SEW EURODRIVE

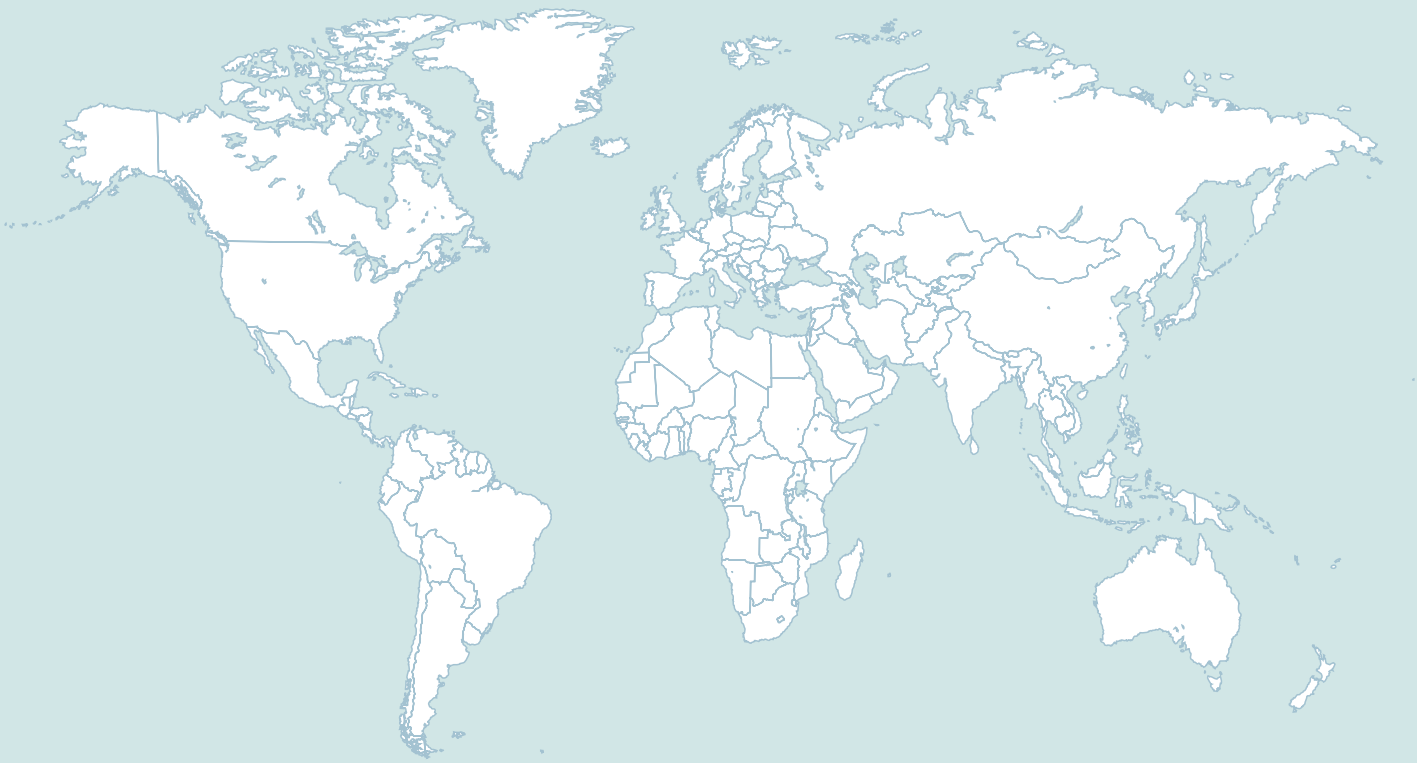
Catalog



DRS Gearmotors

Edition 06/2009

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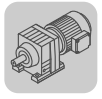

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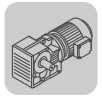
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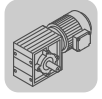

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1 Preface

1.1 The SEW-EURODRIVE group of companies

Global presence

Driving the world with innovative drive solutions for all branches and for every application. Products and systems from SEW-EURODRIVE are used in a multitude of applications worldwide. These include the automotive, building materials, food and beverage as well as metal-processing industries. The decision to use drive technology made by SEW-EURODRIVE stands for reliability regarding both, functionality and investment.

We are represented in the most important branches of industry all over the world: with 12 manufacturing plants, 67 assembly plants in 46 countries and our comprehensive range of services, which we consider an integrative service that continues our commitment to outstanding quality.

Always the right drive

The SEW-EURODRIVE modular concept offers millions of combinations. This wide selection enables you to choose the correct drive for all applications, each based on the required speed and torque range, space available and the ambient conditions. Gear units and gearmotors offering a unique and finely tuned performance range and the best economic prerequisites to face your drive challenges.

The gearmotors are powered by MOVITRAC® frequency inverters, MOVIDRIVE® inverters and MOVIAXIS® multi-axis servo inverters, a combination that blends perfectly with the existing SEW-EURODRIVE program. As in the case for mechanical systems, the development, production and assembly is also carried out completely by SEW-EURODRIVE. In combination with our drive electronics, these drives will provide the utmost in flexibility.

Products of the servo drive system, such as low backlash servo gear units, compact servomotors or MOVIAXIS® multi-axis servo inverters provide precision and dynamics. From single-axis or multi-axis applications all the way to synchronized process sequences, servo drive systems by SEW-EURODRIVE offer a flexible and customized implementation of your application.

For economical, decentralized installations, SEW-EURODRIVE offers components from its decentralized drive system, such as MOVIMOT®, the gearmotor with integrated frequency inverter or MOVI-SWITCH®, the gearmotor with integrated switching and protection function. SEW-EURODRIVE hybrid cables have been designed specifically to ensure cost-effective solutions, independent of the philosophy behind or the size of the system. The latest developments from SEW-EURODRIVE: MOVITRANS® system components for contactless energy transfer, MOVIPRO®, the decentralized drive control and MOVIFIT®, the new decentralized intelligence.

Power, quality and sturdy design combined in one standard product: With high torque levels, industrial gear units from SEW-EURODRIVE realize major movements. The modular concept will once again provide optimum adaptation of industrial gear units to meet a wide range of different applications.

Your ideal partner

Its global presence, extensive product range and broad spectrum of services make SEW-EURODRIVE the ideal partner for the machinery and plant construction industry when it comes to providing drive systems for demanding applications in all branches of industries and applications.

1.2 Products and systems from SEW-EURODRIVE

The products and systems from SEW-EURODRIVE are divided into 4 product groups. These 4 product groups are:

1. Gearmotors and frequency inverters
2. Servo drive systems
3. Decentralized drive systems
4. Industrial gear units

Products and systems used in several group applications are listed in a separate group "Products and systems covering several product groups". Consult the following tables to locate the products and systems included in the respective product group:

1. Gearmotors and frequency inverters		
Gear units/gearmotors	**Motors**	**Frequency inverters**
• Helical gear units/helical gearmotors • Parallel-shaft helical gear units/parallel-shaft helical gearmotors • Helical-bevel gear units/helical-bevel gearmotors • Helical-worm gear units/helical-worm gearmotors • Spiroplan® right-angle gearmotors • Drives for electrified monorail systems • Geared torque motors • Pole-changing gearmotors • Variable speed gear units/variable speed gearmotors • Aseptic gearmotors • Gear units/gearmotors to ATEX standard • Variable speed gear units/variable speed gearmotors to ATEX standard	• Asynchronous AC motors / AC brakemotors • Pole-changing AC motors / AC brakemotors • Energy-efficient motors • Explosion-proof AC motors / AC brakemotors • Torque motors • Single-phase motors / single-phase brakemotors • Asynchronous linear motors	• MOVITRAC® frequency inverters • MOVIDRIVE® inverters • Control, technology and communication options for inverters

2. Servo drive systems		
Servo gear units / servo gearmotors	**Servomotors**	**Servo drive inverters/servo inverters**
• Low backlash planetary servo gear units / planetary gearmotors • Low backlash helical-bevel servo gear units / helical-bevel gearmotors • Explosion-proof servo gear units / servo gearmotors	• Asynchronous servomotors / servo brakemotors • Synchronous servomotors / servo brakemotors • Explosion-proof servomotors / servo brakemotors • Synchronous linear motors	• MOVIDRIVE® servo inverters • MOVIAXIS® multi-axis servo inverters • Control, technology and communication options for servo drive inverters and servo inverters

3. Decentralized drive systems		
Decentralized drives	**Communication and installation**	**Contactless energy transfer**
• MOVIMOT® gearmotors with integrated frequency inverter • MOVIMOT® motors/brakemotors with integrated frequency inverter • MOVI-SWITCH® gearmotors with integrated switching and protection function • MOVI-SWITCH® motors/brakemotors with integrated switching and protection function • Explosion-proof MOVIMOT® and MOVI-SWITCH® gearmotors	• Fieldbus interfaces • Field distributors for decentralized installation • MOVIFIT® product range – MOVIFIT®-MC to control MOVIMOT® drives – MOVIFIT®-SC with integrated electronic motor switch – MOVIFIT®-FC with integrated frequency inverter	• MOVITRANS® system – Stationary components for energy supply – Mobile components for energy consumption – Line cables and installation material

4. Industrial gear units
• Helical gear units • Bevel-helical gear units • Planetary gear units

Products and systems covering several product groups
• Operator terminals • MOVI-PLC® drive-based control system

In addition to products and systems, SEW-EURODRIVE offers a comprehensive range of services. These include:

- Technical consulting
- Application software
- Seminars and training
- Extensive technical documentation
- International customer service

Visit our homepage at

→ **www.sew-eurodrive.com**

The website provides comprehensive information and services.

1.3 Additional documentation

Contents of this publication

This DRS Gearmotors price catalog / catalog includes the detailed technical data of the following SEW-EURODRIVE product groups:

- DRS helical gearmotors
- DRS parallel-shaft helical gearmotors
- DRS helical-bevel gearmotors
- DRS helical-worm gearmotors
- DRS Spiroplan® gearmotors

The price catalogs and catalogs offer the following information:

- Product descriptions
- Unit designations
- Project planning instructions for drives and gear units
- Visual representation of mounting positions
- Explanation on the order information
- Design and operating notes
- Important information about tables and dimension sheets
- Description of the different types
- Overview of all permitted combinations
- Selection tables for DRS gearmotors
- Dimension sheet for DRS gearmotors
- Technical data
- Price catalog → prices and option pricing of options and accessories

Additional documentation

The "DR AC Motors" catalog/price catalog is available from SEW-EURODRIVE in addition to this "DRS Gearmotors" catalog/price catalog.

This catalog/price catalog contains the following information:

- Unit designations
- Product descriptions
- Project planning instructions for DR series AC motors
- Technical data of DR series AC motors
- Technical data of options and additional features
- Information about the dimension sheets
- Dimension sheets for DR AC motors
- Information on brakes from SEW-EURODRIVE
- Information on prefabricated cables
- Price catalog → prices and option pricing of options and accessories

Please note that the complete range of technical documentation is available on our home page:

→ **www.sew-eurodrive.com**

2 Product Description

2.1 General notes on the product description

Ambient temperature

Gear units and gearmotors from SEW-EURODRIVE can be operated in a wide ambient temperature range. The following standard temperature ranges are permitted for filling the gear units according to the lubricant table:

Gear unit	Filled with	Permitted standard temperature range
Helical, parallel shaft helical and helical-bevel gear units	CLP(CC) VG220	-10 °C ... +40 °C
Helical-worm gear unit	CLP(CC) VG680	0 °C ... +40 °C
Spiroplan® gear units	CLP(SEW-PG) VG460	-10 °C ... +40 °C

The rated data of the gear units and gearmotors specified in the catalog/price catalog refer to an ambient temperature of +25 °C.

Gear units and gearmotors from SEW-EURODRIVE can be operated outside the standard temperature range if project planning is adapted to ambient temperatures from -40 °C to +60 °C. Project planning must take special operating conditions into account and adapt the drive to the ambient conditions by selecting suitable lubricants and seals. This kind of project planning is generally recommended for increased ambient temperatures as of size 97 and for helical-worm gear units with small gear ratios.
SEW-EURODRIVE will gladly perform this project planning for you.

If the drive is to be operated on a frequency inverter, you must also consider the project planning notes of the inverter and take into account the thermal effects of inverter operation.

Installation altitude

Due to the low air density at high installation altitudes, heat dissipation on the surface of motors and gear units decreases. The rated data listed in the catalog/price catalog applies to an installation altitude of maximum 1000 m above sea level. Installation altitudes of more than 100 m asl must be taken into account for project planning of gear units and gearmotors.

Power and torque

The power and torque ratings listed in the catalogs refer to mounting position M1 and similar mounting positions in which the input stage is not completely submerged in oil. In addition, the gearmotors are assumed to be standard versions with standard lubrication and under normal ambient conditions.

Please note that the motor power shown in the selection tables for gearmotors is subject to selection. However, the output torque and the desired output speed are essential for the application and need to be checked.

Speeds

The quoted output speeds of the gearmotors are recommended values. You can calculate the rated output speed based on the rated motor speed and the gear unit ratio. Please note that the actual output speed depends on the motor load and the supply system conditions.

Noise

The noise levels of all SEW-EURODRIVE gear units, motors and gearmotors are well within the maximum permitted noise levels set forth in the VDI guideline 2159 for gear units and IEC/EN 60034 for motors.

Coating

Gear units, motors and gearmotors from SEW-EURODRIVE are painted with "blue/gray"/RAL 7031 machine paint according to DIN 1843 as standard. Special paints are available on request.

Exception: Spiroplan® W..10 DT56 gearmotors have an aluminum housing and are supplied unpainted as standard.

Surface and corrosion protection

If required, all gear units, motors and gearmotors from SEW-EURODRIVE can also be supplied with special surface protection for applications in extremely humid and chemically aggressive environments.

Weights

Please note that all weights shown in the catalogs exclude the oil fill for the gear units and gearmotors. The weights vary according to gear unit type and gear unit size. The lubricant fill depends on the mounting position which means no universally applicable information can be given. Please refer to "Lubricants" in the "Design and Operating Notes" section for recommended lubricant fill quantities depending on the mounting position. For the exact weight, refer to the order confirmation.

Air admission and accessibility

The gearmotors/brakemotors must be mounted on the driven machine in such a way that both axially and radially there is enough space left for unimpeded air admission, for maintenance work on the brake and, if required, for the MOVIMOT® inverter. Please also refer to the notes in the motor dimension sheets.

Multi-stage gear units

You can achieve particularly low output speeds by using multi-stage gear units or multi-stage gearmotors. Such a setup requires a helical gear unit or gearmotor on the input end as a second gear unit.

It may be necessary to limit the motor power to match the maximum permitted output torque of the gear unit.

Reduced backlash gear units

Helical, parallel-shaft helical and helical-bevel gear units with reduced backlash are available as of gear unit size 37. The circumferential backlash of these gear units is considerably less than that of the standard versions so that positioning tasks can be solved with great precision. The circumferential backlash is specified in angular minutes [’] in the technical data. The circumferential backlash for the output shaft is specified without load (max. 1% of the rated output torque); the gear unit input end is blocked. For further information, refer to section "Reduced backlash gear units" on page 94.

NOCO® fluid for protection against contact corrosion

As standard, all shaft-mounted gear units and gearmotors are supplied with NOCO® Fluid, a paste that prevents contact corrosion. Use this paste in accordance with the instructions in the gear unit operating instructions. It facilitates service and stripping down jobs.

NOCO® fluid is a food grade substance according to USDA-H1. You can tell that NOCO® Fluid is a food grade oil by the USDA-H1 identification label on its packaging.

RM gear units, RM gearmotors

RM gear units and RM gearmotors are a special type of helical gear units with an extended output bearing hub. They were designed especially for agitating applications and allow for high overhung and axial loads and bending moments. The other data are the same as for standard helical gear units and standard helical gearmotors. You can find special project planning notes for RM gearmotors in the "Project Planning for Gear Units/RM gear units" section.

Spiroplan® right-angle gearmotors

Spiroplan® right-angle gearmotors are robust, single- and two-stage right-angle gearmotors with Spiroplan® gearing. The difference to the helical-worm gear units is the material combination of the steel-on-steel gearing, the special tooth meshing relationships and the aluminum housing. As a result, Spiroplan® right-angle gearmotors are wear-free, very quiet and light.

The particularly short design and the aluminum housing make for very compact and lightweight drive solutions.

After the running-in period, some sizes of Spiroplan® right-angle gearmotors are below the following sound pressure level in 4-pole motor operation on a 50 Hz supply system:

- Spiroplan® W..10 to W..30: 55 dB(A)

The sound-pressure level may be 3 to 5 dB(A) higher at time of delivery than after hours of regular operation.

The wear-free gearing and the life-long lubrication facilitate long periods of maintenance-free operation. The oil filling being independent of the mounting position, except for Spiroplan® W..37 and W..47 in mounting position M4 makes any position possible for Spiroplan® right-angle gearmotors without altering the quantity of oil. Identical hole spacing in the foot and face, as well as the equal shaft height to both, provides you with diverse mounting options.

Two different flange diameters are available. On request, Spiroplan® right-angle gearmotors can be equipped with a torque arm.

Brakemotors

On request, motors and gearmotors can be supplied with an integrated mechanical brake. The SEW-EURODRIVE brake is an electromagnetic disk brake with a DC coil that releases electrically and brakes using spring force. Due to its operating principle, the brake is applied if the power fails. It meets the basic safety requirements. The brake can also be released mechanically if equipped with manual brake release. For this purpose, the brake is supplied with either a hand lever with automatic reset or an adjustable setscrew. The brake is controlled by a brake controller that is either installed in the motor wiring space or the control cabinet.

A characteristic feature of the brakes is their very short design. The brake bearing end shield is a part of both the motor and the brake. The integrated construction of the SEW-EURODRIVE brakemotor permits particularly compact and sturdy solutions.

International markets

On request, SEW-EURODRIVE supplies UL registered motors or CSA certified motors with connection conditions according to CSA and NEMA standard.

On request, SEW-EURODRIVE supplies UL registered MOVIMOT® drives with connection conditions according to NEMA standards.

For the Japanese market, SEW-EURODRIVE offers motors conforming to JIS standard. Contact your sales representative to assist you in such cases.

Components on the input side

The following components on the input side are available for the gear units from SEW-EURODRIVE:

- **Input covers with input shaft extension, optionally with**
  - Centering shoulder
  - Backstop
  - Motor mounting platform
- **Adapter**
  - For mounting IEC or NEMA motors with the option of a backstop
  - For mounting servomotors with a square flange
  - With torque limiting safety couplings and speed or slip monitor
  - With hydraulic centrifugal coupling, also with disk brake or backstop

Swing base

A swing base is a drive unit consisting of helical-bevel gear unit, hydraulic centrifugal coupling and electric motor. The complete arrangement is mounted to a rigid mounting rail.

Motor swings are available with the following optional accessories:

- Torque arm
- Mechanical thermal monitoring unit
- Contactless thermal monitoring unit

2.2 Corrosion and surface protection

General information

SEW-EURODRIVE offers various optional protective measures for operation of motors and gearmotors under special ambient conditions.

The protective measures comprise two groups:

- Corrosion protection KS for motors
- Surface protection OS for motors and gear units

For motors, optimum protection is offered by a combination of KS corrosion protection and surface OS protection.

In addition, special optional protective measures for the output shafts are also available.

KS corrosion protection

KS corrosion protection for motors comprises the following measures:

- All retaining screws that are loosened during operation are made of stainless steel.
- The nameplates are made of stainless steel.
- A top coating is applied to various motor parts.
- The flange contact surfaces and shaft ends are treated with a temporary anti-corrosion agent.
- Additional measures for brakemotors.

A sticker labeled "KORROSIONSSCHUTZ" (corrosion protection) on the fan guard indicates special treatment has been applied.



Motors with forced cooling fan are not available with KS corrosion protection.

OS surface protection

Instead of the standard surface protection, the motors and gear units are available with surface protection OS1 to OS4 as an option. The special procedure 'Z' is also available. Special procedure 'Z' means that large surface recesses are sprayed with a rubber filling prior to painting.

Surface protection	Layers	NDFT[1] on gray-cast iron [µm]	Suitable for
Standard	1 × Dip primer 1 × One-pack top coat	About 50-70	• Normal ambient conditions • Relative humidity below 90 % • Max. surface temperature 120 °C • Corrosivity category C1[2]
OS1	1 × Dip primer 1 × Two-pack base coat 1 × Two-pack top coat	About 120-150	• Low environmental impact • Relative humidity max. 95 % • Max. surface temperature 120 °C • Corrosivity category C2[2]
OS2	1 × Dip primer 2 × Two-pack base coat 1 × Two-pack top coat	About 170-210	• Medium environmental impact • Relative humidity up to 100 % • Max. surface temperature 120 °C • Corrosivity category C3[2]
OS3	1 × Dip primer 2 × Two-pack base coat 2 × Two-pack top coat	About 220-270	• High environmental impact • Relative humidity up to 100 % • Max. surface temperature 120 °C • Corrosivity category C4[2]
OS4	1 × Dip primer 2 × Two-pack epoxy base layer 2 × Two-pack top coat	About 320	• Very high environmental impact • Relative humidity up to 100 % • Max. surface temperature 120 °C • Corrosivity category C5-1[2]

1) NDFT (**n**ominal **d**ry **f**ilm **t**hickness) = Required coating thickness; Minimum thickness = 80 % NDFT; Maximum thickness = 3 x NDFT (DIN EN ISO 12944-5)

2) In accordance with DIN EN ISO 12 944-2

Special protective measures

Gearmotor output shafts can be treated with special optional protective measures for operation subject to severe environmental pollution or in particularly demanding applications.

Measure	Protection principle	Suitable for
FKM oil seal (Viton)	high quality material	drives subject to chemical contamination
Kanisil coating	surface coating of the contact surface of the oil seal	severe environmental impact and in conjunction with FKM oil seal (Viton)
stainless steel output shaft	surface protection with high-quality material	particularly demanding applications in terms of surface protection

NOCO® Fluid

As standard, SEW-EURODRIVE supplies NOCO® Fluid corrosion protection and lubricant with every hollow shaft gear unit. Use NOCO® Fluid when installing hollow shaft gear units. Using this fluid helps prevent contact corrosion and makes it easier to assemble the drive at a later date.

Furthermore, NOCO® Fluid is also suitable for protecting machined metal surfaces that do not have corrosion protection, including parts of shaft ends or flanges. You can order larger quantities of NOCO® Fluid from SEW-EURODRIVE.

NOCO® Fluid is a food grade substance according to USDA-H1. You can tell that NOCO® Fluid is a food grade oil by the USDA-H1 identification label on its packaging.

2.3 Extended storage

Variant

You can also order gear units prepared for "extended storage." SEW-EURODRIVE recommends the "extended storage" type for storage periods longer than 9 months.

In this case, a VCI corrosion inhibitor (volatile corrosion inhibitor) is added to the lubricant in these gear units. Please note that this VCI corrosion inhibitor is only effective in a temperature range of -25 °C ... +50 °C. The flange contact surfaces and shaft ends are also treated with an anti-corrosion agent. If not specified otherwise in your order, the gear unit will be supplied with OS1 surface protection. You can order OS2, OS3 or OS4 instead of OS1.

Surface protection	Suitable for
OS1	Low environmental impact
OS2	Medium environmental impact
OS3	High environmental impact
OS4	Very high environmental impact



The gear units must remain tightly sealed until taken into operation to prevent the VCI corrosion protection agent from evaporating.

Gear units will be supplied with an oil fill according to the mounting position (M1 ... M6) and are ready for operation. Check the oil level before you start operating the gear unit for the first time!

Storage conditions

Observe the storage conditions specified in the following table for extended storage:

Climate zone	Packaging[1)]	Storage location[2)]	Storage duration
Temperate (Europe, USA, Canada, China and Russia, excluding tropical zones)	Packed in containers, with desiccant and moisture indicator sealed in the plastic wrap.	Under roof, protected against rain and snow, no shock loads.	Up to 3 years with regular checks of the packaging and moisture indicator (rel. humidity < 50 %).
	Open	Roofed, enclosed at constant temperature and atmospheric humidity (5 °C < ϑ< 60 °C, < 50 % relative humidity). No sudden temperature fluctuations. Controlled ventilation with filter (free from dust and dirt). Protected against aggressive vapors and shocks.	2 years or more with regular inspections. Check for cleanliness and mechanical damage during inspection. Check corrosion protection.
Tropical (Asia, Africa, Central and South America, Australia, New Zealand excluding temperate zones)	Packed in containers, with desiccant and moisture indicator sealed in the plastic wrap. Protected against insect damage and mildew by chemical treatment.	Under roof, protected against rain and shocks.	Up to 3 years with regular checks of the packaging and moisture indicator (rel. humidity < 50 %).
	Open	Roofed, enclosed at constant temperature and atmospheric humidity (5 °C < ϑ< 50°C, < 50 % relative humidity). No sudden temperature fluctuations. Controlled ventilation with filter (free from dust and dirt). Protected against aggressive vapors and shocks. Protected against insect damage.	2 years or more with regular inspections. Check for cleanliness and mechanical damage during inspection. Check corrosion protection.

1) Packaging must be carried out by an experienced company using the packaging materials that have been explicitly specified for the particular application.

2) SEW-EURODRIVE recommends to store the gear units according to the mounting position.

2.4 Condition monitoring: Oil aging and vibration sensor

DUO10A diagnostics unit (Oil aging sensor)

Gear unit oil diagnostics through thermal analysis

The DUO10A diagnostic unit allows for diagnostic analysis as a means of preventive maintenance. The DUO10A diagnostic unit determines the individual, remaining service life of the oil based on the known service life curves and the oil temperature. The diagnostic unit consists of a temperature sensor and the actual evaluation unit. The remaining service life and the temperature of the oil can be read off via the display at the evaluation unit. The diagnostic unit is characterized by simple operation and user-friendly handling.

DUV10A diagnostics unit (vibration sensor)

Roller bearing diagnostics by means of vibration analysis

The DUV10A diagnostic unit monitors roller bearings, gearings for imbalance, and possible damages. Vibration analysis is used to detect possible damages at an early stage. This device allows for permanent vibration monitoring. The condition and development of the damage can be directly read on the device, or can be visualized externally using switch outputs.

3 Unit Designations and Variants

3.1 Gear unit and options – unit designations

Helical gear units

Designation	
RX..	Single-stage foot-mounted design
RXF..	Single-stage B5 flange-mounted design
R..	Foot-mounted design
R..F	Foot and B5-flange mounted design
RF..	B5 flange-mounted design
RZ..	B14 flange-mounted design
RM..	B5 flange-mounted design with extended bearing hub

Parallel-shaft helical gear units

Designation	
F..	Foot-mounted design
FA..B	Foot-mounted, hollow shaft
FH..B	Foot-mounted, hollow shaft with shrink disk
FV..B	Foot-mounted, hollow shaft with splined hollow shaft to DIN 5480
FF..	B5 flange-mounted design
FAF..	B5 flange-mounted design and hollow shaft
FHF..	B5 flange-mounted and hollow shaft with shrink disk
FVF..	B5 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480
FA..	Hollow shaft
FH..	Hollow shaft with shrink disk
FT..	Hollow shaft with TorqLOC® hollow shaft mounting system
FV..	Hollow shaft with splining to DIN 5480
FAZ..	B14 flange-mounted design and hollow shaft
FHZ..	B14 flange-mounted and hollow shaft with shrink disk
FVZ..	B14 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480

Helical-bevel gear units

Designation	
K..	Foot-mounted design
KA..B	Foot-mounted, hollow shaft
KH..B	Foot-mounted, hollow shaft with shrink disk
KV..B	Foot-mounted, hollow shaft with splined hollow shaft to DIN 5480
KF..	B5 flange-mounted design
KAF..	B5 flange-mounted design and hollow shaft
KHF..	B5 flange-mounted and hollow shaft with shrink disk
KVF..	B5 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480
KA..	Hollow shaft
KH..	Hollow shaft with shrink disk
KT..	Hollow shaft with TorqLOC® hollow shaft mounting system
KV..	Hollow shaft with splining to DIN 5480
KAZ..	B14 flange-mounted design and hollow shaft
KHZ..	B14 flange-mounted and hollow shaft with shrink disk
KVZ..	B14 flange-mounted design and hollow shaft with splined hollow shaft to DIN 5480

Helical-worm gear units

Designation	
S..	Foot-mounted design
SF..	B5 flange-mounted design
SAF..	B5 flange-mounted design and hollow shaft
SHF..	B5 flange-mounted and hollow shaft with shrink disk
SA..	Hollow shaft
SH..	Hollow shaft with shrink disk
ST..	Hollow shaft with TorqLOC® hollow shaft mounting system
SAZ..	B14 flange-mounted design and hollow shaft
SHZ..	B14 flange-mounted and hollow shaft with shrink disk

Spiroplan® gear units

For all gear unit sizes (W..10 to W..47):

Designation	
W..	Foot-mounted design
WF..	Flange-mounted design
WAF..	Flange-mounted design and hollow shaft
WA..	Hollow shaft

Only for gear unit sizes 37 and 47 (W..37 and W 47):

Designation	
WA..B	Foot-mounted, hollow shaft
WH..B	Foot-mounted, hollow shaft with shrink disk
WHF..	Flange-mounted, hollow shaft with shrink disk
WH..	Hollow shaft with shrink disk
WT..	Hollow shaft with TorqLOC® hollow shaft mounting system

Options

R, F and K gear units:

Designation	
/R	Reduced backlash

K, S and W gear units:

Designation	
/T	With torque arm

F gear units:

Designation	
/G	With rubber buffer

Condition monitoring

Designation	Option
/DUO	Diagnostic Unit Oil = Oil aging sensor
/DUV	Diagnostic Unit Vibration = Vibration sensor

3.2 Unit designations for AC motors and options

AC motor series

Designation	
DRS..	Motor, standard efficiency, 50 Hz
DRE..	Energy efficient motor, high efficiency, 50 Hz
DRP..	Energy efficient motor, premium efficiency, 50 Hz
...71 to 315	Sizes: 71 / 80 / 90 / 100 / 112, 132 / 160 / 180 / 225 / 315
..K to L	Lengths: K= very short / S = short / M = medium / L = long MC/LC = Lengths of rotors with copper cage
Number of poles	4

Output types

Designation	Option
/FI	IEC foot-mounted motor with specification of shaft height
/FG	7 Series integral motor, as stand-alone motor
/FF	IEC flange-mounted motor with bore holes
/FT	IEC flange motor with threads
/FL	General flange-mounted motor (other than IEC)
/FM	7 series integral gearmotor with IEC feet, with specification of shaft height if required
/FE	IEC flange-mounted motor with bore holes and IEC feet, with specification of shaft height
/FY	IEC flange-mounted motor with thread and IEC feet, with specification of shaft height
/FK	General flange-mounted motor (other than IEC) with feet, with specification of shaft height if required
/FC	C-face flange-mounted motor, dimensions in inch

Mechanical attachments

Designation	Option
BE..	Spring-loaded brake with size specification
HR	Manual brake release of the brake, automatic disengaging function
HF	Manual brake release, lockable
/RS	Backstop
/MSW	MOVI-SWITCH®
/MI	Motor identification for MOVIMOT®
/MM03MM40	MOVIMOT®
/MO	MOVIMOT® option(s)

Temperature sensors/detection

Designation	Option
/TF	Temperature sensor (positive coefficient thermistor or PTC resistor)
/TH	Thermostat (bimetallic switch)
/KY	One KTY84 - 130 sensor
/PT	One / three PT100 sensor(s)

Encoder

Designation	Option
/ES7S /EG7S /EH7S	Mounted speed sensor with sin/cos interface
/ES7R EG7R	Mounted speed sensor with TTL (RS-422) interface, U = 9 - 26 V
/EI7C /EI7S	Mounted speed sensor with HTL or sin/cos interface
/EI76 /EI72 /EI71	Mounted speed sensor with HTL interface and few periods
/AS7W /AG7W	Mounted absolute encoder, RS-485 interface (multi-turn)
/AS7Y /AG7Y /AH7Y	Mounted absolute encoder, SSI interface (multi-turn)
/AI7W	Mounted absolute encoder with SEW interface
/ES7A /EG7A	Mounting adapter for encoders from the SEW portfolio
/XV.A	Mounting adapter for non-SEW encoders
/XV..	Mounted non-SEW encoders

Connection options

Designation	Option
/IS	Integrated plug connector
/ASB.	HAN 10ES plug connector on terminal box with two-clamp closure (cage clamps on motor end)
/ACB.	HAN 10E plug connector on terminal box with two-clamp closure (crimp contacts on motor end)
/AMB. /ABB.	HAN Modular 10B plug connector on terminal box with two-clamp closure (crimp contacts on motor end)
/ASE.	HAN 10ES plug connector on terminal box with single-clamp closure (cage clamps on motor end)
/ACE.	HAN 10ES plug connector on terminal box with single-clamp closure (crimp contacts on motor end)
/AME. /ABE.	HAN Modular 10B plug connector on terminal box with single-clamp closure (crimp contacts on motor end)
/ASK.	HAN 10ES ECOFAST® plug connector on terminal box with single-clamp closure (cage clamp on motor end), additionally with mounting screws for optional carrier plate
/KCC	Terminal strip with cage clamps
/KC1	C1 profile compliant connection of the DR80 overhead trolley drive (VDI guideline 3643)

Ventilation

Designation	Option
/V	Forced cooling fan
/Z	Additional inertia (flywheel fan)
/AL	Metal fan
/U	Non-ventilated (without fan)
/OL	Non-ventilated (closed B side)
/C	Protection canopy for the fan guard
/LF	Air filter

Bearing

Designation	Option
/NS	Relubrication device (for DR.315 only)
/ERF	Reinforced bearing A-side with roller bearing (for DR.315 only)
/NIB	Insulated bearing B-side (for DR.315 only)

Condition monitoring

Designation	Option
/DUB	Diagnostic unit brake = brake monitoring
/DUV	Diagnostic Unit Vibration = Vibration sensor

Explosion-proof motors

Designation	Option
/2GD	Motors according to 94/9/EC, category 2 (gas/dust)
/3GD	Motors according to 94/9/EC, category 3 (gas/dust)
/3D	Motors according to 94/9/EC, category 3 (dust)
/VE	Forced-cooling fan for motors according to 94/9/EC, category 3 (gas/dust)

Other additional features

Designation	Option
/DH	Condensation drain hole
/RI	Reinforced winding insulation
/2W	2nd shaft end on the motor/brakemotor

3.3 Sample unit designation for a DR gearmotor

The unit designation of the gearmotor starts from the component on the output end. For instance, a multi-staged helical-bevel gearmotor with thermistor sensor in the motor winding has the following unit designation:

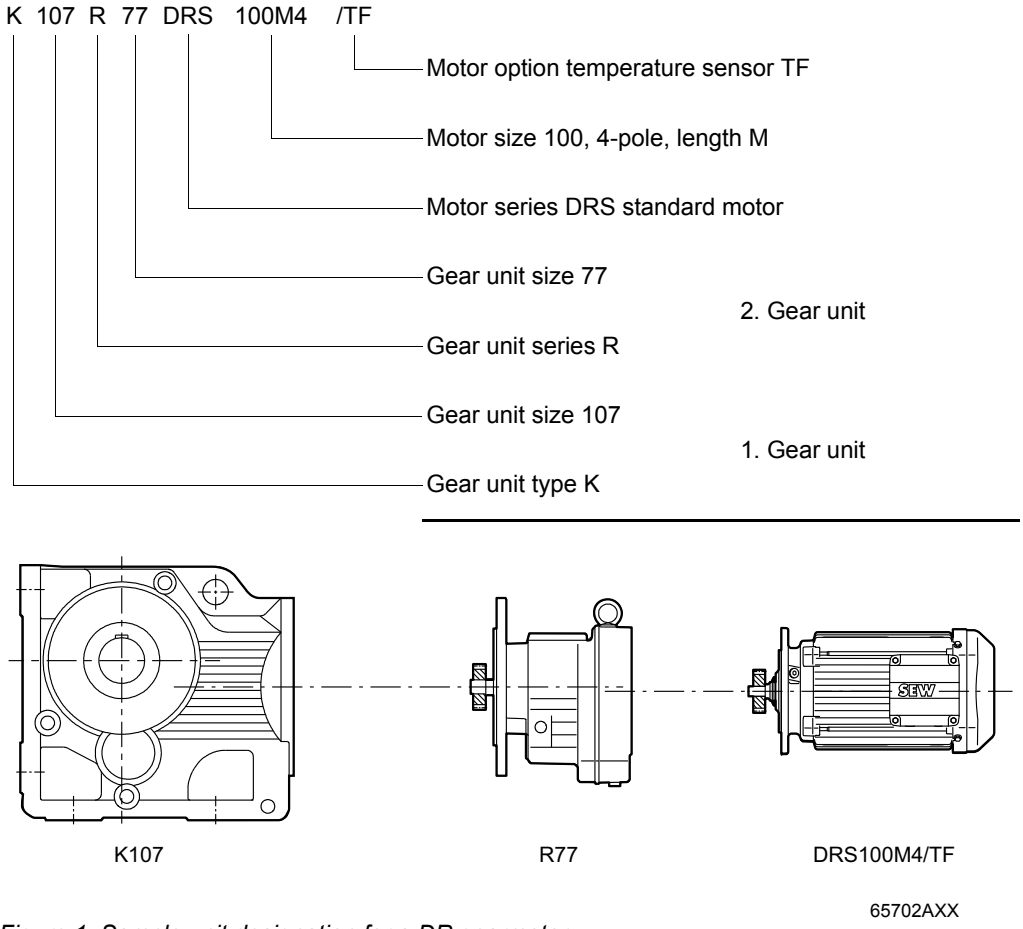


Figure 1: Sample unit designation for a DR gearmotor

Other examples:

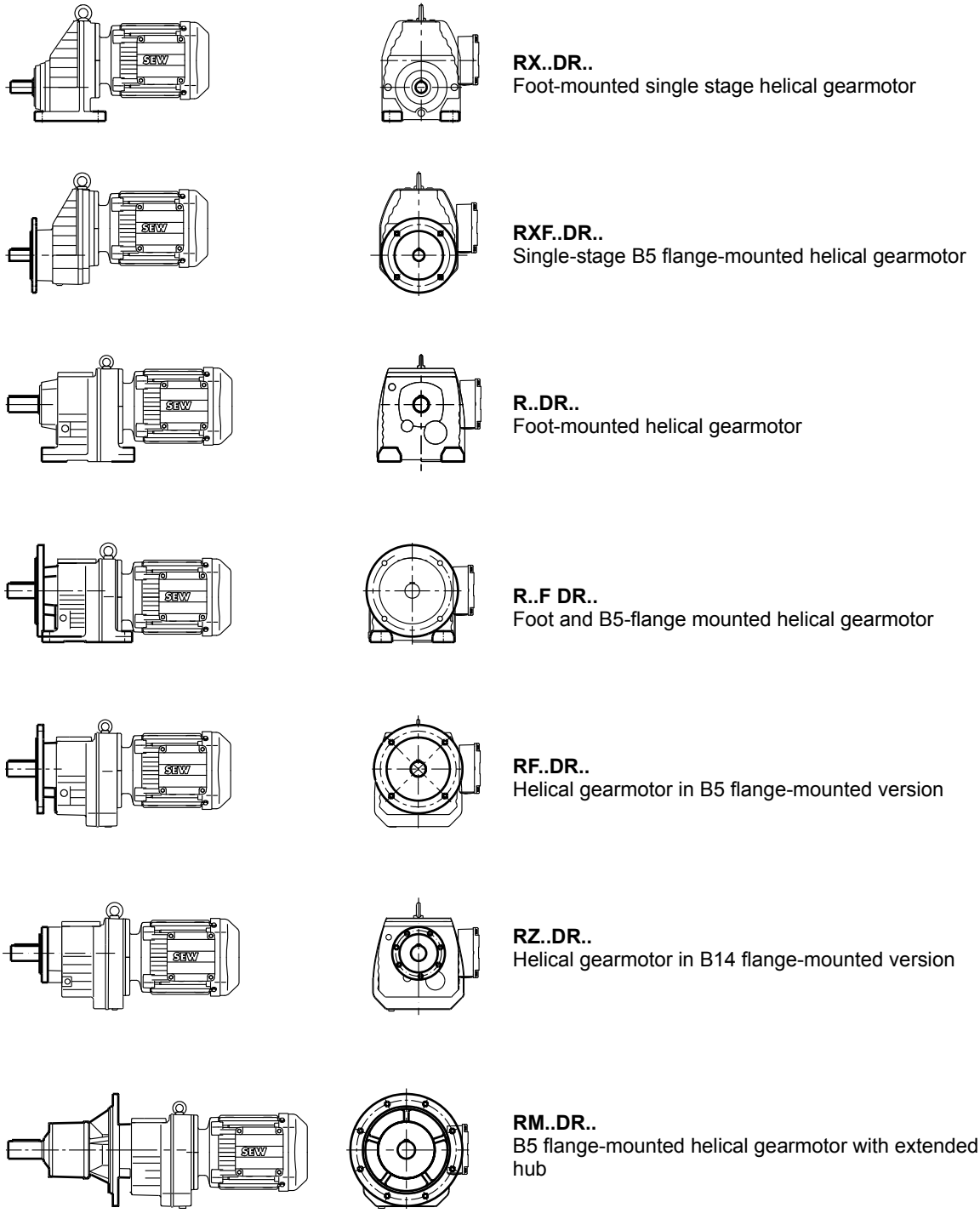
- RF 97 /R DRS100M4 BE2 HR
  - Gear unit type: Reduced backlash (/ R) helical gear unit in flange-mounted version
  - Gear unit size: 97
  - Motor series: DRS standard motor
  - Motor size 100M, 4-pole
  - Motor options: BE2 brake with self-reengaging manual brake release (HR)
- FAF 47 /R DRS90L4 BE2 /C
  - Gear unit type: Reduced backlash (/ R) parallel-shaft helical gear unit in B5 flange-mounted version with hollow shaft
  - Gear unit size: 47
  - Motor series: DRS standard motor
  - Motor size 90L, 4-pole
  - Motor options: BE2 brake and protection canopy for the fan guard (/ C)

3.4 Gearmotor variants

The types described in this section refer to DR gearmotors from SEW-EURODRIVE. They also apply to gear units without motors (without DR).

Helical gearmotors

The following versions of helical gearmotors can be supplied:



RX..DR..
Foot-mounted single stage helical gearmotor

RXF..DR..
Single-stage B5 flange-mounted helical gearmotor

R..DR..
Foot-mounted helical gearmotor

R..F DR..
Foot and B5-flange mounted helical gearmotor

RF..DR..
Helical gearmotor in B5 flange-mounted version

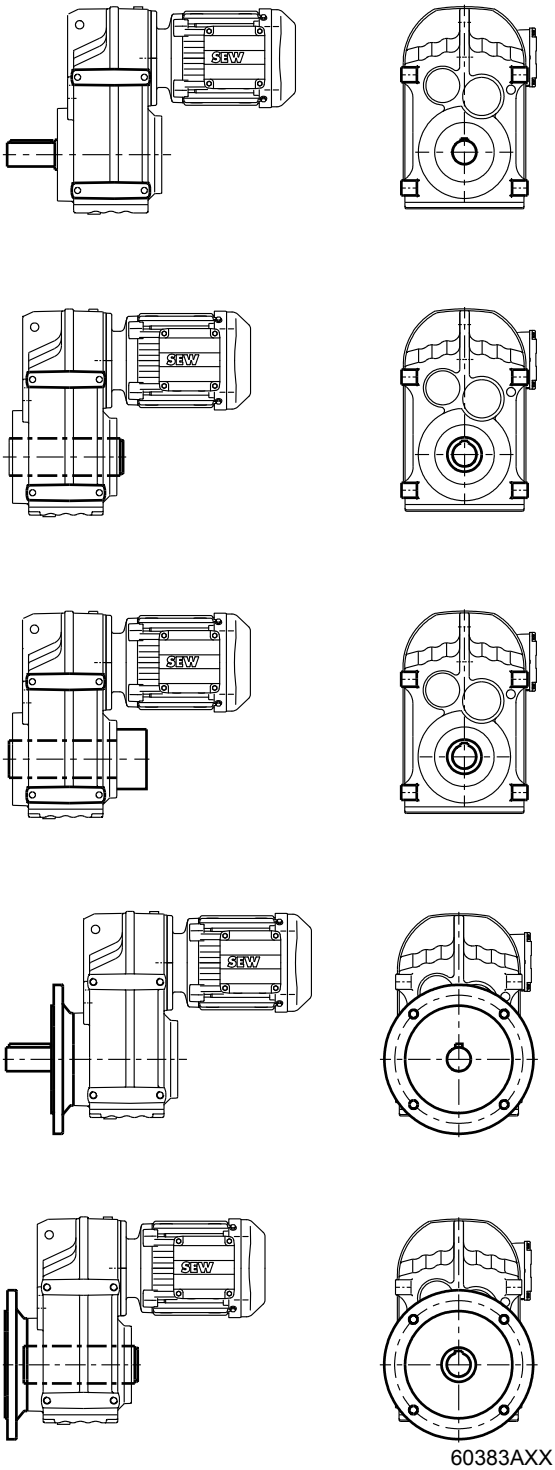
RZ..DR..
Helical gearmotor in B14 flange-mounted version

RM..DR..
B5 flange-mounted helical gearmotor with extended bearing hub

60382AXX

Parallel-shaft helical gearmotors

The following variants of parallel-shaft helical gearmotors can be supplied:



F..DR..
Foot-mounted parallel-shaft helical gearmotor

FA..B DR..
Foot-mounted parallel-shaft helical gearmotor with hollow shaft

FV..B DR..
Foot-mounted parallel-shaft gearmotor with hollow shaft and splining according to DIN 5480

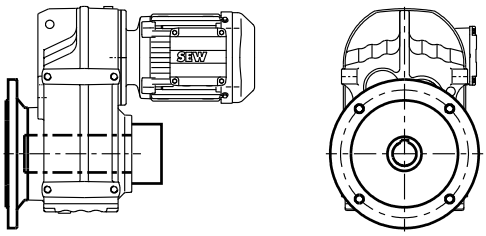
FH..B DR..
Foot-mounted parallel-shaft helical gearmotor with hollow shaft and shrink disk

FF..DR..
B5 flange-mounted parallel-shaft helical gearmotor

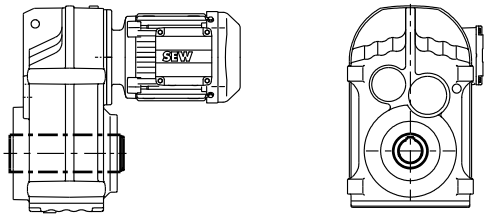
FAF..DR..
Parallel shaft helical gearmotor in B5 flange-mounted design with hollow shaft

FVF..DR..
Parallel-shaft helical gearmotor in B5 flange-mounted design with hollow shaft and splining according to DIN 5480

60383AXX

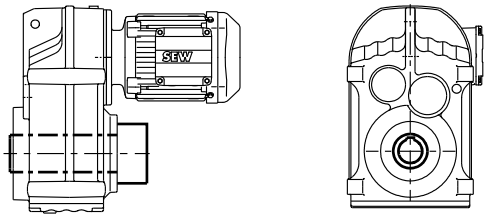


FHF..DR..
Parallel-shaft helical gearmotor in B5 flange-mounted version with hollow shaft and shrink disk



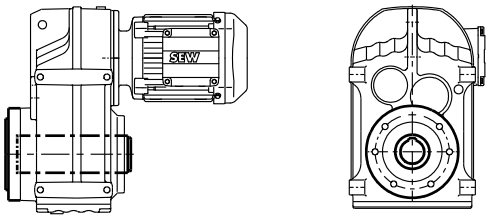
FA..DR..
Parallel-shaft helical gearmotor with hollow shaft

FV..DR..
Parallel-shaft helical gearmotor with hollow shaft and splining according to DIN 5480



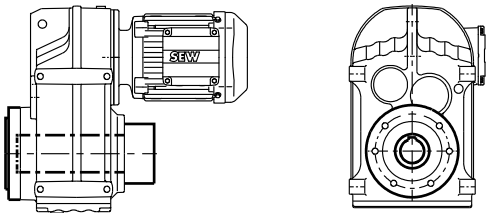
FH..DR..
Parallel-shaft helical gearmotor with hollow shaft and shrink disk

FT..DR..
Parallel-shaft helical gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system



FAZ..DR..
Parallel-shaft helical gearmotor in B14 flange-mounted design with hollow shaft

FVZ..DR..
Parallel-shaft helical gearmotor in B14 flange-mounted design with hollow shaft and splining according to DIN 5480

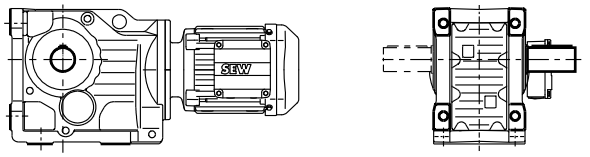


FHZ..DR..
Parallel-shaft helical gearmotor in B14 flange-mounted version with hollow shaft and shrink disk

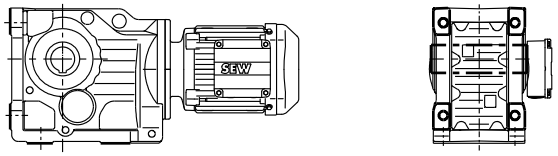
60396AXX

Helical-bevel gearmotors

The following types of helical-bevel gearmotors can be supplied:

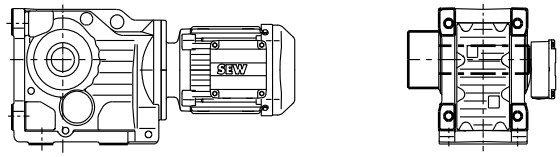


K..DR..
Foot-mounted helical-bevel gearmotor

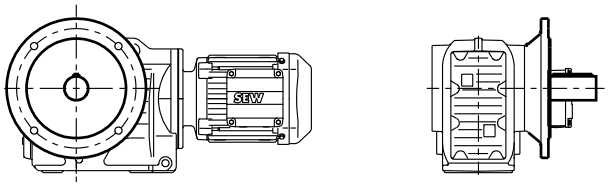


KA..B DR..
Foot-mounted helical-bevel gearmotor with hollow shaft

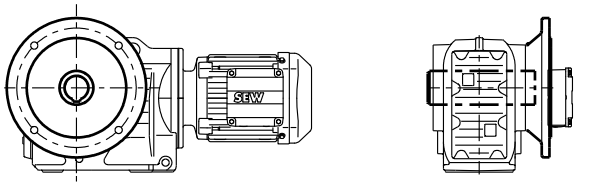
KV..B DR..
Foot-mounted helical-bevel gearmotor unit with hollow shaft and splining according to DIN 5480



KH..B DR..
Foot-mounted helical-bevel gearmotor with hollow shaft and shrink disk



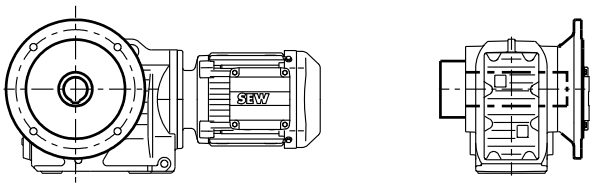
KF..DR..
Helical-bevel gearmotor in B5 flange-mounted design



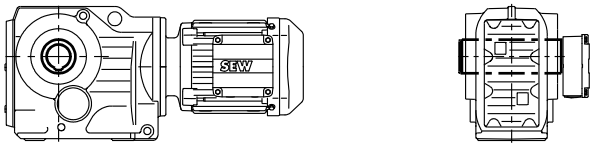
KAF..DR..
Helical-bevel gearmotor in B5 flange-mounted design with hollow shaft

KVF..DR..
Helical-bevel gearmotor in B5 flange-mounted design with hollow shaft and splining according to DIN 5480

60397AXX

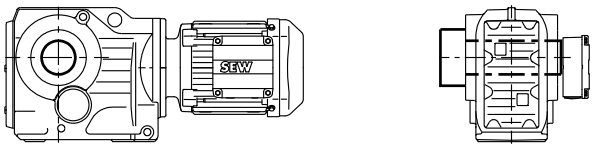


KHF..DR..
Helical-bevel gearmotor in B5 flange-mounted version with hollow shaft and shrink disc



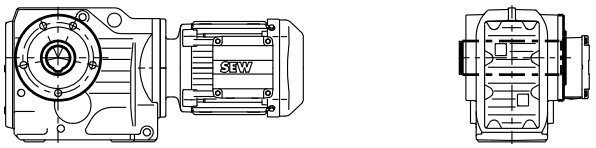
KA..DR..
Helical-bevel gearmotor with hollow shaft

KV..DR..
Helical-bevel gearmotor with hollow shaft and splining according to DIN 5480



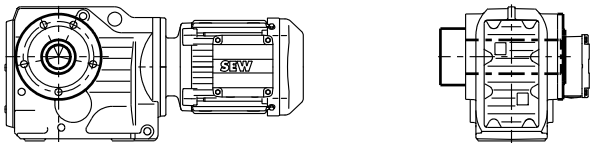
KH..DR..
Helical-bevel gearmotor with hollow shaft and shrink disk

KT..DR..
Helical-bevel gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system



KAZ..DR..
Helical-bevel gearmotor in B14 flange-mounted design with hollow shaft

KVZ..DR..
Helical-bevel gearmotor in B14 flange-mounted design with hollow shaft and splining according to DIN 5480

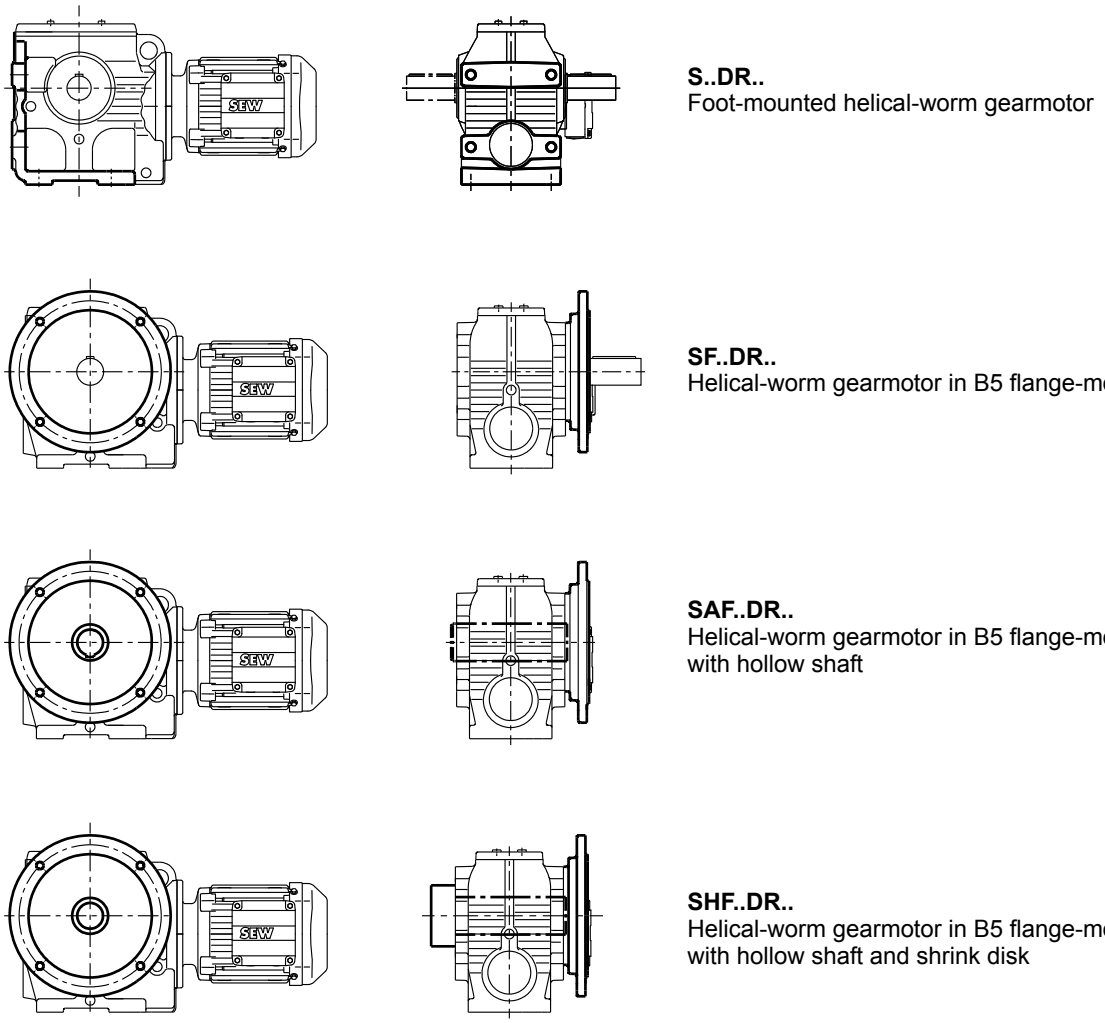


KHZ..DR..
Helical-bevel gearmotor in B14 flange-mounted version with hollow shaft and shrink disk

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Helical-worm gearmotors

The following types of helical-worm gearmotors are available:



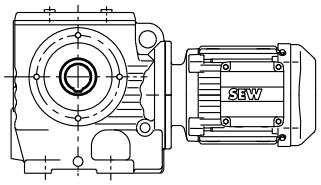
S..DR..
Foot-mounted helical-worm gearmotor

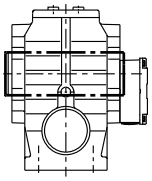
SF..DR..
Helical-worm gearmotor in B5 flange-mounted design

SAF..DR..
Helical-worm gearmotor in B5 flange-mounted design with hollow shaft

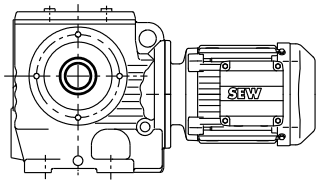
SHF..DR..
Helical-worm gearmotor in B5 flange-mounted design with hollow shaft and shrink disk

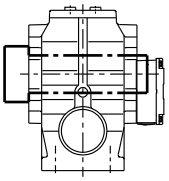
60399AXX





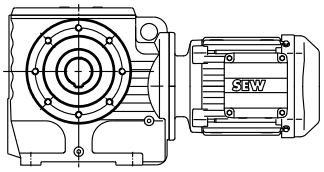
SA..DR..
Helical-worm gearmotor with hollow shaft

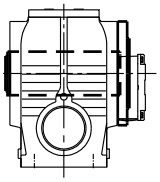




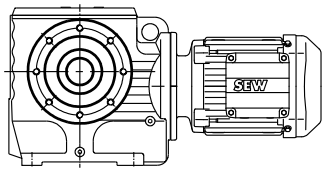
SH..DR..
Helical-worm gearmotor with hollow shaft and shrink disk

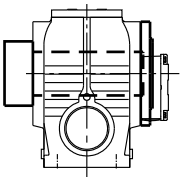
ST..DR..
Helical-worm gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system





SAZ..DR..
Helical-worm gearmotor in B14 flange-mounted design with hollow shaft



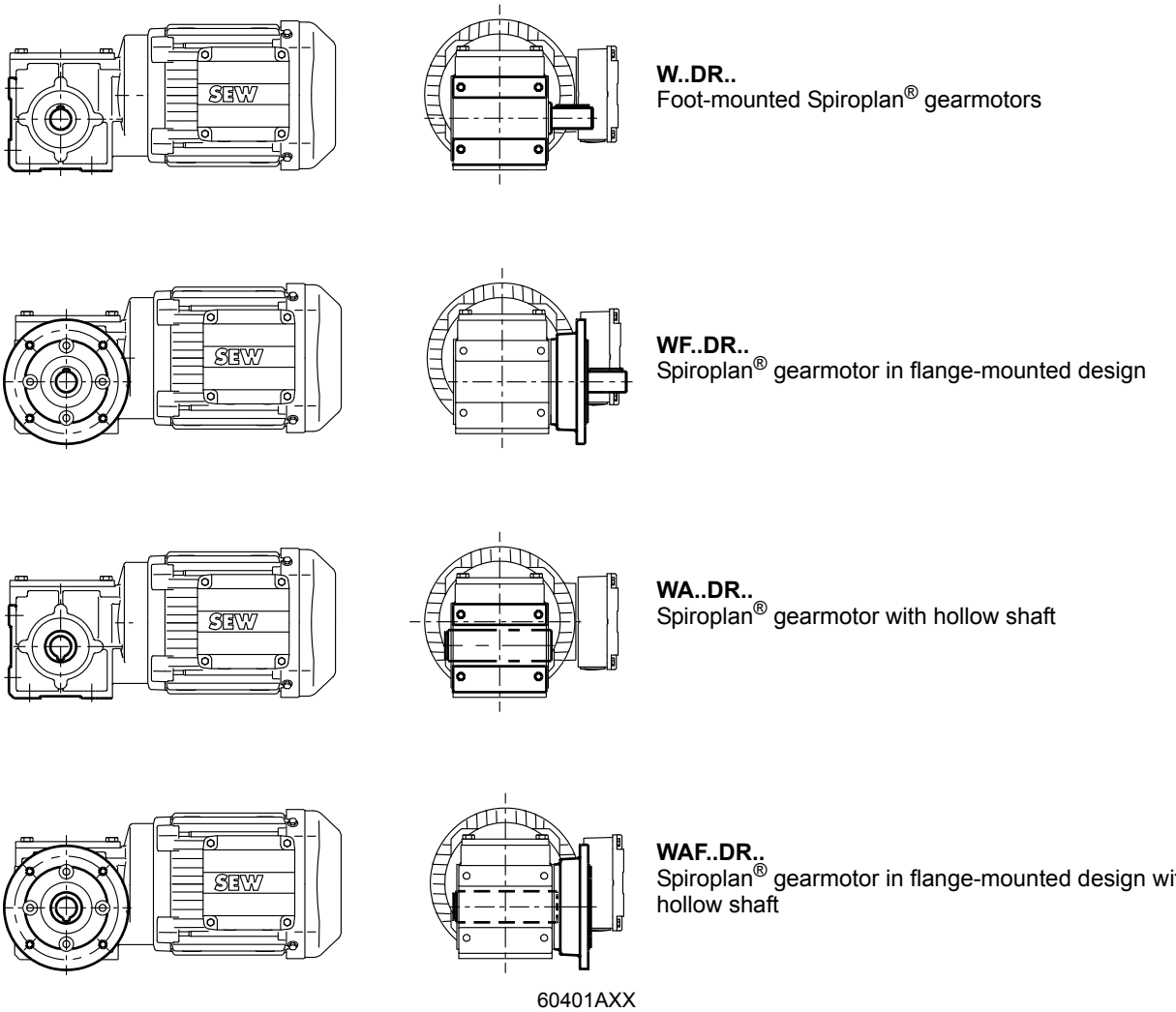


SHZ..DR..
Helical-worm gearmotor in B14 flange-mounted design with hollow shaft and shrink disk

60400AXX

Spiroplan® gearmotors

The following variants of Spiroplan® gearmotors size W..10 to W..47 are available:



W..DR..
Foot-mounted Spiroplan® gearmotors

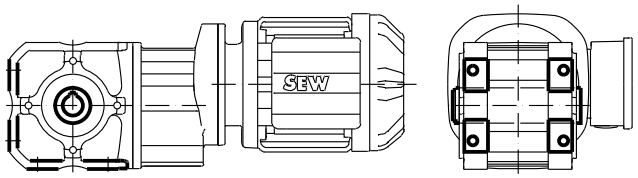
WF..DR..
Spiroplan® gearmotor in flange-mounted design

WA..DR..
Spiroplan® gearmotor with hollow shaft

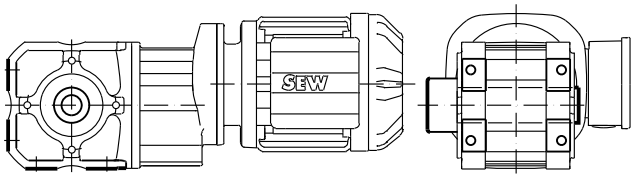
WAF..DR..
Spiroplan® gearmotor in flange-mounted design with hollow shaft

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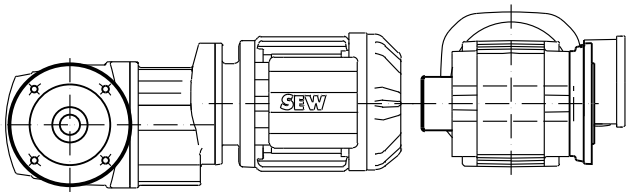
Additionally, the following variants of Spiroplan® gearmotors size W..37 and W..47 are available:



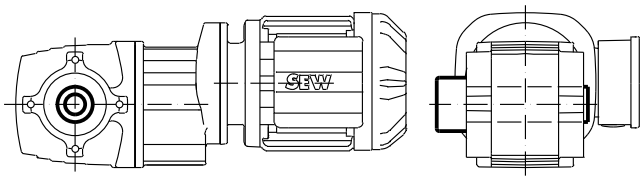
WA..B DR..
Foot-mounted Spiroplan® gearmotor with hollow shaft



WH..B DR..
Foot-mounted Spiroplan® gearmotor with hollow shaft and shrink disk



WHF.. DR..
Spiroplan® gearmotor in flange-mounted design with hollow shaft and shrink disk



WH.. DR..
Spiroplan® gearmotor with hollow shaft and shrink disk

WT.. DR..
Spiroplan® gearmotor with hollow shaft and TorqLOC®

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4 Project Planning for Drives

4.1 Additional documentation

In addition to the information in this manual, SEW-EURODRIVE offers extensive documentation covering the entire topic of electrical drive engineering. These are mainly the publications in the "Drive Engineering – Practical Implementation" series as well as the manuals and catalogs for electronically controlled drives. You will find additional links to a wide selection of our documentation in many languages for download on the SEW-EURODRIVE homepage (http://www.sew-eurodrive.com). The list below includes other documents that are of interest in terms of project planning. You can order these publications from SEW-EURODRIVE.

Drive Engineering – Practical Implementation

- Project Planning for Drives
- Controlled AC Drives
- EMC in Drive Engineering
- Explosion-Proof Drives to EU Directive 94/9/EC
- SEW Disk Brakes

Electronics documentation

- "Decentralized Installation" system folder (MOVIMOT®, MOVI-SWITCH®, communication and supply interfaces)
- "MOVITRAC® B" system manual
- "MOVIDRIVE® MDX60/61B" system manual

4.2 Drive selection data

In order to be able to precisely define the components for your drive, certain data is required. These are:

Drive selection data			Your entry
n_{amin}	Minimum output speed	[1/min]	
n_{amax}	Maximum output speed	[1/min]	
P_a at n_{amin}	Output power at minimum output speed	[kW]	
P_a at n_{amax}	Output power at maximum output speed	[kW]	
M_a at n_{amin}	Output torque at minimum output speed	[Nm]	
M_a at n_{amax}	Output torque at maximum output speed	[Nm]	
F_R	Overhung loads acting on the output shaft. Force application in center of shaft end is assumed. If, specify the exact application point giving the application angle and direction of rotation of the shaft for recalculation.	[N]	
F_A	Axial load (tension and compression) on the output shaft	[N]	
J_{Last}	Mass moment of inertia to be driven	[10^{-4} kgm^2]	
R, F, K, S, W M1 - M6	Required gear unit type and mounting position (→ Sec. Mounting positions, churning losses)	-	
IP..	Required degree of protection	-	
ϑ_{Umg}	Ambient temperature	[°C]	
H	Installation altitude	[m above sea level]	
S.., ..% cdf	Duty type and cyclic duration factor (cdf) or exact load cycle can be entered.	-	
Z	Starting frequency; alternatively, exact load cycle can be specified	[1/h]	
f_{line}	Line frequency	[Hz]	
U_{Mot}, U_{Bremse}	Operating voltage of motor and brake	[V]	
M_B	Required braking torque	[Nm]	
For inverter operation: **Required control type and setting range**			

Determining the motor data

First, in order to select the correct drive, you require the data (mass, speed, setting range, etc.) of the machine to be driven.

These data help determine the required power, torque and speed. Refer to the "Drive Engineering – Practical Implementation, Drive Planning" publication or the PRODRIVE® project planning software for assistance.

Selecting the proper drive

The appropriate drive can be determined with the calculated power and speed and with other mechanical requirements taken into account.

4.3 Project planning procedure

Example

The following flow diagram illustrates the project planning procedure for a positioning drive. The drive consists of a gearmotor that is powered by an inverter.

Necessary information regarding the machine to be driven
- Technical data and environmental conditions
- Positioning accuracy
- Speed setting range (rotational accuracy)
- Travel cycle calculation

↓

Calculation of the relevant application data
- static, dynamic, and regenerative power
- Speeds
- Torques
- Travel diagram

↓

Gear unit selection
- Definition of gear unit size, gear unit reduction ratio and gear unit type
- Check the positioning accuracy
- Check the gear unit utilization ($M_{o\ max} \geq M_{o\ (t)}$)

↓

System selection depending on
- Positioning accuracy
- Setting range
- Control

↓

Inverter operation
- Voltage-controlled inverter without and with speed control
- Voltage-controlled, vector-controlled inverter without and with speed control
- Current-controlled, vector-controlled inverter

↓

Motor selection
- Maximum torque
- For extremely low output speeds: Limit motor power according to $M_{a\ max}$ of the gear unit
- For dynamic drives: Effective torque at medium speed
- Maximum speed
- For dynamic drives: Torque curves
- Thermal load (setting range, cyclic duration factor)
- Selection of the correct encoder
- Motor equipment (brake, plug connector, TF temperature monitoring, etc.)

↓

Brake selection
- Determine the braking torque
- Determine the working capacity
- Determine the brake size
- Select the brake control

↓

↓

Select the inverter
– Motor/inverter assignment
– Continuous power and peak power in voltage-controlled inverters
– Continuous current and peak current in current-controlled inverters

↓

Select the braking resistor
– Based on the calculated regenerative power and cdf

↓

Options
– EMC measures
– Operation/communication
– Additional functions

↓

Make sure that all requirements have been met.

5 Project Planning for Gear Units

5.1 Efficiency of SEW gear units

General information

The efficiency of gear units is mainly determined by the gearing and bearing friction. Keep in mind that the starting efficiency of a gear unit is always less than its efficiency at operating speed. This factor is especially pronounced in the case of helical-worm and Spiroplan® right-angle gearmotors.

R, F, K gear units

The efficiency of helical, parallel-shaft and helical-bevel gear units varies with the number of gear stages, between 94 % (3-stage) and 98 % (1-stage).

S and W gear units

The gearing in helical-worm and Spiroplan® gear units produces a high proportion of sliding friction. As a result, these gear units have higher gearing losses than R, F or K gear units and thus be less efficient.

The efficiency depends on the following factors:

- Gear ratio of the helical-worm or Spiroplan® stage
- Input speed
- Gear unit temperature

Helical-worm gear units from SEW-EURODRIVE are helical gear/worm combinations that are significantly more efficient than plain worm gear units. The efficiency may reach $\eta < 0.5$ if the helical-worm or Spiroplan® stage has a very high ratio step.

Self-locking

Retrodriving torques on helical-worm or Spiroplan® gear units produce an efficiency of $\eta = 2 - 1/\eta$, which is significantly less favorable than the forward efficiency η. The helical-worm or Spiroplan® gear unit is self-locking if the forward efficiency $\eta \leq 0.5$. Some Spiroplan® gear units are also dynamically self-locking. Contact SEW-EURODRIVE if you wish to make technical use of the braking effect of self-locking characteristics.



Do not use the self-locking effect of helical-worm and Spiroplan® gear units as sole safety function for hoists.

Run-in phase

The tooth flanks of new helical-worm and Spiroplan® gear units are not yet completely smooth. That fact makes for a greater friction angle and less efficiency than during later operation. This effect intensifies with increasing gear unit ratio. Subtract the following values from the listed efficiency during the run-in phase:

	Worm	
	i range	**η reduction**
1-start	approx. 50 ... 280	approx. 12%
2-start	approx. 20 ... 75	approx. 6%
3-start	approx. 20 ... 90	approx. 3%
5-start	approx. 6 ... 25	approx. 3%
6-start	approx. 7 ... 25	approx. 2%

Spiroplan® W10 to W30		**Spiroplan® W37 and W47**	
i range	**η reduction**	**i range**	**η reduction**
approx. 35 ... 75	approx. 15%	-	-
approx. 20 ... 35	approx. 10%	-	-
approx. 10 ... 20	approx. 8%	approx. 30 ... 70	approx. 8%
About 8	approx. 5%	approx. 10 ... 30	approx. 5%
About 6	approx. 3%	approx. 3 ... 10	approx. 3%

The run-in phase usually lasts 48 hours. Helical-worm and Spiroplan® gear units achieve their listed rated efficiency values when:

- the gear unit has been completely run-in,
- the gear unit has reached nominal operating temperature,
- the recommended lubricant has been filled in and
- the gear unit is operating in the rated load range.

Churning losses

In certain gear unit mounting positions (→ Sec. "Mounting positions and important order information"), the first gearing stage is completely immersed in the lubricant. When the circumferential velocity of the input stage is high, considerable churning losses occur in larger gear units that must be taken into account. Contact SEW-EURODRIVE if you wish to use gear units of this type.

If possible, use mounting position M1 for R, K and S gear units to keep the churning losses low.

5.2 Oil expansion tank

The oil expansion tank allows the lubricant/air space of the gear unit to expand. This means no lubricant can escape the breather valve at high operating temperatures.

SEW-EURODRIVE recommends to use oil expansion tanks for gear units and gearmotors in M4 mounting position and for input speeds > 2000 min^{-1}.

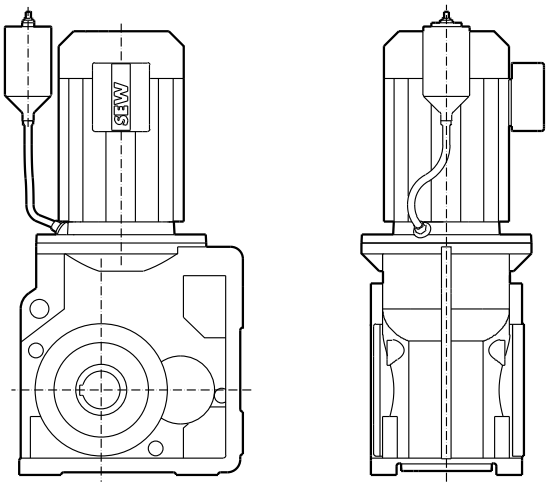


Figure 2: Oil expansion tank

The oil compensator is provided as assembly kit. It is intended for mounting onto the gearmotor. However, if installation space is limited or if the expansion tank is intended for gear units without motor, it can be mounted to nearby machine parts.

For further information, please contact your SEW-EURODRIVE sales representative.

5.3 Multi-stage gearmotors

General information

You can achieve extremely low output speeds by using multi-stage gear units or multi-stage gearmotors. This means an additional second gear unit, usually a helical gear unit, is installed in front of the gear unit or between gear unit and motor.

The resulting total reduction ratio may make gear unit protection necessary.

Limiting the motor power

You have to reduce the maximum output motor power according to the maximum permitted output torque on the gear unit ($M_{a\ max}$). For this purpose you first have to determine the maximum permitted motor torque ($M_{N\ zul}$).

You can calculate the maximum permitted motor torque as follows:

$$M_{N\ zul} = \frac{M_{a\ max}}{i_{ges} \cdot \eta_{ges}}$$

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Use this maximum permitted motor torque $M_{N\ zul}$ and the load diagram of the motor to determine the associated value for the motor current.

Take suitable measures to prevent the continuous current consumption of the motor from exceeding the previously determined value for the motor torque $M_{N\ zul}$. A suitable measure is, for example, to set the trip current of the motor protection switch to this maximum current value. A motor protection switch offers the option to compensate for a brief overload, for example during the startup phase of the motor. A suitable measure for inverter drives is to limit the output current of the inverter according to the determined motor current.

Checking brake torques

If you use a multi-stage brakemotor, you have to limit the braking torque (M_B) according to the maximum permitted motor torque $M_{N\ zul}$. The maximum permitted braking torque is 200 % $M_{N\ zul}$.

$M_{B\ max} \leq 200\ \%\ M_{N\ zul}$

If you have questions on the starting frequency of multi-stage brake motors, please consult SEW-EURODRIVE.

Avoiding blockage

Blockage on the output side of the multi-stage gear unit or multi-stage gearmotor is not permitted. The reason is that indeterminable torques and uncontrolled overhung and axial loads may occur. The gear units may suffer irreparable damage as a result.



Consult SEW-EURODRIVE if blockages of the multi-stage gear unit or multi-stage gearmotor cannot be avoided due to the application.

5.4 Service factor

Determining the service factor

The effect of the driven machine on the gear unit is taken into account to a sufficient level of accuracy using the service factor f_B. The service factor is determined according to the daily operating time and the starting frequency Z. Three load classifications are taken into account depending on the mass acceleration factor. You can read off the service factor applicable to your application in Figure 3. The service factor determined from this diagram must be smaller than or equal to the service factor according to the selection tables.

$$M_a \cdot f_b \leq M_{a\,max}$$

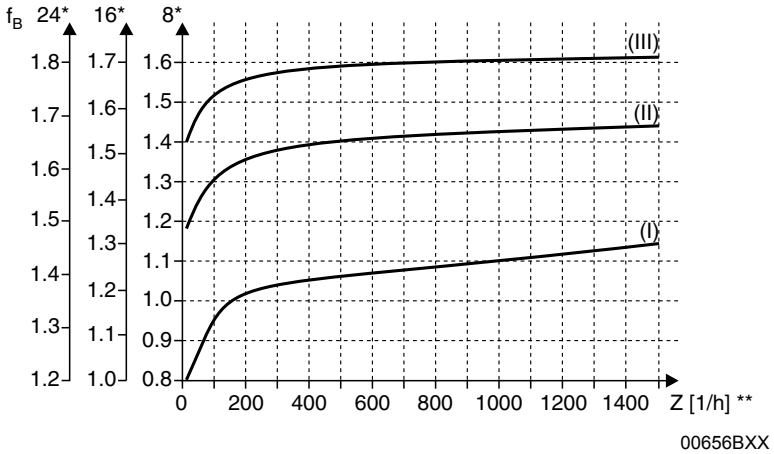


Figure 3: Service factor f_B

* Daily operating time in hours/day
** Starting frequency Z: The cycles include all starting and braking procedures as well as changeovers from low to high speed and vice versa.

Load classification

There are three load classifications:

(I) Uniform, permitted mass acceleration factor ≤ 0.2

(II) Non-uniform, permitted mass acceleration factor ≤ 3

(III) Non-uniform, permitted mass acceleration factor ≤ 10

Mass acceleration factor

The mass acceleration factor is calculated as follows:

$$\textbf{Mass acceleration factor} = \frac{\textbf{All external mass moments of inertia}}{\textbf{Mass moment of inertia on the motor end}}$$

"All external mass moments of inertia" are the mass moments of inertia of the driven machine and the gear unit, scaled down to the motor speed. The calculation for scaling down to motor speed is performed using the following formula:

$$J_X = J \bullet \left(\frac{n}{n_M}\right)^2$$

J_X = Mass moment of inertia scaled down to the motor shaft
J = Mass moment of inertia with reference to the output speed of the gear unit
n = Output speed of the gear unit
n_M = Motor speed

"Mass moment of inertia at the motor end" is the mass moment of inertia of the motor and, if installed, the brake and the flywheel fan (Z fan).

Service factors f_B 1.8 may occur with large mass acceleration factors (> 10), high levels of backlash in the transmission elements or large overhung loads. Contact SEW-EURODRIVE in such cases.

Service factor: SEW f_B

The method for determining the maximum permitted continuous torque $M_{o\ max}$ and using this value to derive the service factor $f_B = M_{o\ max} / M_o$ is not defined in a standard and varies greatly from manufacturer to manufacturer. Even at a SEW service factor of $f_B = 1$, the gear units afford an extremely high level of safety and reliability in the fatigue strength range (exception: Wearing of the worm wheel of the helical-worm gear unit). The service factor may differ from specifications of other gear unit manufacturers. If you are in doubt, contact SEW-EURODRIVE for more detailed information on your specific drive.

Example

Mass acceleration factor 2.5 (load classification II), 14 hours/day operating time (read off at 16 h/d) and 300 cycles/hour Figure 3 result in a service factor f_B = 1.51. According to the selection tables, the selected gearmotor must have an SEW f_B value of 1.51 or greater.

Helical-worm gear unit

For helical-worm gear units, two additional service factors will have to be taken into consideration besides service factor f_B derived from Figure 3. These are:

- f_{B1} = Service factor from ambient temperature
- f_{B2} = Service factor from cyclic duration factor

The additional service factors f_{B1} and f_{B2} can be determined by referring to the diagrams in Figure 4 . For f_{B1}, the load classification is taken into account in the same way as for f_B.

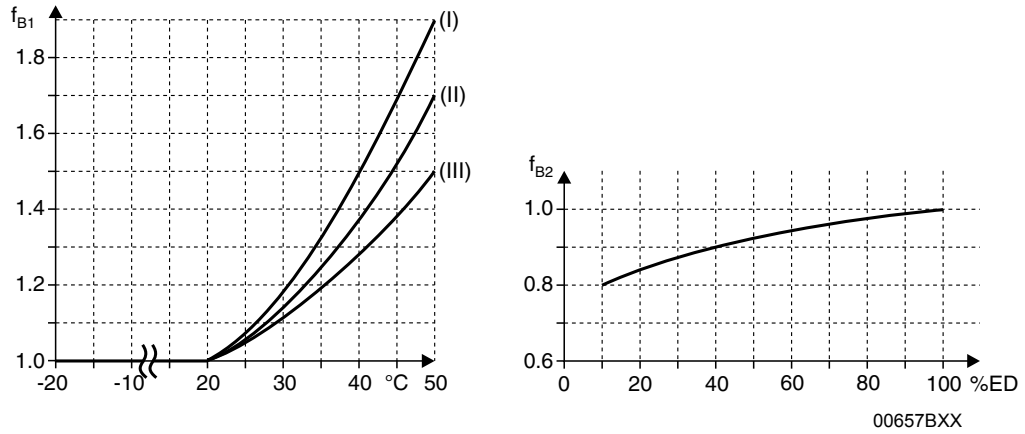


Figure 4: Additional service factors f_{B1} and f_{B2}

$$\textbf{cdf (\%)} = \frac{\textbf{Time under load in min/h}}{\textbf{60}} \bullet \textbf{100}$$

Contact SEW-EURODRIVE in case of temperatures below -20 °C ($\rightarrow f_{B1}$).

The total service factor for helical-worm gear units is calculated as follows:

$$\mathbf{f_{Bges} = f_B \bullet f_{B1} \bullet f_{B2}}$$

Example

The gearmotor with the service factor f_B = 1.51 in the previous example is to be a helical-worm gearmotor.

Ambient temperature ϑ = 40 °C $\rightarrow f_{B1}$ = 1.38 (read off at load classification II)

Time under load = 40 min/h $\rightarrow$ cdf = 66.67% $\rightarrow f_{B2}$ = 0.95

The total service factor is f_{Btot} = 1.51 • 1.38 • 0.95 = 1.98

According to the selection tables, the selected helical-worm gearmotor must have an SEW f_B service factor of 1.98 or greater.

5.5 Overhung and axial loads

Determining the overhung load

An important factor for determining the resulting overhung load is the type of transmission element mounted to the shaft end. The following transmission element factors f_Z have to be considered for various transmission elements.

Transmission element	Transmission element factor f_Z	Comments
Gears	1.15	< 17 teeth
Chain sprockets	1.40	< 13 teeth
Chain sprockets	1.25	< 20 teeth
Narrow V-belt pulleys	1.75	Influence of the pre-tensioning force
Flat-belt pulleys	2.50	Influence of the pre-tensioning force
Toothed belt pulleys	1.50	Influence of the pre-tensioning force

The overhung load exerted on the motor or gear shaft is calculated as follows:

$$F_R = \frac{M_d \bullet 2000}{d_0} \bullet f_Z$$

F_R = Overhung load in N

M_d = Torque in Nm

d_0 = Mean diameter of the installed transmission element in mm

f_Z = Transmission element factor

Permitted overhung load

The basis for determining the permitted overhung loads is the computation of the rated bearing service life L_{10h} of the anti-friction bearings (according to ISO 281).

For special operating conditions, the permitted overhung loads can be determined with regard to the modified service life L_{na} on request.

The permitted overhung loads F_{Ra} for the output shafts of foot-mounted gear units with a solid shaft are listed in the selection tables for gearmotors. Contact SEW-EURODRIVE in case of other versions.

The values refer to force applied to the center of the shaft end (in right-angle gear units as viewed onto drive end). The values for the force application angle α and direction of rotation are based on the most unfavorable conditions.

- Only 50% of the F_{Ra} value specified in the selection tables is permitted in mounting position M1 with wall attachment on the front face for K and S gear units.
- Helical-bevel gearmotors K167 and K187 in mounting positions M1 to M4: A maximum of 50% of the overhung load F_{Ra} specified in the selection tables in the case of gear unit mounting other than as shown in the mounting position sheets.
- Foot and flange-mounted helical gearmotors (R..F): A maximum of 50% of the overhung load F_{Ra} specified in the selection tables for torque transmission via flange mounting are permitted.

Higher permitted overhung loads

Exactly considering the force application angle α and the direction of rotation makes it possible to achieve a higher overhung load. Higher output shaft loads are permitted if heavy duty bearings are installed, especially with R, F and K gear units. Contact SEW-EURODRIVE in such cases.

Definition of the force application

The force application is defined according to the following figure:

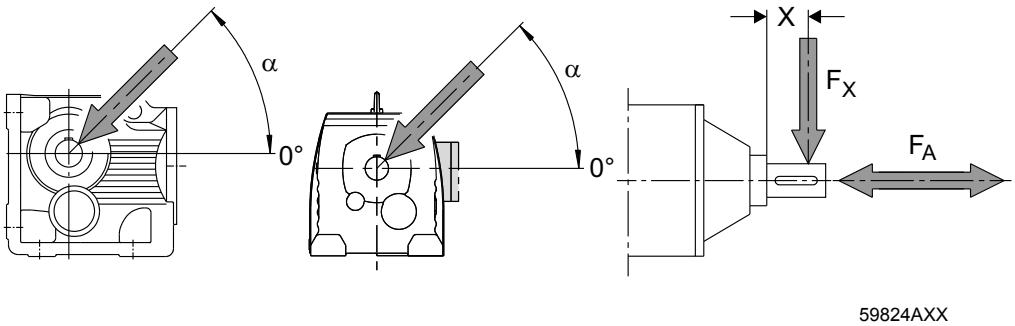


Figure 5: Definition of the force application

F_X = Permitted overhung load at point x [N]

F_A = Permitted axial load [N]

Permitted axial load

If there is no overhung load, then an axial force F_A (tension or compression) amounting to 50% of the overhung load given in the selection tables is permitted. This condition applies to the following gearmotors:

- Helical gearmotors except for R..137... to R..167...
- Parallel-shaft and helical-bevel gearmotors with solid shaft except for F97...
- Helical-worm gearmotors with solid shaft

Contact SEW-EURODRIVE for all other types of gear units and in the event of significantly greater axial forces or combinations of overhung load and axial force.

On the input side: Overhung load conversion for off-center force application

Important: only applies to gear units with input shaft assembly:

Please contact SEW-EURODRIVE for off-center force application on the drive end.

On the output side: Overhung load conversion for off-center force application

The permitted overhung loads must be calculated according the selection tables using the following formulae in the event that force is not applied at the center of the shaft end. The smaller of the two values F_{xL} (according to bearing life) and F_{xW} (according to shaft strength) is the permitted value for the overhung load at point x. Note that the calculations apply to $M_{a\,max}$.

F_{xL} according to bearing service life

$$F_{xL} = F_{Ramax} \bullet \frac{a}{b + x} \; [N]$$

F_{xW} from the Shaft strength:

$$F_{xW} = \frac{c}{f + x} \; [N]$$

F_{Ra} = Permitted overhung load (x = l/2) for foot-mounted gear units according to the selection tables in [N]

x = Distance from the shaft shoulder to the force application point in [mm]

a, b, f = Gear unit constant for overhung load conversion [mm]

c = Gear unit constant for overhung load conversion [Nmm]

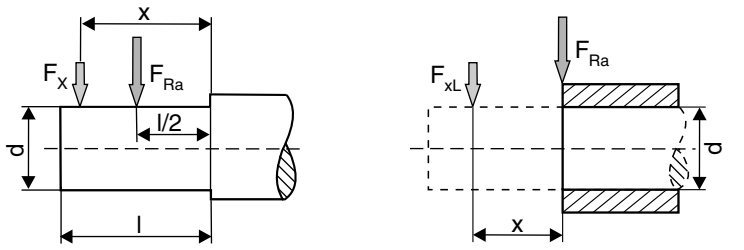


Figure 6: Overhung load F_x for off-center force application

Gear unit constants for overhung load conversion

Gear unit type	a [mm]	b [mm]	c [Nmm]	f [mm]	d [mm]	l [mm]
RX57	43.5	23.5	$1.51 \bullet 10^5$	34.2	20	40
RX67	52.5	27.5	$2.42 \bullet 10^5$	39.7	25	50
RX77	60.5	30.5	$1.95 \bullet 10^5$	0	30	60
RX87	73.5	33.5	$7.69 \bullet 10^5$	48.9	40	80
RX97	86.5	36.5	$1.43 \bullet 10^6$	53.9	50	100
RX107	102.5	42.5	$2.47 \bullet 10^6$	62.3	60	120
R07	72.0	52.0	$4.67 \bullet 10^4$	11	20	40
R17	88.5	68.5	$6.527 \bullet 10^4$	17	20	40
R27	106.5	81.5	$1.56 \bullet 10^5$	11.8	25	50
R37	118	93	$1.24 \bullet 10^5$	0	25	50
R47	137	107	$2.44 \bullet 10^5$	15	30	60
R57	147.5	112.5	$3.77 \bullet 10^5$	18	35	70
R67	168.5	133.5	$2.65 \bullet 10^5$	0	35	70
R77	173.7	133.7	$3.97 \bullet 10^5$	0	40	80
R87	216.7	166.7	$8.47 \bullet 10^5$	0	50	100
R97	255.5	195.5	$1.06 \bullet 10^6$	0	60	120
R107	285.5	215.5	$2.06 \bullet 10^6$	0	70	140
R137	343.5	258.5	$4.58 \bullet 10^6$	0	90	170
R147	402	297	$8.65 \bullet 10^6$	33	110	210
R167	450	345	$1.26 \bullet 10^7$	0	120	210
F27	109.5	84.5	$1.13 \bullet 10^5$	0	25	50
F37	123.5	98.5	$1.07 \bullet 10^5$	0	25	50
F47	153.5	123.5	$1.40 \bullet 10^5$	0	30	60
F57	170.7	135.7	$2.70 \bullet 10^5$	0	35	70
F67	181.3	141.3	$4.12 \bullet 10^5$	0	40	80
F77	215.8	165.8	$7.87 \bullet 10^5$	0	50	100
F87	263	203	$1.06 \bullet 10^6$	0	60	120
F97	350	280	$2.09 \bullet 10^6$	0	70	140
F107	373.5	288.5	$4.23 \bullet 10^6$	0	90	170
F127	442.5	337.5	$9.45 \bullet 10^6$	0	110	210
F157	512	407	$1.05 \bullet 10^7$	0	120	210
K37	123.5	98.5	$1.30 \bullet 10^5$	0	25	50
K47	153.5	123.5	$1.40 \bullet 10^5$	0	30	60
K57	169.7	134.7	$2.70 \bullet 10^5$	0	35	70
K67	181.3	141.3	$4.12 \bullet 10^5$	0	40	80
K77	215.8	165.8	$7.69 \bullet 10^5$	0	50	100
K87	252	192	$1.64 \bullet 10^6$	0	60	120
K97	319	249	$2.8 \bullet 10^6$	0	70	140
K107	373.5	288.5	$5.53 \bullet 10^6$	0	90	170
K127	443.5	338.5	$8.31 \bullet 10^6$	0	110	210
K157	509	404	$1.18 \bullet 10^7$	0	120	210
K167	621.5	496.5	$1.88 \bullet 10^7$	0	160	250
K187	720.5	560.5	$3.04 \bullet 10^7$	0	190	320
W10	84.8	64.8	$3.6 \bullet 10^4$	0	16	40
W20	98.5	78.5	$4.4 \bullet 10^4$	0	20	40
W30	109.5	89.5	$6.0 \bullet 10^4$	0	20	40
W37	121.1	101.1	$6.95 \bullet 10^4$	0	20	40
W47	145.5	115.5	$4.26 \bullet 10^5$	35.6	30	60
S37	118.5	98.5	$6.0 \bullet 10^4$	0	20	40
S47	130	105	$1.33 \bullet 10^5$	0	25	50
S57	150	120	$2.14 \bullet 10^5$	0	30	60
S67	184	149	$3.04 \bullet 10^5$	0	35	70
S77	224	179	$5.26 \bullet 10^5$	0	45	90
S87	281.5	221.5	$1.68 \bullet 10^6$	0	60	120
S97	326.3	256.3	$2.54 \bullet 10^6$	0	70	140

Values for types not listed are available on request.

5.6 RM gear units

Project planning You must take account of the higher overhung loads and axial forces when planning projects with RM helical gearmotors with extended bearing housing. Observe the following project planning procedure:

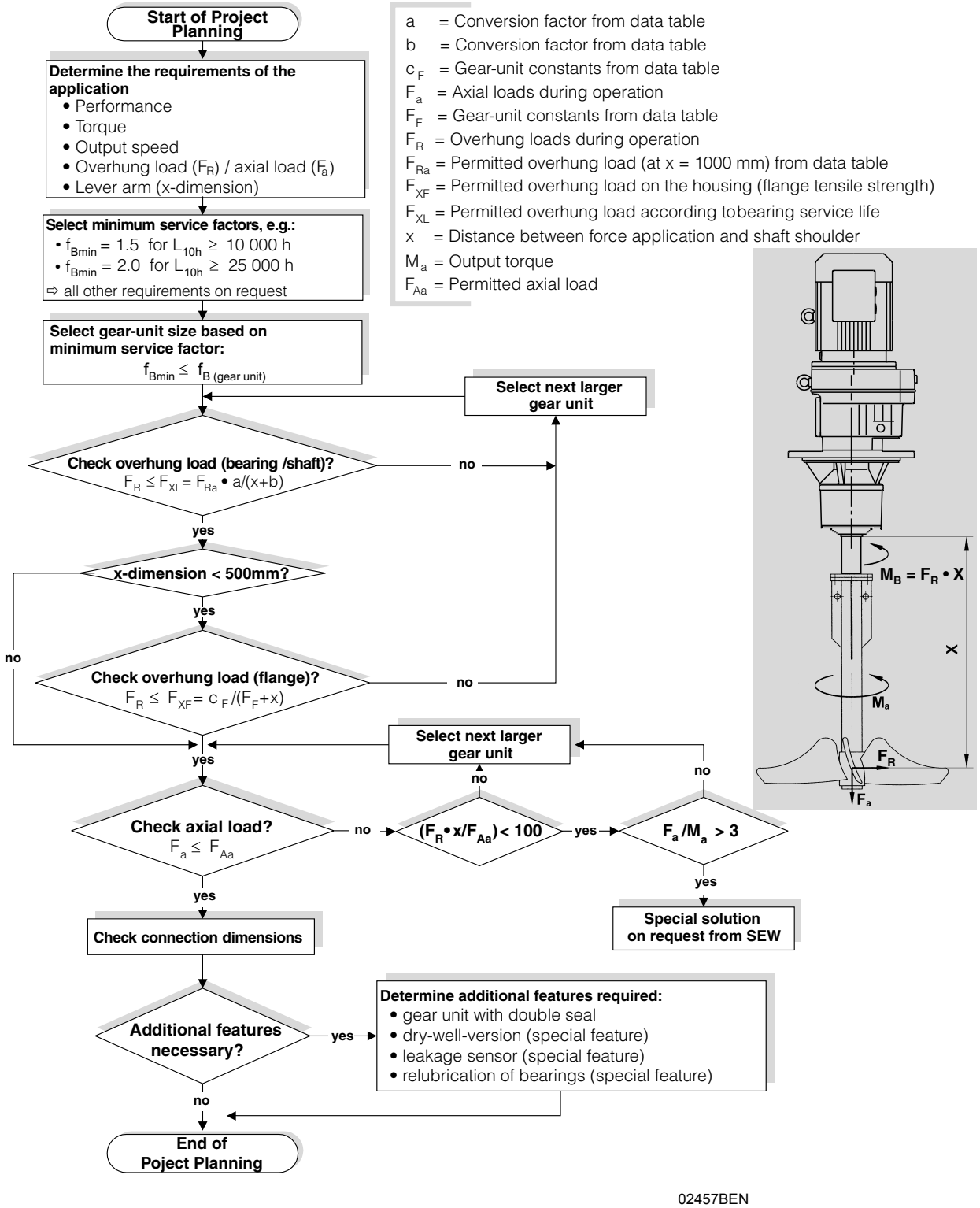


Figure 7: Project planning for RM gear units

Permitted overhung loads and axial forces

The permitted overhung loads F_{Ra} and axial forces F_{Aa} are specified for various service factors f_B and nominal bearing service life L_{10h}.

f_{Bmin} = 1.5; L_{10h} = 10 000 h

		n_a [1/min]							
		< 16	16-25	26-40	41-60	61-100	101-160	161-250	251-400
RM57	F_{Ra} [N]	400	400	400	400	400	405	410	415
	F_{Aa} [N]	18800	15000	11500	9700	7100	5650	4450	3800
RM67	F_{Ra} [N]	575	575	575	580	575	585	590	600
	F_{Aa} [N]	19000	18900	15300	11900	9210	7470	5870	5050
RM77	F_{Ra} [N]	1200	1200	1200	1200	1200	1210	1210	1220
	F_{Aa} [N]	22000	22000	19400	15100	11400	9220	7200	6710
RM87	F_{Ra} [N]	1970	1970	1970	1970	1980	1990	2000	2010
	F_{Aa} [N]	30000	30000	23600	18000	14300	11000	8940	8030
RM97	F_{Ra} [N]	2980	2980	2980	2990	3010	3050	3060	3080
	F_{Aa} [N]	40000	36100	27300	20300	15900	12600	9640	7810
RM107	F_{Ra} [N]	4230	4230	4230	4230	4230	4230	3580	3830
	F_{Aa} [N]	48000	41000	30300	23000	18000	13100	9550	9030
RM137	F_{Ra} [N]	8710	8710	8710	8710	7220	5060	3980	6750
	F_{Aa} [N]	70000	70000	70000	57600	46900	44000	35600	32400
RM147	F_{Ra} [N]	11100	11100	11100	11100	11100	10600	8640	10800
	F_{Aa} [N]	70000	70000	69700	58400	45600	38000	32800	30800
RM167	F_{Ra} [N]	14600	14600	14600	14600	14600	14700	-	-
	F_{Aa} [N]	70000	70000	70000	60300	45300	36900	-	-

f_{Bmin} = 2,0; L_{10h} = 25 000 h

		n_a [1/min]							
		< 16	16-25	26-40	41-60	61-100	101-160	161-250	251-400
RM57	F_{Ra} [N]	410	410	410	410	410	415	415	420
	F_{Aa} [N]	12100	9600	7350	6050	4300	3350	2600	2200
RM67	F_{Ra} [N]	590	590	590	595	590	595	600	605
	F_{Aa} [N]	15800	12000	9580	7330	5580	4460	3460	2930
RM77	F_{Ra} [N]	1210	1210	1210	1210	1210	1220	1220	1220
	F_{Aa} [N]	20000	15400	11900	9070	6670	5280	4010	3700
RM87	F_{Ra} [N]	2000	2000	2000	2000	2000	1720	1690	1710
	F_{Aa} [N]	24600	19200	14300	10600	8190	6100	5490	4860
RM97	F_{Ra} [N]	3040	3040	3040	3050	3070	3080	2540	2430
	F_{Aa} [N]	28400	22000	16200	11600	8850	6840	5830	4760
RM107	F_{Ra} [N]	4330	4330	4330	4330	4330	3350	2810	2990
	F_{Aa} [N]	32300	24800	17800	13000	9780	8170	5950	5620
RM137	F_{Ra} [N]	8850	8850	8850	8830	5660	4020	3200	5240
	F_{Aa} [N]	70000	59900	48000	37900	33800	31700	25600	23300
RM147	F_{Ra} [N]	11400	11400	11400	11400	11400	8320	6850	8440
	F_{Aa} [N]	70000	60600	45900	39900	33500	27900	24100	22600
RM167	F_{Ra} [N]	15100	15100	15100	15100	15100	13100	-	-
	F_{Aa} [N]	70000	63500	51600	37800	26800	23600	-	-

Conversion factors and gear unit constants

The following conversion factors and gear unit constants apply to calculating the permitted overhung load F_{xL} at point $x \neq 1000$ mm for RM gearmotors:

Gear unit type	a	b	c_F (f_B = 1.5)	c_F (f_B = 2.0)	F_F
RM57	1047	47	1220600	1260400	277
RM67	1047	47	2047600	2100000	297.5
RM77	1050	50	2512800	2574700	340.5
RM87	1056.5	56.5	4917800	5029000	414
RM97	1061	61	10911600	11124100	481
RM107	1069	69	15367000	15652000	554.5
RM137	1088	88	25291700	25993600	650
RM147	1091	91	30038700	31173900	756
RM167	1089.5	89.5	42096100	43654300	869

Additional weight RM gear units

Type	Additional weight compared to RF with reference to the smallest RF flange Δm [kg]
RM57	12.0
RM67	15.8
RM77	25.0
RM87	29.7
RM97	51.3
RM107	88.0
RM137	111.1
RM147	167.4
RM167	195.4

5.7 Condition monitoring: Oil aging and vibration sensor

DUO10A diagnostics unit (Oil aging sensor)

The diagnostics unit consists of a temperature sensor and the actual evaluation unit. The temperature sensor is screwed into a screw plug bore of the gear unit via an adapter system and connected to the evaluation unit.

The service life curves of the oil grades common in SEW gear units are stored in the electronics of the evaluation unit. SEW-EURODRIVE can also customize any oil grade in the diagnostic unit. Standard parameterization is performed directly on the evaluation unit. During operation, the evaluation unit continuously calculates the remaining service life in days based on the oil temperature, i.e. the time until the next oil change. The remaining service life is displayed directly on the evaluation unit. The expiration of the service life can also be transferred to a higher-level system via a binary signal and be evaluated or visualized there. Other switch outputs signal when a prewarning stage has been reached, a preset temperature limit is exceeded or readiness for operation. The voltage supply is DC 24 V.

The system operator no longer has to replace the oil within predefined intervals, but can adapt the replacement interval individually to the actual load. The benefits are reduced maintenance and service costs and increased system availability.

DUV10A diagnostics unit (vibration sensor)

The DUV10A diagnostics unit measures the structure-borne noise and uses this value to calculate the frequency spectrum. The structure-born noise sensor and evaluation electronics are fully integrated in the diagnostic unit. Data, such as vibration acceleration, damage frequencies, etc., can be recorded, processed and evaluated decentralized without any expert knowledge. The damage progress of the diagnosis objects is indicated by the LEDs directly on the diagnostics unit. External visualization of the binary signals to the controller is also possible. A depth diagnosis can be displayed via the software.

The diagnostics unit is attached to the gearmotor or motor using a fastening element. The position where the diagnostic unit is installed depends on the objects to be diagnosed (gear unit/motor type, mounting position). The tightening torque for the screw connection is 7 Nm.

The diagnostics unit can be used to monitor up to 5 different objects or 20 individual frequencies. The diagnostic unit can be used with both constant and variable speeds. To ensure correct diagnosis when using variable speeds, a 0...20 mA current loop or a pulse signal must be supplied. The voltage supply is DC 24 V.

The parameters of the unit are set using the supplied software. When all data have been parameterized, a pulse test is carried out to check the signal level from the diagnostics object to the diagnostics unit. Next, all data is transferred to the sensor and a teach-in run can be performed. The teach-in is a self-learning process performed by the sensor under operating conditions. After successful teach-in, the unit is ready and enters monitoring mode. As the unit requires a certain measuring time at constant speed depending on the setting and number of objects to be monitored, you should consult SEW-EURODRIVE for applications where this time is < 16 seconds.

6 Mounting Positions and Important Order Information

6.1 General information regarding the mounting positions

Designation of the mounting positions

SEW-EURODRIVE differentiates between six mounting positions M1 ... M6 for gear units, gearmotors and MOVIMOT® gearmotors. The following figure shows the position of the gear unit in mounting positions M1 ... M6.

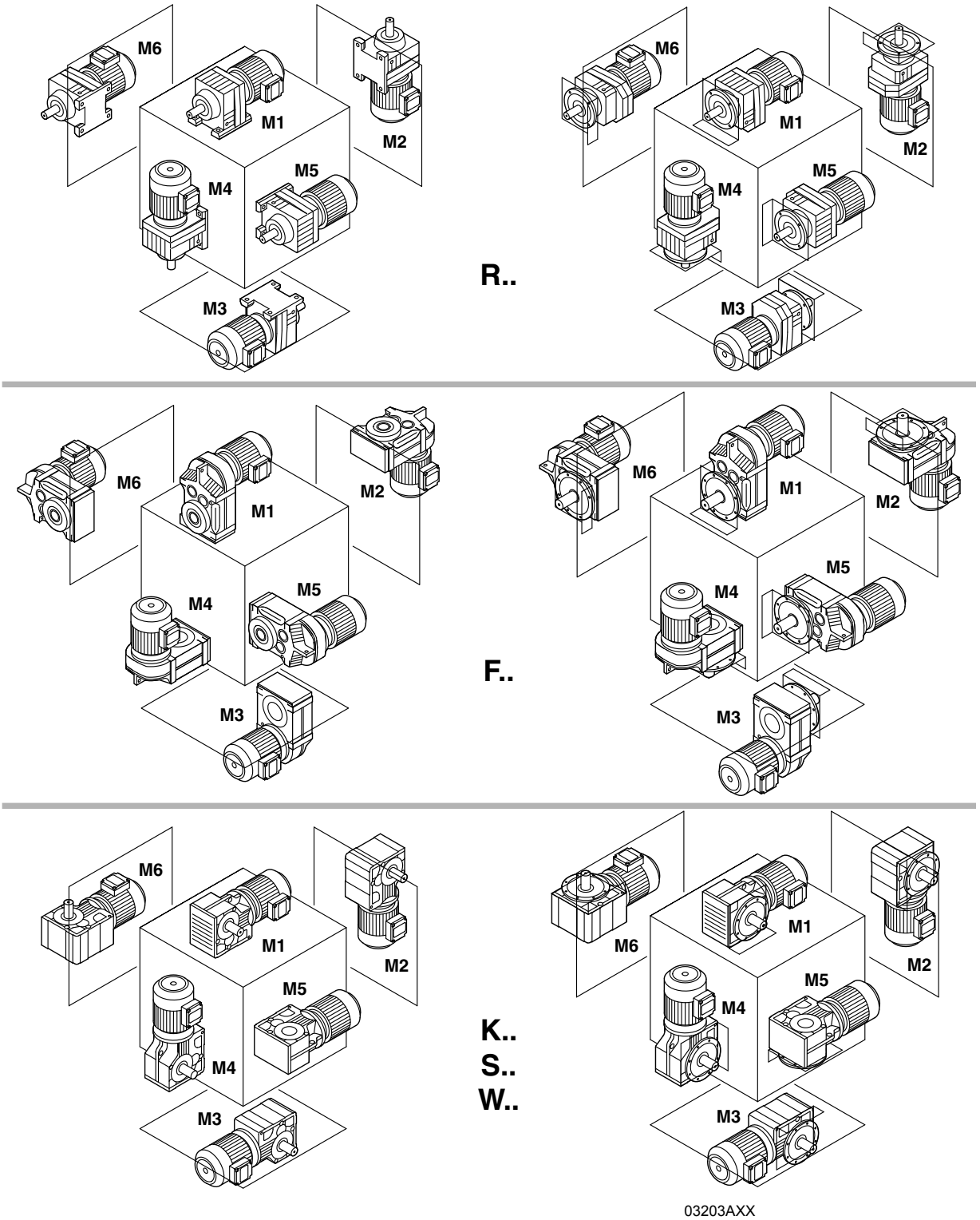


Figure 8: Depiction of mounting positions M1 ... M6

6.2 Important order information

The following order information is required for R, F, K and S gear units and gearmotors in addition to the mounting position to exactly determine the design of the drive.

This information is also required for Spiroplan® gearmotors (W gearmotors) that do not depend on a particular mounting position.

The following applies to all gear units and gearmotors

Observe the following notes for all gear units and gearmotors from SEW-EURODRIVE.

Output direction of rotation with backstop

If the drive has an RS backstop, you have to indicate the direction of rotation of the output for the drive. The following definition applies:

As viewed at the output shaft: Clockwise (CW)
Counterclockwise (CCW)

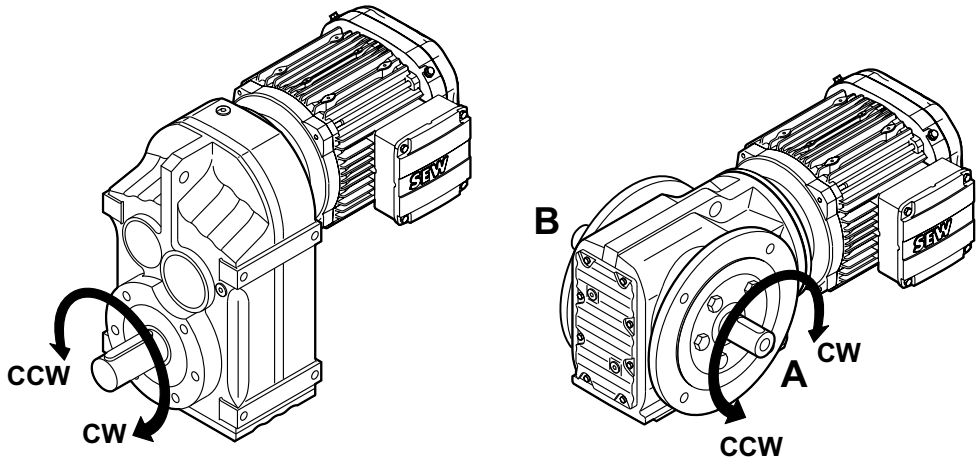


Figure 9: Output direction of rotation

In right-angle gear units, you also have to indicate whether the direction of rotation is given looking onto the A or B end.

Position of the output shaft and output flange

In right-angle gear units, you also have to indicate the position of the output shaft and the output flange:

- A or B or AB

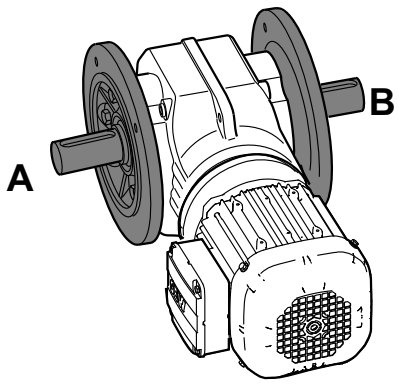
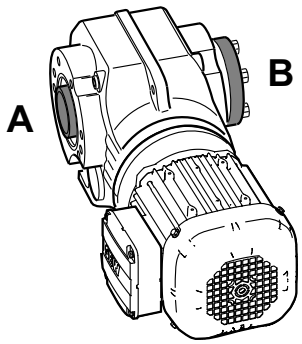


Figure 10: Position of the output shaft and the output flange

Position of output end in right-angle gear units

In shaft mounted right-angle gear units with a shrink disk, you also have to indicate whether the A or B end is the output end. In Figure 11, the A end is the output end. The shrink disk is located opposite the output end.

In shaft mounted right-angle gear units, the "output end" is equivalent to the "shaft position" of right-angle gear units with solid shaft.



60510AXX

Figure 11: Position of the output end

You will find the permitted mounting surfaces (= hatched area) in the mounting position sheets (page 60 and the following pages).

Example: Only the mounting surface at the bottom is possible with helical-bevel gear units K167/K187 in mounting positions M5 and M6.

For all gearmotors

Observe the following notes for all gearmotors from SEW-EURODRIVE.

Position of the motor terminal box and the cable entry

The position of the motor terminal box has so far been specified indicated with 0°, 90°, 180° or 270° as viewed onto the fan guard = B-end (→ Figure 12). A change in the product standard EN 60034 specifies that the following designations will have to be used for terminal box positions for foot-mounted motors in the future:

- As viewed onto the output shaft = A-end
- Designation as R (right), B (bottom), L (left) and T (top)

This new designation applies to foot-mounted motors without a gear unit in mounting position B3 (= M1). The previous designation is maintained for gearmotors. Figure 12 shows both designations. Where the mounting position of the motor changes, R, B, L and T are rotated accordingly. In motor mounting position B8 (= M3), T is at the bottom.

The position of the cable entry can be selected as well. The positions are "X" (= standard position), "1", "2" or "3" (→ Figure 12).

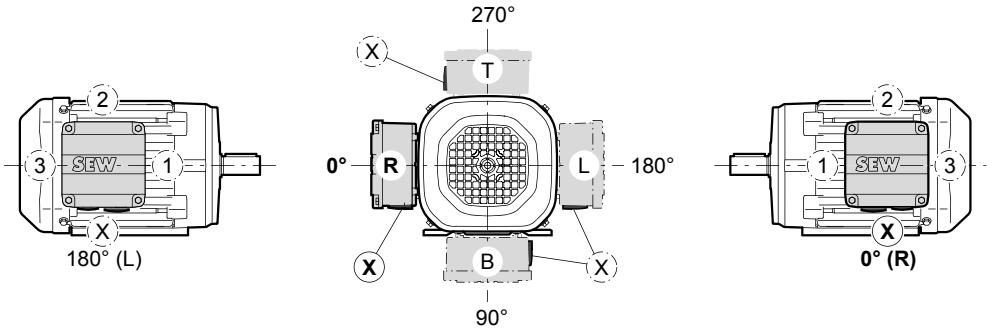


Figure 12: Position of terminal box and cable entry

Unless indicated otherwise, you will receive the terminal box type 0° (R) with "X" cable entry. We recommend selecting cable entry "2" with mounting position M3.

- **When the terminal box is in the 90° (B) position**, check to see if the gearmotor has to be supported.

Software support

Not any cable entry position [X, 1, 2, 3] and terminal box position [0°(R), 90°(B), 180°(L), 270°(T)] can be chosen. Some additional features for the motor require a connection inside the terminal box, which means this terminal box is larger than the standard terminal box due to the normative air gaps and creepage distances. The dimension sheets only depict the standard terminal box.

For a thorough check of the possible positions of your drive, you can use the DRIVECAD software in DriveGate on the SEW-EURODRIVE website.

- If you are already a registered DriveGate user: https://portal.drivegate.biz/drivecad
- If you are not yet a registered DriveGate user: www.sew-eurodrive.de → DriveGate login

Sample orders

Type (Examples)	Mounting position	Shaft position	Flange position	Terminal box position	Cable entry position	Output direction of rotation
K47DRS71S4/RS	M2	A	-	0°	"X"	CW
SF77DRS100M4	M6	AB	AB	90°	"3"	-
KA97DRS132S4	M4	B	-	270°	"2"	-
KH107DRS132M4	M1	A	-	180°	"3"	-
WF20DRS71M4	-	A	A	0°	"X"	-
KAF67A	M3	A	B	-	-	-

Changing the mounting position

Make sure to read the following information when you operate the gearmotor in a mounting position other than the one indicated in the order:

- Adjust lubricant fill quantity to match the new mounting position
- Adjust position of breather valve
- For helical-bevel gearmotors: Contact the SEW-EURODRIVE customer service prior to changing to mounting position M5 or M6 and when changing from M5 to M6 or vice versa.
- For helical-worm gearmotors: Contact the SEW-EURODRIVE customer service when changing to mounting position M2 or M3.

6.3 Key to the mounting position sheets

The Spiroplan® gearmotors are not dependant on the mounting position, except for W..37 and W..47 in mounting position M4. However, mounting positions M1 to M6 are also shown for Spiroplan® gearmotors to assist you in working with this documentation.

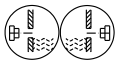
Important! Please note:

Spiroplan® gearmotors W..10 to W..30 cannot be equipped with breather valves, oil level plugs or drain plugs.

Spiroplan® gearmotors W..37 and W..47 can be equipped with breather valves, oil level plugs or drain plugs.

Symbols used

The following table shows the symbols used in the mounting position sheets and their meaning:

Symbol	Meaning
	Breather valve
	Oil level plug[1)]
	Oil drain plug

1) Does not apply to the first gear unit (larger gear unit) of multi-stage gear units.

Churning losses

* → page XX

Churning losses may occur in some mounting positions. Contact SEW-EURODRIVE in case of the following combinations:

Mounting position	Gear unit type	Gear unit size	Input speed [1/min]
M2, M4	R	97 ... 107	> 2500
		> 107	>1500
M2, M3, M4, M5, M6	F	97 ... 107	> 2500
		> 107	> 1500
	K	77 ... 107	> 2500
		> 107	> 1500
	S	77 ... 97	> 2500

Displayed shaft

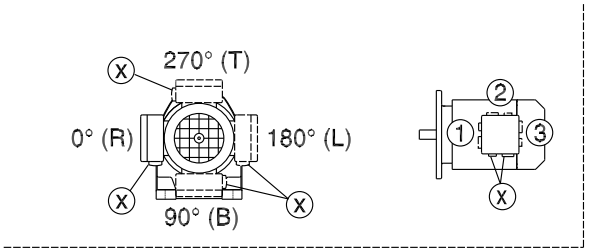
Note the following information regarding display of shafts in the mounting position sheets:

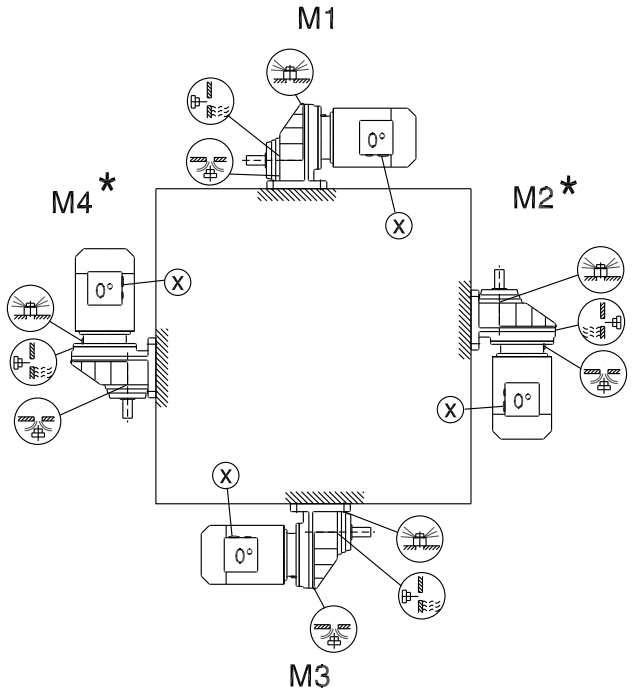
- **For gear units with solid shaft:** The displayed shaft is always on the A end.
- **For shaft mounted gear units:** The shaft with dashed lines represents the customer shaft. The output end (= shaft position) is always shown on the A end.

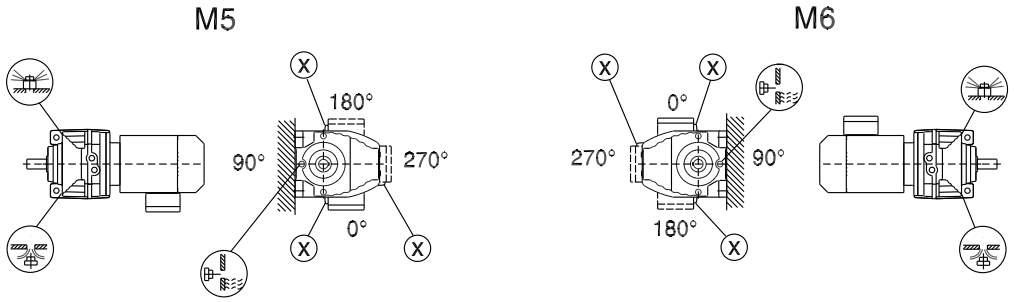
6.4 Helical gearmotors – mounting positions

RX57-RX107

04 043 02 00



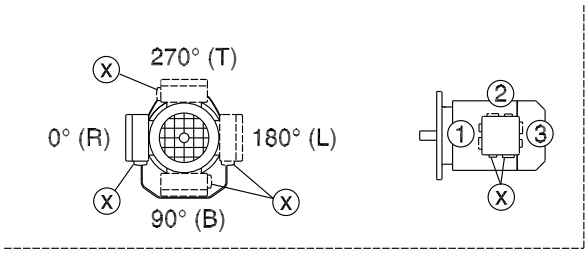


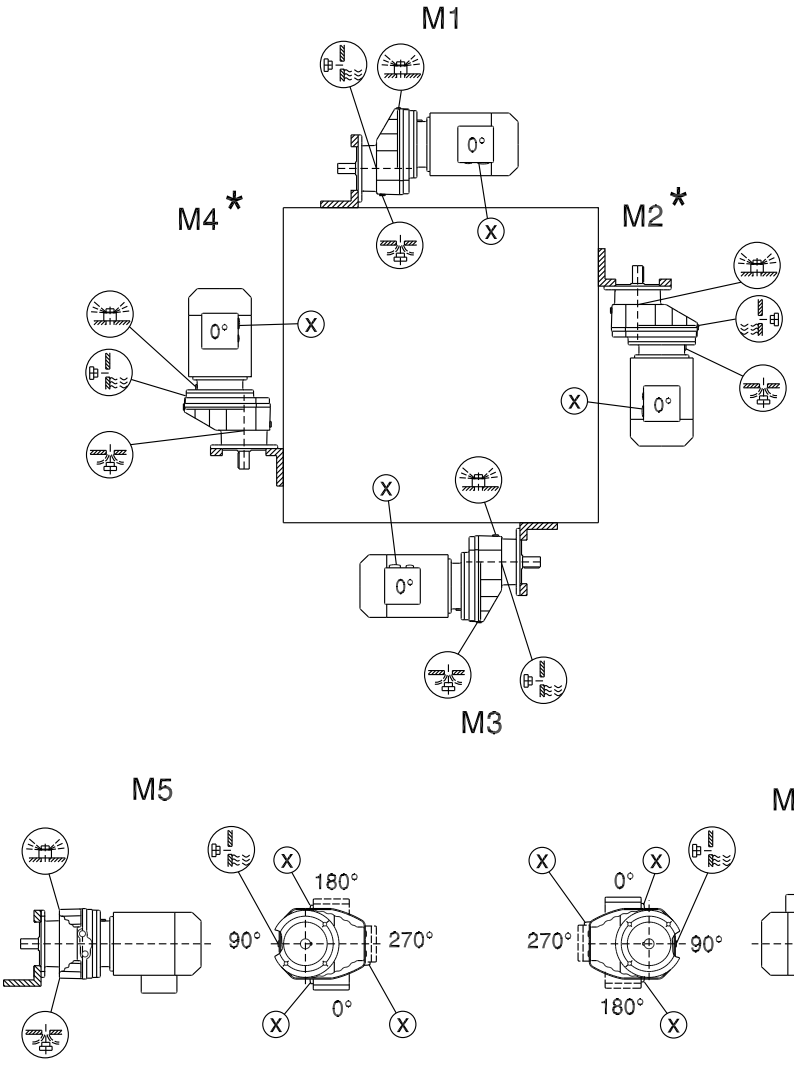


* → page 59

RXF57-RXF107

04 044 02 00

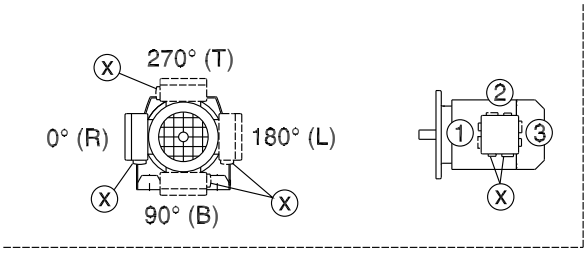


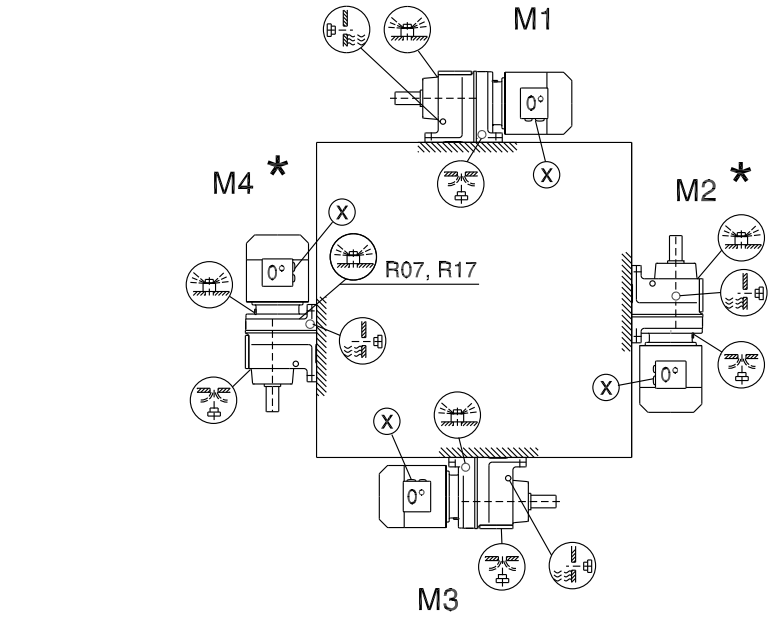


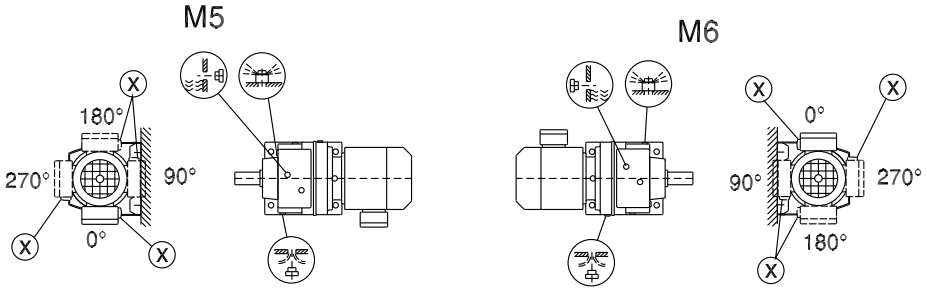
* → page 59

R07-R167

04 040 03 00





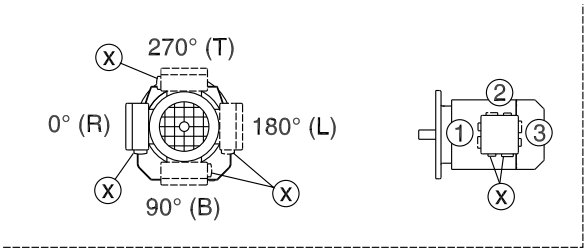


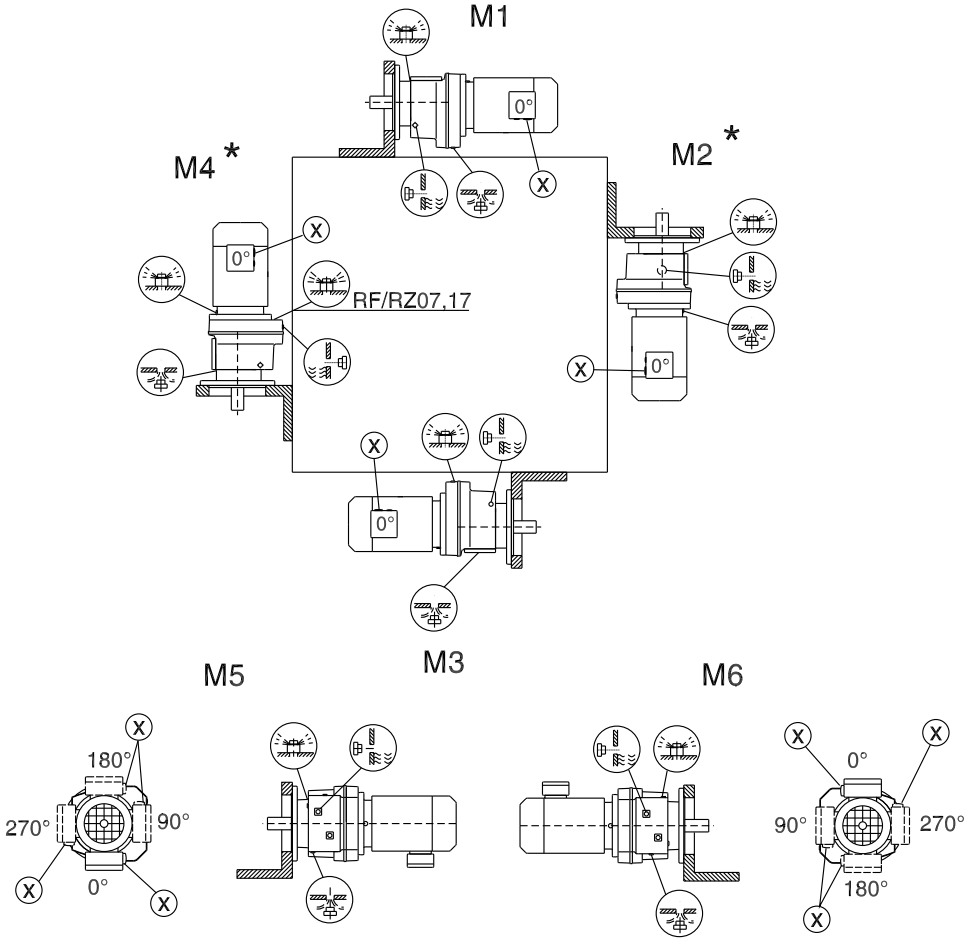
R07		M1, M2 , M3 , M5 , M6
R17, R27		M1, M3 , M5 , M6
R07, R17, R27		
R47, R57		M5

* → page 59

RF07-RF167, RZ07-RZ87

04 041 03 00



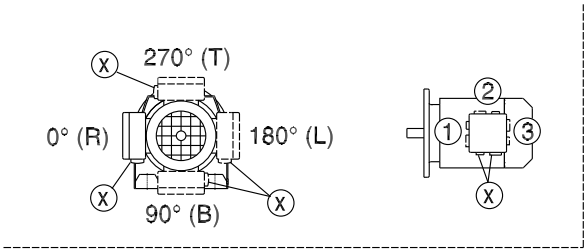


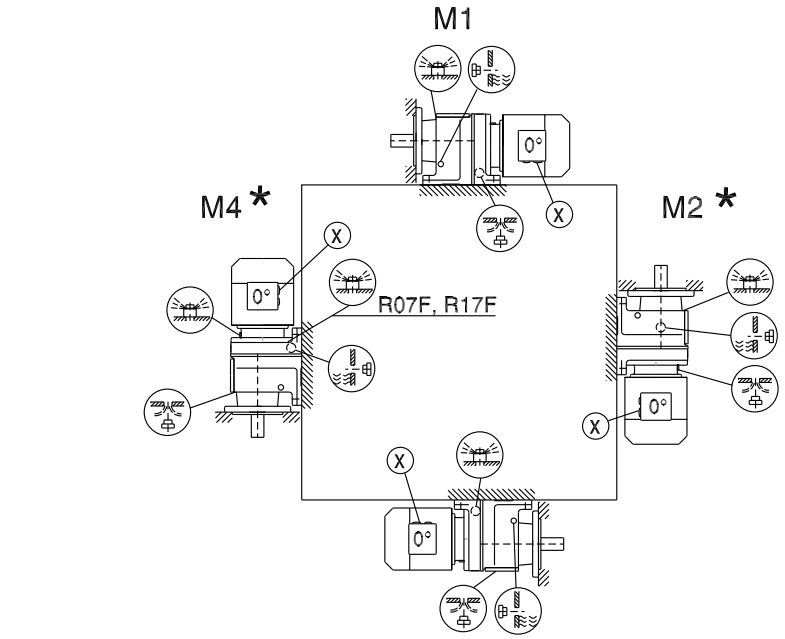
RF/RZ07		M1, M2 , M3 , M5 , M6
RF/RZ17,27		M1, M3 , M5 , M6
RF/RZ07, 17, 27		
RF/RZ47, 57		M5

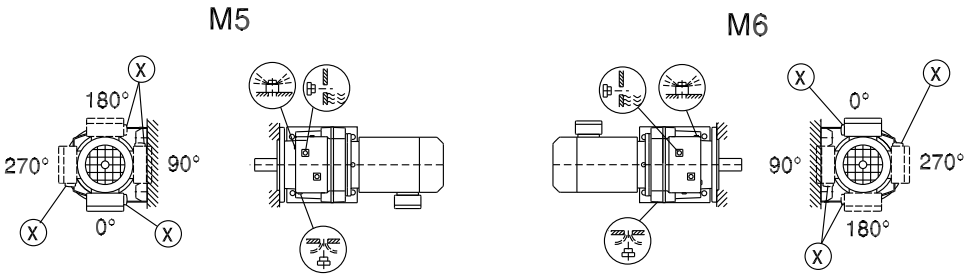
* → page 59

R07F-R87F

04 042 03 00







R07F		M1, M2 , M3 , M5 , M6
R17F, R27F		M1, M3 , M5 , M6
R07F, R17F, R27F		
R47F, R57F		M5

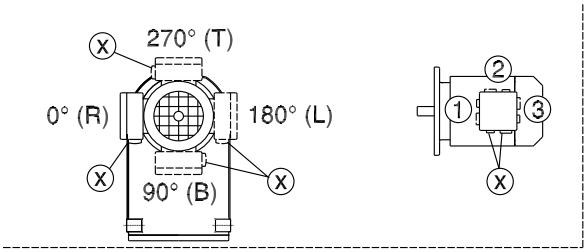
* → page 59

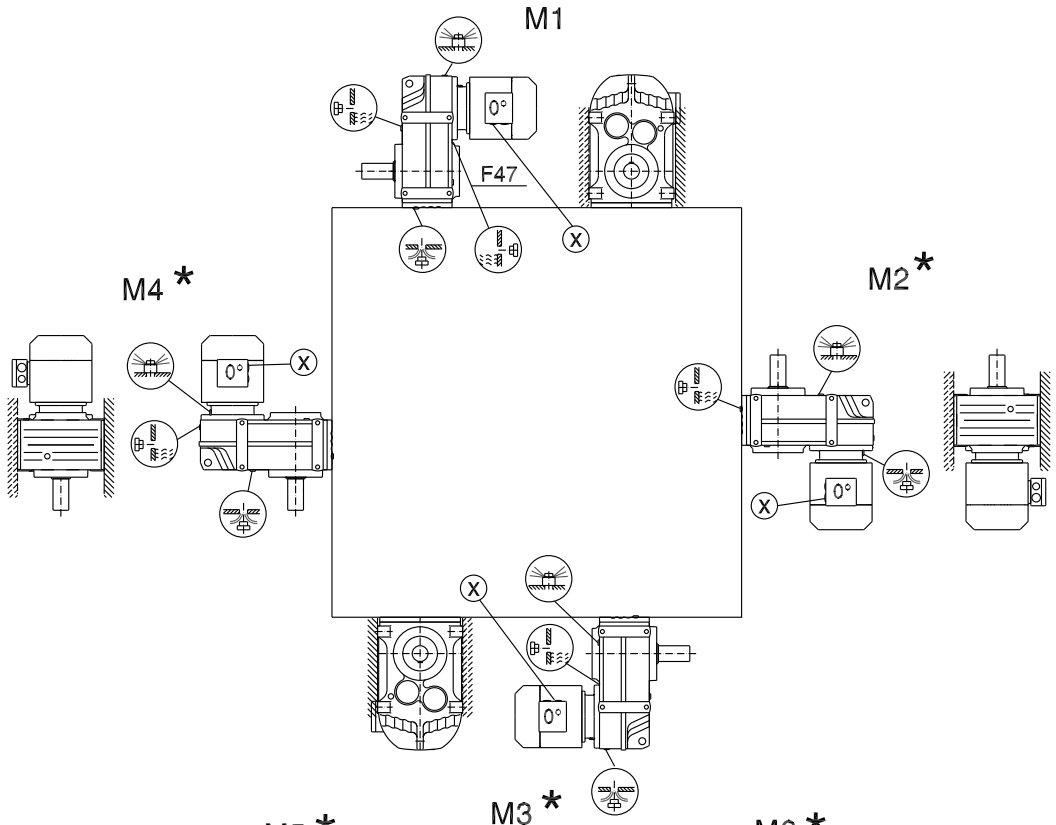
Caution: Observe the information marked with (i) in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads" (page 36).

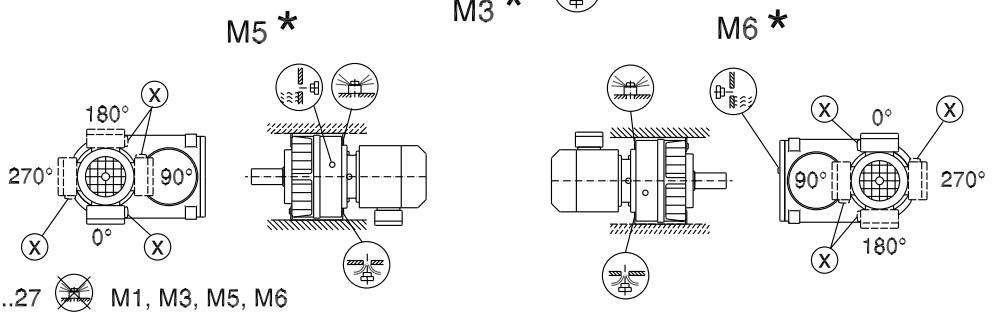
6.5 Parallel-shaft helical gearmotors – mounting positions

F/FA..B/FH27B-157B, FV27B-107B

42 042 03 00







F..27 M1, M3, M5, M6

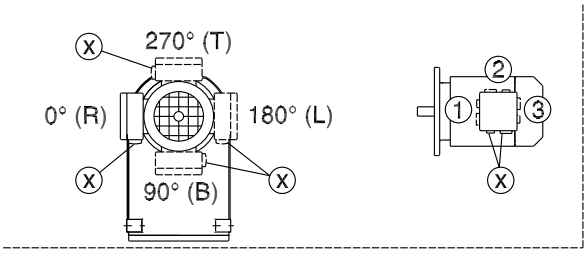
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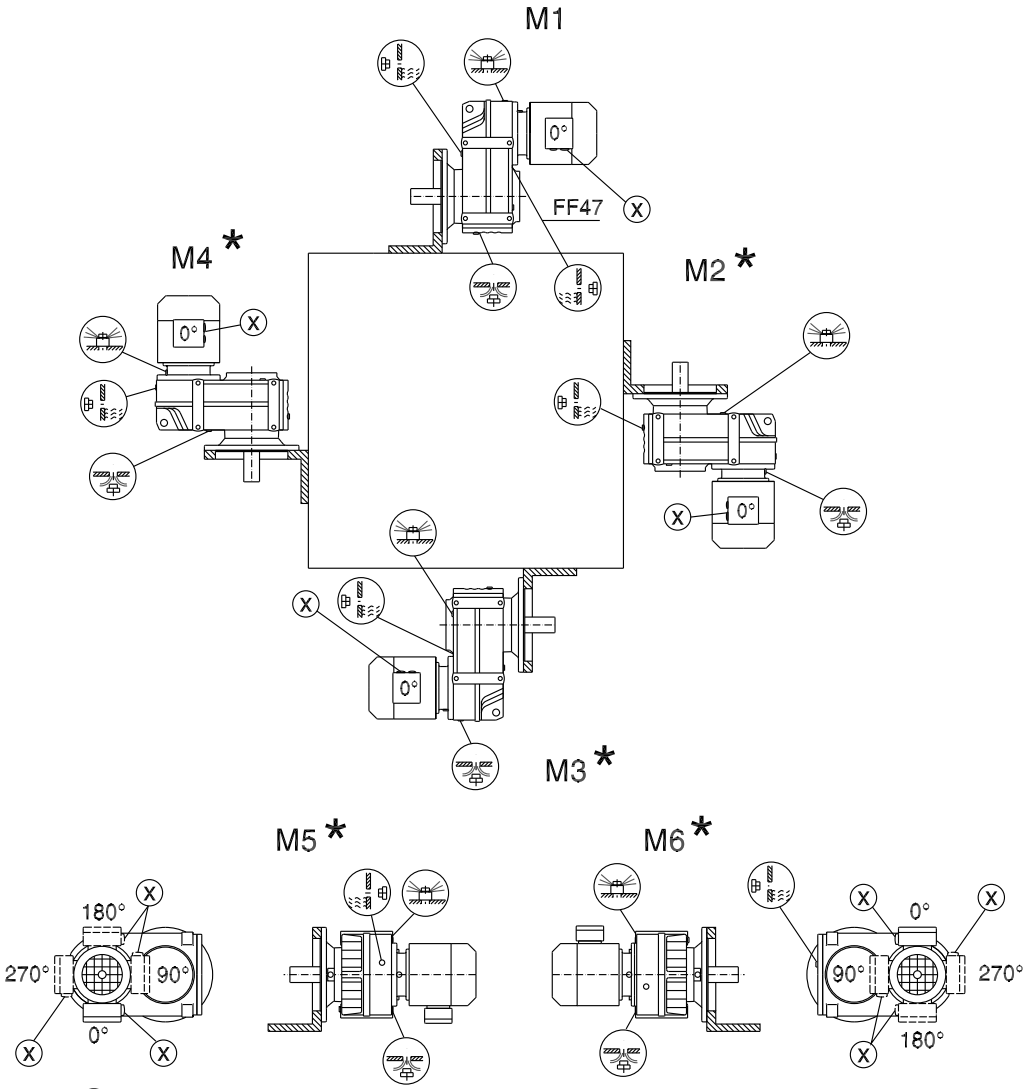
F..27 M1, M3, M5, M6

* → page 59

FF/FAF/FHF/FAZ/FHZ27-157, FVF/FVZ27-107

42 043 03 00





F..27 M1, M3, M5, M6

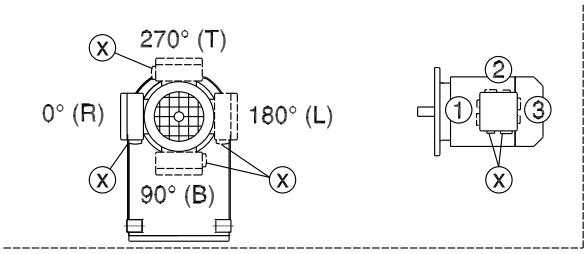
F..27 M1 - M6

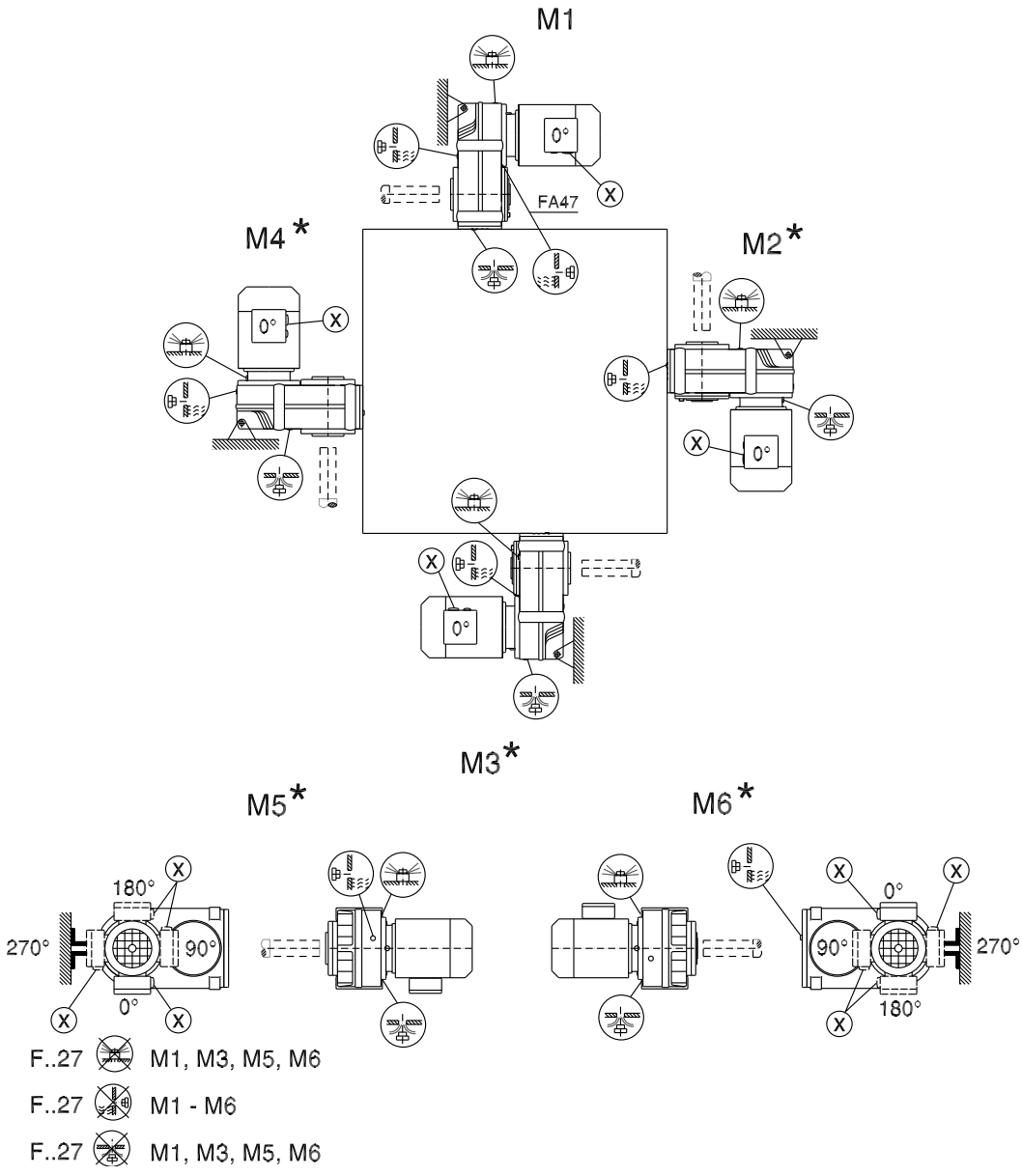
F..27 M1, M3, M5, M6

* → page 59

FA/FH27-157, FV27-107, FT37-97

42 044 03 00



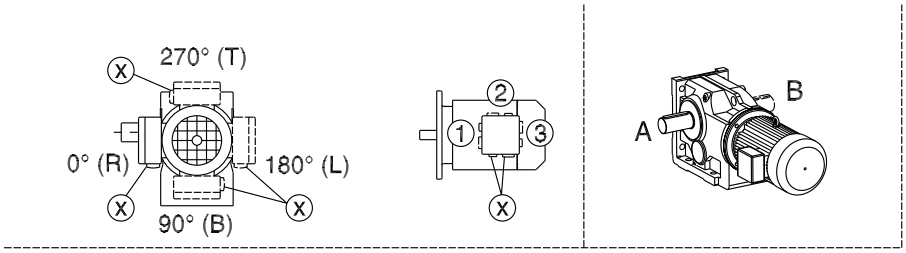


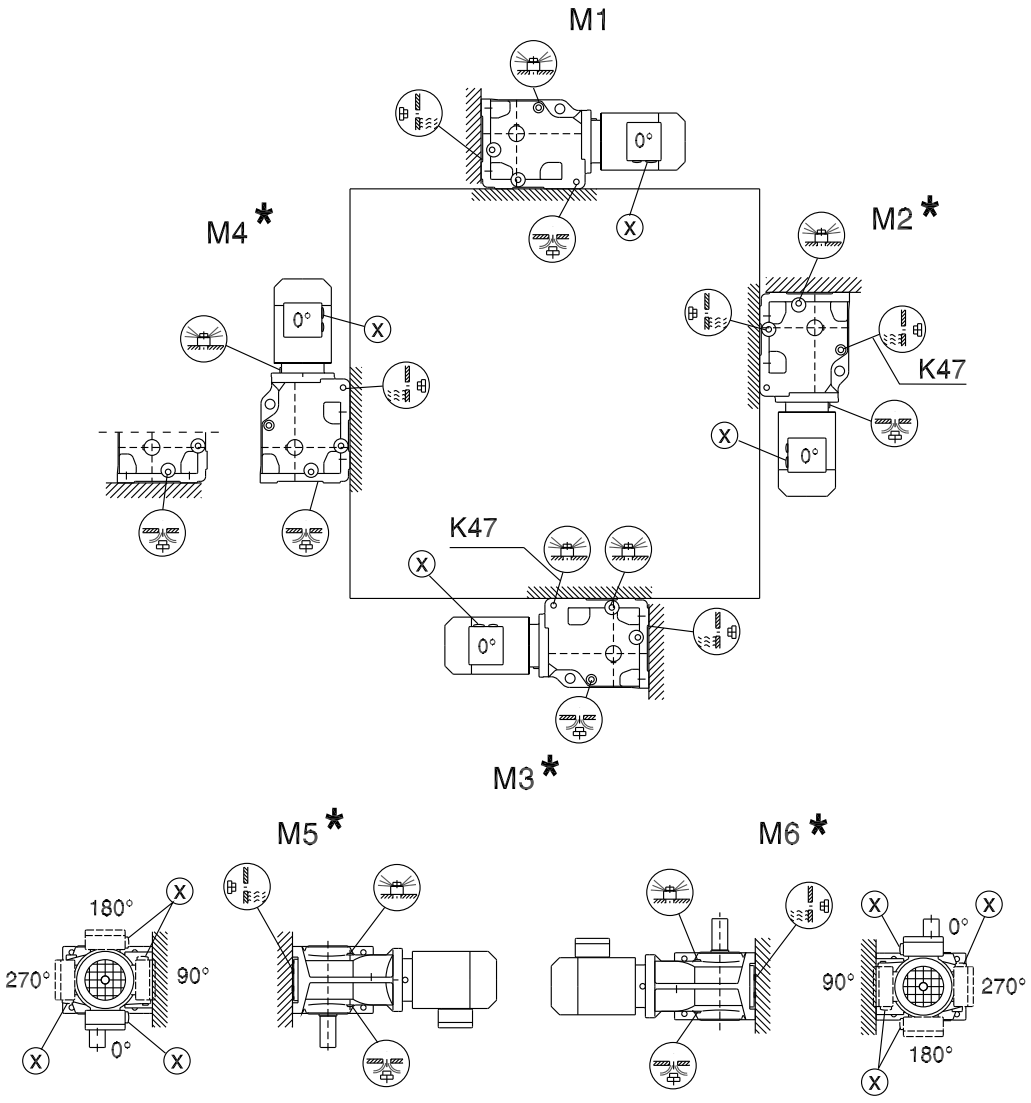
* → page 59

6.6 Helical-bevel gearmotors – mounting positions

K/KA..B/KH47B-157B, KV37B-107B

34 025 03 00



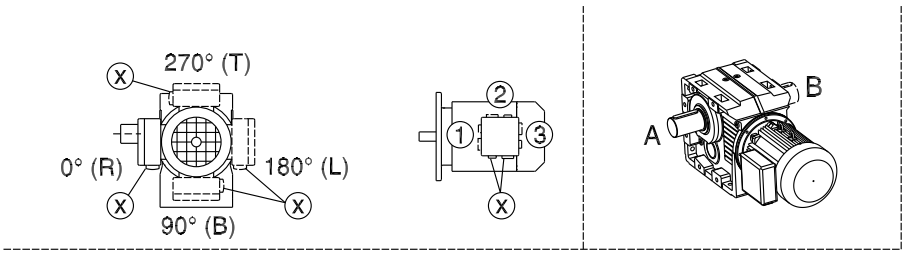


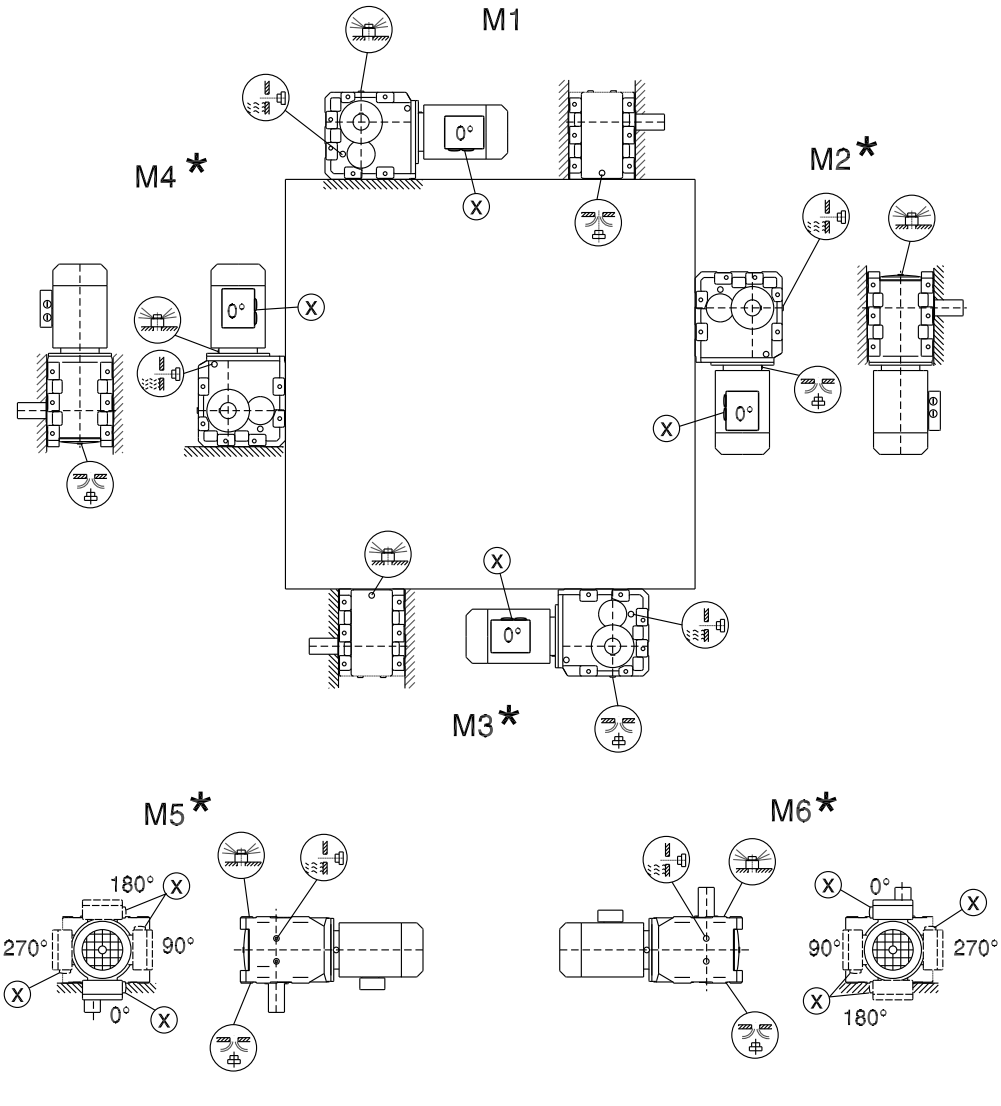
* → page 59

Caution: Observe the information marked with ⓘ in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads" (page 36).

K167-187, KH167B-187B

34 026 03 00



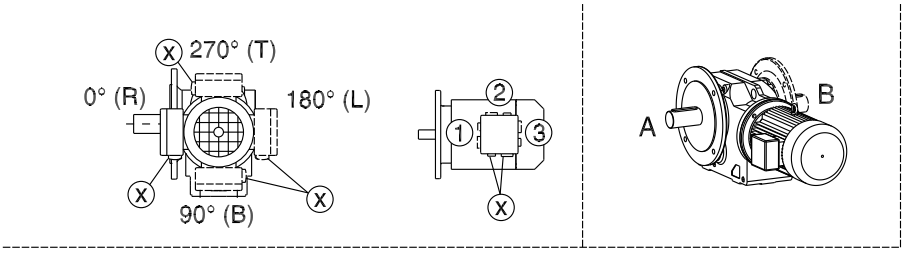


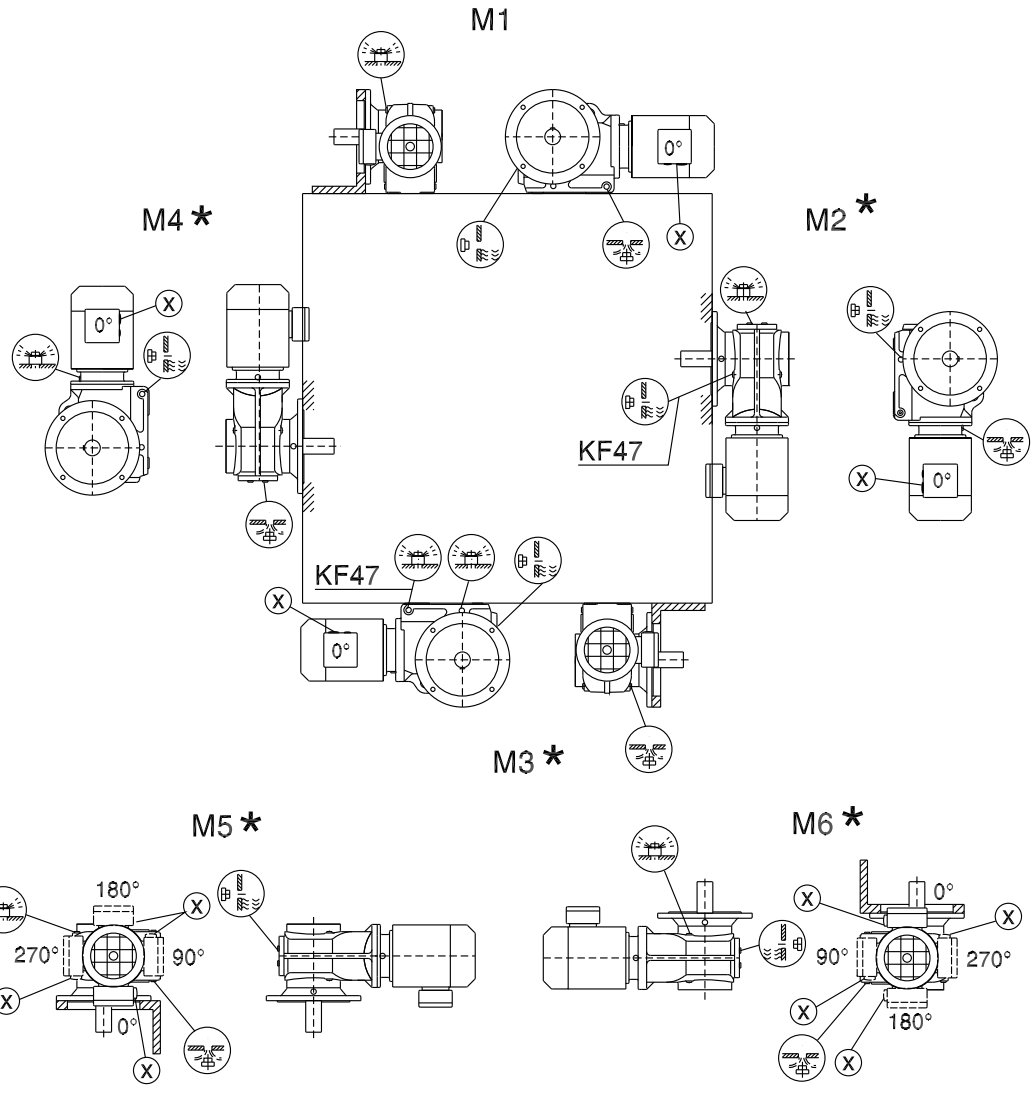
* → page 59

Caution: Observe the information marked with ⓘ in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads" (page 36).

KF/KAF/KHF/KAZ/KHZ37-157, KVF/KVZ37-107

34 027 03 00

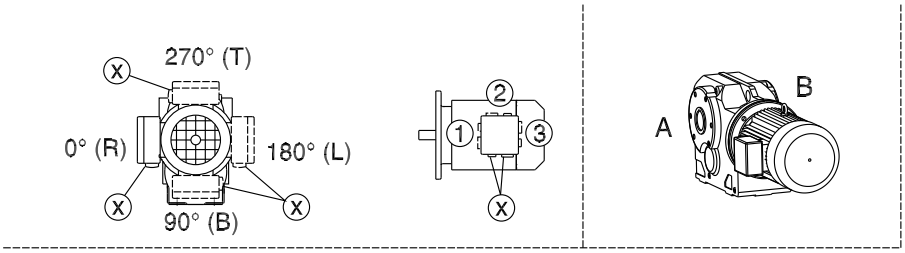


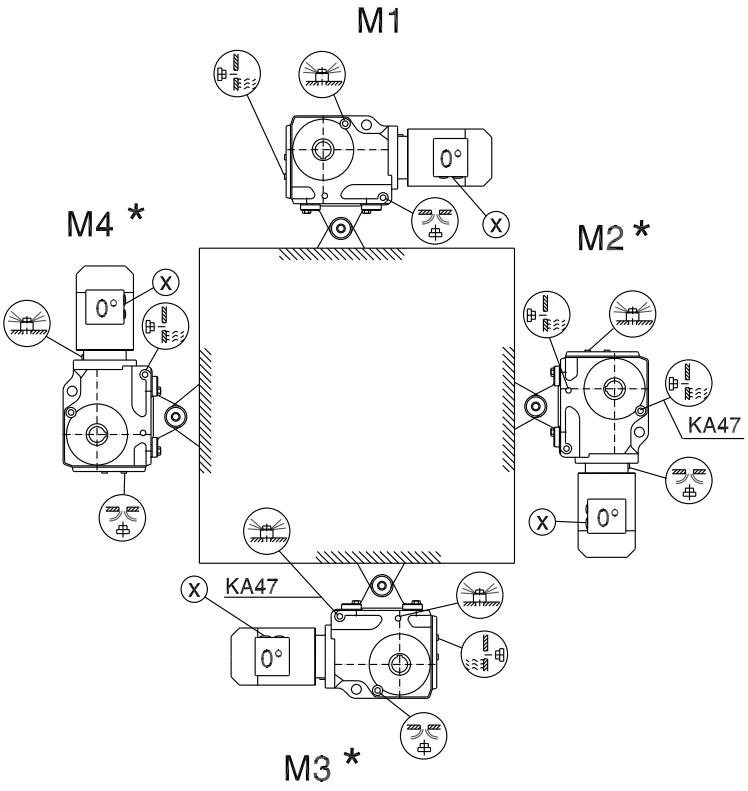


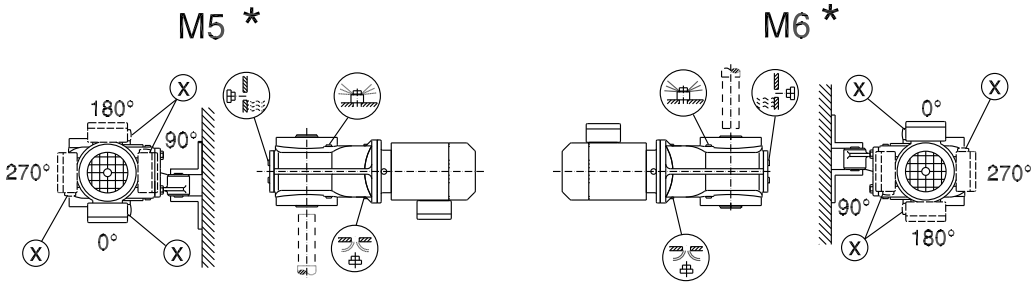
* → page 59

KA/KH37-157, KV37-107, KT37-97

39 025 04 00



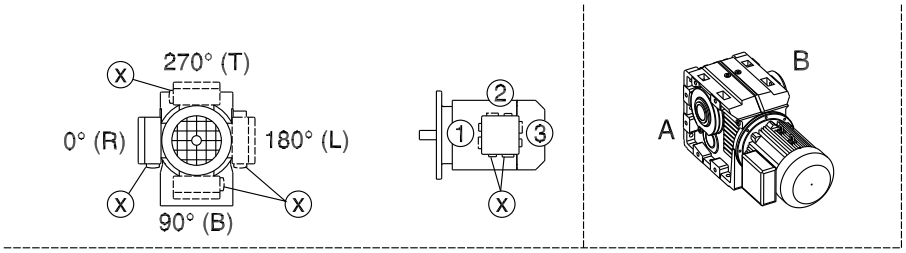


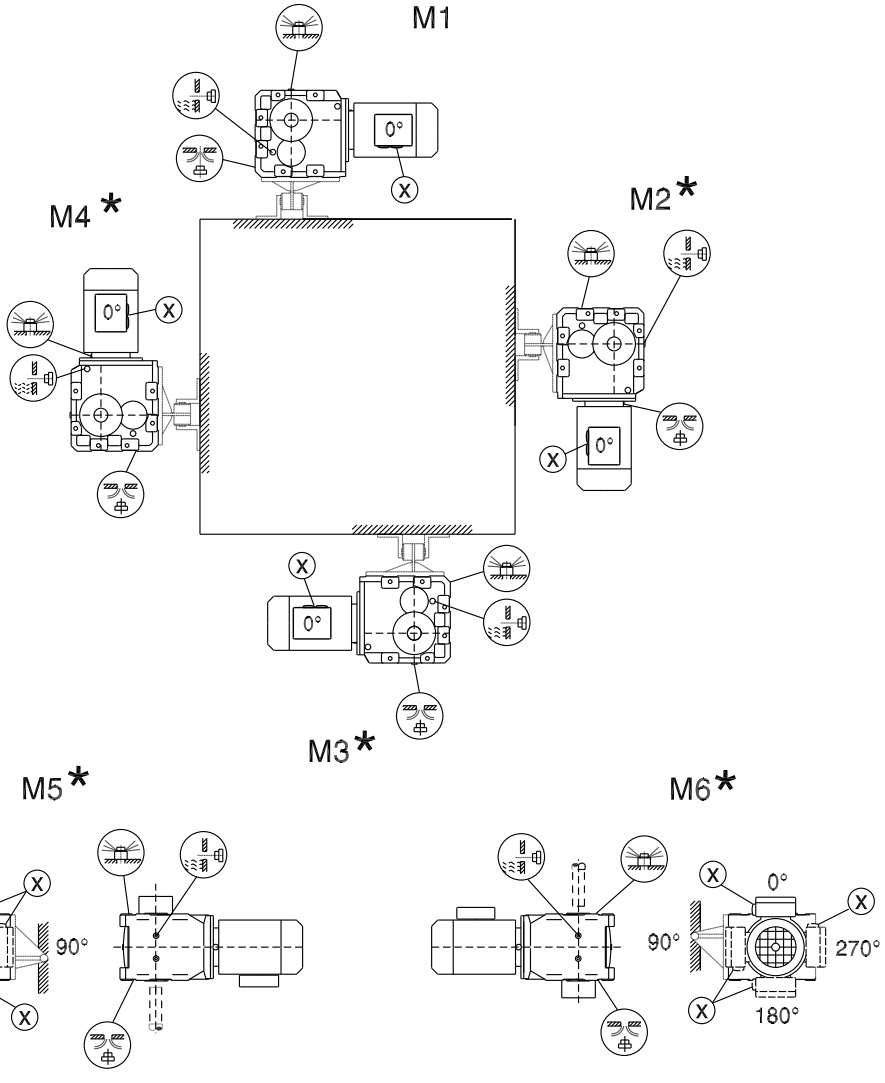


* → page 59

KH167-187

39 026 04 00

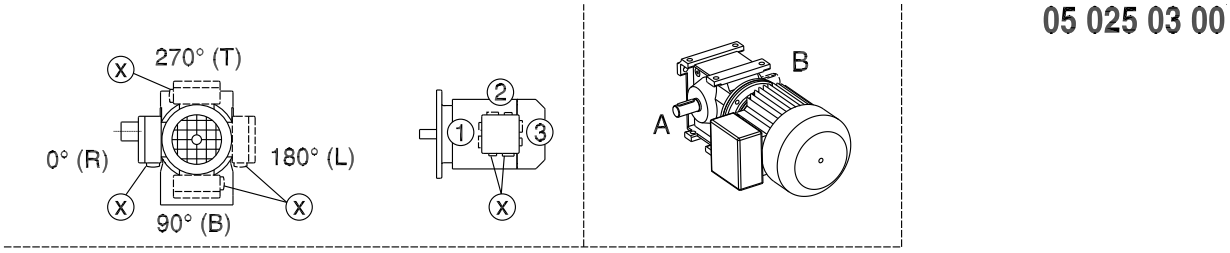




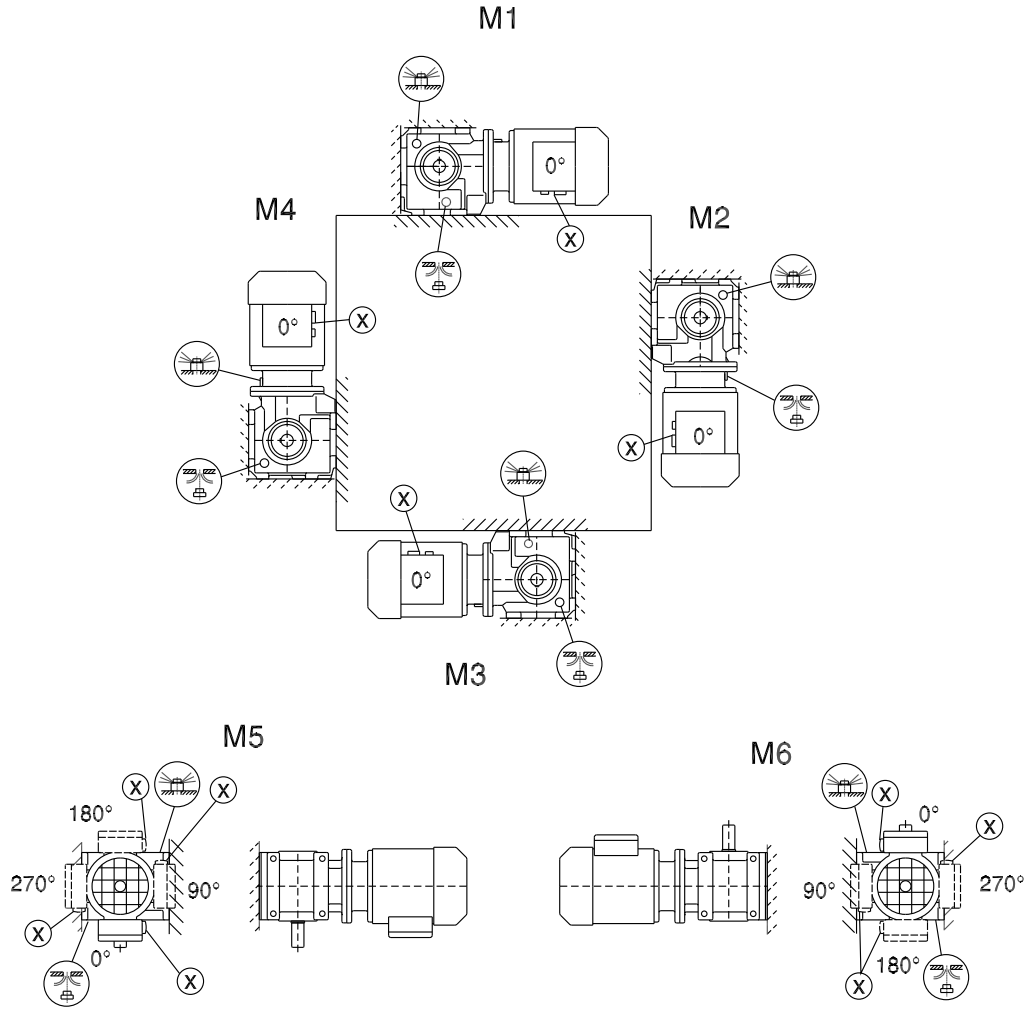
* → page 59

6.7 Helical-worm gearmotors – mounting positions

S37



05 025 03 00

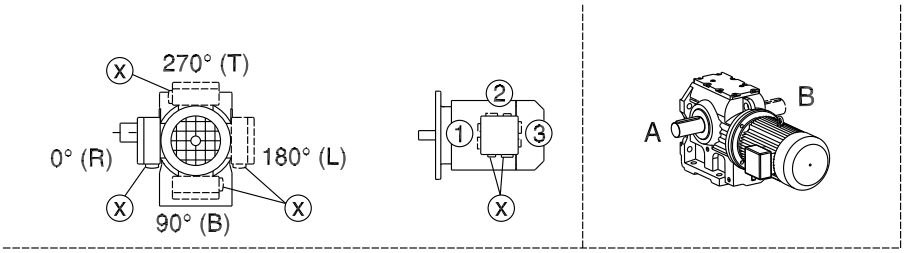


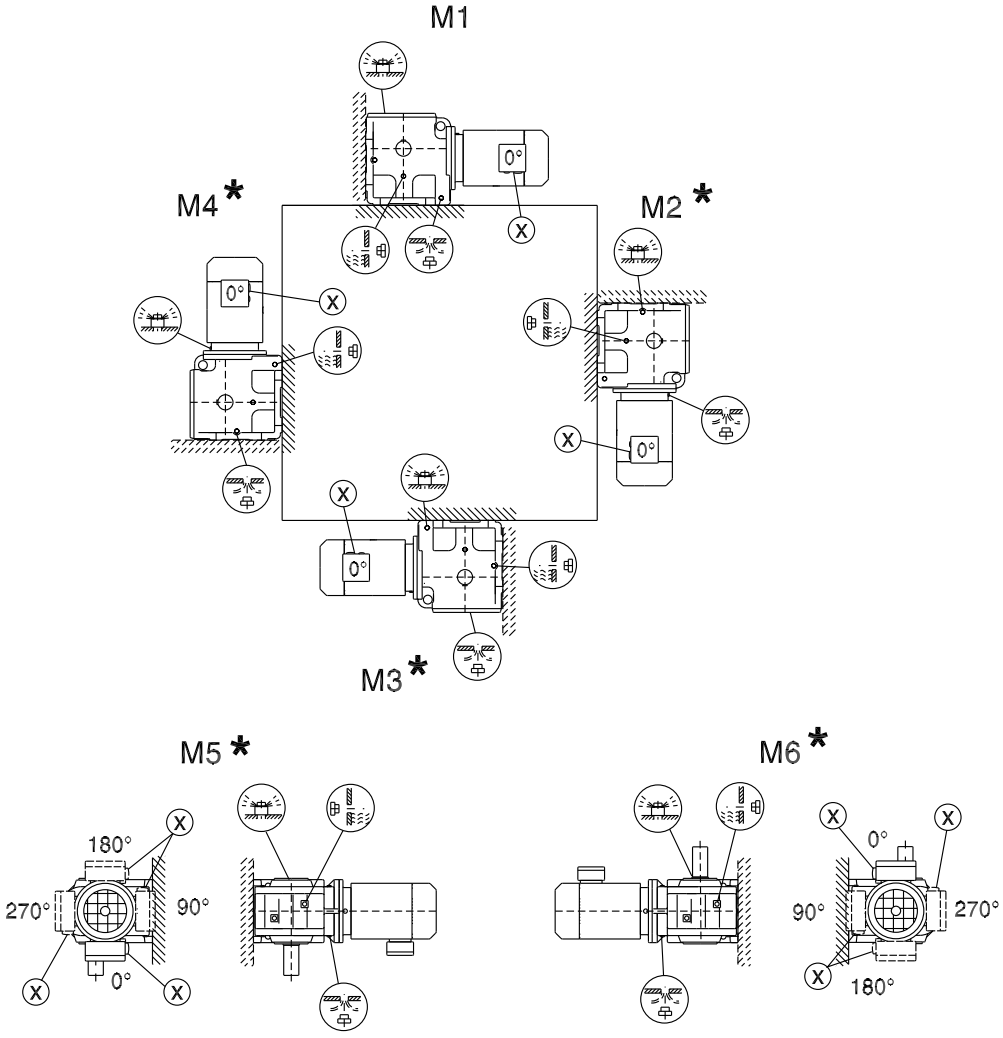
* → page 59

Caution: Obseve the information marked with ⓘ in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads" (page 36).

S47 - S97

05 026 03 00

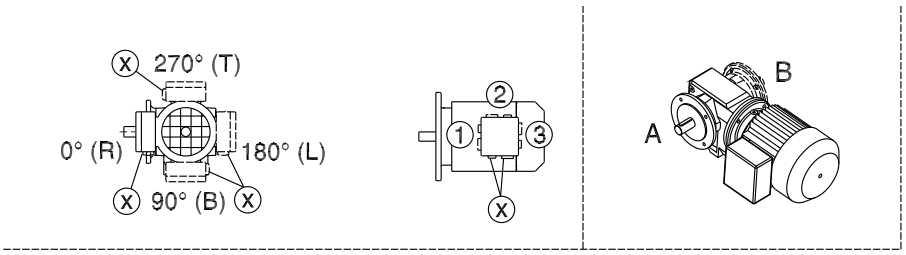


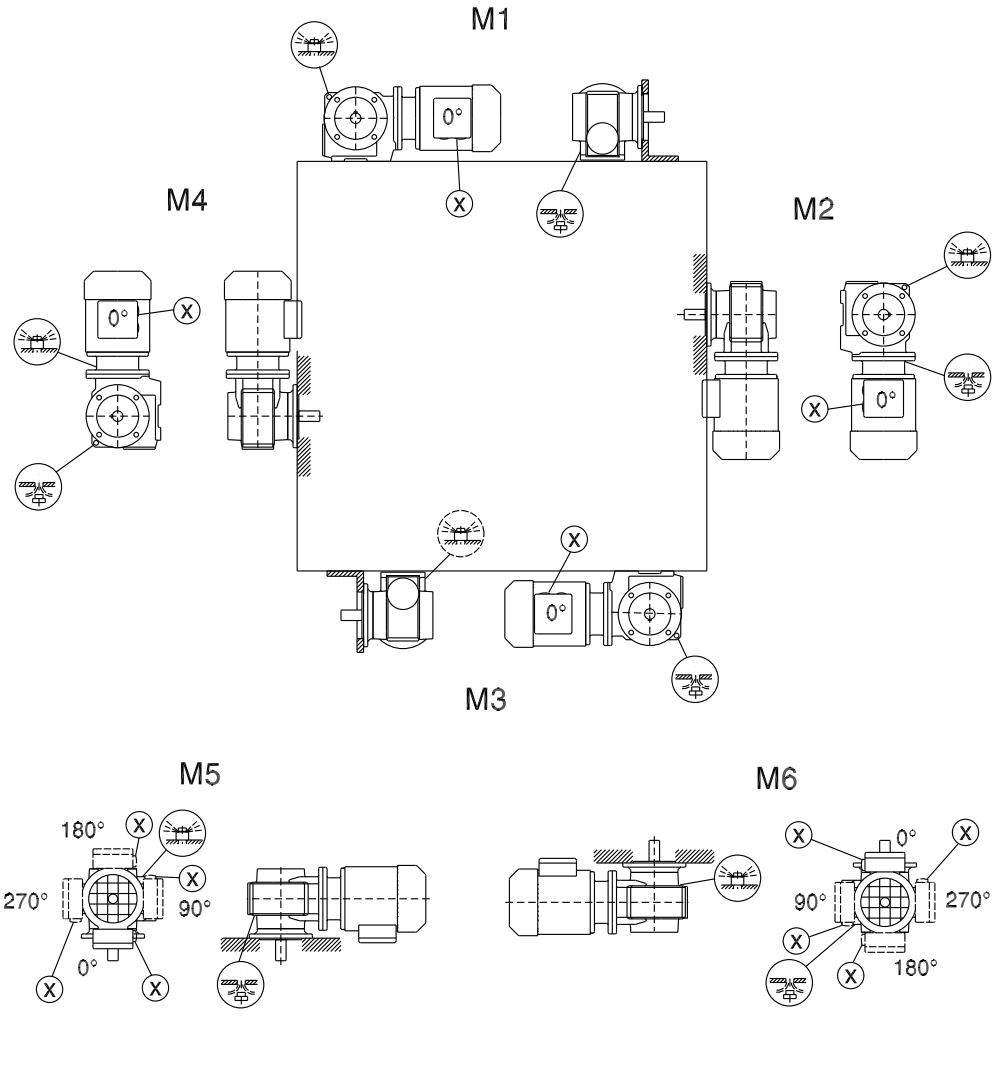


* → page 59

Caution: Observe the information marked with ⓘ in the "Gearmotors" catalog, section "Project Planning for Gear Units/Overhung and axial loads" (page 36).

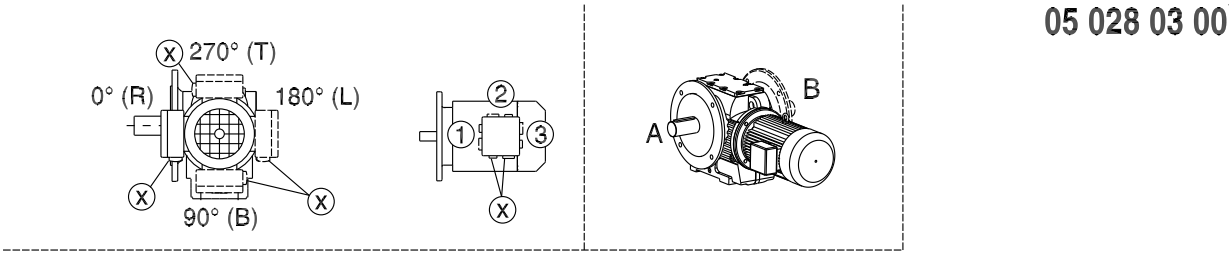
SF/SAF/SHF37

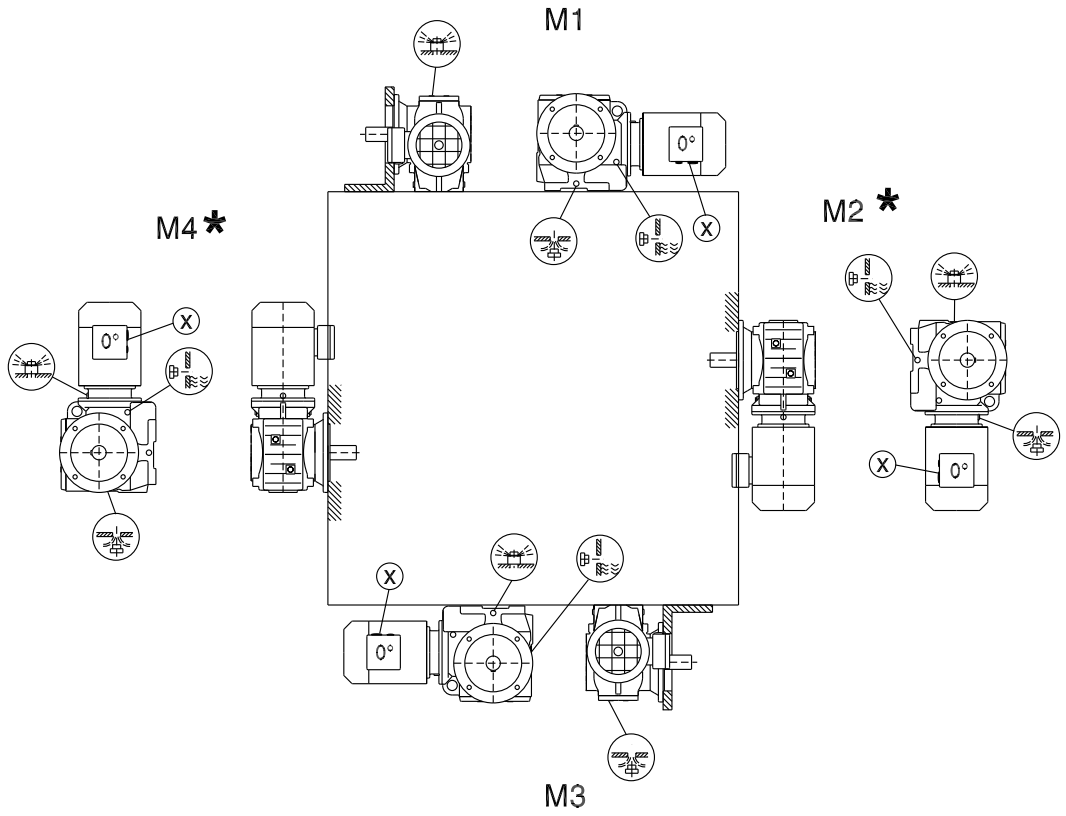


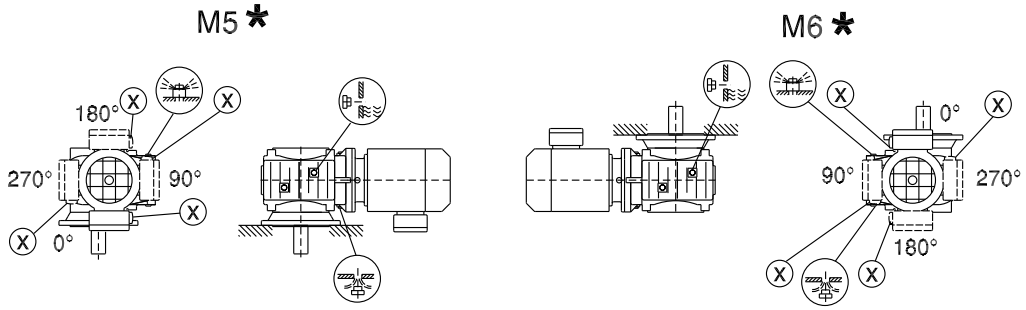


* → page 59

SF/SAF/SHF/SAZ/SHZ47-97



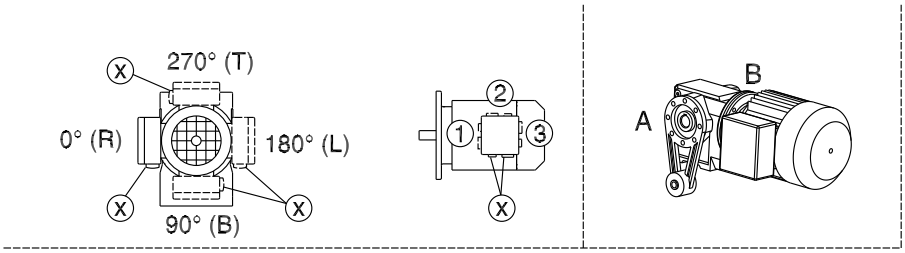


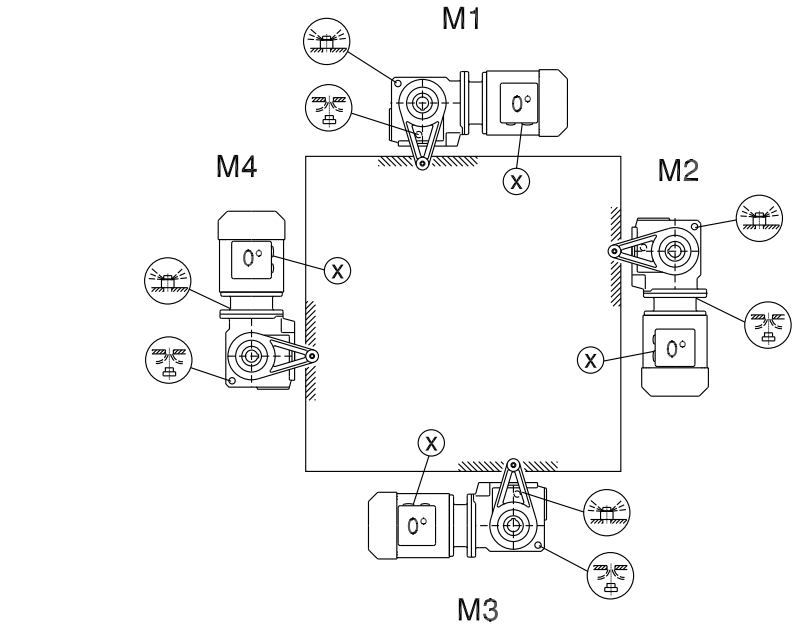


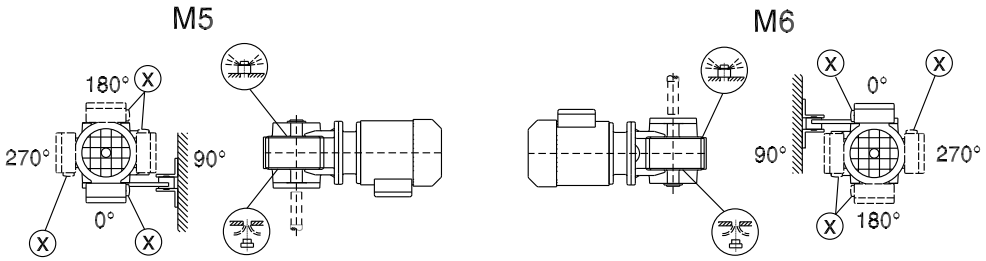
* → page 59

SA/SH/ST37

28 020 04 00



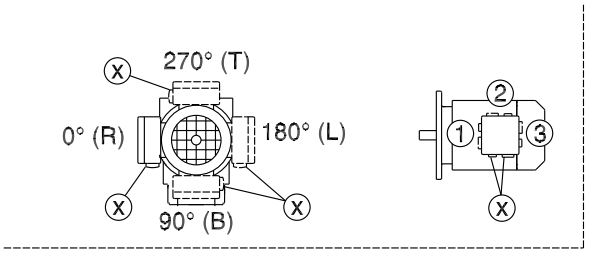


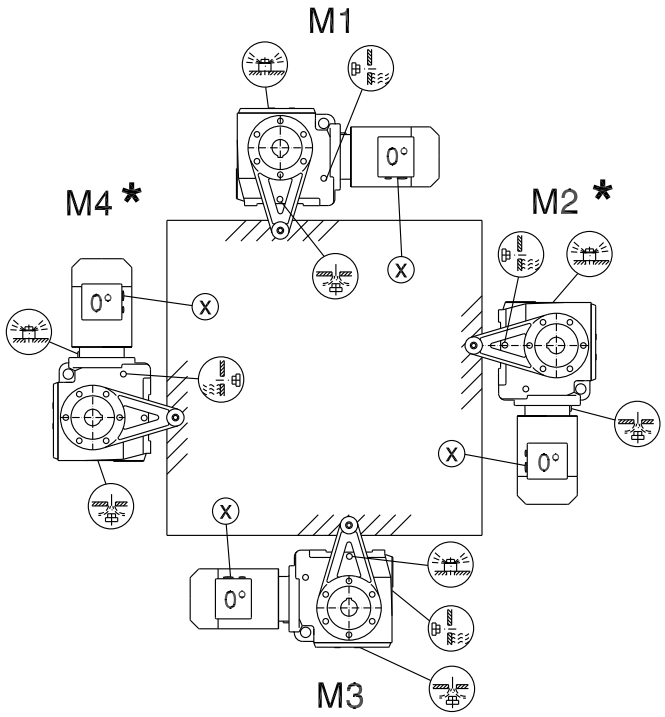


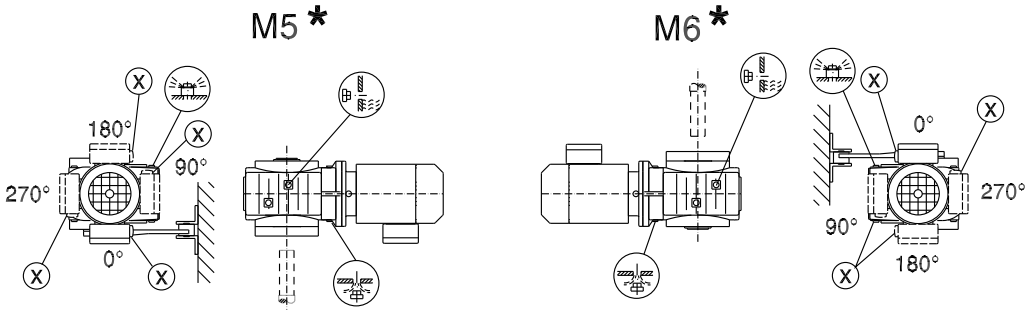
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SA/SH/ST47-97

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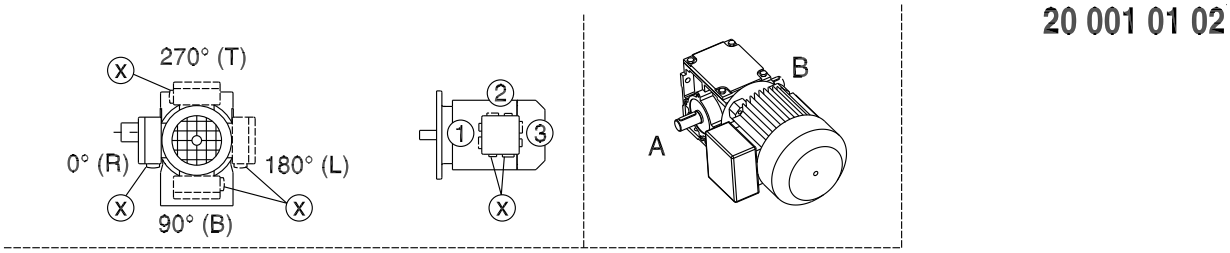


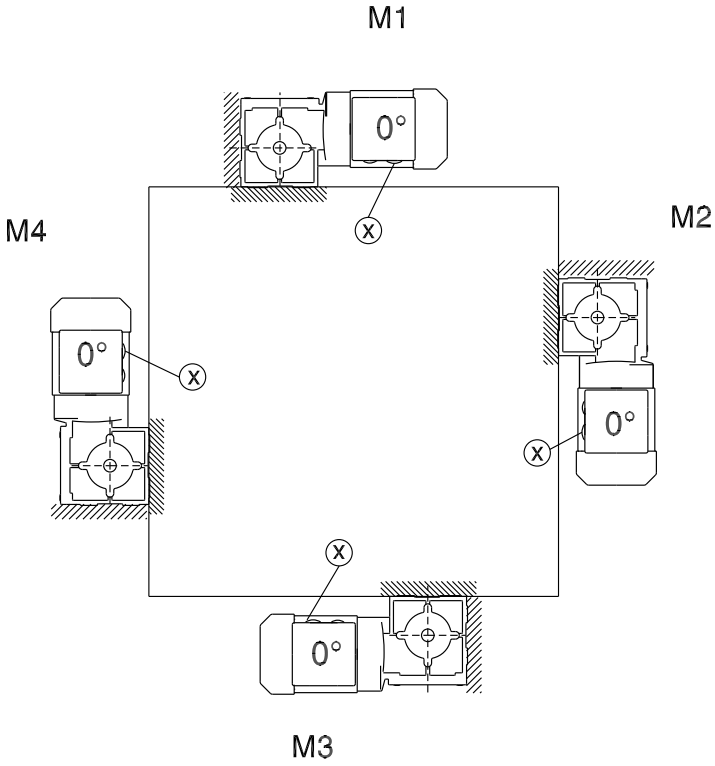


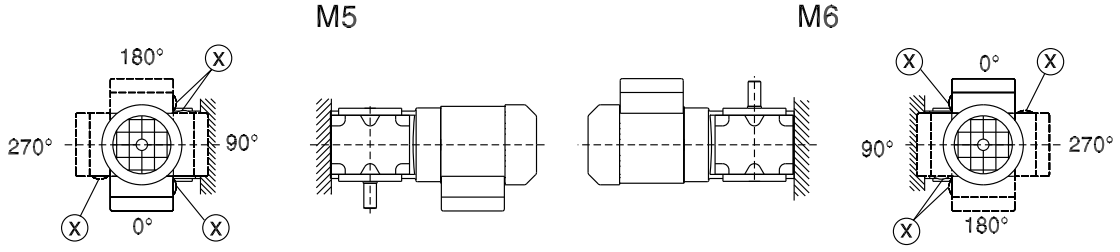
* → page 59

6.8 Spiroplan® gearmotors – mounting positions

W10-30

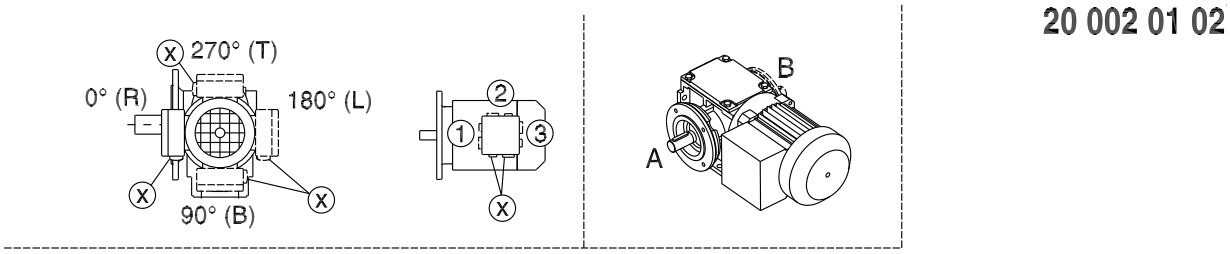


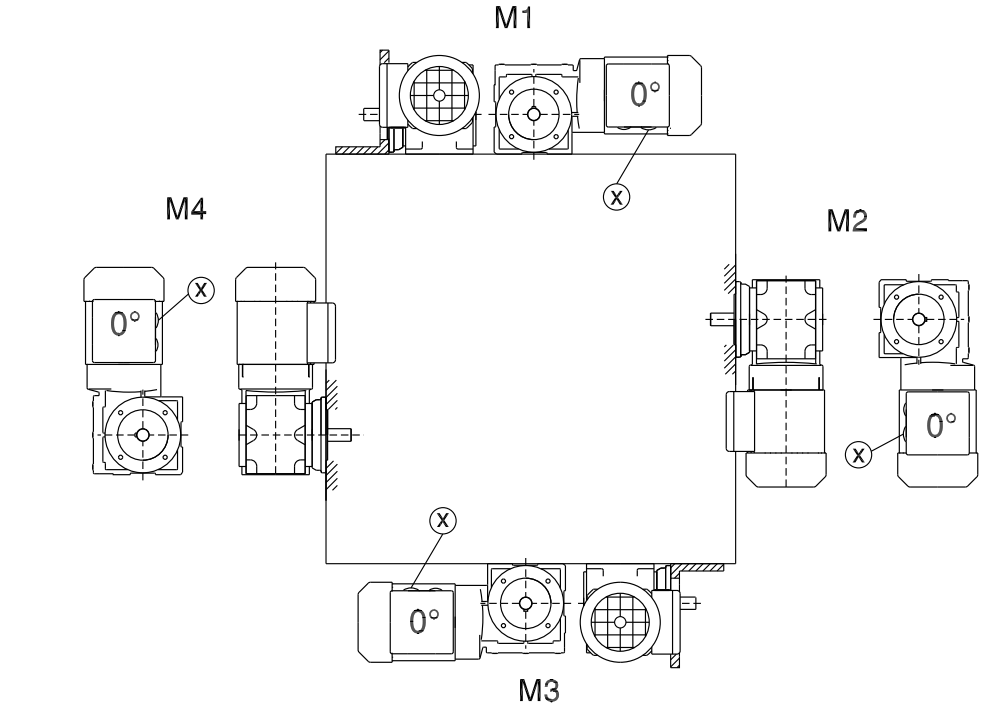


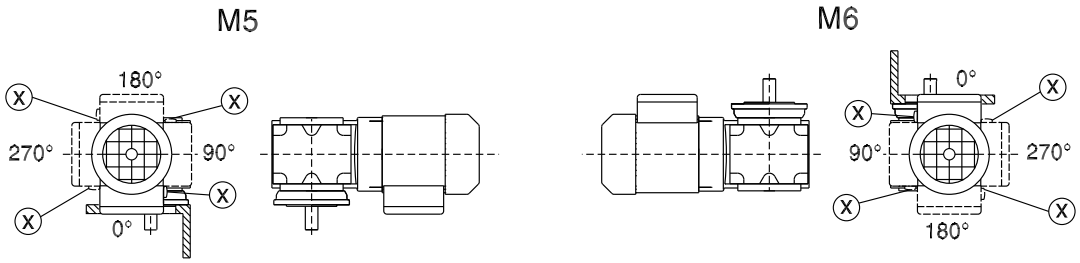


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WF10-30



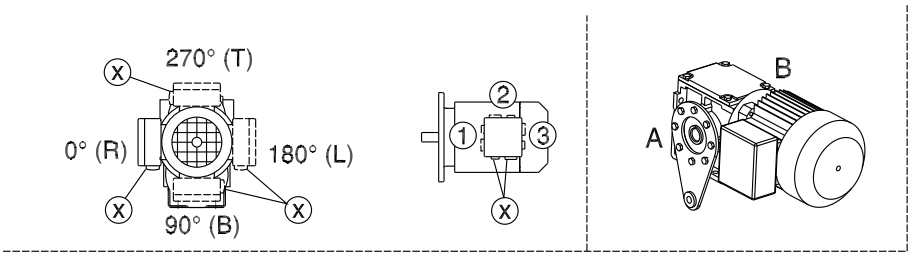


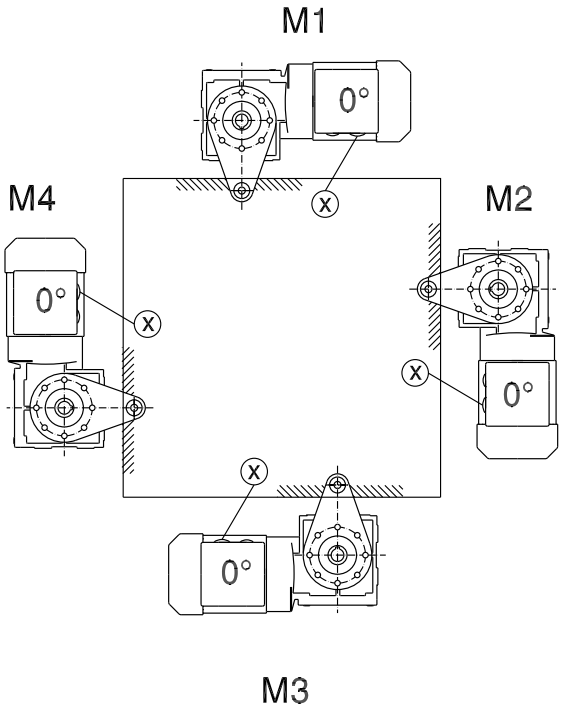


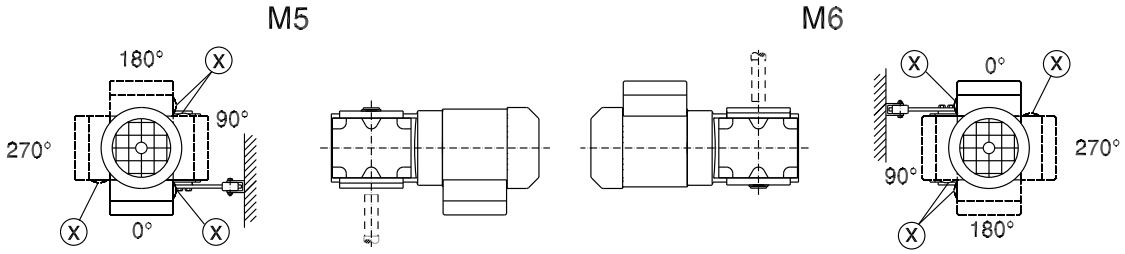
→ page 59

WA10-30

20 003 02 02



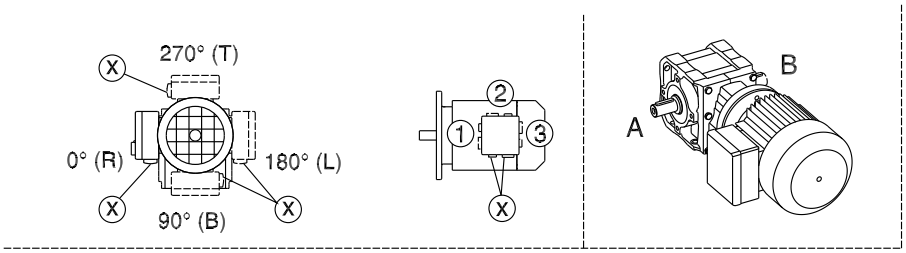


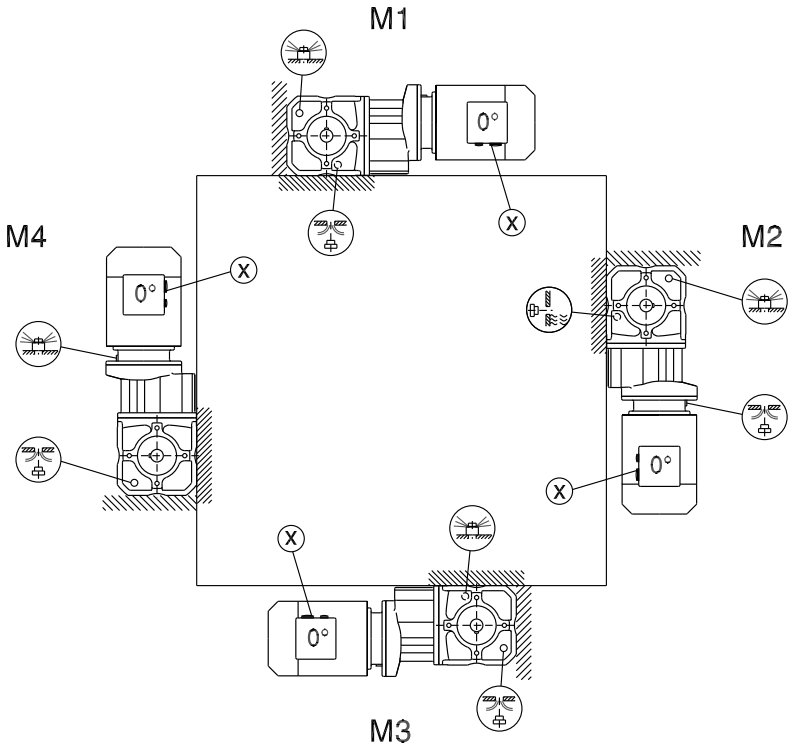


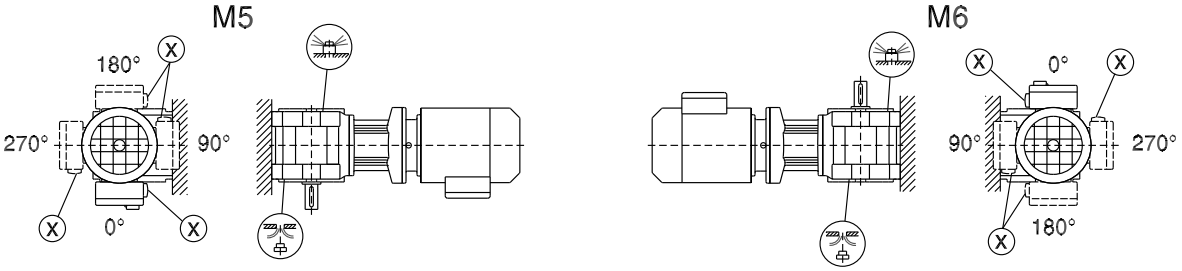
→ page 59

W/WA37-47B

20 012 00 07

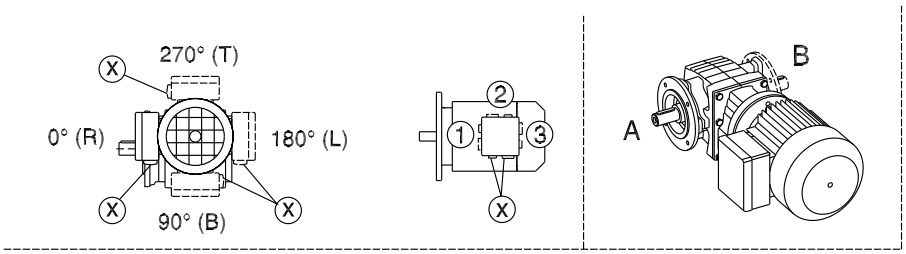


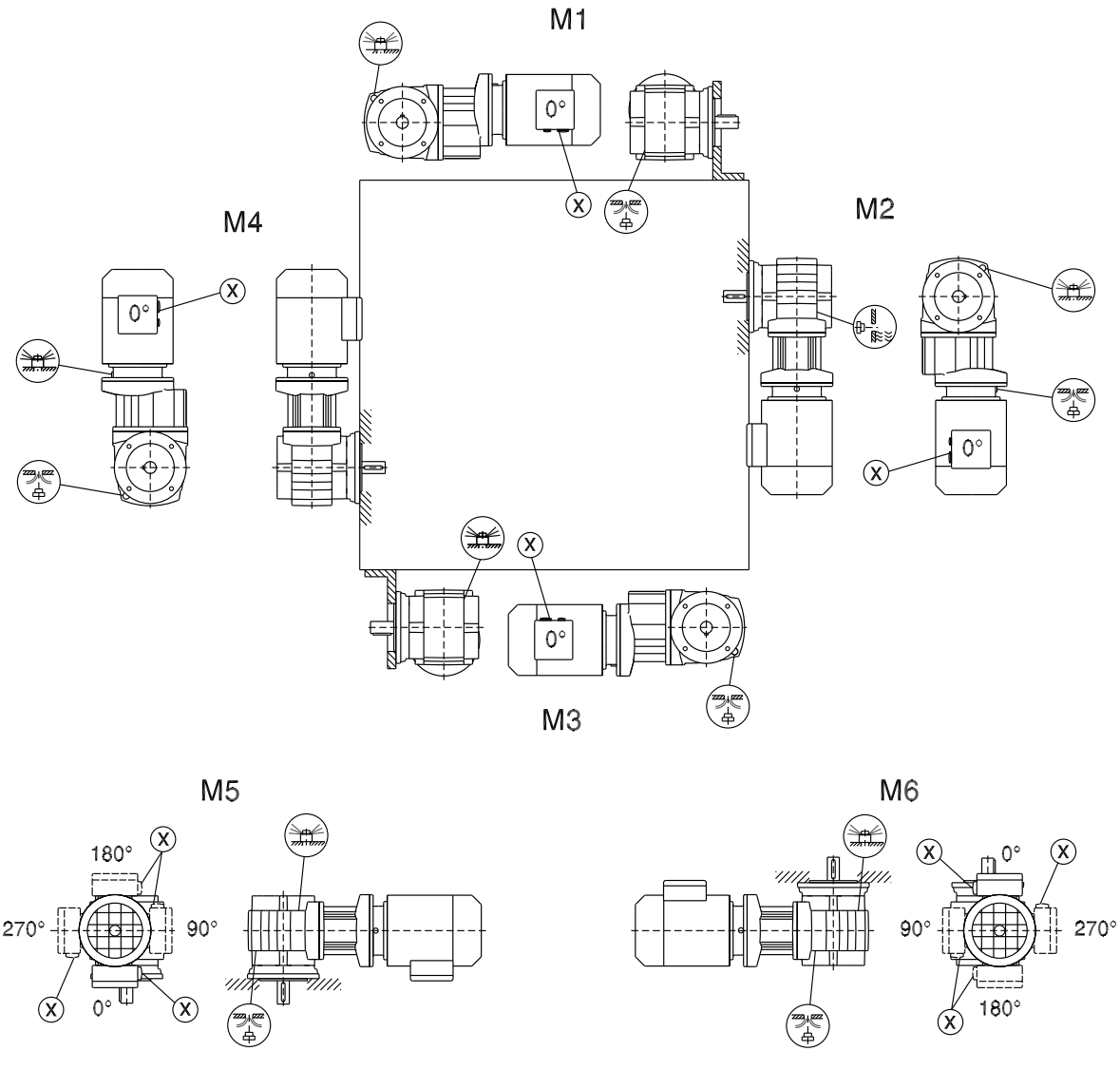




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WF/WAF/WHF37-47

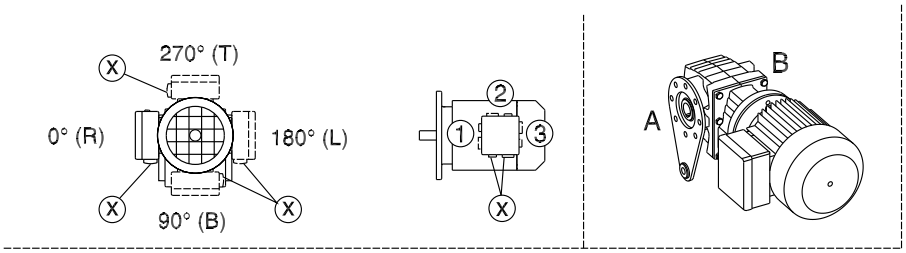


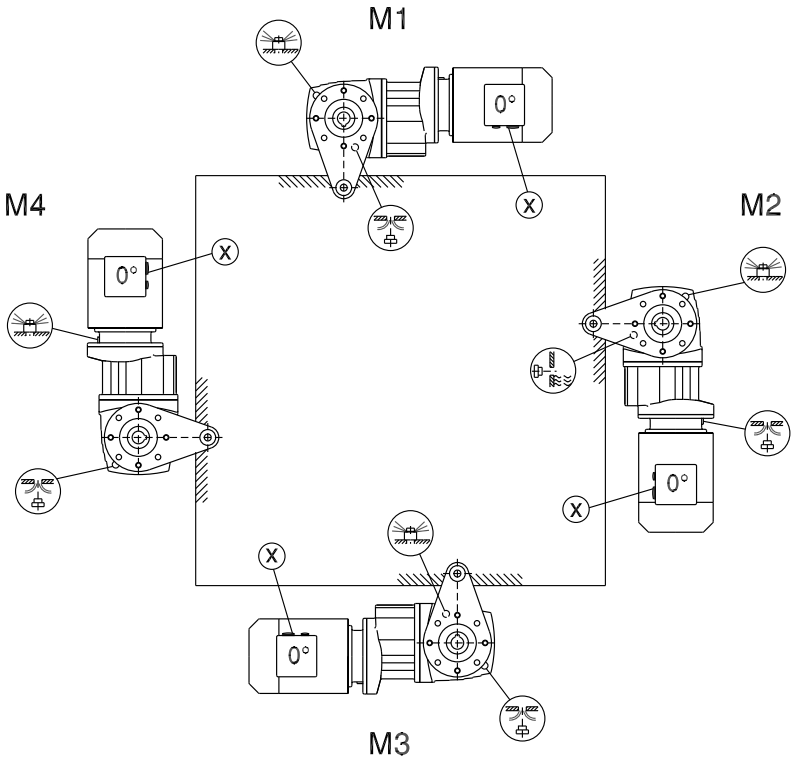


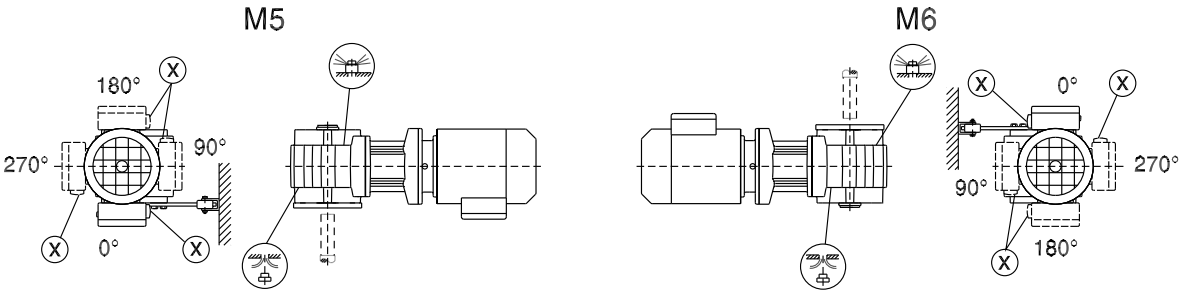
→ page 59

WA/WH/WT37-47

20 014 00 07



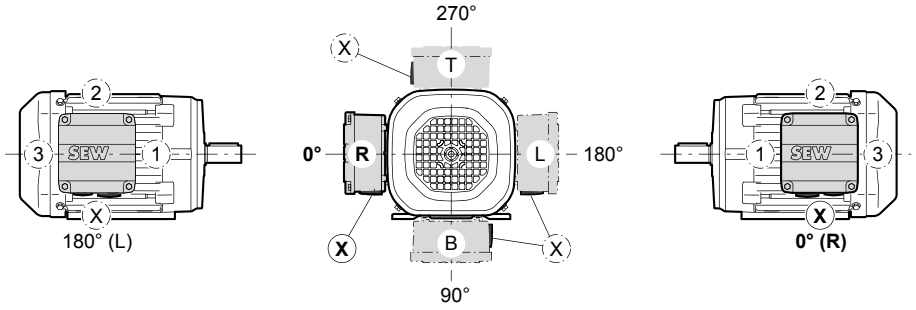




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6.9 AC motor – mounting position designations

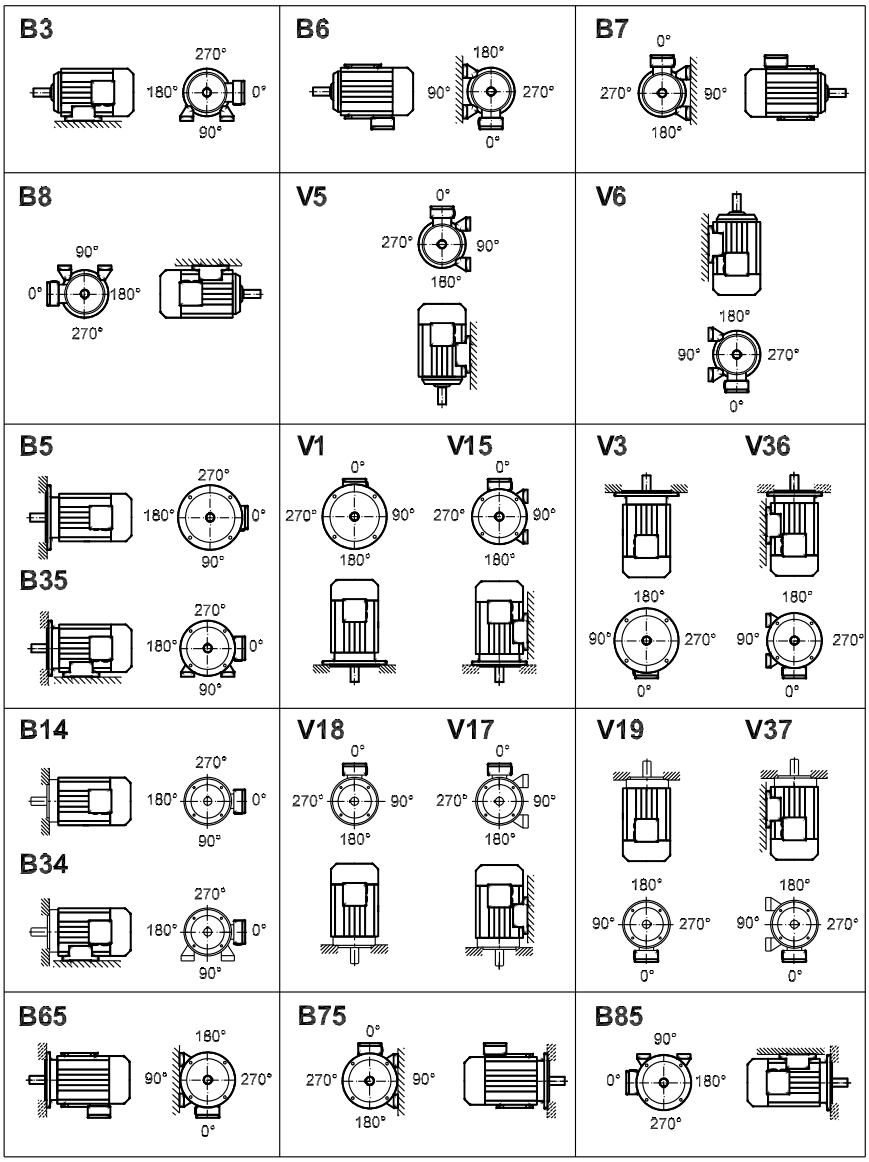
Position of motor terminal box and cable entry



60500AXX

Figure 13: Position of terminal box and cable entry

Mounting positions



62592AXX

Figure 14: AC motors mounting positions

7 Design and Operating Notes

7.1 Lubricants

General information

Unless a special arrangement is made, SEW-EURODRIVE supplies the drives with a lubricant fill adapted for the specific gear unit and mounting position. The decisive factor is the mounting position (M1...M6, → section "Mounting positions and important order information") specified when ordering the drive. You must adapt the lubricant fill in case of any subsequent changes made to the mounting position (→ Lubricant fill quantities).

Lubricant table

The lubricant table on the following page shows the permitted lubricants for SEW-EURODRIVE gear units. Observe the following legend with regards to the lubricant table.

Key to the lubricant table

Abbreviations, meaning of shading and notes:

CLP	= Mineral oil
CLP PG	= Polyglycol (W gear units, conforms to USDA-H1)
CLP HC	= synthetic hydrocarbons
E	= Ester oil (water hazard class 1 (German regulation))
HCE	= synthetic hydrocarbons + ester oil (USDA - H1 certification)
HLP	= Hydraulic oil
	= synthetic lubricant (= synthetic-based roller bearing grease)
	= mineral lubricant (= mineral-based rolling bearing grease)
1)	Helical-worm gear units with PG oil: consult SEW-EURODRIVE.
2)	Special lubricant for Spiroplan® gear units only
3)	SEW-$f_B \geq 1.2$ required
4)	Pay attention to critical starting behavior at low temperatures!
5)	Low-viscosity grease
6)	Ambient temperature
	Lubricant for the food industry (food grade oil)
	Biodegradable oil (lubricant for agriculture, forestry, and fisheries)

Rolling bearing greases

The anti-friction bearings in gear units and motors are given a factory-fill with the greases listed below. SEW-EURODRIVE recommends regreasing rolling bearings with a grease fill at the same time as changing the oil or replacing the rolling bearings.

	Ambient temperature	Manufacturer	Type
Gear unit rolling bearings	-40 °C ... +80 °C	Fuchs	Renolit CX-TOM15[1)]
Motor rolling bearings[2)]	-20 °C ... +80 °C	Esso	Polyrex EM
	+20 °C ... +100 °C	Klüber	Barrierta L55/2
	-40 °C ... +60 °C	Kyodo Yushi	Multemp SRL[3)]
Special greases for gear unit rolling bearings:			
	-30 °C ... +40 °C	Aral	Aral Eural Grease EP 2
	-20 °C ... +40 °C	Aral	Aral Aralube BAB EP2

1) Rolling bearing grease based on semi-synthetic base oil.

2) The motor rolling bearings are covered on both sides and cannot be regreased.

3) Recommended for continuous operation at ambient temperatures below 0 °C, for example in a cold storage.



The following grease quantities are required:

- For fast-running bearings (gear unit input end): Fill the cavities between the rolling elements one-third full with grease.
- For slow-running bearings (in gear units and at gear unit output end): Fill the cavities between the rolling elements two-thirds full with grease.

Lubricant table

01 805 12 92

	6) °C -50 0 +50 +100	DIN (ISO)	ISO,NLGI	Mobil®	Shell	Klüber	ARAL	bp	TEXACO	Castrol Tribol / Optimol	FUCHS	TOTAL
R...	Standard -10 +40	CLP(CC)	VG 220	Mobilgear 600 XP 220	Shell Omala 220	Klüberoil GEM 1-220 N	Aral Degol BG 220	BP Energol GR-XP 220	Meropa 220	Tribol 1100/220 / Alpha SP 220 Optigear BM 220	Renolin CLP 220	Carter EP 220
	-25 +80	CLP PG	VG 220	Mobil Glygoyle 220	Shell Tivela S 220	Klübersynth GH 6-220	Aral Degol GS 220	BP Enersyn SG-XP 220	Synlube CLP 220	Tribol 800/220 / Alphasyn PG 220 Optiflex A 220	Renolin PG 220	Carter SY 220
K...(HK...)	4) -40 +80	CLP HC	VG 220	Mobil SHC 630	Shell Omala HD 220	Klübersynth GEM 4-220 N	Aral Degol PAS 220		Pinnacle EP 220	Tribol 1510/220 / Alphasyn T 220 Optigear Synthetic X 220	Renolin Unisyn CLP 220	
	4) -40 +40	CLP HC	VG 150	Mobil SHC 629	Shell Omala HD 150	Klübersynth GEM 4-150 N			Pinnacle EP 150	Alphasyn T 150 Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
	-20 +25	CLP (CC)	VG 150 VG 100	Mobilgear 600 XP 100	Shell Omala 100	Klüberoil GEM 1-150 N	Aral Degol BG 100	BP Energol GR-XP 100	Meropa 150	Tribol 1100/100 / Alpha SP/100/150 Optigear BM 100	Renolin CLP 150	Carter EP 100
F...	-30 +10	HLP (HM)	VG 68-46 VG 32	Mobil D.T.E. 13M	Shell Tellus T 32	Klüberoil GEM 1-68 N	Aral Degol BG 46		Rando EP Ashless 46	Tribol 1100/68 / Hyspin AWS 32 Optigear 32	Renolin B 46 HVI	Equivis ZS 46
	4) -40 +20	CLP HC	VG 68	Mobil SHC 626							Renolin Unisyn CLP 68	
	4) -40 +10	CLP HC	VG 32	Mobil SHC 624		Klüber-Summit HySyn FG-32			Cetus PAO 46	Alphasyn T32 Optilieb HY 32	Renolin Unisyn OL 32	Dacnis SH 32
	4) -40 -20	HLP (HM)	VG 22 VG 15	Mobil D.T.E. 11M	Shell Tellus T 15	Isoflex MT 30 ROT		BP Energol HLP-HM 15	Rando HDZ 15	Hyspin AWS 22	Renolin MR 310	Equivis ZS 15
S...(HS...)	Standard 0 +40	CLP (CC)	VG 680	Mobilgear 600 XP 680	Shell Omala 680	Klüberoil GEM 1-680 N	Aral Degol BG 680	BP Energol GR-XP 680	Meropa 680	Tribol 1100/680 / Alpha SP 680 Optigear BM 680	Renolin SEW 680	Carter EP 680
	-20 +60	CLP PG	VG 680 1)		Shell Tivela S 680	Klübersynth GH 6-680		BP Enersyn SG-XP 680	Synlube CLP 680	Tribol 800/680 / Optiflex A 680	Renolin PG 680	
	4) -30 +80	CLP HC	VG 460	Mobil SHC 634	Shell Omala HD 460	Klübersynth GEM 4-460 N			Pinnacle EP 460	Optigear Synthetic X 460	Renolin Unisyn CLP 460	
	4) -40 +10	CLP HC	VG 150	Mobil SHC 629	Shell Omala HD 150	Klübersynth GEM 4-150 N			Pinnacle EP 150	Optigear Synthetic X 150	Renolin Unisyn CLP 150	Carter SH 150
	-20 +10	CLP (CC)	VG 150 VG 100	Mobilgear 600 XP 100	Shell Omala 100	Klüberoil GEM 1-150 N	Aral Degol BG 100	BP Energol GR-XP 100	Meropa 150	Tribol 1100/100 / Alpha SP/100/150 Optigear BM 100	Renolin CLP 150	Carter EP 100
	-25 +20	CLP PG	VG 220 1)	Mobil Glygoyle 220	Shell Tivela S 220	Klübersynth GH 6-220	Aral Degol GS 220	BP Enersyn SG-XP 220	Synlube CLP 220	Tribol 800/220 / Alphasyn PG 220 Optiflex A 220	Renolin PG 220	Carter SY 220
	4) -40 +20	CLP HC	VG 68	Mobil SHC 626							Renolin Unisyn CLP 68	
	4) -40 0	CLP HC	VG 32	Mobil SHC 624		Klüber-Summit HySyn FG-32			Cetus PAO 46	Alphasyn T32	Renolin Unisyn OL 32	Dacnis SH 32
R...,K...(HK...), F...,S...(HS...)	4) 0 +40	CLPHC NSF H1	VG 460		Shell Cassida Fluid GL 460	Klüberoil 4UH1-460 N					Optileb GT 460	Geralyn SF 460
	-25 +25		VG 220		Shell Cassida Fluid GL 220	Klüberoil 4UH1-220 N					Optileb GT 220	
	-40 0		VG 68		Shell Cassida Fluid HF 68	Klüberoil 4UH1-68 N					Optileb HY 68	
	-20 +40	E	VG 460			Klüberbio CA2-460	Aral Degol BAB 460			Tribol Bio Top 1418/460	Plantogear 460 S	
W...(HW...)	Standard -20 +40	SEW PG	VG 460 2)			Klüber SEW HT-460-5						
	4) -40 +10	API GL5	SAE 75W90 (~VG 100)	Mobil Synthetic Gear Oil 75 W90								
	-20 +40	H1 PG	VG 460 2) 3)			Klübersynth UH1 6-460						
R32 R302	-25 +60	DIN 51 818 5)	00	Glygoyle Grease 00	Shell Tivela GL 00	Klübersynth GE 46-1200			Multifak 6833 EP 00	Spheerol EPL 0		Marson SY 00
	Standard -15 +40		000 - 0	Mobilux EP 004	Shell Alvania GL 00		Aralub MFL 00	BP Energrease LS-EP 00	Multifak EP 000	CLS Grease Longtime PD 00	Renolin SF 7 - 041	Multis EP 00

Lubricant fill quantities

The specified fill quantities are **recommended values**. The precise values vary depending on the number of stages and gear ratio. When filling, it is essential to check the **oil level plug since it indicates the precise oil capacity**.

The following tables show guide values for lubricant fill quantities in relation to the mounting position M1 ... M6.

Helical (R) gear units

RX..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
RX57	0.60	0.80	1.30	1.30	0.90	0.90
RX67	0.80	0.80	1.70	1.90	1.10	1.10
RX77	1.10	1.50	2.60	2.70	1.60	1.60
RX87	1.70	2.50	4.80	4.80	2.90	2.90
RX97	2.10	3.40	7.4	7.0	4.80	4.80
RX107	3.90	5.6	11.6	11.9	7.7	7.7

RXF..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
RXF57	0.50	0.80	1.10	1.10	0.70	0.70
RXF67	0.70	0.80	1.50	1.40	1.00	1.00
RXF77	0.90	1.30	2.40	2.00	1.60	1.60
RXF87	1.60	1.95	4.90	3.95	2.90	2.90
RXF97	2.10	3.70	7.1	6.3	4.80	4.80
RXF107	3.10	5.7	11.2	9.3	7.2	7.2

R.., R..F

Gear unit	Fill quantity in liters					
	M1[1)]	M2[1)]	M3	M4	M5	M6
R07	0.12	0.20	0.20	0.20	0.20	0.20
R17	0.25	0.55	0.35	0.55	0.35	0.40
R27	0.25/0.40	0.70	0.50	0.70	0.50	0.50
R37	0.30/0.95	0.85	0.95	1.05	0.75	0.95
R47	0.70/1.50	1.60	1.50	1.65	1.50	1.50
R57	0.80/1.70	1.90	1.70	2.10	1.70	1.70
R67	1.10/2.30	2.40/3.20	2.80	2.90	1.80	2.00
R77	1.20/3.00	3.30/4.20	3.60	3.80	2.50	3.40
R87	2.30/6.0	6.4/8.1	7.2	7.2	6.3	6.5
R97	4.60/9.8	11.7/14.0	11.7	13.4	11.3	11.7
R107	6.0/13.7	16.3	16.9	19.2	13.2	15.9
R137	10.0/25.0	28.0	29.5	31.5	25.0	25.0
R147	15.4/40.0	46.5	48.0	52.0	39.5	41.0
R167	27.0/70.0	82.0	78.0	88.0	66.0	69.0

1) The larger gear unit of multi-stage gear units must be filled with the larger oil volume.

RF..

Gear unit	Fill quantity in liters					
	M1[1)]	M2[1)]	M3	M4	M5	M6
RF07	0.12	0.20	0.20	0.20	0.20	0.20
RF17	0.25	0.55	0.35	0.55	0.35	0.40
RF27	0.25/0.40	0.70	0.50	0.70	0.50	0.50
RF37	0.35/0.95	0.90	0.95	1.05	0.75	0.95
RF47	0.65/1.50	1.60	1.50	1.65	1.50	1.50
RF57	0.80/1.70	1.80	1.70	2.00	1.70	1.70
RF67	1.20/2.50	2.50/3.20	2.70	2.80	1.90	2.10
RF77	1.20/2.60	3.10/4.10	3.30	3.60	2.40	3.00
RF87	2.40/6.0	6.4/8.2	7.1	7.2	6.3	6.4
RF97	5.1/10.2	11.9/14.0	11.2	14.0	11.2	11.8
RF107	6.3/14.9	15.9	17.0	19.2	13.1	15.9
RF137	9.5/25.0	27.0	29.0	32.5	25.0	25.0
RF147	16.4/42.0	47.0	48.0	52.0	42.0	42.0
RF167	26.0/70.0	82.0	78.0	88.0	65.0	71.0

1) The larger gear unit of multi-stage gear units must be filled with the larger oil volume.

Parallel-shaft helical (F) gear units

F.., FA..B, FH..B, FV..B

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
F..27	0.60	0.80	0.65	0.70	0.60	0.60
F..37	0.95	1.25	0.70	1.25	1.00	1.10
F..47	1.50	1.80	1.10	1.90	1.50	1.70
F..57	2.60	3.50	2.10	3.50	2.80	2.90
F..67	2.70	3.80	1.90	3.80	2.90	3.20
F..77	5.9	7.3	4.30	8.0	6.0	6.3
F..87	10.8	13.0	7.7	13.8	10.8	11.0
F..97	18.5	22.5	12.6	25.2	18.5	20.0
F..107	24.5	32.0	19.5	37.5	27.0	27.0
F..127	40.5	54.5	34.0	61.0	46.3	47.0
F..157	69.0	104.0	63.0	105.0	86.0	78.0

FF..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
FF27	0.60	0.80	0.65	0.70	0.60	0.60
FF37	1.00	1.25	0.70	1.30	1.00	1.10
FF47	1.60	1.85	1.10	1.90	1.50	1.70
FF57	2.80	3.50	2.10	3.70	2.90	3.00
FF67	2.70	3.80	1.90	3.80	2.90	3.20
FF77	5.9	7.3	4.30	8.1	6.0	6.3
FF87	10.8	13.2	7.8	14.1	11.0	11.2
FF97	19.0	22.5	12.6	25.6	18.9	20.5
FF107	25.5	32.0	19.5	38.5	27.5	28.0
FF127	41.5	55.5	34.0	63.0	46.3	49.0
FF157	72.0	105.0	64.0	106.0	87.0	79.0

FA.., FH.., FV.., FAF.., FAZ.., FHF.., FHZ.., FVF.., FVZ.., FT..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
F..27	0.60	0.80	0.65	0.70	0.60	0.60
F..37	0.95	1.25	0.70	1.25	1.00	1.10
F..47	1.50	1.80	1.10	1.90	1.50	1.70
F..57	2.70	3.50	2.10	3.40	2.90	3.00
F..67	2.70	3.80	1.90	3.80	2.90	3.20
F..77	5.9	7.3	4.30	8.0	6.0	6.3
F..87	10.8	13.0	7.7	13.8	10.8	11.0
F..97	18.5	22.5	12.6	25.2	18.5	20.0
F..107	24.5	32.0	19.5	37.5	27.0	27.0
F..127	39.0	54.5	34.0	61.0	45.0	46.5
F..157	68.0	103.0	62.0	104.0	85.0	77.0

Helical-bevel (K) gear units

K.., KA..B, KH..B, KV..B

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
K..37	0.50	1.00	1.00	1.25	0.95	0.95
K..47	0.80	1.30	1.50	2.00	1.60	1.60
K..57	1.10	2.20	2.20	2.80	2.30	2.10
K..67	1.10	2.40	2.60	3.45	2.60	2.60
K..77	2.20	4.10	4.40	5.8	4.20	4.40
K..87	3.70	8.0	8.7	10.9	8.0	8.0
K..97	7.0	14.0	15.7	20.0	15.7	15.5
K..107	10.0	21.0	25.5	33.5	24.0	24.0
K..127	21.0	41.5	44.0	54.0	40.0	41.0
K..157	31.0	62.0	65.0	90.0	58.0	62.0
K..167	33.0	95.0	105.0	123.0	85.0	84.0
K..187	53.0	152.0	167.0	200	143.0	143.0

KF..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
KF37	0.50	1.10	1.10	1.50	1.00	1.00
KF47	0.80	1.30	1.70	2.20	1.60	1.60
KF57	1.20	2.20	2.40	3.15	2.50	2.30
KF67	1.10	2.40	2.80	3.70	2.70	2.70
KF77	2.10	4.10	4.40	5.9	4.50	4.50
KF87	3.70	8.2	9.0	11.9	8.4	8.4
KF97	7.0	14.7	17.3	21.5	15.7	16.5
KF107	10.0	21.8	25.8	35.1	25.2	25.2
KF127	21.0	41.5	46.0	55.0	41.0	41.0
KF157	31.0	66.0	69.0	92.0	62.0	62.0

KA.., KH.., KV.., KAF.., KHF.., KVF.., KAZ.., KHZ.., KVZ.., KT..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
K..37	0.50	1.00	1.00	1.40	1.00	1.00
K..47	0.80	1.30	1.60	2.15	1.60	1.60
K..57	1.20	2.20	2.40	3.15	2.70	2.40
K..67	1.10	2.40	2.70	3.70	2.60	2.60
K..77	2.10	4.10	4.60	5.9	4.40	4.40
K..87	3.70	8.2	8.8	11.1	8.0	8.0
K..97	7.0	14.7	15.7	20.0	15.7	15.7
K..107	10.0	20.5	24.0	32.4	24.0	24.0
K..127	21.0	41.5	43.0	52.0	40.0	40.0
K..157	31.0	66.0	67.0	87.0	62.0	62.0

Helical-worm (S) gear units

S

Gear unit	Fill quantity in liters					
	M1	M2	M3[1)]	M4	M5	M6
S..37	0.25	0.40	0.50	0.55	0.40	0.40
S..47	0.35	0.80	0.70/0.90	1.00	0.80	0.80
S..57	0.50	1.20	1.00/1.20	1.45	1.30	1.30
S..67	1.00	2.00	2.20/3.10	3.10	2.60	2.60
S..77	1.90	4.20	3.70/5.4	5.9	4.40	4.40
S..87	3.30	8.1	6.9/10.4	11.3	8.4	8.4
S..97	6.8	15.0	13.4/18.0	21.8	17.0	17.0

1) The larger gear unit of multi-stage gear units must be filled with the larger oil volume.

SF..

Gear unit	Fill quantity in liters					
	M1	M2	M3[1)]	M4	M5	M6
SF37	0.25	0.40	0.50	0.55	0.40	0.40
SF47	0.40	0.90	0.90/1.05	1.05	1.00	1.00
SF57	0.50	1.20	1.00/1.50	1.55	1.40	1.40
SF67	1.00	2.20	2.30/3.00	3.20	2.70	2.70
SF77	1.90	4.10	3.90/5.8	6.5	4.90	4.90
SF87	3.80	8.0	7.1/10.1	12.0	9.1	9.1
SF97	7.4	15.0	13.8/18.8	22.6	18.0	18.0

1) The larger gear unit of multi-stage gear units must be filled with the larger oil volume.

SA.., SH.., SAF.., SHZ.., SAZ.., SHF.., ST..

Gear unit	Fill quantity in liters					
	M1	M2	M3[1)]	M4	M5	M6
S..37	0.25	0.40	0.50	0.50	0.40	0.40
S..47	0.40	0.80	0.70/0.90	1.00	0.80	0.80
S..57	0.50	1.10	1.00/1.50	1.50	1.20	1.20
S..67	1.00	2.00	1.80/2.60	2.90	2.50	2.50
S..77	1.80	3.90	3.60/5.0	5.8	4.50	4.50
S..87	3.80	7.4	6.0/8.7	10.8	8.0	8.0
S..97	7.0	14.0	11.4/16.0	20.5	15.7	15.7

1) The larger gear unit of multi-stage gear units must be filled with the larger oil volume.

Spiroplan® (W) gear units

W.., WF.., WA..B, WH..B

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
W..10	0.16					
W..20	0.24					
W..30	0.40					
W..37	0.50			0.70	0.50	
W..47	0.90			1.40	0.90	

WA.., WAF.., WT.., WH.., WHF..

Gear unit	Fill quantity in liters					
	M1	M2	M3	M4	M5	M6
W..10	0.16					
W..20	0.24					
W..30	0.40					
W..37	0.50			0.70	0.50	
W..47	0.80			1.25	0.80	

7.2 Reduced backlash gear units

Helical, parallel-shaft helical and helical-bevel gear units with reduced backlash are available as of gear unit size 37. The circumferential backlash of these gear units is considerably less than that of the standard versions so that positioning tasks can be solved with great precision. The circumferential backlash is specified in angular minutes ['] in the technical data. The circumferential backlash for the output shaft is specified without load (max. 1% of the rated output torque); the gear unit input end is blocked.

The reduced backlash variant is available for the following gear units:

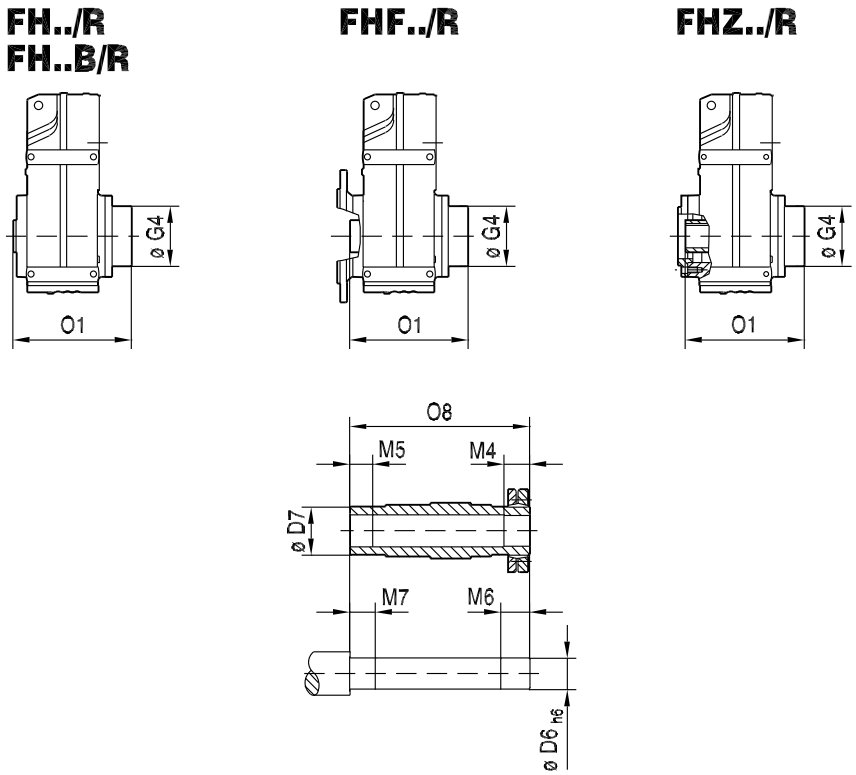
- Helical gear units (R) sizes 37 to 167
- Parallel-shaft gear units (F) sizes 37 to 157
- Helical-bevel gear units (K) sizes 37 to 187

Multi-stage gear units are not available in reduced backlash variants.

Apart from the parallel-shaft gear units FH.87 and FH.97 with reduced backlash, the dimensions of the reduced backlash variants correspond to the dimensions of the standard designs.

The following figure shows the dimensions of the FH.87 and FH.97 gear units with reduced backlash:

42 020 00 09



Type	D6	D7	G4	M4	M5	M6	M7	O1	O8
FH.87/R	Ø 65 $_{h6}$	Ø 85	Ø 163	41	40	46	45	312.5	299.5
FH.97/R	Ø 75 $_{h6}$	Ø 95	Ø 184	55	50	60	55	382.5	367

7.3 Installation/removal of gear units with hollow shafts and keys



- Always use the supplied NOCO® Fluid for assembly. The fluid prevents contact corrosion and facilitates subsequent disassembly.
- The keyway dimension X is specified by the customers, but X must be > DK.

Assembly

SEW-EURODRIVE recommends two variants for mounting gear units with hollow shaft and key onto the input shaft of the driven machine (= customer shaft):

1. Use the provided fastening parts for installation.
2. Use the optional installation/removal kit for installation.

1. Provided fastening parts

The following fastening parts are supplied as standard:

- Retaining screw with washer (2)
- Retaining ring (3)

Note the following points concerning the customer shaft:

- The installation length of the customer shaft with contact shoulder (A) must be L8 - 1 mm.
- The installation length of the customer shaft without contact shoulder (B) must equal L8.

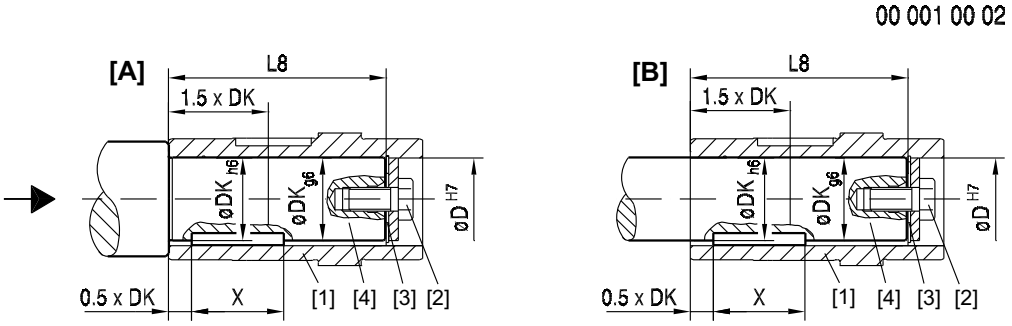


Figure 15: Customer shaft with contact shoulder (A) and without contact shoulder (B)

(1) Hollow shaft
(2) Retaining screw with washer
(3) Retaining ring
(4) Customer shaft

Dimensions and tightening torque:

The retaining screw (2) must be tightened to the tightening torque MS given in the following table.

Gear unit type	D^{H7} [mm]	DK [mm]	L8 [mm]	MS [Nm]
WA..10	16	16	69	8
WA..20	18	18	8484	
WA..20	20	20		
FA..27	25	25	88	20
WA..30, WA..37	20	20	105	8
SA..37			104	
FA..37, KA..37, SA..47	30	30	105	20
SA..47, WA..37	25	25	105	
SAF402	30	30	138	
FA..47, KA..47, SA..57	35	35	132	
WA..47	30	30	122	
SA..57			132	
FA..57, KA..57	40	40	142	40
FA..67, KA..67			156	
SA..67			144	
SA..67	45	45	144	
FA..77, KA..77, SA..77	50	50	183	40
SA..77	60	60	180	80
FA..87, KA..87			210	
SA..87			220	
SA..87	70	70	220	
FA..97, KA..97	70	70	270	
SA..97			260	
SA..97	90	90	255	200
FA..107			313	
KA..107			313	
FA..127, KA..127	100	100	373	
FA..157, KA..157	120	120	460	

2. Installation/removal kit

You can also use the optional installation/removal kit for installation. You can order the kit for the specific gear unit type(s) by quoting the part numbers in the table below. The delivery includes:

- Spacer tube for installation without contact shoulder (5)
- Retaining screw for installation (2)
- Forcing washer for removal (7)
- Locked nut for removal (8)

The short retaining screw delivered as standard is not required.

Note the following points concerning the customer shaft:

- The installation length of the customer shaft must be LK2. Do not use the spacer if the customer shaft **has a contact shoulder (A)**.
- The installation length of the customer shaft must be LK2. Use the spacer if the customer shaft **has a contact shoulder (B)**.

00 002 00 02

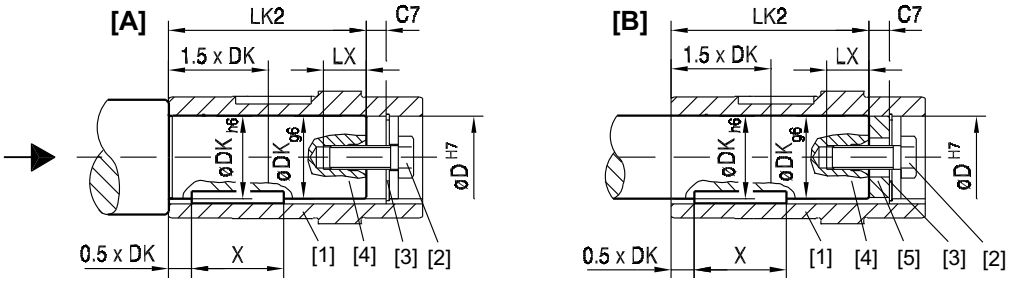


Figure 16: Customer shaft with contact shoulder (A) and without contact shoulder (B)

(1) Hollow shaft
(2) Retaining screw with washer
(3) Retaining ring
(4) Customer shaft
(5) Spacer tube

Dimensions, tightening torque and part numbers:

The retaining screw (2) must be tightened to the tightening torque MS given in the following table.

Type	D^{H7} [mm]	DK [mm]	LK2 [mm]	LX^{+2} [mm]	C7 [mm]	MS [Nm]	Part number of installation-removal set
WA..10	16	16	57	12.5	11	8	643 712 5
WA..20	18	18	72	16	12		643 682 X
WA..20, WA..30, WA..37	20	20	72, 93				643 683 8
SA..37	20	20	92	16	12	8	643 683 8
FA..27	25	25	72	22	16	20	643 684 6
SA..47			89				
WA..47	30	30	106				643 685 4
FA..37, KA..37			89				
SA..47			89				
SA..57			116				
FA..47, KA..47, SA..57	35	35	114	28	18		643 686 2
FA..57, KA..57	40	40	124	36		40	643 687 0
FA..67			138				
KA..67			138				
SA..67			126				
SA..67	45	45	126				643 688 9
FA..77, KA..77, SA..77	50	50	165				643 689 7
FA..87, KA..87	60	60	188	42	22	80	643 690 0
SA..77			158				
SA..87			198				
FA..97, KA..97	70	70	248				643 691 9
SA..87			198				
SA..97			238				
FA..107, KA..107	90	90	287	50	26	200	643 692 7
SA..97			229				
FA..127, KA..127	100	100	347				643 693 5
FA..157, KA..157	120	120	434				643 694 3

Removal

Applies only if installation/removal kit was previously used for installation (→ Figure 16).

Proceed as follows to remove the gear unit:

1. Loosen the retaining screw (6).
2. Remove the circlip (3) and, if used, the spacer tube (5).
3. According to Figure 17 place the forcing washer (7) and the locked nut (8) between the customer shaft (4) and circlip (3).
4. Re-install the circlip (3).
5. Re-install the retaining screw (6). Now you can force the gear unit off the shaft.

00 003 00 02

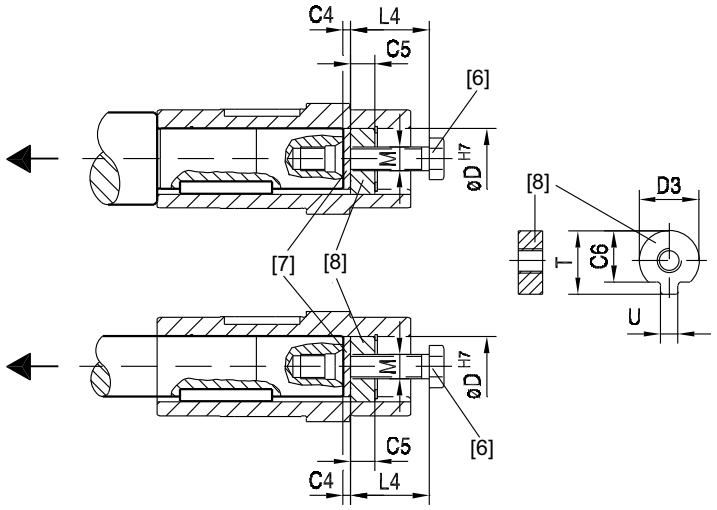


Figure 17: Removal

(6) Retaining screw
(7) Forcing washer
(8) Locked nut for removal

Dimensions and part numbers:

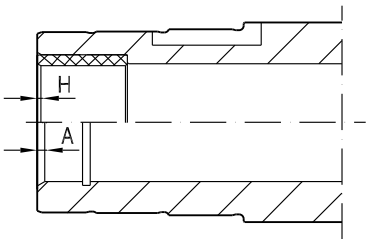
Type	D^{H7} [mm]	M	C4 [mm]	C5 [mm]	C6 [mm]	$U^{-0.5}$ [mm]	$T^{-0.5}$ [mm]	$D3^{-0.5}$ [mm]	L4 [mm]	Part number of installation/removal kit
WA..10	16	M5	5	5	12	4.5	18	15.7	50	643 712 5
WA..20	18	M6		6	13.5	5.5	20.5	17.7	25	643 682 X
WA..20, WA..30, WA..37, SA..37	20				15.5	5.5	22.5	19.7		643 683 8
FA27.., SA..47	25	M10		10	20	7.5	28	24.7	35	643 684 6
FA..37, KA..37, SA..47, SA..57, WA..47	30				25	7.5	33	29.7		643 685 4
FA..47, KA..47, SA..57	35	M12		12	29	9.5	38	34.7	45	643 686 2
FA..57, KA..57, FA..67, KA..67, SA..67	40	M16			34	11.5	41.9	39.7	50	643 687 0
SA..67	45				38.5	13.5	48.5	44.7		643 688 9
FA..77, KA..77, SA..77	50				43.5	13.5	53.5	49.7		643 689 7
FA..87, KA..87, SA..77, SA..87	60	M20		16	56	17.5	64	59.7	60	643 690 0
FA..97, KA..97, SA..87, SA..97	70				65.5	19.5	74.5	69.7		643 691 9
FA..107, KA..107, SA..97	90	M24		20	80	24.5	95	89.7	70	643 692 7
FA..127, KA..127	100				89	27.5	106	99.7		643 693 5
FA..157, KA..157	120				107	31	127	119.7		643 694 3

7.4 Gear units with hollow shaft

Chamfers on hollow shafts

The following illustration shows the chamfers on parallel-shaft helical, helical-bevel, helical-worm and Spiroplan® gear units with hollow shaft:

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Figure 18: Chamfers on hollow shafts

Gear unit	Variant	
	with hollow shaft (A)	with hollow shaft and shrink disk (H)
W..10 - W..30	2 × 30°	-
F..27	2 × 30°	0.5 × 45°
F../K../S../W..37	2 × 30°	0.5 × 45°
F../K../S../W..47	2 × 30°	0.5 × 45°
S..57	2 × 30°	0.5 × 45°
F../K..57	2 × 30°	0.5 × 45°
F../K../S..67	2 × 30°	0.5 × 45°
F../K../S..77	2 × 30°	0.5 × 45°
F../K../S..87	3 × 30°	0.5 × 45°
F../K../S..97	3 × 30°	0.5 × 45°
F../K..107	3 × 30°	3 × 2°
F../K..127	5 × 30°	1.5 × 30°
F../K..157	5 × 30°	1.5 × 30°
KH167	-	1.5 × 30°
KH187	-	1.5 × 30°

Special motor/gear unit combinations

Please note for parallel-shaft helical gearmotors with hollow shaft (FA..B, FV..B, FH..B, FAF, FVF, FHF, FA, FV, FH, FT, FAZ, FVZ, FHZ):

- If you are using a customer shaft pushed through on the motor end, there may be a collision when a "small gear unit" is used in combination with a "large motor".
- Check the motor dimension AC to decide whether there will be a collision with a pushed-through customer shaft.

7.5 TorqLOC® mounting system for gear units with hollow shaft

Description of TorqLOC®

The TorqLOC® hollow shaft mounting system is used for achieving a non-positive connection between customer shaft and the hollow shaft in the gear unit. As a result, the TorqLOC® hollow shaft mounting system is an alternative to the hollow shaft with shrink disk, the hollow shaft with key and the splined hollow shaft.

The TorqLOC® hollow shaft mounting system consists of the following components:

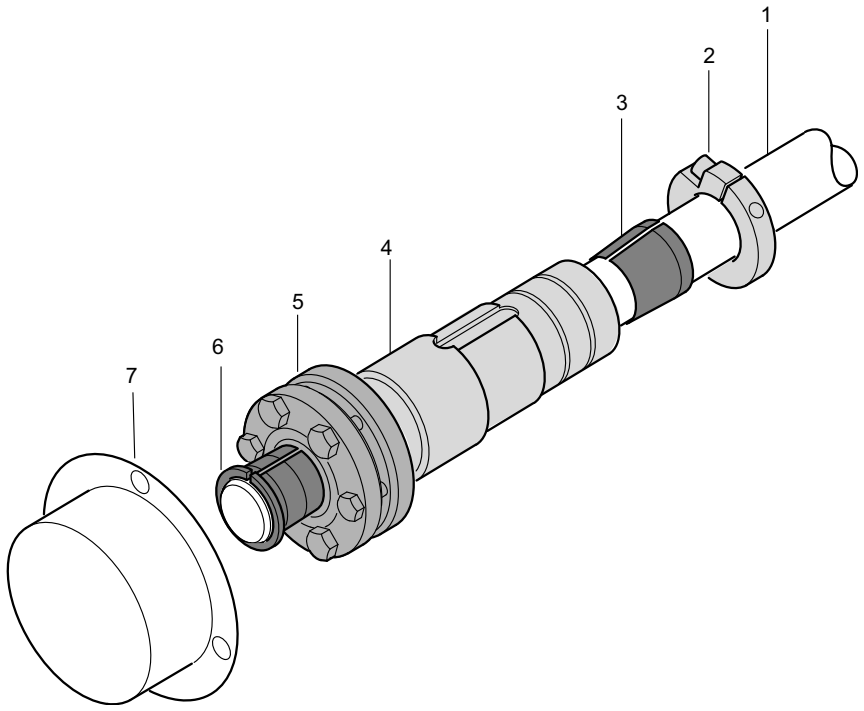


Figure 19: Components of the TorqLOC® hollow shaft mounting system

1. Customer shaft
2. Clamping ring
3. Conical bronze bushing
4. Hollow shaft in gear unit
5. Shrink disk
6. Conical steel bushing
7. Fixed cover

Advantages of TorqLOC®

The TorqLOC® hollow shaft mounting system provides the following advantages:

- Cost saving as the customer shaft can be made from drawn material up to quality h11.
- Cost saving as different customer shaft diameters can be realized with one hollow shaft diameter and different bushings.
- Simple installation as there is no need to accommodate any shaft connections.
- Simple removal even after many hours of operation as the formation of contact corrosion has been reduced and the conical connections can easily be released.

Technical data

The TorqLOC® hollow shaft mounting system is approved for input torques of 92 Nm to 18000 Nm.

The following gear units are available with TorqLOC® hollow shaft mounting system:

- Parallel-shaft helical gear units in gear unit sizes 37 to 157 (FT37 to FT157)
- Helical-bevel gear units in gear unit sizes 37 to 157 (KT37 to KT157)
- Helical-worm gear units in gear unit sizes 37 to 97 (ST37 to ST97)
- Spiroplan® gear unit sizes 37 and 47 (WT37 and WT47)

Available options

The following options are available for gear units with a TorqLOC® hollow shaft mounting system:

- Helical-bevel, helical-worm and Spiroplan® gear units with TorqLOC® (KT.., ST.., WT37, WT47): The "torque arm" (../T) option is available.
- Parallel-shaft helical gear units with TorqLOC® (FT..): The "rubber buffer" (../G) option is available.

7.6 Shouldered hollow shaft with shrink disk option

As an option, gear units with hollow shaft and shrink disk (parallel-shaft helical gear units FH/FHF/FHZ37-157, helical-bevel gear units KH/KHF/KHZ37-157 and helical-worm gear units SH/SHF47-97) can be supplied with a larger bore diameter D'.

D' = D as standard.

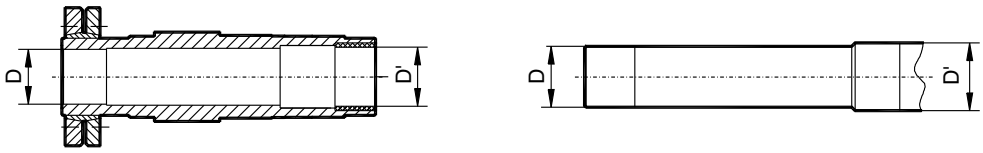


Figure 20: Optional hole diameter D'

Gear unit	Bore diameter D / optionally D' [mm]
FH/FHF/FHZ37, KH/KHF/KHZ37, SH/SHF/SHZ47	30 / 32
FH/FHF/FHZ47, KH/KHF/KHZ47, SH/SHF/SHZ57	35 / 36
FH/FHF/FHZ57, KH/KHF/KHZ57	40 / 42
FH/FHF/FHZ67, KH/KHF/KHZ67, SH/SHF/SHZ67	40 / 42
FH/FHF/FHZ77, KH/KHF/KHZ77, SH/SHF/SHZ77	50 / 52
FH/FHF/FHZ87, KH/KHF/KHZ87, SH/SHF/SHZ87	65 / 66
FH/FHF/FHZ97, KH/KHF/KHZ97, SH/SHF/SHZ97	75 / 76
FH/FHF/FHZ107, KH/KHF/KHZ107	95 / 96
FH/FHF/FHZ127, KH/KHF/KHZ127	105 / 106
FH/FHF/FHZ157, KH/KHF/KHZ157	125 / 126

Diameter D/D' must be specified when ordering gear units with a shouldered hollow shaft (optional bore diameter D').

Sample order FH37 DRS80M4 with hollow shaft 30/32 mm

Parallel-shaft helical gear units with shouldered hollow shaft (dimensions in mm):

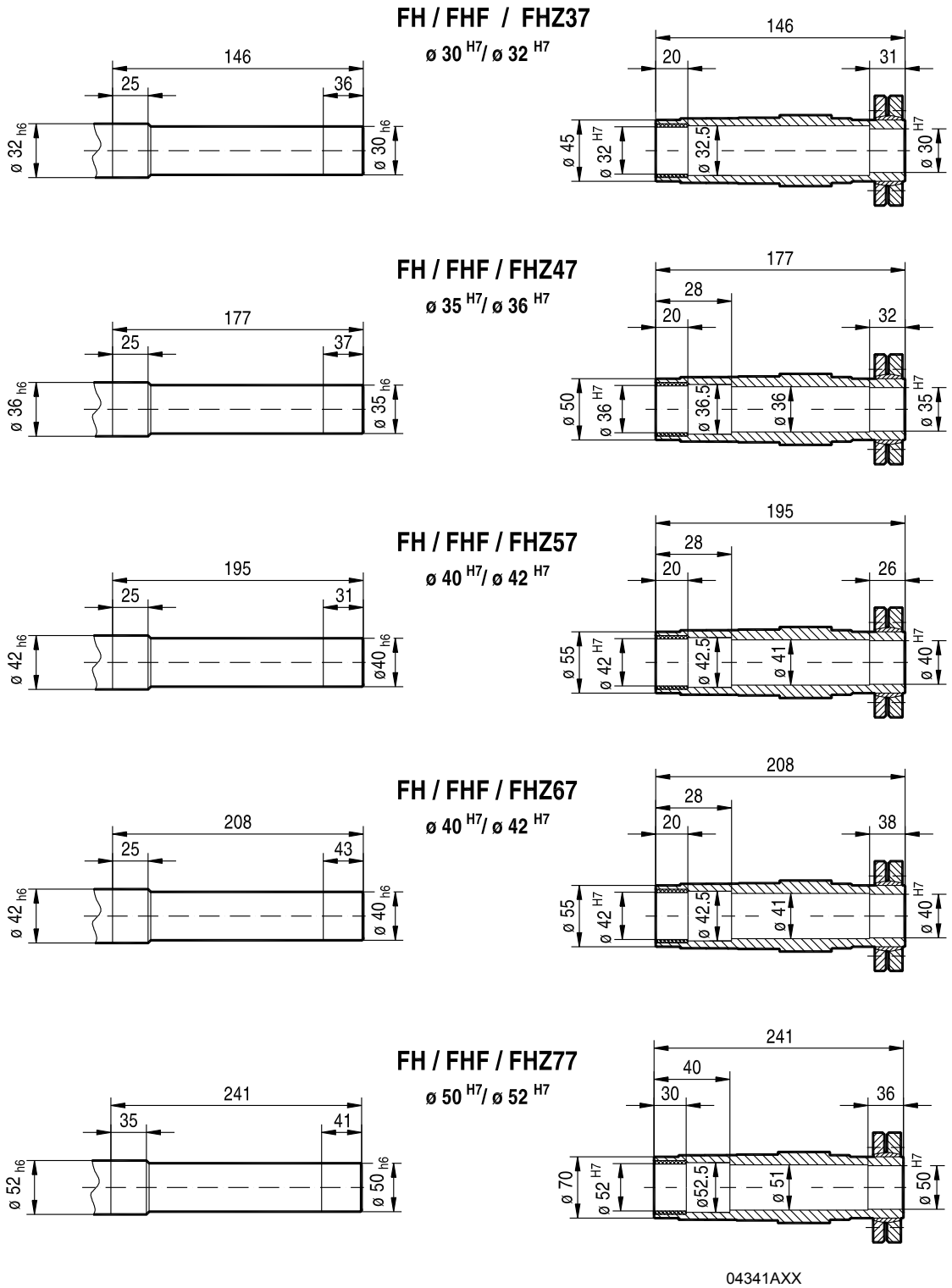


Figure 21: Shouldered hollow shaft FH/FHF/FHZ37...77

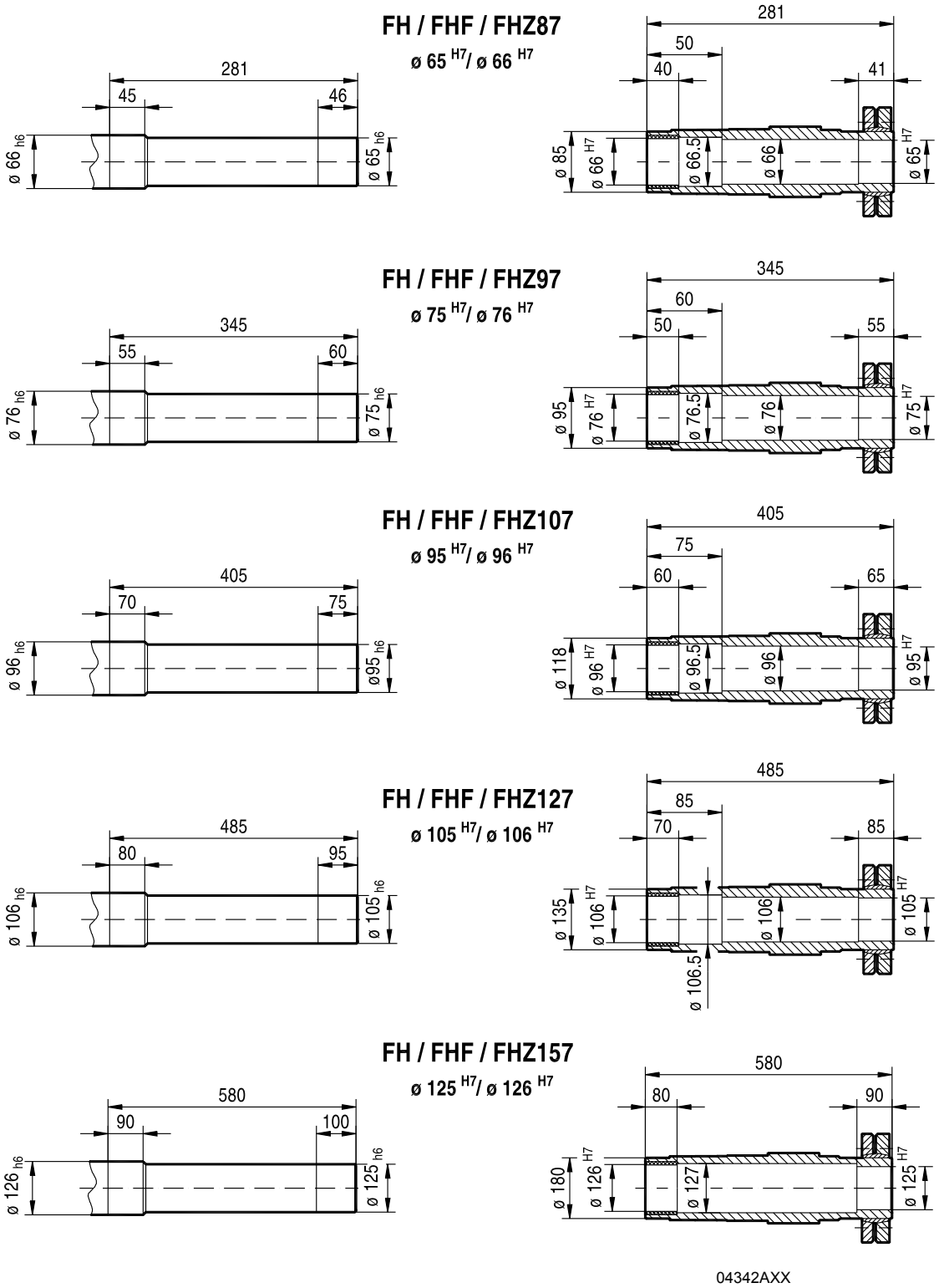


Figure 22: Shouldered hollow shaft FH/FHF/FHZ87...157

Helical-bevel gear units with shouldered hollow shaft (dimensions in mm):

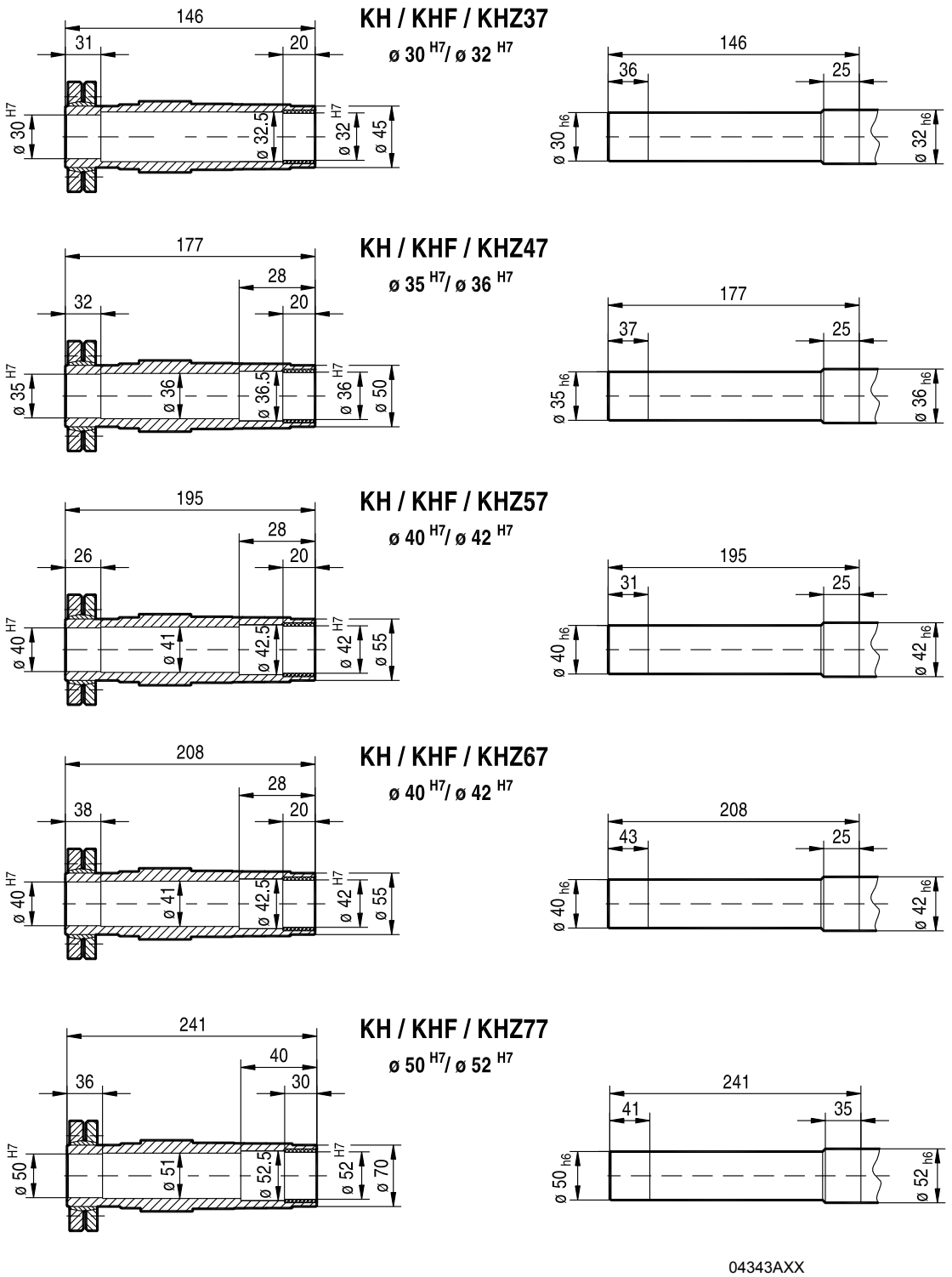


Figure 23: Shouldered hollow shaft KH/KHF/KHZ37...77

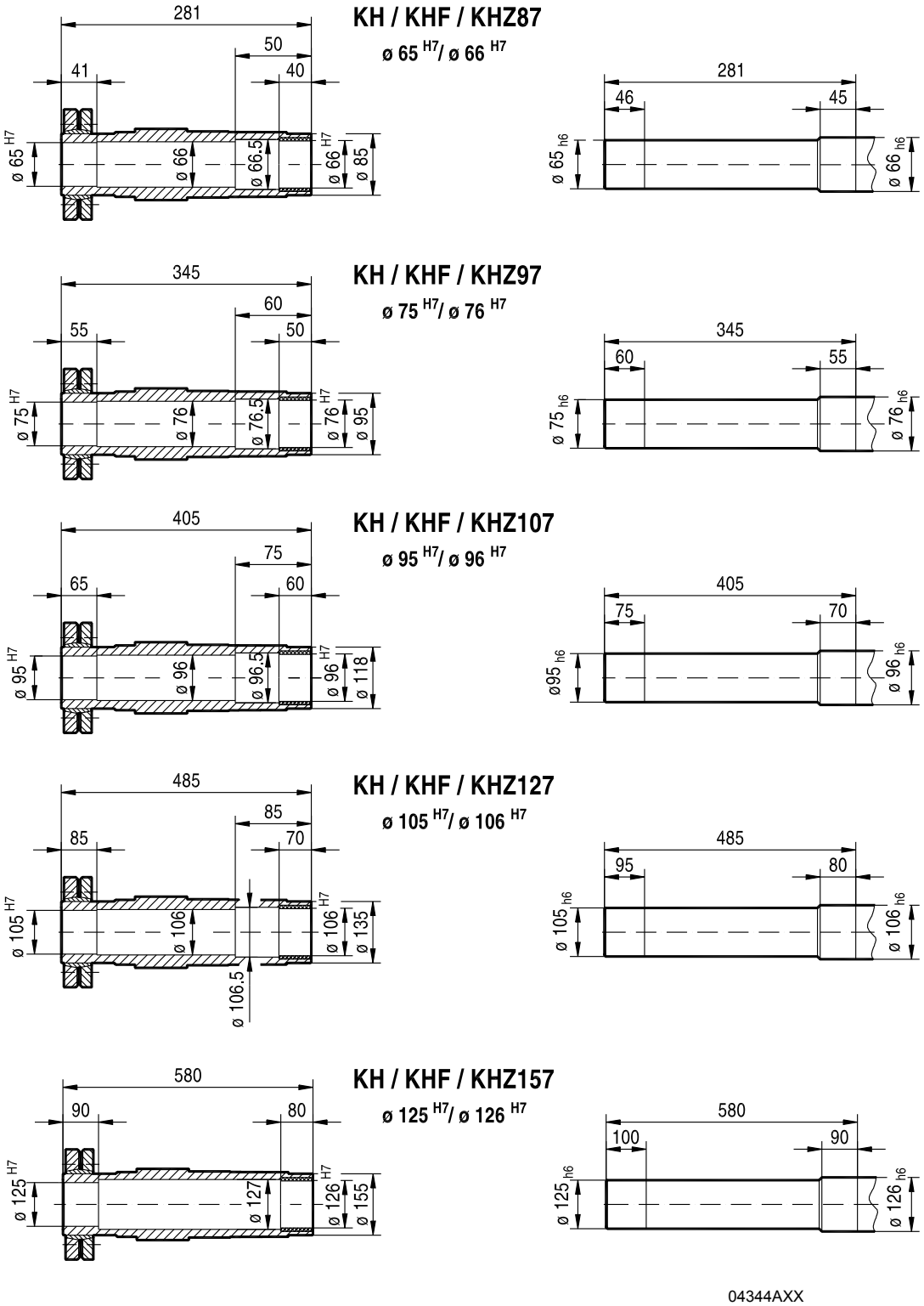


Figure 24: Shouldered hollow shaft KH/KHF/KHZ87...157

Helical-worm gear units with shouldered hollow shaft (dimensions in mm):

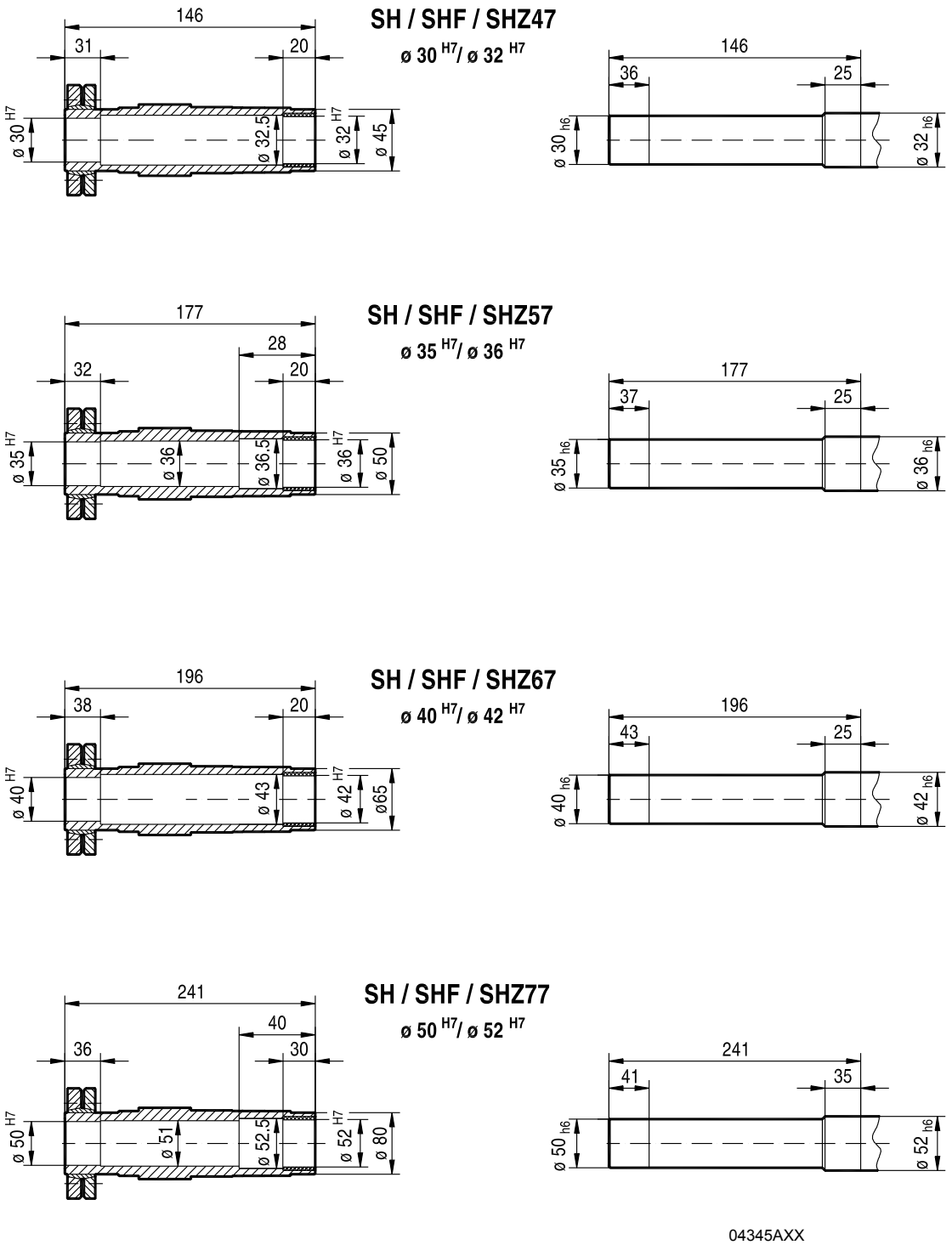


Figure 25: Shouldered hollow shaft SH/SHF/SHZ47...77

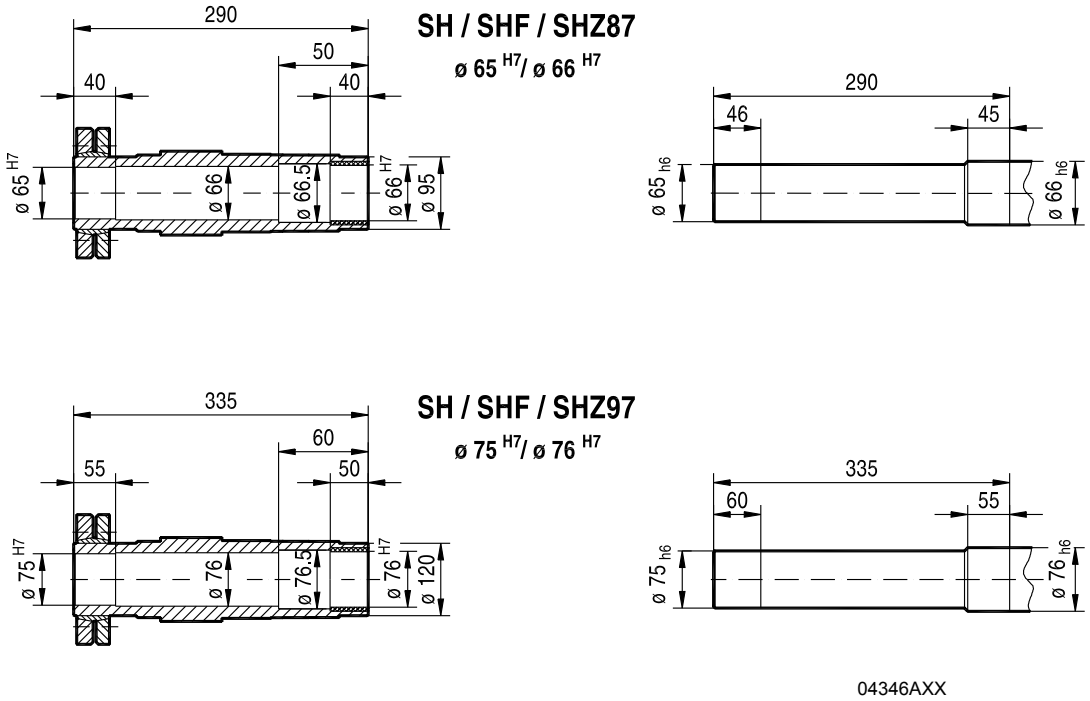
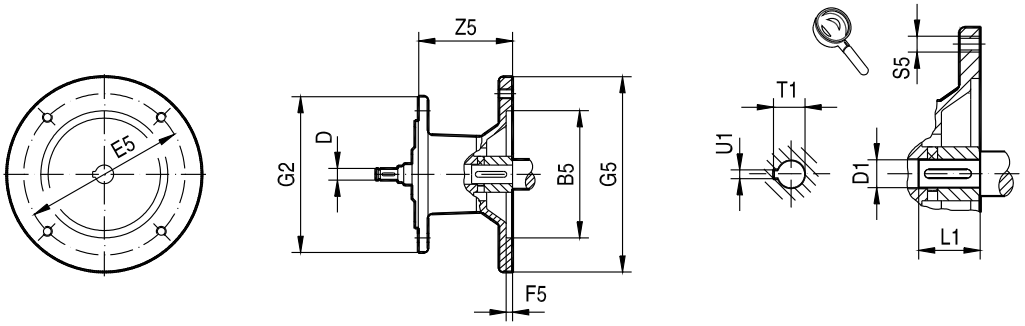


Figure 26: Shouldered hollow shaft SH/SHF/SHZ87...97

7.7 Adapters for mounting IEC motors

23 002 100



Gear unit type	Adapter type	Dimensions in mm											
		B5	D	E5	F5	G2	G5	S5	Z5	D1	L1	T1	U1
R..27, R..37 F..27, F..37, F..47 K..37 S..37, S..47, S..57 W..37	**AM63**	95	10	115	3.5	120	140	M8	72	11	23	12.8	4
	AM71[1)]	110		130	4		160			14	30	16.3	5
	AM80[1)]	130	12	165	4.5		200	M10	106	19	40	21.8	6
	AM90[1)]		14							24	50	27.3	8
R..47[2)]**, R..57, R..67 F..57, F..67 K..47**[2)]**, K..57, K..67 S..67 W..47**	**AM63**	95	10	115	3.5	160	140	M8	66	11	23	12.8	4
	AM71	110		130	4		160			14	30	16.3	5
	AM80	130	12	165	4.5		200	M10	99	19	40	21.8	6
	AM90		14							24	50	27.3	8
	AM100[1)]	180	16	215	5		250	M12	134	28	60	31.3	8
	AM112[1)]		18										
	AM132S/M[1)]	230	22	265			300		191	38	80	41.3	10
R..77 F..77 K..77 S..77	**AM63**	95	10	115	3.5	200	140	M8	60	11	23	12.8	4
	AM71	110		130	4		160			14	30	16.3	5
	AM80	130	12	165	4.5		200	M10	92	19	40	21.8	6
	AM90		14							24	50	27.3	8
	AM100[1)]	180	16	215	5		250	M12	126	28	60	31.3	8
	AM112[1)]		18										
	AM132S/M[1)]	230	22	265			300		179	38	80	41.3	10
	AM132ML[1)]		28										
R..87 F..87 K..87 S..87[3)]	**AM80**	130	12	165	4.5	250	200	M10	87	19	40	21.8	6
	AM90		14							24	50	27.3	8
	AM100	180	16	215	5		250	M12	121	28	60	31.3	8
	AM112		18										
	AM132S/M	230	22	265			300		174	38	80	41.3	10
	AM132ML		28										
	AM160[1)]	250	28	300	6		350	M16	232	42	110	45.3	12
	AM180[1)]		32							48		51.8	14

1) Check dimension 1/2 G5 because component may protrude past foot-mounting surface if installed on R, K, S or W foot-mounted gear unit.

2) not with AM112

3) not with AM180

23 003 100

Fig.1

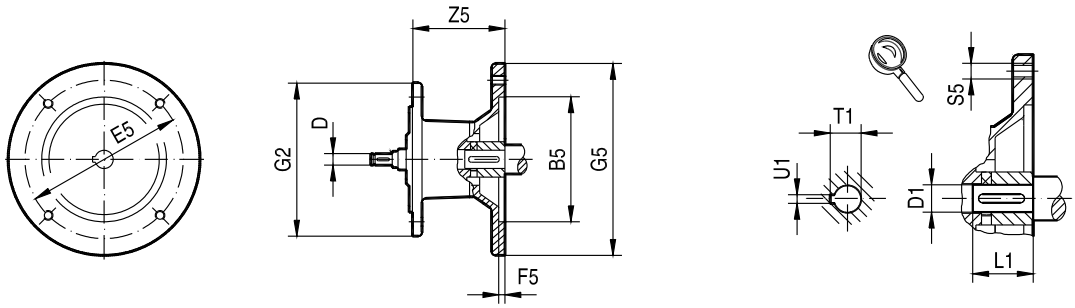
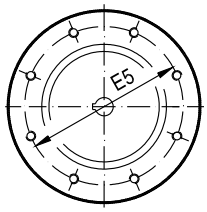


Fig.2



Gear unit type	Adapter type	Fig.	Dimensions in mm											
			B5	D	E5	F5	G2	G5	S5	Z5	D1	L1	T1	U1
R..97 F..97 K..97 S..97[1]	AM100	1	180	16	215	5	300	250	M12	116	28	60	31.3	8
	AM112			18										
	AM132S/M		230	22	265			300		169	38	80	41.3	10
	AM132ML			28										
	AM160		250	28	300	6		350	M16	227	42	110	45.3	12
	AM180			32							48		51.8	14
	AM200		300	38	350	7		400		268	55		59.3	16
R..107 F..107 K..107	AM100	1	180	16	215	5	350	250	M12	110	28	60	31.3	8
	AM112			18										
	AM132S/M		230	22	265			300		163	38	80	41.3	10
	AM132ML			28										
	AM160		250	28	300	6		350	M16	221	42	110	45.3	12
	AM180			32							48		51.8	14
	AM200		300	38	350	7		400		262	55		59.3	16
	AM225	2	350	38	400			450		277	60	140	64.4	18
R..137	AM132S/M	1	230	22	265	5	400	300	M12	156	38	80	41.3	10
	AM132ML			28										
	AM160		250	28	300	6		350	M16	214	42	110	45.3	12
	AM180			32							48		51.8	14
	AM200		300	38	350	7		400		255	55		59.3	16
	AM225	2	350	38	400			450		270	60	140	64.4	18

1) Not with AM200

23 004 100

Fig.1

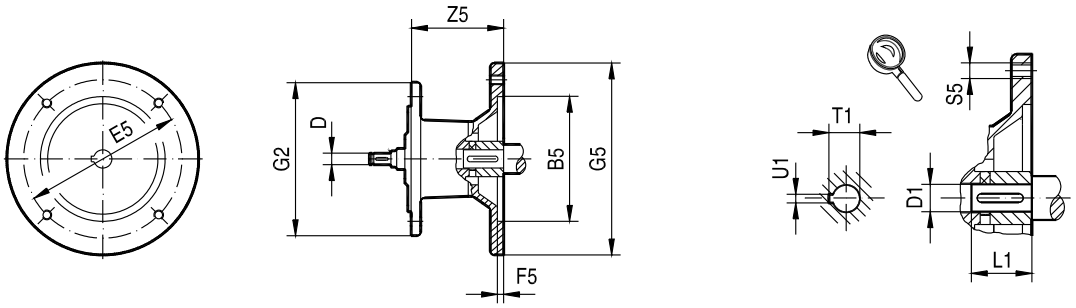
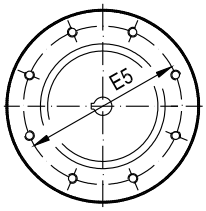
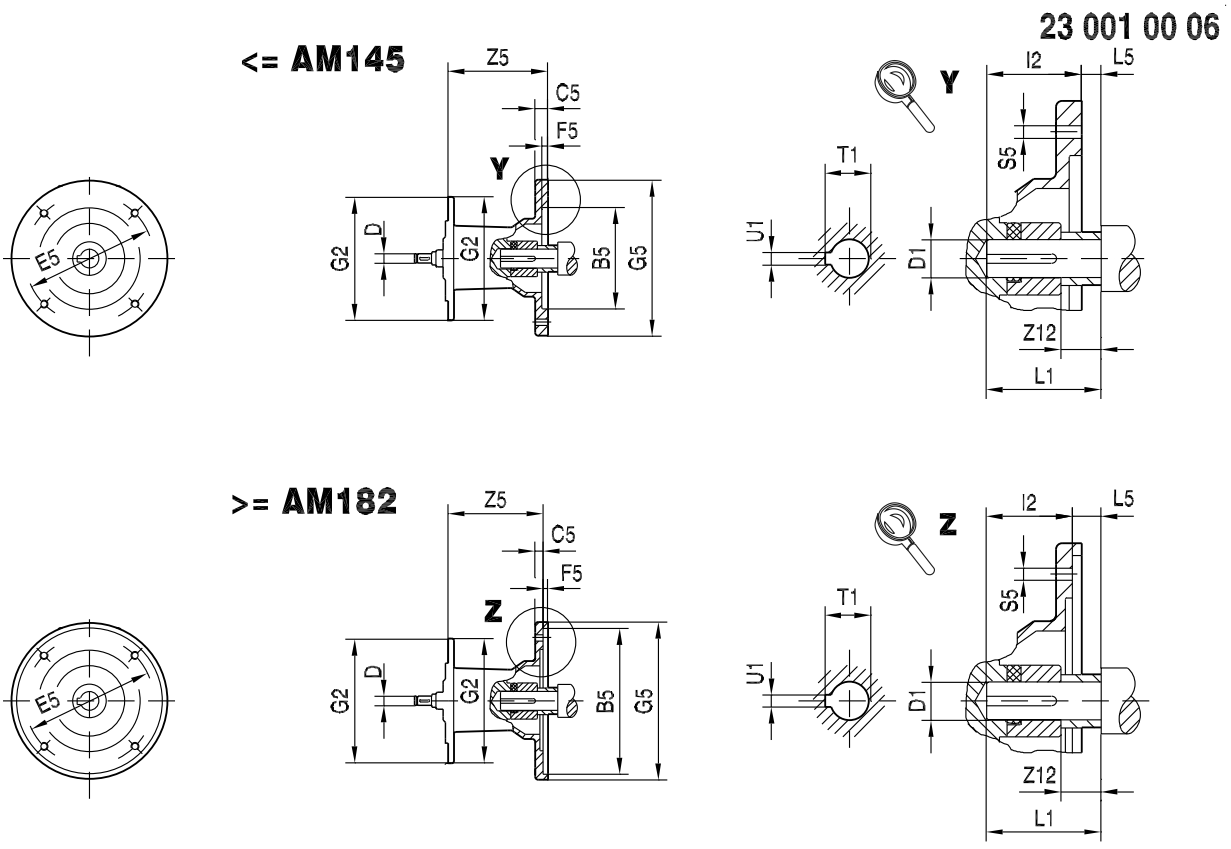


Fig.2



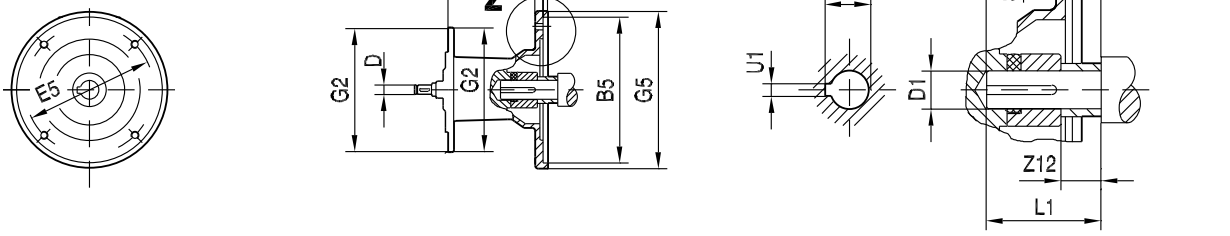
Gear unit type	Adapter type	Fig.	Dimensions in mm											
			B5	D	E5	F5	G2	G5	S5	Z5	D1	L1	T1	U1
R..147 F..127 K..127	**AM132S/M**	1	230	22	265	5	450	300	M12	148	38	80	41.3	10
	AM132ML			28							38			
	AM160		250	28	300	6		350	M16	206	42	110	45.3	12
	AM180			32							48		51.8	14
	AM200		300	38	350	7		400		247	55		59.3	16
	AM225	2	350	38	400			450		262	60	140	64.4	18
	AM250		450	48	500			550		336	65		69.4	
	AM280										75		79.9	20
R..167 F..157 K..157 K..167 K..187	**AM160**	1	250	28	300	6	550	350		198	42	110	45.3	12
	AM180			32							48		51.8	14
	AM200		300	38	350	7		400		239	55		59.3	16
	AM225	2	350	38	400			450		254	60	140	64.4	18
	AM250		450	48	500			550		328	65		69.4	
	AM280										75		79.9	20

7.8 Adapters for mounting NEMA motors



Gear unit type	Adapter type	Dimensions in mm															
		B5	C5	D	E5	F5	G2	G5	I2	L5	S5	Z5	Z12	D1	L1	T1	U1
R..27, R..37 F..27, F..37, F..47 K..37 S..37, S..47, S..57 W..37	AM56	114.3	11	10	149.2	4.5	120	170	52.55	-4.8	10.5	93.5	16.5	15.875	47	18.1	4.76
	AM143		12	12					54.1	3		117	14.5	22.225	57	24.7	
	AM145			14													
R..47, R..57, R..67 F..57, F..67 K..47, K..57, K..67 S..67 W..47	AM56	114.3	11	10	149.2	4.5	160	170	52.55	-4.8	10.5	87	16.5	15.875	47	18.1	4.76
	AM143		12	12					54.1	3		110.5	14.5	22.225	57	24.7	
	AM145			14													
	AM182	215.9	10	16	184	5		228	66.85	3	15	147.5	16.5	28.575	69	31.7	6.35
	AM184			18													
	AM213/215		11	22					79.55	6.3		200.5	15.8	34.925	85	38.7	7.94
R..77 F..77 K..77 S..77	AM56	114.3	11	10	149.2	4.5	200	170	52.55	-4.8	10.5	81	16.5	15.875	47	18.1	4.76
	AM143		12	12					54.1	3		103.5	14.5	22.225	57	24.7	
	AM145			14													
	AM182	215.9	10	16	184	5		228	66.85	3	15	139.5	16.5	28.575	69	31.7	6.35
	AM184			18													
	AM213/215		11	22					79.55	6.3		188.5	15.8	34.925	85	38.7	7.94
R..87 F..87 K..87 S..87	AM143	114.3	12	12	149.2	4.5	250	170	54.1	3	10.5	98.5	14.5	22.225	57	24.7	4.76
	AM145			14													
	AM182	215.9	10	16	184	5		228	66.85	3	15	134.5	16.5	28.575	69	31.7	6.35
	AM184			18													
	AM213/215		11	22					79.55	6.3		183.5	15.8	34.925	85	38.7	7.94
	AM254/256		12	28					95.3	6.3		234	8.8	41.275	101	45.8	9.53
	AM284/286	266.7	15	32	228.6	5		286	111.05	6.3	15	241	15.8	47.625	117	53.4	12.7

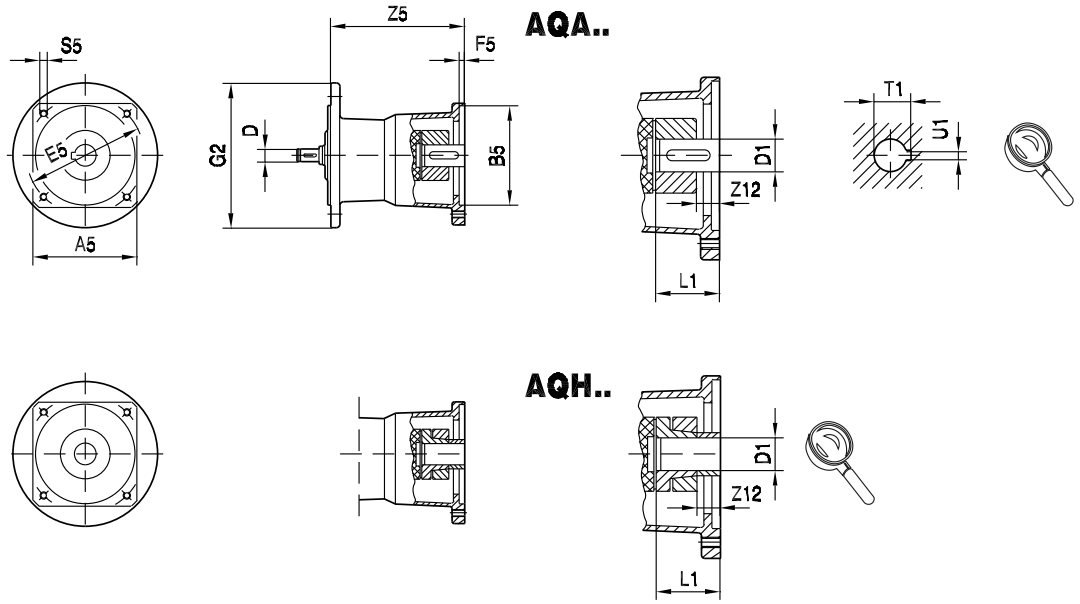
23 002 00 06



Gear unit type	Adapter type	Dimensions in mm															
		B5	C5	D	E5	F5	G2	G5	I2	L5	S5	Z5	Z12	D1	L1	T1	U1
R..97 F..97 K..97 S..97	AM182	215.9	10	16	184	5	300	228	66.85	3	15	129.5	16.5	28.575	69	31.7	6.35
	AM184			18													
	AM213/215		11	22					79.55	6.3		178.5	15.8	34.925	85	38.7	7.94
	AM254/256		12	28					95.3	6.3		229	8.8	41.275	101	45.8	9.53
	AM284/286	266.7	20	32	228.6	5		286	111.05	6.3	15	236	15.8	47.625	117	53.4	12.7
	AM324/326	317.5	17	38	279.4	5		356	127.05	6.3	17.5	296	34.8	53.975	133	60	12.7
	AM364/365			38					143.05					60.325	149	67.6	15.875
R..107 F..107 K..107	AM182	215.9	10	16	184	5	350	228	66,85	3	15	123.5	16.5	28.575	69.85	31.7	6.35
	AM184			18													
	AM213/215		11	22					79.55	6.3		172.5	15.8	34.925	85.85	38.7	7.94
	AM254/256		12	28					95.3	6.3		223	8.8	41.275	101.6	45.8	9.53
	AM284/286	266.7	15	32	228.6	5		286	111.05	6.3	15	230	15.8	47.625	117.35	53.4	12.7
	AM324/326	317.5	17	38	279.4	5		356	127.05	6.3	17.5	290	34.8	53.975	133.35	60	12.7
	AM364/365			38					143.05					60.325	149.35	67.6	15.875
R..137	AM213/215	215.9	11	22	184	5	400	228	79.55	6.3	15	165.5	15.8	34.925	85.85	38.7	7.94
	AM254/256		12	28					95.3	6.3		216	8.8	41.275	101.6	45.8	9.53
	AM284/286	266.7	15	32	228.6	5		286	111.05	6.3	15	223	15.8	47.625	117.35	53.4	12.7
	AM324/326	317.5	17	38	279.4	5		356	127.05	6.3	17.5	283	34.8	53.975	133.35	60	12.7
	AM364/365			38					143.05					60.325	149.35	67.6	15.875
R..147 F..127 K..127	AM213/215	215.9	11	22	184	5	450	228	79.55	6.3	15	157.5	15.8	34.925	85.85	38.7	7.94
	AM254/256		12	28					95.3	6.3		208	8.8	41.275	101.6	45.8	9.53
	AM284/286	266.7	15	32	228.6	5		286	111.05	6.3	15	215	15.8	47.625	117.35	53.4	12.7
	AM324/326	317.5	17	38	279.4	5		356	127.05	6.3	17.5	275	34.8	53.975	133.35	60	12.7
	AM364/365			38					143.05					60.325	149.35	67.6	15.875
R..167 F..157 K..157 K..167 K..187	AM254/256	215.9	12	28	184	5	550	228	95.3	6.3	15	200	8.8	41.275	101.6	45.8	9.53
	AM284/286	266.7	15	32	228.6	5		286	111.05	6.3	15	207	15.8	47.625	117.35	53.4	12.7
	AM324/326	317.5	17	38	279.4	5		356	127.05	6.3	17.5	267	34.8	53.975	133.35	60	12.7
	AM364/365			38					143.05					60.325	149.35	67.6	15.875

7.9 Adapters for mounting servomotors

23 005 01 00



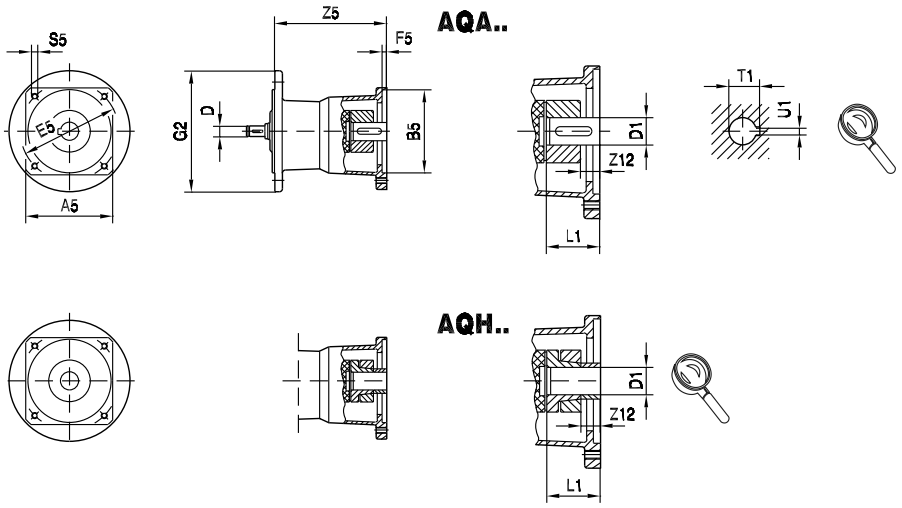
Gear unit type	Adapter type	Dimensions in mm													
		A5	B5	D	E5	F5	G2	S5	Z5	Z12[1)]	Z12[2)]	D1	L1	T1[1)]	U1[1)]
R..27, R..37 F..27, F..37, F..47 K..37 S..37, S..47, S..57 W..37	AQ..80/1	82	60	10 12	75	3	120	M5	104.5	5.5	5.5	11	23	12.8	4
	AQ..80/2											14	30	16.3	5
	AQ..80/3		50		95			M6							
	AQ..100/1	100	80	10 12 14 16	100	4		M6	129.5	-	-	14	30	16.3	5
	AQ..100/2		95		115			M8							
	AQ..100/3		80		100			M6	143.5	2	14	19	40	21.8	6
	AQ..100/4		95		115			M8							
	AQ..115/1	115	95		130			M8	152.5	11	23	19	40	21.8	6
	AQ..115/2		110												
	AQ..115/3									16	16	24	50	27.3	8
R..47, R..57, R..67 F..57, F..67 K..47[3)], K..57, K..67 S..67 W..47	AQ..80/1	82	60	10 12	75	3	160	M5	98	5.5	5.5	11	23	12.8	4
	AQ..80/2											14	30	16.3	5
	AQ..80/3		50		95			M6							
	AQ..100/1	100	80	10 12 14 16	100	4		M6	122.5	-	-	14	30	16.3	5
	AQ..100/2		95		115			M8							
	AQ..100/3		80		100			M6	136.5	2	14	19	40	21.8	6
	AQ..100/4		95		115			M8							
	AQ..115/1	115	95		130			M8	145.5	11	23	19	40	21.8	6
	AQ..115/2		110												
	AQ..115/3									16	16	24	50	27.3	8
	AQ..140/1	140	110	16 18 22	165	5		M10	175	16	16	24	50	27.3	8
	AQ..140/2		130												
	AQ..140/3								188	22	22	32	60	35.5	10
	AQ..140/4											28		31.3	8
	AQ..160/1	162	155		190							32		35.3	10
	AQ..190/1	190	130	22 28	215			M12	237.5	24	24	32	60	35.3	10
	AQ..190/2		180												
	AQ..190/3								261.5	34	34	38	80	41.3	10

1) For versions with keyway (AQA..).

2) For version with clamping ring hub (AQH..).

3) Not with AQ190

23 006 01 00

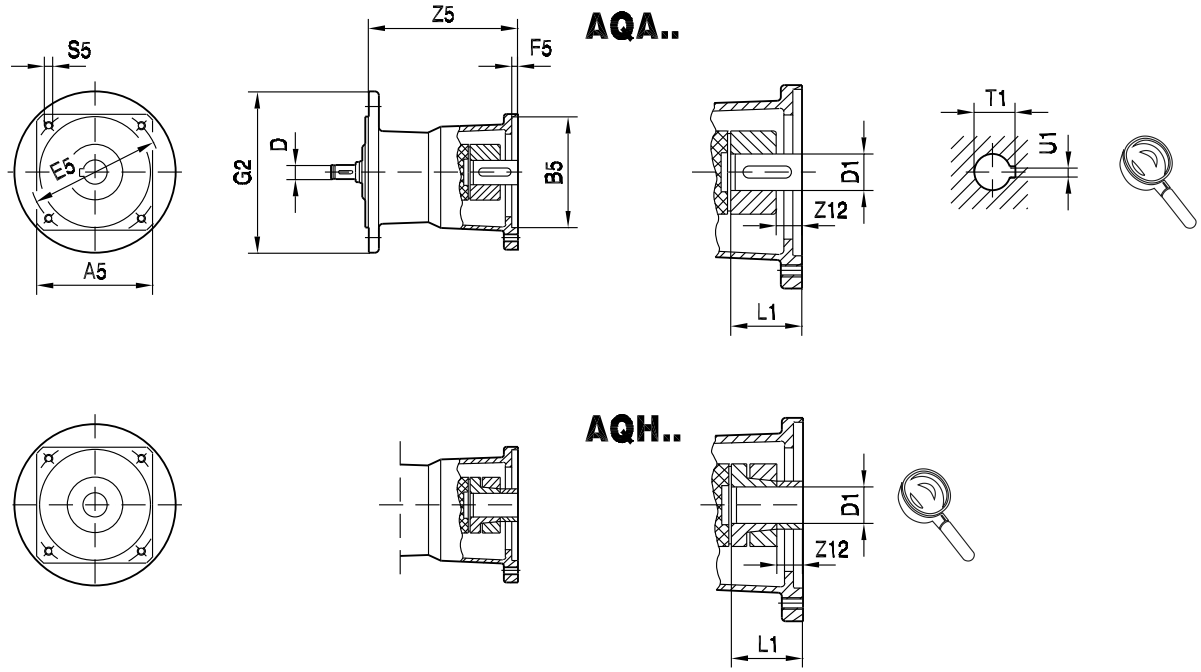


Gear unit type	Adapter type	Dimensions in mm													
		A5	B5	D	E5	F5	G2	S5	Z5	Z12[1]	Z12[2]	D1	L1	T1[1]	U1[1]
R..77 F..77 K..77 S..77	AQ..80/1	82	60	10 12	75	3	200	M5	92	5.5	5.5	11	23	12.8	4
	AQ..80/2				75							14	30	16.3	5
	AQ..80/3		50		95			M6							
	AQ..100/1	100	80	10 12 14 16	100	4		M6	115.5	-	-	14	30	16.3	5
	AQ..100/2		95		115			M8							
	AQ..100/3		80		100			M6	129.5	2	14	19	40	21.8	6
	AQ..100/4		95		115			M8							
	AQ..115/1	115	95		130			M8	138.5	11	23	19	40	21.8	6
	AQ..115/2		110												
	AQ..115/3									16	16	24	50	27.3	8
	AQ..140/1	140	110	16 18 22	165	5		M10	167	16	16	24	50	27.3	8
	AQ..140/2		130												
	AQ..140/3								180	22	22	32	60	35.3	10
	AQ..140/4											28		31.3	8
	AQ..160/1	162	155		190							32		35.3	10
	AQ..190/1	190	130	22 28	215			M12	225.5	24	24	32	60	35.3	10
	AQ..190/2		180												
	AQ..190/3								249.5	34	34	38	80	41.3	10
R..87 F..87 K..87 S..87	AQ..100/1	100	80	12 14 16	100	4	250	M6	110.5	-	-	14	30	16.3	5
	AQ..100/2		95		115			M8							
	AQ..100/3		80		100			M6	124.5	2	14	19	40	21.8	6
	AQ..100/4		95		115			M8							
	AQ..115/1	115	95		130			M8	133.5	11	23	19	40	21.8	6
	AQ..115/2		110												
	AQ..115/3									16	16	24	50	27.3	8
	AQ..140/1	140	110	16 18 22	165	5		M10	162	16	16	24	50	27.3	8
	AQ..140/2		130												
	AQ..140/3								175	22	22	32	60	35.3	10
	AQ..140/4											28		31.3	8
	AQ..160/1	162	155		190							32		35.3	10
	AQ..190/1	190	130	22 28	215			M12	220.5	24	24	32	60	35.3	10
	AQ..190/2		180												
	AQ..190/3								244.5	34	34	38	80	41.3	10

1) For versions with keyway (AQA..).

2) For version with clamping ring hub (AQH..).

23 007 01 00



Gear unit type	Adapter type	Dimensions in mm													
		A5	B5	D	E5	F5	G2	S5	Z5	Z12[1)]	Z12[2)]	D1	L1	T1[1)]	U1[1)]
R..97 F..97 K..97 S..97	AQ..140/1	140	110	16 18 22	165	5	300	M10	157	16	16	24	50	27.3	8
	AQ..140/2		130												
	AQ..140/3								170	22	22	32	60	35.3	10
	AQ..140/4											28		31.3	8
	AQ..160/1	162	155		190							32		35.3	10
	AQ..190/1	190	130	22 28	215			M12	215.5	24	24	32	60	35.3	10
	AQ..190/2		180												
	AQ..190/3								239.5	34	34	38	80	41.3	
R..107 F..107 K..107	AQ..140/1	140	110	16 18 22	165		350	M10	151	16	16	24	50	27.3	8
	AQ..140/2		130												
	AQ..140/3								164	22	22	32	60	35.3	10
	AQ..140/4											28		31.3	8
	AQ..160/1	162	155		190							32		35.3	10
	AQ..190/1	190	130	22 28	215			M12	209.5	24	24	32	60	35.3	10
	AQ..190/2		180												
	AQ..190/3								233.5	34	34	38	80	41.3	
R..137	AQ..190/1	190	130	22 28	215		400	M12	202.5	24	24	32	60	35.3	10
	AQ..190/2		180												
	AQ..190/3								226.5	34	34	38	80	41.3	
R..147 F..127 K..127	AQ..190/1		130	22 28			450		194.5	24	24	32	60	35.3	
	AQ..190/2		180												
	AQ..190/3								218.5	34	34	38	80	41.3	

1) For versions with keyway (AQA..).

2) For version with clamping ring hub (AQH..).

7.10 Fastening the gear unit

Use bolts of quality 8.8 to fasten gear units and gearmotors.

Exception

Use bolts of **quality 10.9** to fasten the customer flange to transmit the rated torques for the following flange-mounted (RF ../RZ..) and foot/flange-mounted helical gearmotors (R..F):

- RF37, R37F with flange ∅ 120 mm
- RF47, R47F with flange ∅ 140 mm
- RF57, R57F with flange ∅ 160 mm
- RZ37 ... RZ87

7.11 Torque arms

Available torque arms

Gear unit	Size					
	27	37	47	57	67	77
KA, KH, KV, KT	-	643 425 8	643 428 2	643 431 2	643 431 2	643 434 7
SA, SH, ST	-	126 994 1	644 237 4	644 240 4	644 243 9	644 246 3
FA, FH, FV, FT Rubber buffer (2 pieces)	013 348 5	013 348 5	013 348 5	013 348 5	013 348 5	013 349 3

Gear unit	Size				
	87	97	107	127	157
KA, KH, KV, KT	643 437 1	643 440 1	643 443 6	643 294 8	-
SA, SH, ST	644 249 8	644 252 8	-	-	-
FA, FH, FV, FT Rubber buffer (2 pieces)	013 349 3	013 350 7	013 350 7	013 351 5	013 347 7

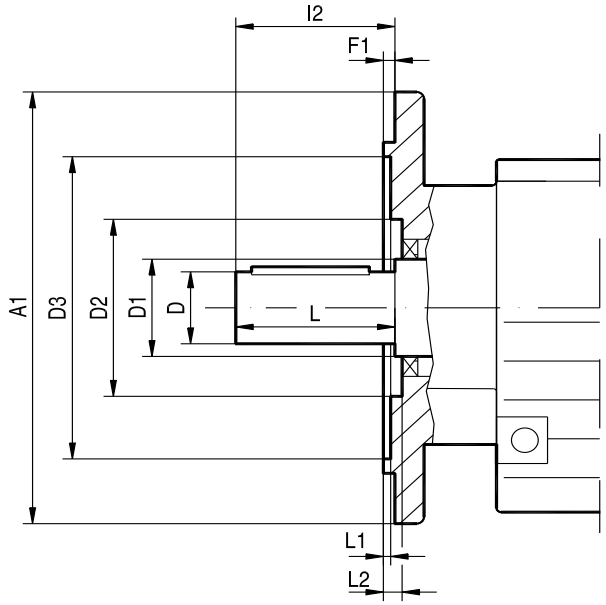
Gear unit	Size				
	10	20	30	37	47
WA	1 061 021 9	1 68 073 0	1 68 011 0	1 061 129 0	1 061 187 8

Torque arms for KH167.., KH187..

As standard, torque arms are not available for gear unit sizes KH167.. and KH187... Consult SEW-EURODRIVE for design proposals if you require torque arms for these gear units.

7.12 Flange contours of RF.. and R..F gear units

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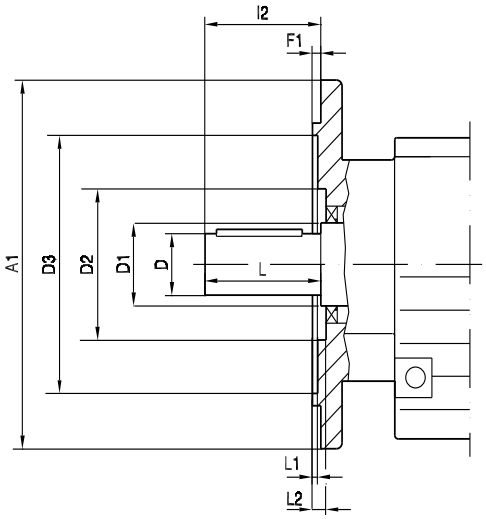
Check dimensions L1 and L2 for selection and installation of output elements.

Type	Dimensions in mm											
	A1	D	D1	D2		D3	F1	I2	L	L1		L2
				RF	R..F					RF	R..F	
RF07, R07F	120	20	22	38	38	72	3	40	40	2	2	6
	140[1)]				-	85	3			2	-	6
	160[1)]				-	100	3.5			2.5	-	6.5
RF17, R17F	120	20	25	46	46	65	3	40	40	1	1	5
	140				-	78	3			1	-	5
	160[1)]				-	95	3.5			1	-	6
RF27, R27F	120	25	30	54	54	66	3	50	50	1	1	6
	140				-	79	3			3	-	7
	160				-	92	3.5			3	-	7
RF37, R37F	120	25	35	60	63	70	3	50	50	5	4	7
	160				-	96	3.5			1	-	7.5
	200[1)]				-	119	3.5			1	-	7.5
RF47, R47F	140	30	35	72	64	82	3	60	60	4	1	6
	160				-	96	3.5			0.5	-	6.5
	200				-	116	3.5			0.5	-	6.5
RF57, R57F	160	35	40	76	75	96	3.5	70	70	4	2.5	5
	200				-	116	3.5			0	-	5
	250[1)]				-	160	4			0.5	-	5.5
RF67, R67F	200	35	50	90	90	118	3.5	70	70	2	4	7
	250				-	160	4			1	-	7.5
RF77, R77F	250	40	52	112	100	160	4	80	80	0.5	2.5	7
	300[1)]				-	210	4			0.5	-	7
RF87, R87F	300	50	62	123	122	210	4	100	100	0	1.5	8
	350				-	226	5			1	-	9
RF97	350	60	72	136		236	5	120	120	0		9
	450					320						
RF107	350	70	82	157		232	5	140	140	0		11
	450			186		316						
RF137	450	90	108	180		316	5	170	170	0		10
	550					416						
RF147	450	110	125	210		316	5	210	210	0		10
	550					416						
RF167	550	120	145	290		416	5	210	210	1		10
	660					517	6			2		11

1) The flange contour protrudes from under the base surface.

7.13 Flange contours of FF.., KF.., SF.. and WF.. gear units

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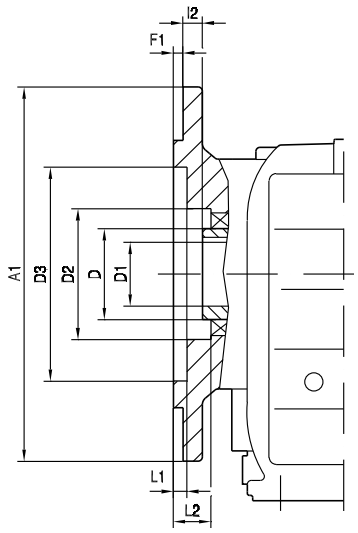


Check dimensions L1 and L2 for selection and installation of output elements.

Type	Dimensions in mm									
	A1	D	D1	D2	D3	F1	l2	L	L1	L2
FF27	160	25	40	66	96	3.5	50	50	3	18.5
FF37	160	25	30	70	94	3.5	50	50	2	6
FF47	200	30	40	72	115	3.5	60	60	3.5	7.5
FF57	250	35	40	84	155	4	70	70	4	9
FF67	250	40	50	84	155	4	80	80	4	9
FF77	300	50	55	82	205	4	100	100	5	9
FF87	350	60	65	115	220	5	120	120	5	9
FF97	450	70	75	112	320	5	140	140	8	10
FF107	450	90	100	159	318	5	170	170	16	9
FF127	550	110	118	-	420	5	210	210	10	-
FF157	660	120	135	190	520	6	210	210	8	14
KF37	160	25	30	70	94	3.5	50	50	2	6
KF47	200	30	40	72	115	3.5	60	60	3.5	7.5
KF57	250	35	40	84	155	4	70	70	4	9
KF67	250	40	50	84	155	4	80	80	4	9
KF77	300	50	55	82	205	4	100	100	5	9
KF87	350	60	65	115	220	5	120	120	5	9
KF97	450	70	75	112	320	5	140	140	8	10
KF107	450	90	100	159	318	5	170	170	16	9
KF127	550	110	118	-	420	5	210	210	10	-
KF157	660	120	135	190	520	6	210	210	8	14
SF37	120	20	25	-	68	3	40	40	6	-
SF37	160	20	25	-	96	3.5	40	40	5.5	-
SF47	160	25	30	70	94	3.5	50	50	2	6
SF57	200	30	40	72	115	3.5	60	60	3.5	7.5
SF67	200	35	45	-	115	3.5	70	70	8.5	-
SF77	250	45	55	108	160	4	90	90	8	9
SF87	350	60	65	130	220	5	120	120	6	10
SF97	450	70	75	150	320	5	140	140	8.5	10
WF10	80	16	25	-	39	2.5	40	40	30	-
WF10	120	16	25	39	74	3	40	40	5	30
WF20	110	20	30	44	53	-4	40	40	27	35
WF20	120	20	30	-	45	2.5	40	40	37.5	-
WF30	120	20	30	48	63	2.5	40	40	18	27
WF30	160	20	30	48	63	2.5	40	40	33	42
WF37	120	20	30	-	70	2.5	40	40	-	10.5
WF37	160	20	30	-	70	2.5	40	40	-	25.5
WF47	160	30	35	-	92	3.5	10	60	6	-

7.14 Flange contours of FAF.., KAF.., SAF.. and WAF.. gear units

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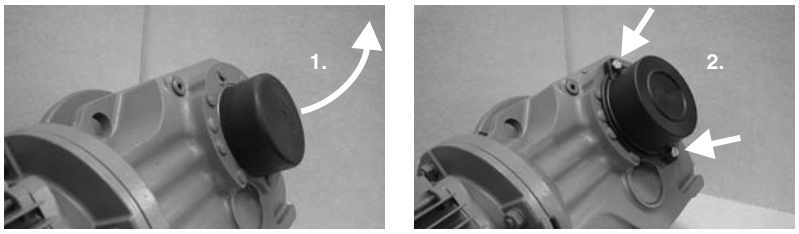


Check dimensions L1 and L2 for selection and installation of output elements.

Type	Dimensions in mm								
	A1	D	D1	D2	D3	F1	l2	L1	L2
FAF27	160	40	25	66	96	3.5	20	3	18.5
FAF37	160	45	30	62	94	3.5	24	2	30
FAF47	200	50	35	70	115	3.5	25	3.5	31.5
FAF57	250	55	40	76	155	4	23.5	4	31
FAF67	250	55	40	76	155	4	23	4	31
FAF77	300	70	50	95	205	4	37	5	45
FAF87	350	85	60	120	220	5	30	5	39
FAF97	450	95	70	135	320	5	41.5	5.5	51
FAF107	450	118	90	224	320	5	41	16	52
FAF127	550	135	100	185	420	5	51	6	63
FAF157	660	155	120	200	520	6	60	10	74
KAF37	160	45	30	62	94	3.5	24	2	30
KAF47	200	50	35	70	115	3.5	25	3.5	8.5
KAF57	250	55	40	76	155	4	23.5	4	31
KAF67	250	55	40	76	155	4	23	4	31
KAF77	300	70	50	95	205	4	37	5	45
KAF87	350	85	60	120	220	5	30	5	39
KAF97	450	95	70	135	320	5	41.5	5.5	51
KAF107	450	118	90	224	320	5	41	16	52
KAF127	550	135	100	185	420	5	51	6	63
KAF157	660	155	120	200	520	6	60	10	74
SAF37	120	35	20	-	68	3	15	6	-
SAF37	160	35	20	-	96	3.5	15	5.5	-
SAF47	160	45	30 / 25	62	94	3.5	24	2	30
SAF57	200	50	35 / 30	70	115	3.5	25	3.5	31.5
SAF67	200	65	45 / 40	91	115	3.5	42.5	4	48.5
SAF77	250	80	60 / 50	112	164	4	45.5	5	53.5
SAF87	350	95	70 / 60	131	220	5	52.5	6	62.5
SAF97	450	120	90 / 70	160	320	5	60	6.5	69
WAF10	80	25	16	-	39	2.5	23	30	-
WAF10	120	25	16	39	74	3	23	5	30
WAF20	110	30	18 / 20	44	53	-4	30	27	35
WAF20	120	30	18 / 20	-	45	2.5	30	37.5	-
WAF30	120	30	20	48	63	2.5	19.5	18	27
WAF30	160	30	20	48	63	2.5	34.5	33	42
WAF37	120	35	20 / 25	54	70	2.5	19.5	10.5	27
WAF37	160	35	20 / 25	54	70	2.5	34.5	25.5	42
WAF47	160	45	25 / 30	72	92	3.5	10	6	45

7.15 Fixed covers

Parallel-shaft helical gear units, helical-bevel gear units, helical-worm and Spiroplan® gear units with hollow shafts and shrink disks of size 37 up to size 97 come equipped with a rotating cover as standard. If, for safety reasons, fixed covers are required for these gear units, you can order them for the respective gear unit types by quoting the part numbers in the following tables. As standard, size 107 parallel-shaft helical gear units and helical-bevel gear units with hollow shafts and shrink disks and size 27 parallel-shaft helical gear units come equipped with a fixed cover.

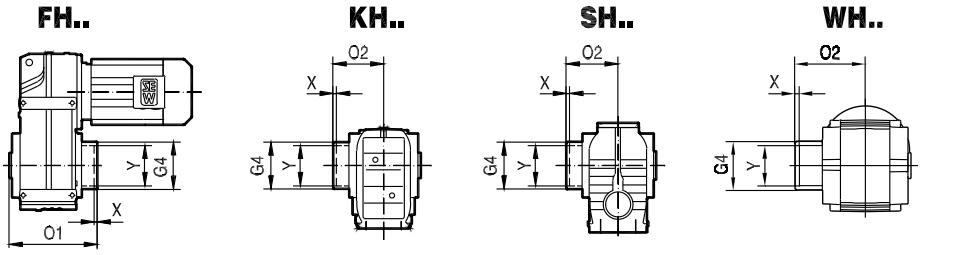


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Figure 27: Replacing a rotating cover with a fixed cover

1. Pull off the rotating cover.
2. Install and fasten fixed cover.

Part numbers and dimensions



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Parallel-shaft helical gearmotors	FH..37	FH..47	FH..57	FH..67	FH..77	FH..87	FH..97
Part number	643 513 0	643 514 9	643 515 7	643 515 7	643 516 5	643 517 3	643 518 1
Max. size of motor that can be mounted	DR80	DR80	DR80	DR132	DR160	DR180..	DR180..
G4 [mm]	78	88	100	100	121	164	185
O1 [mm]	157	188.5	207.5	221.5	255	295	363.5
X [mm]	2	4.5	7.5	6	6	4	6.5
Y [mm]	75	83	83	93	114	159	174

Helical-bevel gearmotors[1)]	KH..37	KH..47	KH..57	KH..67	KH..77	KH..87	KH..97
Part number	643 513 0	643 514 9	643 515 7	643 515 7	643 516 5	643 517 3	643 518 1
G4 [mm]	78	88	100	100	121	164	185
O2 [mm]	95	111.5	122.5	129	147	172	210.5
X [mm]	0	1.5	5.5	3	1	2	4.5
Y [mm]	75	83	83	93	114	159	174

1) Not possible in foot-mounted helical-bevel gear units with hollow shaft and shrink disk (KH..B).

Helical-worm gearmotors	SH..37	SH..47	SH..57	SH..67	SH..77	SH..87	SH..97
Part number	643 512 2	643 513 0	643 514 9	643 515 7	643 516 5	643 517 3	643 518 1
G4 [mm]	59	78	88	100	121	164	185
O2 [mm]	88	95	111.5	123	147	176	204.5
X [mm]	1	0	1.5	3	1	0	0.5
Y [mm]	53	75	83	93	114	159	174

Spiroplan® gearmotors	WH..37	WH..47					
Part number	1 061 136 3	1 061 194 0					
G4 [mm]	68	80.5					
O2 [mm]	95.5	109.5					
X [mm]	11	12.5					
Y [mm]	50	72					

7.16 Condition monitoring: Oil aging and vibration sensor

Oil aging sensor – technical data

DUO10A diagnostic unit

/DUO10A	Technical data		
Preset oil grades	OIL1	CLP mineral oil	T_{max} = 100 °C
		Bio oil	T_{max} = 100 °C
	OIL2	CLP HC synthetic oil	T_{max} = 130 °C
		CLP PAO oil	T_{max} = 130 °C
	OIL3	CLP PG polyglycol	T_{max} = 130 °C
	OIL4	Food grade oil	T_{max} = 100 °C
Switch outputs	1: Early warning (time to next oil change can be set to between 2 and 100 days) 2: Main alarm (time to oil change 0 days) 3: Exceeded temperature T_{max} 4: DUO10A is ready for operation		
Permitted oil temperature	-40 °C to +130 °C		
Permitted temperature sensors	PT1000		
EMC	IEC1000-4-2/3/4/6		
Ambient temperature	-25 °C to +70 °C		
Operating voltage	DC 18-28 V		
Current consumption at DC 24 V	< 90 mA		
Protection class	III		
Degree of protection	IP67 (optionally IP69K)		
Housing materials	Evaluation unit: V2A, EPDM/X, PBT, FPM Temperature sensor: V4A		
Electrical connection	Evaluation unit: M12 plug connector PT1000 temperature sensor: M12 plug connector		

Designations and part numbers

Designation	Description	Part number
DUO10A 	Evaluation unit (basic unit)	1 343 875 1
DUO10A-PUR-M12-5m	5 m PUR cable with 1 connector	1 343 877 8
DUO10A-PVC-M12-5m	5 m PVC cable with 1 connector	1 343 878 6
DUO10A	Angle bracket	1 343 880 8
DUO10A D = 34	Mounting clamp	1 343 879 4

Designation	Description	Part number
W4843 PT1000 	PT1000 temperature sensor	1 343 881 6
W4843_4x0.34-2m-PUR	2 m PUR cable for PT1000[1)]	1 343 882 4
W4843_4x0.34-2m-PVC	2 m PVC cable for PT1000[2)]	1 343 883 2
DUO10A 	Protection cap (for aseptic design, IP69K)	1 343 902 2

1) PUR cables are particularly suited for use in oil-contaminated environments.

2) PVC cables are particularly suited for use in wet environments.

Mounting on standard gear units (R, F, K, S)

Adapter for mounting the PT1000 temperature sensor in screw plug holes:

Complete adapter for PT1000 sensor	Part number
M10 × 1	1 343 903 0
M12 × 1.5	1 343 904 9
M22 × 1.5	1 343 905 7
M33 × 2	1 343 906 5
M42 × 2	1 343 907 3

Mounting base for installing the diagnostic unit at the gear unit with an angle bracket:

Mounting base with sealing ring	Part number
M10 × 1	1 343 441 1
M12 × 1.5	1 343 827 1
M22 × 1.5	1 343 829 8
M33 × 2	1 343 830 1
M42 × 2	1 343 832 8

Vibration sensor technical data

DUV10A and DUV30A diagnostics units

/DUV10A and DUV30A	Technical data
Measuring range	± 20 g
Frequency range	0.125 ... 500 Hz
Spectral resolution	0.125 Hz
Diagnostic processes	FFT, envelope-FFT, trend analysis
Minimum measuring period	8.0 s
Speed range	12 ... 3500 min^{-1}
Switch outputs	1: Early warning 2: Main alarm
Operating voltage	DC 10-32 V
Current consumption at DC 24 V	100 mA
Protection class	III
EMC	IEC1000-4-2/3/4/6
Overload capacity	100 g
Ambient temperature	-30 °C to +60 °C
Degree of protection	IP67
Housing materials	Zinc die-casting, coating based on epoxy finish, polyester membrane keypad
Electrical connection for supply and switching output	M12 plug connector
Electrical connection RS-232 for communication	M8 plug connector
Certificates and standards	CE, UL

Designations and part numbers

Designation	Description	Part number
DUV10A 	Diagnostic unit (basic unit)	1 406 629 7
DUV10A-S	Configuration software	1 406 630 0
DUV10A-K-RS232-M8	Communication cable	1 406 631 9
DUV10A-N24DC	DC 24 V power supply unit	1 406 632 7
DUV10A-I	Pulse tester	1 406 633 5
DUV10A-K-M12-2m PUR	2 m PUR cable with 1 connector[1)]	1 406 634 3
DUV10A-K-M12-5m PUR	5 m PUR cable with 1 connector[1)]	1 406 635 1
DUV10A-K-M12-2m PVC	2 m PVC cable with 1 connector[2)]	1 326 620 9
DUV10A-K-M12-5m PVC	5 m PVC cable with 1 connector[2)]	1 326 621 7

1) PUR cables are particularly suited for use in oil-contaminated environments.

2) PVC cables are particularly suited for use in wet environments.

Mounting on standard gear units (R, F, K, S)

Mounting base for installing the diagnostic unit at the gear unit:

Mounting base with sealing ring	Part number
M10 × 1	1 343 441 1
M12 × 1.5	1 343 827 1
M22 × 1.5	1 343 829 8
M33 × 2	1 343 830 1
M42 × 2	1 343 832 8

Mounted on motor

Mounting base for installing the diagnostic unit at the motor:

Fastening element	Part number
M12, for motor sizes 132M to 180	1 343 842 5
M16, for motor sizes 200 to 280	1 343 844 1

8 Important Information about Tables and Dimension Sheets

8.1 Geometrically possible combinations

Structure of the tables

These tables show combinations of gear units and AC (brake) motors that are geometrically possible. The following data are given for each combination and an input speed n_i = 1400 1/min:

- Output speed (n_a)
- Maximum output torque (M_{amax})
- Permitted overhung load (F_{RA}) at maximum output torque, applies to foot-mounted gear units with solid shaft
- Gear ratio (i)

Torsion angle $\varphi_{(/R)}$**:** If no value is indicated, the gear unit is not available with "reduced backlash (/R)" with this option. If a value is stated, this gear unit is available with "reduced backlash (/R)". The numerical value specifies the circumferential backlash of the reduced backlash version in angular minutes ['].

R57, n_e = 1400 1/min											**450 Nm**
n_a [1/min]	**M_{amax} [Nm]**	**F_{Ra} [N]**	**$\varphi_{(/R)}$ ['] **	**i**	**DR63 DRS71S DRS71M**	**DRS80**	**DRS90M**	**DRS90L DRS100M**	**DRS100LC**	**DRS132S DRS132M**	**DRS132MC**
				 **2**							
53	450	4750	6	26.31							
56	450	4640	6	24.99*							
64	450	4370	7	21.93							
75	450	4050	7	18.60*							

Gear unit reduction ratio

No data (-): The reduced backlash (= /R) option is not possible for this i value.
Numerical value given: The reduced backlash (= /R) option is possible; the numerical value specifies the circumferential backlash of the reduced backlash version in angular minutes ['].

Permitted overhung load at maximum output torque (foot-mounted gear unit with solid shaft)

Maximum output torque

Output speed

* Finite gear unit reduction ratio

	Combination with the motor in the header **is possible**.
	Combination with the motor in the header **is not possible**.

Helical gear units (R), with the exception of the single stage RX gear unit, and parallel-shaft helical gear units (F) have two or three stages, depending on the gear unit reduction ratio. The tables indicate whether the subsequent i ranges are two or three stage. Multi-stage gear units always have a helical gear unit as their primary gear unit; it explains why the number of stages is also given for multi-stage gear units.

 **2** For R and F gear units: Number of stages of the subsequent gear ratios (two or three stage).

 **3**  **3** For multi-stage gear units: Stages of the following ratios (2-2, 3-3, 2-3 or 3-2 stages).
The number of stages of the primary gear unit (= small gear unit) is given on the right; the number of stages of the output gear unit (= large gear unit) is given on the left.

Helical-bevel, Spiroplan® and helical-worm gear units (K, W and S) have a defined number of stages. This means the number of stages does not have to be listed in the tables.

- Helical-bevel gear units (K): Always three-stage
- Spiroplan® gear units (W): W..10 to W..30: always single-stage W..37 and W..47: always two-stage
- Helical-worm gear units (S): always two-stage

8.2 Selection tables for gearmotors

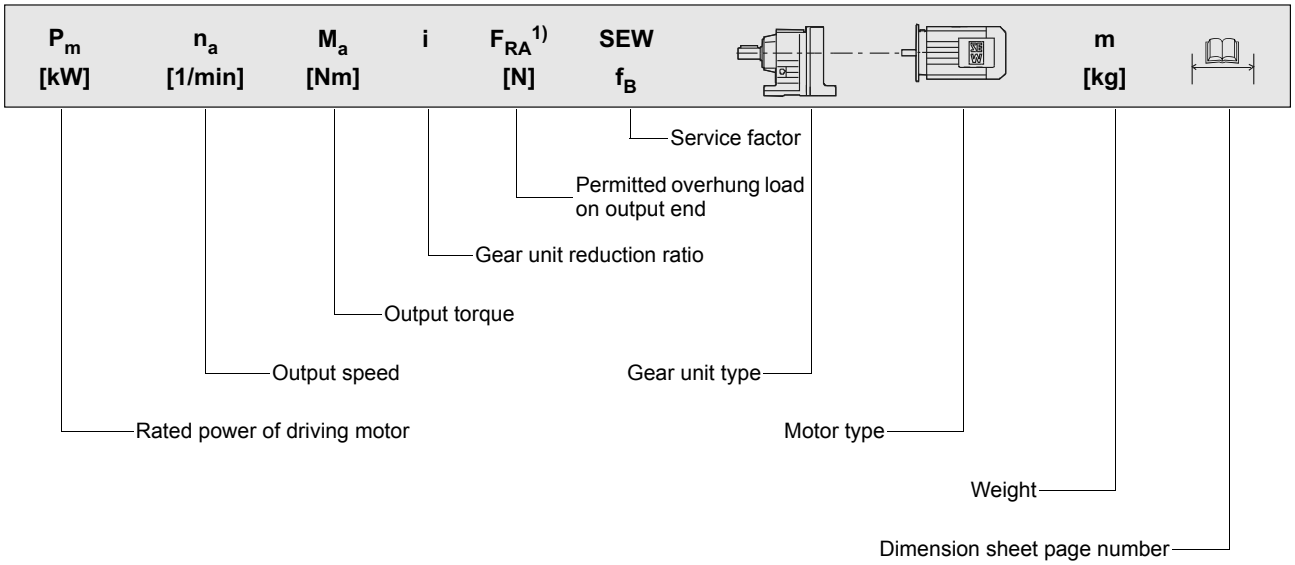
Structure of the selection tables

The two figures below illustrate the structure of the selection tables for gearmotors. There are two types of selection tables:

1. For standard output speeds, sorted according to the rated power P_m [kW] of the driving motor.
2. For extremely low output speeds, multi-stage gearmotors are always sorted according to the maximum permitted output torque $M_{o\ max}$ [Nm].

1. For standard output speeds:

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Key

* Finite gear unit reduction ratio

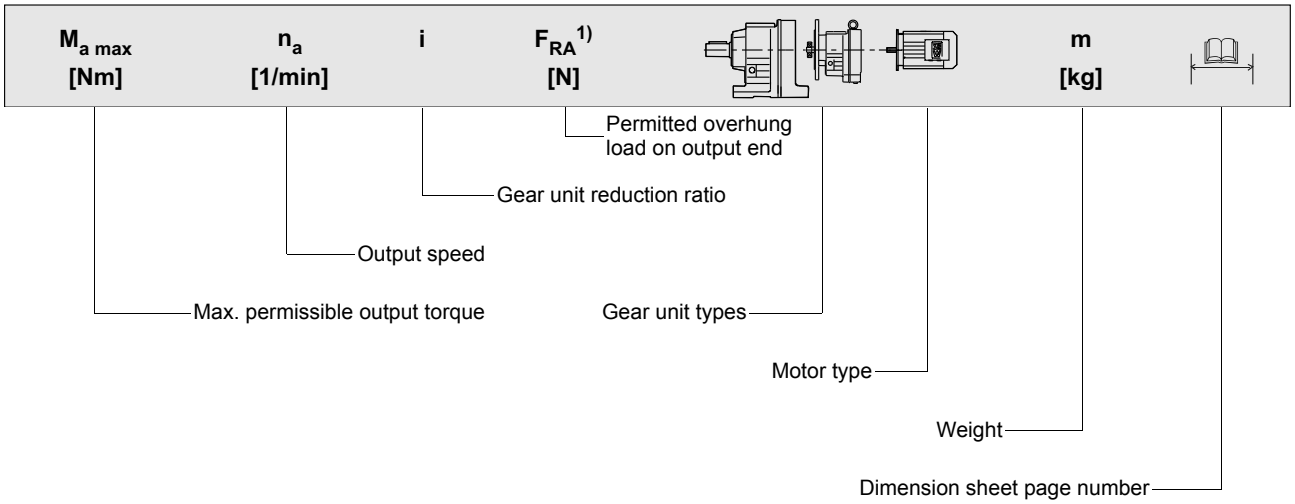
1) Overhung load for foot-mounted gear units with solid shaft; overhung loads for other gear unit types upon request

Only applies to Spiroplan® (W) gearmotors:

- If a lubricant is used for the food industry (food grade), SEW $f_B \geq 1.2$ required.

1. For extremely low output speeds (multi-stage gearmotors):

61030AXX



Key

* Finite gear unit reduction ratio

1) Overhung load for foot-mounted gear units with solid shaft; overhung loads for other gear unit types upon request

In drives for extremely low output speeds (multi-stage gearmotors), the motor power must be limited to the maximum permitted output torque of the gear unit.

8.3 Information regarding the dimension sheets

Scope of delivery



= Standard parts supplied by SEW-EURODRIVE.



= Standard parts not supplied by SEW-EURODRIVE.

Tolerances

Shaft heights

The following tolerances apply to the indicated dimensions:

h	≤ 250 mm	→ -0.5 mm
h	> 250 mm	→ -1 mm

Foot-mounted gear units: Check the mounted motor because it may project below the mounting surface.

Shaft ends

Diameter tolerance:

∅	≤ 50 mm	→ ISO k6
∅	> 50 mm	→ ISO m6

Center bores according to DIN 332, shape DR:

∅	= 7...10 mm	→ M3	∅	> 30...38 mm	→ M12
∅	> 10...13 mm	→ M4	∅	> 38...50 mm	→ M16
∅	> 13...16 mm	→ M5	∅	> 50...85 mm	→ M20
∅	> 16...21 mm	→ M6	∅	> 85...130 mm	→ M24
∅	> 21...24 mm	→ M8	∅	> 130 mm	→ M30
∅	> 24...30 mm	→ M10			

Keys: according to DIN 6885 (domed type)

Hollow shafts

Diameter tolerance:

∅ → ISO H7 measured with plug gauge

Keys: according to DIN 6885 (domed type)

Exception: Key for WA37 with shaft ∅ 25 mm according to DIN 6885-3 (low form)

Multiple-spline shafts

Dm	= Measuring roller diameter
Me	= Check gauge

Flanges

Centering shoulder tolerance:

∅	≤ 230 mm (flange sizes A120...A300)	→ ISO j6
∅	> 230 mm (flange sizes A350...A660)	→ ISO h6

Up to 3 different flange dimensions are available for each size of helical gear unit, Spiroplan® gear unit, AC (brake)motor and explosion-proof AC (brake)motor. The dimension sheets show the possible flanges for the respective sizes.

Eyebolts, lifting eyes

R07...R27 helical gear units, motors up to DR100 and the Spiroplan® gearmotors W..10 to W..30 are delivered without special transportation fixtures. All other gear units and motors are equipped with cast-on suspension eye lugs, screw-on suspension eye lugs or screw-on lifting eyebolts.

Gear unit/motor type	screw-on,		cast-on eyebolts
	lifting eyebolts	eyebolts	
R..37-R..57	-	•	-
R..67-R..107	•	-	-
RX57-RX67	-	•	-
RX77-RX107	•	-	-
F..27-F..157	-	-	•
K..37-K..157	-	-	•
K..167-K..187	•	-	-
S..37-S..47	-	•	-
S..57-S..97	-	-	•
W37-W47	-	•	-
≥ **DR112**	•	-	-

Breather valves

The gear unit dimension drawings are shown with screw plugs. As standard, the corresponding screw plug is replaced with an activated breather valve depending on the ordered mounting position M1...M6. Contour dimensions might be slightly different as a result.

Shrink disk connection

Hollow shaft gear unit with shrink disk connection: If required, please request a detailed data sheet on shrink disks, data sheet no. 33 753 ..95.

Splined hollow shaft

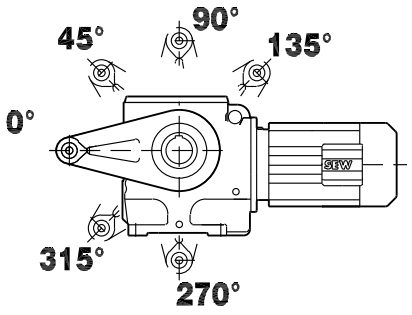
FV.. hollow shaft gear units in sizes 27 ... 107 and KV.. in sizes 37 ... 107 are delivered with a splined hollow shaft according to DIN 5480 (tooth space tolerance 9H).

Rubber buffer for FA/FH/FV/FT

Preload rubber buffer by the indicated value ΔL. The characteristic curve of spring for the rubber buffers is available at SEW-EURODRIVE on request.

Torque arm position

The following illustration shows the possible torque arm positions for helical-worm gear units and Spiroplan® gear units as well as the respective angles:



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Figure 28: Torque arm position

Dimensions for motors

Motor options

The motor dimensions may change due to motor options. Refer to the dimension drawings of the motor options.

Special designs

The dimensions of the terminal box on special designs such as KS, CSA, VIK, low voltage or voltage changeover may deviate from the standard dimensions.

EN 50347

European standard EN 50347 became effective in August 2001. This standard adopts the dimension designations for three-phase AC motors of size 56 to 315M and flange size 65 to 740 from the IEC 72-1 standard.

The new dimension designations given in EN 50347 / IEC 72-1 are used for the relevant dimensions in the dimension sheet tables.

Dimension designations for motors

The dimension designations for the motors are described below:

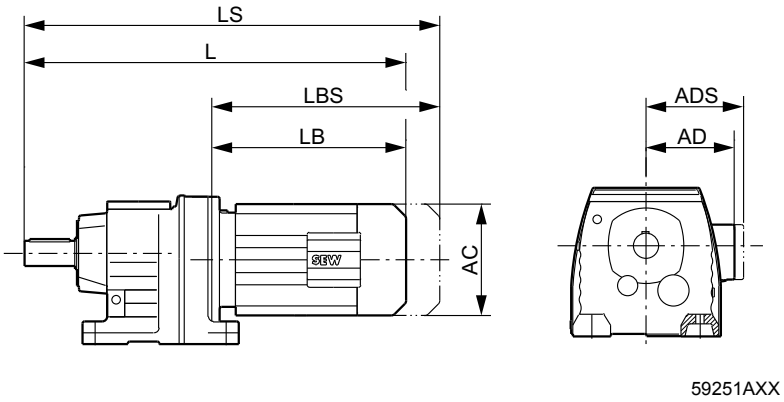


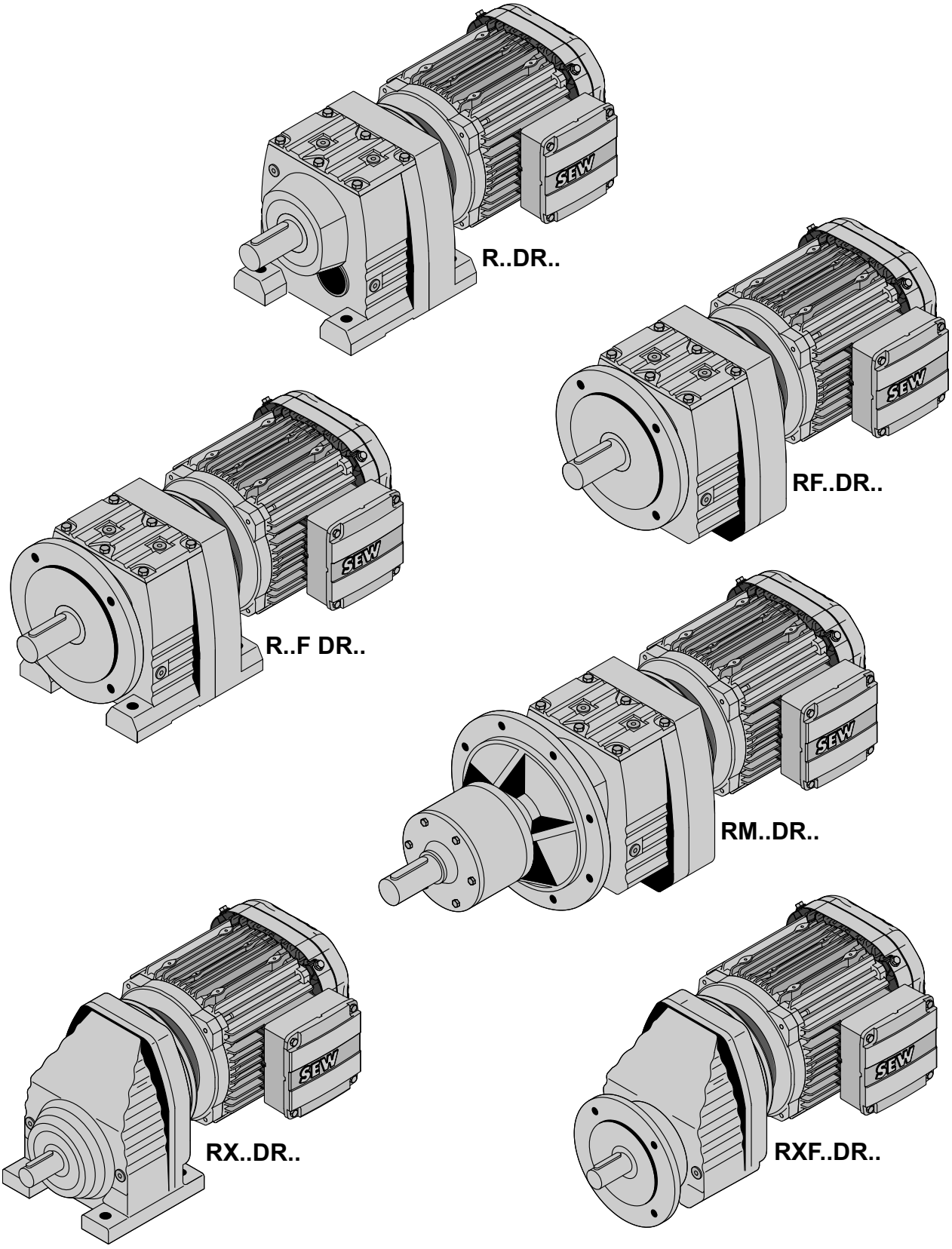
Figure 29: Dimension designations for the motors

L	= Total length of the gearmotor
LS	= Total length of the gearmotor including the brake
LB	= Length of the motor
LBS	= Length of the brakemotor
AC	= Diameter of the motor
AD	= Distance between the center of the motor shaft and the top part of the terminal box
ADS	= Distance between the center of the brakemotor shaft and the top part of the terminal box



9 R..DRS

9.1 R, RF, R..F, RM, RX, RXF, RZ..DRS

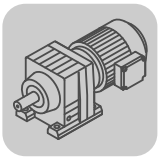


9.2 R.. → DRS

RX57, n_e = 1400 1/min											69 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
255	39	3100	-	5.50*							
276	36	3030	-	5.07							
322	68	2640	-	4.35							
369	69	2480	-	3.79							
394	69	2420	-	3.55*							
446	65	2320	-	3.14							
481	67	2170	-	2.91							
530	69	1810	-	2.64*							
591	69	1500	-	2.37							
686	69	1070	-	2.04							
729	69	890	-	1.92*							
848	69	430	-	1.65							
946	68	112	-	1.48							
1075	63	132	-	1.30							

RX67, n_e = 1400 1/min											134 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
231	43	4010	-	6.07							
270	75	3580	-	5.18							
309	82	3350	-	4.53							
326	80	3300	-	4.30*							
371	87	3090	-	3.77							
438	100	2800	-	3.20*							
484	106	2640	-	2.89							
551	118	2000	-	2.54							
583	123	1530	-	2.40*							
686	134	230	-	2.04							
753	126	225	-	1.86							
870	114	245	-	1.61							
1000	104	205	-	1.40*							

RX77, n_e = 1400 1/min											215 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
175	57	6330	-	8.00*							
187	53	6200	-	7.47							
218	103	5600	-	6.41							
249	110	5300	-	5.63							
262	103	5240	-	5.35*							
296	123	4900	-	4.73							
347	143	4500	-	4.04*							
378	153	4290	-	3.70							
431	182	3200	-	3.25*							
455	193	2560	-	3.08*							
519	215	1110	-	2.70							
576	215	510	-	2.43							
657	200	435	-	2.13							
745	187	335	-	1.88*							
838	173	315	-	1.67							
986	155	315	-	1.42							



RX87, n_e = 1400 1/min — 405 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
162	139	7890	-	8.65									
183	149	7490	-	7.63									
194	140	7380	-	7.20*									
217	192	6850	-	6.45									
252	225	6320	-	5.56*									
276	250	5980	-	5.07									
311	290	5500	-	4.50*									
370	305	5030	-	3.78									
402	405	2730	-	3.48									
453	405	1950	-	3.09									
507	405	1200	-	2.76*									
565	405	470	-	2.48									
651	385	42	-	2.15									
725	355	185	-	1.93									
875	315	74	-	1.60*									
1005	290	74	-	1.39									

RX97, n_e = 1400 1/min — 595 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
170	225	9560	-	8.23									
196	260	8950	-	7.16*									
213	300	8500	-	6.56									
242	420	7630	-	5.79									
285	395	7220	-	4.91									
310	595	6180	-	4.52									
347	595	5380	-	4.04									
385	595	4530	-	3.64*									
424	595	3730	-	3.30									
479	595	2810	-	2.92									
530	595	1980	-	2.64									
625	595	495	-	2.24*									
714	570	19	-	1.96									
854	505	51	-	1.64									
986	455	132	-	1.42									

RX107, n_e = 1400 1/min — 830 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
211	460	9700	-	6.63*							
250	455	9080	-	5.61							
270	695	7850	-	5.19							
301	695	7450	-	4.65							
333	830	6420	-	4.20*							
367	830	5550	-	3.81							
414	830	4490	-	3.38							
456	830	3600	-	3.07							
530	830	2170	-	2.64*							
609	830	900	-	2.30							
718	765	555	-	1.95							
819	705	480	-	1.71							
972	645	315	-	1.44							

R07, n_e = 1400 1/min					50 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DT56 DR63 DRS71S
				3	
18	50	1510	-	78.24	
20	50	1510	-	71.47	
23	50	1510	-	60.32	
27	50	1510	-	51.52	
29	50	1470	-	47.78	
32	50	1420	-	44.16	
34	50	1380	-	41.31	
35	50	1370	-	40.34	
36	50	1340	-	38.51	
41	50	1270	-	34.05	
48	50	1190	-	29.08	
52	50	1150	-	26.97	
60	50	1080	-	23.32	
64	50	1040	-	21.73	
				2	
76	50	970	-	18.31	
84	50	930	-	16.73	
99	50	850	-	14.12	
116	50	790	-	12.06	
125	50	760	-	11.18	
145	50	710	-	9.67	
155	50	685	-	9.01	
178	49	645	-	7.85	
187	43	595	-	7.48	
205	43	535	-	6.83	
243	40	530	-	5.76	
285	37	530	-	4.92	
306	36	520	-	4.57	
354	34	505	-	3.95	
380	33	500	-	3.68	
436	31	495	-	3.21	

R17, n_e = 1400 1/min					85 Nm	
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				3		
17	85	1770	-	81.64		
20	85	1770	-	70.39		
21	85	1770	-	65.61		
24	85	1770	-	57.35		
26	85	1770	-	53.76		
30	85	1770	-	47.44		
32	85	1770	-	44.18		
36	85	1770	-	38.61		
39	85	1770	-	36.20		
44	85	1770	-	31.94		
49	85	1770	-	28.32		
58	85	1650	-	24.07		
				2		
55	85	1690	-	25.23		
60	85	1620	-	23.15		
71	85	1500	-	19.71		
82	85	1400	-	16.99		
88	85	1350	-	15.84		

R17, n_e = 1400 1/min						85 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
101	85	1270	-	13.84		
108	85	1230	-	12.98		
122	81	1180	-	11.45		
138	77	1140	-	10.15		
162	72	1090	-	8.63		
185	56	1040	-	7.55		
199	55	1010	-	7.04		
228	54	950	-	6.15		
243	53	930	-	5.76		
275	51	890	-	5.09		
310	48	870	-	4.51		
366	45	830	-	3.83		

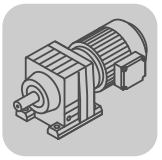
R27, n_e = 1400 1/min								130 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				 3				
10	130	4230	-	135.09				
11	130	4230	-	123.91				
13	130	4230	-	105.49				
15	130	4230	-	90.96				
17	130	4230	-	84.78				
19	130	4230	-	74.11				
20	130	4180	-	69.47				
23	130	3980	-	61.30				
25	130	3840	-	55.87				
29	130	3630	-	48.17				
31	130	3530	-	44.90				
36	130	3350	-	39.25				
38	130	3260	-	36.79				
43	130	3100	-	32.47				
49	130	2950	-	28.78				
57	130	2770	-	24.47				
				 2				
49	130	2940	-	28.37				
54	130	2840	-	26.09				
63	130	2660	-	22.32				
72	130	2510	-	19.35				
77	130	2440	-	18.08				
90	130	2290	-	15.63				
105	130	2140	-	13.28*				
118	129	1990	-	11.86				
138	122	1890	-	10.13				
149	122	900	-	9.41				
172	116	870	-	8.16				
183	112	900	-	7.63*				
212	106	880	-	6.59				
250	99	880	-	5.60*				
280	95	860	-	5.00*				
328	87	920	-	4.27				
350	85	910	-	4.00*				
415	79	900	-	3.37				

R27R17, n_e = 1400 1/min						130 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				3 3		
0.16	130	4230	-	8612		
0.19	130	4230	-	7425		
0.20	130	4230	-	6921		
0.23	130	4230	-	6050		
0.27	130	4230	-	5217		
0.30	130	4230	-	4661		
0.34	130	4230	-	4073		
0.40	130	4230	-	3516		
0.44	130	4230	-	3160		
0.51	130	4230	-	2763		
0.58	130	4230	-	2414		
0.66	130	4230	-	2110		
0.75	130	4230	-	1862		
0.86	130	4230	-	1625		
0.98	130	4230	-	1434		
1.1	130	4230	-	1254		
				2 3		
0.77	130	4230	-	1822		
0.89	130	4230	-	1580		
0.96	130	4230	-	1464		
1.1	130	4230	-	1270		
1.3	130	4230	-	1100		
1.4	130	4230	-	972		
1.7	130	4230	-	840		
1.9	130	4230	-	741		
2.1	130	4230	-	654		
2.5	130	4230	-	566		
2.8	130	4230	-	499		
				3 2		
1.3	130	4230	-	1101		
1.5	130	4230	-	962		
1.7	130	4230	-	848		
1.9	130	4230	-	743		
2.2	130	4230	-	649		
2.5	130	4230	-	567		
2.8	130	4230	-	509		
3.2	130	4230	-	432		
3.6	130	4230	-	387		
4.1	130	4230	-	339		
4.7	130	4230	-	296		
5.4	130	4230	-	259		
6.1	130	4230	-	229		
7.0	130	4230	-	200		
7.9	130	4230	-	177		
8.4	130	4230	-	166		
9.3	130	4230	-	150		
9.9	130	4230	-	141		
11	130	4230	-	124		
13	130	4230	-	110		
15	130	4230	-	94		
				2 2		
3.2	130	4230	-	440		
3.7	130	4230	-	381		
4.3	130	4230	-	329		

R27R17, n_e = 1400 1/min						130 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
4.8	130	4230	-	290		
5.5	130	4230	-	256		
6.2	130	4230	-	227		
6.9	130	4230	-	203		
7.8	130	4230	-	179		
9.0	130	4230	-	156		
10	130	4230	-	135		
12	130	4230	-	118		
13	130	4230	-	104		
16	130	4230	-	90		

R37, n_e = 1400 1/min								200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3				
10	200	4950	8	134.82				
11	200	4950	8	123.66				
13	200	4950	8	105.28				
15	200	4950	8	90.77				
17	200	4950	8	84.61				
19	200	4950	8	73.96				
20	200	4950	8	69.33				
23	200	4950	8	61.18				
25	200	4950	9	55.76				
29	200	4950	9	48.08				
31	200	4950	9	44.81				
36	200	4760	9	39.17				
38	200	4540	9	36.72				
43	200	4120	9	32.40				
49	200	3740	9	28.73				
57	200	3240	9	24.42				
				2				
49	200	3690	7	28.32				
54	185	3860	7	26.03				
63	200	2970	7	22.27				
73	200	2570	7	19.31				
78	200	2390	8	18.05				
90	200	2010	8	15.60				
106	190	1880	8	13.25				
118	183	1810	8	11.83				
138	170	1820	8	10.11				
148	167	1760	8	9.47				
176	156	1720	8	7.97				
210	144	1000	12	6.67				
247	142	760	12	5.67				
277	135	790	13	5.06				
324	126	820	13	4.32				
346	122	850	13	4.05				
411	112	900	14	3.41				

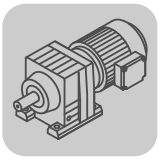
R37R17, n_e = 1400 1/min						**200 Nm**
n_a [1/min]	**M_{amax} [Nm]**	**F_{Ra} [N]**	**$\varphi_{(/R)}$ [']**	**i**	**DR63 DRS71S DRS71M**	**DRS80**
				3 3		
0.16	200	4950	-	8595		
0.19	200	4950	-	7411		
0.20	200	4950	-	6907		
0.23	200	4950	-	6038		
0.27	200	4950	-	5206		
0.30	200	4950	-	4651		
0.34	200	4950	-	4065		
0.38	200	4950	-	3658		
0.44	200	4950	-	3154		
0.51	200	4950	-	2757		
0.58	200	4950	-	2409		
0.66	200	4950	-	2106		
0.75	200	4950	-	1856		
0.86	200	4950	-	1622		
0.98	200	4950	-	1431		
1.1	200	4950	-	1251		
				2 3		
0.77	200	4950	-	1818		
0.89	200	4950	-	1576		
1.0	200	4950	-	1359		
1.1	200	4950	-	1267		
1.3	200	4950	-	1098		
1.4	200	4950	-	970		
1.7	200	4950	-	839		
1.9	200	4950	-	740		
2.1	200	4950	-	653		
2.4	200	4950	-	577		
2.8	200	4950	-	498		
				3 2		
1.3	200	4950	-	1099		
1.5	200	4950	-	960		
1.7	200	4950	-	847		
1.9	200	4950	-	741		
2.2	200	4950	-	647		
2.5	200	4950	-	566		
2.8	200	4950	-	508		
3.2	200	4950	-	431		
3.6	200	4950	-	387		
4.1	200	4950	-	338		
4.7	200	4950	-	296		
5.4	200	4950	-	259		
6.1	200	4950	-	228		
7.0	200	4950	-	199		
8.1	200	4950	-	172		
9.3	200	4950	-	150		
11	200	4950	-	130		
11	200	4950	-	124		
13	200	4950	-	110		
15	200	4950	-	94		
				2 2		
3.2	200	4950	-	439		
3.7	200	4950	-	378		
4.3	200	4950	-	328		
4.8	200	4950	-	289		



R37R17, n_e = 1400 1/min						200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
5.3	200	4950	-	265		
6.2	200	4950	-	226		
6.9	200	4950	-	202		
7.8	200	4950	-	179		
9.0	200	4950	-	156		
10	200	4950	-	135		
11	200	4950	-	127		
13	200	4950	-	104		
16	200	4950	-	90		

R47, n_e = 1400 1/min										300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
				3						
7.9	300	5420	7	176.88						
8.6	300	5420	7	162.94						
10	300	5420	7	139.99						
11	300	5420	7	121.87						
12	300	5420	7	114.17						
14	300	5420	7	100.86						
15	300	5420	7	93.68						
16	300	5420	7	84.90						
18	300	5420	7	76.23						
20	300	5420	8	68.54						
22	300	5420	8	64.21						
25	300	5420	8	56.73						
27	300	5350	8	52.69						
29	300	5150	8	47.75						
33	300	4930	8	42.87						
38	300	4630	8	36.93						
40	300	4520	8	34.73						
47	300	4240	8	29.88						
52	300	4050	8	26.70						
59	300	3840	8	23.59						
				2						
41	240	4690	7	33.79						
45	220	4610	7	31.12						
52	300	4050	7	26.74						
60	300	3820	7	23.28						
64	300	3710	7	21.81						
73	295	3530	7	19.27						
78	290	3390	7	17.89						
86	275	3350	7	16.22						
96	265	3230	7	14.56						
112	250	3080	7	12.54						
119	245	3020	7	11.79						
138	230	2890	7	10.15						
154	220	2780	8	9.07						
175	205	2690	8	8.01						
180	163	2720	10	7.76*						
201	159	2620	10	6.96						
233	156	2470	10	6.00						
248	155	2410	10	5.64*						
289	150	2280	10	4.85						
323	146	2190	11	4.34						
366	144	2090	11	3.83						

R47R37, n_e = 1400 1/min								300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.10	300	5420	-	13598				
0.11	300	5420	-	12472				
0.13	300	5420	-	10619				
0.15	300	5420	-	9155				
0.16	300	5420	-	8534				
0.19	300	5420	-	7460				
0.20	300	5420	-	6993				
0.23	300	5420	-	6171				
0.25	300	5420	-	5624				
0.29	300	5420	-	4849				
0.31	300	5420	-	4520				
0.35	300	5420	-	3951				
0.38	300	5420	-	3704				
0.43	300	5420	-	3268				
0.48	300	5420	-	2898				
0.57	300	5420	-	2463				
				2 3				
0.54	300	5420	-	2598				
0.59	300	5420	-	2383				
0.69	300	5420	-	2029				
0.80	300	5420	-	1749				
0.86	300	5420	-	1630				
0.98	300	5420	-	1425				
1.0	300	5420	-	1336				
1.2	300	5420	-	1179				
1.3	300	5420	-	1074				
1.5	300	5420	-	927				
1.6	300	5420	-	863				
1.9	300	5420	-	755				
2.0	300	5420	-	708				
2.2	300	5420	-	624				
2.5	300	5420	-	554				
3.0	300	5420	-	471				
				3 2				
0.49	300	5420	-	2856				
0.53	300	5420	-	2625				
0.62	300	5420	-	2246				
0.72	300	5420	-	1948				
0.77	300	5420	-	1821				
0.89	300	5420	-	1573				
1.2	300	5420	-	1193				
1.4	300	5420	-	1020				
1.5	300	5420	-	955				
1.7	300	5420	-	804				
2.1	300	5420	-	673				
2.4	300	5420	-	572				
2.7	300	5420	-	510				
3.2	300	5420	-	436				
3.4	300	5420	-	408				
4.1	300	5420	-	344				
				2 2				
2.6	300	5420	-	546				
2.8	300	5420	-	502				
3.3	300	5420	-	429				



R47R37, n_e = 1400 1/min								300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
3.8	300	5420	-	372				
4.0	300	5420	-	348				
4.7	300	5420	-	301				
5.5	300	5420	-	255				
6.1	300	5420	-	228				
7.2	300	5420	-	195				
7.7	300	5420	-	182				
9.1	300	5420	-	154				
11	300	5420	-	129				
13	300	5420	-	109				
14	300	5420	-	98				

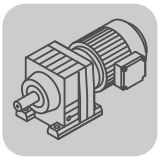
R57, n_e = 1400 1/min											450 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3							
7.5	450	7110	7	186.89							
8.1	450	7110	7	172.17							
9.5	450	7110	7	147.92							
11	450	7110	7	128.77							
12	450	7110	7	120.63							
13	450	7110	7	106.58							
14	450	7110	7	98.99							
16	450	7110	7	89.71							
17	450	7110	7	80.55							
20	450	7110	7	69.23							
22	450	6980	8	64.85							
24	450	6630	8	57.29							
26	450	6430	8	53.22							
29	450	6170	8	48.23							
32	450	5900	8	43.30							
38	450	5530	8	37.30*							
40	450	5390	8	35.07							
46	450	5050	8	30.18							
52	450	4800	8	26.97							
				2							
53	450	4750	6	26.31							
56	450	4640	6	24.99*							
64	450	4370	7	21.93							
75	450	4050	7	18.60*							
83	450	3860	7	16.79							
95	435	3690	7	14.77*							
100	430	3610	7	13.95*							
118	405	3430	7	11.88							
130	390	3330	7	10.79							
150	370	3180	7	9.35							
155	375	2010	9	9.06							
176	355	2020	9	7.97							
186	350	1950	9	7.53							
218	335	1770	9	6.41							
241	320	1820	10	5.82							
277	305	1730	10	5.05							
319	280	1900	10	4.39							

R57R37, n_e = 1400 1/min								450 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.10	450	7110	-	14369				
0.12	450	7110	-	12095				
0.13	450	7110	-	10860				
0.15	450	7110	-	9445				
0.17	450	7110	-	8480				
0.19	450	7110	-	7312				
0.21	450	7110	-	6521				
0.25	450	7110	-	5585				
0.28	450	7110	-	4928				
0.32	450	7110	-	4378				
0.36	450	7110	-	3873				
0.42	450	7110	-	3344				
0.48	450	7110	-	2907				
0.55	450	7110	-	2567				
0.62	450	7110	-	2244				
0.71	450	7110	-	1967				
				2 3				
0.47	450	7110	-	2957				
0.56	450	7110	-	2508				
0.61	450	7110	-	2309				
0.70	450	7110	-	1991				
0.79	450	7110	-	1768				
0.92	450	7110	-	1520				
1.0	450	7110	-	1342				
1.2	450	7110	-	1164				
1.4	450	7110	-	1027				
1.6	450	7110	-	894				
1.7	450	7110	-	805				
2.0	450	7110	-	683				
2.3	450	7110	-	603				
2.6	450	7110	-	534				
3.1	450	7110	-	454				
3.4	450	7110	-	410				
				3 2				
0.81	450	7110	-	1732				
0.90	450	7110	-	1555				
1.0	450	7110	-	1399				
1.2	450	7110	-	1189				
1.4	450	7110	-	1034				
1.8	450	7110	-	782				
2.1	450	7110	-	678				
2.3	450	7110	-	604				
2.6	450	7110	-	537				
3.0	450	7110	-	471				
3.9	450	7110	-	357				
4.4	450	7110	-	319				
5.1	450	7110	-	273				
5.8	450	7110	-	241				
6.5	450	7110	-	215				
7.5	450	7110	-	187				
8.5	450	7110	-	164				
9.9	450	7110	-	142				
				2 2				
3.9	450	7110	-	359				

R57R37, n_e = 1400 1/min								450 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
4.3	450	7110	-	324				
4.8	450	7110	-	290				
5.3	450	7110	-	262				
5.7	450	7110	-	246				
6.4	450	7110	-	220				
7.4	450	7110	-	188				
8.8	450	7110	-	159				
9.6	450	7110	-	146				
10	450	7110	-	134				

R67, n_e = 1400 1/min											600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				 3							
7.0	600	7560	6	199.81							
7.6	600	7560	6	184.07							
8.9	600	7560	6	158.14							
10	600	7560	6	137.67							
11	600	7560	6	128.97							
12	600	7560	6	113.94							
13	600	7560	6	105.83							
15	600	7560	6	95.91							
16	600	7560	6	86.11							
19	600	7560	7	74.17							
20	600	7560	7	69.75							
23	600	7560	7	61.26							
25	600	7560	7	56.89							
27	600	7560	7	51.56							
30	600	7560	7	46.29							
35	580	7790	7	39.88*							
37	570	7900	7	37.50							
43	540	8210	7	32.27							
49	520	8400	7	28.83							
				 2							
50	540	8210	6	28.13							
52	540	8210	6	26.72							
60	560	8010	6	23.44							
70	600	7560	6	19.89							
78	590	7330	6	17.95							
89	560	7130	6	15.79							
94	550	6980	6	14.91							
110	520	6650	6	12.70							
121	500	6500	7	11.54							
140	470	6220	7	10.00							
161	440	5960	7	8.70*							
180	380	5830	8	7.79							
190	370	5790	8	7.36*							
223	330	5590	9	6.27							
246	310	5450	9	5.70							
284	290	5210	9	4.93							
326	270	5000	10	4.29							

R67R37, n_e = 1400 1/min								600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.09	600	7560	-	15361				
0.11	600	7560	-	12931				
0.12	600	7560	-	11996				
0.14	600	7560	-	10097				
0.15	600	7560	-	9066				
0.18	600	7560	-	7816				
0.21	600	7560	-	6732				
0.23	600	7560	-	5970				
0.27	600	7560	-	5268				
0.30	600	7560	-	4680				
0.34	600	7560	-	4136				
0.39	600	7560	-	3566				
0.45	600	7560	-	3125				
0.51	600	7560	-	2745				
0.58	600	7560	-	2403				
				2 3				
0.52	600	7560	-	2682				
0.57	600	7560	-	2460				
0.67	600	7560	-	2094				
0.78	600	7560	-	1805				
0.86	600	7560	-	1629				
0.95	600	7560	-	1471				
1.0	600	7560	-	1379				
1.3	600	7560	-	1109				
1.5	600	7560	-	956				
1.6	600	7560	-	891				
1.9	600	7560	-	730				
2.2	600	7560	-	644				
2.5	600	7560	-	571				
2.9	600	7560	-	486				
				3 2				
0.66	600	7560	-	2136				
0.76	600	7560	-	1852				
0.85	600	7560	-	1652				
0.98	600	7560	-	1432				
1.1	600	7560	-	1259				
1.3	600	7560	-	1106				
1.7	600	7560	-	836				
1.9	600	7560	-	750				
2.2	600	7560	-	646				
2.4	600	7560	-	574				
2.8	600	7560	-	495				
3.2	600	7560	-	438				
3.6	600	7560	-	388				
4.1	600	7560	-	344				
4.8	600	7560	-	294				
5.4	600	7560	-	261				
6.0	600	7560	-	234				
7.0	600	7560	-	200				
8.0	600	7560	-	176				
8.9	600	7560	-	158				
				2 2				
3.2	600	7560	-	443				
3.6	600	7560	-	384				

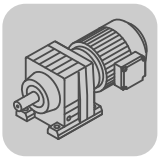


R67R37, n_e = 1400 1/min								600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
3.9	600	7560	-	359				
4.5	600	7560	-	310				
5.3	600	7560	-	264				
6.0	600	7560	-	235				
7.0	600	7560	-	201				
7.7	600	7560	-	181				
8.8	600	7560	-	159				

R77, n_e = 1400 1/min											820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3							
7.2	820	9920	6	195.24*							
8.4	820	9920	6	166.59							
9.6	820	9920	6	145.67							
10	820	9920	6	138.39							
12	820	9920	6	121.42							
14	820	9920	6	102.99							
15	820	9920	6	92.97							
17	820	9920	6	81.80							
18	820	9920	7	77.24							
21	820	9920	7	65.77							
24	820	9920	7	57.68							
27	820	9920	7	52.07							
31	820	9920	7	45.81							
32	820	9920	7	43.26							
38	820	9920	7	36.83							
42	820	9920	7	33.47							
48	820	9920	7	29.00							
55	780	10100	7	25.23							
				2							
60	820	8870	6	23.37							
65	820	8250	6	21.43							
74	780	7980	6	18.80							
79	780	7620	6	17.82*							
90	740	7390	6	15.60							
100	720	7050	6	14.05							
114	690	6740	6	12.33							
129	660	6490	7	10.88							
145	630	6300	7	9.64							
163	630	4110	7	8.59							
181	610	3940	8	7.74							
206	580	3850	8	6.79							
234	540	3990	8	5.99*							
264	510	3990	8	5.31*							

R77R37, n_e = 1400 1/min								820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.09	820	9920	-	16370				
0.09	820	9920	-	15015				
0.10	820	9920	-	13885				
0.11	820	9920	-	12783				
0.13	820	9920	-	11021				

R77R37, n_e = 1400 1/min								820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
0.14	820	9920	-	9788				
0.16	820	9920	-	8714				
0.18	820	9920	-	7617				
0.21	820	9920	-	6770				
0.24	820	9920	-	5838				
0.27	820	9920	-	5184				
0.31	820	9920	-	4470				
0.35	820	9920	-	3999				
0.40	820	9920	-	3488				
0.46	820	9920	-	3053				
0.52	820	9920	-	2671				
			2 3					
0.44	820	9920	-	3151				
0.48	820	9920	-	2890				
0.57	820	9920	-	2460				
0.66	820	9920	-	2121				
0.71	820	9920	-	1977				
0.81	820	9920	-	1728				
0.86	820	9920	-	1620				
0.98	820	9920	-	1430				
1.1	820	9920	-	1303				
1.2	820	9920	-	1124				
1.3	820	9920	-	1047				
1.5	820	9920	-	915				
1.6	820	9920	-	858				
1.8	820	9920	-	757				
2.1	820	9920	-	671				
2.5	820	9920	-	571				
			3 2					
0.60	820	9920	-	2345				
0.68	820	9920	-	2070				
0.77	820	9920	-	1822				
0.89	820	9920	-	1580				
1.0	820	9920	-	1394				
1.1	820	9920	-	1218				
1.3	820	9920	-	1084				
1.5	820	9920	-	940				
1.7	820	9920	-	821				
1.9	820	9920	-	731				
2.2	820	9920	-	646				
2.5	820	9920	-	560				
2.9	820	9920	-	488				
3.2	820	9920	-	436				
3.8	820	9920	-	373				
4.3	820	9920	-	327				
4.8	820	9920	-	289				
5.4	820	9920	-	260				
6.2	820	9920	-	224				
7.1	820	9920	-	197				
8.3	820	9920	-	169				
9.4	820	9920	-	149				
			2 2					
2.7	820	9920	-	520				
3.1	820	9920	-	451				
3.3	820	9920	-	422				
3.8	820	9920	-	365				



R77R37, n_e = 1400 1/min — 820 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
4.5	820	9920	-	310				
5.1	820	9920	-	276				
5.9	820	9920	-	236				
6.3	820	9920	-	221				
7.5	820	9920	-	186				

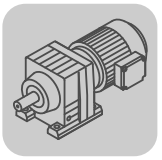
R87, n_e = 1400 1/min — 1550 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
				3									
5.7	1550	16900	6	246.54									
6.5	1550	16900	6	216.54									
6.8	1550	16900	6	205.71									
7.7	1550	16900	6	181.77									
9.0	1550	16900	6	155.34									
9.8	1550	16900	6	142.41									
11	1550	16900	6	124.97									
12	1550	16900	6	118.43*									
14	1550	16900	6	103.65									
15	1550	16900	6	93.38									
17	1550	16900	6	81.92									
19	1550	16900	6	72.57									
22	1550	15800	6	63.68*									
23	1550	15200	6	60.35*									
27	1550	13500	6	52.82									
29	1550	16900	7	47.58									
34	1550	16900	7	41.74									
38	1550	16800	7	36.84*									
43	1550	16000	7	32.66*									
50	1500	15100	7	27.88									
				2									
41	1500	9480	5	34.40*									
45	1550	7820	5	31.40									
50	1550	15000	6	27.84*									
60	1550	13900	6	23.40									
65	1500	13600	6	21.51									
73	1440	13000	6	19.10									
82	1390	12600	6	17.08*									
91	1340	12100	6	15.35									
105	1280	11600	6	13.33									
117	1230	11200	6	11.93									
141	1180	10400	6	9.90*									
153	1210	10500	6	9.14*									
170	1160	10200	7	8.22									
196	1070	9780	7	7.13									
219	1020	9450	7	6.39									
264	910	8980	7	5.30*									

R87R57, n_e = 1400 1/min — 1550 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3 3							
0.08	1550	16900	-	17452							
0.09	1550	16900	-	15310							
0.10	1550	16900	-	13813							

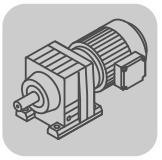
R87R57, n_e = 1400 1/min											1550 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
0.12	1550	16900	-	12025							
0.13	1550	16900	-	10549							
0.15	1550	16900	-	9244							
0.17	1550	16900	-	8109							
0.20	1550	16900	-	7038							
0.23	1550	16900	-	6174							
0.26	1550	16900	-	5449							
0.29	1550	16900	-	4831							
0.33	1550	16900	-	4206							
0.37	1550	16900	-	3744							
0.43	1550	16900	-	3233							
0.49	1550	16900	-	2873							
0.56	1550	16900	-	2518							
0.63	1550	16900	-	2209							
0.71	1550	16900	-	1961							
1.4	1550	16900	-	994							
1.6	1550	16900	-	881							
			2	3							
0.35	1550	16900	-	4020							
0.38	1550	16900	-	3703							
0.44	1550	16900	-	3182							
0.51	1550	16900	-	2770							
0.54	1550	16900	-	2595							
0.66	1550	16900	-	2129							
0.73	1550	16900	-	1930							
0.81	1550	16900	-	1733							
0.94	1550	16900	-	1489							
1.0	1550	16900	-	1395							
1.1	1550	16900	-	1232							
1.2	1550	16900	-	1145							
1.4	1550	16900	-	1037							
1.5	1550	16900	-	931							
1.7	1550	16900	-	802							
1.9	1550	16900	-	754							
2.2	1550	16900	-	649							
2.4	1550	16900	-	580							
			3	2							
0.81	1550	16900	-	1737							
0.92	1550	16900	-	1524							
1.1	1550	16900	-	1303							
1.2	1550	16900	-	1143							
1.4	1550	16900	-	1008							
1.6	1550	16900	-	885							
1.8	1550	16900	-	776							
2.0	1550	16900	-	685							
2.3	1550	16900	-	599							
2.7	1550	16900	-	525							
3.1	1550	16900	-	456							
3.5	1550	16900	-	398							
4.0	1550	16900	-	352							
4.6	1550	16900	-	305							
5.2	1550	16900	-	268							
5.9	1550	16900	-	236							
6.7	1550	16900	-	209							
			2	2							
2.6	1550	16900	-	538							



R87R57, n_e = 1400 1/min												1550 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
3.0	1550	16900	-	472							
3.5	1550	16900	-	400							
3.9	1550	16900	-	361							
4.7	1550	16900	-	300							
5.5	1550	16900	-	256							
6.0	1550	16900	-	232							
7.2	1550	16900	-	195							

R97, n_e = 1400 1/min													3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
				3									
4.8	3000	19800	6	289.74									
5.5	3000	19800	6	255.71									
5.8	3000	19800	6	241.25									
6.5	3000	19800	6	216.28									
7.5	3000	19800	6	186.30									
8.2	3000	19800	6	170.02									
9.3	3000	19800	6	150.78									
11	3000	19800	6	126.75									
12	3000	19800	6	116.48									
14	3000	19800	6	103.44									
15	3000	19800	6	92.48									
17	3000	19800	6	83.15									
19	3000	18000	6	72.17									
21	3000	19800	6	65.21									
23	3000	19800	6	59.92									
26	3000	19800	6	53.21									
29	3000	19800	6	47.58									
33	3000	19800	6	42.78									
38	3000	18600	6	37.13									
42	2890	17900	6	33.25									
51	2670	16900	6	27.58									
				2									
44	2560	10600	5	32.05									
51	2560	8380	5	27.19									
56	2830	15900	5	25.03									
63	2720	15300	5	22.37									
70	2610	14800	5	20.14									
77	2500	14400	6	18.24									
87	2400	13800	6	16.17									
96	2300	13400	6	14.62									
113	2190	12700	6	12.39									
129	2090	12100	6	10.83									
151	2030	12200	6	9.29									
167	2030	11700	6	8.39									
197	2000	10900	6	7.12									
225	1890	10500	6	6.21									
269	1780	9850	6	5.20									
311	1630	9500	6	4.50*									

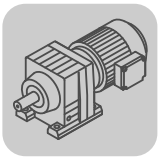
R97R57, n_e = 1400 1/min											3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3 3							
0.06	3000	19800	-	21769							
0.07	3000	19800	-	19332							
0.08	3000	19800	-	17230							
0.09	3000	19800	-	14999							
0.11	3000	19800	-	13320							
0.13	3000	19800	-	11156							
0.14	3000	19800	-	10030							
0.16	3000	19800	-	8706							
0.18	3000	19800	-	7692							
0.21	3000	19800	-	6708							
0.24	3000	19800	-	5931							
0.27	3000	19800	-	5161							
0.31	3000	19800	-	4559							
0.35	3000	19800	-	4004							
0.40	3000	19800	-	3481							
				2 3							
0.30	3000	19800	-	4678							
0.32	3000	19800	-	4309							
0.38	3000	19800	-	3702							
0.46	3000	19800	-	3019							
0.52	3000	19800	-	2668							
0.62	3000	19800	-	2245							
0.69	3000	19800	-	2016							
0.81	3000	19800	-	1733							
0.86	3000	19800	-	1623							
0.98	3000	19800	-	1434							
1.2	3000	19800	-	1207							
1.3	3000	19800	-	1084							
1.5	3000	19800	-	934							
1.6	3000	19800	-	878							
1.9	3000	19800	-	755							
				3 2							
0.46	3000	19800	-	3065							
0.51	3000	19800	-	2722							
0.61	3000	19800	-	2311							
0.67	3000	19800	-	2078							
0.77	3000	19800	-	1823							
0.88	3000	19800	-	1583							
1.0	3000	19800	-	1396							
1.1	3000	19800	-	1228							
1.3	3000	19800	-	1069							
1.5	3000	19800	-	938							
1.7	3000	19800	-	824							
1.9	3000	19800	-	737							
2.2	3000	19800	-	632							
2.5	3000	19800	-	560							
2.9	3000	19800	-	484							
3.2	3000	19800	-	431							
3.7	3000	19800	-	379							
4.2	3000	19800	-	336							
4.7	3000	19800	-	296							
5.6	3000	19800	-	249							
6.0	3000	19800	-	234							
6.7	3000	19800	-	209							



R97R57, n_e = 1400 1/min											3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				2 2							
2.2	3000	19800	-	625							
2.6	3000	19800	-	549							
3.0	3000	19800	-	466							
3.3	3000	19800	-	420							
3.8	3000	19800	-	370							
4.0	3000	19800	-	349							
4.7	3000	19800	-	297							
5.2	3000	19800	-	270							
6.2	3000	19800	-	227							

R107, n_e = 1400 1/min											4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
				3							
5.6	4300	29500	7	251.15							
6.1	4300	29500	7	229.95							
6.9	4300	29500	7	203.16							
8.1	4300	29500	7	172.34							
8.8	4300	29500	7	158.68							
9.9	4300	29500	7	141.83							
11	4300	29500	7	127.68							
12	4300	29500	7	115.63							
14	4300	29500	7	102.53							
15	4300	29500	7	92.70							
18	4300	29500	7	78.57							
19	4300	29500	7	72.88							
21	4300	29200	7	65.60*							
24	4300	28000	7	59.41							
27	4300	26600	7	52.68							
29	4300	25500	7	47.63							
35	4300	23800	7	40.37*							
40	4300	22400	7	35.26							
47	4300	20700	7	29.49							
				2							
45	4300	21100	7	30.77							
51	4300	20100	7	27.58							
56	4300	19200	7	24.90*							
62	4300	18300	7	22.62							
70	4300	17300	7	20.07							
77	4300	16600	7	18.21							
89	4300	15400	7	15.65							
102	4300	14400	7	13.66							
121	4300	13300	7	11.59							
138	4300	12400	7	10.13							
164	4300	11300	7	8.56							
178	2970	13800	9	7.86							
210	2970	12800	9	6.66							
241	2970	12100	9	5.82							
285	2900	11300	9	4.92							

R107R77, n_e = 1400 1/min											4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3 3							
0.07	4300	29500	-	20018							
0.08	4300	29500	-	17080							
0.09	4300	29500	-	14936							
0.11	4300	29500	-	12829							
0.12	4300	29500	-	11256							
0.15	4300	29500	-	9547							
0.16	4300	29500	-	8618							
0.18	4300	29500	-	7583							
0.21	4300	29500	-	6743							
0.24	4300	29500	-	5914							
0.27	4300	29500	-	5168							
0.32	4300	29500	-	4435							
0.36	4300	29500	-	3896							
0.41	4300	29500	-	3432							
0.46	4300	29500	-	3039							
0.52	4300	29500	-	2688							
0.60	4300	29500	-	2339							
				2 3							
0.36	4300	29500	-	3918							
0.42	4300	29500	-	3343							
0.46	4300	29500	-	3034							
0.53	4300	29500	-	2653							
0.61	4300	29500	-	2280							
0.68	4300	29500	-	2067							
0.83	4300	29500	-	1693							
0.90	4300	29500	-	1550							
1.0	4300	29500	-	1407							
1.2	4300	29500	-	1209							
1.3	4300	29500	-	1055							
1.5	4300	29500	-	919							
1.7	4300	29500	-	815							
2.0	4300	29500	-	717							
2.2	4300	29500	-	626							
2.7	4300	29500	-	528							
				3 2							
0.70	4300	29500	-	1987							
0.77	4300	29500	-	1827							
0.88	4300	29500	-	1599							
1.0	4300	29500	-	1400							
1.1	4300	29500	-	1226							
1.3	4300	29500	-	1104							
1.5	4300	29500	-	939							
1.7	4300	29500	-	822							
2.3	4300	29500	-	614							
2.6	4300	29500	-	544							
2.8	4300	29500	-	492							
3.4	4300	29500	-	417							
3.8	4300	29500	-	369							
4.3	4300	29500	-	323							
4.9	4300	29500	-	285							
5.5	4300	29500	-	253							
6.5	4300	29500	-	214							
7.5	4300	29500	-	187							



R107R77, n_e = 1400 1/min — 4300 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				2 2							
3.0	4300	29500	-	469							
3.3	4300	29500	-	426							
3.7	4300	29500	-	377							
4.3	4300	29500	-	325							
4.9	4300	29500	-	284							
5.5	4300	29500	-	256							
6.4	4300	29500	-	220							
7.3	4300	29500	-	193							
8.1	4300	29500	-	172							

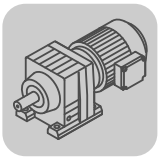
R137, n_e = 1400 1/min — 8000 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280
				3					
6.3	8000	53400	6	222.60*					
7.4	8000	53400	6	188.45					
8.0	8000	53400	6	174.40*					
9.0	8000	53400	6	156.31					
9.9	8000	53400	6	141.12*					
11	8000	53400	6	128.18					
12	8000	53400	6	113.72					
14	8000	53400	6	103.20*					
16	8000	53400	6	88.70*					
17	8000	53400	6	80.91*					
19	8000	53400	6	73.49					
21	8000	53400	6	65.20					
24	8000	53400	6	59.17*					
28	8000	53400	6	50.86*					
32	8000	53400	6	44.39					
37	8000	53400	6	37.65					
43	8000	53400	6	32.91					
50	7680	54100	7	27.83					
				2					
47	7780	53900	6	29.57*					
58	8000	49400	6	24.12					
64	8000	47100	6	22.00*					
74	8000	43500	6	19.04*					
83	8000	40600	6	16.80*					
96	8000	37300	6	14.51					
109	8000	34700	6	12.83					
130	8000	31100	6	10.79					
161	7840	27600	6	8.71					
184	5110	39000	8	7.59					
219	5110	35900	8	6.38					
272	4600	34500	8	5.15					

R137R77, n_e = 1400 1/min — 8000 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3 3							
0.06	8000	53400	-	22203							
0.07	8000	53400	-	18945							
0.08	8000	53400	-	16566							

R137R77, n_e = 1400 1/min											8000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
0.09	8000	53400	-	14777							
0.11	8000	53400	-	12921							
0.12	8000	53400	-	11712							
0.13	8000	53400	-	10573							
0.16	8000	53400	-	8784							
0.19	8000	53400	-	7479							
0.21	8000	53400	-	6559							
0.24	8000	53400	-	5834							
0.27	8000	53400	-	5116							
0.31	8000	53400	-	4464							
0.36	8000	53400	-	3928							
0.41	8000	53400	-	3454							
0.47	8000	53400	-	2993							
			2	3							
0.30	8000	53400	-	4709							
0.35	8000	53400	-	4018							
0.40	8000	53400	-	3514							
0.42	8000	53400	-	3338							
0.48	8000	53400	-	2929							
0.56	8000	53400	-	2484							
0.62	8000	53400	-	2242							
0.75	8000	53400	-	1863							
0.88	8000	53400	-	1586							
1.0	8000	53400	-	1391							
1.1	8000	53400	-	1256							
1.3	8000	53400	-	1105							
1.3	8000	53400	-	1043							
1.6	8000	53400	-	888							
2.0	8000	53400	-	699							
2.3	8000	53400	-	609							
			3	2							
0.53	8000	53400	-	2658							
0.58	8000	53400	-	2412							
0.68	8000	53400	-	2073							
0.76	8000	53400	-	1839							
0.88	8000	53400	-	1598							
1.0	8000	53400	-	1397							
1.1	8000	53400	-	1226							
1.3	8000	53400	-	1090							
1.5	8000	53400	-	951							
1.7	8000	53400	-	831							
1.9	8000	53400	-	730							
2.2	8000	53400	-	629							
2.5	8000	53400	-	560							
2.9	8000	53400	-	490							
3.3	8000	53400	-	428							
3.7	8000	53400	-	381							
4.3	8000	53400	-	323							
4.8	8000	53400	-	291							
5.5	8000	53400	-	255							
6.3	8000	53400	-	223							
7.1	8000	53400	-	197							
8.0	8000	53400	-	175							
			2	2							
2.5	8000	53400	-	564							
2.7	8000	53400	-	517							



R137R77, n_e = 1400 1/min											8000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
3.1	8000	53400	-	453							
3.7	8000	53400	-	376							
4.1	8000	53400	-	339							
4.7	8000	53400	-	297							

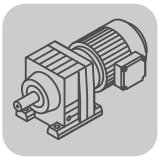
R147, n_e = 1400 1/min								13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280
				3				
8.6	13000	62700	5	163.31				
9.5	13000	62700	5	146.91				
12	13000	62700	5	119.86				
13	13000	62700	5	109.31				
15	13000	62700	6	94.60*				
17	13000	62700	6	83.47				
19	13000	62700	6	72.09				
21	13000	62700	6	66.99				
23	13000	62700	6	61.09				
26	13000	62700	6	52.87				
30	13000	62700	6	46.65				
35	13000	62700	6	40.29				
39	13000	62700	6	35.64				
47	13000	62700	6	29.95				
58	11900	64700	6	24.19				
				2				
68	12000	64600	5	20.44				
78	10500	67000	5	18.04				
90	13000	62700	5	15.64				
101	12600	63400	5	13.91				
117	13000	60400	5	11.99				
144	13000	54400	6	9.74				
169	13000	49900	6	8.26				
193	8670	58400	8	7.25				
238	8670	53200	8	5.89				
280	8670	49300	8	5.00				

R147R77, n_e = 1400 1/min											13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3 3							
0.06	13000	62700	-	23401							
0.07	13000	62700	-	21342							
0.08	13000	62700	-	18210							
0.09	13000	62700	-	15923							
0.10	13000	62700	-	14075							
0.11	13000	62700	-	12344							
0.13	13000	62700	-	11143							
0.14	13000	62700	-	9743							
0.17	13000	62700	-	8443							
0.19	13000	62700	-	7307							
0.22	13000	62700	-	6447							
0.25	13000	62700	-	5568							
0.28	13000	62700	-	4926							
0.32	13000	62700	-	4325							
0.37	13000	62700	-	3754							

R147R77, n_e = 1400 1/min											13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
0.42	13000	62700	-	3302							
0.48	13000	62700	-	2898							
				3 2							
0.55	13000	62700	-	2555							
0.63	13000	62700	-	2211							
0.72	13000	62700	-	1951							
0.82	13000	62700	-	1705							
0.91	13000	62700	-	1536							
1.1	13000	62700	-	1329							
1.2	13000	62700	-	1166							
1.4	13000	62700	-	1029							
1.6	13000	62700	-	889							
1.8	13000	62700	-	784							
2.0	13000	62700	-	695							
2.3	13000	62700	-	619							
2.5	13000	62700	-	558							
2.9	13000	62700	-	489							
3.4	13000	62700	-	415							

R147R87, n_e = 1400 1/min											13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
				3 2								
2.6	13000	62700	-	533								
3.0	13000	62700	-	462								
3.3	13000	62700	-	426								
3.8	13000	62700	-	368								
4.3	13000	62700	-	326								
5.0	13000	62700	-	280								
5.7	13000	62700	-	247								
6.5	13000	62700	-	214								
7.4	13000	62700	-	189								
8.8	13000	62700	-	159								

R167, n_e = 1400 1/min										18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
				3						
6.1	18000	120000	5	229.71						
7.5	18000	120000	5	186.93*						
9.1	18000	120000	5	153.07						
10	18000	120000	5	139.98						
11	18000	120000	5	121.81*						
13	18000	120000	5	107.49						
15	18000	120000	5	93.19						
17	18000	120000	5	82.91*						
19	18000	120000	6	73.70*						
21	18000	120000	6	67.40						
24	18000	120000	6	58.65						
27	18000	120000	6	51.76						
31	18000	120000	6	44.87						
35	18000	120000	6	39.92						
41	18000	120000	6	34.41						
50	18000	120000	6	27.96						
59	18000	116500	6	23.71						



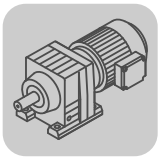
R167, n_e = 1400 1/min										18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
				2						
30	7000	120000	5	46.00						
37	9000	120000	5	37.74						
46	10000	120000	5	30.71						
57	14000	120000	5	24.57						
64	13000	120000	5	21.85						
74	16000	111400	5	19.03						
82	15000	108900	5	16.98						
97	18000	93800	5	14.48						
117	17000	88700	5	11.99						
137	17000	82500	5	10.24						

R167R97, n_e = 1400 1/min													18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
				3 3									
0.05	18000	120000	-	27001									
0.06	18000	120000	-	22482									
0.07	18000	120000	-	20002									
0.08	18000	120000	-	17361									
0.09	18000	120000	-	15446									
0.10	18000	120000	-	14051									
0.12	18000	120000	-	11812									
0.13	18000	120000	-	10509									
0.15	18000	120000	-	9631									
0.18	18000	120000	-	7749									
0.20	18000	120000	-	6894									
0.23	18000	120000	-	6077									
0.26	18000	120000	-	5407									
0.30	18000	120000	-	4650									
0.34	18000	120000	-	4129									
0.38	18000	120000	-	3692									
0.45	18000	120000	-	3099									
				3 2									
0.53	18000	120000	-	2657									
0.60	18000	120000	-	2333									
0.67	18000	120000	-	2085									
0.75	18000	120000	-	1877									
0.84	18000	120000	-	1670									
0.97	18000	120000	-	1438									
1.1	18000	120000	-	1279									
1.2	18000	120000	-	1123									
1.4	18000	120000	-	999									
1.6	18000	120000	-	861									
1.8	18000	120000	-	760									
2.1	18000	120000	-	656									
2.4	18000	120000	-	579									
2.8	18000	120000	-	503									
3.2	18000	120000	-	432									
3.7	18000	120000	-	376									
4.2	18000	120000	-	335									
4.6	18000	120000	-	303									
5.0	18000	120000	-	279									

R167R107, n_e = 1400 1/min											18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
			2	3							
0.38	18000	120000	-	3637							
0.42	18000	120000	-	3330							
0.51	18000	120000	-	2757							
0.57	18000	120000	-	2436							
0.61	18000	120000	-	2298							
0.68	18000	120000	-	2066							
0.76	18000	120000	-	1849							
0.84	18000	120000	-	1674							
0.94	18000	120000	-	1485							
1.0	18000	120000	-	1342							
1.1	18000	120000	-	1229							
1.3	18000	120000	-	1111							
1.5	18000	120000	-	950							
1.6	18000	120000	-	860							
1.8	18000	120000	-	763							
2.0	18000	120000	-	690							
2.4	18000	120000	-	585							
2.7	18000	120000	-	511							
			3	2							
4.0	18000	120000	-	349							
4.7	18000	120000	-	295							
5.2	18000	120000	-	270							
6.1	18000	120000	-	229							
7.0	18000	120000	-	200							
8.3	18000	120000	-	169							
			2	2							
3.1	18000	120000	-	446							
3.5	18000	120000	-	399							
3.9	18000	120000	-	361							
4.3	18000	120000	-	328							
4.8	18000	120000	-	291							
5.3	18000	120000	-	264							
6.2	18000	120000	-	227							
7.1	18000	120000	-	198							
8.3	18000	120000	-	168							

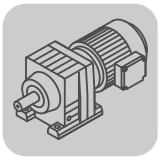
9.3 R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.09	**17**	52	78.24	1490	0.95						
	18	47	71.47	1520	1.05						
	22	40	60.32	1560	1.25						
	25	34	51.52	1590	1.45						
	27	32	47.78	1600	1.60						
	29	29	44.16	1610	1.70						
	31	27	41.31	1600	1.85	**R**	**07**	**DT**	**56M4**	5.8	243
	32	27	40.34	1590	1.85	**RF**	**07**	**DT**	**56M4**	5.8	244
	34	26	38.51	1570	1.95						
	38	22	34.05	1520	2.2						
	45	19	29.08	1460	2.6						
	48	18	26.97	1430	2.8						
	56	15	23.32	1370	3.2						
	60	14	21.73	1350	3.5						
	71	12	18.31	1280	4.1						
	78	11	16.73	1250	4.5						
	92	9.3	14.12	1190	5.4						
	108	8.0	12.06	1140	6.2						
	116	7.4	11.18	1110	6.8						
	134	6.4	9.67	1060	7.8						
	144	6.0	9.01	1040	8.3						
	166	5.2	7.85	1000	9.4	**R**	**07**	**DT**	**56M4**	5.7	243
	174	4.9	7.48	980	8.8	**RF**	**07**	**DT**	**56M4**	5.7	244
	190	4.5	6.83	960	9.6						
	226	3.8	5.76	910	11						
	264	3.3	4.92	860	11						
	285	3.0	4.57	840	12						
	329	2.6	3.95	800	13						
	353	2.4	3.68	790	14						
	405	2.1	3.21	755	15						
0.12	**0.06**	13300	21342	62000	1.00						
	0.08	11300	18210	65700	1.15	**R**	**147R77**	**DR**	**63S4**	420	280
	0.09	9920	15923	67900	1.30	**RF**	**147R77**	**DR**	**63S4**	430	280
	0.10	8770	14075	69400	1.50						
	0.11	7640	12344	70700	1.70						
	0.12	6730	11143	71600	1.95						
	0.14	6030	9743	72200	2.2						
	0.16	4830	8443	73100	2.7	**R**	**147R77**	**DR**	**63S4**	420	280
	0.19	4180	7307	73400	3.1	**RF**	**147R77**	**DR**	**63S4**	430	280
	0.21	3690	6447	73700	3.5						
	0.25	3180	5568	73900	4.1						
	0.11	8050	12921	53300	1.00						
	0.12	7250	11712	54900	1.10						
	0.13	6390	10573	56400	1.25						
	0.16	5020	8784	58400	1.60	**R**	**137R77**	**DR**	**63S4**	290	280
	0.18	4090	7479	59400	1.95	**RF**	**137R77**	**DR**	**63S4**	310	280
	0.21	4060	6559	59400	1.95						
	0.24	3190	5834	60200	2.5						
	0.27	3160	5116	60200	2.5						
	0.18	4410	7583	28800	0.95						
	0.20	3690	6743	32400	1.15						
	0.23	3660	5914	32500	1.15						
	0.27	2820	5168	35500	1.50	**R**	**107R77**	**DR**	**63S4**	200	280
	0.31	2530	4435	36100	1.70	**RF**	**107R77**	**DR**	**63S4**	210	280
	0.35	2260	3896	36500	1.90						
	0.45	1880	3039	36900	2.3						
	0.35	2470	3918	36200	1.75						
	0.41	2100	3343	36700	2.0						
	0.45	1910	3034	36900	2.2	**R**	**107R77**	**DR**	**63S4**	195	280
	0.52	1670	2653	37100	2.6	**RF**	**107R77**	**DR**	**63S4**	200	280
	0.61	1430	2280	37300	3.0						
	0.67	1290	2067	37400	3.3						
	0.30	3050	4559	17700	1.00						
	0.34	2560	4004	23700	1.15	**R**	**97R57**	**DR**	**63S4**	130	280
	0.40	2270	3481	25200	1.30	**RF**	**97R57**	**DR**	**63S4**	145	280



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**0.29**	3230	4678	4840	0.95						
	0.32	2980	4309	20400	1.00						
	0.37	2560	3702	23700	1.15						
	0.46	2080	3019	26100	1.45	**R**	**97R57**	**DR**	**63S4**	125	280
	0.52	1800	2668	27100	1.65	**RF**	**97R57**	**DR**	**63S4**	140	280
	0.61	1480	2245	27700	2.0						
	0.68	1300	2016	27900	2.3						
	0.80	1190	1733	28000	2.5						
	0.45	2120	3065	25900	1.40						
	0.51	1880	2722	26800	1.60						
	0.60	1590	2311	27500	1.90						
	0.66	1430	2078	27700	2.1	**R**	**97R57**	**DR**	**63S4**	130	280
	0.76	1230	1823	28000	2.4	**RF**	**97R57**	**DR**	**63S4**	145	280
	0.87	1070	1583	28200	2.8						
	0.99	900	1396	28300	3.3						
	1.1	770	1228	28400	3.9						
	0.48	1760	2873	15200	0.90	**R**	**87R57**	**DR**	**63S4**	86	280
	0.70	1300	1961	18500	1.20	**RF**	**87R57**	**DR**	**63S4**	93	280
	0.53	1780	2595	15000	0.85						
	0.65	1430	2129	17700	1.10	**R**	**87R57**	**DR**	**63S4**	85	280
	0.72	1270	1930	18600	1.20	**RF**	**87R57**	**DR**	**63S4**	92	280
	0.80	1120	1733	19300	1.40						
	0.79	1140	1737	19200	1.35						
	0.91	1000	1524	19800	1.55						
	1.1	810	1303	20000	1.90						
	1.2	710	1143	20000	2.2	**R**	**87R57**	**DR**	**63S4**	85	280
	1.6	580	885	20000	2.6	**RF**	**87R57**	**DR**	**63S4**	92	280
	1.8	510	776	20000	3.0						
	2.0	450	685	20000	3.4						
	2.3	360	599	20000	4.3						
	1.1	930	1303	8660	0.85						
	1.2	795	1124	10100	1.05	**R**	**77R37**	**DR**	**63S4**	45	280
	1.3	740	1047	10600	1.10	**RF**	**77R37**	**DR**	**63S4**	51	280
	1.5	635	915	11300	1.30						
	1.1	820	1218	9910	1.00						
	1.3	740	1084	10600	1.10						
	1.5	660	940	11200	1.25	**R**	**77R37**	**DR**	**63S4**	46	280
	1.7	520	821	12000	1.55	**RF**	**77R37**	**DR**	**63S4**	52	280
	1.9	475	731	12200	1.70						
	2.1	455	646	12300	1.80						
	2.6	375	520	12600	2.2						
	3.1	320	451	12700	2.5	**R**	**77R37**	**DR**	**63S4**	45	280
	3.3	300	422	12800	2.7	**RF**	**77R37**	**DR**	**63S4**	51	280
	3.8	255	365	12900	3.2						
	1.6	625	891	7190	0.95						
	1.9	505	730	8530	1.20						
	2.1	440	644	9060	1.35	**R**	**67R37**	**DR**	**63S4**	40	280
	2.4	385	571	9430	1.55	**RF**	**67R37**	**DR**	**63S4**	43	280
	2.8	320	486	9790	1.85						
	1.6	590	836	7670	1.00						
	1.8	490	750	8630	1.20						
	2.1	440	646	9050	1.35	**R**	**67R37**	**DR**	**63S4**	41	280
	2.4	400	574	9330	1.50	**RF**	**67R37**	**DR**	**63S4**	44	280
	2.8	345	495	9660	1.75						
	3.2	285	438	9940	2.1						
	1.8	550	782	4650	0.80						
	2.0	455	678	7070	1.00						
	2.3	410	604	7260	1.10						
	2.6	370	537	7400	1.20	**R**	**57R37**	**DR**	**63S4**	34	280
	2.9	325	471	7550	1.35	**RF**	**57R37**	**DR**	**63S4**	38	280
	3.9	240	357	7760	1.85						
	4.3	215	319	7820	2.1						
	3.8	255	359	7730	1.75						
	4.3	230	324	7790	1.95						
	4.8	200	290	7840	2.2	**R**	**57R37**	**DR**	**63S4**	33	280
	5.3	185	262	7880	2.4	**RF**	**57R37**	**DR**	**63S4**	37	280
	5.6	170	246	7900	2.6						
	6.3	150	220	7930	3.0						

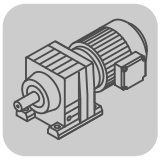
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**2.7**	340	510	4360	0.85						
	3.2	285	436	5480	1.05	**R**	**47R37**	**DR**	**63S4**	28	280
	3.4	265	408	5590	1.10	**RF**	**47R37**	**DR**	**63S4**	28	280
	4.0	215	344	5780	1.35						
	2.8	365	502	3020	0.80						
	3.2	310	429	5350	0.95						
	3.7	265	372	5580	1.10						
	4.0	245	348	5670	1.20	**R**	**47R37**	**DR**	**63S4**	28	280
	4.6	210	301	5810	1.40	**RF**	**47R37**	**DR**	**63S4**	28	280
	5.4	177	255	5920	1.70						
	6.0	156	228	5980	1.95						
	7.1	130	195	6040	2.3						
	4.1	225	338	4570	0.90						
	4.7	210	296	4780	0.95						
	5.3	184	259	5130	1.10	**R**	**37R17**	**DR**	**63S4**	17	280
	6.0	163	228	5360	1.25	**RF**	**37R17**	**DR**	**63S4**	19	280
	6.9	140	199	5550	1.40						
	8.0	122	172	5680	1.65						
	4.2	235	328	3730	0.85						
	4.8	205	289	4880	1.00						
	5.2	192	265	5040	1.05	**R**	**37R17**	**DR**	**63S4**	17	280
	6.1	156	226	5410	1.30	**RF**	**37R17**	**DR**	**63S4**	18	280
	6.8	144	202	5520	1.40						
	7.7	125	179	5660	1.60						
	6.0	158	229	4090	0.80						
	6.9	138	200	4200	0.95	**R**	**27R17**	**DR**	**63S4**	11	280
	7.8	121	177	4270	1.05	**RF**	**27R17**	**DR**	**63S4**	11	280
	8.3	116	166	4290	1.10						
	6.1	157	227	4100	0.85						
	6.8	144	203	4170	0.90	**R**	**27R17**	**DR**	**63S4**	11	280
	7.7	125	179	4260	1.05	**RF**	**27R17**	**DR**	**63S4**	11	280
	8.8	106	156	4330	1.25						
	4.6	245	195.24*	12900	3.3	**R**	**77**	**DR**	**63M6**	37	264
	5.4	210	166.59	13000	3.9	**RF**	**77**	**DR**	**63M6**	43	265
	6.2	186	145.67	13000	4.4						
	4.5	250	199.81	10100	2.4						
	4.9	230	184.07	10100	2.6						
	5.7	200	158.14	10300	3.0	**R**	**67**	**DR**	**63M6**	30	261
	6.5	175	137.67	10300	3.4	**RF**	**67**	**DR**	**63M6**	33	262
	7.0	164	128.97	10400	3.6						
	7.9	145	113.94	10400	4.1						
	6.9	166	199.81	10300	3.6	**R**	**67**	**DR**	**63S4**	30	261
	7.5	153	184.07	10400	3.9	**RF**	**67**	**DR**	**63S4**	33	262
	4.8	235	186.89	7780	1.90						
	5.2	215	172.17	7820	2.0						
	6.1	188	147.92	7870	2.4						
	7.0	164	128.77	7910	2.7	**R**	**57**	**DR**	**63M6**	23	258
	7.5	154	120.63	7920	2.9	**RF**	**57**	**DR**	**63M6**	27	259
	8.4	136	106.58	7950	3.3						
	9.1	126	98.99	7960	3.6						
	7.4	155	186.89	7920	2.9						
	8.0	143	172.17	7940	3.2	**R**	**57**	**DR**	**63S4**	23	258
	9.3	123	147.92	7960	3.7	**RF**	**57**	**DR**	**63S4**	27	259
	11	107	128.77	7980	4.2						
	5.1	225	176.88	5760	1.35						
	5.5	205	162.94	5830	1.45	**R**	**47**	**DR**	**63M6**	18	255
	6.4	178	139.99	5920	1.70	**RF**	**47**	**DR**	**63M6**	18	256
	7.4	155	121.87	5980	1.95						
	7.8	147	176.88	6000	2.0						
	8.5	135	162.94	6030	2.2						
	9.9	116	139.99	6070	2.6						
	11	101	121.87	6100	3.0	**R**	**47**	**DR**	**63S4**	18	255
	12	95	114.17	6100	3.2	**RF**	**47**	**DR**	**63S4**	18	256
	14	84	100.86	6120	3.6						
	15	78	93.68	6130	3.9						



R..DRS
R..DRS [kW]

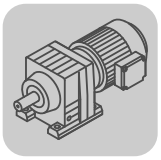
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**6.7**	172	134.82	5270	1.15						
	7.3	157	123.66	5400	1.25						
	8.6	134	105.28	5600	1.50	**R**	**37**	**DR**	**63M6**	14	252
	9.9	116	90.77	5730	1.75	**RF**	**37**	**DR**	**63M6**	16	253
	11	108	84.61	5770	1.85						
	12	94	73.96	5850	2.1						
	10	112	134.82	5750	1.80						
	11	103	123.66	5800	1.95						
	13	87	105.28	5880	2.3	**R**	**37**	**DR**	**63S4**	14	252
	15	75	90.77	5930	2.6	**RF**	**37**	**DR**	**63S4**	16	253
	16	70	84.61	5950	2.8						
	19	61	73.96	5980	3.3						
	7.3	158	123.91	4090	0.80						
	8.5	134	105.49	4210	0.95						
	9.9	116	90.96	4300	1.10	**R**	**27**	**DR**	**63M6**	8.3	249
	11	108	84.78	4320	1.20	**RF**	**27**	**DR**	**63M6**	8.2	250
	12	94	74.11	4370	1.40						
	10	112	135.09	4310	1.15						
	11	103	123.91	4340	1.25						
	13	88	105.49	4390	1.50						
	15	76	90.96	4420	1.70						
	16	70	84.78	4440	1.85						
	19	62	74.11	4460	2.1	**R**	**27**	**DR**	**63S4**	8.3	249
	20	58	69.47	4460	2.2	**RF**	**27**	**DR**	**63S4**	8.2	250
	23	51	61.30	4400	2.6						
	25	46	55.87	4280	2.8						
	29	40	48.17	4090	3.2						
	31	37	44.90	4000	3.5						
	11	104	81.64	300	0.80						
	13	90	70.39	1470	0.95						
	14	84	65.61	1860	1.00	**R**	**17**	**DR**	**63M6**	7.6	246
	16	73	57.35	2430	1.15	**RF**	**17**	**DR**	**63M6**	7.5	247
	17	68	53.76	2500	1.25						
	19	60	47.44	2500	1.40						
	17	68	81.64	2500	1.25						
	20	58	70.39	2500	1.45						
	21	54	65.61	2500	1.55						
	24	48	57.35	2500	1.80						
	26	45	53.76	2500	1.90						
	29	39	47.44	2500	2.2	**R**	**17**	**DR**	**63S4**	7.6	246
	31	37	44.18	2500	2.3	**RF**	**17**	**DR**	**63S4**	7.5	247
	36	32	38.61	2430	2.6						
	38	30	36.20	2390	2.8						
	43	26	31.94	2310	3.2						
	49	24	28.32	2230	3.6						
	57	20	24.07	2130	4.2						
	22	53	60.32	1480	0.95						
	25	45	51.52	1540	1.10						
	27	42	47.78	1550	1.20						
	29	39	44.16	1550	1.30						
	31	36	41.31	1530	1.35						
	32	36	40.34	1520	1.40	**R**	**07**	**DT**	**56L4**	5.8	243
	34	34	38.51	1510	1.45	**RF**	**07**	**DT**	**56L4**	5.8	244
	38	30	34.05	1460	1.65						
	45	26	29.08	1410	1.95						
	48	24	26.97	1380	2.1						
	56	21	23.32	1340	2.4						
	60	19	21.73	1310	2.6						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**71**	16	18.31	1250	3.1						
	78	15	16.73	1220	3.4						
	92	12	14.12	1170	4.0						
	108	11	12.06	1120	4.7						
	116	9.9	11.18	1090	5.0						
	134	8.5	9.67	1050	5.9						
	144	7.9	9.01	1030	6.3						
	166	6.9	7.85	980	7.1	**R**	**07**	**DT**	**56L4**	5.7	243
	174	6.6	7.48	970	6.5	**RF**	**07**	**DT**	**56L4**	5.7	244
	190	6.0	6.83	950	7.2						
	226	5.1	5.76	900	7.8						
	264	4.3	4.92	860	8.6						
	285	4.0	4.57	840	9.0						
	329	3.5	3.95	800	9.7						
	353	3.2	3.68	780	10						
	405	2.8	3.21	750	11						
	227	5.0	6.07	4260	8.6						
	267	4.3	5.18	4050	17	**RX**	**67**	**DR**	**63S4**	16	233
	305	3.8	4.53	3870	22	**RXF**	**67**	**DR**	**63S4**	20	234
	321	3.6	4.30*	3810	22						
	251	4.6	5.50*	3360	8.5						
	272	4.2	5.07	3270	8.6						
	317	3.6	4.35	3120	19						
	364	3.1	3.79	2980	22						
	389	2.9	3.55*	2910	24						
	440	2.6	3.14	2800	25	**RX**	**57**	**DR**	**63S4**	14	231
	474	2.4	2.91	2730	28	**RXF**	**57**	**DR**	**63S4**	16	232
	523	2.2	2.64*	2640	31						
	582	2.0	2.37	2550	34						
	676	1.7	2.04	2430	41						
	719	1.6	1.92*	2380	43						
	835	1.4	1.65	2260	49						
0.18	**0.09**	14900	14075	50900	0.85						
	0.11	13000	12344	62500	1.00	**R**	**147R77**	**DR**	**63M4**	420	280
	0.12	11600	11143	65200	1.10	**RF**	**147R77**	**DR**	**63M4**	430	280
	0.14	10300	9743	67300	1.25						
	0.16	8550	8443	69700	1.50						
	0.18	7400	7307	70900	1.75						
	0.20	6530	6447	71800	2.00						
	0.24	5640	5568	72500	2.3	**R**	**147R77**	**DR**	**63M4**	420	280
	0.27	5140	4926	72800	2.5	**RF**	**147R77**	**DR**	**63M4**	430	280
	0.31	4420	4325	73300	2.9						
	0.35	3920	3754	73600	3.3						
	0.40	3370	3302	73800	3.8						
	0.15	8900	8784	50100	0.90						
	0.18	7390	7479	54600	1.10						
	0.20	6950	6559	55500	1.15						
	0.23	5760	5834	57400	1.40	**R**	**137R77**	**DR**	**63M4**	290	280
	0.26	5420	5116	57900	1.50	**RF**	**137R77**	**DR**	**63M4**	310	280
	0.30	4520	4464	59000	1.75						
	0.34	3980	3928	59500	2.0						
	0.28	5060	4709	58300	1.60						
	0.33	4320	4018	59200	1.85						
	0.38	3770	3514	59700	2.1	**R**	**137R77**	**DR**	**63M4**	280	280
	0.40	3580	3338	59900	2.2	**RF**	**137R77**	**DR**	**63M4**	300	280
	0.45	3140	2929	60200	2.5						
	0.30	4490	4435	28400	0.95						
	0.34	3980	3896	31100	1.10	**R**	**107R77**	**DR**	**63M4**	200	280
	0.43	3220	3039	34200	1.35	**RF**	**107R77**	**DR**	**63M4**	210	280
	0.34	4210	3918	29900	1.00						
	0.39	3590	3343	32800	1.20						
	0.44	3260	3034	34100	1.30	**R**	**107R77**	**DR**	**63M4**	195	280
	0.50	2850	2653	35400	1.50	**RF**	**107R77**	**DR**	**63M4**	200	280
	0.58	2450	2280	36200	1.75						
	0.64	2210	2067	36500	1.95						



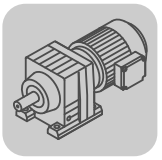
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**0.66**	2100	1987	36700	2.0						
	0.72	1870	1827	36900	2.3						
	0.83	1590	1599	37200	2.7	**R**	**107R77**	**DR**	**63M4**	200	280
	0.94	1430	1400	37300	3.0	**RF**	**107R77**	**DR**	**63M4**	205	280
	1.1	1220	1226	37400	3.5						
	0.49	2990	2668	20000	1.00						
	0.59	2480	2245	24200	1.20						
	0.65	2200	2016	25500	1.35						
	0.76	1960	1733	26500	1.50						
	0.81	1840	1623	27000	1.65						
	0.92	1610	1434	27500	1.85	**R**	**97R57**	**DR**	**63M4**	125	280
	1.1	1330	1207	27900	2.2	**RF**	**97R57**	**DR**	**63M4**	140	280
	1.2	1180	1084	28000	2.5						
	1.4	1000	934	28200	3.0						
	1.5	930	878	28300	3.2						
	1.8	790	755	28400	3.8						
	0.49	3090	2722	15900	0.95						
	0.57	2620	2311	23400	1.15	**R**	**97R57**	**DR**	**63M4**	130	280
	0.64	2350	2078	24800	1.25	**RF**	**97R57**	**DR**	**63M4**	145	280
	0.89	1690	1489	15900	0.90						
	0.95	1580	1395	16700	1.00						
	1.1	1380	1232	18000	1.10						
	1.2	1270	1145	18600	1.20	**R**	**87R57**	**DR**	**63M4**	85	280
	1.3	1140	1037	19200	1.35	**RF**	**87R57**	**DR**	**63M4**	92	280
	1.4	1010	931	19800	1.50						
	1.6	860	802	20000	1.80						
	0.87	1680	1524	15900	0.90						
	1.0	1390	1303	17900	1.10						
	1.2	1220	1143	18900	1.25	**R**	**87R57**	**DR**	**63M4**	85	280
	1.5	970	885	19900	1.60	**RF**	**87R57**	**DR**	**63M4**	92	280
	1.7	850	776	20000	1.80						
	1.5	970	858	5830	0.85						
	1.7	850	757	9590	0.95	**R**	**77R37**	**DR**	**63M4**	45	280
	2.0	750	671	10500	1.10	**RF**	**77R37**	**DR**	**63M4**	51	280
	2.3	630	571	11400	1.30						
	1.6	880	821	9230	0.90						
	1.8	800	731	10100	1.00						
	2.0	745	646	10500	1.10						
	2.4	645	560	11300	1.25						
	2.7	550	488	11800	1.50	**R**	**77R37**	**DR**	**63M4**	46	280
	3.0	485	436	12100	1.70	**RF**	**77R37**	**DR**	**63M4**	52	280
	3.5	420	373	12400	1.95						
	4.0	365	327	12600	2.2						
	4.6	325	289	12700	2.5						
	2.3	635	571	7060	0.95	**R**	**67R37**	**DR**	**63M4**	40	280
	2.7	535	486	8250	1.10	**RF**	**67R37**	**DR**	**63M4**	43	280
	2.3	655	574	5820	0.90						
	2.7	565	495	7950	1.05						
	3.0	480	438	8740	1.25						
	3.4	425	388	9160	1.40	**R**	**67R37**	**DR**	**63M4**	41	280
	3.8	390	344	9380	1.55	**RF**	**67R37**	**DR**	**63M4**	44	280
	4.5	315	294	9800	1.90						
	5.1	290	261	9920	2.1						
	2.9	500	454	6650	0.90	**R**	**57R37**	**DR**	**63M4**	33	280
	3.2	450	410	7090	1.00	**RF**	**57R37**	**DR**	**63M4**	37	280
	2.8	535	471	5250	0.85						
	3.7	400	357	7300	1.10						
	4.1	355	319	7460	1.25	**R**	**57R37**	**DR**	**63M4**	34	280
	4.8	300	273	7630	1.50	**RF**	**57R37**	**DR**	**63M4**	38	280
	5.5	260	241	7730	1.75						
	6.1	230	215	7790	1.95						
	3.7	420	359	7230	1.05						
	4.1	375	324	7380	1.20						
	4.6	335	290	7530	1.35						
	5.0	300	262	7620	1.50	**R**	**57R37**	**DR**	**63M4**	33	280
	5.4	280	246	7680	1.60	**RF**	**57R37**	**DR**	**63M4**	37	280
	6.0	245	220	7750	1.80						
	7.0	210	188	7830	2.1						
	8.3	177	159	7890	2.6						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**4.4**	345	301	4150	0.85						
	5.2	290	255	5460	1.05	**R**	**47R37**	**DR**	**63M4**	28	280
	5.8	255	228	5620	1.15	**RF**	**47R37**	**DR**	**63M4**	28	280
	6.8	215	195	5790	1.40						
	6.6	225	199	4510	0.85						
	7.7	199	172	4960	1.00	**R**	**37R17**	**DR**	**63M4**	17	280
	8.8	173	150	5260	1.15	**RF**	**37R17**	**DR**	**63M4**	19	280
	6.5	230	202	4050	0.85						
	7.4	205	179	4870	0.95	**R**	**37R17**	**DR**	**63M4**	17	280
	8.5	176	156	5220	1.15	**RF**	**37R17**	**DR**	**63M4**	18	280
	9.4	157	141	4100	0.85						
	11	139	124	4190	0.95	**R**	**27R17**	**DR**	**63M4**	11	280
	12	124	110	4260	1.05	**RF**	**27R17**	**DR**	**63M4**	11	280
	14	105	94	4340	1.25						
	9.8	152	135	4120	0.85						
	11	139	118	4190	0.95	**R**	**27R17**	**DR**	**63M4**	11	280
	13	121	104	4270	1.10	**RF**	**27R17**	**DR**	**63M4**	11	280
	15	104	90	4340	1.25						
	4.5	385	195.24*	12500	2.1	**R**	**77**	**DR**	**63L6**	38	264
	5.2	325	166.59	12700	2.5	**RF**	**77**	**DR**	**63L6**	43	265
	6.0	285	145.67	12800	2.8						
	6.3	270	138.39	12900	3.0	**R**	**77**	**DR**	**63L6**	38	264
	7.2	235	121.42	12900	3.4	**RF**	**77**	**DR**	**63L6**	43	265
	6.8	250	195.24*	12900	3.2						
	7.9	215	166.59	13000	3.8	**R**	**77**	**DR**	**63M4**	37	264
	9.1	190	145.67	13000	4.3	**RF**	**77**	**DR**	**63M4**	43	265
	9.5	180	138.39	13000	4.6						
	4.4	390	199.81	9370	1.50						
	4.7	360	184.07	9560	1.65						
	5.5	310	158.14	9830	1.90						
	6.3	270	137.67	10000	2.2						
	6.8	250	128.97	10100	2.4						
	7.6	225	113.94	10200	2.7	**R**	**67**	**DR**	**63L6**	30	261
	8.2	205	105.83	10200	2.9	**RF**	**67**	**DR**	**63L6**	34	262
	9.1	190	95.91	10300	3.2						
	10	170	86.11	10300	3.5						
	12	146	74.17	10400	4.1						
	12	138	69.75	10400	4.4						
	6.6	260	199.81	10100	2.3						
	7.2	235	184.07	10100	2.5						
	8.4	205	158.14	10200	2.9						
	9.6	179	137.67	10300	3.4	**R**	**67**	**DR**	**63M4**	30	261
	10	168	128.97	10300	3.6	**RF**	**67**	**DR**	**63M4**	33	262
	12	148	113.94	10400	4.0						
	12	138	105.83	10400	4.4						
	4.7	365	186.89	7420	1.20						
	5.0	340	172.17	7510	1.30						
	5.9	290	147.92	7650	1.55	**R**	**57**	**DR**	**63L6**	24	258
	6.8	250	128.77	7740	1.75	**RF**	**57**	**DR**	**63L6**	27	259
	7.2	235	120.63	7780	1.90						
	7.1	240	186.89	7770	1.85						
	7.7	220	172.17	7810	2.0						
	8.9	193	147.92	7860	2.3						
	10	168	128.77	7900	2.7	**R**	**57**	**DR**	**63M4**	23	258
	11	157	120.63	7920	2.9	**RF**	**57**	**DR**	**63M4**	27	259
	12	139	106.58	7940	3.2						
	13	129	98.99	7950	3.5						
	15	117	89.71	7970	3.8						
	7.5	230	176.88	5740	1.30						
	8.1	210	162.94	5810	1.40						
	9.4	182	139.99	5910	1.65						
	11	159	121.87	5980	1.90						
	12	149	114.17	6000	2.0	**R**	**47**	**DR**	**63M4**	18	255
	13	131	100.86	6040	2.3	**RF**	**47**	**DR**	**63M4**	18	256
	14	122	93.68	6060	2.5						
	16	111	84.90	6080	2.7						
	17	99	76.23	6100	3.0						

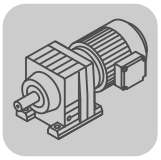


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**7.0**	240	123.66	3060	0.80						
	8.3	205	105.28	4840	0.95	**R**	**37**	**DR**	**63L6**	15	252
	9.6	179	90.77	5190	1.10	**RF**	**37**	**DR**	**63L6**	16	253
	10	167	84.61	5310	1.20						
	9.8	176	134.82	5230	1.15						
	11	161	123.66	5370	1.25						
	13	137	105.28	5580	1.45						
	15	118	90.77	5710	1.70						
	16	110	84.61	5760	1.80	**R**	**37**	**DR**	**63M4**	14	252
	18	96	73.96	5840	2.1	**RF**	**37**	**DR**	**63M4**	16	253
	19	90	69.33	5870	2.2						
	22	80	61.18	5920	2.5						
	24	73	55.76	5940	2.8						
	27	63	48.08	5960	3.2						
	11	161	123.91	4070	0.80						
	13	137	105.49	4200	0.95						
	15	118	90.96	4280	1.10						
	16	110	84.78	4320	1.20						
	18	96	74.11	4360	1.35						
	19	90	69.47	4380	1.45						
	22	80	61.30	4320	1.65						
	24	73	55.87	4210	1.80	**R**	**27**	**DR**	**63M4**	8.3	249
	27	63	48.17	4040	2.1	**RF**	**27**	**DR**	**63M4**	8.2	250
	29	58	44.90	3960	2.2						
	34	51	39.25	3810	2.5						
	36	48	36.79	3740	2.7						
	41	42	32.47	3610	3.1						
	46	38	28.78	3480	3.5						
	54	32	24.47	3310	4.1						
	47	37	28.37	3460	3.5						
	51	34	26.09	3380	3.8						
	59	29	22.32	3220	4.5						
	68	25	19.35	3090	5.2	**R**	**27**	**DR**	**63M4**	8.0	249
	73	24	18.08	3020	5.5	**RF**	**27**	**DR**	**63M4**	7.9	250
	84	20	15.63	2890	6.4						
	99	17	13.28*	2750	7.5						
	16	106	81.64	46	0.80						
	19	92	70.39	1330	0.95						
	20	85	65.61	1740	1.00						
	23	75	57.35	2350	1.15						
	25	70	53.76	2500	1.20						
	28	62	47.44	2450	1.40	**R**	**17**	**DR**	**63M4**	7.6	246
	30	58	44.18	2410	1.50	**RF**	**17**	**DR**	**63M4**	7.5	247
	34	50	38.61	2340	1.70						
	36	47	36.20	2300	1.80						
	41	42	31.94	2240	2.0						
	47	37	28.32	2170	2.3						
	55	31	24.07	2080	2.7						
	52	33	25.23	2110	2.6						
	57	30	23.15	2060	2.8	**R**	**17**	**DR**	**63M4**	7.3	246
	67	26	19.71	1970	3.3	**RF**	**17**	**DR**	**63M4**	7.2	247
	78	22	16.99	1890	3.8						
	28	62	47.78	1100	0.80						
	30	58	44.16	1340	0.85						
	32	54	41.31	1390	0.95						
	33	52	40.34	1380	0.95						
	34	50	38.51	1380	1.00	**R**	**07**	**DR**	**63M4**	6.4	243
	39	44	34.05	1350	1.15	**RF**	**07**	**DR**	**63M4**	6.4	244
	45	38	29.08	1310	1.30						
	49	35	26.97	1290	1.40						
	57	30	23.32	1250	1.65						
	61	28	21.73	1240	1.75						

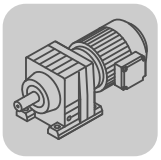


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**72**	24	18.31	1190	2.1						
	79	22	16.73	1160	2.3						
	94	18	14.12	1120	2.7						
	109	16	12.06	1070	3.2						
	118	15	11.18	1050	3.4						
	137	13	9.67	1010	4.0						
	146	12	9.01	990	4.3						
	168	10	7.85	960	4.8	**R**	**07**	**DR**	**63M4**	6.3	243
	177	9.7	7.48	940	4.4	**RF**	**07**	**DR**	**63M4**	6.3	244
	193	8.9	6.83	920	4.8						
	229	7.5	5.76	880	5.3						
	268	6.4	4.92	840	5.8						
	289	5.9	4.57	820	6.1						
	334	5.1	3.95	785	6.7						
	359	4.8	3.68	765	6.9						
	412	4.2	3.21	735	7.4						
	243	7.1	11.18	860	7.0						
	281	6.1	9.67	820	8.2						
	302	5.7	9.01	810	8.8						
	346	5.0	7.85	775	9.8						
	364	4.7	7.48	765	9.2						
	398	4.3	6.83	740	10	**R**	**07**	**DR**	**63S2**	6.3	243
	472	3.6	5.76	705	11	**RF**	**07**	**DR**	**63S2**	6.3	244
	552	3.1	4.92	670	12						
	596	2.9	4.57	655	12						
	689	2.5	3.95	625	14						
	739	2.3	3.68	615	14						
	848	2.0	3.21	585	16						
	143	12	6.07	4940	3.6						
	168	10	5.18	4690	7.4	**RX**	**67**	**DR**	**63L6**	17	233
	192	8.9	4.53	4490	9.2	**RXF**	**67**	**DR**	**63L6**	21	234
	202	8.5	4.30*	4410	9.4						
	218	7.9	6.07	4310	5.4						
	255	6.7	5.18	4090	11						
	292	5.9	4.53	3920	14						
	307	5.6	4.30*	3850	14						
	350	4.9	3.77	3690	18	**RX**	**67**	**DR**	**63M4**	16	233
	412	4.2	3.20*	3500	24	**RXF**	**67**	**DR**	**63M4**	20	234
	457	3.8	2.89	3380	28						
	519	3.3	2.54	3240	36						
	550	3.1	2.40*	3180	40						
	646	2.7	2.04	3020	50						
	158	11	5.50*	3880	3.6						
	172	10	5.07	3780	3.6	**RX**	**57**	**DR**	**63L6**	14	231
	200	8.6	4.35	3600	7.9	**RXF**	**57**	**DR**	**63L6**	16	232
	230	7.5	3.79	3440	9.2						
	240	7.2	5.50*	3400	5.4						
	261	6.6	5.07	3310	5.4						
	303	5.7	4.35	3150	12						
	348	4.9	3.79	3010	14						
	372	4.6	3.55*	2940	15						
	421	4.1	3.14	2830	16	**RX**	**57**	**DR**	**63M4**	14	231
	453	3.8	2.91	2760	18	**RXF**	**57**	**DR**	**63M4**	16	232
	500	3.4	2.64*	2670	20						
	557	3.1	2.37	2580	22						
	647	2.7	2.04	2460	26						
	688	2.5	1.92*	2410	28						
	799	2.2	1.65	2290	31						
0.25	**0.13**	15100	9743	48200	0.85						
	0.15	12700	8443	63100	1.00						
	0.18	11000	7307	66200	1.20						
	0.20	9740	6447	68100	1.35						
	0.23	8410	5568	69800	1.55	**R**	**147R77**	**DR**	**63L4**	420	280
	0.26	7590	4926	70700	1.70	**RF**	**147R77**	**DR**	**63L4**	430	280
	0.30	6570	4325	71700	2.00						
	0.35	5790	3754	72400	2.2						
	0.39	5020	3302	72900	2.6						
	0.45	4370	2898	73300	3.0						

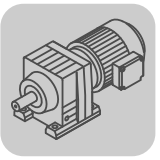


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**0.22**	8660	5834	51100	0.90						
	0.25	7960	5116	53500	1.00	**R**	**137R77**	**DR**	**63L4**	290	280
	0.29	6740	4464	55800	1.20	**RF**	**137R77**	**DR**	**63L4**	310	280
	0.33	5930	3928	57100	1.35						
	0.28	7430	4709	54600	1.10						
	0.32	6340	4018	56500	1.25						
	0.37	5540	3514	57700	1.45	**R**	**137R77**	**DR**	**63L4**	280	280
	0.39	5260	3338	58100	1.50	**RF**	**137R77**	**DR**	**63L4**	300	280
	0.44	4620	2929	58900	1.75						
	0.49	4180	2658	59300	1.90						
	0.54	3800	2412	59700	2.1						
	0.63	3260	2073	60100	2.4	**R**	**137R77**	**DR**	**63L4**	290	280
	0.71	2810	1839	60500	2.8	**RF**	**137R77**	**DR**	**63L4**	310	280
	0.93	2180	1397	60800	3.7						
	1.1	1880	1226	61000	4.2						
	0.43	4730	3039	25600	0.90	**R**	**107R77**	**DR**	**63L4**	205	280
						RF	**107R77**	**DR**	**63L4**	210	280
	0.43	4780	3034	23600	0.90	**R**	**107R77**	**DR**	**63L4**	195	280
						RF	**107R77**	**DR**	**63L4**	200	280
	0.65	3100	1987	34600	1.40						
	0.71	2790	1827	35600	1.55						
	0.81	2400	1599	36300	1.80						
	0.93	2140	1400	36600	2.0	**R**	**107R77**	**DR**	**63L4**	200	280
	1.1	1840	1226	36900	2.3	**RF**	**107R77**	**DR**	**63L4**	205	280
	1.4	1430	939	37300	3.0						
	1.6	1230	822	37400	3.5						
	0.75	2840	1733	22000	1.05	**R**	**97R57**	**DR**	**63L4**	125	280
	0.80	2650	1623	23200	1.15	**RF**	**97R57**	**DR**	**63L4**	145	280
	0.71	2960	1823	21100	1.00						
	0.82	2570	1583	23700	1.15						
	0.93	2230	1396	25400	1.35						
	1.1	1940	1228	26600	1.55						
	1.2	1750	1069	27300	1.70	**R**	**97R57**	**DR**	**63L4**	130	280
	1.4	1520	938	27600	1.95	**RF**	**97R57**	**DR**	**63L4**	145	280
	1.6	1300	824	27900	2.3						
	1.8	1160	737	28100	2.6						
	2.1	990	632	28200	3.0						
	1.1	1850	1145	10700	0.85						
	1.2	1660	1037	16000	0.95	**R**	**87R57**	**DR**	**63L4**	85	280
	1.4	1480	931	17400	1.05	**RF**	**87R57**	**DR**	**63L4**	93	280
	1.6	1260	802	18600	1.20						
	1.1	1790	1143	14700	0.85						
	1.5	1420	885	17800	1.10						
	1.7	1240	776	18700	1.25						
	1.9	1100	685	19400	1.40	**R**	**87R57**	**DR**	**63L4**	86	280
	2.2	920	599	20000	1.65	**RF**	**87R57**	**DR**	**63L4**	93	280
	2.5	810	525	20000	1.90						
	2.8	715	456	20000	2.2						
	4.9	415	268	20000	3.7						
	2.3	910	571	8910	0.90	**R**	**77R37**	**DR**	**63L4**	46	280
						RF	**77R37**	**DR**	**63L4**	52	280
	2.3	920	560	8780	0.90						
	2.7	795	488	10100	1.05						
	3.0	705	436	10900	1.15						
	3.5	605	373	11500	1.35	**R**	**77R37**	**DR**	**63L4**	47	280
	4.0	530	327	11900	1.55	**RF**	**77R37**	**DR**	**63L4**	53	280
	4.5	470	289	12200	1.75						
	5.0	420	260	12400	1.95						
	5.8	355	224	12600	2.3						
	3.4	620	388	7290	0.95						
	3.8	565	344	7950	1.05						
	4.4	465	294	8870	1.30						
	5.0	420	261	9180	1.40	**R**	**67R37**	**DR**	**63L4**	41	280
	5.6	380	234	9460	1.60	**RF**	**67R37**	**DR**	**63L4**	45	280
	6.5	320	200	9780	1.85						
	7.4	275	176	9980	2.2						
	8.2	250	158	10100	2.4						

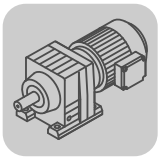
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**3.4**	640	384	6960	0.95						
	3.6	600	359	7550	1.00						
	4.2	515	310	8430	1.15						
	4.9	435	264	9100	1.40	**R**	**67R37**	**DR**	**63L4**	41	280
	5.5	385	235	9420	1.55	**RF**	**67R37**	**DR**	**63L4**	44	280
	6.5	325	201	9750	1.85						
	7.2	295	181	9900	2.0						
	4.1	515	319	6050	0.85						
	4.8	435	273	7160	1.05						
	5.4	380	241	7380	1.20						
	6.0	340	215	7510	1.30	**R**	**57R37**	**DR**	**63L4**	35	280
	7.0	300	187	7630	1.50	**RF**	**57R37**	**DR**	**63L4**	38	280
	7.9	260	164	7730	1.75						
	9.2	225	142	7800	2.00						
	4.0	540	324	4980	0.85						
	4.5	480	290	6950	0.95						
	5.0	435	262	7160	1.05	**R**	**57R37**	**DR**	**63L4**	34	280
	5.3	405	246	7280	1.10	**RF**	**57R37**	**DR**	**63L4**	37	280
	5.9	360	220	7440	1.25						
	5.7	370	228	2440	0.80						
	6.7	315	195	5320	0.95	**R**	**47R37**	**DR**	**63L4**	29	280
	7.1	295	182	5440	1.00	**RF**	**47R37**	**DR**	**63L4**	29	280
	8.5	245	154	5680	1.20						
	8.7	245	150	2540	0.80						
	10	210	130	4790	0.95						
	10	200	124	4930	1.00	**R**	**37R17**	**DR**	**63L4**	18	280
	12	178	110	5200	1.10	**RF**	**37R17**	**DR**	**63L4**	19	280
	14	152	94	5460	1.30						
	9.7	220	135	4660	0.90						
	10	210	127	4770	0.95	**R**	**37R17**	**DR**	**63L4**	18	280
	12	174	104	5250	1.15	**RF**	**37R17**	**DR**	**63L4**	19	280
	14	150	90	5470	1.35						
	4.6	520	195.24*	12000	1.55	**R**	**77**	**DRS**	**71S6**	39	264
	5.4	440	166.59	12300	1.85	**RF**	**77**	**DRS**	**71S6**	45	265
	6.1	385	145.67	12500	2.1	**RM**	**77**	**DRS**	**71S6**	70	265
	6.7	355	195.24*	12600	2.3						
	7.8	305	166.59	12800	2.7						
	8.9	265	145.67	12900	3.1	**R**	**77**	**DR**	**63L4**	38	264
	9.4	250	138.39	12900	3.2	**RF**	**77**	**DR**	**63L4**	43	265
	11	220	121.42	13000	3.7						
	4.5	530	199.81	8280	1.15						
	4.9	490	184.07	8660	1.20						
	5.7	420	158.14	9190	1.40	**R**	**67**	**DRS**	**71S6**	32	261
	6.5	365	137.67	9540	1.65	**RF**	**67**	**DRS**	**71S6**	35	262
	6.9	340	128.97	9670	1.75	**RM**	**67**	**DRS**	**71S6**	51	262
	7.8	300	113.94	9870	1.95						
	8.5	280	105.83	9960	2.1						
	6.5	365	199.81	9540	1.65						
	7.1	335	184.07	9700	1.80						
	8.2	290	158.14	9930	2.1						
	9.4	250	137.67	10100	2.4						
	10	235	128.97	10100	2.5	**R**	**67**	**DR**	**63L4**	30	261
	11	205	113.94	10200	2.9	**RF**	**67**	**DR**	**63L4**	34	262
	12	194	105.83	10300	3.1						
	14	176	95.91	10300	3.4						
	15	158	86.11	10400	3.8						
	4.8	495	186.89	6760	0.90						
	5.2	455	172.17	7060	1.00						
	6.0	390	147.92	7330	1.15	**R**	**57**	**DRS**	**71S6**	26	258
	7.0	340	128.77	7500	1.30	**RF**	**57**	**DRS**	**71S6**	29	259
	7.4	320	120.63	7570	1.40	**RM**	**57**	**DRS**	**71S6**	41	259
	8.4	280	106.58	7670	1.60						
	9.0	260	98.99	7720	1.70						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**7.0**	340	186.89	7500	1.30						
	7.6	315	172.17	7580	1.40						
	8.8	270	147.92	7700	1.65						
	10	235	128.77	7780	1.90						
	11	220	120.63	7810	2.0	**R**	**57**	**DR**	**63L4**	24	258
	12	196	106.58	7860	2.3	**RF**	**57**	**DR**	**63L4**	27	259
	13	182	98.99	7880	2.5						
	14	165	89.71	7910	2.7						
	16	148	80.55	7930	3.0						
	19	127	69.23	7960	3.5						
	7.4	320	176.88	5280	0.90						
	8.0	295	162.94	5420	1.00						
	9.3	255	139.99	5630	1.15						
	11	220	121.87	5770	1.35						
	11	205	114.17	5820	1.45						
	13	185	100.86	5900	1.60						
	14	172	93.68	5940	1.75	**R**	**47**	**DR**	**63L4**	19	255
	15	156	84.90	5980	1.90	**RF**	**47**	**DR**	**63L4**	19	256
	17	140	76.23	6020	2.1						
	19	126	68.54	6050	2.4						
	20	118	64.21	6070	2.5						
	23	104	56.73	6090	2.9						
	25	97	52.69	6100	3.1						
	27	88	47.75	6080	3.4						
	9.6	245	134.82	2630	0.80						
	11	225	123.66	4560	0.90						
	12	193	105.28	5030	1.05						
	14	167	90.77	5320	1.20						
	15	155	84.61	5420	1.30						
	18	136	73.96	5580	1.45						
	19	127	69.33	5650	1.55	**R**	**37**	**DR**	**63L4**	15	252
	21	112	61.18	5750	1.80	**RF**	**37**	**DR**	**63L4**	16	253
	23	102	55.76	5800	1.95						
	27	88	48.08	5870	2.3						
	29	82	44.81	5760	2.4						
	33	72	39.17	5540	2.8						
	35	67	36.72	5430	3.0						
	40	60	32.40	5230	3.4						
	15	156	84.78	4100	0.85						
	18	136	74.11	4210	0.95						
	19	128	69.47	4240	1.00						
	21	113	61.30	4180	1.15						
	23	103	55.87	4090	1.25						
	27	88	48.17	3940	1.45	**R**	**27**	**DR**	**63L4**	9.0	249
	29	82	44.90	3870	1.60	**RF**	**27**	**DR**	**63L4**	8.9	250
	33	72	39.25	3730	1.80						
	35	68	36.79	3660	1.90						
	40	60	32.47	3540	2.2						
	45	53	28.78	3420	2.5						
	53	45	24.47	3270	2.9						
	46	52	28.37	3410	2.5						
	50	48	26.09	3330	2.7						
	58	41	22.32	3180	3.2						
	67	36	19.35	3050	3.7						
	72	33	18.08	2990	3.9						
	83	29	15.63	2860	4.5						
	98	24	13.28*	2730	5.3						
	110	22	11.86	2630	5.9						
	128	19	10.13	2510	6.6	**R**	**27**	**DR**	**63L4**	8.7	249
	138	17	9.41	2440	7.0	**RF**	**27**	**DR**	**63L4**	8.6	250
	159	15	8.16	2330	7.7						
	170	14	7.63*	2280	8.0						
	197	12	6.59	2180	8.8						
	232	10	5.60*	2080	9.6						
	260	9.2	5.00*	2000	10						
	304	7.8	4.27	1900	11						
	325	7.3	4.00*	1870	12						
	386	6.2	3.37	1770	13						

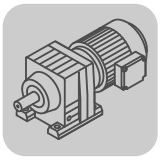


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**23**	105	57.35	156	0.80						
	24	99	53.76	785	0.85						
	27	87	47.44	1630	1.00						
	29	81	44.18	2000	1.05						
	34	71	38.61	2200	1.20	**R**	**17**	**DR**	**63L4**	8.3	246
	36	66	36.20	2180	1.30	**RF**	**17**	**DR**	**63L4**	8.2	247
	41	59	31.94	2120	1.45						
	46	52	28.32	2070	1.65						
	54	44	24.07	2000	1.90						
	52	46	25.23	2020	1.85						
	56	42	23.15	1980	2.0						
	66	36	19.71	1910	2.4						
	77	31	16.99	1840	2.7	**R**	**17**	**DR**	**63L4**	8.0	246
	82	29	15.84	1810	2.9	**RF**	**17**	**DR**	**63L4**	7.9	247
	94	25	13.84	1740	3.4						
	100	24	12.98	1720	3.6						
	114	21	11.45	1660	3.9						
	38	62	34.05	1090	0.80						
	45	53	29.08	1200	0.95						
	48	50	26.97	1190	1.00	**R**	**07**	**DR**	**63L4**	7.2	243
	56	43	23.32	1170	1.15	**RF**	**07**	**DR**	**63L4**	7.2	244
	60	40	21.73	1160	1.25						
	71	34	18.31	1120	1.50						
	78	31	16.73	1100	1.65						
	92	26	14.12	1070	1.95						
	108	22	12.06	1030	2.3						
	116	20	11.18	1010	2.4						
	134	18	9.67	980	2.8						
	144	16	9.01	960	3.0						
	166	14	7.85	930	3.4	**R**	**07**	**DR**	**63L4**	7.0	243
	174	14	7.48	920	3.1	**RF**	**07**	**DR**	**63L4**	7.0	244
	190	12	6.83	900	3.4						
	226	11	5.76	860	3.8						
	264	9.0	4.92	820	4.1						
	285	8.4	4.57	800	4.3						
	329	7.3	3.95	770	4.7						
	353	6.8	3.68	755	4.8						
	405	5.9	3.21	725	5.2						
	238	10	11.18	840	5.0						
	275	8.7	9.67	810	5.8						
	295	8.1	9.01	795	6.2						
	339	7.0	7.85	765	7.0						
	356	6.7	7.48	755	6.4						
	389	6.1	6.83	735	7.0	**R**	**07**	**DR**	**63M2**	6.3	243
	461	5.2	5.76	700	7.7	**RF**	**07**	**DR**	**63M2**	6.3	244
	540	4.4	4.92	665	8.4						
	583	4.1	4.57	650	8.8						
	674	3.5	3.95	625	9.7						
	723	3.3	3.68	610	10						
	829	2.9	3.21	585	11						
	148	16	6.07	4860	2.6						
	173	14	5.18	4620	5.4	**RX**	**67**	**DRS**	**71S6**	19	233
	198	12	4.53	4420	6.8	**RXF**	**67**	**DRS**	**71S6**	23	234
	208	12	4.30*	4350	7.0						
	214	11	6.07	4310	3.9						
	251	9.5	5.18	4100	7.9						
	287	8.3	4.53	3920	9.9						
	302	7.9	4.30*	3860	10						
	345	6.9	3.77	3700	13	**RX**	**67**	**DR**	**63L4**	17	233
	406	5.9	3.20*	3500	17	**RXF**	**67**	**DR**	**63L4**	21	234
	450	5.3	2.89	3390	20						
	511	4.7	2.54	3250	25						
	542	4.4	2.40*	3190	28						
	636	3.8	2.04	3020	35						
	163	15	5.50*	3820	2.6						
	177	14	5.07	3720	2.7	**RX**	**57**	**DRS**	**71S6**	16	231
	206	12	4.35	3540	5.9	**RXF**	**57**	**DRS**	**71S6**	18	232
	236	10	3.79	3390	6.8						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**236**	10	5.50*	3390	3.9						
	257	9.3	5.07	3300	3.9						
	299	8.0	4.35	3150	8.5						
	343	7.0	3.79	3010	9.9						
	366	6.5	3.55*	2950	11						
	414	5.8	3.14	2830	11	**RX**	**57**	**DR**	**63L4**	14	231
	446	5.3	2.91	2760	13	**RXF**	**57**	**DR**	**63L4**	16	232
	492	4.8	2.64*	2680	14						
	548	4.4	2.37	2580	16						
	637	3.7	2.04	2460	19						
	677	3.5	1.92*	2410	20						
	787	3.0	1.65	2300	23						
0.37	**0.19**	15900	7307	37500	0.80						
	0.21	14000	6447	60400	0.90						
	0.25	12100	5568	64300	1.05						
	0.28	10900	4926	66400	1.20	**R**	**147R77**	**DRS**	**71S4**	425	280
	0.32	9470	4325	68500	1.35	**RF**	**147R77**	**DRS**	**71S4**	430	280
	0.37	8310	3754	70000	1.55	**RM**	**147R77**	**DRS**	**71S4**	600	280
	0.42	7230	3302	71100	1.80						
	0.48	6320	2898	71900	2.1						
	0.31	9730	4464	36000	0.80	**R**	**137R77**	**DRS**	**71S4**	290	280
	0.35	8570	3928	51500	0.95	**RF**	**137R77**	**DRS**	**71S4**	315	280
						RM	**137R77**	**DRS**	**71S4**	425	280
	0.34	9080	4018	48100	0.90						
	0.39	7940	3514	53500	1.00						
	0.41	7540	3338	54300	1.05	**R**	**137R77**	**DRS**	**71S4**	280	280
	0.47	6610	2929	56000	1.20	**RF**	**137R77**	**DRS**	**71S4**	305	280
	0.56	5600	2484	57600	1.45	**RM**	**137R77**	**DRS**	**71S4**	415	280
	0.62	5020	2242	58400	1.60						
	0.52	5990	2658	57000	1.35						
	0.57	5440	2412	57800	1.45						
	0.67	4670	2073	58800	1.70						
	0.75	4060	1839	59400	1.95	**R**	**137R77**	**DRS**	**71S4**	290	280
	0.99	3130	1397	60200	2.6	**RF**	**137R77**	**DRS**	**71S4**	315	280
	1.1	2710	1226	60500	2.9	**RM**	**137R77**	**DRS**	**71S4**	425	280
	1.3	2440	1090	60700	3.3						
	1.4	2130	951	60900	3.8						
	0.67	4660	2067	27300	0.90						
	0.82	3790	1693	31900	1.15						
	0.89	3420	1550	33500	1.25	**R**	**107R77**	**DRS**	**71S4**	200	280
	0.98	3100	1407	34600	1.40	**RF**	**107R77**	**DRS**	**71S4**	205	280
	1.1	2660	1209	35900	1.60	**RM**	**107R77**	**DRS**	**71S4**	290	280
	1.3	2330	1055	36400	1.85						
	0.69	4450	1987	28600	0.95						
	0.76	4030	1827	30800	1.05						
	0.86	3490	1599	33200	1.25	**R**	**107R77**	**DRS**	**71S4**	205	280
	0.99	3090	1400	34600	1.40	**RF**	**107R77**	**DRS**	**71S4**	210	280
	1.1	2670	1226	35900	1.60	**RM**	**107R77**	**DRS**	**71S4**	295	280
	1.5	2070	939	36700	2.1						
	1.7	1790	822	37000	2.4						
	1.1	2760	1207	22500	1.10	**R**	**97R57**	**DRS**	**71S4**	130	280
	1.3	2460	1084	24300	1.20	**RF**	**97R57**	**DRS**	**71S4**	145	280
						RM	**97R57**	**DRS**	**71S4**	195	280
	0.99	3170	1396	10800	0.95						
	1.1	2770	1228	22500	1.10						
	1.3	2470	1069	24200	1.20						
	1.5	2160	938	25700	1.40						
	1.7	1860	824	26900	1.60	**R**	**97R57**	**DRS**	**71S4**	130	280
	1.9	1660	737	27400	1.80	**RF**	**97R57**	**DRS**	**71S4**	145	280
	2.2	1420	632	27700	2.1	**RM**	**97R57**	**DRS**	**71S4**	200	280
	3.2	980	431	28200	3.1						
	3.6	850	379	28300	3.5						
	4.1	765	336	28400	3.9						
	1.7	1810	802	13800	0.85	**R**	**87R57**	**DRS**	**71S4**	87	280
	1.8	1690	754	15800	0.90	**RF**	**87R57**	**DRS**	**71S4**	94	280
	2.1	1440	649	17600	1.05	**RM**	**87R57**	**DRS**	**71S4**	125	280

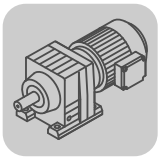
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**1.8**	1770	776	15100	0.85						
	2.0	1560	685	16800	1.00						
	2.3	1330	599	18300	1.15	**R**	**87R57**	**DRS**	**71S4**	88	280
	2.6	1170	525	19100	1.30	**RF**	**87R57**	**DRS**	**71S4**	95	280
	3.0	1020	456	19700	1.50	**RM**	**87R57**	**DRS**	**71S4**	125	280
	5.2	595	268	20000	2.6						
	5.8	525	236	20000	2.9						
	2.6	1260	538	18700	1.25						
	2.9	1100	472	19400	1.40	**R**	**87R57**	**DRS**	**71S4**	86	280
	3.4	920	400	20000	1.65	**RF**	**87R57**	**DRS**	**71S4**	93	280
	3.8	830	361	20000	1.85	**RM**	**87R57**	**DRS**	**71S4**	125	280
	3.7	860	373	9520	0.95						
	4.2	755	327	10500	1.10						
	4.8	670	289	11100	1.20						
	5.3	600	260	11600	1.35	**R**	**77R37**	**DRS**	**71S4**	49	280
	6.2	505	224	12000	1.60	**RF**	**77R37**	**DRS**	**71S4**	55	280
	7.0	445	197	12300	1.85	**RM**	**77R37**	**DRS**	**71S4**	80	280
	8.2	385	169	12500	2.1						
	9.3	340	149	12700	2.4						
	4.7	665	294	4670	0.90						
	5.3	600	261	7550	1.00	**R**	**67R37**	**DRS**	**71S4**	43	280
	5.9	535	234	8220	1.10	**RF**	**67R37**	**DRS**	**71S4**	47	280
	6.9	455	200	8930	1.30	**RM**	**67R37**	**DRS**	**71S4**	62	280
	3.1	1130	289.74	28100	2.6						
	3.5	990	255.71	28200	3.0	**R**	**97**	**DRS**	**71M6**	110	270
	3.8	940	241.25	28300	3.2	**RF**	**97**	**DRS**	**71M6**	125	271
	4.2	840	216.28	28400	3.6	**RM**	**97**	**DRS**	**71M6**	175	271
	3.7	960	246.54	20000	1.60						
	4.2	840	216.54	20000	1.85						
	4.4	800	205.71	20000	1.95	**R**	**87**	**DRS**	**71M6**	67	267
	5.0	705	181.77	20000	2.2	**RF**	**87**	**DRS**	**71M6**	74	268
	5.8	605	155.34	20000	2.6	**RM**	**87**	**DRS**	**71M6**	105	268
	6.4	555	142.41	20000	2.8						
	5.4	650	166.59	11200	1.25	**R**	**77**	**DRS**	**71M6**	41	264
	6.2	565	145.67	11700	1.45	**RF**	**77**	**DRS**	**71M6**	46	265
	6.5	540	138.39	11900	1.50	**RM**	**77**	**DRS**	**71M6**	71	265
	7.1	495	195.24*	12100	1.65						
	8.3	425	166.59	12400	1.90						
	9.5	370	145.67	12600	2.2	**R**	**77**	**DRS**	**71S4**	39	264
	10.0	350	138.39	12600	2.3	**RF**	**77**	**DRS**	**71S4**	45	265
	11	310	121.42	12800	2.6	**RM**	**77**	**DRS**	**71S4**	70	265
	13	260	102.99	12900	3.1						
	15	235	92.97	12900	3.4						
	5.7	615	158.14	7350	0.95						
	6.6	535	137.67	8240	1.10	**R**	**67**	**DRS**	**71M6**	34	261
	7.0	500	128.97	8550	1.20	**RF**	**67**	**DRS**	**71M6**	37	262
	7.9	440	113.94	9030	1.35	**RM**	**67**	**DRS**	**71M6**	52	262
	6.9	510	199.81	8480	1.15						
	7.5	470	184.07	8820	1.25						
	8.7	400	158.14	9300	1.50						
	10	350	137.67	9620	1.70						
	11	330	128.97	9740	1.80						
	12	290	113.94	9920	2.1	**R**	**67**	**DRS**	**71S4**	32	261
	13	270	105.83	10000	2.2	**RF**	**67**	**DRS**	**71S4**	35	262
	14	245	95.91	10100	2.4	**RM**	**67**	**DRS**	**71S4**	51	262
	16	220	86.11	10200	2.7						
	19	190	74.17	10300	3.2						
	20	179	69.75	10300	3.4						
	23	157	61.26	10400	3.8						
	24	146	56.89	10400	4.1						
	7.0	500	128.77	6610	0.90						
	7.5	470	120.63	7010	0.95	**R**	**57**	**DRS**	**71M6**	27	258
	8.5	415	106.58	7250	1.10	**RF**	**57**	**DRS**	**71M6**	30	259
	9.1	385	98.99	7360	1.15	**RM**	**57**	**DRS**	**71M6**	42	259



R..DRS
R..DRS [kW]

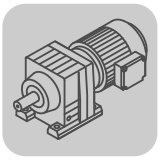
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**7.4**	475	186.89	6980	0.95						
	8.0	440	172.17	7140	1.00						
	9.3	375	147.92	7380	1.20						
	11	325	128.77	7540	1.35						
	11	305	120.63	7610	1.45						
	13	270	106.58	7700	1.65						
	14	250	98.99	7740	1.80	**R**	**57**	**DRS**	**71S4**	26	258
	15	225	89.71	7800	1.95	**RF**	**57**	**DRS**	**71S4**	29	259
	17	205	80.55	7840	2.2	**RM**	**57**	**DRS**	**71S4**	41	259
	20	177	69.23	7890	2.5						
	21	166	64.85	7910	2.7						
	24	147	57.29	7760	3.1						
	26	136	53.22	7600	3.3						
	29	124	48.23	7380	3.6						
	9.9	355	139.99	3490	0.85						
	11	310	121.87	5350	0.95						
	12	290	114.17	5460	1.05						
	14	255	100.86	5620	1.15						
	15	235	93.68	5700	1.25						
	16	215	84.90	5790	1.40						
	18	195	76.23	5870	1.55						
	20	176	68.54	5930	1.70	**R**	**47**	**DRS**	**71S4**	20	255
	21	164	64.21	5960	1.80	**RF**	**47**	**DRS**	**71S4**	20	256
	24	145	56.73	6010	2.1						
	26	135	52.69	5990	2.2						
	29	122	47.75	5820	2.4						
	32	110	42.87	5650	2.7						
	37	94	36.93	5410	3.2						
	40	89	34.73	5310	3.4						
	41	86	33.79	5270	2.8						
	44	80	31.12	5140	2.8						
	52	68	26.74	4920	4.4	**R**	**47**	**DRS**	**71S4**	20	255
	59	60	23.28	4720	5.0	**RF**	**47**	**DRS**	**71S4**	20	256
	63	56	21.81	4620	5.4						
	15	230	90.77	4250	0.85						
	16	215	84.61	4720	0.90	**R**	**37**	**DRS**	**71S4**	17	252
	19	189	73.96	5070	1.05	**RF**	**37**	**DRS**	**71S4**	18	253
	20	178	69.33	5210	1.15						
	23	157	61.18	5410	1.30						
	25	143	55.76	5530	1.40						
	29	123	48.08	5580	1.60						
	31	115	44.81	5480	1.75	**R**	**37**	**DRS**	**71S4**	17	252
	35	100	39.17	5280	2.00	**RF**	**37**	**DRS**	**71S4**	18	253
	38	94	36.72	5190	2.1						
	43	83	32.40	5010	2.4						
	48	74	28.73	4850	2.7						
	57	62	24.42	4620	3.2						
	49	72	28.32	4830	2.8						
	53	67	26.03	4710	2.8						
	62	57	22.27	4500	3.5	**R**	**37**	**DRS**	**71S4**	17	252
	71	49	19.31	4320	4.0	**RF**	**37**	**DRS**	**71S4**	18	253
	76	46	18.05	4230	4.3						
	88	40	15.60	4050	5.0						
	104	34	13.25	3850	5.6	**R**	**37**	**DRS**	**71S4**	17	252
	117	30	11.83	3720	6.0	**RF**	**37**	**DRS**	**71S4**	18	253
	23	157	61.30	3870	0.85						
	25	143	55.87	3800	0.90						
	29	123	48.17	3680	1.05						
	31	115	44.90	3620	1.15						
	35	100	39.25	3510	1.30	**R**	**27**	**DRS**	**71S4**	11	249
	38	94	36.79	3460	1.40	**RF**	**27**	**DRS**	**71S4**	11	250
	42	83	32.47	3350	1.55						
	48	74	28.78	3250	1.75						
	56	63	24.47	3110	2.1						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**49**	73	28.37	3240	1.80						
	53	67	26.09	3170	1.95						
	62	57	22.32	3040	2.3						
	71	50	19.35	2920	2.6	**R**	**27**	**DRS**	**71S4**	11	249
	76	46	18.08	2860	2.8	**RF**	**27**	**DRS**	**71S4**	11	250
	88	40	15.63	2750	3.2						
	104	34	13.28*	2620	3.8						
	36	99	38.61	770	0.85						
	38	93	36.20	1260	0.90						
	43	82	31.94	1910	1.05	**R**	**17**	**DRS**	**71S4**	10	246
	49	72	28.32	1880	1.15	**RF**	**17**	**DRS**	**71S4**	10.0	247
	57	62	24.07	1830	1.40						
	55	65	25.23	1840	1.30						
	60	59	23.15	1820	1.45						
	70	50	19.71	1760	1.70						
	81	44	16.99	1710	1.95						
	87	40	15.84	1680	2.1						
	100	35	13.84	1630	2.4						
	106	33	12.98	1610	2.6						
	121	29	11.45	1560	2.8						
	136	26	10.15	1520	3.0	**R**	**17**	**DRS**	**71S4**	9.8	246
	160	22	8.63	1460	3.3	**RF**	**17**	**DRS**	**71S4**	9.7	247
	183	19	7.55	1370	2.9						
	196	18	7.04	1350	3.1						
	224	16	6.15	1300	3.4						
	239	15	5.76	1280	3.6						
	271	13	5.09	1240	3.9						
	306	12	4.51	1200	4.2						
	360	9.8	3.83	1140	4.6						
	75	47	18.31	1000	1.05						
	82	43	16.73	980	1.15						
	98	36	14.12	960	1.40						
	114	31	12.06	940	1.60						
	123	29	11.18	930	1.75						
	143	25	9.67	900	2.0						
	153	23	9.01	890	2.2						
	176	20	7.85	860	2.4	**R**	**07**	**DRS**	**71S4**	8.8	243
	185	19	7.48	860	2.2	**RF**	**07**	**DRS**	**71S4**	8.8	244
	202	18	6.83	840	2.5						
	239	15	5.76	810	2.7						
	280	13	4.92	780	2.9						
	302	12	4.57	765	3.1						
	350	10	3.95	735	3.4						
	375	9.4	3.68	720	3.5						
	430	8.2	3.21	695	3.8						
	274	13	9.67	780	3.9						
	294	12	9.01	765	4.2						
	337	10	7.85	740	4.7						
	354	10	7.48	730	4.3						
	388	9.1	6.83	715	4.7						
	460	7.7	5.76	680	5.2	**R**	**07**	**DR**	**63L2**	7.0	243
	538	6.6	4.92	650	5.6	**RF**	**07**	**DR**	**63L2**	7.0	244
	580	6.1	4.57	640	5.9						
	671	5.3	3.95	610	6.4						
	720	4.9	3.68	600	6.7						
	826	4.3	3.21	575	7.2						
	175	20	5.18	4560	3.7						
	200	18	4.53	4370	4.6	**RX**	**67**	**DRS**	**71M6**	20	233
	210	17	4.30*	4300	4.8	**RXF**	**67**	**DRS**	**71M6**	24	234
	240	15	3.77	4130	5.9						
	227	16	6.07	4200	2.8						
	267	13	5.18	3990	5.6						
	305	12	4.53	3820	7.1						
	321	11	4.30*	3760	7.3						
	366	9.7	3.77	3600	9.0	**RX**	**67**	**DRS**	**71S4**	19	233
	431	8.2	3.20*	3420	12	**RXF**	**67**	**DRS**	**71S4**	23	234
	478	7.4	2.89	3310	14						
	543	6.5	2.54	3170	18						
	575	6.1	2.40*	3110	20						
	675	5.2	2.04	2950	26						

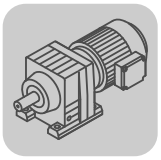


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**208**	17	4.35	3490	4.0	**RX**	**57**	**DRS**	**71M6**	17	231
	239	15	3.79	3340	4.7	**RXF**	**57**	**DRS**	**71M6**	19	232
	255	14	3.55*	3280	5.0						
	251	14	5.50*	3300	2.8						
	272	13	5.07	3210	2.8						
	317	11	4.35	3060	6.1						
	364	9.7	3.79	2930	7.1						
	389	9.1	3.55*	2870	7.6						
	440	8.0	3.14	2760	8.1	**RX**	**57**	**DRS**	**71S4**	16	231
	474	7.5	2.91	2690	8.9	**RXF**	**57**	**DRS**	**71S4**	18	232
	523	6.8	2.64*	2610	10						
	582	6.1	2.37	2520	11						
	676	5.2	2.04	2400	13						
	719	4.9	1.92*	2350	14						
	835	4.2	1.65	2240	16						
0.55	**0.23**	19500	6077	120000	0.90	**R**	**167R97**	**DRS**	**71M4**	760	280
	0.26	17300	5407	120000	1.05	**RF**	**167R97**	**DRS**	**71M4**	760	280
	0.30	14700	4650	120000	1.20	**RM**	**167R97**	**DRS**	**71M4**	960	280
	0.33	12800	4129	120000	1.40						
	0.28	16600	4926	26700	0.80						
	0.32	14400	4325	56500	0.90	**R**	**147R77**	**DRS**	**71M4**	425	280
	0.37	12600	3754	63300	1.05	**RF**	**147R77**	**DRS**	**71M4**	430	280
	0.42	11000	3302	66200	1.20	**RM**	**147R77**	**DRS**	**71M4**	600	280
	0.48	9670	2898	68200	1.35						
	0.54	8750	2555	69400	1.50						
	0.62	7580	2211	70800	1.70						
	0.71	6680	1951	71600	1.95	**R**	**147R77**	**DRS**	**71M4**	425	280
	0.81	5720	1705	72400	2.3	**RF**	**147R77**	**DRS**	**71M4**	430	280
	0.90	5120	1536	72900	2.5	**RM**	**147R77**	**DRS**	**71M4**	600	280
	1.0	4430	1329	73300	2.9						
	1.2	3850	1166	73600	3.4						
						R	**137R77**	**DRS**	**71M4**	280	280
	0.56	8510	2484	51800	0.95	**RF**	**137R77**	**DRS**	**71M4**	305	280
						RM	**137R77**	**DRS**	**71M4**	415	280
	0.52	9110	2658	47600	0.90						
	0.57	8260	2412	52800	0.95						
	0.67	7100	2073	55200	1.15						
	0.75	6210	1839	56700	1.30						
	0.86	5330	1598	58000	1.50	**R**	**137R77**	**DRS**	**71M4**	290	280
	0.99	4760	1397	58700	1.70	**RF**	**137R77**	**DRS**	**71M4**	315	280
	1.1	4150	1226	59300	1.90	**RM**	**137R77**	**DRS**	**71M4**	425	280
	1.3	3710	1090	59800	2.2						
	1.4	3240	951	60200	2.5						
	1.7	2770	831	60500	2.9						
	0.98	4750	1407	24800	0.90						
	1.1	4080	1209	30600	1.05						
	1.3	3560	1055	32900	1.20	**R**	**107R77**	**DRS**	**71M4**	200	280
	1.5	3110	919	34600	1.40	**RF**	**107R77**	**DRS**	**71M4**	205	280
	1.7	2780	815	35600	1.55	**RM**	**107R77**	**DRS**	**71M4**	295	280
	1.9	2430	717	36300	1.75						
	2.2	2120	626	36600	2.0						
	0.99	4730	1400	25600	0.90						
	1.1	4110	1226	30400	1.05	**R**	**107R77**	**DRS**	**71M4**	205	280
	1.2	3680	1104	32400	1.15	**RF**	**107R77**	**DRS**	**71M4**	210	280
	1.5	3170	939	34400	1.35	**RM**	**107R77**	**DRS**	**71M4**	300	280
	1.7	2750	822	35700	1.55						
	1.7	2820	824	22100	1.05						
	1.9	2530	737	23900	1.20						
	2.2	2160	632	25700	1.40						
	2.5	1880	560	26800	1.60						
	2.8	1640	484	27400	1.85	**R**	**97R57**	**DRS**	**71M4**	130	280
	3.2	1480	431	27700	2.0	**RF**	**97R57**	**DRS**	**71M4**	150	280
	3.6	1300	379	27900	2.3	**RM**	**97R57**	**DRS**	**71M4**	200	280
	4.1	1160	336	28100	2.6						
	4.7	1010	296	28200	3.0						
	5.5	840	249	28400	3.6						

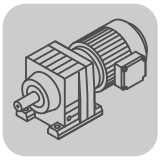


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**2.6**	1780	525	15000	0.85						
	3.0	1550	456	16900	1.00	**R**	**87R57**	**DRS**	**71M4**	89	280
	3.5	1340	398	18200	1.15	**RF**	**87R57**	**DRS**	**71M4**	96	280
	3.9	1190	352	19000	1.30	**RM**	**87R57**	**DRS**	**71M4**	125	280
	4.5	1020	305	19700	1.50						
	2.9	1660	472	16100	0.95	**R**	**87R57**	**DRS**	**71M4**	87	280
	3.4	1400	400	17900	1.10	**RF**	**87R57**	**DRS**	**71M4**	95	280
	3.8	1260	361	18700	1.25	**RM**	**87R57**	**DRS**	**71M4**	125	280
	5.0	970	276	6200	0.85						
	5.8	820	236	9850	1.00	**R**	**77R37**	**DRS**	**71M4**	49	280
	6.2	770	221	10300	1.05	**RF**	**77R37**	**DRS**	**71M4**	55	280
	7.4	645	186	11300	1.25	**RM**	**77R37**	**DRS**	**71M4**	80	280
	3.2	1660	289.74	27400	1.80						
	3.6	1460	255.71	27700	2.0	**R**	**97**	**DRS**	**80S6**	110	270
	3.8	1380	241.25	27800	2.2	**RF**	**97**	**DRS**	**80S6**	130	271
	4.2	1240	216.28	28000	2.4	**RM**	**97**	**DRS**	**80S6**	180	271
	4.8	1100	289.74	28100	2.7						
	5.4	970	255.71	28200	3.1	**R**	**97**	**DRS**	**71M4**	110	270
	5.7	910	241.25	28300	3.3	**RF**	**97**	**DRS**	**71M4**	125	271
	6.4	820	216.28	28400	3.6	**RM**	**97**	**DRS**	**71M4**	175	271
	3.7	1410	246.54	17800	1.10						
	4.2	1240	216.54	18800	1.25	**R**	**87**	**DRS**	**80S6**	69	267
	4.4	1180	205.71	19100	1.30	**RF**	**87**	**DRS**	**80S6**	76	268
	5.0	1040	181.77	19700	1.50	**RM**	**87**	**DRS**	**80S6**	105	268
	5.9	890	155.34	20000	1.75						
	5.6	930	246.54	20000	1.65						
	6.4	820	216.54	20000	1.90						
	6.7	780	205.71	20000	2.00						
	7.6	690	181.77	20000	2.2	**R**	**87**	**DRS**	**71M4**	67	267
	8.9	590	155.34	20000	2.6	**RF**	**87**	**DRS**	**71M4**	74	268
	9.7	540	142.41	20000	2.9	**RM**	**87**	**DRS**	**71M4**	105	268
	11	475	124.97	20000	3.3						
	12	450	118.43*	20000	3.4						
	13	390	103.65	20000	3.9						
	8.3	630	166.59	11400	1.30						
	9.5	550	145.67	11800	1.50						
	10.0	525	138.39	12000	1.55						
	11	460	121.42	12200	1.75	**R**	**77**	**DRS**	**71M4**	41	264
	13	390	102.99	12500	2.1	**RF**	**77**	**DRS**	**71M4**	46	265
	15	350	92.97	12600	2.3	**RM**	**77**	**DRS**	**71M4**	71	265
	17	310	81.80	12800	2.6						
	18	290	77.24	12800	2.8						
	21	250	65.77	12900	3.3						
	8.7	600	158.14	7540	1.00						
	10	520	137.67	8360	1.15						
	11	490	128.97	8660	1.20						
	12	430	113.94	9110	1.40						
	13	400	105.83	9320	1.50	**R**	**67**	**DRS**	**71M4**	34	261
	14	365	95.91	9550	1.65	**RF**	**67**	**DRS**	**71M4**	37	262
	16	325	86.11	9750	1.85	**RM**	**67**	**DRS**	**71M4**	52	262
	19	280	74.17	9960	2.1						
	20	265	69.75	10000	2.3						
	23	230	61.26	10200	2.6						
	24	215	56.89	10200	2.8						
	11	455	120.63	7060	1.00						
	13	405	106.58	7290	1.10						
	14	375	98.99	7390	1.20						
	15	340	89.71	7510	1.30						
	17	305	80.55	7610	1.45						
	20	260	69.23	7720	1.70	**R**	**57**	**DRS**	**71M4**	27	258
	21	245	64.85	7750	1.80	**RF**	**57**	**DRS**	**71M4**	30	259
	24	215	57.29	7500	2.1	**RM**	**57**	**DRS**	**71M4**	42	259
	26	200	53.22	7360	2.2						
	29	184	48.23	7160	2.4						
	32	165	43.30	6960	2.7						
	37	142	37.30*	6670	3.2						
	39	134	35.07	6560	3.4						



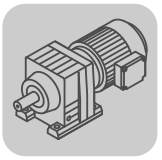
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**52**	100	26.31	6030	4.5	**R**	**57**	**DRS**	**71M4**	26	258
	55	95	24.99*	5940	4.7	**RF**	**57**	**DRS**	**71M4**	29	259
	63	84	21.93	5720	5.4	**RM**	**57**	**DRS**	**71M4**	41	259
	74	71	18.60*	5440	6.4						
	15	355	93.68	3610	0.85						
	16	320	84.90	5290	0.95						
	18	290	76.23	5470	1.05						
	20	260	68.54	5610	1.15						
	21	240	64.21	5690	1.25						
	24	215	56.73	5800	1.40	**R**	**47**	**DRS**	**71M4**	22	255
	26	200	52.69	5750	1.50	**RF**	**47**	**DRS**	**71M4**	22	256
	29	182	47.75	5610	1.65						
	32	163	42.87	5450	1.85						
	37	140	36.93	5240	2.1						
	40	132	34.73	5160	2.3						
	46	114	29.88	4950	2.6						
	52	102	26.74	4800	3.0	**R**	**47**	**DRS**	**71M4**	21	255
	59	89	23.28	4610	3.4	**RF**	**47**	**DRS**	**71M4**	21	256
	63	83	21.81	4520	3.6						
	23	230	61.18	4210	0.85						
	25	210	55.76	4780	0.95						
	29	183	48.08	5150	1.10						
	31	171	44.81	5220	1.15						
	35	149	39.17	5050	1.35	**R**	**37**	**DRS**	**71M4**	18	252
	38	140	36.72	4980	1.45	**RF**	**37**	**DRS**	**71M4**	19	253
	43	123	32.40	4820	1.60						
	48	109	28.73	4680	1.85						
	57	93	24.42	4480	2.2						
	62	85	22.27	4370	2.4						
	71	74	19.31	4200	2.7						
	76	69	18.05	4120	2.9	**R**	**37**	**DRS**	**71M4**	18	252
	88	59	15.60	3960	3.4	**RF**	**37**	**DRS**	**71M4**	19	253
	104	50	13.25	3780	3.8						
	117	45	11.83	3650	4.1						
	35	149	39.25	3270	0.85						
	38	140	36.79	3230	0.95						
	42	124	32.47	3150	1.05	**R**	**27**	**DRS**	**71M4**	12	249
	48	110	28.78	3070	1.20	**RF**	**27**	**DRS**	**71M4**	12	250
	56	93	24.47	2960	1.40						
	62	85	22.32	2900	1.55						
	71	74	19.35	2800	1.75						
	76	69	18.08	2750	1.90						
	88	60	15.63	2650	2.2						
	104	50	13.28*	2540	2.6						
	116	45	11.86	2460	2.9						
	136	38	10.13	2360	3.2						
	147	36	9.41	2280	3.4	**R**	**27**	**DRS**	**71M4**	12	249
	169	31	8.16	2190	3.7	**RF**	**27**	**DRS**	**71M4**	12	250
	181	29	7.63*	2150	3.9						
	209	25	6.59	2070	4.2						
	246	21	5.60*	1970	4.6						
	276	19	5.00*	1910	5.0						
	323	16	4.27	1820	5.3						
	345	15	4.00*	1780	5.6						
	410	13	3.37	1690	6.2						
	52	100	53.76	630	0.85						
	59	89	47.44	1530	0.95	**R**	**17**	**DRS**	**71M2**	11	246
	64	83	44.18	1600	1.05	**RF**	**17**	**DRS**	**71M2**	11	247
	73	72	38.61	1580	1.20						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
0.55	**70**	75	19.71	1580	1.15						
	81	65	16.99	1560	1.30						
	87	60	15.84	1540	1.40						
	100	53	13.84	1510	1.60						
	106	49	12.98	1490	1.70						
	121	44	11.45	1460	1.85						
	136	39	10.15	1430	2.00						
	160	33	8.63	1380	2.2	**R**	**17**	**DRS**	**71M4**	11	246
	183	29	7.55	1290	1.95	**RF**	**17**	**DRS**	**71M4**	11	247
	196	27	7.04	1270	2.0						
	224	23	6.15	1230	2.3						
	239	22	5.76	1220	2.4						
	271	19	5.09	1180	2.6						
	306	17	4.51	1150	2.8						
	360	15	3.83	1100	3.1						
	326	16	8.63	1160	4.5						
	372	14	7.55	1090	4.0	**R**	**17**	**DRS**	**71M2**	11	246
	399	13	7.04	1070	4.2	**RF**	**17**	**DRS**	**71M2**	11	247
	457	12	6.15	1040	4.7						
	153	34	18.31	810	1.45						
	168	31	16.73	795	1.60						
	199	26	14.12	775	1.90						
	233	22	12.06	755	2.2						
	251	21	11.18	745	2.4						
	291	18	9.67	725	2.8						
	312	17	9.01	715	3.0						
	358	15	7.85	690	3.3	**R**	**07**	**DRS**	**71M2**	10	243
	376	14	7.48	685	3.1	**RF**	**07**	**DRS**	**71M2**	10	244
	411	13	6.83	670	3.4						
	487	11	5.76	645	3.7						
	571	9.2	4.92	620	4.0						
	615	8.5	4.57	605	4.2						
	712	7.4	3.95	585	4.6						
	764	6.9	3.68	570	4.8						
	876	6.0	3.21	550	5.2						
	177	30	5.18	4480	2.5						
	202	26	4.53	4300	3.2	**RX**	**67**	**DRS**	**80S6**	22	233
	213	25	4.30*	4230	3.2	**RXF**	**67**	**DRS**	**80S6**	26	234
	243	22	3.77	4060	4.0						
	267	20	5.18	3950	3.8						
	305	17	4.53	3790	4.8						
	321	16	4.30*	3720	4.9						
	366	14	3.77	3570	6.0						
	431	12	3.20*	3390	8.2						
	478	11	2.89	3280	9.6	**RX**	**67**	**DRS**	**71M4**	20	233
	543	9.7	2.54	3150	12	**RXF**	**67**	**DRS**	**71M4**	24	234
	575	9.1	2.40*	3090	14						
	675	7.8	2.04	2940	17						
	743	7.1	1.86	2850	18						
	858	6.1	1.61	2720	19						
	210	25	4.35	3420	2.7						
	241	22	3.79	3280	3.2						
	258	20	3.55*	3220	3.4	**RX**	**57**	**DRS**	**80S6**	20	231
	292	18	3.14	3100	3.6	**RXF**	**57**	**DRS**	**80S6**	22	232
	314	17	2.91	3030	4.0						
	317	17	4.35	3020	4.1						
	364	14	3.79	2890	4.8						
	389	14	3.55*	2840	5.1						
	440	12	3.14	2730	5.5						
	474	11	2.91	2660	6.0						
	523	10	2.64*	2580	6.9	**RX**	**57**	**DRS**	**71M4**	17	231
	582	9.0	2.37	2500	7.7	**RXF**	**57**	**DRS**	**71M4**	19	232
	676	7.8	2.04	2380	8.8						
	719	7.3	1.92*	2330	9.4						
	835	6.3	1.65	2220	11						
	935	5.6	1.48	2140	12						
	1060	5.0	1.30	2060	13						
0.75	**0.30**	20200	4650	120000	0.90	**R**	**167R97**	**DRS**	**80S4**	760	280
	0.34	17700	4129	120000	1.00	**RF**	**167R97**	**DRS**	**80S4**	760	280
						RM	**167R97**	**DRS**	**80S4**	960	280

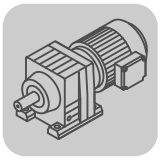


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**0.53**	11800	2657	120000	1.50	**R**	**167R97**	**DRS**	**80S4**	750	280
	0.60	10200	2333	120000	1.75	**RF**	**167R97**	**DRS**	**80S4**	760	280
	0.68	9070	2085	120000	2.00	**RM**	**167R97**	**DRS**	**80S4**	960	280
	0.98	6400	1438	120000	2.8						
	0.43	14900	3302	50700	0.85	**R**	**147R77**	**DRS**	**80S4**	425	280
	0.49	13100	2898	62400	1.00	**RF**	**147R77**	**DRS**	**80S4**	435	280
						RM	**147R77**	**DRS**	**80S4**	600	280
	0.55	11800	2555	64900	1.10						
	0.64	10200	2211	67400	1.25						
	0.72	9020	1951	69100	1.45	**R**	**147R77**	**DRS**	**80S4**	425	280
	0.83	7760	1705	70600	1.65	**RF**	**147R77**	**DRS**	**80S4**	435	280
	0.92	6960	1536	71400	1.85	**RM**	**147R77**	**DRS**	**80S4**	600	280
	1.1	6020	1329	72200	2.2						
	1.2	5250	1166	72800	2.5						
	0.76	8530	1863	51700	0.95	**R**	**137R77**	**DRS**	**80S4**	285	280
	0.89	7220	1586	55000	1.10	**RF**	**137R77**	**DRS**	**80S4**	310	280
	1.0	6430	1391	56300	1.25	**RM**	**137R77**	**DRS**	**80S4**	420	280
	1.1	5790	1256	57300	1.40						
	0.68	9590	2073	39100	0.85						
	0.77	8420	1839	52200	0.95						
	0.88	7240	1598	54900	1.10						
	1.0	6440	1397	56300	1.25	**R**	**137R77**	**DRS**	**80S4**	295	280
	1.2	5620	1226	57600	1.40	**RF**	**137R77**	**DRS**	**80S4**	315	280
	1.3	5020	1090	58400	1.60	**RM**	**137R77**	**DRS**	**80S4**	430	280
	1.5	4380	951	59100	1.80						
	1.7	3770	831	59700	2.1						
	1.9	3280	730	60100	2.4						
	1.3	4830	1055	21800	0.90	**R**	**107R77**	**DRS**	**80S4**	200	280
	1.5	4210	919	29900	1.00	**RF**	**107R77**	**DRS**	**80S4**	210	280
	1.7	3750	815	32100	1.15	**RM**	**107R77**	**DRS**	**80S4**	295	280
	1.5	4290	939	29500	1.00	**R**	**107R77**	**DRS**	**80S4**	205	280
	1.7	3740	822	32200	1.15	**RF**	**107R77**	**DRS**	**80S4**	215	280
	3.8	1670	369	37100	2.6	**RM**	**107R77**	**DRS**	**80S4**	300	280
	4.4	1450	323	37300	3.0						
	2.2	2920	632	21500	1.05						
	2.5	2550	560	23800	1.15						
	2.9	2220	484	25500	1.35						
	3.3	2000	431	26400	1.50	**R**	**97R57**	**DRS**	**80S4**	135	280
	3.7	1750	379	27300	1.70	**RF**	**97R57**	**DRS**	**80S4**	150	280
	4.2	1560	336	27600	1.90	**RM**	**97R57**	**DRS**	**80S4**	200	280
	4.8	1370	296	27800	2.2						
	5.7	1140	249	28100	2.6						
	3.6	1820	398	13000	0.85						
	4.0	1610	352	16400	0.95	**R**	**87R57**	**DRS**	**80S4**	91	280
	4.6	1390	305	17900	1.10	**RF**	**87R57**	**DRS**	**80S4**	98	280
	5.3	1230	268	18800	1.25	**RM**	**87R57**	**DRS**	**80S4**	130	280
	6.0	1080	236	19500	1.45						
	3.9	1690	361	15800	0.90	**R**	**87R57**	**DRS**	**80S4**	90	280
	4.7	1400	300	17900	1.10	**RF**	**87R57**	**DRS**	**80S4**	97	280
	5.5	1190	256	19000	1.30	**RM**	**87R57**	**DRS**	**80S4**	125	280
	3.6	2000	255.71	26400	1.50	**R**	**97**	**DRS**	**80M6**	115	270
	3.8	1880	241.25	26800	1.60	**RF**	**97**	**DRS**	**80M6**	130	271
	4.2	1690	216.28	27400	1.75	**RM**	**97**	**DRS**	**80M6**	180	271
	4.9	1470	289.74	27700	2.0						
	5.5	1290	255.71	27900	2.3						
	5.8	1220	241.25	28000	2.4	**R**	**97**	**DRS**	**80S4**	110	270
	6.5	1090	216.28	28100	2.7	**RF**	**97**	**DRS**	**80S4**	130	271
	7.6	940	186.30	28300	3.2	**RM**	**97**	**DRS**	**80S4**	180	271
	8.3	860	170.02	28300	3.5						
	4.2	1690	216.54	15800	0.90	**R**	**87**	**DRS**	**80M6**	72	267
	4.4	1610	205.71	16500	0.95	**RF**	**87**	**DRS**	**80M6**	79	268
	5.0	1420	181.77	17800	1.10	**RM**	**87**	**DRS**	**80M6**	110	268
	5.9	1210	155.34	18900	1.25	**R**	**87**	**DRS**	**80M6**	72	267
	6.4	1110	142.41	19400	1.40	**RF**	**87**	**DRS**	**80M6**	79	268
						RM	**87**	**DRS**	**80M6**	110	268



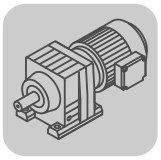
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**5.7**	1250	246.54	18700	1.25						
	6.5	1090	216.54	19400	1.40						
	6.8	1040	205.71	19700	1.50						
	7.8	920	181.77	20000	1.70						
	9.1	785	155.34	20000	1.95	**R**	**87**	**DRS**	**80S4**	69	267
	9.9	720	142.41	20000	2.1	**RF**	**87**	**DRS**	**80S4**	76	268
	11	630	124.97	20000	2.4	**RM**	**87**	**DRS**	**80S4**	105	268
	12	600	118.43*	20000	2.6						
	14	525	103.65	20000	2.9						
	15	470	93.38	20000	3.3						
	8.5	840	166.59	9670	0.95	**R**	**77**	**DRS**	**80S4**	43	264
	9.7	735	145.67	10600	1.10	**RF**	**77**	**DRS**	**80S4**	49	265
	10	700	138.39	10900	1.15	**RM**	**77**	**DRS**	**80S4**	74	265
	12	615	121.42	11500	1.35						
	14	520	102.99	12000	1.55						
	15	470	92.97	12200	1.75						
	17	415	81.80	12400	1.95						
	18	390	77.24	12500	2.1	**R**	**77**	**DRS**	**80S4**	43	264
	21	330	65.77	12700	2.5	**RF**	**77**	**DRS**	**80S4**	49	265
	24	290	57.68	12800	2.8	**RM**	**77**	**DRS**	**80S4**	74	265
	27	260	52.07	12900	3.1						
	31	230	45.81	13000	3.5						
	33	215	43.26	13000	3.7						
	11	655	128.97	5920	0.90						
	12	575	113.94	7800	1.05						
	13	535	105.83	8240	1.10						
	15	485	95.91	8690	1.25						
	16	435	86.11	9080	1.35	**R**	**67**	**DRS**	**80S4**	36	261
	19	375	74.17	9480	1.60	**RF**	**67**	**DRS**	**80S4**	39	262
	20	350	69.75	9610	1.70	**RM**	**67**	**DRS**	**80S4**	55	262
	23	310	61.26	9830	1.95						
	25	285	56.89	9930	2.1						
	27	260	51.56	10000	2.3						
	30	235	46.29	10100	2.6						
	13	540	106.58	5110	0.85						
	14	500	98.99	6610	0.90						
	16	455	89.71	7080	1.00	**R**	**57**	**DRS**	**80S4**	29	258
	18	405	80.55	7270	1.10	**RF**	**57**	**DRS**	**80S4**	33	259
	20	350	69.23	7480	1.30	**RM**	**57**	**DRS**	**80S4**	45	259
	22	325	64.85	7390	1.35						
	25	290	57.29	7180	1.55						
	26	270	53.22	7060	1.65						
	29	245	48.23	6890	1.85						
	33	215	43.30	6700	2.0	**R**	**57**	**DRS**	**80S4**	29	258
	38	189	37.30*	6450	2.4	**RF**	**57**	**DRS**	**80S4**	33	259
	40	178	35.07	6340	2.5	**RM**	**57**	**DRS**	**80S4**	45	259
	47	153	30.18	6090	2.9						
	52	137	26.97	5910	3.3						
	54	134	26.31	5870	3.4						
	56	127	24.99*	5780	3.5	**R**	**57**	**DRS**	**80S4**	28	258
	64	111	21.93	5570	4.0	**RF**	**57**	**DRS**	**80S4**	32	259
	76	94	18.60*	5310	4.8	**RM**	**57**	**DRS**	**80S4**	44	259
	21	345	68.54	4110	0.85						
	22	325	64.21	5270	0.90	**R**	**47**	**DRS**	**80S4**	24	255
	25	285	56.73	5480	1.05	**RF**	**47**	**DRS**	**80S4**	24	256
	27	265	52.69	5460	1.10						
	30	240	47.75	5340	1.25						
	33	215	42.87	5210	1.40						
	38	188	36.93	5030	1.60	**R**	**47**	**DRS**	**80S4**	24	255
	41	176	34.73	4960	1.70	**RF**	**47**	**DRS**	**80S4**	24	256
	47	152	29.88	4770	2.00						
	53	136	26.70	4630	2.2						
	60	120	23.59	4480	2.5						
	53	136	26.74	4640	2.2						
	61	118	23.28	4470	2.5						
	65	111	21.81	4390	2.7	**R**	**47**	**DRS**	**80S4**	23	255
	73	98	19.27	4240	3.0	**RF**	**47**	**DRS**	**80S4**	23	256
	79	91	17.89	4160	3.2						
	87	82	16.22	4040	3.3						



R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**29**	240	48.08	3070	0.80	**R**	**37**	**DRS**	**80S4**	20	252
	31	225	44.81	4430	0.90	**RF**	**37**	**DRS**	**80S4**	22	253
	36	199	39.17	4760	1.00						
	38	186	36.72	4710	1.05						
	44	165	32.40	4590	1.20	**R**	**37**	**DRS**	**80S4**	20	252
	49	146	28.73	4470	1.35	**RF**	**37**	**DRS**	**80S4**	22	253
	58	124	24.42	4300	1.60						
	63	113	22.27	4200	1.75						
	73	98	19.31	4050	2.0						
	78	92	18.05	3980	2.2						
	90	79	15.60	3830	2.5	**R**	**37**	**DRS**	**80S4**	20	252
	106	67	13.25	3670	2.8	**RF**	**37**	**DRS**	**80S4**	21	253
	119	60	11.83	3550	3.0						
	140	51	10.11	3400	3.3						
	149	48	9.47	3330	3.5						
	49	146	28.78	2870	0.90	**R**	**27**	**DRS**	**80S4**	14	249
	58	124	24.47	2780	1.05	**RF**	**27**	**DRS**	**80S4**	14	250
	63	113	22.32	2740	1.15						
	73	98	19.35	2660	1.30						
	78	92	18.08	2620	1.40						
	90	79	15.63	2530	1.65						
	106	68	13.28*	2440	1.95						
	119	60	11.86	2370	2.1						
	139	51	10.13	2280	2.4	**R**	**27**	**DRS**	**80S4**	14	249
	150	48	9.41	2200	2.6	**RF**	**27**	**DRS**	**80S4**	14	250
	173	41	8.16	2120	2.8						
	185	39	7.63*	2080	2.9						
	214	34	6.59	2000	3.2						
	252	28	5.60*	1920	3.5						
	282	25	5.00*	1860	3.7						
	72	100	19.71	665	0.85						
	83	86	16.99	1390	1.00						
	89	80	15.84	1380	1.05						
	102	70	13.84	1370	1.20						
	109	66	12.98	1360	1.30						
	123	58	11.45	1340	1.40						
	139	52	10.15	1320	1.50						
	163	44	8.63	1290	1.65	**R**	**17**	**DRS**	**80S4**	13	246
	187	38	7.55	1190	1.45	**RF**	**17**	**DRS**	**80S4**	13	247
	200	36	7.04	1180	1.55						
	229	31	6.15	1150	1.75						
	245	29	5.76	1140	1.80						
	277	26	5.09	1110	2.00						
	313	23	4.51	1090	2.1						
	368	20	3.83	1050	2.3						
	245	29	11.45	1190	2.8						
	276	26	10.15	1160	3.0						
	324	22	8.63	1120	3.3						
	371	19	7.55	1050	2.9						
	398	18	7.04	1030	3.1	**R**	**17**	**DRS**	**80S2**	13	246
	455	16	6.15	1000	3.4	**RF**	**17**	**DRS**	**80S2**	13	247
	486	15	5.76	980	3.6						
	550	13	5.09	950	3.9						
	621	12	4.51	920	4.2						
	730	9.8	3.83	890	4.6						
	202	35	4.53	4240	2.3						
	213	34	4.30*	4180	2.4	**RX**	**67**	**DRS**	**80M6**	25	233
	243	30	3.77	4010	3.0	**RXF**	**67**	**DRS**	**80M6**	29	234
	286	25	3.20*	3820	4.0						

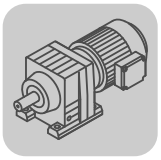
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**272**	26	5.18	3880	2.8						
	312	23	4.53	3720	3.6						
	328	22	4.30*	3660	3.7						
	374	19	3.77	3520	4.5						
	441	16	3.20*	3340	6.1						
	488	15	2.89	3230	7.2	**RX**	**67**	**DRS**	**80S4**	22	233
	555	13	2.54	3100	9.2	**RXF**	**67**	**DRS**	**80S4**	26	234
	588	12	2.40*	3050	10						
	690	10	2.04	2900	13						
	759	9.4	1.86	2810	13						
	876	8.2	1.61	2680	14						
	241	30	3.79	3220	2.3						
	258	28	3.55*	3160	2.5						
	292	24	3.14	3050	2.6	**RX**	**57**	**DRS**	**80M6**	22	231
	314	23	2.91	2980	2.9	**RXF**	**57**	**DRS**	**80M6**	24	232
	347	21	2.64*	2890	3.3						
	324	22	4.35	2960	3.1						
	372	19	3.79	2840	3.6						
	397	18	3.55*	2780	3.8						
	450	16	3.14	2680	4.1						
	484	15	2.91	2620	4.5						
	534	13	2.64*	2540	5.2	**RX**	**57**	**DRS**	**80S4**	20	231
	595	12	2.37	2460	5.8	**RXF**	**57**	**DRS**	**80S4**	22	232
	691	10	2.04	2340	6.6						
	734	9.8	1.92*	2300	7.0						
	853	8.4	1.65	2190	8.2						
	955	7.5	1.48	2110	9.1						
	1080	6.6	1.30	2030	9.6						
1.1	**0.53**	17700	2657	120000	1.00						
	0.60	15400	2333	120000	1.15						
	0.68	13700	2085	120000	1.30						
	0.75	12200	1877	120000	1.45	**R**	**167R97**	**DRS**	**80M4**	760	280
	0.84	10800	1670	120000	1.65	**RF**	**167R97**	**DRS**	**80M4**	760	280
	0.98	9610	1438	120000	1.85	**RM**	**167R97**	**DRS**	**80M4**	960	280
	1.1	8550	1279	120000	2.1						
	1.3	7450	1123	120000	2.4						
	0.64	15100	2211	48200	0.85						
	0.72	13300	1951	61900	0.95						
	0.83	11500	1705	65300	1.10						
	0.92	10300	1536	67200	1.25						
	1.1	8990	1329	69100	1.45	**R**	**147R77**	**DRS**	**80M4**	430	280
	1.2	7850	1166	70500	1.65	**RF**	**147R77**	**DRS**	**80M4**	435	280
	1.4	6900	1029	71400	1.90	**RM**	**147R77**	**DRS**	**80M4**	600	280
	1.6	5980	889	72200	2.2						
	1.8	5260	784	72800	2.5						
	2.0	4640	695	73200	2.8						
	1.0	9540	1391	40100	0.85						
	1.1	8590	1256	51400	0.95	**R**	**137R77**	**DRS**	**80M4**	285	280
	1.3	7530	1105	54300	1.05	**RF**	**137R77**	**DRS**	**80M4**	310	280
	1.4	7100	1043	55200	1.15	**RM**	**137R77**	**DRS**	**80M4**	420	280
	1.6	6020	888	57000	1.35						
	1.0	9560	1397	39700	0.85						
	1.2	8360	1226	52400	0.95						
	1.3	7450	1090	54500	1.05						
	1.5	6500	951	56200	1.25	**R**	**137R77**	**DRS**	**80M4**	295	280
	1.7	5620	831	57600	1.40	**RF**	**137R77**	**DRS**	**80M4**	320	280
	1.9	4910	730	58500	1.65	**RM**	**137R77**	**DRS**	**80M4**	430	280
	2.2	4190	629	59300	1.90						
	2.5	3800	560	59700	2.1						
	2.9	3270	490	60100	2.4						
	2.0	4890	717	19200	0.90	**R**	**107R77**	**DRS**	**80M4**	205	280
						RF	**107R77**	**DRS**	**80M4**	210	280
						RM	**107R77**	**DRS**	**80M4**	300	280



R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] 1)	SEW f_B					m [kg]	
1.1	**2.3**	4120	614	30400	1.05						
	2.6	3630	544	32600	1.20						
	2.9	3280	492	34000	1.30						
	3.4	2780	417	35600	1.55	**R**	**107R77**	**DRS**	**80M4**	210	280
	3.8	2490	369	36200	1.70	**RF**	**107R77**	**DRS**	**80M4**	215	280
	4.4	2170	323	36600	1.95	**RM**	**107R77**	**DRS**	**80M4**	305	280
	4.9	1910	285	36900	2.2						
	5.6	1690	253	37100	2.5						
	3.3	2960	431	21000	1.00						
	3.7	2600	379	23500	1.15						
	4.2	2310	336	25000	1.30	**R**	**97R57**	**DRS**	**80M4**	135	280
	4.8	2030	296	26300	1.50	**RF**	**97R57**	**DRS**	**80M4**	155	280
	5.7	1690	249	27300	1.75	**RM**	**97R57**	**DRS**	**80M4**	205	280
	6.0	1580	234	27500	1.90						
	6.8	1410	209	27800	2.1						
	5.3	1820	268	12700	0.85	**R**	**87R57**	**DRS**	**80M4**	94	280
	6.0	1610	236	16500	0.95	**RF**	**87R57**	**DRS**	**80M4**	100	280
	6.8	1410	209	17800	1.10	**RM**	**87R57**	**DRS**	**80M4**	130	280
	5.5	1760	256	15200	0.90	**R**	**87R57**	**DRS**	**80M4**	92	280
	6.1	1600	232	16600	0.95	**RF**	**87R57**	**DRS**	**80M4**	100	280
	7.2	1350	195	18100	1.15	**RM**	**87R57**	**DRS**	**80M4**	130	280
	4.3	2440	216.28	24400	1.25	**R**	**97**	**DRS**	**90L6**	120	270
	5.0	2100	186.30	26000	1.45	**RF**	**97**	**DRS**	**90L6**	135	271
						RM	**97**	**DRS**	**90L6**	190	271
	5.5	1900	255.71	26700	1.55						
	5.8	1790	241.25	27100	1.65						
	6.5	1610	216.28	27500	1.85						
	7.6	1380	186.30	27800	2.2	**R**	**97**	**DRS**	**80M4**	115	270
	8.3	1260	170.02	27900	2.4	**RF**	**97**	**DRS**	**80M4**	130	271
	9.4	1120	150.78	28100	2.7	**RM**	**97**	**DRS**	**80M4**	180	271
	11	940	126.75	28300	3.2						
	12	860	116.48	28300	3.5						
	6.5	1610	216.54	16500	0.95	**R**	**87**	**DRS**	**80M4**	72	267
	6.8	1530	205.71	17100	1.00	**RF**	**87**	**DRS**	**80M4**	79	268
	7.8	1350	181.77	18200	1.15	**RM**	**87**	**DRS**	**80M4**	110	268
	9.1	1150	155.34	19200	1.35						
	9.9	1060	142.41	19600	1.45						
	11	930	124.97	20000	1.65						
	12	880	118.43*	20000	1.75						
	14	770	103.65	20000	2.0	**R**	**87**	**DRS**	**80M4**	72	267
	15	695	93.38	20000	2.2	**RF**	**87**	**DRS**	**80M4**	79	268
	17	610	81.92	20000	2.5	**RM**	**87**	**DRS**	**80M4**	110	268
	19	540	72.57	20000	2.9						
	22	470	63.68*	20000	3.3						
	23	445	60.35*	20000	3.4						
	27	390	52.82	20000	3.9						
	12	900	121.42	9060	0.90	**R**	**77**	**DRS**	**80M4**	46	264
	14	765	102.99	10400	1.05	**RF**	**77**	**DRS**	**80M4**	52	265
	15	690	92.97	11000	1.20	**RM**	**77**	**DRS**	**80M4**	77	265
	17	605	81.80	11500	1.35						
	18	575	77.24	11700	1.45						
	21	485	65.77	12100	1.65						
	24	425	57.68	12400	1.90	**R**	**77**	**DRS**	**80M4**	46	264
	27	385	52.07	12500	2.1	**RF**	**77**	**DRS**	**80M4**	52	265
	31	340	45.81	12700	2.4	**RM**	**77**	**DRS**	**80M4**	77	265
	33	320	43.26	12700	2.5						
	38	270	36.83	12900	3.0						
	42	245	33.47	12900	3.3						
	16	640	86.11	7030	0.95						
	19	550	74.17	8080	1.10						
	20	515	69.75	8410	1.15						
	23	455	61.26	8940	1.30						
	25	420	56.89	9180	1.40	**R**	**67**	**DRS**	**80M4**	38	261
	27	380	51.56	9440	1.55	**RF**	**67**	**DRS**	**80M4**	42	262
	30	340	46.29	9660	1.75	**RM**	**67**	**DRS**	**80M4**	57	262
	35	295	39.88*	9900	1.95						
	38	275	37.50	9970	2.0						
	44	240	32.27	10100	2.2						
	49	210	28.83	10200	2.4						

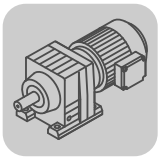
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**50**	205	28.13	10200	2.6	**R**	**67**	**DRS**	**80M4**	38	261
	53	199	26.72	10100	2.7	**RF**	**67**	**DRS**	**80M4**	41	262
	60	175	23.44	9710	3.2	**RM**	**67**	**DRS**	**80M4**	57	262
	71	148	19.89	9250	4.0						
	20	515	69.23	6130	0.85	**R**	**57**	**DRS**	**80M4**	32	258
	22	480	64.85	6840	0.95	**RF**	**57**	**DRS**	**80M4**	35	259
	25	425	57.29	6700	1.05	**RM**	**57**	**DRS**	**80M4**	47	259
	26	395	53.22	6600	1.15						
	29	355	48.23	6480	1.25						
	33	320	43.30	6340	1.40	**R**	**57**	**DRS**	**80M4**	32	258
	38	275	37.30*	6130	1.60	**RF**	**57**	**DRS**	**80M4**	35	259
	40	260	35.07	6050	1.70	**RM**	**57**	**DRS**	**80M4**	47	259
	47	220	30.18	5840	2.0						
	52	200	26.97	5680	2.2						
	54	196	26.31	5640	2.3						
	56	186	24.99*	5570	2.4	**R**	**57**	**DRS**	**80M4**	31	258
	64	163	21.93	5390	2.8	**RF**	**57**	**DRS**	**80M4**	34	259
	76	139	18.60*	5160	3.2	**RM**	**57**	**DRS**	**80M4**	46	259
	84	125	16.79	5020	3.6						
	30	355	47.75	3660	0.85						
	33	315	42.87	4840	0.95						
	38	275	36.93	4710	1.10						
	41	255	34.73	4650	1.15	**R**	**47**	**DRS**	**80M4**	27	255
	47	220	29.88	4510	1.35	**RF**	**47**	**DRS**	**80M4**	27	256
	53	199	26.70	4400	1.50						
	60	176	23.59	4280	1.70						
	61	173	23.28	4270	1.75						
	65	162	21.81	4200	1.85						
	73	144	19.27	4080	2.1						
	79	133	17.89	4000	2.2						
	87	121	16.22	3900	2.3	**R**	**47**	**DRS**	**80M4**	26	255
	97	108	14.56	3790	2.4	**RF**	**47**	**DRS**	**80M4**	26	256
	112	93	12.54	3650	2.7						
	120	88	11.79	3580	2.8						
	139	76	10.15	3440	3.0						
	155	68	9.07	3330	3.2						
	44	240	32.40	2930	0.85	**R**	**37**	**DRS**	**80M4**	23	252
	49	210	28.73	3320	0.95	**RF**	**37**	**DRS**	**80M4**	24	253
	58	182	24.42	3730	1.10						
	73	144	19.31	3840	1.40	**R**	**37**	**DRS**	**80M4**	23	252
	78	134	18.05	3780	1.50	**RF**	**37**	**DRS**	**80M4**	24	253
	90	116	15.60	3660	1.70						
	106	99	13.25	3520	1.95						
	119	88	11.83	3420	2.1						
	140	75	10.11	3280	2.3						
	149	70	9.47	3230	2.4	**R**	**37**	**DRS**	**80M4**	23	252
	177	59	7.97	3080	2.6	**RF**	**37**	**DRS**	**80M4**	24	253
	211	50	6.67	2910	2.9						
	249	42	5.67	2780	3.4						
	279	38	5.06	2700	3.6						
	73	144	19.35	2430	0.90						
	78	135	18.08	2410	0.95						
	90	116	15.63	2350	1.10						
	106	99	13.28*	2280	1.30						
	119	88	11.86	2230	1.45						
	139	76	10.13	2160	1.60						
	173	61	8.16	2010	1.90	**R**	**27**	**DRS**	**80M4**	17	249
	185	57	7.63*	1980	1.95	**RF**	**27**	**DRS**	**80M4**	17	250
	214	49	6.59	1910	2.2						
	252	42	5.60*	1840	2.4						
	282	37	5.00*	1790	2.6						
	330	32	4.27	1720	2.7						
	352	30	4.00*	1690	2.8						
	418	25	3.37	1610	3.2						



R..DRS
R..DRS [kW]

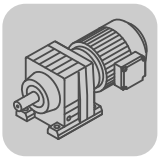
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**214**	49	13.28*	1950	2.6						
	240	44	11.86	1900	2.9						
	280	38	10.13	1820	3.2						
	302	35	9.41	1760	3.5						
	348	30	8.16	1690	3.8						
	372	28	7.63*	1660	4.0	**R**	**27**	**DRS**	**80M2**	17	249
	431	24	6.59	1600	4.3	**RF**	**27**	**DRS**	**80M2**	17	250
	507	21	5.60*	1530	4.8						
	568	18	5.00*	1480	5.1						
	665	16	4.27	1410	5.5						
	710	15	4.00*	1390	5.7						
	843	12	3.37	1320	6.3						
	144	73	19.71	1150	1.15						
	167	63	16.99	1140	1.35						
	179	59	15.84	1130	1.45						
	205	51	13.84	1120	1.65						
	219	48	12.98	1110	1.75						
	248	42	11.45	1090	1.90						
	280	38	10.15	1070	2.0						
	329	32	8.63	1040	2.3	**R**	**17**	**DRS**	**80M2**	16	246
	376	28	7.55	960	2.0	**RF**	**17**	**DRS**	**80M2**	16	247
	404	26	7.04	950	2.1						
	462	23	6.15	930	2.4						
	493	21	5.76	920	2.5						
	558	19	5.09	900	2.7						
	630	17	4.51	870	2.9						
	741	14	3.83	840	3.2						
	250	42	5.63	5660	2.6						
	264	40	5.35*	5570	2.6	**RX**	**77**	**DRS**	**80M4**	36	235
	298	35	4.73	5370	3.5	**RXF**	**77**	**DRS**	**80M4**	38	236
	247	43	3.77	3910	2.0	**RX**	**67**	**DRS**	**90L6**	32	233
						RXF	**67**	**DRS**	**90L6**	36	234
	312	34	4.53	3650	2.4						
	328	32	4.30*	3600	2.5						
	374	28	3.77	3460	3.1						
	441	24	3.20*	3290	4.2						
	488	22	2.89	3190	4.9						
	555	19	2.54	3060	6.2	**RX**	**67**	**DRS**	**80M4**	25	233
	588	18	2.40*	3010	6.9	**RXF**	**67**	**DRS**	**80M4**	29	234
	690	15	2.04	2860	8.8						
	759	14	1.86	2780	9.1						
	876	12	1.61	2650	9.5						
	1005	10	1.40*	2540	10						
	297	35	3.14	2950	1.85	**RX**	**57**	**DRS**	**90L6**	30	231
	352	30	2.64*	2810	2.3	**RXF**	**57**	**DRS**	**90L6**	32	232
	372	28	3.79	2770	2.4						
	397	26	3.55*	2720	2.6						
	450	23	3.14	2620	2.8						
	484	22	2.91	2560	3.1						
	534	20	2.64*	2490	3.5						
	595	18	2.37	2410	3.9	**RX**	**57**	**DRS**	**80M4**	22	231
	691	15	2.04	2300	4.5	**RXF**	**57**	**DRS**	**80M4**	24	232
	734	14	1.92*	2260	4.8						
	853	12	1.65	2160	5.6						
	955	11	1.48	2080	6.2						
	1080	9.7	1.30	2010	6.5						
1.5	**0.60**	21500	2333	120000	0.85						
	0.67	19100	2085	120000	0.95						
	0.75	17100	1877	120000	1.05						
	0.84	15200	1670	120000	1.20	**R**	**167R97**	**DRS**	**90M4**	760	280
	0.97	13300	1438	120000	1.35	**RF**	**167R97**	**DRS**	**90M4**	770	280
	1.1	11900	1279	120000	1.50	**RM**	**167R97**	**DRS**	**90M4**	960	280
	1.2	10300	1123	120000	1.75						
	1.4	9250	999	120000	1.95						
	3.3	3940	426	73600	3.3	**R**	**147R87**	**DRS**	**90M4**	450	280
	3.8	3400	368	73800	3.8	**RF**	**147R87**	**DRS**	**90M4**	460	280
						RM	**147R87**	**DRS**	**90M4**	630	280

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**0.82**	16000	1705	36100	0.80						
	0.91	14400	1536	57400	0.90						
	1.0	12400	1329	63700	1.05						
	1.2	10900	1166	66400	1.20						
	1.4	9590	1029	68300	1.35	**R**	**147R77**	**DRS**	**90M4**	430	280
	1.6	8310	889	70000	1.55	**RF**	**147R77**	**DRS**	**90M4**	440	280
	1.8	7310	784	71000	1.80	**RM**	**147R77**	**DRS**	**90M4**	610	280
	2.0	6460	695	71800	2.0						
	2.3	5820	619	72400	2.2						
	2.5	5230	558	72800	2.5						
	1.3	9840	1043	33700	0.80						
	1.6	8350	888	52400	0.95	**R**	**137R77**	**DRS**	**90M4**	290	280
	2.0	6540	699	56200	1.20	**RF**	**137R77**	**DRS**	**90M4**	315	280
	2.3	5670	609	57500	1.40	**RM**	**137R77**	**DRS**	**90M4**	425	280
	1.3	10300	1090	18900	0.80						
	1.5	9000	951	49300	0.90						
	1.7	7800	831	53800	1.05						
	1.9	6820	730	55700	1.15						
	2.2	5840	629	57300	1.35	**R**	**137R77**	**DRS**	**90M4**	300	280
	2.5	5260	560	58100	1.50	**RF**	**137R77**	**DRS**	**90M4**	325	280
	2.8	4560	490	58900	1.75	**RM**	**137R77**	**DRS**	**90M4**	435	280
	3.3	3980	428	59500	2.0						
	3.7	3580	381	59900	2.2						
	4.3	3040	323	60300	2.6						
						R	**107R77**	**DRS**	**90M4**	210	280
	2.6	4940	528	16500	0.85	**RF**	**107R77**	**DRS**	**90M4**	215	280
						RM	**107R77**	**DRS**	**90M4**	300	280
	2.6	5060	544	6050	0.85						
	2.8	4570	492	27900	0.95	**R**	**107R77**	**DRS**	**90M4**	215	280
	3.4	3880	417	31600	1.10	**RF**	**107R77**	**DRS**	**90M4**	220	280
	3.8	3460	369	33300	1.25	**RM**	**107R77**	**DRS**	**90M4**	305	280
	4.3	3020	323	34900	1.40						
						R	**107R77**	**DRS**	**90M4**	205	280
	3.0	4490	469	28300	0.95	**RF**	**107R77**	**DRS**	**90M4**	215	280
						RM	**107R77**	**DRS**	**90M4**	300	280
	4.2	3190	336	9620	0.95						
	4.7	2800	296	22300	1.05	**R**	**97R57**	**DRS**	**90M4**	140	280
	5.6	2350	249	24800	1.30	**RF**	**97R57**	**DRS**	**90M4**	160	280
	6.0	2190	234	25600	1.35	**RM**	**97R57**	**DRS**	**90M4**	210	280
	6.7	1960	209	26500	1.55						
	3.7	3880	251.15	31500	1.10						
	4.0	3560	229.95	32900	1.20						
	4.6	3140	203.16	34500	1.35	**R**	**107**	**DRS**	**100M6**	185	272
	5.4	2660	172.34	35900	1.60	**RF**	**107**	**DRS**	**100M6**	190	273
	5.8	2450	158.68	36200	1.75	**RM**	**107**	**DRS**	**100M6**	275	273
	6.5	2190	141.83	36600	1.95						
	5.5	2610	255.71	23400	1.15						
	5.8	2460	241.25	24300	1.20						
	6.5	2210	216.28	25500	1.35						
	7.5	1900	186.30	26700	1.55						
	8.2	1730	170.02	27300	1.70	**R**	**97**	**DRS**	**90M4**	115	270
	9.3	1540	150.78	27600	1.95	**RF**	**97**	**DRS**	**90M4**	135	271
	11	1290	126.75	27900	2.3	**RM**	**97**	**DRS**	**90M4**	185	271
	12	1190	116.48	28000	2.5						
	14	1050	103.44	28200	2.8						
	15	940	92.48	28300	3.2						
	7.7	1850	181.77	10300	0.85						
	9.0	1580	155.34	16600	1.00						
	9.8	1450	142.41	17500	1.05	**R**	**87**	**DRS**	**90M4**	76	267
	11	1270	124.97	18600	1.20	**RF**	**87**	**DRS**	**90M4**	83	268
	12	1210	118.43*	18900	1.30	**RM**	**87**	**DRS**	**90M4**	115	268
	14	1060	103.65	19600	1.45						

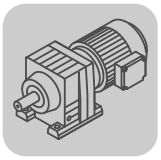


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**15**	950	93.38	20000	1.60						
	17	830	81.92	20000	1.85						
	19	740	72.57	20000	2.1						
	22	650	63.68*	20000	2.4	**R**	**87**	**DRS**	**90M4**	76	267
	23	615	60.35*	20000	2.5	**RF**	**87**	**DRS**	**90M4**	83	268
	27	540	52.82	20000	2.9	**RM**	**87**	**DRS**	**90M4**	115	268
	29	485	47.58	20000	3.2						
	34	425	41.74	20000	3.6						
	38	375	36.84*	19600	4.1						
	15	950	92.97	8020	0.85						
	17	830	81.80	9760	1.00	**R**	**77**	**DRS**	**90M4**	50	264
	18	790	77.24	10200	1.05	**RF**	**77**	**DRS**	**90M4**	55	265
	21	670	65.77	11100	1.20	**RM**	**77**	**DRS**	**90M4**	80	265
	24	590	57.68	11600	1.40						
	27	530	52.07	11900	1.55						
	31	465	45.81	12200	1.75						
	32	440	43.26	12300	1.85	**R**	**77**	**DRS**	**90M4**	50	264
	38	375	36.83	12600	2.2	**RF**	**77**	**DRS**	**90M4**	55	265
	42	340	33.47	12700	2.4	**RM**	**77**	**DRS**	**90M4**	80	265
	48	295	29.00	12600	2.8						
	55	255	25.23	12100	3.0						
	60	235	23.37	11800	3.4	**R**	**77**	**DRS**	**90M4**	48	264
	65	215	21.43	11500	3.7	**RF**	**77**	**DRS**	**90M4**	54	265
	74	192	18.80	11100	4.0	**RM**	**77**	**DRS**	**90M4**	79	265
	23	625	61.26	7230	0.95						
	25	580	56.89	7770	1.05						
	27	525	51.56	8330	1.15						
	30	470	46.29	8800	1.25	**R**	**67**	**DRS**	**90M4**	43	261
	35	405	39.88*	9280	1.40	**RF**	**67**	**DRS**	**90M4**	47	262
	37	380	37.50	9440	1.50	**RM**	**67**	**DRS**	**90M4**	62	262
	43	330	32.27	9740	1.65						
	49	295	28.83	9910	1.75						
	50	285	28.13	9940	1.90						
	52	270	26.72	9870	2.00	**R**	**67**	**DRS**	**90M4**	42	261
	60	235	23.44	9520	2.3	**RF**	**67**	**DRS**	**90M4**	46	262
	70	200	19.89	9090	3.0	**RM**	**67**	**DRS**	**90M4**	61	262
	78	184	17.95	8830	3.2						
	26	540	53.22	4980	0.85	**R**	**57**	**DRS**	**90M4**	37	258
	29	490	48.23	6020	0.90	**RF**	**57**	**DRS**	**90M4**	40	259
	32	440	43.30	5920	1.00	**RM**	**57**	**DRS**	**90M4**	52	259
	38	380	37.30*	5780	1.20						
	40	355	35.07	5710	1.25	**R**	**57**	**DRS**	**90M4**	37	258
	46	305	30.18	5550	1.45	**RF**	**57**	**DRS**	**90M4**	40	259
	52	275	26.97	5420	1.65	**RM**	**57**	**DRS**	**90M4**	52	259
	53	265	26.31	5400	1.65						
	56	255	24.99*	5340	1.75						
	64	220	21.93	5180	2.0						
	75	190	18.60*	4980	2.4	**R**	**57**	**DRS**	**90M4**	36	258
	83	172	16.79	4860	2.6	**RF**	**57**	**DRS**	**90M4**	39	259
	95	151	14.77*	4710	2.9	**RM**	**57**	**DRS**	**90M4**	51	259
	100	143	13.95*	4640	3.0						
	118	122	11.88	4440	3.3						
	38	375	36.93	2190	0.80						
	40	355	34.73	3680	0.85						
	47	305	29.88	4220	1.00	**R**	**47**	**DRS**	**90M4**	32	255
	52	270	26.70	4140	1.10	**RF**	**47**	**DRS**	**90M4**	32	256
	59	240	23.59	4050	1.25						

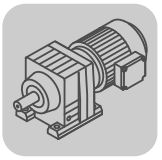


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**60**	235	23.28	4040	1.25						
	64	220	21.81	3990	1.35						
	73	197	19.27	3890	1.50						
	78	183	17.89	3830	1.60						
	86	166	16.22	3750	1.65						
	96	149	14.56	3660	1.80						
	112	128	12.54	3530	1.95						
	119	121	11.79	3480	2.0						
	138	104	10.15	3340	2.2	**R**	**47**	**DRS**	**90M4**	31	255
	154	93	9.07	3250	2.4	**RF**	**47**	**DRS**	**90M4**	31	256
	175	82	8.01	3140	2.5						
	181	79	7.76*	3070	2.1						
	201	71	6.96	2980	2.2						
	233	61	6.00	2870	2.5						
	248	58	5.64*	2820	2.7						
	288	50	4.85	2700	3.0						
	323	44	4.34	2620	3.3						
	365	39	3.83	2530	3.7						
	73	198	19.31	2640	1.00						
	78	185	18.05	2820	1.10	**R**	**37**	**DRS**	**90M4**	27	252
	90	160	15.60	3150	1.25	**RF**	**37**	**DRS**	**90M4**	28	253
	106	136	13.25	3350	1.40						
	118	121	11.83	3270	1.50						
	139	103	10.11	3160	1.65						
	148	97	9.47	3110	1.70						
	176	82	7.97	2990	1.90						
	210	68	6.67	2830	2.1	**R**	**37**	**DRS**	**90M4**	27	252
	247	58	5.67	2710	2.4	**RF**	**37**	**DRS**	**90M4**	28	253
	277	52	5.06	2630	2.6						
	324	44	4.32	2520	2.8						
	346	41	4.05	2480	3.0						
	411	35	3.41	2360	3.2						
	214	67	13.25	2840	2.8						
	239	60	11.83	2760	3.1						
	280	51	10.11	2640	3.3	**R**	**37**	**DRS**	**90M2**	27	252
	299	48	9.47	2600	3.5	**RF**	**37**	**DRS**	**90M2**	28	253
	355	40	7.97	2480	3.9						
	90	160	15.63	1690	0.80						
	105	136	13.28*	2010	0.95						
	118	121	11.86	2080	1.05						
	138	104	10.13	2030	1.20						
	172	84	8.16	1880	1.40						
	184	78	7.63*	1860	1.45	**R**	**27**	**DRS**	**90M4**	21	249
	212	67	6.59	1810	1.55	**RF**	**27**	**DRS**	**90M4**	21	250
	250	57	5.60*	1760	1.75						
	280	51	5.00*	1710	1.85						
	328	44	4.27	1650	2.00						
	350	41	4.00*	1630	2.1						
	415	34	3.37	1560	2.3						
	239	60	11.86	1820	2.2						
	279	51	10.13	1750	2.4						
	347	41	8.16	1630	2.8						
	371	39	7.63*	1600	2.9						
	429	33	6.59	1550	3.2	**R**	**27**	**DRS**	**90M2**	21	249
	505	28	5.60*	1480	3.5	**RF**	**27**	**DRS**	**90M2**	21	250
	566	25	5.00*	1440	3.8						
	663	22	4.27	1380	4.0						
	708	20	4.00*	1360	4.2						
	840	17	3.37	1290	4.6						
	249	58	5.63	5590	1.90						
	262	55	5.35*	5510	1.90						
	296	48	4.73	5310	2.5						
	347	41	4.04*	5060	3.5						
	378	38	3.70	4930	4.0	**RX**	**77**	**DRS**	**90M4**	40	235
	431	33	3.25*	4730	5.5	**RXF**	**77**	**DRS**	**90M4**	42	236
	455	32	3.08*	4650	6.1						
	519	28	2.70	4460	7.8						
	576	25	2.43	4320	8.7						

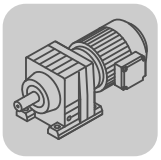


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**309**	46	4.53	3580	1.75						
	326	44	4.30*	3530	1.80						
	371	39	3.77	3400	2.2						
	438	33	3.20*	3240	3.1						
	485	30	2.89	3140	3.6						
	551	26	2.54	3020	4.5	**RX**	**67**	**DRS**	**90M4**	30	233
	583	25	2.40*	2970	5.0	**RXF**	**67**	**DRS**	**90M4**	34	234
	685	21	2.04	2830	6.4						
	754	19	1.86	2750	6.6						
	870	16	1.61	2630	6.9						
	1000	14	1.40*	2520	7.3						
	369	39	3.79	2700	1.80						
	394	36	3.55*	2660	1.90						
	446	32	3.14	2560	2.0						
	481	30	2.91	2510	2.2						
	530	27	2.64*	2440	2.6						
	591	24	2.37	2370	2.8	**RX**	**57**	**DRS**	**90M4**	27	231
	686	21	2.04	2270	3.3	**RXF**	**57**	**DRS**	**90M4**	29	232
	729	20	1.92*	2230	3.5						
	847	17	1.65	2130	4.1						
	948	15	1.48	2060	4.5						
	1075	13	1.30	1980	4.7						
2.2	**0.84**	22700	1670	120000	0.80						
	0.97	19800	1438	120000	0.90						
	1.1	17600	1279	120000	1.00						
	1.2	15400	1123	120000	1.15	**R**	**167R97**	**DRS**	**90L4**	760	280
	1.4	13700	999	120000	1.30	**RF**	**167R97**	**DRS**	**90L4**	770	280
	1.6	11800	861	120000	1.50	**RM**	**167R97**	**DRS**	**90L4**	960	280
	1.8	10400	760	120000	1.70						
	2.1	8790	656	120000	2.0						
	2.6	7250	533	71100	1.80						
	3.0	6240	462	72000	2.1	**R**	**147R87**	**DRS**	**90L4**	455	280
	3.3	5860	426	72300	2.2	**RF**	**147R87**	**DRS**	**90L4**	465	280
	3.8	5060	368	72900	2.6	**RM**	**147R87**	**DRS**	**90L4**	630	280
	4.3	4470	326	73300	2.9						
	1.2	16100	1166	34200	0.80						
	1.4	14200	1029	59600	0.90						
	1.6	12300	889	64000	1.05						
	1.8	10800	784	66500	1.20	**R**	**147R77**	**DRS**	**90L4**	435	280
	2.0	9580	695	68400	1.35	**RF**	**147R77**	**DRS**	**90L4**	445	280
	2.3	8600	619	69600	1.50	**RM**	**147R77**	**DRS**	**90L4**	610	280
	2.5	7740	558	70600	1.70						
	2.9	6780	489	71500	1.90						
	2.0	9680	699	37100	0.85	**R**	**137R77**	**DRS**	**90L4**	295	280
	2.3	8410	609	52200	0.95	**RF**	**137R77**	**DRS**	**90L4**	315	280
						RM	**137R77**	**DRS**	**90L4**	430	280
	1.9	10100	730	26600	0.80						
	2.2	8670	629	51100	0.90						
	2.5	7780	560	53800	1.05						
	2.8	6760	490	55800	1.20						
	3.3	5900	428	57200	1.35	**R**	**137R77**	**DRS**	**90L4**	300	280
	3.7	5300	381	58000	1.50	**RF**	**137R77**	**DRS**	**90L4**	325	280
	4.3	4490	323	59000	1.80	**RM**	**137R77**	**DRS**	**90L4**	435	280
	4.8	4040	291	59500	2.00						
	5.5	3530	255	59900	2.3						
	6.3	3090	223	60300	2.6						
	4.3	4480	323	28400	0.95						
	4.9	3940	285	31300	1.10	**R**	**107R77**	**DRS**	**90L4**	215	280
	5.5	3490	253	33200	1.25	**RF**	**107R77**	**DRS**	**90L4**	220	280
	6.5	2950	214	35100	1.45	**RM**	**107R77**	**DRS**	**90L4**	310	280
						R	**107R77**	**DRS**	**90L4**	210	280
	4.3	4570	325	27900	0.95	**RF**	**107R77**	**DRS**	**90L4**	215	280
						RM	**107R77**	**DRS**	**90L4**	305	280
						R	**97R57**	**DRS**	**90L4**	145	280
	6.7	2900	209	21600	1.05	**RF**	**97R57**	**DRS**	**90L4**	160	280
						RM	**97R57**	**DRS**	**90L4**	210	280



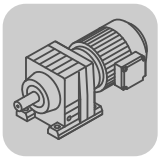
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2	**4.7**	4460	203.16	28500	0.95	**R**	**107**	**DRS**	**112M6**	195	272
	5.5	3790	172.34	32000	1.15	**RF**	**107**	**DRS**	**112M6**	200	273
	6.0	3490	158.68	33200	1.25	**RM**	**107**	**DRS**	**112M6**	290	273
	6.7	3120	141.83	34600	1.40						
	5.6	3760	251.15	32100	1.15	**R**	**107**	**DRS**	**90L4**	180	272
	6.1	3450	229.95	33400	1.25	**RF**	**107**	**DRS**	**90L4**	185	273
	6.9	3040	203.16	34800	1.40	**RM**	**107**	**DRS**	**90L4**	270	273
	8.1	2580	172.34	36000	1.65						
	8.8	2380	158.68	36300	1.80						
	9.9	2120	141.83	36600	2.0	**R**	**107**	**DRS**	**90L4**	180	272
	11	1910	127.68	36900	2.2	**RF**	**107**	**DRS**	**90L4**	185	273
	12	1730	115.63	37000	2.5	**RM**	**107**	**DRS**	**90L4**	270	273
	14	1530	102.53	37200	2.8						
	15	1390	92.70	37300	3.1						
	6.5	3240	216.28	3580	0.90	**R**	**97**	**DRS**	**90L4**	120	270
	7.5	2790	186.30	22300	1.05	**RF**	**97**	**DRS**	**90L4**	135	271
	8.2	2550	170.02	23800	1.20	**RM**	**97**	**DRS**	**90L4**	190	271
	9.3	2260	150.78	25300	1.35						
	11	1900	126.75	26800	1.60						
	12	1740	116.48	27300	1.70						
	14	1550	103.44	27600	1.95						
	15	1380	92.48	27800	2.2	**R**	**97**	**DRS**	**90L4**	120	270
	17	1240	83.15	28000	2.4	**RF**	**97**	**DRS**	**90L4**	135	271
	19	1080	72.17	28100	2.8	**RM**	**97**	**DRS**	**90L4**	190	271
	21	970	65.21	27700	3.1						
	23	890	59.92	27100	3.3						
	26	795	53.21	26200	3.8						
	29	710	47.58	25300	4.2						
	11	1870	124.97	8830	0.85						
	12	1770	118.43*	15100	0.85	**R**	**87**	**DRS**	**90L4**	79	267
	14	1550	103.65	16900	1.00	**RF**	**87**	**DRS**	**90L4**	86	268
	15	1400	93.38	17900	1.10	**RM**	**87**	**DRS**	**90L4**	115	268
	17	1220	81.92	18800	1.25						
	19	1080	72.57	19500	1.40						
	22	950	63.68*	20000	1.60						
	23	900	60.35*	20000	1.70						
	27	790	52.82	20000	1.95	**R**	**87**	**DRS**	**90L4**	79	267
	29	710	47.58	20000	2.2	**RF**	**87**	**DRS**	**90L4**	86	268
	34	625	41.74	19900	2.5	**RM**	**87**	**DRS**	**90L4**	115	268
	38	550	36.84*	19200	2.8						
	43	490	32.66*	18600	3.2						
	41	515	34.40*	18900	2.9						
	45	470	31.40	18400	3.3	**R**	**87**	**DRS**	**90L4**	77	267
	50	415	27.84*	17700	3.7	**RF**	**87**	**DRS**	**90L4**	84	268
	60	350	23.40	16800	4.4	**RM**	**87**	**DRS**	**90L4**	115	268
	65	320	21.51	16400	4.6						
	21	980	65.77	4630	0.85						
	24	860	57.68	9480	0.95	**R**	**77**	**DRS**	**90L4**	52	264
	27	780	52.07	10300	1.05	**RF**	**77**	**DRS**	**90L4**	58	265
	31	685	45.81	11000	1.20	**RM**	**77**	**DRS**	**90L4**	83	265
	32	645	43.26	11300	1.25						
	38	550	36.83	11800	1.50	**R**	**77**	**DRS**	**90L4**	52	264
	42	500	33.47	12100	1.65	**RF**	**77**	**DRS**	**90L4**	58	265
	48	435	29.00	12100	1.90	**RM**	**77**	**DRS**	**90L4**	83	265
	55	375	25.23	11700	2.1						
	60	350	23.37	11500	2.3						
	65	320	21.43	11200	2.6						
	74	280	18.80	10800	2.8	**R**	**77**	**DRS**	**90L4**	51	264
	79	265	17.82*	10600	2.9	**RF**	**77**	**DRS**	**90L4**	57	265
	90	230	15.60	10200	3.2	**RM**	**77**	**DRS**	**90L4**	82	265
	100	210	14.05	9930	3.4						
	35	595	39.88*	7580	0.95						
	37	560	37.50	7980	1.00	**R**	**67**	**DRS**	**90L4**	46	261
	43	480	32.27	8720	1.10	**RF**	**67**	**DRS**	**90L4**	49	262
	49	430	28.83	9120	1.20	**RM**	**67**	**DRS**	**90L4**	65	262



R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2	**60**	350	23.44	9150	1.60						
	70	295	19.89	8780	2.0						
	78	265	17.95	8550	2.2						
	89	235	15.79	8260	2.4						
	94	220	14.91	8130	2.5	**R**	**67**	**DRS**	**90L4**	45	261
	110	191	12.70	7780	2.7	**RF**	**67**	**DRS**	**90L4**	48	262
	121	173	11.54	7570	2.9	**RM**	**67**	**DRS**	**90L4**	64	262
	140	150	10.00	7270	3.1						
	161	131	8.70*	6980	3.4						
	180	117	7.79	6770	3.2						
	38	555	37.30*	4310	0.80						
	40	525	35.07	5110	0.85	**R**	**57**	**DRS**	**90L4**	39	258
	46	450	30.18	5040	1.00	**RF**	**57**	**DRS**	**90L4**	43	259
	52	400	26.97	4960	1.10	**RM**	**57**	**DRS**	**90L4**	55	259
	64	325	21.93	4810	1.35						
	75	275	18.60*	4670	1.60						
	83	250	16.79	4570	1.80						
	95	220	14.77*	4450	1.95						
	100	205	13.95*	4400	2.0	**R**	**57**	**DRS**	**90L4**	38	258
	118	178	11.88	4240	2.3	**RF**	**57**	**DRS**	**90L4**	42	259
	130	162	10.79	4150	2.4	**RM**	**57**	**DRS**	**90L4**	54	259
	150	140	9.35	4000	2.6						
	155	136	9.06	3980	2.8						
	176	120	7.97	3860	3.0						
	129	163	21.93	4150	2.8						
	152	139	18.60*	3990	3.2	**R**	**57**	**DRS**	**90L2**	38	258
	168	125	16.79	3890	3.6	**RF**	**57**	**DRS**	**90L2**	42	259
	191	110	14.77*	3760	4.0	**RM**	**57**	**DRS**	**90L2**	54	259
	202	104	13.95*	3700	4.1						
	73	285	19.27	3560	1.00						
	86	240	16.22	3470	1.15						
	96	215	14.56	3400	1.20						
	112	188	12.54	3310	1.35						
	119	177	11.79	3270	1.40						
	138	152	10.15	3170	1.50						
	154	136	9.07	3090	1.60						
	175	120	8.01	3000	1.70	**R**	**47**	**DRS**	**90L4**	33	255
	181	116	7.76*	2910	1.40	**RF**	**47**	**DRS**	**90L4**	34	256
	201	104	6.96	2840	1.50						
	233	90	6.00	2750	1.75						
	248	85	5.64*	2700	1.85						
	288	73	4.85	2600	2.1						
	323	65	4.34	2530	2.2						
	365	58	3.83	2450	2.5						
	146	144	19.27	3130	2.1						
	174	121	16.22	3010	2.3						
	194	108	14.56	2930	2.4						
	225	93	12.54	2820	2.7	**R**	**47**	**DRS**	**90L2**	33	255
	239	88	11.79	2780	2.8	**RF**	**47**	**DRS**	**90L2**	34	256
	278	76	10.15	2670	3.0						
	311	68	9.07	2590	3.2						
	352	60	8.01	2510	3.4						
	90	230	15.60	1040	0.85						
	106	199	13.25	1630	0.95	**R**	**37**	**DRS**	**90L4**	29	252
	118	178	11.83	1970	1.05	**RF**	**37**	**DRS**	**90L4**	31	253
	139	152	10.11	2340	1.10						
	148	142	9.47	2470	1.20						
	176	120	7.97	2740	1.30						
	210	100	6.67	2460	1.45						
	247	85	5.67	2570	1.65	**R**	**37**	**DRS**	**90L4**	29	252
	277	76	5.06	2510	1.80	**RF**	**37**	**DRS**	**90L4**	31	253
	324	65	4.32	2420	1.95						
	346	61	4.05	2380	2.0						
	411	51	3.41	2280	2.2						
	181	116	15.60	2780	1.70						
	213	99	13.25	2700	1.95	**R**	**37**	**DRS**	**90L2**	29	252
	238	88	11.83	2630	2.1	**RF**	**37**	**DRS**	**90L2**	31	253

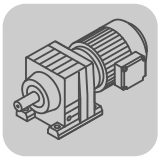
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2	**279**	75	10.11	2530	2.3						
	298	70	9.47	2490	2.4						
	354	59	7.97	2390	2.6						
	423	50	6.67	2260	2.9						
	498	42	5.67	2160	3.4	**R**	**37**	**DRS**	**90L2**	29	252
	557	38	5.06	2100	3.6	**RF**	**37**	**DRS**	**90L2**	31	253
	653	32	4.32	2010	3.9						
	697	30	4.05	1980	4.0						
	827	25	3.41	1880	4.4						
	138	152	10.13	1100	0.80						
	212	99	6.59	1120	1.05						
	250	84	5.60*	1380	1.20						
	280	75	5.00*	1530	1.25	**R**	**27**	**DRS**	**90L4**	24	249
	328	64	4.27	1540	1.35	**RF**	**27**	**DRS**	**90L4**	23	250
	350	60	4.00*	1520	1.40						
	415	51	3.37	1470	1.55						
	212	99	13.28*	1710	1.30						
	238	88	11.86	1680	1.45						
	278	76	10.13	1640	1.60						
	428	49	6.59	1460	2.2						
	504	42	5.60*	1410	2.4	**R**	**27**	**DRS**	**90L2**	24	249
	564	37	5.00*	1380	2.6	**RF**	**27**	**DRS**	**90L2**	23	250
	660	32	4.27	1320	2.7						
	705	30	4.00*	1300	2.8						
	837	25	3.37	1250	3.2						
	296	71	4.73	5190	1.75						
	347	61	4.04*	4960	2.4						
	378	56	3.70	4830	2.8						
	431	49	3.25*	4650	3.7						
	455	46	3.08*	4570	4.2						
	519	40	2.70	4390	5.3	**RX**	**77**	**DRS**	**90L4**	42	235
	576	36	2.43	4250	5.9	**RXF**	**77**	**DRS**	**90L4**	45	236
	657	32	2.13	4090	6.2						
	745	28	1.88*	3930	6.6						
	840	25	1.67	3780	6.9						
	984	21	1.42	3600	7.2						
	371	57	3.77	3280	1.55						
	438	48	3.20*	3140	2.1						
	485	43	2.89	3050	2.4						
	551	38	2.54	2940	3.1						
	583	36	2.40*	2900	3.4	**RX**	**67**	**DRS**	**90L4**	32	233
	685	31	2.04	2760	4.4	**RXF**	**67**	**DRS**	**90L4**	36	234
	754	28	1.86	2680	4.5						
	870	24	1.61	2570	4.7						
	1000	21	1.40*	2470	5.0						
	446	47	3.14	2450	1.40						
	530	40	2.64*	2350	1.75						
	591	36	2.37	2280	1.95						
	686	31	2.04	2190	2.2	**RX**	**57**	**DRS**	**90L4**	30	231
	729	29	1.92*	2150	2.4	**RXF**	**57**	**DRS**	**90L4**	32	232
	847	25	1.65	2060	2.8						
	948	22	1.48	2000	3.1						
	1075	20	1.30	1930	3.2						
3.0	**1.2**	21200	1123	120000	0.85						
	1.4	18800	999	120000	0.95						
	1.6	16200	861	120000	1.10	**R**	**167R97**	**DRS**	**100M4**	770	280
	1.8	14300	760	120000	1.25	**RF**	**167R97**	**DRS**	**100M4**	770	280
	2.1	12100	656	120000	1.50	**RM**	**167R97**	**DRS**	**100M4**	970	280
	2.8	9330	503	120000	1.95						
	2.6	9980	533	67800	1.30						
	3.0	8610	462	69600	1.50						
	3.3	8050	426	70200	1.60	**R**	**147R87**	**DRS**	**100M4**	460	280
	3.8	6950	368	71400	1.85	**RF**	**147R87**	**DRS**	**100M4**	470	280
	4.3	6150	326	72100	2.1	**RM**	**147R87**	**DRS**	**100M4**	640	280
	5.0	5220	280	72800	2.5						



R..DRS
R..DRS [kW]

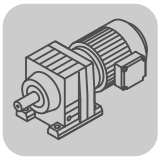
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
3.0	**1.6**	16800	889	21900	0.75						
	1.8	14800	784	52000	0.85	**R**	**147R77**	**DRS**	**100M4**	440	280
	2.0	13100	695	62300	1.00	**RF**	**147R77**	**DRS**	**100M4**	450	280
	2.3	11700	619	64900	1.10	**RM**	**147R77**	**DRS**	**100M4**	610	280
	2.5	10600	558	66900	1.20						
	2.8	9280	490	44800	0.85						
	3.3	8100	428	53200	1.00						
	3.7	7260	381	54900	1.10	**R**	**137R77**	**DRS**	**100M4**	305	280
	4.3	6150	323	56800	1.30	**RF**	**137R77**	**DRS**	**100M4**	330	280
	4.8	5540	291	57700	1.45	**RM**	**137R77**	**DRS**	**100M4**	440	280
	5.5	4840	255	58600	1.65						
	6.3	4240	223	59300	1.90						
	2.7	9990	517	29900	0.80	**R**	**137R77**	**DRS**	**100M4**	295	280
	3.1	8750	453	50700	0.90	**RF**	**137R77**	**DRS**	**100M4**	320	280
						RM	**137R77**	**DRS**	**100M4**	430	280
	5.5	4790	253	23500	0.90	**R**	**107R77**	**DRS**	**100M4**	220	280
	6.5	4060	214	30700	1.05	**RF**	**107R77**	**DRS**	**100M4**	225	280
	7.5	3540	187	33000	1.20	**RM**	**107R77**	**DRS**	**100M4**	315	280
						R	**107R77**	**DRS**	**100M4**	215	280
	5.5	4920	256	17400	0.85	**RF**	**107R77**	**DRS**	**100M4**	220	280
						RM	**107R77**	**DRS**	**100M4**	310	280
	6.0	4810	158.68	22700	0.90	**R**	**107**	**DRS**	**112M6**	195	272
	6.7	4290	141.83	29500	1.00	**RF**	**107**	**DRS**	**112M6**	200	273
	7.4	3870	127.68	31600	1.10	**RM**	**107**	**DRS**	**112M6**	290	273
	6.1	4700	229.95	26500	0.90						
	6.9	4150	203.16	30200	1.05						
	8.1	3520	172.34	33100	1.20						
	8.8	3240	158.68	34100	1.30						
	9.9	2900	141.83	35200	1.50	**R**	**107**	**DRS**	**100M4**	185	272
	11	2610	127.68	36000	1.65	**RF**	**107**	**DRS**	**100M4**	190	273
	12	2360	115.63	36300	1.80	**RM**	**107**	**DRS**	**100M4**	275	273
	14	2090	102.53	36700	2.0						
	15	1890	92.70	36900	2.3						
	18	1600	78.57	35900	2.7						
	19	1490	72.88	35200	2.9						
	9.3	3080	150.78	16200	0.95						
	11	2590	126.75	23600	1.15						
	12	2380	116.48	24700	1.25						
	14	2110	103.44	25900	1.40						
	15	1890	92.48	26800	1.60						
	17	1700	83.15	27300	1.75						
	19	1470	72.17	27700	2.0	**R**	**97**	**DRS**	**100M4**	125	270
	21	1330	65.21	27000	2.2	**RF**	**97**	**DRS**	**100M4**	140	271
	23	1220	59.92	26400	2.4	**RM**	**97**	**DRS**	**100M4**	195	271
	26	1080	53.21	25600	2.8						
	29	970	47.58	24800	3.1						
	33	870	42.78	24000	3.4						
	38	755	37.13	23100	4.0						
	42	680	33.25	22400	4.2						
	15	1910	93.38	3650	0.80						
	17	1670	81.92	16000	0.90	**R**	**87**	**DRS**	**100M4**	84	267
	19	1480	72.57	17400	1.05	**RF**	**87**	**DRS**	**100M4**	91	268
	22	1300	63.68*	18400	1.20	**RM**	**87**	**DRS**	**100M4**	120	268
	23	1230	60.35*	18800	1.25						
	27	1080	52.82	19500	1.45						
	29	970	47.58	19900	1.60	**R**	**87**	**DRS**	**100M4**	84	267
	34	850	41.74	19400	1.80	**RF**	**87**	**DRS**	**100M4**	91	268
	38	750	36.84*	18700	2.1	**RM**	**87**	**DRS**	**100M4**	120	268
	43	665	32.66*	18100	2.3						
	50	570	27.88	17400	2.6						
	41	700	34.40*	18400	2.1						
	45	640	31.40	17900	2.4						
	50	565	27.84*	17400	2.7						
	60	475	23.40	16500	3.2	**R**	**87**	**DRS**	**100M4**	82	267
	65	440	21.51	16100	3.4	**RF**	**87**	**DRS**	**100M4**	89	268
	73	390	19.10	15600	3.7	**RM**	**87**	**DRS**	**100M4**	120	268
	82	345	17.08*	15100	4.0						
	91	310	15.35	14600	4.3						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] 1)	SEW f_B					m [kg]	
3.0	**31**	930	45.81	8670	0.85	**R**	**77**	**DRS**	**100M4**	57	264
	32	880	43.26	9270	0.95	**RF**	**77**	**DRS**	**100M4**	63	265
	38	750	36.83	10500	1.10	**RM**	**77**	**DRS**	**100M4**	88	265
	42	685	33.47	11000	1.20						
	48	590	29.00	11600	1.40	**R**	**77**	**DRS**	**100M4**	57	264
	55	515	25.23	11300	1.50	**RF**	**77**	**DRS**	**100M4**	63	265
						RM	**77**	**DRS**	**100M4**	88	265
	60	475	23.37	11100	1.70						
	65	435	21.43	10800	1.85						
	74	380	18.80	10500	2.0						
	79	360	17.82*	10300	2.1						
	90	315	15.60	9980	2.3						
	100	285	14.05	9700	2.5	**R**	**77**	**DRS**	**100M4**	56	264
	114	250	12.33	9350	2.7	**RF**	**77**	**DRS**	**100M4**	61	265
	129	220	10.88	9030	3.0	**RM**	**77**	**DRS**	**100M4**	86	265
	145	197	9.64	8720	3.2						
	163	176	8.59	8500	3.6						
	181	158	7.74	8240	3.8						
	206	139	6.79	7920	4.2						
	60	475	23.44	8730	1.15						
	70	405	19.89	8420	1.45						
	78	365	17.95	8220	1.60						
	89	320	15.79	7980	1.75	**R**	**67**	**DRS**	**100M4**	50	261
	94	305	14.91	7860	1.80	**RF**	**67**	**DRS**	**100M4**	53	262
	110	255	12.70	7550	2.0	**RM**	**67**	**DRS**	**100M4**	69	262
	121	235	11.54	7360	2.1						
	140	200	10.00	7090	2.3						
						R	**57**	**DRS**	**100M4**	44	258
	52	550	26.97	4330	0.80	**RF**	**57**	**DRS**	**100M4**	48	259
						RM	**57**	**DRS**	**100M4**	60	259
	64	445	21.93	4380	1.00	**R**	**57**	**DRS**	**100M4**	43	258
	75	380	18.60*	4300	1.20	**RF**	**57**	**DRS**	**100M4**	47	259
	83	340	16.79	4240	1.30	**RM**	**57**	**DRS**	**100M4**	59	259
	95	300	14.77*	4160	1.45						
	100	285	13.95*	4120	1.50						
	118	240	11.88	4010	1.65						
	130	220	10.79	3940	1.75						
	150	191	9.35	3820	1.95						
	155	185	9.06	3810	2.0	**R**	**57**	**DRS**	**100M4**	43	258
	176	163	7.97	3700	2.2	**RF**	**57**	**DRS**	**100M4**	47	259
	186	154	7.53	3650	2.3	**RM**	**57**	**DRS**	**100M4**	59	259
	218	131	6.41	3520	2.6						
	240	119	5.82	3430	2.7						
	277	103	5.05	3310	3.0						
	319	90	4.39	3190	3.1						
	130	220	21.93	3940	2.0	**R**	**57**	**DRS**	**100M2**	43	258
	153	188	18.60*	3800	2.4	**RF**	**57**	**DRS**	**100M2**	47	259
	169	169	16.79	3720	2.7	**RM**	**57**	**DRS**	**100M2**	59	259
	192	149	14.77*	3610	2.9						
	204	141	13.95*	3560	3.1	**R**	**57**	**DRS**	**100M2**	43	258
	239	120	11.88	3420	3.4	**RF**	**57**	**DRS**	**100M2**	47	259
	263	109	10.79	3340	3.6	**RM**	**57**	**DRS**	**100M2**	59	259
	86	330	16.22	2020	0.85	**R**	**47**	**DRS**	**100M4**	38	255
	96	295	14.56	2500	0.90	**RF**	**47**	**DRS**	**100M4**	38	256
	112	255	12.54	3040	0.95						
	119	240	11.79	3040	1.00						
	138	205	10.15	2970	1.10						
	154	186	9.07	2910	1.20						
	175	164	8.01	2840	1.25						
	181	159	7.76*	2740	1.05						
	201	142	6.96	2680	1.10	**R**	**47**	**DRS**	**100M4**	38	255
	233	123	6.00	2610	1.25	**RF**	**47**	**DRS**	**100M4**	38	256
	248	115	5.64*	2580	1.35						
	288	99	4.85	2490	1.50						
	323	89	4.34	2430	1.65						
	365	78	3.83	2360	1.85						



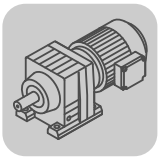
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
3.0	**241**	119	11.79	2660	2.1						
	280	102	10.15	2570	2.2						
	313	92	9.07	2500	2.4						
	354	81	8.01	2420	2.5						
	366	78	7.76*	2360	2.1						
	408	70	6.96	2300	2.3	**R**	**47**	**DRS**	**100M2**	38	255
	474	60	6.00	2210	2.6	**RF**	**47**	**DRS**	**100M2**	38	256
	504	57	5.64*	2180	2.7						
	585	49	4.85	2090	3.1						
	655	44	4.34	2030	3.3						
	741	39	3.83	1960	3.7						
	139	205	10.11	780	0.80						
	148	194	9.47	1010	0.85	**R**	**37**	**DRS**	**100M4**	34	252
	176	163	7.97	1510	0.95	**RF**	**37**	**DRS**	**100M4**	36	253
	210	136	6.67	1250	1.05						
	247	116	5.67	1620	1.25						
	277	104	5.06	1830	1.30	**R**	**37**	**DRS**	**100M4**	34	252
	324	88	4.32	2060	1.45	**RF**	**37**	**DRS**	**100M4**	36	253
	346	83	4.05	2140	1.45						
	411	70	3.41	2180	1.60						
	281	102	10.11	2350	1.65						
	300	96	9.47	2370	1.75	**R**	**37**	**DRS**	**100M2**	34	252
	356	80	7.97	2280	1.95	**RF**	**37**	**DRS**	**100M2**	36	253
	426	67	6.67	2160	2.1						
	501	57	5.67	2080	2.5						
	561	51	5.06	2030	2.6	**R**	**37**	**DRS**	**100M2**	34	252
	657	44	4.32	1950	2.9	**RF**	**37**	**DRS**	**100M2**	36	253
	702	41	4.05	1920	3.0						
	833	34	3.41	1830	3.3						
	250	115	5.60*	360	0.85						
	280	102	5.00*	615	0.95						
	328	87	4.27	910	1.00	**R**	**27**	**DRS**	**100M4**	29	249
	350	82	4.00*	1010	1.05	**RF**	**27**	**DRS**	**100M4**	29	250
	415	69	3.37	1230	1.15						
	431	66	6.59	1270	1.60						
	507	56	5.60*	1320	1.75						
	568	50	5.00*	1300	1.90	**R**	**27**	**DRS**	**100M2**	29	249
	665	43	4.27	1260	2.0	**RF**	**27**	**DRS**	**100M2**	29	250
	710	40	4.00*	1240	2.1						
	843	34	3.37	1200	2.3						
	217	132	6.45	7130	1.45						
	252	114	5.56*	6830	2.00						
	276	104	5.07	6650	2.4	**RX**	**87**	**DRS**	**100M4**	64	237
	311	92	4.50*	6420	3.2	**RXF**	**87**	**DRS**	**100M4**	69	238
	370	77	3.78	6100	3.9						
	296	97	4.73	5050	1.25						
	347	83	4.04*	4830	1.75						
	378	76	3.70	4720	2.0	**RX**	**77**	**DRS**	**100M4**	47	235
	431	66	3.25*	4550	2.7	**RXF**	**77**	**DRS**	**100M4**	49	236
	455	63	3.08*	4480	3.1						
	371	77	3.77	3150	1.15						
	438	66	3.20*	3030	1.55						
	485	59	2.89	2950	1.80						
	551	52	2.54	2850	2.3						
	583	49	2.40*	2810	2.5	**RX**	**67**	**DRS**	**100M4**	37	233
	685	42	2.04	2680	3.2	**RXF**	**67**	**DRS**	**100M4**	41	234
	754	38	1.86	2610	3.3						
	870	33	1.61	2510	3.5						
	1000	29	1.40*	2410	3.6						
	446	64	3.14	2330	1.00						
	530	54	2.64*	2240	1.30						
	591	48	2.37	2180	1.40						
	686	42	2.04	2100	1.65	**RX**	**57**	**DRS**	**100M4**	35	231
	729	39	1.92*	2070	1.75	**RXF**	**57**	**DRS**	**100M4**	37	232
	847	34	1.65	1990	2.0						
	948	30	1.48	1930	2.2						
	1075	27	1.30	1870	2.4						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
4.0	**1.7**	21100	861	120000	0.85						
	1.9	18600	760	120000	0.95	**R**	**167R97**	**DRS**	**100LC4**	770	280
	2.2	15800	656	120000	1.15	**RF**	**167R97**	**DRS**	**100LC4**	780	280
	2.9	12100	503	120000	1.50	**RM**	**167R97**	**DRS**	**100LC4**	970	280
	3.8	9090	376	120000	2.00						
	4.3	8090	335	120000	2.2						
	2.7	12900	533	62700	1.00						
	3.1	11200	462	65900	1.15						
	3.4	10400	426	67100	1.25						
	3.9	9020	368	69100	1.45	**R**	**147R87**	**DRS**	**100LC4**	465	280
	4.4	7980	326	70300	1.65	**RF**	**147R87**	**DRS**	**100LC4**	475	280
	5.2	6790	280	71500	1.90	**RM**	**147R87**	**DRS**	**100LC4**	640	280
	5.8	5990	247	72200	2.2						
	6.8	5180	214	72800	2.5						
	7.6	4580	189	73200	2.8						
	9.1	3850	159	73600	3.4						
	2.3	15200	619	46800	0.85						
	2.6	13700	558	61100	0.95	**R**	**147R77**	**DRS**	**100LC4**	445	280
	3.0	12000	489	64500	1.10	**RF**	**147R77**	**DRS**	**100LC4**	450	280
	3.5	10200	415	67500	1.25	**RM**	**147R77**	**DRS**	**100LC4**	620	280
	3.8	9400	381	42700	0.85						
	4.5	7970	323	53400	1.00	**R**	**137R77**	**DRS**	**100LC4**	310	280
	5.0	7180	291	55000	1.10	**RF**	**137R77**	**DRS**	**100LC4**	335	280
	5.7	6270	255	56600	1.25	**RM**	**137R77**	**DRS**	**100LC4**	445	280
	6.5	5490	223	57800	1.45						
	3.8	9380	376	42900	0.85	**R**	**137R77**	**DRS**	**100LC4**	300	280
	4.3	8450	339	52000	0.95	**RF**	**137R77**	**DRS**	**100LC4**	325	280
	4.9	7400	297	54600	1.10	**RM**	**137R77**	**DRS**	**100LC4**	435	280
						R	**107R77**	**DRS**	**100LC4**	225	280
	7.7	4590	187	27700	0.95	**RF**	**107R77**	**DRS**	**100LC4**	230	280
						RM	**107R77**	**DRS**	**100LC4**	320	280
						R	**107R77**	**DRS**	**100LC4**	220	280
	7.5	4800	193	22800	0.90	**RF**	**107R77**	**DRS**	**100LC4**	225	280
	8.4	4300	172	29500	1.00	**RM**	**107R77**	**DRS**	**100LC4**	315	280
	4.2	9040	222.60*	48600	0.90						
	5.0	7650	188.45	54100	1.05	**R**	**137**	**DRS**	**132S6**	285	274
	5.4	7080	174.40*	55200	1.15	**RF**	**137**	**DRS**	**132S6**	310	275
	6.0	6350	156.31	56500	1.25	**RM**	**137**	**DRS**	**132S6**	420	275
	6.7	5730	141.12*	57400	1.40						
	7.3	5200	128.18	58100	1.55						
	8.3	4620	113.72	58900	1.75	**R**	**137**	**DRS**	**132S6**	285	274
	9.1	4190	103.20*	59300	1.90	**RF**	**137**	**DRS**	**132S6**	310	275
	11	3600	88.70*	59900	2.2	**RM**	**137**	**DRS**	**132S6**	420	275
	8.4	4550	172.34	28000	0.95						
	9.1	4190	158.68	30000	1.05						
	10	3740	141.83	32100	1.15						
	11	3370	127.68	33600	1.25						
	12	3050	115.63	34800	1.40						
	14	2710	102.53	35800	1.60	**R**	**107**	**DRS**	**100LC4**	190	272
	16	2450	92.70	36200	1.75	**RF**	**107**	**DRS**	**100LC4**	195	273
	18	2070	78.57	34700	2.1	**RM**	**107**	**DRS**	**100LC4**	280	273
	20	1920	72.88	34000	2.2						
	22	1730	65.60*	33100	2.5						
	24	1570	59.41	32200	2.7						
	27	1390	52.68	31100	3.1						
	12	3070	116.48	16500	0.95						
	14	2730	103.44	22700	1.10						
	16	2440	92.48	24400	1.25						
	17	2190	83.15	25600	1.35						
	20	1900	72.17	26600	1.55						
	22	1720	65.21	25900	1.75	**R**	**97**	**DRS**	**100LC4**	130	270
	24	1580	59.92	25400	1.90	**RF**	**97**	**DRS**	**100LC4**	145	271
	27	1400	53.21	24600	2.1	**RM**	**97**	**DRS**	**100LC4**	200	271
	30	1250	47.58	23900	2.4						
	34	1130	42.78	23300	2.6						
	39	980	37.13	22400	3.1						
	43	870	33.25	21700	3.3						

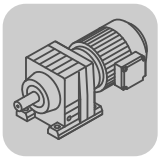


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
4.0	**45**	840	32.05	21500	3.0						
	53	715	27.19	20500	3.6	**R**	**97**	**DRS**	**100LC4**	125	270
	58	660	25.03	20000	4.3	**RF**	**97**	**DRS**	**100LC4**	145	271
	65	590	22.37	19400	4.6	**RM**	**97**	**DRS**	**100LC4**	195	271
	72	530	20.14	18800	4.9						
	23	1680	63.68*	13500	0.90	**R**	**87**	**DRS**	**100LC4**	89	267
	24	1590	60.35*	14100	0.95	**RF**	**87**	**DRS**	**100LC4**	96	268
	27	1390	52.82	15400	1.10	**RM**	**87**	**DRS**	**100LC4**	125	268
	30	1250	47.58	16200	1.25						
	35	1100	41.74	16900	1.40	**R**	**87**	**DRS**	**100LC4**	89	267
	39	970	36.84*	17500	1.60	**RF**	**87**	**DRS**	**100LC4**	96	268
	44	860	32.66*	17500	1.80	**RM**	**87**	**DRS**	**100LC4**	125	268
	52	735	27.88	16800	2.0						
	42	900	34.40*	17700	1.65						
	46	820	31.40	17300	1.85						
	52	735	27.84*	16800	2.1						
	62	615	23.40	16000	2.5						
	67	565	21.51	15600	2.6	**R**	**87**	**DRS**	**100LC4**	87	267
	76	500	19.10	15100	2.8	**RF**	**87**	**DRS**	**100LC4**	94	268
	85	450	17.08*	14700	3.1	**RM**	**87**	**DRS**	**100LC4**	125	268
	94	405	15.35	14200	3.3						
	108	350	13.33	13600	3.6						
	121	315	11.93	13200	3.9						
	39	970	36.83	6130	0.85						
	43	880	33.47	9270	0.95	**R**	**77**	**DRS**	**100LC4**	62	264
	50	765	29.00	10400	1.05	**RF**	**77**	**DRS**	**100LC4**	68	265
	57	665	25.23	10700	1.15	**RM**	**77**	**DRS**	**100LC4**	93	265
	62	615	23.37	10500	1.35						
	67	565	21.43	10300	1.45						
	77	495	18.80	10000	1.55						
	81	470	17.82*	9910	1.65						
	93	410	15.60	9590	1.80						
	103	370	14.05	9340	1.95						
	117	325	12.33	9030	2.1	**R**	**77**	**DRS**	**100LC4**	61	264
	133	285	10.88	8740	2.3	**RF**	**77**	**DRS**	**100LC4**	66	265
	150	250	9.64	8460	2.5	**RM**	**77**	**DRS**	**100LC4**	91	265
	168	225	8.59	8280	2.8						
	187	200	7.74	8030	3.0						
	213	180	6.79	7730	3.2						
	241	158	5.99*	7450	3.4						
	272	140	5.31*	7190	3.6						
	73	525	19.89	7930	1.15						
	80	470	17.95	7780	1.25						
	91	415	15.79	7570	1.35						
	97	390	14.91	7480	1.40						
	114	335	12.70	7210	1.55						
	125	305	11.54	7050	1.65						
	145	260	10.00	6810	1.80	**R**	**67**	**DRS**	**100LC4**	55	261
	166	230	8.70*	6580	1.90	**RF**	**67**	**DRS**	**100LC4**	58	262
	185	205	7.79	6410	1.85	**RM**	**67**	**DRS**	**100LC4**	74	262
	196	195	7.36*	6320	1.90						
	231	166	6.27	6040	2.00						
	254	150	5.70	5890	2.1						
	293	130	4.93	5650	2.2						
	337	114	4.29	5430	2.4						
	78	490	18.60*	3610	0.90	**R**	**57**	**DRS**	**100LC4**	48	258
	86	440	16.79	3830	1.00	**RF**	**57**	**DRS**	**100LC4**	52	259
	98	390	14.77*	3790	1.10	**RM**	**57**	**DRS**	**100LC4**	64	259
	104	365	13.95*	3770	1.15						
	122	310	11.88	3700	1.30						
	134	285	10.79	3650	1.35						
	155	245	9.35	3570	1.50						
	159	235	9.06	3580	1.55	**R**	**57**	**DRS**	**100LC4**	48	258
	181	210	7.97	3490	1.70	**RF**	**57**	**DRS**	**100LC4**	52	259
	192	199	7.53	3450	1.75	**RM**	**57**	**DRS**	**100LC4**	64	259
	225	169	6.41	3340	2.00						
	248	154	5.82	3270	2.1						
	286	133	5.05	3160	2.3						
	329	116	4.39	3060	2.4						

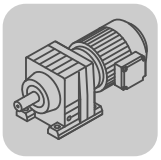


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
4.0	**142**	265	10.15	2020	0.85						
	159	235	9.07	2410	0.90						
	180	210	8.01	2630	0.95						
	208	184	6.96	2480	0.85						
	241	158	6.00	2420	1.00	**R**	**47**	**DRS**	**100LC4**	43	255
	256	149	5.64*	2400	1.05	**RF**	**47**	**DRS**	**100LC4**	43	256
	298	128	4.85	2340	1.15						
	333	115	4.34	2290	1.25						
	377	101	3.83	2240	1.40						
	179	210	16.22	2640	1.30						
	199	192	14.56	2600	1.40						
	231	165	12.54	2530	1.50						
	246	155	11.79	2500	1.60						
	286	134	10.15	2430	1.70						
	320	119	9.07	2380	1.85						
	362	106	8.01	2320	1.95	**R**	**47**	**DRS**	**100LC2**	43	255
	374	102	7.76*	2240	1.60	**RF**	**47**	**DRS**	**100LC2**	43	256
	416	92	6.96	2190	1.75						
	484	79	6.00	2120	1.95						
	514	74	5.64*	2090	2.1						
	598	64	4.85	2020	2.4						
	669	57	4.34	1960	2.6						
	757	50	3.83	1900	2.8						
	260	147	5.56*	6600	1.55						
	285	134	5.07	6440	1.85	**RX**	**87**	**DRS**	**100LC4**	69	237
	321	119	4.50*	6230	2.4	**RXF**	**87**	**DRS**	**100LC4**	74	238
	382	100	3.78	5930	3.0						
	358	107	4.04*	4650	1.35						
	390	98	3.70	4540	1.55						
	445	86	3.25*	4390	2.1						
	469	81	3.08*	4320	2.4						
	536	71	2.70	4170	3.0	**RX**	**77**	**DRS**	**100LC4**	52	235
	595	64	2.43	4050	3.4	**RXF**	**77**	**DRS**	**100LC4**	54	236
	678	56	2.13	3900	3.6						
	769	50	1.88*	3760	3.8						
	867	44	1.67	3630	3.9						
	1015	38	1.42	3460	4.1						
	452	85	3.20*	2860	1.20						
	500	76	2.89	2800	1.40						
	569	67	2.54	2720	1.75						
	602	63	2.40*	2680	1.95	**RX**	**67**	**DRS**	**100LC4**	42	233
	707	54	2.04	2570	2.5	**RXF**	**67**	**DRS**	**100LC4**	46	234
	778	49	1.86	2510	2.6						
	898	42	1.61	2410	2.7						
	1030	37	1.40*	2320	2.8						
	547	70	2.64*	1710	1.00						
	610	63	2.37	1820	1.10						
	708	54	2.04	1940	1.30						
	753	51	1.92*	1960	1.35	**RX**	**57**	**DRS**	**100LC4**	40	231
	875	44	1.65	1890	1.60	**RXF**	**57**	**DRS**	**100LC4**	42	232
	979	39	1.48	1840	1.75						
	1110	34	1.30	1780	1.85						
5.5	**2.2**	21900	656	120000	0.80						
	2.5	19200	579	120000	0.95						
	2.9	16800	503	120000	1.05						
	3.3	14300	432	120000	1.25	**R**	**167R97**	**DRS**	**132S4**	790	280
	3.8	12600	376	120000	1.45	**RF**	**167R97**	**DRS**	**132S4**	790	280
	4.3	11200	335	120000	1.60	**RM**	**167R97**	**DRS**	**132S4**	990	280
	4.8	10000	303	120000	1.80						
	5.2	9250	279	120000	1.95						
	3.1	15500	462	43500	0.85						
	3.4	14400	426	57200	0.90						
	3.9	12400	368	63700	1.05						
	4.4	11000	326	66200	1.20	**R**	**147R87**	**DRS**	**132S4**	480	280
	5.2	9410	280	68600	1.40	**RF**	**147R87**	**DRS**	**132S4**	490	280
	5.8	8300	247	70000	1.55	**RM**	**147R87**	**DRS**	**132S4**	660	280
	6.8	7170	214	71200	1.80						
	7.6	6340	189	71900	2.0						



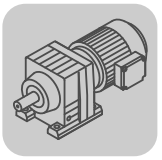
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
5.5	**5.9**	8930	163.31	69200	1.45	**R**	**147**	**DRS**	**160S6**	440	276
	6.5	8030	146.91	70300	1.60	**RF**	**147**	**DRS**	**160S6**	450	277
	8.0	6550	119.86	71700	2.00	**RM**	**147**	**DRS**	**160S6**	620	277
	8.8	5980	109.31	72200	2.2	**R**	**147**	**DRS**	**160S6**	440	276
	10	5170	94.60*	72800	2.5	**RF**	**147**	**DRS**	**160S6**	450	277
	12	4560	83.47	73200	2.8	**RM**	**147**	**DRS**	**160S6**	620	277
	5.5	9540	174.40*	40100	0.85						
	6.1	8550	156.31	51600	0.95	**R**	**137**	**DRS**	**160S6**	310	274
	6.8	7720	141.12*	54000	1.05	**RF**	**137**	**DRS**	**160S6**	335	275
	7.5	7010	128.18	55300	1.15	**RM**	**137**	**DRS**	**160S6**	445	275
	8.4	6220	113.72	56700	1.30						
						R	**137**	**DRS**	**160S6**	310	274
	9.3	5640	103.20*	57600	1.40	**RF**	**137**	**DRS**	**160S6**	335	275
						RM	**137**	**DRS**	**160S6**	445	275
	6.5	8090	222.60*	53200	1.00						
	7.7	6840	188.45	55600	1.15	**R**	**137**	**DRS**	**132S4**	290	274
	8.3	6330	174.40*	56500	1.25	**RF**	**137**	**DRS**	**132S4**	310	275
	9.2	5680	156.31	57500	1.40	**RM**	**137**	**DRS**	**132S4**	425	275
	10	5120	141.12*	58200	1.55						
	11	4650	128.18	58800	1.70						
	13	4130	113.72	59400	1.95						
	14	3750	103.20*	59700	2.1						
	16	3220	88.70*	60200	2.5	**R**	**137**	**DRS**	**132S4**	290	274
	18	2940	80.91*	60400	2.7	**RF**	**137**	**DRS**	**132S4**	310	275
	20	2670	73.49	60600	3.0	**RM**	**137**	**DRS**	**132S4**	425	275
	22	2360	65.20	60700	3.4						
	24	2150	59.17*	60900	3.7						
	28	1840	50.86*	61000	4.3						
	11	4640	127.68	27500	0.95						
	12	4200	115.63	30000	1.00						
	14	3720	102.53	32200	1.15						
	16	3360	92.70	33700	1.30						
	18	2850	78.57	33400	1.50	**R**	**107**	**DRS**	**132S4**	200	272
	20	2640	72.88	32800	1.60	**RF**	**107**	**DRS**	**132S4**	210	273
	22	2380	65.60*	32000	1.80	**RM**	**107**	**DRS**	**132S4**	295	273
	24	2150	59.41	31200	2.00						
	27	1910	52.68	30200	2.2						
	30	1730	47.63	29400	2.5						
	36	1460	40.37*	28200	2.9						
	17	3020	83.15	18900	1.00						
	20	2620	72.17	21900	1.15						
	22	2370	65.21	24600	1.25						
	24	2170	59.92	24200	1.40						
	27	1930	53.21	23600	1.55	**R**	**97**	**DRS**	**132S4**	145	270
	30	1720	47.58	23000	1.75	**RF**	**97**	**DRS**	**132S4**	160	271
	34	1550	42.78	22400	1.95	**RM**	**97**	**DRS**	**132S4**	215	271
	39	1340	37.13	21600	2.2						
	43	1200	33.25	21000	2.4						
	52	1000	27.58	20000	2.7						
	45	1160	32.05	20900	2.2						
	53	980	27.19	20000	2.6						
	58	900	25.03	19500	3.1	**R**	**97**	**DRS**	**132S4**	140	270
	65	810	22.37	18900	3.3	**RF**	**97**	**DRS**	**132S4**	160	271
	72	730	20.14	18400	3.6	**RM**	**97**	**DRS**	**132S4**	210	271
	79	660	18.24	17900	3.8						
	89	585	16.17	17300	4.1						
	30	1720	47.58	15600	0.90						
	35	1510	41.74	17200	1.00	**R**	**87**	**DRS**	**132S4**	105	267
	39	1330	36.84*	17100	1.15	**RF**	**87**	**DRS**	**132S4**	110	268
	44	1180	32.66*	16700	1.30	**RM**	**87**	**DRS**	**132S4**	140	268
	52	1010	27.88	16100	1.50						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] 1)	SEW f_B					m [kg]	
5.5	**52**	1010	27.84*	16100	1.55						
	62	850	23.40	15400	1.80						
	67	780	21.51	15100	1.90						
	76	690	19.10	14700	2.1						
	85	620	17.08*	14200	2.2						
	94	555	15.35	13800	2.4	**R**	**87**	**DRS**	**132S4**	100	267
	108	480	13.33	13300	2.6	**RF**	**87**	**DRS**	**132S4**	110	268
	121	430	11.93	12900	2.8	**RM**	**87**	**DRS**	**132S4**	140	268
	146	355	9.90*	12300	3.3						
	158	330	9.14*	12100	3.6						
	176	295	8.22	11800	3.9						
	203	255	7.13	11300	4.1						
	77	680	18.80	9280	1.15	**R**	**77**	**DRS**	**132S4**	76	264
	81	645	17.82*	9380	1.20	**RF**	**77**	**DRS**	**132S4**	82	265
	93	565	15.60	9130	1.30	**RM**	**77**	**DRS**	**132S4**	105	265
	103	510	14.05	8930	1.40						
	117	445	12.33	8670	1.55						
	133	395	10.88	8420	1.65						
	150	350	9.64	8170	1.80	**R**	**77**	**DRS**	**132S4**	76	264
	168	310	8.59	8060	2.0	**RF**	**77**	**DRS**	**132S4**	82	265
	187	280	7.74	7830	2.2	**RM**	**77**	**DRS**	**132S4**	105	265
	213	245	6.79	7560	2.4						
	241	215	5.99*	7300	2.5						
	272	193	5.31*	7050	2.6						
	91	570	15.79	6660	1.00						
	97	540	14.91	6950	1.00						
	114	460	12.70	6800	1.15						
	125	415	11.54	6680	1.20						
	145	360	10.00	6480	1.30						
	166	315	8.70*	6290	1.40	**R**	**67**	**DRS**	**132S4**	70	261
	185	280	7.79	6170	1.35	**RF**	**67**	**DRS**	**132S4**	73	262
	196	265	7.36*	6080	1.40	**RM**	**67**	**DRS**	**132S4**	89	262
	231	225	6.27	5850	1.45						
	254	205	5.70	5710	1.50						
	293	179	4.93	5500	1.60						
	337	156	4.29	5300	1.75						
	332	158	8.70*	5300	2.8						
	371	142	7.79	5160	2.7						
	393	134	7.36*	5080	2.8	**R**	**67**	**DRS**	**132S2**	68	261
	461	114	6.27	4850	2.9	**RF**	**67**	**DRS**	**132S2**	71	262
	507	104	5.70	4720	3.0	**RM**	**67**	**DRS**	**132S2**	87	262
	586	90	4.93	4530	3.2						
	673	78	4.29	4350	3.5						
	98	535	14.77*	1790	0.80						
	104	505	13.95*	2130	0.85	**R**	**57**	**DRS**	**132S4**	63	258
	122	430	11.88	2950	0.95	**RF**	**57**	**DRS**	**132S4**	67	259
	134	390	10.79	3270	1.00	**RM**	**57**	**DRS**	**132S4**	79	259
	155	335	9.35	3240	1.10						
	181	285	7.97	3220	1.25						
	192	270	7.53	3190	1.30	**R**	**57**	**DRS**	**132S4**	63	258
	225	230	6.41	3120	1.45	**RF**	**57**	**DRS**	**132S4**	67	259
	248	210	5.82	3070	1.50	**RM**	**57**	**DRS**	**132S4**	79	259
	286	183	5.05	2990	1.65						
	329	160	4.39	2910	1.75						
	309	170	9.35	2930	2.2						
	363	145	7.97	2850	2.4						
	384	137	7.53	2820	2.6	**R**	**57**	**DRS**	**132S2**	61	258
	451	116	6.41	2710	2.9	**RF**	**57**	**DRS**	**132S2**	65	259
	496	106	5.82	2650	3.0	**RM**	**57**	**DRS**	**132S2**	77	259
	573	92	5.05	2560	3.3						
	658	80	4.39	2470	3.5						
	298	176	4.85	1890	0.85						
	333	158	4.34	2110	0.95	**R**	**47**	**DRS**	**132S4**	59	255
	377	139	3.83	2080	1.05	**RF**	**47**	**DRS**	**132S4**	59	256

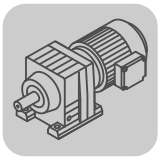


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
5.5	**230**	225	12.54	1740	1.10						
	245	210	11.79	1920	1.15						
	285	184	10.15	2250	1.25						
	319	165	9.07	2220	1.35						
	361	146	8.01	2170	1.40	**R**	**47**	**DRS**	**132S2**	56	255
	482	109	6.00	2000	1.45	**RF**	**47**	**DRS**	**132S2**	57	256
	512	102	5.64*	1970	1.50						
	595	88	4.85	1920	1.70						
	666	79	4.34	1870	1.85						
	754	70	3.83	1820	2.1						
	218	240	6.63*	10400	1.90						
	258	200	5.61	9950	2.2	**RX**	**107**	**DRS**	**132S4**	140	241
	278	189	5.19	9730	3.7	**RXF**	**107**	**DRS**	**132S4**	155	242
	311	169	4.65	9430	4.1						
	250	210	5.79	8360	2.0						
	294	179	4.91	7980	2.2						
	319	164	4.52	7800	3.6						
	357	147	4.04	7560	4.0						
	397	132	3.64*	7330	4.5						
	438	120	3.30	7120	5.0	**RX**	**97**	**DRS**	**132S4**	105	239
	494	106	2.92	6870	5.6	**RXF**	**97**	**DRS**	**132S4**	115	240
	547	96	2.64	6670	6.2						
	645	81	2.24*	6340	7.3						
	739	71	1.96	6090	8.0						
	883	60	1.64	5760	8.5						
	1020	52	1.42	5510	8.8						
	321	164	4.50*	6020	1.75						
	382	138	3.78	5750	2.2						
	416	126	3.48	5620	3.2						
	468	112	3.09	5440	3.6	**RX**	**87**	**DRS**	**132S4**	84	237
	524	100	2.76*	5280	4.0	**RXF**	**87**	**DRS**	**132S4**	89	238
	582	90	2.48	5120	4.5						
	671	78	2.15	4910	4.9						
	445	118	3.25*	4210	1.55						
	469	112	3.08*	4150	1.70						
	536	98	2.70	4020	2.2						
	595	88	2.43	3910	2.4	**RX**	**77**	**DRS**	**132S4**	67	235
	678	77	2.13	3770	2.6	**RXF**	**77**	**DRS**	**132S4**	70	236
	769	68	1.88*	3650	2.7						
	867	61	1.67	3530	2.8						
	1015	52	1.42	3370	3.0						
	569	92	2.54	2550	1.30						
	602	87	2.40*	2520	1.40						
	707	74	2.04	2430	1.80	**RX**	**67**	**DRS**	**132S4**	58	233
	778	68	1.86	2380	1.85	**RXF**	**67**	**DRS**	**132S4**	62	234
	898	58	1.61	2300	1.95						
	1030	51	1.40*	2220	2.0						
	708	74	2.04	695	0.95						
	753	70	1.92*	780	1.00						
	875	60	1.65	960	1.15	**RX**	**57**	**DRS**	**132S4**	55	231
	979	54	1.48	1040	1.25	**RXF**	**57**	**DRS**	**132S4**	57	232
	1110	47	1.30	1180	1.35						
7.5	**2.9**	23100	503	120000	0.80						
	3.3	19700	432	120000	0.90						
	3.8	17200	376	120000	1.05	**R**	**167R97**	**DRS**	**132M4**	800	280
	4.3	15300	335	120000	1.15	**RF**	**167R97**	**DRS**	**132M4**	800	280
	4.8	13800	303	120000	1.30	**RM**	**167R97**	**DRS**	**132M4**	1000	280
	5.2	12700	279	120000	1.40						
	4.4	15000	326	49300	0.85						
	5.2	12900	280	62900	1.00						
	5.8	11300	247	65600	1.15	**R**	**147R87**	**DRS**	**132M4**	490	280
	6.8	9830	214	68000	1.30	**RF**	**147R87**	**DRS**	**132M4**	500	280
	7.6	8690	189	69500	1.50	**RM**	**147R87**	**DRS**	**132M4**	670	280
	9.1	7300	159	71000	1.80						
	4.2	17200	229.71	120000	1.05	**R**	**167**	**DRS**	**160M6**	700	278
	5.1	14000	186.93*	120000	1.30	**RF**	**167**	**DRS**	**160M6**	700	279
						RM	**167**	**DRS**	**160M6**	900	279

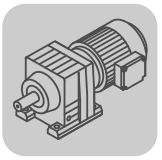


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**6.2**	11400	153.07	120000	1.55						
	6.8	10400	139.98	120000	1.70						
	7.8	9130	121.81*	120000	1.95						
	8.9	8060	107.49	120000	2.2	**R**	**167**	**DRS**	**160M6**	700	278
	10	6980	93.19	120000	2.6	**RF**	**167**	**DRS**	**160M6**	700	279
	12	6210	82.91*	120000	2.9	**RM**	**167**	**DRS**	**160M6**	900	279
	13	5520	73.70*	120000	3.3						
	14	5050	67.40	120000	3.6						
	5.8	12200	163.31	64100	1.05	**R**	**147**	**DRS**	**160M6**	450	276
	6.5	11000	146.91	66200	1.20	**RF**	**147**	**DRS**	**160M6**	460	277
	8.0	8980	119.86	69100	1.45	**RM**	**147**	**DRS**	**160M6**	630	277
	8.7	8190	109.31	70100	1.60	**R**	**147**	**DRS**	**160M6**	450	276
	10	7090	94.60*	71200	1.85	**RF**	**147**	**DRS**	**160M6**	460	277
	11	6250	83.47	72000	2.1	**RM**	**147**	**DRS**	**160M6**	630	277
	7.7	9340	188.45	43800	0.85						
	8.3	8640	174.40*	51200	0.95	**R**	**137**	**DRS**	**132M4**	300	274
	9.2	7740	156.31	53900	1.05	**RF**	**137**	**DRS**	**132M4**	325	275
	10	6990	141.12*	55400	1.15	**RM**	**137**	**DRS**	**132M4**	435	275
	11	6350	128.18	56500	1.25						
	13	5630	113.72	57600	1.40						
	14	5110	103.20*	58300	1.55						
	16	4390	88.70*	59100	1.80	**R**	**137**	**DRS**	**132M4**	300	274
	18	4010	80.91*	59500	2.00	**RF**	**137**	**DRS**	**132M4**	325	275
	20	3640	73.49	59800	2.2	**RM**	**137**	**DRS**	**132M4**	435	275
	22	3230	65.20	60200	2.5						
	24	2930	59.17*	60400	2.7						
	28	2520	50.86*	60700	3.2						
	16	4590	92.70	27800	0.95						
	18	3890	78.57	31500	1.10						
	20	3610	72.88	31200	1.20						
	22	3250	65.60*	30600	1.30						
	24	2940	59.41	29900	1.45	**R**	**107**	**DRS**	**132M4**	215	272
	27	2610	52.68	29100	1.65	**RF**	**107**	**DRS**	**132M4**	220	273
	30	2360	47.63	28400	1.80	**RM**	**107**	**DRS**	**132M4**	305	273
	36	2000	40.37*	27300	2.2						
	41	1740	35.26	26300	2.5						
	49	1460	29.49	25100	2.9						
	47	1520	30.77	25400	2.8						
	52	1360	27.58	24700	3.2	**R**	**107**	**DRS**	**132M4**	205	272
	58	1230	24.90*	24000	3.5	**RF**	**107**	**DRS**	**132M4**	210	273
	64	1120	22.62	23400	3.8	**RM**	**107**	**DRS**	**132M4**	300	273
	24	2970	59.92	20900	1.00						
	27	2630	53.21	22200	1.15	**R**	**97**	**DRS**	**132M4**	155	270
	30	2350	47.58	21700	1.25	**RF**	**97**	**DRS**	**132M4**	175	271
	34	2120	42.78	21300	1.40	**RM**	**97**	**DRS**	**132M4**	225	271
	39	1840	37.13	20700	1.65						
	43	1640	33.25	20200	1.75	**R**	**97**	**DRS**	**132M4**	155	270
	52	1360	27.58	19300	1.95	**RF**	**97**	**DRS**	**132M4**	175	271
						RM	**97**	**DRS**	**132M4**	225	271
	45	1580	32.05	20000	1.60						
	53	1340	27.19	19200	1.90						
	58	1240	25.03	18900	2.3	**R**	**97**	**DRS**	**132M4**	150	270
	65	1100	22.37	18300	2.4	**RF**	**97**	**DRS**	**132M4**	170	271
	72	990	20.14	17900	2.6	**RM**	**97**	**DRS**	**132M4**	220	271
	79	900	18.24	17400	2.8						
	39	1820	36.84*	12900	0.85	**R**	**87**	**DRS**	**132M4**	115	267
	44	1610	32.66*	15600	0.95	**RF**	**87**	**DRS**	**132M4**	120	268
	52	1380	27.88	15200	1.10	**RM**	**87**	**DRS**	**132M4**	150	268

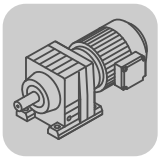


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**52**	1380	27.84*	15200	1.10						
	62	1160	23.40	14700	1.35						
	67	1060	21.51	14400	1.40						
	76	940	19.10	14100	1.50						
	85	840	17.08*	13700	1.65						
	94	760	15.35	12600	1.75						
	108	660	13.33	12900	1.95	**R**	**87**	**DRS**	**132M4**	115	267
	121	590	11.93	12500	2.1	**RF**	**87**	**DRS**	**132M4**	120	268
	146	490	9.90*	11900	2.4	**RM**	**87**	**DRS**	**132M4**	150	268
	158	450	9.14*	11900	2.7						
	176	405	8.22	11500	2.8						
	203	350	7.13	11100	3.0						
	226	315	6.39	10700	3.2						
	273	260	5.30*	10100	3.5						
	77	930	18.80	5390	0.85						
	81	880	17.82*	5800	0.90						
	93	770	15.60	6670	0.95						
	103	695	14.05	7230	1.05						
	117	610	12.33	7790	1.15						
	133	535	10.88	7990	1.20	**R**	**77**	**DRS**	**132M4**	87	264
	150	475	9.64	7790	1.30	**RF**	**77**	**DRS**	**132M4**	93	265
	168	425	8.59	7650	1.50	**RM**	**77**	**DRS**	**132M4**	120	265
	187	380	7.74	7570	1.60						
	213	335	6.79	7320	1.70						
	241	295	5.99*	7090	1.80						
	272	260	5.31*	6870	1.95						
	114	625	12.70	4310	0.85						
	125	570	11.54	4920	0.85						
	145	495	10.00	5670	0.95						
	166	430	8.70*	5920	1.00						
	185	385	7.79	5540	1.00	**R**	**67**	**DRS**	**132M4**	81	261
	196	360	7.36*	5760	1.00	**RF**	**67**	**DRS**	**132M4**	84	262
	231	310	6.27	5580	1.05	**RM**	**67**	**DRS**	**132M4**	100	262
	254	280	5.70	5470	1.10						
	293	240	4.93	5290	1.20						
	337	210	4.29	5120	1.25						
	181	395	7.97	1030	0.90						
	192	370	7.53	1340	0.95						
	225	315	6.41	2060	1.05	**R**	**57**	**DRS**	**132M4**	75	258
	248	285	5.82	2420	1.10	**RF**	**57**	**DRS**	**132M4**	78	259
	286	250	5.05	2760	1.20	**RM**	**57**	**DRS**	**132M4**	90	259
	329	215	4.39	2710	1.30						
	197	360	14.77*	2590	1.20						
	209	340	13.95*	2800	1.25						
	245	290	11.88	2780	1.40						
	270	265	10.79	2750	1.45						
	311	230	9.35	2700	1.60	**R**	**57**	**DRS**	**132M2**	75	258
	365	196	7.97	2660	1.80	**RF**	**57**	**DRS**	**132M2**	78	259
	387	185	7.53	2640	1.90	**RM**	**57**	**DRS**	**132M2**	90	259
	454	158	6.41	2560	2.1						
	500	143	5.82	2520	2.2						
	577	124	5.05	2440	2.5						
	663	108	4.39	2370	2.6						
	218	325	6.63*	10100	1.40						
	258	275	5.61	9660	1.65						
	278	255	5.19	9460	2.7	**RX**	**107**	**DRS**	**132M4**	150	241
	311	230	4.65	9180	3.0	**RXF**	**107**	**DRS**	**132M4**	170	242
	344	205	4.20*	8930	4.0						
	250	285	5.79	8060	1.45						
	294	240	4.91	7730	1.60						
	319	220	4.52	7560	2.6						
	357	200	4.04	7340	3.0	**RX**	**97**	**DRS**	**132M4**	120	239
	397	180	3.64*	7140	3.3	**RXF**	**97**	**DRS**	**132M4**	125	240
	438	163	3.30	6940	3.6						
	494	145	2.92	6710	4.1						

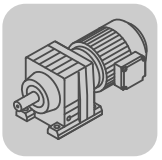


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**321**	220	4.50*	5740	1.30						
	382	188	3.78	5520	1.65						
	416	172	3.48	5400	2.4						
	468	153	3.09	5250	2.6						
	524	137	2.76*	5100	3.0	**RX**	**87**	**DRS**	**132M4**	95	237
	582	123	2.48	4960	3.3	**RXF**	**87**	**DRS**	**132M4**	100	238
	671	107	2.15	4770	3.6						
	749	96	1.93	4630	3.7						
	903	79	1.60*	4390	4.0						
	1040	69	1.39	4220	4.2						
	445	161	3.25*	3850	1.15						
	469	153	3.08*	3920	1.25						
	536	134	2.70	3820	1.60						
	595	120	2.43	3720	1.80	**RX**	**77**	**DRS**	**132M4**	78	235
	678	106	2.13	3610	1.90	**RXF**	**77**	**DRS**	**132M4**	81	236
	769	93	1.88*	3500	2.0						
	867	83	1.67	3390	2.1						
	1015	70	1.42	3250	2.2						
	569	126	2.54	1540	0.95						
	602	119	2.40*	1650	1.05						
	707	101	2.04	1840	1.30	**RX**	**67**	**DRS**	**132M4**	69	233
	778	92	1.86	1960	1.35	**RXF**	**67**	**DRS**	**132M4**	73	234
	898	80	1.61	2090	1.45						
	1030	69	1.40*	2080	1.50						
9.2	**3.9**	20900	376	120000	0.85						
	4.4	18600	335	120000	0.95	**R**	**167R97**	**DRS**	**132MC4**	800	280
	4.8	16700	303	120000	1.05	**RF**	**167R97**	**DRS**	**132MC4**	810	280
	5.2	15400	279	120000	1.15	**RM**	**167R97**	**DRS**	**132MC4**	1000	280
	5.2	15600	280	41700	0.85						
	5.9	13800	247	61000	0.95	**R**	**147R87**	**DRS**	**132MC4**	495	280
	6.9	11900	214	64700	1.10	**RF**	**147R87**	**DRS**	**132MC4**	500	280
	7.8	10500	189	67000	1.25	**RM**	**147R87**	**DRS**	**132MC4**	670	280
	9.2	8860	159	69300	1.45						
	9.0	9790	163.31	68100	1.35	**R**	**147**	**DRS**	**132MC4**	435	276
	10.0	8800	146.91	69400	1.50	**RF**	**147**	**DRS**	**132MC4**	445	277
	12	7180	119.86	71200	1.80	**RM**	**147**	**DRS**	**132MC4**	610	277
	13	6550	109.31	71700	2.00						
	15	5670	94.60*	72500	2.3	**R**	**147**	**DRS**	**132MC4**	435	276
	18	5000	83.47	72900	2.6	**RF**	**147**	**DRS**	**132MC4**	445	277
	20	4320	72.09	73400	3.0	**RM**	**147**	**DRS**	**132MC4**	610	277
	22	4010	66.99	73500	3.2						
	9.4	9370	156.31	43200	0.85						
	10	8460	141.12*	52000	0.95	**R**	**137**	**DRS**	**132MC4**	305	274
	11	7680	128.18	54000	1.05	**RF**	**137**	**DRS**	**132MC4**	325	275
	13	6810	113.72	55700	1.15	**RM**	**137**	**DRS**	**132MC4**	435	275
	14	6180	103.20*	56700	1.30						
	17	5310	88.70*	58000	1.50						
	18	4850	80.91*	58600	1.65						
	20	4400	73.49	59100	1.80	**R**	**137**	**DRS**	**132MC4**	305	274
	22	3910	65.20	59600	2.0	**RF**	**137**	**DRS**	**132MC4**	325	275
	25	3540	59.17*	59900	2.2	**RM**	**137**	**DRS**	**132MC4**	435	275
	29	3040	50.86*	60300	2.6						
	33	2660	44.39	60600	3.0						
	19	4710	78.57	26300	0.90						
	20	4370	72.88	29100	1.00						
	22	3930	65.60*	29300	1.10						
	25	3560	59.41	28700	1.20	**R**	**107**	**DRS**	**132MC4**	215	272
	28	3150	52.68	28000	1.35	**RF**	**107**	**DRS**	**132MC4**	220	273
	31	2850	47.63	27400	1.50	**RM**	**107**	**DRS**	**132MC4**	310	273
	36	2420	40.37*	26400	1.80						
	42	2110	35.26	25600	2.0						
	50	1760	29.49	24500	2.4						
	48	1840	30.77	24700	2.3						
	53	1650	27.58	24100	2.6	**R**	**107**	**DRS**	**132MC4**	210	272
	59	1490	24.90*	23400	2.9	**RF**	**107**	**DRS**	**132MC4**	215	273
	65	1350	22.62	22800	3.2	**RM**	**107**	**DRS**	**132MC4**	305	273
	73	1200	20.07	22100	3.6						

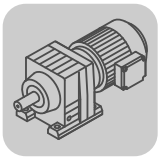


R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
9.2	**28**	3190	53.21	9960	0.95	**R**	**97**	**DRS**	**132MC4**	160	270
	31	2850	47.58	20600	1.05	**RF**	**97**	**DRS**	**132MC4**	175	271
	34	2560	42.78	20300	1.15	**RM**	**97**	**DRS**	**132MC4**	225	271
	39	2220	37.13	19800	1.35	**R**	**97**	**DRS**	**132MC4**	160	270
	44	1990	33.25	19400	1.45	**RF**	**97**	**DRS**	**132MC4**	175	271
	53	1650	27.58	18600	1.60	**RM**	**97**	**DRS**	**132MC4**	225	271
	59	1500	25.03	18200	1.90						
	65	1340	22.37	17800	2.0						
	73	1200	20.14	17300	2.2	**R**	**97**	**DRS**	**132MC4**	155	270
	80	1090	18.24	16900	2.3	**RF**	**97**	**DRS**	**132MC4**	170	271
	91	960	16.17	16400	2.5	**RM**	**97**	**DRS**	**132MC4**	225	271
	100	870	14.62	16000	2.6						
	118	740	12.39	15300	3.0						
	68	1280	21.51	13800	1.15						
	77	1140	19.10	13500	1.25						
	86	1020	17.08*	13200	1.35						
	95	920	15.35	12900	1.45						
	110	795	13.33	12500	1.60	**R**	**87**	**DRS**	**132MC4**	115	267
	123	715	11.93	12200	1.70	**RF**	**87**	**DRS**	**132MC4**	125	268
	148	590	9.90*	11600	2.00	**RM**	**87**	**DRS**	**132MC4**	155	268
	160	545	9.14*	11600	2.2						
	178	490	8.22	11300	2.4						
	205	425	7.13	10900	2.5						
	229	380	6.39	10500	2.7						
	104	840	14.05	4860	0.85	**R**	**77**	**DRS**	**132MC4**	90	264
	119	735	12.33	5710	0.95	**RF**	**77**	**DRS**	**132MC4**	96	265
	135	650	10.88	6360	1.00	**RM**	**77**	**DRS**	**132MC4**	120	265
	152	575	9.64	6860	1.10						
	189	460	7.74	6360	1.30	**R**	**77**	**DRS**	**132MC4**	90	264
	216	405	6.79	6760	1.40	**RF**	**77**	**DRS**	**132MC4**	96	265
	244	355	5.99*	6900	1.50	**RM**	**77**	**DRS**	**132MC4**	120	265
	276	315	5.31*	6690	1.60						
	282	310	5.19	9200	2.2						
	315	275	4.65	8950	2.5	**RX**	**107**	**DRS**	**132MC4**	155	241
	349	250	4.20*	8720	3.3	**RXF**	**107**	**DRS**	**132MC4**	170	242
	384	225	3.81	8500	3.6						
	433	200	3.38	8220	4.1						
	324	270	4.52	7340	2.2						
	362	240	4.04	7140	2.4						
	402	215	3.64*	6950	2.7						
	444	198	3.30	6770	3.0						
	501	175	2.92	6560	3.4	**RX**	**97**	**DRS**	**132MC4**	120	239
	554	158	2.64	6380	3.8	**RXF**	**97**	**DRS**	**132MC4**	130	240
	654	134	2.24*	6090	4.4						
	749	117	1.96	5860	4.9						
	895	98	1.64	5560	5.2						
	1035	85	1.42	5330	5.4						
	421	205	3.48	5200	1.95						
	475	185	3.09	5060	2.2						
	531	166	2.76*	4930	2.4						
	590	149	2.48	4800	2.7	**RX**	**87**	**DRS**	**132MC4**	98	237
	680	129	2.15	4630	3.0	**RXF**	**87**	**DRS**	**132MC4**	105	238
	760	116	1.93	4500	3.1						
	916	96	1.60*	4280	3.3						
	1055	83	1.39	4120	3.5						
	603	146	2.43	3060	1.50						
	688	128	2.13	3200	1.55						
	779	113	1.88*	3300	1.65	**RX**	**77**	**DRS**	**132MC4**	81	235
	879	100	1.67	3270	1.75	**RXF**	**77**	**DRS**	**132MC4**	84	236
	1030	85	1.42	3140	1.80						
11.0	**5.0**	19300	295	120000	0.95						
	5.4	17900	270	120000	1.00	**R**	**167R107**	**DRS**	**160M4**	870	280
	6.4	15100	229	120000	1.20	**RF**	**167R107**	**DRS**	**160M4**	880	280
	7.3	13200	200	120000	1.35	**RM**	**167R107**	**DRS**	**160M4**	1070	280
	8.6	11100	169	120000	1.60						
						R	**167R107**	**DRS**	**160M4**	860	280
	5.0	19600	291	120000	0.90	**RF**	**167R107**	**DRS**	**160M4**	870	280
						RM	**167R107**	**DRS**	**160M4**	1070	280



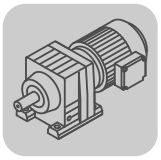
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
11.0	**4.4**	22400	335	120000	0.80	**R**	**167R97**	**DRS**	**160M4**	820	280
	4.8	20100	303	120000	0.90	**RF**	**167R97**	**DRS**	**160M4**	830	280
	5.2	18600	279	120000	0.95	**RM**	**167R97**	**DRS**	**160M4**	1020	280
	5.9	16500	247	27000	0.80						
	6.8	14300	214	58400	0.90	**R**	**147R87**	**DRS**	**160M4**	520	280
	7.7	12600	189	63300	1.05	**RF**	**147R87**	**DRS**	**160M4**	520	280
	9.2	10600	159	66800	1.20	**RM**	**147R87**	**DRS**	**160M4**	690	280
	6.4	16500	229.71	120000	1.10	**R**	**167**	**DRS**	**160M4**	700	278
	7.8	13400	186.93*	120000	1.35	**RF**	**167**	**DRS**	**160M4**	700	279
						RM	**167**	**DRS**	**160M4**	900	279
	9.5	11000	153.07	120000	1.65						
	10	10000	139.98	120000	1.80						
	12	8760	121.81*	120000	2.0	**R**	**167**	**DRS**	**160M4**	700	278
	14	7730	107.49	120000	2.3	**RF**	**167**	**DRS**	**160M4**	700	279
	16	6700	93.19	120000	2.7	**RM**	**167**	**DRS**	**160M4**	900	279
	18	5960	82.91*	120000	3.0						
	8.9	11700	163.31	65000	1.10	**R**	**147**	**DRS**	**160M4**	450	276
	9.9	10500	146.91	66900	1.25	**RF**	**147**	**DRS**	**160M4**	460	277
	12	8620	119.86	69600	1.50	**RM**	**147**	**DRS**	**160M4**	630	277
	13	7860	109.31	70500	1.65						
	15	6800	94.60*	71500	1.90						
	17	6000	83.47	72200	2.2	**R**	**147**	**DRS**	**160M4**	450	276
	20	5180	72.09	72800	2.5	**RF**	**147**	**DRS**	**160M4**	460	277
	22	4810	66.99	73100	2.7	**RM**	**147**	**DRS**	**160M4**	630	277
	24	4390	61.09	73300	3.0						
	28	3800	52.87	73600	3.4						
	10	10100	141.12*	25000	0.80						
	11	9220	128.18	45800	0.85						
	13	8180	113.72	53000	1.00						
	14	7420	103.20*	54600	1.10						
	16	6380	88.70*	56400	1.25						
	18	5820	80.91*	57300	1.35	**R**	**137**	**DRS**	**160M4**	320	274
	20	5280	73.49	58000	1.50	**RF**	**137**	**DRS**	**160M4**	345	275
	22	4690	65.20	58800	1.70	**RM**	**137**	**DRS**	**160M4**	455	275
	25	4250	59.17*	59200	1.90						
	29	3650	50.86*	59800	2.2						
	33	3190	44.39	60200	2.5						
	39	2700	37.65	60500	3.0						
	44	2360	32.91	60700	3.4						
	22	4710	65.60*	26000	0.90						
	25	4270	59.41	27600	1.00						
	28	3790	52.68	27000	1.15	**R**	**107**	**DRS**	**160M4**	235	272
	31	3420	47.63	26500	1.25	**RF**	**107**	**DRS**	**160M4**	245	273
	36	2900	40.37*	25700	1.50	**RM**	**107**	**DRS**	**160M4**	330	273
	41	2530	35.26	24900	1.70						
	50	2120	29.49	23900	2.0						
	47	2210	30.77	24200	1.95						
	53	1980	27.58	23600	2.2						
	59	1790	24.90*	23000	2.4	**R**	**107**	**DRS**	**160M4**	230	272
	65	1620	22.62	22400	2.6	**RF**	**107**	**DRS**	**160M4**	235	273
	73	1440	20.07	21700	3.0	**RM**	**107**	**DRS**	**160M4**	325	273
	80	1310	18.21	21200	3.3						
	34	3070	42.78	16600	0.95						
	39	2670	37.13	18900	1.10	**R**	**97**	**DRS**	**160M4**	180	270
	44	2390	33.25	18600	1.20	**RF**	**97**	**DRS**	**160M4**	195	271
	53	1980	27.58	18000	1.35	**RM**	**97**	**DRS**	**160M4**	250	271
	58	1800	25.03	17700	1.55	**R**	**97**	**DRS**	**160M4**	175	270
	65	1600	22.37	17300	1.70	**RF**	**97**	**DRS**	**160M4**	195	271
	72	1440	20.14	16900	1.80	**RM**	**97**	**DRS**	**160M4**	245	271
	80	1310	18.24	16500	1.90						
	90	1160	16.17	16100	2.1						
	100	1050	14.62	15700	2.2						
	118	890	12.39	15000	2.5	**R**	**97**	**DRS**	**160M4**	175	270
	135	775	10.83	14500	2.7	**RF**	**97**	**DRS**	**160M4**	195	271
	157	665	9.29	14200	3.0	**RM**	**97**	**DRS**	**160M4**	245	271
	174	600	8.39	13800	3.4						
	205	510	7.12	13200	3.9						
	235	445	6.21	12600	4.2						



R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
11.0	**68**	1540	21.51	13200	0.95	**R**	**87**	**DRS**	**160M4**	135	267
	76	1370	19.10	13000	1.05	**RF**	**87**	**DRS**	**160M4**	145	268
	85	1220	17.08*	12700	1.15	**RM**	**87**	**DRS**	**160M4**	175	268
	95	1100	15.35	12500	1.20						
	110	950	13.33	12100	1.35						
	122	850	11.93	11900	1.45						
	147	710	9.90*	11400	1.65	**R**	**87**	**DRS**	**160M4**	135	267
	160	655	9.14*	11400	1.85	**RF**	**87**	**DRS**	**160M4**	145	268
	178	590	8.22	11100	1.95	**RM**	**87**	**DRS**	**160M4**	175	268
	205	510	7.13	10700	2.1						
	229	455	6.39	10400	2.2						
	275	380	5.30*	9870	2.4						
	134	780	10.88	4340	0.85	**R**	**77**	**DRS**	**160M4**	110	264
	151	690	9.64	5080	0.90	**RF**	**77**	**DRS**	**160M4**	115	265
						RM	**77**	**DRS**	**160M4**	140	265
	189	555	7.74	4700	1.10						
	215	485	6.79	5300	1.20	**R**	**77**	**DRS**	**160M4**	110	264
	244	430	5.99*	5770	1.25	**RF**	**77**	**DRS**	**160M4**	115	265
	275	380	5.31*	6120	1.35	**RM**	**77**	**DRS**	**160M4**	140	265
	281	370	5.19	8970	1.85						
	314	330	4.65	8740	2.1						
	348	300	4.20*	8530	2.8						
	383	270	3.81	8320	3.0	**RX**	**107**	**DRS**	**160M4**	175	241
	431	240	3.38	8070	3.4	**RXF**	**107**	**DRS**	**160M4**	190	242
	475	220	3.07	7860	3.8						
	553	190	2.64*	7540	4.4						
	323	325	4.52	7130	1.85						
	361	290	4.04	6950	2.0						
	401	260	3.64*	6780	2.3						
	443	235	3.30	6620	2.5						
	499	210	2.92	6420	2.8	**RX**	**97**	**DRS**	**160M4**	145	239
	552	190	2.64	6260	3.1	**RXF**	**97**	**DRS**	**160M4**	150	240
	652	161	2.24*	5980	3.7						
	746	141	1.96	5770	4.0						
	892	118	1.64	5480	4.3						
	1030	102	1.42	5260	4.5						
	420	250	3.48	5010	1.60						
	473	220	3.09	4890	1.80	**RX**	**87**	**DRS**	**160M4**	120	237
	529	199	2.76*	4780	2.0	**RXF**	**87**	**DRS**	**160M4**	125	238
	588	178	2.48	4660	2.3						
	678	155	2.15	4510	2.5						
	757	139	1.93	4390	2.6	**RX**	**87**	**DRS**	**160M4**	120	237
	912	115	1.60*	4180	2.7	**RXF**	**87**	**DRS**	**160M4**	125	238
	1050	100	1.39	4030	2.9						
	601	175	2.43	1940	1.25						
	685	153	2.13	2190	1.30						
	777	135	1.88*	2370	1.40	**RX**	**77**	**DRS**	**160M4**	105	235
	876	120	1.67	2500	1.45	**RXF**	**77**	**DRS**	**160M4**	105	236
	1025	102	1.42	2610	1.50						
15.0	**6.4**	20700	229	120000	0.85	**R**	**167R107**	**DRS**	**160MC4**	880	280
	7.3	18000	200	120000	1.00	**RF**	**167R107**	**DRS**	**160MC4**	880	280
	8.6	15200	169	120000	1.20	**RM**	**167R107**	**DRS**	**160MC4**	1080	280
	6.5	20800	227	120000	0.85	**R**	**167R107**	**DRS**	**160MC4**	870	280
	7.4	18100	198	120000	1.00	**RF**	**167R107**	**DRS**	**160MC4**	880	280
						RM	**167R107**	**DRS**	**160MC4**	1070	280
	6.4	22400	229.71	120000	0.80	**R**	**167**	**DRS**	**160MC4**	700	278
	7.8	18200	186.93*	120000	1.00	**RF**	**167**	**DRS**	**160MC4**	710	279
						RM	**167**	**DRS**	**160MC4**	900	279
	9.6	14900	153.07	120000	1.20						
	10	13600	139.98	120000	1.30						
	12	11900	121.81*	120000	1.50						
	14	10500	107.49	120000	1.70	**R**	**167**	**DRS**	**160MC4**	700	278
	16	9110	93.19	120000	2.00	**RF**	**167**	**DRS**	**160MC4**	710	279
	18	8100	82.91*	120000	2.2	**RM**	**167**	**DRS**	**160MC4**	900	279
	20	7200	73.70*	120000	2.5						
	22	6580	67.40	120000	2.7						

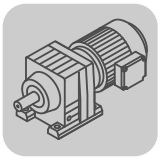
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
15.0	**9.0**	15900	163.31	37100	0.80	**R**	**147**	**DRS**	**160MC4**	455	276
	10.0	14300	146.91	58000	0.90	**RF**	**147**	**DRS**	**160MC4**	465	277
	12	11700	119.86	65100	1.10	**RM**	**147**	**DRS**	**160MC4**	630	277
	13	10600	109.31	66800	1.20						
	15	9240	94.60*	68800	1.40						
	18	8160	83.47	70100	1.60						
	20	7040	72.09	71300	1.85	**R**	**147**	**DRS**	**160MC4**	455	276
	22	6540	66.99	71700	2.00	**RF**	**147**	**DRS**	**160MC4**	465	277
	24	5970	61.09	72200	2.2	**RM**	**147**	**DRS**	**160MC4**	630	277
	28	5160	52.87	72800	2.5						
	31	4560	46.65	73200	2.8						
	14	10000	103.20*	27000	0.80	**R**	**137**	**DRS**	**160MC4**	325	274
	17	8670	88.70*	51100	0.90	**RF**	**137**	**DRS**	**160MC4**	350	275
	18	7910	80.91*	53600	1.00	**RM**	**137**	**DRS**	**160MC4**	460	275
	20	7180	73.49	55000	1.10						
	22	6370	65.20	56400	1.25						
	25	5780	59.17*	57400	1.40						
	29	4970	50.86*	58400	1.60	**R**	**137**	**DRS**	**160MC4**	325	274
	33	4340	44.39	59200	1.85	**RF**	**137**	**DRS**	**160MC4**	350	275
	39	3680	37.65	59800	2.2	**RM**	**137**	**DRS**	**160MC4**	460	275
	45	3210	32.91	60200	2.5						
	53	2720	27.83	60500	2.8						
	31	4650	47.63	24400	0.90	**R**	**107**	**DRS**	**160MC4**	240	272
	36	3940	40.37*	23900	1.10	**RF**	**107**	**DRS**	**160MC4**	250	273
	42	3440	35.26	23400	1.25	**RM**	**107**	**DRS**	**160MC4**	335	273
	50	2880	29.49	22600	1.50						
	48	3000	30.77	22800	1.45						
	53	2690	27.58	22300	1.60						
	59	2430	24.90*	21900	1.75	**R**	**107**	**DRS**	**160MC4**	235	272
	65	2210	22.62	21400	1.95	**RF**	**107**	**DRS**	**160MC4**	240	273
	73	1960	20.07	20900	2.2	**RM**	**107**	**DRS**	**160MC4**	330	273
	80	1780	18.21	20400	2.4						
	94	1530	15.65	19700	2.8						
	107	1330	13.66	19000	3.2						
	53	2690	27.58	16500	1.00	**R**	**97**	**DRS**	**160MC4**	185	270
						RF	**97**	**DRS**	**160MC4**	200	271
						RM	**97**	**DRS**	**160MC4**	255	271
	59	2440	25.03	16300	1.15						
	65	2180	22.37	16100	1.25						
	73	1960	20.14	15800	1.35						
	80	1780	18.24	15500	1.40						
	91	1580	16.17	15200	1.50						
	100	1420	14.62	14900	1.60	**R**	**97**	**DRS**	**160MC4**	180	270
	118	1210	12.39	14400	1.80	**RF**	**97**	**DRS**	**160MC4**	200	271
	135	1050	10.83	14000	1.95	**RM**	**97**	**DRS**	**160MC4**	250	271
	158	900	9.29	13800	2.2						
	175	820	8.39	13400	2.5						
	206	695	7.12	12800	2.9						
	236	605	6.21	12400	3.1						
	86	1660	17.08*	11600	0.85	**R**	**87**	**DRS**	**160MC4**	140	267
	95	1500	15.35	11500	0.90	**RF**	**87**	**DRS**	**160MC4**	150	268
	110	1300	13.33	11300	1.00	**RM**	**87**	**DRS**	**160MC4**	180	268
	123	1160	11.93	11100	1.05						
	148	960	9.90*	10700	1.20						
	160	890	9.14*	11000	1.35	**R**	**87**	**DRS**	**160MC4**	140	267
	178	800	8.22	10700	1.45	**RF**	**87**	**DRS**	**160MC4**	150	268
	205	695	7.13	10300	1.55	**RM**	**87**	**DRS**	**160MC4**	180	268
	229	620	6.39	10100	1.65						
	276	515	5.30*	9590	1.75						
	282	505	5.19	8430	1.35						
	315	450	4.65	8250	1.55	**RX**	**107**	**DRS**	**160MC4**	180	241
	349	410	4.20*	8080	2.0	**RXF**	**107**	**DRS**	**160MC4**	200	242
	384	370	3.81	7920	2.2						



R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
15.0	**433**	330	3.38	7700	2.5						
	477	300	3.07	7530	2.8						
	555	255	2.64*	7250	3.2						
	636	225	2.30	7000	3.7	**RX**	**107**	**DRS**	**160MC4**	180	241
	750	191	1.95	6700	4.0	**RXF**	**107**	**DRS**	**160MC4**	200	242
	858	167	1.71	6460	4.2						
	1015	141	1.44	6160	4.6						
	324	440	4.52	6660	1.35						
	362	395	4.04	6520	1.50						
	402	355	3.64*	6390	1.65						
	444	320	3.30	6260	1.85						
	501	285	2.92	6100	2.1	**RX**	**97**	**DRS**	**160MC4**	150	239
	554	255	2.64	5960	2.3	**RXF**	**97**	**DRS**	**160MC4**	155	240
	654	215	2.24*	5730	2.7						
	749	191	1.96	5540	3.0						
	895	160	1.64	5290	3.2						
	1035	138	1.42	5080	3.3						
	421	335	3.48	4280	1.20						
	475	300	3.09	4500	1.35						
	531	265	2.76*	4420	1.50	**RX**	**87**	**DRS**	**160MC4**	125	237
	590	240	2.48	4340	1.65	**RXF**	**87**	**DRS**	**160MC4**	130	238
	680	210	2.15	4230	1.85						
	760	189	1.93	4130	1.90						
	916	156	1.60*	3960	2.0	**RX**	**87**	**DRS**	**160MC4**	125	237
	1055	136	1.39	3840	2.1	**RXF**	**87**	**DRS**	**160MC4**	130	238
18.5	**7.8**	22600	186.93*	120000	0.80						
	9.5	18500	153.07	120000	0.95	**R**	**167**	**DRS**	**180M4**	740	278
	10	16900	139.98	120000	1.05	**RF**	**167**	**DRS**	**180M4**	750	279
	12	14700	121.81*	120000	1.20	**RM**	**167**	**DRS**	**180M4**	950	279
	14	13000	107.49	120000	1.40						
	16	11200	93.19	120000	1.60						
	18	10000	82.91*	120000	1.80	**R**	**167**	**DRS**	**180M4**	740	278
	20	8910	73.70*	120000	2.0	**RF**	**167**	**DRS**	**180M4**	750	279
	22	8150	67.40	120000	2.2	**RM**	**167**	**DRS**	**180M4**	950	279
	25	7090	58.65	120000	2.5						
	12	14500	119.86	56400	0.90	**R**	**147**	**DRS**	**180M4**	500	276
	13	13200	109.31	62200	1.00	**RF**	**147**	**DRS**	**180M4**	510	277
	15	11400	94.60*	65500	1.15	**RM**	**147**	**DRS**	**180M4**	670	277
	17	10100	83.47	67600	1.30						
	20	8720	72.09	69500	1.50						
	22	8100	66.99	70200	1.60	**R**	**147**	**DRS**	**180M4**	500	276
	24	7390	61.09	71000	1.75	**RF**	**147**	**DRS**	**180M4**	510	277
	28	6390	52.87	71900	2.0	**RM**	**147**	**DRS**	**180M4**	670	277
	31	5640	46.65	72500	2.3						
	36	4870	40.29	73000	2.7						
	18	9790	80.91*	34900	0.80						
	20	8890	73.49	50100	0.90	**R**	**137**	**DRS**	**180M4**	370	274
	22	7880	65.20	53600	1.00	**RF**	**137**	**DRS**	**180M4**	395	275
	25	7150	59.17*	55100	1.10	**RM**	**137**	**DRS**	**180M4**	500	275
	29	6150	50.86*	56800	1.30						
	33	5370	44.39	57900	1.50	**R**	**137**	**DRS**	**180M4**	370	274
	39	4550	37.65	58900	1.75	**RF**	**137**	**DRS**	**180M4**	395	275
	44	3980	32.91	59500	2.0	**RM**	**137**	**DRS**	**180M4**	500	275
	52	3360	27.83	60100	2.3						
	49	3570	29.57*	59900	2.2						
	61	2910	24.12	60400	2.7	**R**	**137**	**DRS**	**180M4**	360	274
	66	2660	22.00*	60600	3.0	**RF**	**137**	**DRS**	**180M4**	385	275
	77	2300	19.04*	60800	3.5	**RM**	**137**	**DRS**	**180M4**	495	275
	87	2030	16.80*	60900	3.9						
	36	4880	40.37*	19400	0.90	**R**	**107**	**DRS**	**180M4**	285	272
	41	4260	35.26	22100	1.00	**RF**	**107**	**DRS**	**180M4**	295	273
	50	3560	29.49	21500	1.20	**RM**	**107**	**DRS**	**180M4**	380	273

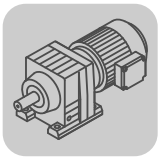
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
18.5	**59**	3010	24.90*	20900	1.45						
	65	2730	22.62	20600	1.55						
	73	2420	20.07	20100	1.75						
	80	2200	18.21	19700	1.95						
	93	1890	15.65	19100	2.3	**R**	**107**	**DRS**	**180M4**	280	272
	107	1650	13.66	18500	2.6	**RF**	**107**	**DRS**	**180M4**	285	273
	126	1400	11.59	17800	3.1	**RM**	**107**	**DRS**	**180M4**	375	273
	144	1220	10.13	17200	3.5						
	186	950	7.86	16300	3.1						
	219	800	6.66	15600	3.7						
	72	2430	20.14	14900	1.05						
	80	2200	18.24	14700	1.15						
	90	1950	16.17	14500	1.25						
	100	1760	14.62	14200	1.30						
	118	1490	12.39	13800	1.45						
	135	1310	10.83	13500	1.60	**R**	**97**	**DRS**	**180M4**	225	270
	157	1120	9.29	13400	1.80	**RF**	**97**	**DRS**	**180M4**	245	271
	174	1010	8.39	13100	2.0	**RM**	**97**	**DRS**	**180M4**	295	271
	205	860	7.12	12600	2.3						
	235	750	6.21	12100	2.5						
	281	625	5.20	11600	2.8						
	324	540	4.50*	11100	3.0						
	110	1610	13.33	10600	0.80						
	122	1440	11.93	10400	0.85						
	147	1190	9.90*	10200	1.00						
	160	1100	9.14*	10600	1.10	**R**	**87**	**DRS**	**180M4**	185	267
	178	990	8.22	10300	1.15	**RF**	**87**	**DRS**	**180M4**	195	268
	205	860	7.13	10000	1.25	**RM**	**87**	**DRS**	**180M4**	225	268
	229	770	6.39	9780	1.30						
	275	640	5.30*	9360	1.40						
	348	505	4.20*	7720	1.65						
	383	460	3.81	7580	1.80	**RX**	**107**	**DRS**	**180M4**	225	241
	431	405	3.38	7400	2.0	**RXF**	**107**	**DRS**	**180M4**	240	242
	475	370	3.07	7250	2.2						
	553	315	2.64*	7010	2.6						
	634	275	2.30	6790	3.0	**RX**	**107**	**DRS**	**180M4**	225	241
	747	235	1.95	6520	3.2	**RXF**	**107**	**DRS**	**180M4**	240	242
	855	205	1.71	6290	3.4						
	1010	175	1.44	6020	3.7						
	401	440	3.64*	6060	1.35						
	443	395	3.30	5960	1.50						
	499	350	2.92	5830	1.70						
	552	315	2.64	5720	1.85	**RX**	**97**	**DRS**	**180M4**	190	239
	652	270	2.24*	5520	2.2	**RXF**	**97**	**DRS**	**180M4**	200	240
	746	235	1.96	5350	2.4						
	892	198	1.64	5130	2.6						
	1030	171	1.42	4940	2.6						
	529	330	2.76*	3020	1.20						
	588	300	2.48	3330	1.35						
	678	260	2.15	3620	1.50	**RX**	**87**	**DRS**	**180M4**	170	237
	757	230	1.93	3800	1.50	**RXF**	**87**	**DRS**	**180M4**	175	238
	912	194	1.60*	3770	1.65						
	1050	168	1.39	3670	1.70						
22	**9.5**	22000	153.07	120000	0.80	**R**	**167**	**DRS**	**180L4**	760	278
	10	20100	139.98	120000	0.90	**RF**	**167**	**DRS**	**180L4**	770	279
	12	17500	121.81*	120000	1.05	**RM**	**167**	**DRS**	**180L4**	970	279
	14	15400	107.49	120000	1.15						
	16	13400	93.19	120000	1.35						
	18	11900	82.91*	120000	1.50						
	20	10600	73.70*	120000	1.70	**R**	**167**	**DRS**	**180L4**	760	278
	22	9690	67.40	120000	1.85	**RF**	**167**	**DRS**	**180L4**	770	279
	25	8430	58.65	120000	2.1	**RM**	**167**	**DRS**	**180L4**	970	279
	28	7440	51.76	120000	2.4						
	33	6450	44.87	120000	2.8						
	13	15700	109.31	40600	0.85						
	15	13600	94.60*	61400	0.95	**R**	**147**	**DRS**	**180L4**	520	276
	17	12000	83.47	64500	1.10	**RF**	**147**	**DRS**	**180L4**	530	277
	20	10300	72.09	67200	1.25	**RM**	**147**	**DRS**	**180L4**	690	277



R..DRS
R..DRS [kW]

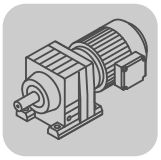
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
22	**22**	9630	66.99	68300	1.35						
	24	8790	61.09	69400	1.50						
	28	7600	52.87	70700	1.70	**R**	**147**	**DRS**	**180L4**	520	276
	31	6710	46.65	71600	1.95	**RF**	**147**	**DRS**	**180L4**	530	277
	36	5790	40.29	72400	2.2	**RM**	**147**	**DRS**	**180L4**	690	277
	41	5120	35.64	72900	2.5						
	49	4300	29.95	73400	3.0						
	22	9380	65.20	43100	0.85						
	25	8510	59.17*	51800	0.95	**R**	**137**	**DRS**	**180L4**	390	274
	29	7310	50.86*	54800	1.10	**RF**	**137**	**DRS**	**180L4**	415	275
	33	6380	44.39	56400	1.25	**RM**	**137**	**DRS**	**180L4**	520	275
	39	5410	37.65	57900	1.50	**R**	**137**	**DRS**	**180L4**	390	274
	44	4730	32.91	58700	1.70	**RF**	**137**	**DRS**	**180L4**	415	275
	52	4000	27.83	59500	1.90	**RM**	**137**	**DRS**	**180L4**	520	275
	49	4250	29.57*	59200	1.85						
	61	3470	24.12	60000	2.3	**R**	**137**	**DRS**	**180L4**	380	274
	66	3160	22.00*	60200	2.5	**RF**	**137**	**DRS**	**180L4**	405	275
	77	2730	19.04*	60500	2.9	**RM**	**137**	**DRS**	**180L4**	510	275
	87	2410	16.80*	60700	3.3	**R**	**137**	**DRS**	**180L4**	380	274
	101	2080	14.51	60900	3.8	**RF**	**137**	**DRS**	**180L4**	405	275
	114	1840	12.83	61000	4.3	**RM**	**137**	**DRS**	**180L4**	510	275
						R	**107**	**DRS**	**180L4**	305	272
	41	5070	35.26	4470	0.85	**RF**	**107**	**DRS**	**180L4**	310	273
	50	4240	29.49	20400	1.00	**RM**	**107**	**DRS**	**180L4**	400	273
	59	3580	24.90*	20000	1.20	**R**	**107**	**DRS**	**180L4**	300	272
	65	3250	22.62	19700	1.30	**RF**	**107**	**DRS**	**180L4**	305	273
	73	2880	20.07	19400	1.50	**RM**	**107**	**DRS**	**180L4**	395	273
	80	2620	18.21	19000	1.65						
	93	2250	15.65	18500	1.90						
	107	1960	13.66	18000	2.2						
	126	1660	11.59	17300	2.6	**R**	**107**	**DRS**	**180L4**	300	272
	144	1450	10.13	16800	3.0	**RF**	**107**	**DRS**	**180L4**	305	273
	170	1230	8.56	16100	3.5	**RM**	**107**	**DRS**	**180L4**	395	273
	186	1130	7.86	16100	2.6						
	219	950	6.66	15400	3.1						
	251	830	5.82	14800	3.5						
	72	2890	20.14	14000	0.90						
	80	2620	18.24	13900	0.95	**R**	**97**	**DRS**	**180L4**	245	270
	90	2320	16.17	13700	1.05	**RF**	**97**	**DRS**	**180L4**	265	271
	100	2100	14.62	13600	1.10	**RM**	**97**	**DRS**	**180L4**	315	271
	118	1780	12.39	13300	1.25						
	135	1550	10.83	13000	1.35						
	157	1330	9.29	13100	1.50						
	174	1200	8.39	12800	1.70	**R**	**97**	**DRS**	**180L4**	245	270
	205	1020	7.12	12300	1.95	**RF**	**97**	**DRS**	**180L4**	265	271
	235	890	6.21	11900	2.1	**RM**	**97**	**DRS**	**180L4**	315	271
	281	745	5.20	11400	2.4						
	324	645	4.50*	10900	2.5						
	147	1420	9.90*	9640	0.85						
	160	1310	9.14*	10100	0.90						
	178	1180	8.22	9960	1.00	**R**	**87**	**DRS**	**180L4**	205	267
	205	1020	7.13	9700	1.05	**RF**	**87**	**DRS**	**180L4**	215	268
	229	910	6.39	9490	1.10	**RM**	**87**	**DRS**	**180L4**	245	268
	275	760	5.30*	9120	1.20						
	348	600	4.20*	7340	1.35						
	383	545	3.81	7230	1.50						
	431	485	3.38	7090	1.70	**RX**	**107**	**DRS**	**180L4**	245	241
	475	440	3.07	6970	1.90	**RXF**	**107**	**DRS**	**180L4**	260	242
	553	375	2.64*	6760	2.2						
	634	330	2.30	6570	2.5						
	747	280	1.95	6320	2.7	**RX**	**107**	**DRS**	**180L4**	245	241
	855	245	1.71	6120	2.9	**RXF**	**107**	**DRS**	**180L4**	260	242
	1010	205	1.44	5870	3.1						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
22	**401**	520	3.64*	5720	1.15						
	443	470	3.30	5650	1.25						
	499	420	2.92	5560	1.40						
	552	380	2.64	5470	1.55	**RX**	**97**	**DRS**	**180L4**	210	239
	652	320	2.24*	5300	1.85	**RXF**	**97**	**DRS**	**180L4**	220	240
	746	280	1.96	5160	2.0						
	892	235	1.64	4960	2.1						
	1030	200	1.42	4790	2.2						
	529	395	2.76*	1240	1.00						
	588	355	2.48	1690	1.15						
	678	305	2.15	2140	1.25	**RX**	**87**	**DRS**	**180L4**	185	237
	757	275	1.93	2430	1.30	**RXF**	**87**	**DRS**	**180L4**	190	238
	912	230	1.60*	2740	1.35						
	1050	200	1.39	3020	1.45						
30	**14**	20900	107.49	120000	0.85	**R**	**167**	**DRS**	**180LC4**	780	278
	16	18100	93.19	120000	1.00	**RF**	**167**	**DRS**	**180LC4**	780	279
	18	16100	82.91*	120000	1.10	**RM**	**167**	**DRS**	**180LC4**	980	279
	20	14300	73.70*	120000	1.25						
	22	13100	67.40	120000	1.35						
	25	11400	58.65	120000	1.55						
	28	10000	51.76	120000	1.80	**R**	**167**	**DRS**	**180LC4**	780	278
	33	8740	44.87	120000	2.1	**RF**	**167**	**DRS**	**180LC4**	780	279
	37	7770	39.92	120000	2.3	**RM**	**167**	**DRS**	**180LC4**	980	279
	43	6700	34.41	120000	2.7						
	53	5440	27.96	120000	3.3						
	62	4620	23.71	120000	3.9						
	18	16200	83.47	32400	0.80						
	20	14000	72.09	60400	0.95	**R**	**147**	**DRS**	**180LC4**	530	276
	22	13000	66.99	62500	1.00	**RF**	**147**	**DRS**	**180LC4**	540	277
	24	11900	61.09	64700	1.10	**RM**	**147**	**DRS**	**180LC4**	700	277
	28	10300	52.87	67300	1.25						
	32	9090	46.65	69000	1.45						
	36	7850	40.29	70500	1.65	**R**	**147**	**DRS**	**180LC4**	530	276
	41	6940	35.64	71400	1.85	**RF**	**147**	**DRS**	**180LC4**	540	277
	49	5830	29.95	72300	2.2	**RM**	**147**	**DRS**	**180LC4**	700	277
	61	4710	24.19	73100	2.5						
	72	3980	20.44	73600	3.0	**R**	**147**	**DRS**	**180LC4**	520	276
	82	3510	18.04	73800	3.0	**RF**	**147**	**DRS**	**180LC4**	520	277
	94	3040	15.64	74000	4.3	**RM**	**147**	**DRS**	**180LC4**	690	277
	29	9910	50.86*	31900	0.80						
	33	8650	44.39	51200	0.90	**R**	**137**	**DRS**	**180LC4**	400	274
	39	7330	37.65	54700	1.10	**RF**	**137**	**DRS**	**180LC4**	425	275
	45	6410	32.91	56400	1.25	**RM**	**137**	**DRS**	**180LC4**	540	275
	53	5420	27.83	57900	1.40						
	61	4700	24.12	58800	1.70						
	67	4280	22.00*	59200	1.85	**R**	**137**	**DRS**	**180LC4**	390	274
	77	3710	19.04*	59800	2.2	**RF**	**137**	**DRS**	**180LC4**	415	275
	88	3270	16.80*	60100	2.4	**RM**	**137**	**DRS**	**180LC4**	530	275
	101	2820	14.51	59500	2.8						
	115	2500	12.83	58400	3.2	**R**	**137**	**DRS**	**180LC4**	390	274
	136	2100	10.79	56600	3.8	**RF**	**137**	**DRS**	**180LC4**	415	275
	194	1470	7.59	53300	3.4	**RM**	**137**	**DRS**	**180LC4**	530	275
	230	1240	6.38	51300	4.1						
	73	3910	20.07	17600	1.10						
	81	3540	18.21	17400	1.20						
	94	3050	15.65	17100	1.40						
	108	2660	13.66	16800	1.60						
	127	2250	11.59	16300	1.90	**R**	**107**	**DRS**	**180LC4**	310	272
	145	1970	10.13	15900	2.2	**RF**	**107**	**DRS**	**180LC4**	315	273
	172	1660	8.56	15400	2.6	**RM**	**107**	**DRS**	**180LC4**	405	273
	187	1530	7.86	15500	1.95						
	221	1290	6.66	14900	2.3						
	252	1130	5.82	14400	2.6						
	299	950	4.92	13700	3.0						
	101	2840	14.62	12000	0.80						
	119	2410	12.39	11900	0.90	**R**	**97**	**DRS**	**180LC4**	255	270
	136	2100	10.83	11800	1.00	**RF**	**97**	**DRS**	**180LC4**	275	271
	158	1800	9.29	12300	1.10	**RM**	**97**	**DRS**	**180LC4**	325	271
	175	1630	8.39	12100	1.25						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
30	**207**	1380	7.12	11700	1.45	**R**	**97**	**DRS**	**180LC4**	255	270
	237	1210	6.21	11400	1.55	**RF**	**97**	**DRS**	**180LC4**	275	271
	283	1010	5.20	10900	1.75	**RM**	**97**	**DRS**	**180LC4**	325	271
	327	870	4.50*	10500	1.85						
	434	655	3.38	6370	1.25						
	479	595	3.07	6310	1.40						
	557	510	2.64*	6180	1.60						
	638	445	2.30	6050	1.85	**RX**	**107**	**DRS**	**180LC4**	255	241
	752	380	1.95	5870	2.0	**RXF**	**107**	**DRS**	**180LC4**	270	242
	860	330	1.71	5720	2.1						
	1020	280	1.44	5520	2.3						
	503	565	2.92	3120	1.05						
	556	515	2.64	3560	1.15						
	656	435	2.24*	4050	1.35	**RX**	**97**	**DRS**	**180LC4**	225	239
	751	380	1.96	4450	1.50	**RXF**	**97**	**DRS**	**180LC4**	230	240
	898	315	1.64	4580	1.60						
	1040	275	1.42	4450	1.65						
37	**16**	22300	93.19	120000	0.80						
	18	19900	82.91*	120000	0.90						
	20	17700	73.70*	120000	1.00						
	22	16100	67.40	120000	1.10						
	25	14000	58.65	120000	1.30	**R**	**167**	**DRS**	**225S4**	890	278
	28	12400	51.76	120000	1.45	**RF**	**167**	**DRS**	**225S4**	900	279
	33	10700	44.87	120000	1.65	**RM**	**167**	**DRS**	**225S4**	1100	279
	37	9590	39.92	120000	1.90						
	43	8270	34.41	120000	2.2						
	53	6710	27.96	120000	2.7						
	48	7380	30.71	120000	1.35						
	60	5900	24.57	120000	2.4	**R**	**167**	**DRS**	**225S4**	890	278
	67	5250	21.85	120000	2.5	**RF**	**167**	**DRS**	**225S4**	890	279
	77	4570	19.03	120000	3.5	**RM**	**167**	**DRS**	**225S4**	1090	279
	87	4080	16.98	120000	3.7						
	22	16100	66.99	35000	0.80	**R**	**147**	**DRS**	**225S4**	650	276
	24	14600	61.09	54200	0.90	**RF**	**147**	**DRS**	**225S4**	660	277
	28	12700	52.87	63200	1.00	**RM**	**147**	**DRS**	**225S4**	820	277
	32	11200	46.65	65900	1.15						
	36	9680	40.29	68200	1.35	**R**	**147**	**DRS**	**225S4**	650	276
	41	8560	35.64	69700	1.50	**RF**	**147**	**DRS**	**225S4**	660	277
	49	7190	29.95	71100	1.80	**RM**	**147**	**DRS**	**225S4**	820	277
	61	5810	24.19	72400	2.0						
	72	4910	20.44	73000	2.4	**R**	**147**	**DRS**	**225S4**	630	276
	82	4330	18.04	73400	2.4	**RF**	**147**	**DRS**	**225S4**	640	277
	94	3750	15.64	73700	3.5	**RM**	**147**	**DRS**	**225S4**	810	277
						R	**147**	**DRS**	**225S4**	630	276
	106	3340	13.91	73900	3.8	**RF**	**147**	**DRS**	**225S4**	640	277
						RM	**147**	**DRS**	**225S4**	810	277
	39	9050	37.65	48500	0.90	**R**	**137**	**DRS**	**225S4**	520	274
	45	7910	32.91	53600	1.00	**RF**	**137**	**DRS**	**225S4**	540	275
	53	6680	27.83	55900	1.15	**RM**	**137**	**DRS**	**225S4**	650	275
	61	5790	24.12	57300	1.40						
	67	5280	22.00*	58000	1.50	**R**	**137**	**DRS**	**225S4**	510	274
	77	4570	19.04*	57800	1.75	**RF**	**137**	**DRS**	**225S4**	530	275
	88	4030	16.80*	57300	2.00	**RM**	**137**	**DRS**	**225S4**	640	275
	101	3480	14.51	56600	2.3						
	115	3080	12.83	55800	2.6						
	136	2590	10.79	54400	3.1	**R**	**137**	**DRS**	**225S4**	510	274
	169	2090	8.71	52600	3.7	**RF**	**137**	**DRS**	**225S4**	530	275
	194	1820	7.59	51900	2.8	**RM**	**137**	**DRS**	**225S4**	640	275
	230	1530	6.38	50100	3.3						
	285	1230	5.15	47800	3.7						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
37	**73**	4820	20.07	16100	0.90						
	81	4370	18.21	16100	1.00						
	94	3760	15.65	15900	1.15						
	108	3280	13.66	15700	1.30						
	127	2780	11.59	15400	1.55	**R**	**107**	**DRS**	**225S4**	430	272
	145	2430	10.13	15100	1.75	**RF**	**107**	**DRS**	**225S4**	435	273
	172	2050	8.56	14700	2.1	**RM**	**107**	**DRS**	**225S4**	520	273
	187	1880	7.86	15000	1.55						
	221	1600	6.66	14400	1.85						
	252	1390	5.82	14000	2.1						
	299	1180	4.92	13400	2.4						
	434	810	3.38	4470	1.00						
	479	735	3.07	4950	1.10						
	557	630	2.64*	5530	1.30						
	638	550	2.30	5610	1.50	**RX**	**107**	**DRS**	**225S4**	375	241
	752	465	1.95	5490	1.65	**RXF**	**107**	**DRS**	**225S4**	390	242
	860	410	1.71	5370	1.70						
	1020	345	1.44	5220	1.85						
45	**20**	21300	73.70*	120000	0.85						
	22	19500	67.40	120000	0.90	**R**	**167**	**DRS**	**225M4**	920	278
	25	17000	58.65	120000	1.05	**RF**	**167**	**DRS**	**225M4**	920	279
	29	15000	51.76	120000	1.20	**RM**	**167**	**DRS**	**225M4**	1120	279
	33	13000	44.87	120000	1.40						
	37	11500	39.92	120000	1.55	**R**	**167**	**DRS**	**225M4**	920	278
	43	9990	34.41	120000	1.80	**RF**	**167**	**DRS**	**225M4**	920	279
	53	8110	27.96	120000	2.2	**RM**	**167**	**DRS**	**225M4**	1120	279
	62	6880	23.71	120000	2.6						
	48	8910	30.71	120000	1.10						
	60	7130	24.57	120000	1.95	**R**	**167**	**DRS**	**225M4**	910	278
	68	6340	21.85	120000	2.0	**RF**	**167**	**DRS**	**225M4**	920	279
	78	5520	19.03	120000	2.9	**RM**	**167**	**DRS**	**225M4**	1110	279
	87	4930	16.98	120000	3.0						
	28	15300	52.87	45800	0.85						
	32	13500	46.65	61500	0.95	**R**	**147**	**DRS**	**225M4**	670	276
	37	11600	40.29	65100	1.10	**RF**	**147**	**DRS**	**225M4**	680	277
	42	10300	35.64	67300	1.25	**RM**	**147**	**DRS**	**225M4**	840	277
	49	8690	29.95	69500	1.50						
	61	7020	24.19	71300	1.70						
	72	5930	20.44	72300	2.0						
	82	5230	18.04	72800	2.0						
	95	4540	15.64	73200	2.9	**R**	**147**	**DRS**	**225M4**	650	276
	106	4030	13.91	73500	3.1	**RF**	**147**	**DRS**	**225M4**	660	277
	123	3480	11.99	73800	3.7	**RM**	**147**	**DRS**	**225M4**	830	277
	204	2100	7.25	74300	4.1						
	45	9550	32.91	39800	0.85	**R**	**137**	**DRS**	**225M4**	540	274
	53	8070	27.83	51300	0.95	**RF**	**137**	**DRS**	**225M4**	560	275
						RM	**137**	**DRS**	**225M4**	670	275
	61	7000	24.12	52500	1.15	**R**	**137**	**DRS**	**225M4**	530	274
	67	6380	22.00*	52900	1.25	**RF**	**137**	**DRS**	**225M4**	550	275
	78	5520	19.04*	53300	1.45	**RM**	**137**	**DRS**	**225M4**	660	275
	88	4870	16.80*	53400	1.65						
	102	4210	14.51	53100	1.90						
	115	3720	12.83	52700	2.2						
	137	3130	10.79	51900	2.6	**R**	**137**	**DRS**	**225M4**	530	274
	170	2520	8.71	50500	3.1	**RF**	**137**	**DRS**	**225M4**	550	275
	195	2200	7.59	50200	2.3	**RM**	**137**	**DRS**	**225M4**	660	275
	232	1850	6.38	48600	2.8						
	287	1490	5.15	46600	3.1						
	95	4540	15.65	14600	0.95						
	108	3960	13.66	14600	1.10						
	128	3360	11.59	14400	1.30						
	146	2940	10.13	14300	1.45	**R**	**107**	**DRS**	**225M4**	450	272
	173	2480	8.56	14000	1.75	**RF**	**107**	**DRS**	**225M4**	455	273
	188	2280	7.86	14400	1.30	**RM**	**107**	**DRS**	**225M4**	540	273
	222	1930	6.66	13900	1.55						
	254	1690	5.82	13600	1.75						
	301	1420	4.92	13000	2.0						



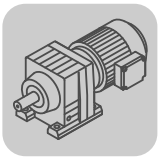
R..DRS
R..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] 1)	SEW f_B					m [kg]	
45	**437**	980	3.38	1430	0.85						
	482	890	3.07	2140	0.95						
	561	765	2.64*	3020	1.10						
	642	665	2.30	3680	1.25	**RX**	**107**	**DRS**	**225M4**	395	241
	757	565	1.95	4240	1.35	**RXF**	**107**	**DRS**	**225M4**	410	242
	866	495	1.71	4580	1.40						
	1025	415	1.44	4880	1.55						
55	**25**	20800	58.65	120000	0.85						
	29	18300	51.76	120000	1.00						
	33	15900	44.87	120000	1.15	**R**	**167**	**DRS**	**225MC4**	930	278
	37	14100	39.92	120000	1.25	**RF**	**167**	**DRS**	**225MC4**	930	279
	43	12200	34.41	120000	1.45	**RM**	**167**	**DRS**	**225MC4**	1130	279
	53	9920	27.96	120000	1.80						
	62	8410	23.71	120000	2.1						
	60	8710	24.57	120000	1.60	**R**	**167**	**DRS**	**225MC4**	920	278
	68	7750	21.85	120000	1.70	**RF**	**167**	**DRS**	**225MC4**	930	279
	78	6750	19.03	120000	2.4	**RM**	**167**	**DRS**	**225MC4**	1120	279
	87	6020	16.98	120000	2.5	**R**	**167**	**DRS**	**225MC4**	920	278
	102	5130	14.48	120000	3.5	**RF**	**167**	**DRS**	**225MC4**	930	279
	123	4250	11.99	120000	4.0	**RM**	**167**	**DRS**	**225MC4**	1120	279
	32	16500	46.65	27600	0.80						
	37	14200	40.29	58700	0.90	**R**	**147**	**DRS**	**225MC4**	680	276
	42	12600	35.64	63400	1.05	**RF**	**147**	**DRS**	**225MC4**	690	277
	49	10600	29.95	66800	1.20	**RM**	**147**	**DRS**	**225MC4**	860	277
	61	8580	24.19	69600	1.40						
	72	7250	20.44	71100	1.65						
	82	6400	18.04	71900	1.65	**R**	**147**	**DRS**	**225MC4**	670	276
	95	5540	15.64	72600	2.3	**RF**	**147**	**DRS**	**225MC4**	680	277
	106	4930	13.91	73000	2.6	**RM**	**147**	**DRS**	**225MC4**	840	277
	123	4250	11.99	73400	3.0						
	152	3450	9.74	73800	3.8	**R**	**147**	**DRS**	**225MC4**	670	276
	204	2570	7.25	74200	3.4	**RF**	**147**	**DRS**	**225MC4**	680	277
	251	2090	5.89	72500	4.2	**RM**	**147**	**DRS**	**225MC4**	840	277
	78	6750	19.04*	47800	1.20	**R**	**137**	**DRS**	**225MC4**	540	274
	88	5960	16.80*	48500	1.35	**RF**	**137**	**DRS**	**225MC4**	570	275
	102	5140	14.51	48900	1.55	**RM**	**137**	**DRS**	**225MC4**	680	275
	115	4550	12.83	49000	1.75						
	137	3820	10.79	48700	2.1						
	170	3090	8.71	48000	2.5	**R**	**137**	**DRS**	**225MC4**	540	274
	195	2690	7.59	48100	1.90	**RF**	**137**	**DRS**	**225MC4**	570	275
	232	2260	6.38	46900	2.3	**RM**	**137**	**DRS**	**225MC4**	680	275
	287	1820	5.15	45200	2.5						
75	**33**	21700	44.87	120000	0.85						
	37	19300	39.92	120000	0.95						
	43	16600	34.41	120000	1.10	**R**	**167**	**DV**	**280S4**	1190	278
	53	13500	27.96	120000	1.35	**RF**	**167**	**DV**	**280S4**	1190	279
	62	11400	23.71	120000	1.55						
	60	11800	24.57	120000	1.20						
	68	10500	21.85	120000	1.25	**R**	**167**	**DV**	**280S4**	1180	278
	78	9210	19.03	120000	1.75	**RF**	**167**	**DV**	**280S4**	1190	279
	87	8210	16.98	120000	1.85						
	102	7000	14.48	120000	2.6	**R**	**167**	**DV**	**280S4**	1180	278
	123	5800	11.99	116600	2.9	**RF**	**167**	**DV**	**280S4**	1190	279
	145	4950	10.24	112800	3.4						
	49	14400	29.95	56500	0.90	**R**	**147**	**DV**	**280S4**	940	276
	61	11700	24.19	65100	1.00	**RF**	**147**	**DV**	**280S4**	950	277
	72	9890	20.44	67900	1.20						
	82	8720	18.04	69500	1.20	**R**	**147**	**DV**	**280S4**	930	276
	95	7560	15.64	70800	1.70	**RF**	**147**	**DV**	**280S4**	940	277
	106	6730	13.91	71600	1.85						
	123	5800	11.99	72400	2.2						
	152	4710	9.74	73100	2.8						
	179	3990	8.26	73500	3.2	**R**	**147**	**DV**	**280S4**	930	276
	204	3500	7.25	73100	2.5	**RF**	**147**	**DV**	**280S4**	940	277
	251	2850	5.89	70100	3.0						
	296	2410	5.00	67600	3.6						

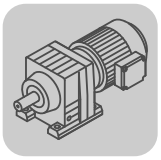
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] 1)	SEW f_B					m [kg]	
90	**37**	23100	39.92	120000	0.80						
	43	19900	34.41	120000	0.90	**R**	**167**	**DV**	**280M4**	1190	278
	53	16200	27.96	120000	1.10	**RF**	**167**	**DV**	**280M4**	1200	279
	62	13700	23.71	120000	1.30						
	78	11000	19.03	120000	1.45	**R**	**167**	**DV**	**280M4**	1180	278
						RF	**167**	**DV**	**280M4**	1190	279
	87	9860	16.98	120000	1.50						
	102	8400	14.48	117300	2.1	**R**	**167**	**DV**	**280M4**	1180	278
	123	6960	11.99	113500	2.4	**RF**	**167**	**DV**	**280M4**	1190	279
	145	5940	10.24	110100	2.9						
	95	9080	15.64	69000	1.45	**R**	**147**	**DV**	**280M4**	930	276
	106	8070	13.91	70200	1.55	**RF**	**147**	**DV**	**280M4**	940	277
	123	6960	11.99	71400	1.85						
	152	5650	9.74	72500	2.3						
	179	4790	8.26	73000	2.7	**R**	**147**	**DV**	**280M4**	930	276
	204	4210	7.25	70900	2.1	**RF**	**147**	**DV**	**280M4**	940	277
	251	3420	5.89	68300	2.5						
	296	2900	5.00	66100	3.0						
110	**53**	19800	27.96	117100	0.90	**R**	**167**	**DRS**	**315K4**	1440	278
	62	16800	23.71	116900	1.05	**RF**	**167**	**DRS**	**315K4**	1440	279
						RM	**167**	**DRS**	**315K4**	1640	279
	78	13400	19.03	115500	1.20	**R**	**167**	**DRS**	**315K4/ERF/NS**	1430	278
						RF	**167**	**DRS**	**315K4/ERF/NS**	1440	279
						RM	**167**	**DRS**	**315K4/ERF/NS**	1630	279
	87	12000	16.98	114300	1.25	**R**	**167**	**DRS**	**315K4**	1430	278
	102	10200	14.48	112200	1.75	**RF**	**167**	**DRS**	**315K4**	1440	279
	124	8500	11.99	109300	2.0	**RM**	**167**	**DRS**	**315K4**	1630	279
	145	7250	10.24	106500	2.3						
132						**R**	**167**	**DRS**	**315S4**	1520	278
	62	20100	23.71	107900	0.90	**RF**	**167**	**DRS**	**315S4**	1520	279
						RM	**167**	**DRS**	**315S4**	1720	279
	78	16200	19.03	108300	1.00	**R**	**167**	**DRS**	**315S4/ERF/NS**	1510	278
	87	14400	16.98	107900	1.05	**RF**	**167**	**DRS**	**315S4/ERF/NS**	1520	279
						RM	**167**	**DRS**	**315S4/ERF/NS**	1710	279
	102	12300	14.48	106700	1.45	**R**	**167**	**DRS**	**315S4**	1510	278
	123	10200	11.99	104700	1.65	**RF**	**167**	**DRS**	**315S4**	1520	279
	145	8710	10.24	102600	1.95	**RM**	**167**	**DRS**	**315S4**	1710	279
160	**102**	14900	14.48	99700	1.20	**R**	**167**	**DRS**	**315M4**	1670	278
	124	12300	11.99	98900	1.40	**RF**	**167**	**DRS**	**315M4**	1680	279
	145	10500	10.24	97600	1.60	**RM**	**167**	**DRS**	**315M4**	1870	279

9.4 R..R..DRS [Nm]

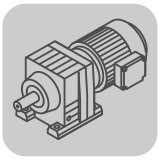
$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]						m [kg]	
130	**0.16**	8612	4230							
	0.19	7425	4230							
	0.20	6921	4230							
	0.23	6050	4230							
	0.26	5217	4230							
	0.30	4661	4230	**R**	**27R17**	**DR**	**63S4**		12	280
	0.34	4073	4230	**RF**	**27R17**	**DR**	**63S4**		11	280
	0.39	3516	4230							
	0.44	3160	4230							
	0.50	2763	4230							
	0.57	2414	4230							
	0.65	2110	4230							
	0.76	1822	4230							
	0.87	1580	4230							
	0.94	1464	4230							
	1.1	1270	4230							
	1.2	1100	4230							
	1.4	972	4230	**R**	**27R17**	**DR**	**63S4**		11	280
	1.6	840	4230	**RF**	**27R17**	**DR**	**63S4**		11	280
	1.9	741	4230							
	2.1	654	4230							
	2.4	566	4230							
	2.8	499	4230							
	3.1	440	4230							
	3.6	381	4230							
	4.2	329	4230							
	4.8	290	4230	**R**	**27R17**	**DR**	**63S4**		11	280
	5.4	256	4230	**RF**	**27R17**	**DR**	**63S4**		11	280
	6.1	227	4230							
	6.8	203	4230							
	7.4	179	4230							
	8.5	156	4230	**R**	**27R17**	**DR**	**63M4**		11	280
	9.8	135	4230	**RF**	**27R17**	**DR**	**63M4**		11	280
	11	118	4230							
	12	104	4230	**R**	**27R17**	**DR**	**63L4**		12	280
	14	90	4230	**RF**	**27R17**	**DR**	**63L4**		12	280
200	**0.16**	8595	4940							
	0.19	7411	4940							
	0.20	6907	4940							
	0.23	6038	4940							
	0.27	5206	4940							
	0.30	4651	4940	**R**	**37R17**	**DR**	**63S4**		17	280
	0.34	4065	4940	**RF**	**37R17**	**DR**	**63S4**		19	280
	0.38	3658	4940							
	0.44	3154	4940							
	0.50	2757	4940							
	0.57	2409	4940							
	0.66	2106	4940							
	0.76	1818	4940							
	0.88	1576	4940							
	1.0	1359	4940							
	1.1	1267	4940							
	1.3	1098	4940							
	1.4	970	4940	**R**	**37R17**	**DR**	**63S4**		17	280
	1.6	839	4940	**RF**	**37R17**	**DR**	**63S4**		19	280
	1.9	740	4940							
	2.1	653	4940							
	2.4	577	4940							
	2.8	498	4940							
	3.1	439	4940							
	3.6	378	4940	**R**	**37R17**	**DR**	**63S4**		17	280
	4.2	328	4940	**RF**	**37R17**	**DR**	**63S4**		18	280
	4.8	289	4940							
	5.0	265	4940							
	5.8	226	4940	**R**	**37R17**	**DR**	**63M4**		17	280
	6.5	202	4940	**RF**	**37R17**	**DR**	**63M4**		18	280
	7.4	179	4940							



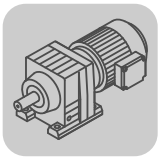
$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
200	**8.4**	156	4940	**R**	**37R17**	**DR**	**63L4**	18	280
	9.7	135	4940	**RF**	**37R17**	**DR**	**63L4**	19	280
	10	127	4940						
	13	104	4940	**R**	**37R17**	**DRS**	**71S4**	19	280
	15	90	4940	**RF**	**37R17**	**DRS**	**71S4**	21	280
300	**0.10**	13598	5420						
	0.11	12472	5420						
	0.13	10619	5420						
	0.15	9155	5420						
	0.16	8534	5420						
	0.18	7460	5420						
	0.20	6993	5420						
	0.22	6171	5420	**R**	**47R37**	**DR**	**63S4**	29	280
	0.25	5624	5420	**RF**	**47R37**	**DR**	**63S4**	29	280
	0.28	4849	5420						
	0.31	4520	5420						
	0.35	3951	5420						
	0.37	3704	5420						
	0.42	3268	5420						
	0.48	2898	5420						
	0.56	2463	5420						
	0.53	2598	5420						
	0.58	2383	5420						
	0.68	2029	5420						
	0.79	1749	5420						
	0.85	1630	5420						
	0.97	1425	5420	**R**	**47R37**	**DR**	**63S4**	29	280
	1.0	1336	5420	**RF**	**47R37**	**DR**	**63S4**	29	280
	1.2	1179	5420						
	1.3	1074	5420						
	1.5	927	5420						
	1.6	863	5420						
	1.8	755	5420						
	2.5	546	5420	**R**	**47R37**	**DR**	**63S4**	28	280
	2.8	502	5420	**RF**	**47R37**	**DR**	**63S4**	28	280
	3.2	429	5420						
	3.6	372	5420	**R**	**47R37**	**DR**	**63M4**	28	280
	3.8	348	5420	**RF**	**47R37**	**DR**	**63M4**	28	280
	4.4	301	5420						
	5.1	255	5420	**R**	**47R37**	**DR**	**63L4**	29	280
	5.7	228	5420	**RF**	**47R37**	**DR**	**63L4**	29	280
450	**0.10**	14369	7100						
	0.11	12095	7100						
	0.13	10860	7100						
	0.15	9445	7100						
	0.16	8480	7100						
	0.19	7312	7100						
	0.21	6521	7100						
	0.25	5585	7100	**R**	**57R37**	**DR**	**63S4**	34	280
	0.28	4928	7100	**RF**	**57R37**	**DR**	**63S4**	38	280
	0.32	4378	7100	**RM**	**57R37**	**DR**	**63S4**	50	280
	0.36	3873	7100						
	0.41	3344	7100						
	0.47	2907	7100						
	0.54	2567	7100						
	0.61	2244	7100						
	0.70	1967	7100						
	0.80	1732	7100						
	0.89	1555	7100						
	0.99	1399	7100	**R**	**57R37**	**DR**	**63S4**	34	280
	1.2	1189	7100	**RF**	**57R37**	**DR**	**63S4**	38	280
	1.3	1034	7100	**RM**	**57R37**	**DR**	**63S4**	50	280
	1.8	782	7100						
	2.0	678	7100						
	2.2	604	7100	**R**	**57R37**	**DR**	**63M4**	34	280
	2.5	537	7100	**RF**	**57R37**	**DR**	**63M4**	38	280
	2.8	471	7100	**RM**	**57R37**	**DR**	**63M4**	50	280



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [N]					m [kg]	
450	**3.6**	357	7100	**R**	**57R37**	**DR**	**63L4**	35	280
	4.1	319	7100	**RF**	**57R37**	**DR**	**63L4**	38	280
				RM	**57R37**	**DR**	**63L4**	50	280
	5.1	273	7100	**R**	**57R37**	**DRS**	**71S4**	37	280
	5.7	241	7100	**RF**	**57R37**	**DRS**	**71S4**	40	280
				RM	**57R37**	**DRS**	**71S4**	52	280
600	**0.09**	15361	7560						
	0.11	12931	7560						
	0.12	11996	7560						
	0.14	10097	7560						
	0.15	9066	7560						
	0.18	7816	7560						
	0.20	6732	7560	**R**	**67R37**	**DR**	**63S4**	41	280
	0.23	5970	7560	**RF**	**67R37**	**DR**	**63S4**	44	280
	0.26	5268	7560	**RM**	**67R37**	**DR**	**63S4**	60	280
	0.29	4680	7560						
	0.33	4136	7560						
	0.39	3566	7560						
	0.44	3125	7560						
	0.50	2745	7560						
	0.57	2403	7560						
	0.51	2682	7560						
	0.56	2460	7560						
	0.66	2094	7560	**R**	**67R37**	**DR**	**63S4**	40	280
	0.76	1805	7560	**RF**	**67R37**	**DR**	**63S4**	43	280
	0.85	1629	7560	**RM**	**67R37**	**DR**	**63S4**	59	280
	0.94	1471	7560						
	1.0	1379	7560						
	1.8	730	7560	**R**	**67R37**	**DR**	**63M4**	40	280
	2.3	571	7560	**RF**	**67R37**	**DR**	**63M4**	43	280
				RM	**67R37**	**DR**	**63M4**	59	280
				R	**67R37**	**DR**	**63L4**	41	280
	2.7	486	7560	**RF**	**67R37**	**DR**	**63L4**	44	280
				RM	**67R37**	**DR**	**63L4**	60	280
	0.84	1652	7560						
	0.96	1432	7560	**R**	**67R37**	**DR**	**63S4**	41	280
	1.1	1259	7560	**RF**	**67R37**	**DR**	**63S4**	44	280
	1.2	1106	7560	**RM**	**67R37**	**DR**	**63S4**	60	280
	1.6	836	7560						
	1.8	750	7560	**R**	**67R37**	**DR**	**63M4**	41	280
	2.0	646	7560	**RF**	**67R37**	**DR**	**63M4**	44	280
	2.3	574	7560	**RM**	**67R37**	**DR**	**63M4**	60	280
	2.6	495	7560	**R**	**67R37**	**DR**	**63L4**	41	280
	3.0	438	7560	**RF**	**67R37**	**DR**	**63L4**	45	280
	3.4	388	7560	**RM**	**67R37**	**DR**	**63L4**	60	280
	4.0	344	7560	**R**	**67R37**	**DRS**	**71S4**	43	280
	4.7	294	7560	**RF**	**67R37**	**DRS**	**71S4**	47	280
				RM	**67R37**	**DRS**	**71S4**	62	280
820	**0.08**	16370	9920						
	0.09	15015	9920						
	0.10	13885	9920						
	0.11	12783	9920						
	0.13	11021	9920						
	0.14	9788	9920						
	0.16	8714	9920						
	0.18	7617	9920	**R**	**77R37**	**DR**	**63S4**	46	280
	0.20	6770	9920	**RF**	**77R37**	**DR**	**63S4**	52	280
	0.24	5838	9920	**RM**	**77R37**	**DR**	**63S4**	77	280
	0.27	5184	9920						
	0.31	4470	9920						
	0.35	3999	9920						
	0.40	3488	9920						
	0.45	3053	9920						
	0.52	2671	9920						

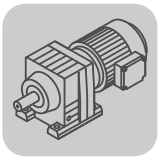


$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
820	**0.44**	3151	9920						
	0.48	2890	9920						
	0.56	2460	9920						
	0.65	2121	9920	**R**	**77R37**	**DR**	**63S4**	45	280
	0.70	1977	9920	**RF**	**77R37**	**DR**	**63S4**	51	280
	0.80	1728	9920	**RM**	**77R37**	**DR**	**63S4**	76	280
	0.85	1620	9920						
	0.97	1430	9920						
	1.1	1303	9920						
	1.2	1124	9920						
	1.3	1047	9920	**R**	**77R37**	**DR**	**63M4**	45	280
	1.4	915	9920	**RF**	**77R37**	**DR**	**63M4**	51	280
	1.5	858	9920	**RM**	**77R37**	**DR**	**63M4**	76	280
	1.7	757	9920						
	1.9	671	9920	**R**	**77R37**	**DR**	**63L4**	46	280
	2.3	571	9920	**RF**	**77R37**	**DR**	**63L4**	52	280
				RM	**77R37**	**DR**	**63L4**	77	280
	2.3	560	9920	**R**	**77R37**	**DR**	**63L4**	47	280
				RF	**77R37**	**DR**	**63L4**	53	280
				RM	**77R37**	**DR**	**63L4**	78	280
	2.8	488	9920	**R**	**77R37**	**DRS**	**71S4**	49	280
	3.2	436	9920	**RF**	**77R37**	**DRS**	**71S4**	55	280
	3.7	373	9920	**RM**	**77R37**	**DRS**	**71S4**	80	280
	4.2	327	9920	**R**	**77R37**	**DRS**	**71M4**	50	280
	4.8	289	9920	**RF**	**77R37**	**DRS**	**71M4**	56	280
	5.3	260	9920	**RM**	**77R37**	**DRS**	**71M4**	81	280
1550	**0.08**	17452	16900						
	0.09	15310	16900						
	0.10	13813	16900						
	0.11	12025	16900						
	0.13	10549	16900						
	0.15	9244	16900						
	0.17	8109	16900	**R**	**87R57**	**DR**	**63S4**	86	280
	0.20	7038	16900	**RF**	**87R57**	**DR**	**63S4**	93	280
	0.22	6174	16900	**RM**	**87R57**	**DR**	**63S4**	125	280
	0.25	5449	16900						
	0.29	4831	16900						
	0.33	4206	16900						
	0.37	3744	16900						
	0.43	3233	16900						
	0.48	2873	16900						
	0.67	1961	16900	**R**	**87R57**	**DR**	**63M4**	86	280
				RF	**87R57**	**DR**	**63M4**	93	280
				RM	**87R57**	**DR**	**63M4**	125	280
	0.34	4020	16900						
	0.43	3182	16900	**R**	**87R57**	**DR**	**63S4**	85	280
	0.50	2770	16900	**RF**	**87R57**	**DR**	**63S4**	92	280
	0.53	2595	16900	**RM**	**87R57**	**DR**	**63S4**	120	280
	0.62	2129	16900						
	0.68	1930	16900	**R**	**87R57**	**DR**	**63M4**	85	280
	0.76	1733	16900	**RF**	**87R57**	**DR**	**63M4**	92	280
	0.89	1489	16900	**RM**	**87R57**	**DR**	**63M4**	120	280
	0.95	1395	16900						
	1.0	1232	16900	**R**	**87R57**	**DR**	**63L4**	85	280
	1.1	1145	16900	**RF**	**87R57**	**DR**	**63L4**	93	280
	1.2	1037	16900	**RM**	**87R57**	**DR**	**63L4**	120	280
	1.7	802	16900	**R**	**87R57**	**DRS**	**71S4**	87	280
	1.8	754	16900	**RF**	**87R57**	**DRS**	**71S4**	94	280
				RM	**87R57**	**DRS**	**71S4**	125	280
	0.76	1737	16900	**R**	**87R57**	**DR**	**63M4**	85	280
	0.87	1524	16900	**RF**	**87R57**	**DR**	**63M4**	92	280
				RM	**87R57**	**DR**	**63M4**	120	280
	1.0	1303	16900	**R**	**87R57**	**DR**	**63L4**	86	280
	1.3	1008	16900	**RF**	**87R57**	**DR**	**63L4**	93	280
				RM	**87R57**	**DR**	**63L4**	125	280
	1.6	885	16900	**R**	**87R57**	**DRS**	**71S4**	88	280
	2.0	685	16900	**RF**	**87R57**	**DRS**	**71S4**	95	280
				RM	**87R57**	**DRS**	**71S4**	125	280

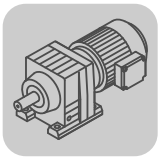


R..DRS
R..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
1550				**R**	**87R57**	**DRS**	**71M4**	89	280
	2.3	599	16900	**RF**	**87R57**	**DRS**	**71M4**	96	280
				RM	**87R57**	**DRS**	**71M4**	125	280
				R	**87R57**	**DRS**	**80S4**	91	280
	3.5	398	16900	**RF**	**87R57**	**DRS**	**80S4**	98	280
	4.0	352	16900	**RM**	**87R57**	**DRS**	**80S4**	130	280
				R	**87R57**	**DRS**	**80M4**	94	280
	4.6	305	16900	**RF**	**87R57**	**DRS**	**80M4**	100	280
	5.3	268	16900	**RM**	**87R57**	**DRS**	**80M4**	130	280
				R	**87R57**	**DRS**	**71M4**	87	280
	2.6	538	16900	**RF**	**87R57**	**DRS**	**71M4**	95	280
	2.9	472	16900	**RM**	**87R57**	**DRS**	**71M4**	125	280
				R	**87R57**	**DRS**	**80S4**	90	280
	3.5	400	16900	**RF**	**87R57**	**DRS**	**80S4**	97	280
	3.9	361	16900	**RM**	**87R57**	**DRS**	**80S4**	125	280
				R	**87R57**	**DRS**	**80M4**	92	280
	4.7	300	16900	**RF**	**87R57**	**DRS**	**80M4**	100	280
	5.5	256	16900	**RM**	**87R57**	**DRS**	**80M4**	130	280
3000	**0.06**	21769	19800						
	0.07	19332	19800						
	0.08	17230	19800						
	0.09	14999	19800						
	0.10	13320	19800						
	0.12	11156	19800	**R**	**97R57**	**DR**	**63S4**	130	280
	0.14	10030	19800	**RF**	**97R57**	**DR**	**63S4**	145	280
	0.16	8706	19800	**RM**	**97R57**	**DR**	**63S4**	195	280
	0.18	7692	19800						
	0.21	6708	19800						
	0.23	5931	19800						
	0.27	5161	19800						
				R	**97R57**	**DR**	**63M4**	130	280
	0.33	4004	19800	**RF**	**97R57**	**DR**	**63M4**	145	280
	0.38	3481	19800	**RM**	**97R57**	**DR**	**63M4**	195	280
				R	**97R57**	**DR**	**63S4**	125	280
	0.29	4678	19800	**RF**	**97R57**	**DR**	**63S4**	140	280
				RM	**97R57**	**DR**	**63S4**	195	280
	0.31	4309	19800	**R**	**97R57**	**DR**	**63M4**	125	280
	0.36	3702	19800	**RF**	**97R57**	**DR**	**63M4**	140	280
	0.44	3019	19800	**RM**	**97R57**	**DR**	**63M4**	195	280
	0.49	2668	19800	**R**	**97R57**	**DR**	**63L4**	125	280
	0.58	2245	19800	**RF**	**97R57**	**DR**	**63L4**	145	280
	0.64	2016	19800	**RM**	**97R57**	**DR**	**63L4**	195	280
	0.80	1733	19800	**R**	**97R57**	**DRS**	**71S4**	130	280
	0.85	1623	19800	**RF**	**97R57**	**DRS**	**71S4**	145	280
	0.96	1434	19800	**RM**	**97R57**	**DRS**	**71S4**	195	280
	1.1	1207	19800						
	1.3	1084	19800	**R**	**97R57**	**DRS**	**71M4**	130	280
	1.5	934	19800	**RF**	**97R57**	**DRS**	**71M4**	145	280
	1.6	878	19800	**RM**	**97R57**	**DRS**	**71M4**	195	280
				R	**97R57**	**DRS**	**80S4**	130	280
	1.8	755	19800	**RF**	**97R57**	**DRS**	**80S4**	150	280
				RM	**97R57**	**DRS**	**80S4**	200	280
	0.76	1823	19800	**R**	**97R57**	**DRS**	**71S4**	130	280
	0.87	1583	19800	**RF**	**97R57**	**DRS**	**71S4**	145	280
	0.99	1396	19800	**RM**	**97R57**	**DRS**	**71S4**	200	280
	1.1	1228	19800	**R**	**97R57**	**DRS**	**71M4**	130	280
	1.3	1069	19800	**RF**	**97R57**	**DRS**	**71M4**	150	280
	1.5	938	19800	**RM**	**97R57**	**DRS**	**71M4**	200	280
				R	**97R57**	**DRS**	**80S4**	135	280
	1.7	824	19800	**RF**	**97R57**	**DRS**	**80S4**	150	280
	1.9	737	19800	**RM**	**97R57**	**DRS**	**80S4**	200	280
				R	**97R57**	**DRS**	**80M4**	135	280
	2.2	632	19800	**RF**	**97R57**	**DRS**	**80M4**	155	280
	2.5	560	19800	**RM**	**97R57**	**DRS**	**80M4**	205	280
	2.9	484	19800						
	3.2	431	19800	**R**	**97R57**	**DRS**	**90M4**	140	280
	3.7	379	19800	**RF**	**97R57**	**DRS**	**90M4**	160	280
	4.2	336	19800	**RM**	**97R57**	**DRS**	**90M4**	210	280

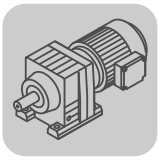


$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
3000	**4.7**	296	19800	**R**	**97R57**	**DRS**	**90L4**	145	280
	5.6	249	19800	**RF**	**97R57**	**DRS**	**90L4**	160	280
	6.0	234	19800	**RM**	**97R57**	**DRS**	**90L4**	210	280
	2.2	625	19800	**R**	**97R57**	**DRS**	**80M4**	135	280
	2.6	549	19800	**RF**	**97R57**	**DRS**	**80M4**	150	280
				RM	**97R57**	**DRS**	**80M4**	200	280
	5.2	270	19800	**R**	**97R57**	**DRS**	**90L4**	140	280
	6.2	227	19800	**RF**	**97R57**	**DRS**	**90L4**	160	280
				RM	**97R57**	**DRS**	**90L4**	210	280
4300	**0.07**	20018	29500						
	0.08	17080	29500						
	0.09	14936	29500						
	0.11	12829	29500	**R**	**107R77**	**DR**	**63S4**	200	280
	0.12	11256	29500	**RF**	**107R77**	**DR**	**63S4**	210	280
	0.14	9547	29500	**RM**	**107R77**	**DR**	**63S4**	295	280
	0.16	8618	29500						
	0.18	7583	29500						
	0.20	6743	29500						
	0.22	5914	29500	**R**	**107R77**	**DR**	**63M4**	200	280
	0.26	5168	29500	**RF**	**107R77**	**DR**	**63M4**	210	280
	0.30	4435	29500	**RM**	**107R77**	**DR**	**63M4**	295	280
	0.33	3896	29500	**R**	**107R77**	**DR**	**63L4**	205	280
	0.43	3039	29500	**RF**	**107R77**	**DR**	**63L4**	210	280
				RM	**107R77**	**DR**	**63L4**	295	280
	0.33	3918	29500	**R**	**107R77**	**DR**	**63L4**	195	280
	0.39	3343	29500	**RF**	**107R77**	**DR**	**63L4**	200	280
	0.43	3034	29500	**RM**	**107R77**	**DR**	**63L4**	290	280
	0.52	2653	29500	**R**	**107R77**	**DRS**	**71S4**	200	280
	0.61	2280	29500	**RF**	**107R77**	**DRS**	**71S4**	205	280
	0.67	2067	29500	**RM**	**107R77**	**DRS**	**71S4**	290	280
	0.82	1693	29500	**R**	**107R77**	**DRS**	**71M4**	200	280
	0.89	1550	29500	**RF**	**107R77**	**DRS**	**71M4**	205	280
	0.98	1407	29500	**RM**	**107R77**	**DRS**	**71M4**	295	280
	1.2	1209	29500	**R**	**107R77**	**DRS**	**80S4**	200	280
	1.3	1055	29500	**RF**	**107R77**	**DRS**	**80S4**	210	280
				RM	**107R77**	**DRS**	**80S4**	295	280
	1.5	919	29500	**R**	**107R77**	**DRS**	**80M4**	205	280
	1.7	815	29500	**RF**	**107R77**	**DRS**	**80M4**	210	280
	2.0	717	29500	**RM**	**107R77**	**DRS**	**80M4**	300	280
	2.2	626	29500	**R**	**107R77**	**DRS**	**90M4**	210	280
	2.6	528	29500	**RF**	**107R77**	**DRS**	**90M4**	215	280
				RM	**107R77**	**DRS**	**90M4**	300	280
	0.69	1987	29500	**R**	**107R77**	**DRS**	**71S4**	205	280
				RF	**107R77**	**DRS**	**71S4**	210	280
				RM	**107R77**	**DRS**	**71S4**	295	280
	0.76	1827	29500	**R**	**107R77**	**DRS**	**71M4**	205	280
	0.86	1599	29500	**RF**	**107R77**	**DRS**	**71M4**	210	280
	0.99	1400	29500	**RM**	**107R77**	**DRS**	**71M4**	300	280
	1.1	1226	29500	**R**	**107R77**	**DRS**	**80S4**	205	280
	1.3	1104	29500	**RF**	**107R77**	**DRS**	**80S4**	215	280
	1.5	939	29500	**RM**	**107R77**	**DRS**	**80S4**	300	280
	1.7	822	29500	**R**	**107R77**	**DRS**	**80M4**	210	280
				RF	**107R77**	**DRS**	**80M4**	215	280
				RM	**107R77**	**DRS**	**80M4**	305	280
	2.3	614	29500	**R**	**107R77**	**DRS**	**90M4**	215	280
	2.6	544	29500	**RF**	**107R77**	**DRS**	**90M4**	220	280
	2.8	492	29500	**RM**	**107R77**	**DRS**	**90M4**	305	280
	3.4	417	29500	**R**	**107R77**	**DRS**	**90L4**	215	280
	3.8	369	29500	**RF**	**107R77**	**DRS**	**90L4**	220	280
	4.3	323	29500	**RM**	**107R77**	**DRS**	**90L4**	310	280
	4.9	285	29500	**R**	**107R77**	**DRS**	**100M4**	220	280
	5.5	253	29500	**RF**	**107R77**	**DRS**	**100M4**	225	280
				RM	**107R77**	**DRS**	**100M4**	315	280
	6.7	214	29500	**R**	**107R77**	**DRS**	**100LC4**	225	280
	7.7	187	29500	**RF**	**107R77**	**DRS**	**100LC4**	230	280
				RM	**107R77**	**DRS**	**100LC4**	320	280

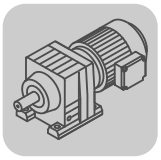


R..DRS
R..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
4300				**R**	**107R77**	**DRS**	**90M4**	205	280
	3.0	469	29500	**RF**	**107R77**	**DRS**	**90M4**	215	280
				RM	**107R77**	**DRS**	**90M4**	300	280
	3.3	426	29500	**R**	**107R77**	**DRS**	**90L4**	210	280
	3.7	377	29500	**RF**	**107R77**	**DRS**	**90L4**	215	280
	4.3	325	29500	**RM**	**107R77**	**DRS**	**90L4**	305	280
	4.9	284	29500	**R**	**107R77**	**DRS**	**100M4**	215	280
	5.5	256	29500	**RF**	**107R77**	**DRS**	**100M4**	220	280
				RM	**107R77**	**DRS**	**100M4**	310	280
	6.6	220	29500	**R**	**107R77**	**DRS**	**100LC4**	220	280
	7.5	193	29500	**RF**	**107R77**	**DRS**	**100LC4**	225	280
	8.4	172	29500	**RM**	**107R77**	**DRS**	**100LC4**	315	280
8000	**0.06**	22203	53400						
	0.07	18945	53400	**R**	**137R77**	**DR**	**63S4**	290	280
	0.08	16566	53400	**RF**	**137R77**	**DR**	**63S4**	310	280
	0.09	14777	53400	**RM**	**137R77**	**DR**	**63S4**	425	280
	0.11	12921	53400						
	0.11	11712	53400	**R**	**137R77**	**DR**	**63M4**	290	280
	0.12	10573	53400	**RF**	**137R77**	**DR**	**63M4**	310	280
	0.15	8784	53400	**RM**	**137R77**	**DR**	**63M4**	425	280
	0.17	7479	53400	**R**	**137R77**	**DR**	**63L4**	290	280
	0.20	6559	53400	**RF**	**137R77**	**DR**	**63L4**	310	280
	0.22	5834	53400	**RM**	**137R77**	**DR**	**63L4**	425	280
	0.27	5116	53400	**R**	**137R77**	**DRS**	**71S4**	290	280
	0.31	4464	53400	**RF**	**137R77**	**DRS**	**71S4**	315	280
	0.35	3928	53400	**RM**	**137R77**	**DRS**	**71S4**	425	280
	0.40	3454	53400	**R**	**137R77**	**DRS**	**71M4**	290	280
	0.46	2993	53400	**RF**	**137R77**	**DRS**	**71M4**	315	280
				RM	**137R77**	**DRS**	**71M4**	425	280
	0.29	4709	53400	**R**	**137R77**	**DRS**	**71S4**	280	280
	0.34	4018	53400	**RF**	**137R77**	**DRS**	**71S4**	305	280
				RM	**137R77**	**DRS**	**71S4**	415	280
	0.39	3514	53400						
	0.41	3338	53400	**R**	**137R77**	**DRS**	**71M4**	280	280
	0.47	2929	53400	**RF**	**137R77**	**DRS**	**71M4**	305	280
	0.56	2484	53400	**RM**	**137R77**	**DRS**	**71M4**	415	280
	0.62	2242	53400	**R**	**137R77**	**DRS**	**80S4**	285	280
	0.75	1863	53400	**RF**	**137R77**	**DRS**	**80S4**	310	280
				RM	**137R77**	**DRS**	**80S4**	420	280
	0.89	1586	53400	**R**	**137R77**	**DRS**	**80M4**	285	280
	1.0	1391	53400	**RF**	**137R77**	**DRS**	**80M4**	310	280
	1.1	1256	53400	**RM**	**137R77**	**DRS**	**80M4**	420	280
	1.3	1105	53400	**R**	**137R77**	**DRS**	**90M4**	290	280
	1.3	1043	53400	**RF**	**137R77**	**DRS**	**90M4**	315	280
	1.6	888	53400	**RM**	**137R77**	**DRS**	**90M4**	425	280
	2.0	699	53400	**R**	**137R77**	**DRS**	**90L4**	295	280
	2.3	609	53400	**RF**	**137R77**	**DRS**	**90L4**	315	280
				RM	**137R77**	**DRS**	**90L4**	430	280
	0.52	2658	53400	**R**	**137R77**	**DRS**	**71M4**	290	280
	0.57	2412	53400	**RF**	**137R77**	**DRS**	**71M4**	315	280
				RM	**137R77**	**DRS**	**71M4**	425	280
	0.68	2073	53400	**R**	**137R77**	**DRS**	**80S4**	295	280
	0.76	1839	53400	**RF**	**137R77**	**DRS**	**80S4**	315	280
				RM	**137R77**	**DRS**	**80S4**	430	280
	0.88	1598	53400	**R**	**137R77**	**DRS**	**80M4**	295	280
	1.0	1397	53400	**RF**	**137R77**	**DRS**	**80M4**	320	280
	1.2	1226	53400	**RM**	**137R77**	**DRS**	**80M4**	430	280
	1.3	1090	53400	**R**	**137R77**	**DRS**	**90M4**	300	280
	1.5	951	53400	**RF**	**137R77**	**DRS**	**90M4**	325	280
				RM	**137R77**	**DRS**	**90M4**	435	280
	1.7	831	53400	**R**	**137R77**	**DRS**	**90L4**	300	280
	1.9	730	53400	**RF**	**137R77**	**DRS**	**90L4**	325	280
	2.2	629	53400	**RM**	**137R77**	**DRS**	**90L4**	435	280
	2.5	560	53400	**R**	**137R77**	**DRS**	**100M4**	305	280
	2.8	490	53400	**RF**	**137R77**	**DRS**	**100M4**	330	280
	3.3	428	53400	**RM**	**137R77**	**DRS**	**100M4**	440	280



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
8000				**R**	**137R77**	**DRS**	**100LC4**	310	280
	3.8	381	53400	**RF**	**137R77**	**DRS**	**100LC4**	335	280
				RM	**137R77**	**DRS**	**100LC4**	445	280
	4.5	323	53400	**R**	**137R77**	**DRS**	**132S4**	325	280
	5.0	291	53400	**RF**	**137R77**	**DRS**	**132S4**	350	280
	5.7	255	53400	**RM**	**137R77**	**DRS**	**132S4**	460	280
	2.5	564	53400	**R**	**137R77**	**DRS**	**100M4**	295	280
	2.7	517	53400	**RF**	**137R77**	**DRS**	**100M4**	320	280
	3.1	453	53400	**RM**	**137R77**	**DRS**	**100M4**	430	280
	3.8	376	53400	**R**	**137R77**	**DRS**	**100LC4**	300	280
	4.3	339	53400	**RF**	**137R77**	**DRS**	**100LC4**	325	280
				RM	**137R77**	**DRS**	**100LC4**	435	280
	4.9	297	53400	**R**	**137R77**	**DRS**	**132S4**	315	280
				RF	**137R77**	**DRS**	**132S4**	340	280
				RM	**137R77**	**DRS**	**132S4**	450	280
13000	**0.06**	23401	62700	**R**	**147R77**	**DR**	**63S4**	420	280
	0.06	21342	62700	**RF**	**147R77**	**DR**	**63S4**	430	280
				RM	**147R77**	**DR**	**63S4**	600	280
	0.07	18210	62700						
	0.08	15923	62700	**R**	**147R77**	**DR**	**63M4**	420	280
	0.09	14075	62700	**RF**	**147R77**	**DR**	**63M4**	430	280
	0.11	12344	62700	**RM**	**147R77**	**DR**	**63M4**	600	280
	0.12	11143	62700	**R**	**147R77**	**DR**	**63L4**	420	280
	0.13	9743	62700	**RF**	**147R77**	**DR**	**63L4**	430	280
				RM	**147R77**	**DR**	**63L4**	600	280
	0.16	8443	62700	**R**	**147R77**	**DRS**	**71S4**	425	280
	0.19	7307	62700	**RF**	**147R77**	**DRS**	**71S4**	430	280
	0.21	6447	62700	**RM**	**147R77**	**DRS**	**71S4**	600	280
	0.25	5568	62700	**R**	**147R77**	**DRS**	**71M4**	425	280
	0.28	4926	62700	**RF**	**147R77**	**DRS**	**71M4**	430	280
	0.32	4325	62700	**RM**	**147R77**	**DRS**	**71M4**	600	280
	0.37	3754	62700	**R**	**147R77**	**DRS**	**80S4**	425	280
	0.42	3302	62700	**RF**	**147R77**	**DRS**	**80S4**	435	280
	0.48	2898	62700	**RM**	**147R77**	**DRS**	**80S4**	600	280
	0.55	2555	62700	**R**	**147R77**	**DRS**	**80M4**	430	280
	0.64	2211	62700	**RF**	**147R77**	**DRS**	**80M4**	435	280
	0.72	1951	62700	**RM**	**147R77**	**DRS**	**80M4**	600	280
	0.82	1705	62700	**R**	**147R77**	**DRS**	**90M4**	430	280
	0.91	1536	62700	**RF**	**147R77**	**DRS**	**90M4**	440	280
				RM	**147R77**	**DRS**	**90M4**	610	280
	1.0	1329	62700	**R**	**147R77**	**DRS**	**90L4**	435	280
	1.2	1166	62700	**RF**	**147R77**	**DRS**	**90L4**	445	280
	1.4	1029	62700	**RM**	**147R77**	**DRS**	**90L4**	610	280
	1.6	889	62700	**R**	**147R77**	**DRS**	**100M4**	440	280
	1.8	784	62700	**RF**	**147R77**	**DRS**	**100M4**	450	280
	2.0	695	62700	**RM**	**147R77**	**DRS**	**100M4**	610	280
	2.3	619	62700	**R**	**147R77**	**DRS**	**100LC4**	445	280
	2.6	558	62700	**RF**	**147R77**	**DRS**	**100LC4**	450	280
				RM	**147R77**	**DRS**	**100LC4**	620	280
	3.0	489	62700	**R**	**147R77**	**DRS**	**132S4**	455	280
				RF	**147R77**	**DRS**	**132S4**	465	280
				RM	**147R77**	**DRS**	**132S4**	630	280
	2.7	533	62700	**R**	**147R87**	**DRS**	**132S4**	480	280
	3.1	462	62700	**RF**	**147R87**	**DRS**	**132S4**	485	280
	3.4	426	62700	**RM**	**147R87**	**DRS**	**132S4**	650	280
	3.9	368	62700	**R**	**147R87**	**DRS**	**132M4**	490	280
	4.4	326	62700	**RF**	**147R87**	**DRS**	**132M4**	500	280
				RM	**147R87**	**DRS**	**132M4**	670	280
	5.2	280	62700	**R**	**147R87**	**DRS**	**132MC4**	495	280
	5.9	247	62700	**RF**	**147R87**	**DRS**	**132MC4**	500	280
				RM	**147R87**	**DRS**	**132MC4**	670	280
	6.8	214	62700	**R**	**147R87**	**DRS**	**160M4**	520	280
				RF	**147R87**	**DRS**	**160M4**	520	280
				RM	**147R87**	**DRS**	**160M4**	690	280



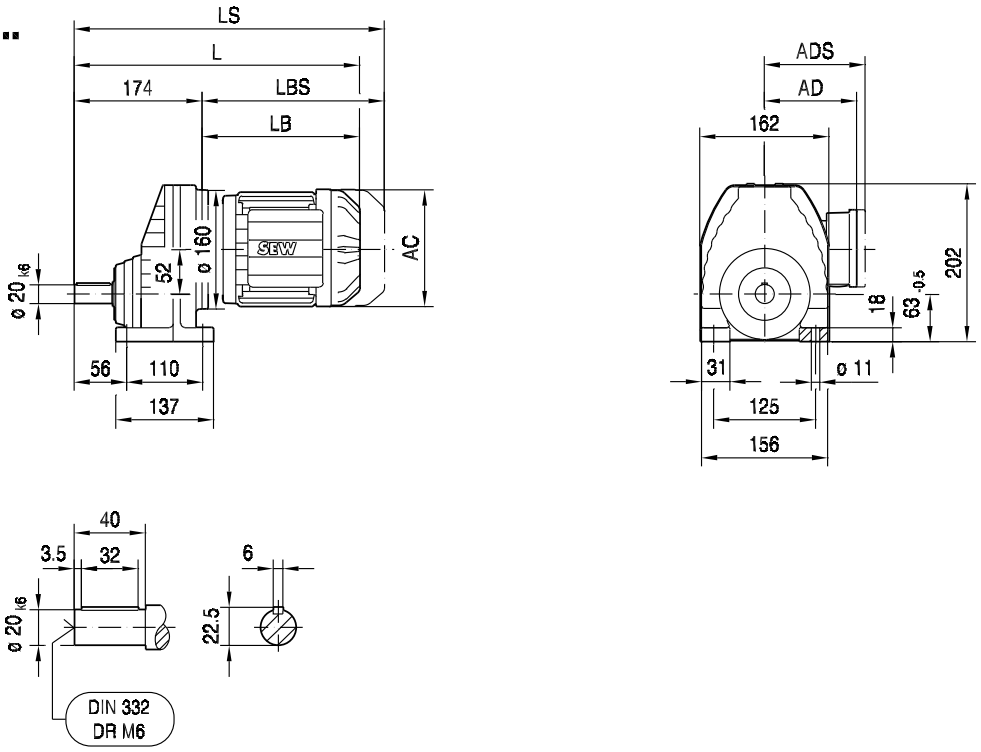
R..DRS
R..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
18000	**0.05**	27001	120000						
	0.06	22482	120000						
	0.07	20002	120000						
	0.08	17361	120000	**R**	**167R97**	**DRS**	**71M4**	760	280
	0.09	15446	120000	**RF**	**167R97**	**DRS**	**71M4**	760	280
	0.10	14051	120000	**RM**	**167R97**	**DRS**	**71M4**	960	280
	0.12	11812	120000						
	0.13	10509	120000						
	0.14	9631	120000						
	0.18	7749	120000	**R**	**167R97**	**DRS**	**80S4**	760	280
	0.20	6894	120000	**RF**	**167R97**	**DRS**	**80S4**	760	280
				RM	**167R97**	**DRS**	**80S4**	960	280
				R	**167R97**	**DRS**	**71M4**	760	280
	0.23	6077	120000	**RF**	**167R97**	**DRS**	**71M4**	760	280
				RM	**167R97**	**DRS**	**71M4**	960	280
	0.26	5407	120000	**R**	**167R97**	**DRS**	**80S4**	760	280
	0.30	4650	120000	**RF**	**167R97**	**DRS**	**80S4**	760	280
				RM	**167R97**	**DRS**	**80S4**	960	280
	0.34	4129	120000	**R**	**167R97**	**DRS**	**80M4**	760	280
	0.38	3692	120000	**RF**	**167R97**	**DRS**	**80M4**	770	280
				RM	**167R97**	**DRS**	**80M4**	960	280
	0.53	2657	120000	**R**	**167R97**	**DRS**	**90M4**	760	280
	0.60	2333	120000	**RF**	**167R97**	**DRS**	**90M4**	770	280
	0.67	2085	120000	**RM**	**167R97**	**DRS**	**90M4**	960	280
	0.75	1877	120000	**R**	**167R97**	**DRS**	**90L4**	760	280
	0.84	1670	120000	**RF**	**167R97**	**DRS**	**90L4**	770	280
	0.97	1438	120000	**RM**	**167R97**	**DRS**	**90L4**	960	280
	1.1	1279	120000	**R**	**167R97**	**DRS**	**100M4**	770	280
	1.2	1123	120000	**RF**	**167R97**	**DRS**	**100M4**	770	280
	1.4	999	120000	**RM**	**167R97**	**DRS**	**100M4**	970	280
	1.7	861	120000	**R**	**167R97**	**DRS**	**100LC4**	770	280
	1.9	760	120000	**RF**	**167R97**	**DRS**	**100LC4**	780	280
				RM	**167R97**	**DRS**	**100LC4**	970	280
	2.2	656	120000	**R**	**167R97**	**DRS**	**132S4**	790	280
	2.5	579	120000	**RF**	**167R97**	**DRS**	**132S4**	790	280
				RM	**167R97**	**DRS**	**132S4**	990	280
	2.9	503	120000	**R**	**167R97**	**DRS**	**132M4**	800	280
	3.3	432	120000	**RF**	**167R97**	**DRS**	**132M4**	800	280
				RM	**167R97**	**DRS**	**132M4**	1000	280
	3.9	376	120000	**R**	**167R97**	**DRS**	**132MC4**	800	280
	4.4	335	120000	**RF**	**167R97**	**DRS**	**132MC4**	810	280
				RM	**167R97**	**DRS**	**132MC4**	1000	280
	4.8	303	120000	**R**	**167R97**	**DRS**	**160M4**	820	280
	5.2	279	120000	**RF**	**167R97**	**DRS**	**160M4**	830	280
				RM	**167R97**	**DRS**	**160M4**	1020	280
				R	**167R107**	**DRS**	**160M4**	870	280
	5.0	295	120000	**RF**	**167R107**	**DRS**	**160M4**	880	280
				RM	**167R107**	**DRS**	**160M4**	1070	280
	5.4	270	120000	**R**	**167R107**	**DRS**	**160MC4**	880	280
	6.4	229	120000	**RF**	**167R107**	**DRS**	**160MC4**	880	280
	7.3	200	120000	**RM**	**167R107**	**DRS**	**160MC4**	1080	280
				R	**167R107**	**DRS**	**160M4**	860	280
	5.0	291	120000	**RF**	**167R107**	**DRS**	**160M4**	870	280
				RM	**167R107**	**DRS**	**160M4**	1070	280
	5.6	264	120000	**R**	**167R107**	**DRS**	**160MC4**	870	280
	6.5	227	120000	**RF**	**167R107**	**DRS**	**160MC4**	880	280
	7.4	198	120000	**RM**	**167R107**	**DRS**	**160MC4**	1070	280

9.5 R..DRS [mm]

01 081 00 06

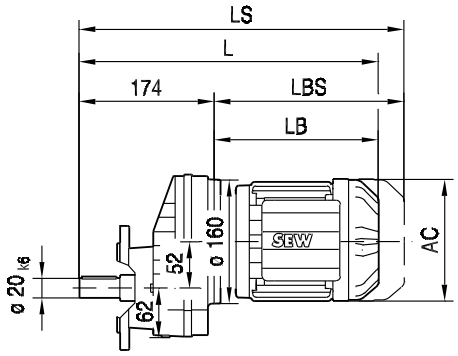
RX57..

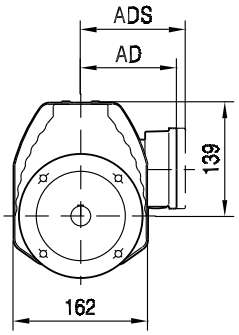


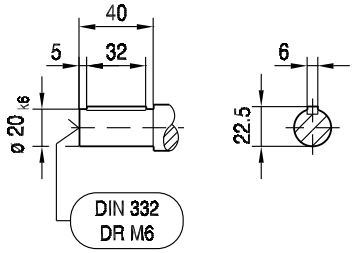
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	359	370	395	404	435	437	457	487	517	564
LS	414	438	463	485	516	530	550	580	610	676
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

01 082 00 06

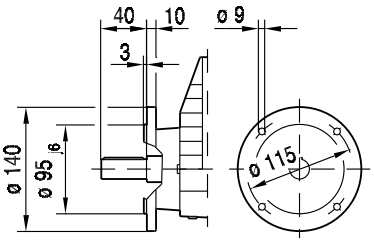
RXF57..



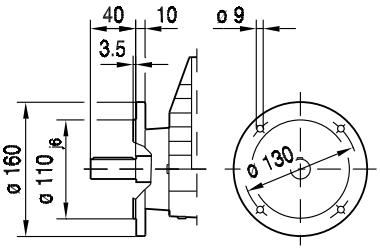




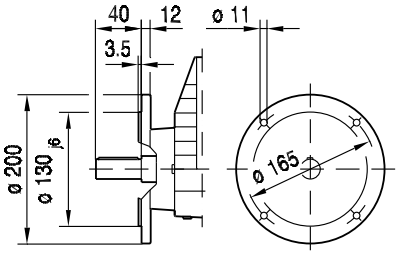
ø 140



ø 160



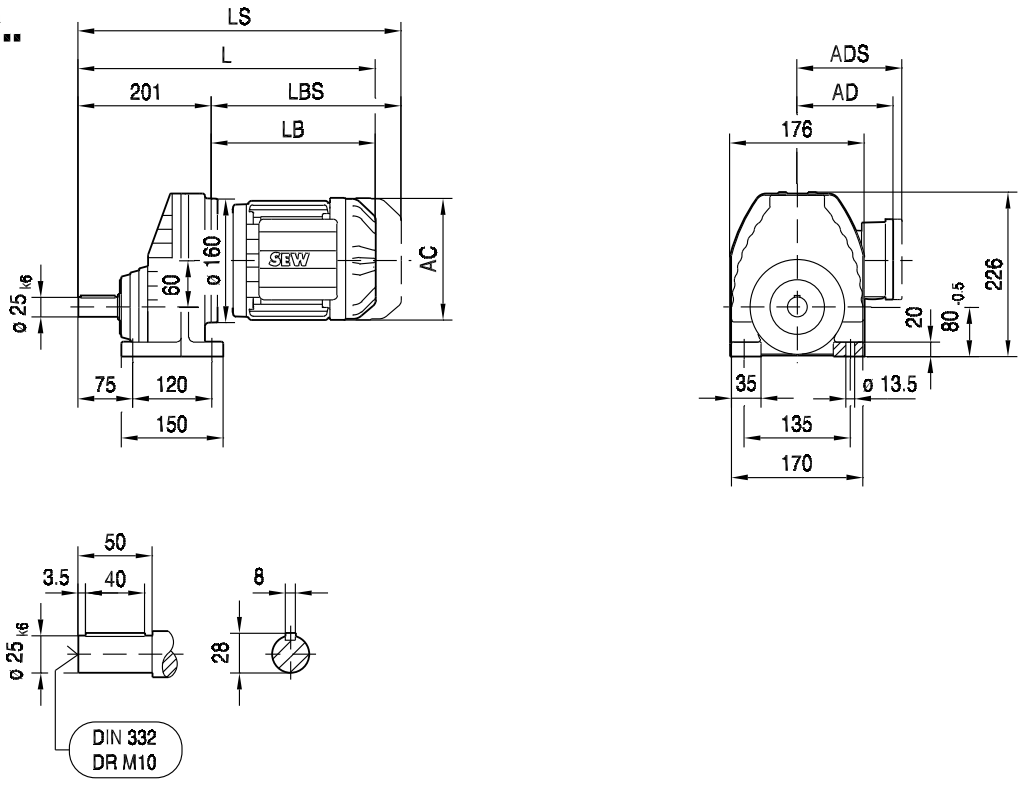
ø 200



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	359	370	395	404	435	437	457	487	517	564
LS	414	438	463	485	516	530	550	580	610	676
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

01 083 00 06

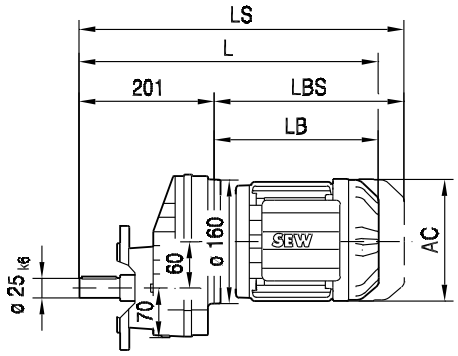
RX67..

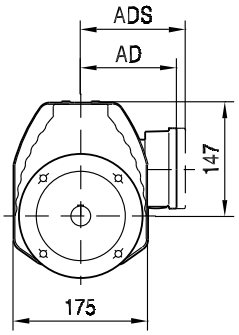


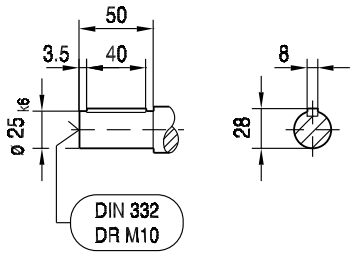
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	386	397	422	431	462	464	484	514	544	591	641
LS	441	465	490	512	543	557	577	607	637	703	753
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

01 084 00 06

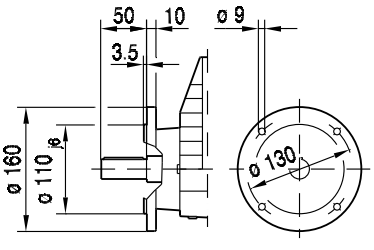
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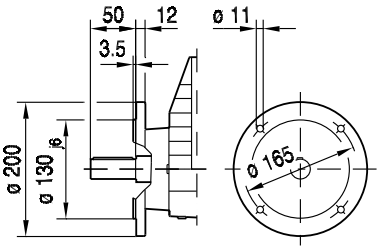




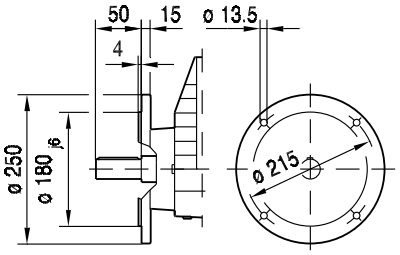
ø 160



ø 200



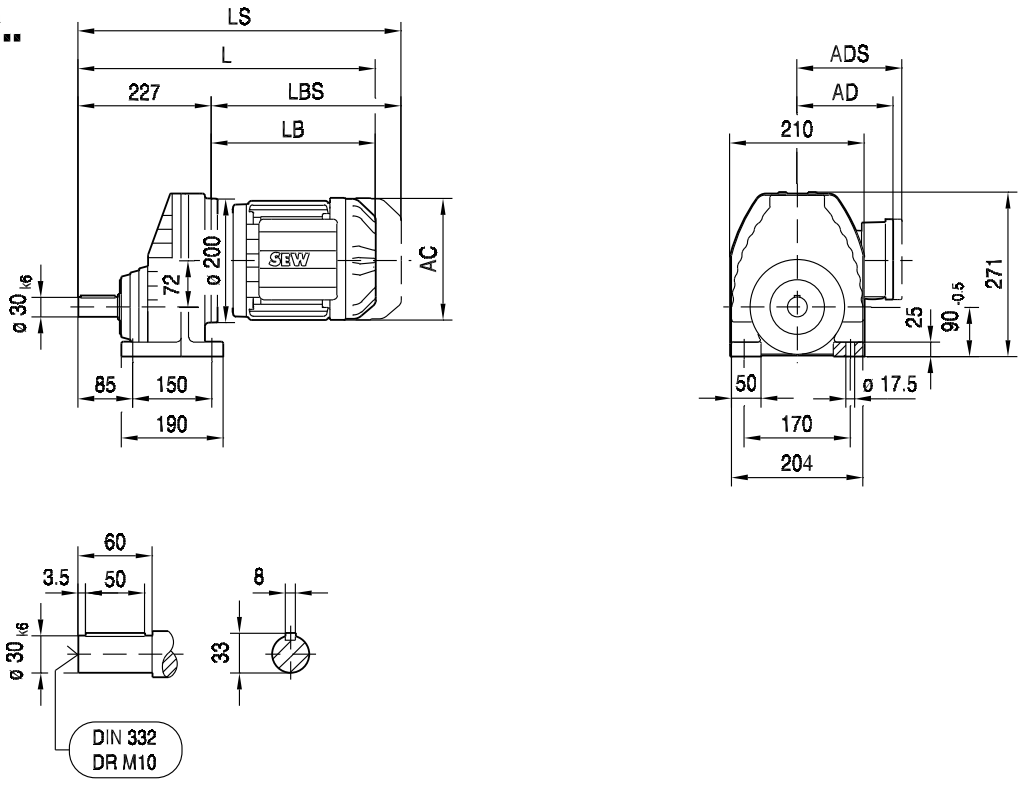
ø 250



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	386	397	422	431	462	464	484	514	544	591	641
LS	441	465	490	512	543	557	577	607	637	703	753
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

01 085 00 06

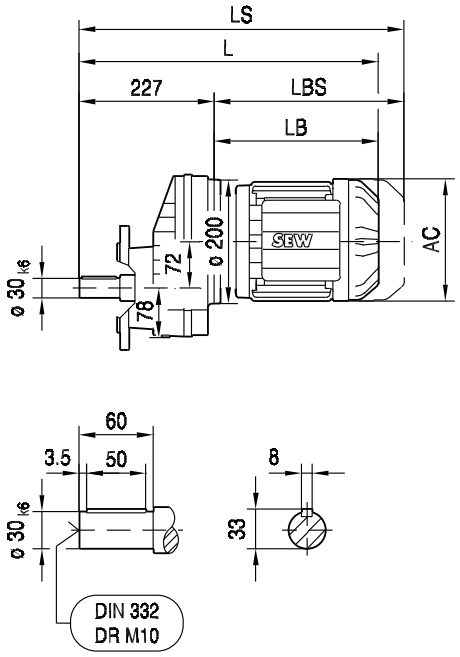
RX77..

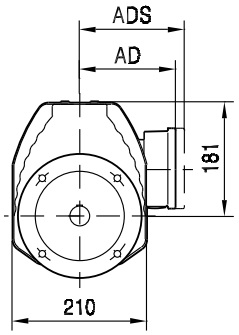


(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	179	179	197	197	221	221	270
AD	128	140	140	157	157	170	170	228
ADS	139	150	150	158	158	172	172	228
L	481	483	503	533	563	606	656	697
LS	562	576	596	626	656	718	768	834
LB	254	256	276	306	336	379	429	470
LBS	335	349	369	399	429	491	541	607

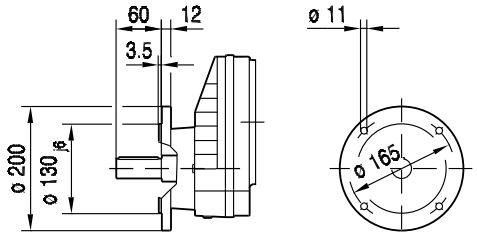
01 086 00 06

RXF77..

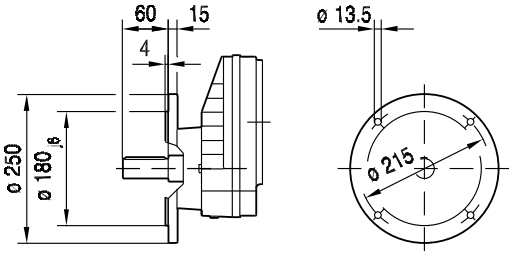




ø 200



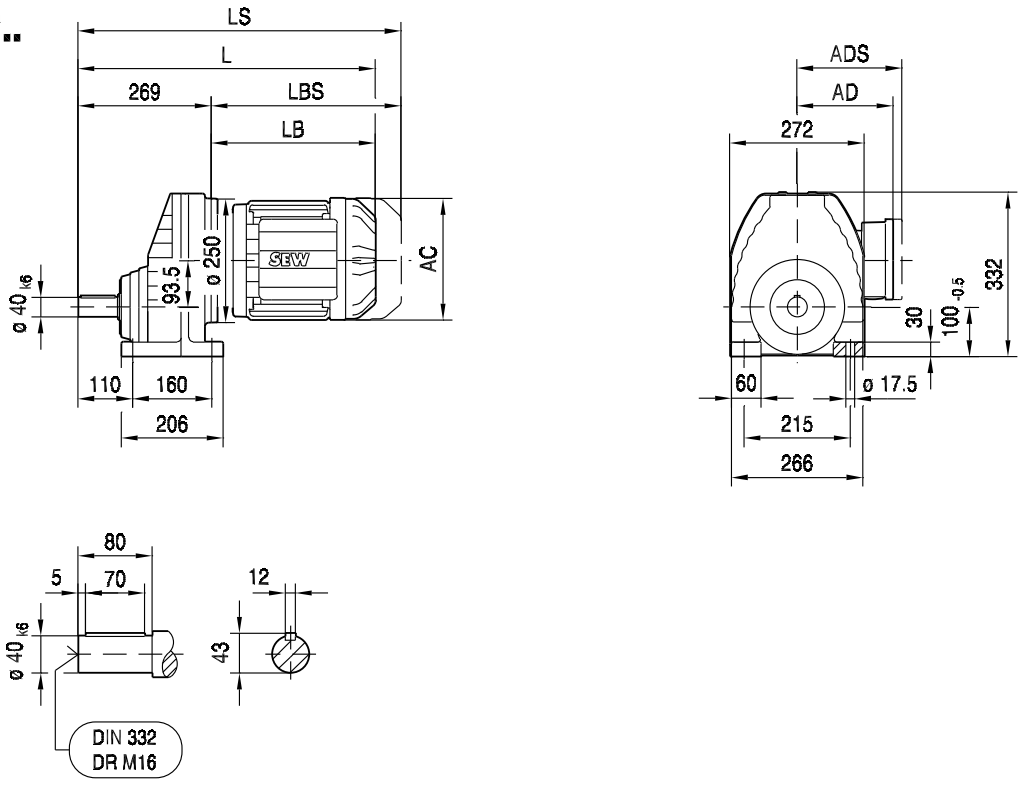
ø 250



(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	179	179	197	197	221	221	270
AD	128	140	140	157	157	170	170	228
ADS	139	150	150	158	158	172	172	228
L	481	483	503	533	563	606	656	697
LS	562	576	596	626	656	718	768	834
LB	254	256	276	306	336	379	429	470
LBS	335	349	369	399	429	491	541	607

01 087 00 06

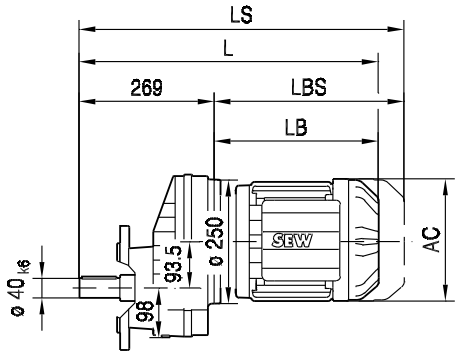
RX87..

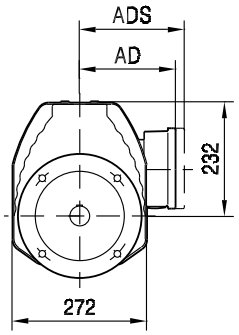


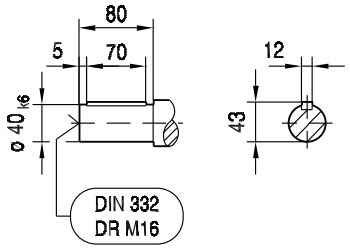
(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	
AC	197	197	221	221	270	316	316	
AD	157	157	170	170	228	253	253	
ADS	158	158	172	172	228	253	253	
L	570	600	643	693	734	803	863	
LS	663	693	755	805	871	992	1052	
LB	301	331	374	424	465	534	594	
LBS	394	424	486	536	602	723	783	

01 088 00 06

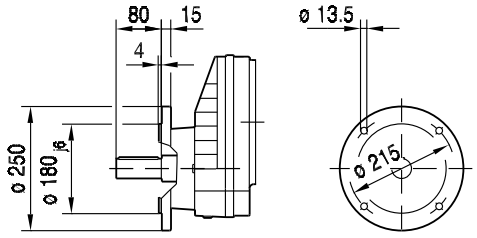
RXF87..



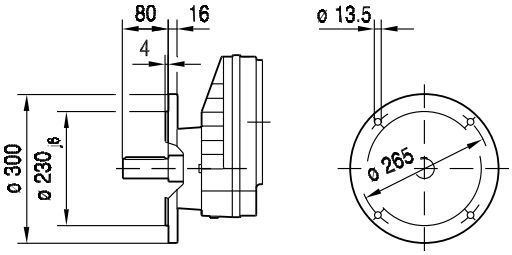




ø 250



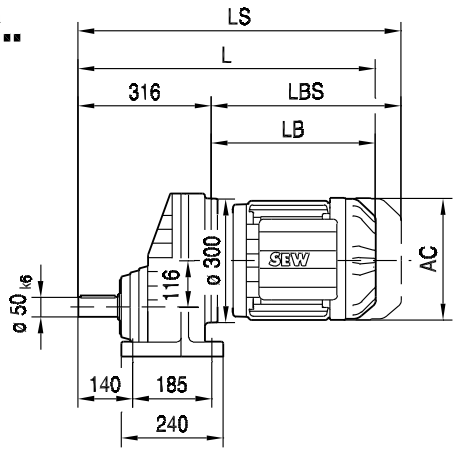
ø 300

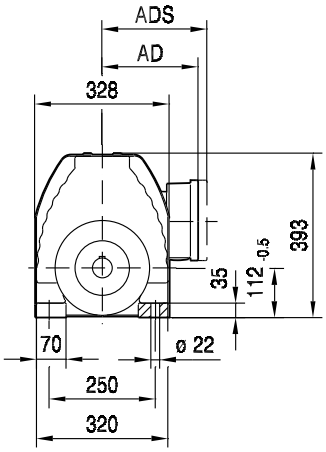


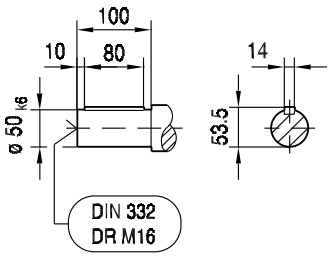
(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	
AC	197	197	221	221	270	316	316	
AD	157	157	170	170	228	253	253	
ADS	158	158	172	172	228	253	253	
L	570	600	643	693	734	803	863	
LS	663	693	755	805	871	992	1052	
LB	301	331	374	424	465	534	594	
LBS	394	424	486	536	602	723	783	

01 089 00 06

RX97..



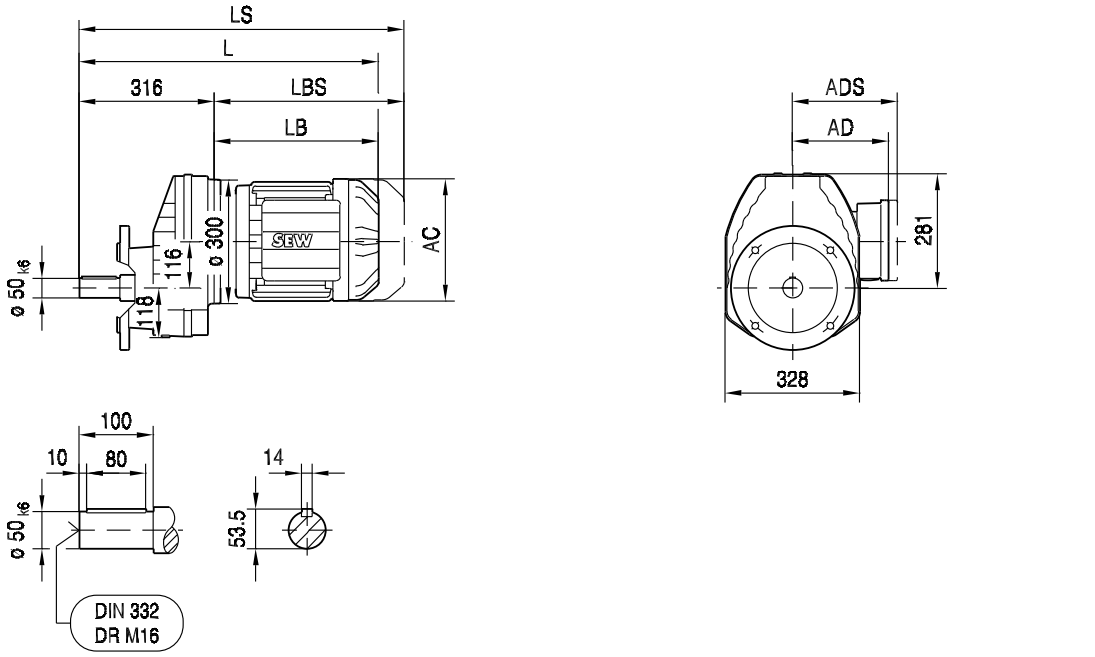




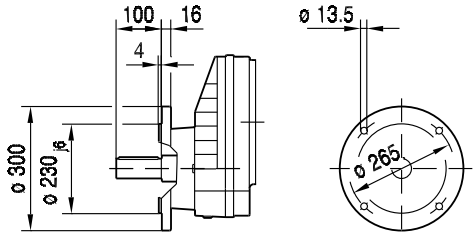
(→ 131)	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC			
AC	221	221	270	316	316			
AD	170	170	228	253	253			
ADS	172	172	228	253	253			
L	685	735	776	845	905			
LS	797	847	913	1034	1094			
LB	369	419	460	529	589			
LBS	481	531	597	718	778			

01 090 00 06

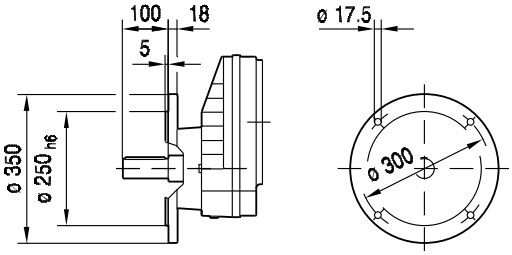
RXF97..



ø 300



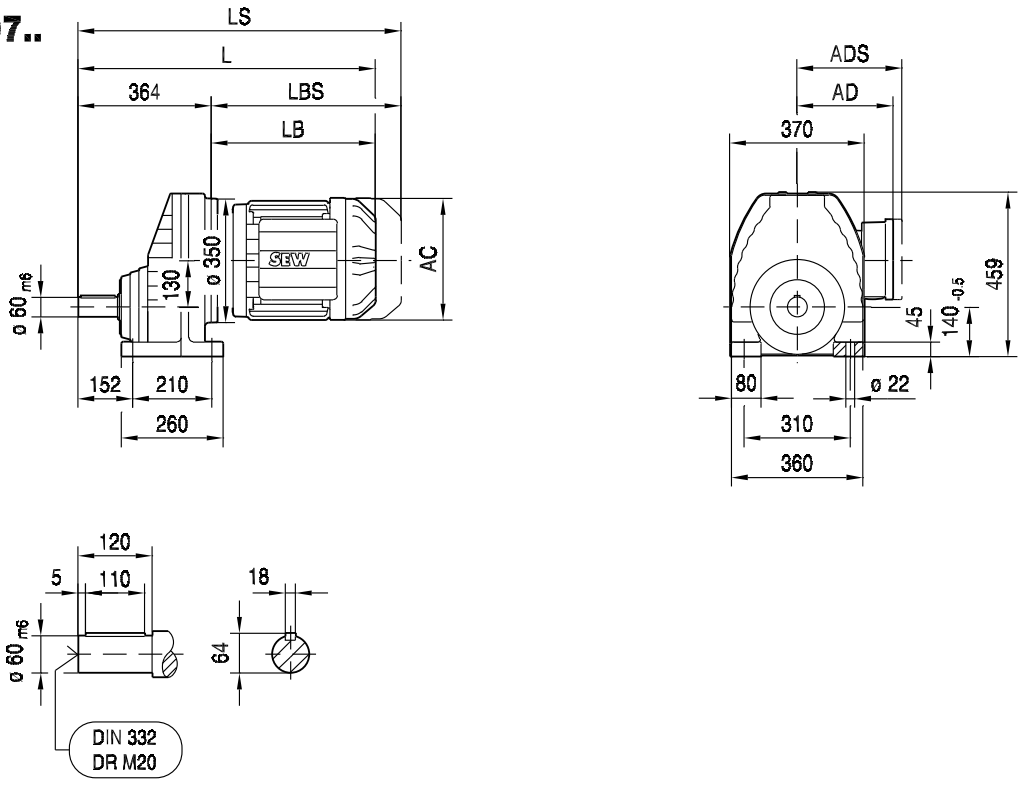
ø 350



(→ 131)	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC			
AC	221	221	270	316	316			
AD	170	170	228	253	253			
ADS	172	172	228	253	253			
L	685	735	776	845	905			
LS	797	847	913	1034	1094			
LB	369	419	460	529	589			
LBS	481	531	597	718	778			

01 091 00 06

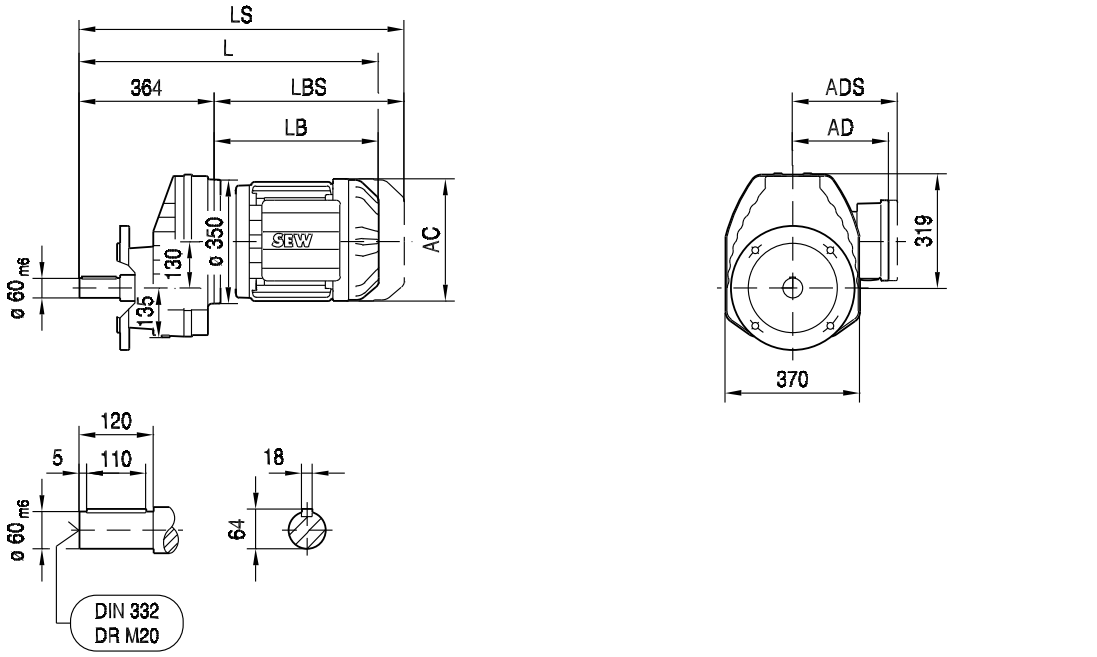
RX107..



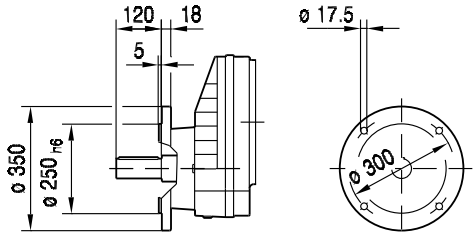
(→ 131)	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	
AC	221	221	270	316	316	394	394	
AD	170	170	228	253	253	283	283	
ADS	172	172	228	253	253	283	283	
L	727	777	818	887	947	1020	1070	
LS	839	889	955	1076	1136	1225	1275	
LB	363	413	454	523	583	656	706	
LBS	475	525	591	712	772	861	911	

01 092 00 06

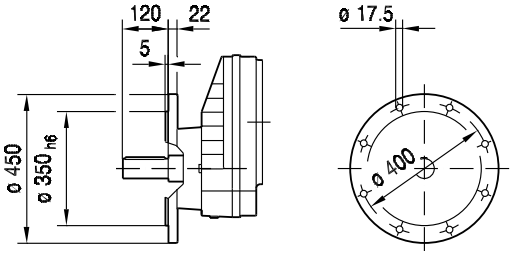
RXF107..



ø 350



ø 450

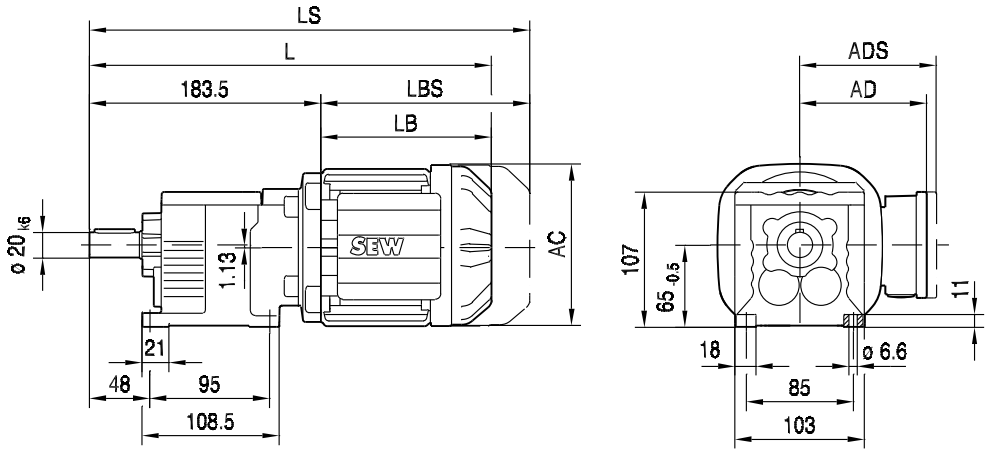


(→ 131)	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	
AC	221	221	270	316	316	394	394	
AD	170	170	228	253	253	283	283	
ADS	172	172	228	253	253	283	283	
L	727	777	818	887	947	1020	1070	
LS	839	889	955	1076	1136	1225	1275	
LB	363	413	454	523	583	656	706	
LBS	475	525	591	712	772	861	911	

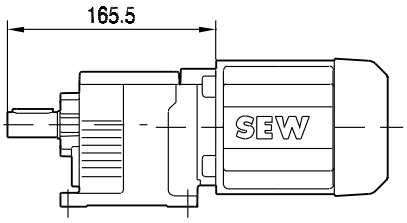
01 093 00 06

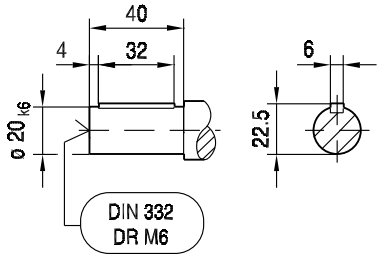
R07..

DR..

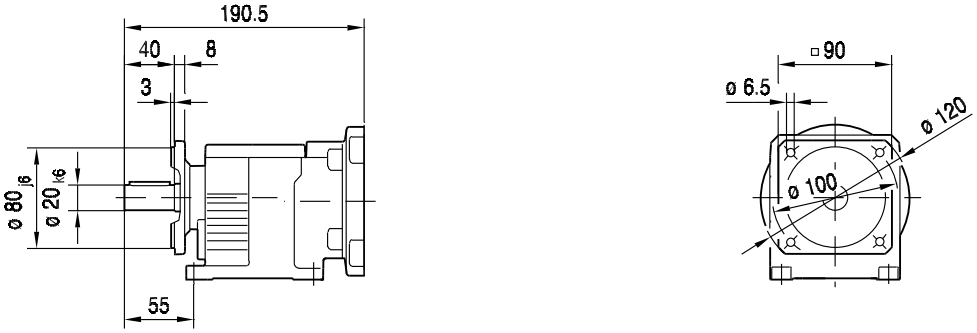


DT56..





R07F..

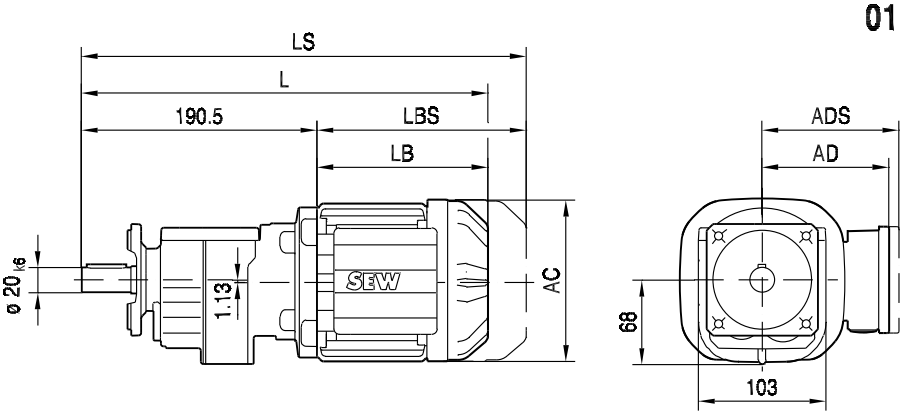


(→ 131)	DT56..	DR63..	DR71S					
AC	109	132	139					
AD	87	105	119					
ADS	87	105	129					
L	302	333	344					
LS	338	388	412					
LB	136	149	160					
LBS	172	204	228					

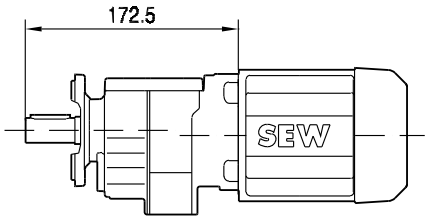
01 095 00 06

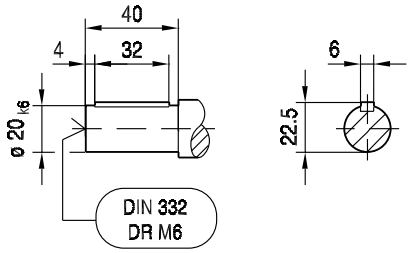
RF07..

DR..

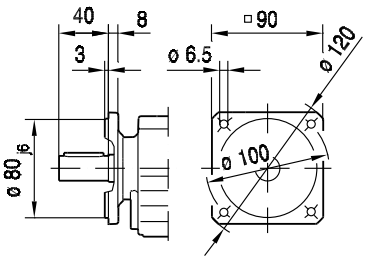


DT56..

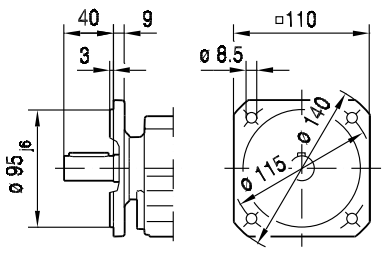




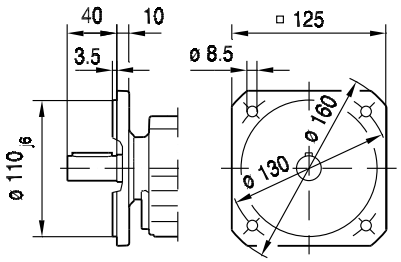
ø 120



ø 140



ø 160

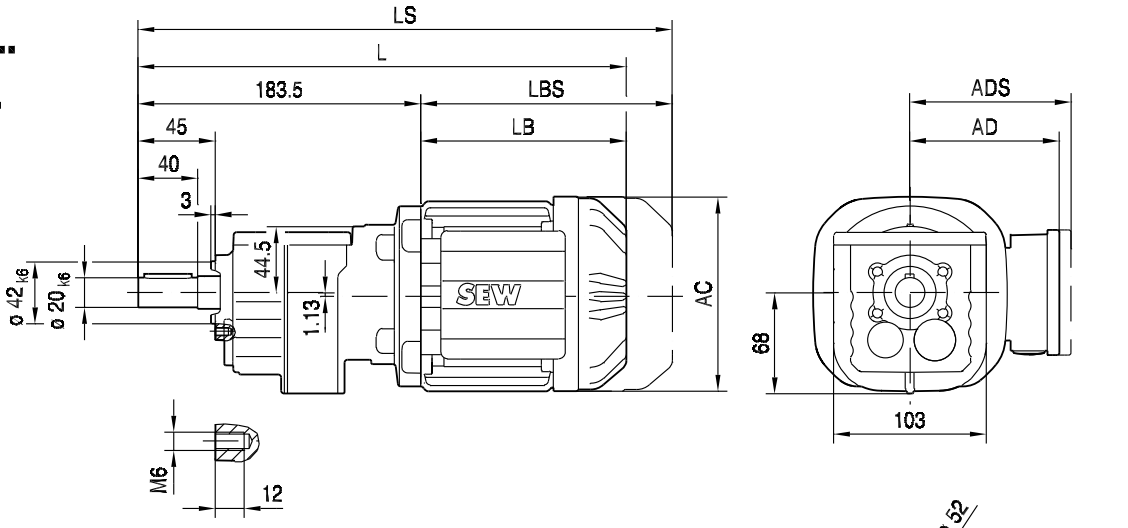


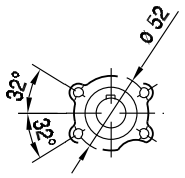
(→ 131)	DT56..	DR63..	DR71S					
AC	109	132	139					
AD	87	105	119					
ADS	87	105	129					
L	309	340	351					
LS	345	395	419					
LB	136	149	160					
LBS	172	204	228					

01 096 00 06

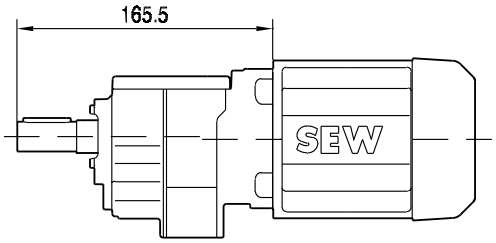
RZ07..

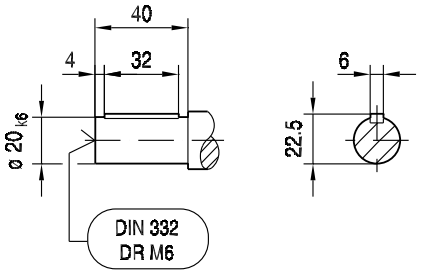
DR..





DT56..

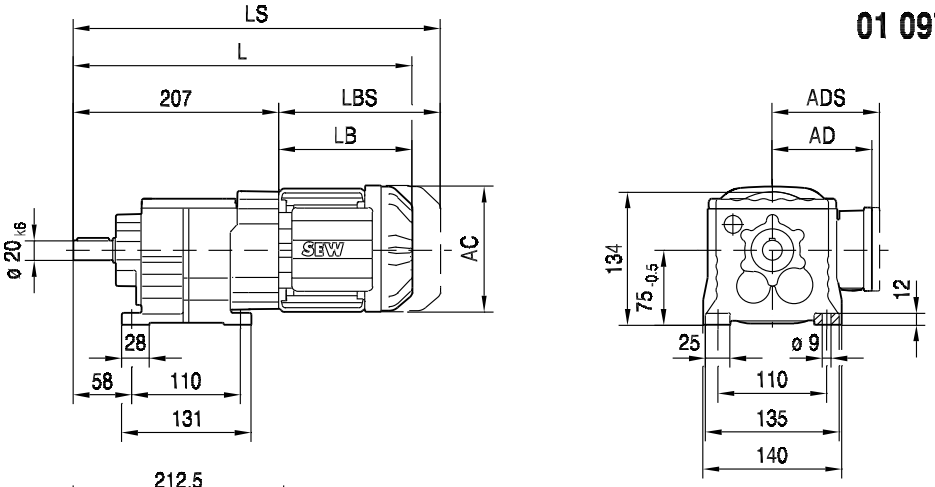




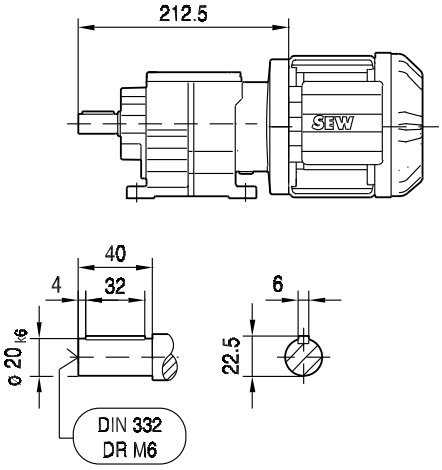
(→ 📖 131)	DT56..	DR63..	DR71S					
AC	109	132	139					
AD	87	105	119					
ADS	87	105	129					
L	302	333	344					
LS	338	388	412					
LB	136	149	160					
LBS	172	204	228					

01 097 00 06

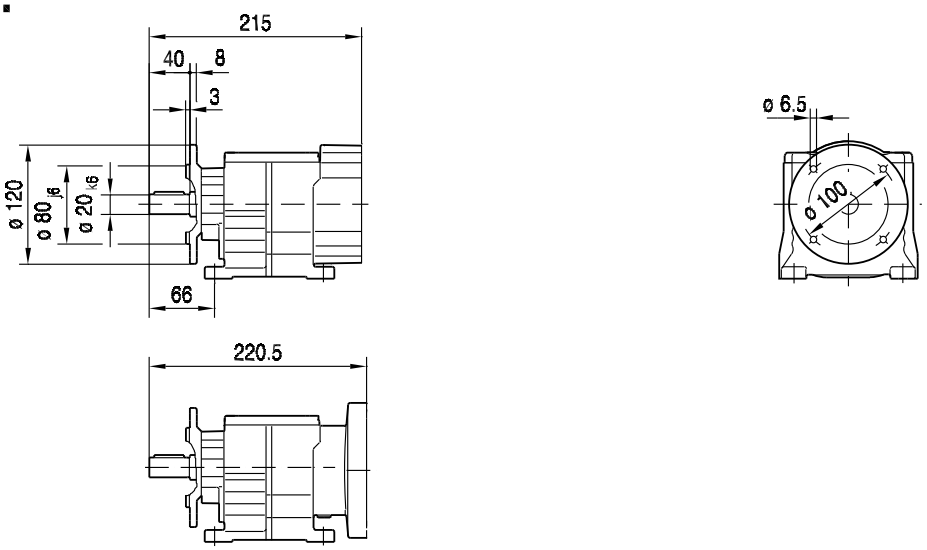
R17..



DR80..



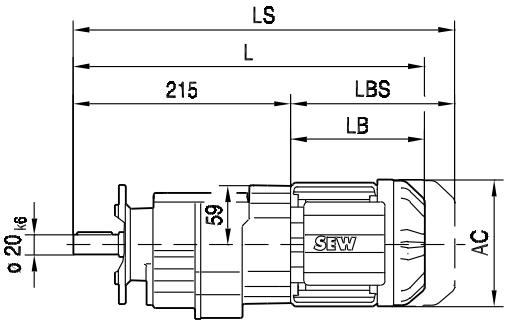
R17F..

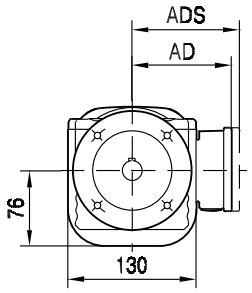


(→ 131)	DR63..	DR71S	DR71M	DR80S				
AC	132	139	139	156				
AD	105	119	119	128				
ADS	105	129	129	139				
L	356	367	392	402				
LS	411	435	460	483				
LB	149	160	185	189				
LBS	204	228	253	270				

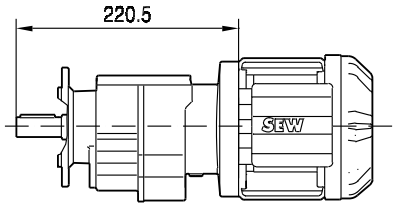
01 098 00 06

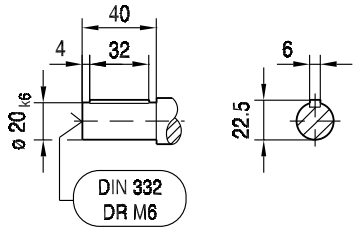
RF17..



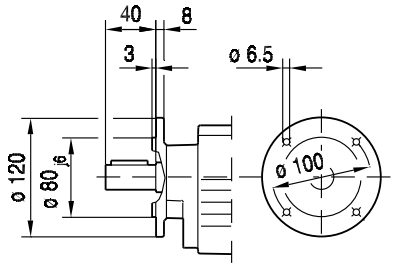


DR80..

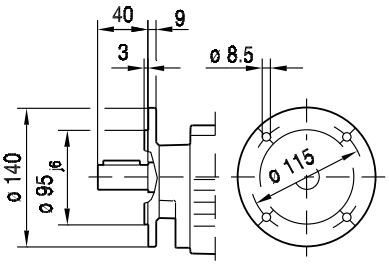




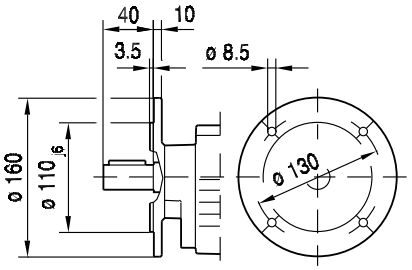
ø 120



ø 140



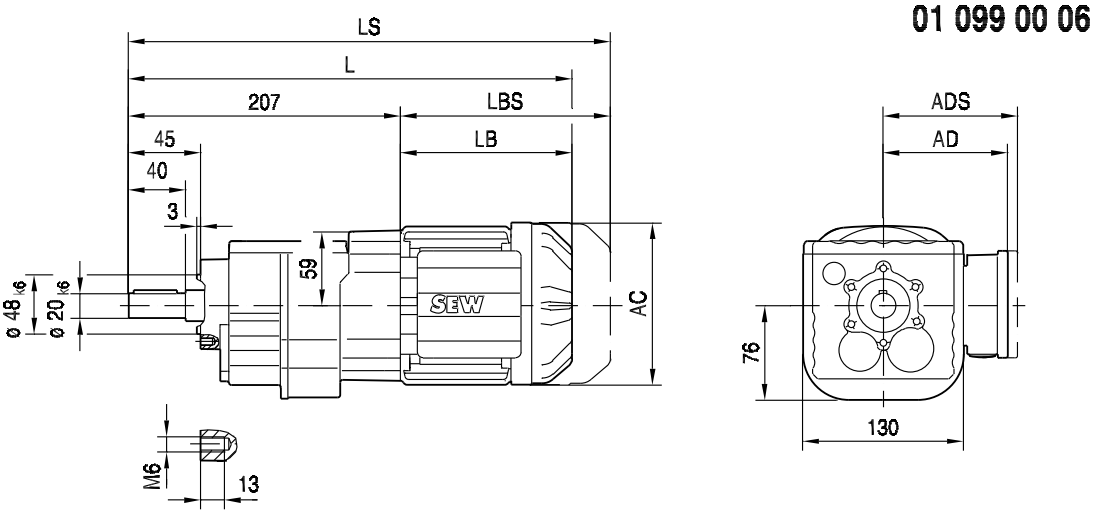
ø 160



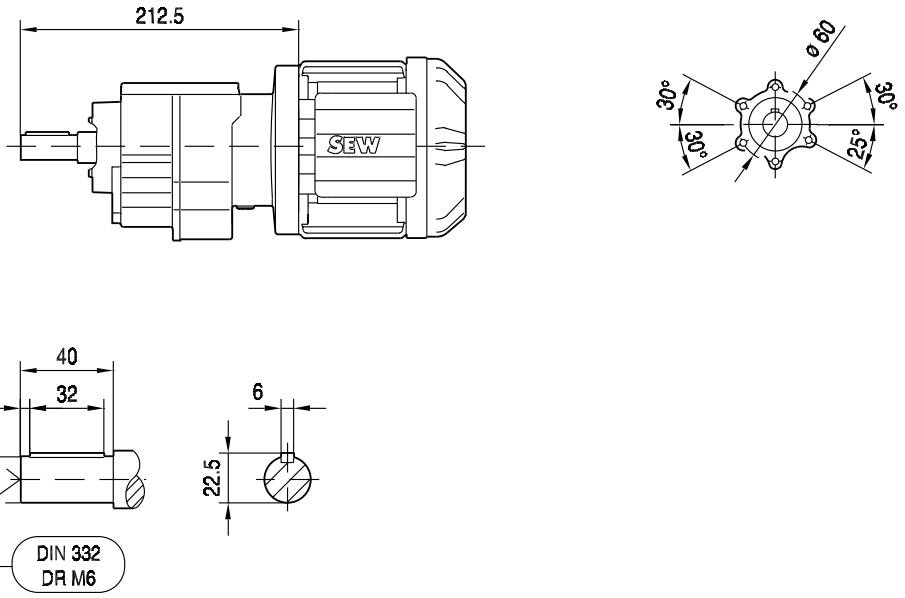
(→ 131)	DR63..	DR71S	DR71M	DR80S				
AC	132	139	139	156				
AD	105	119	119	128				
ADS	105	129	129	139				
L	364	375	400	410				
LS	419	443	468	491				
LB	149	160	185	189				
LBS	204	228	253	270				

01 099 00 06

RZ17..



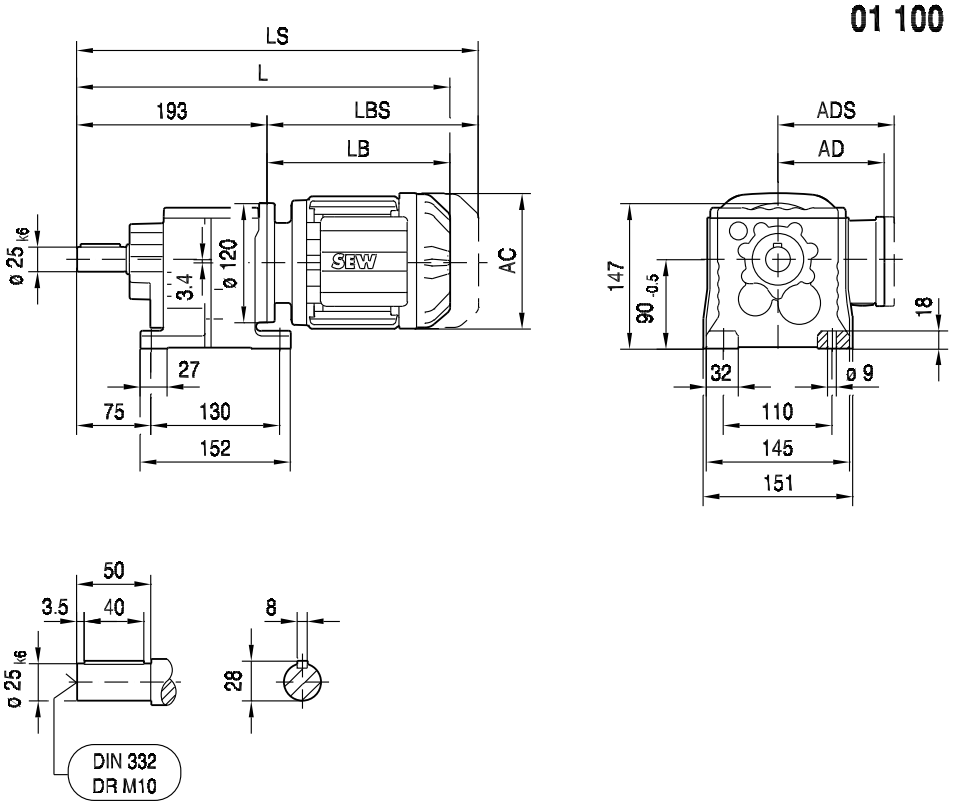
DR80..



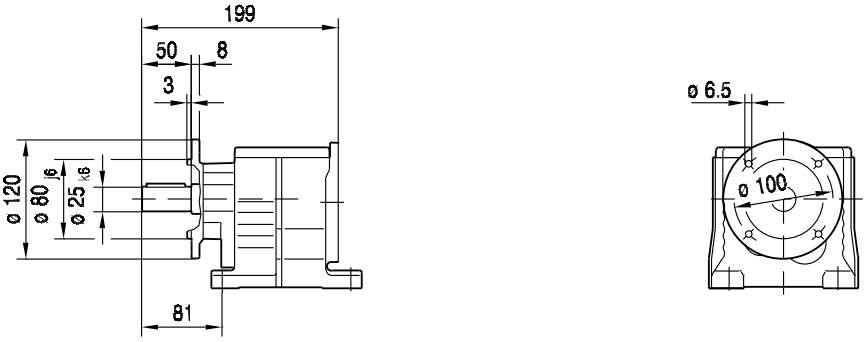
(→ 131)	DR63..	DR71S	DR71M	DR80S				
AC	132	139	139	156				
AD	105	119	119	128				
ADS	105	129	129	139				
L	356	367	392	402				
LS	411	435	460	483				
LB	149	160	185	189				
LBS	204	228	253	270				

01 100 00 06

R27..



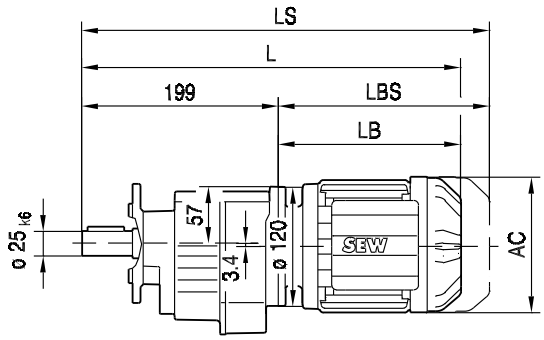
R27F..

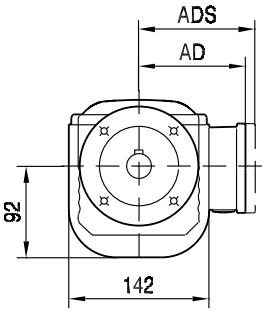


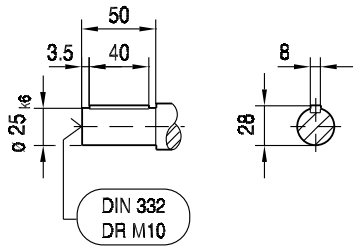
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	384	396	421	430	461	465	485	515
LS	439	464	489	511	542	558	578	608
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

01 101 00 06

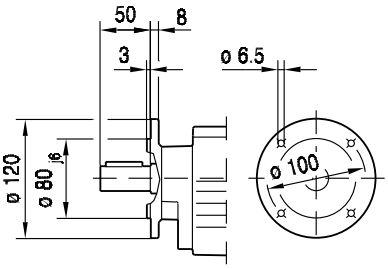
RF27..



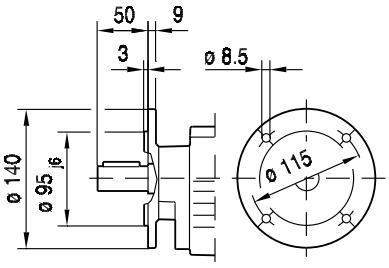




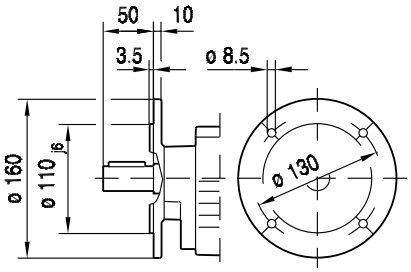
ø 120



ø 140



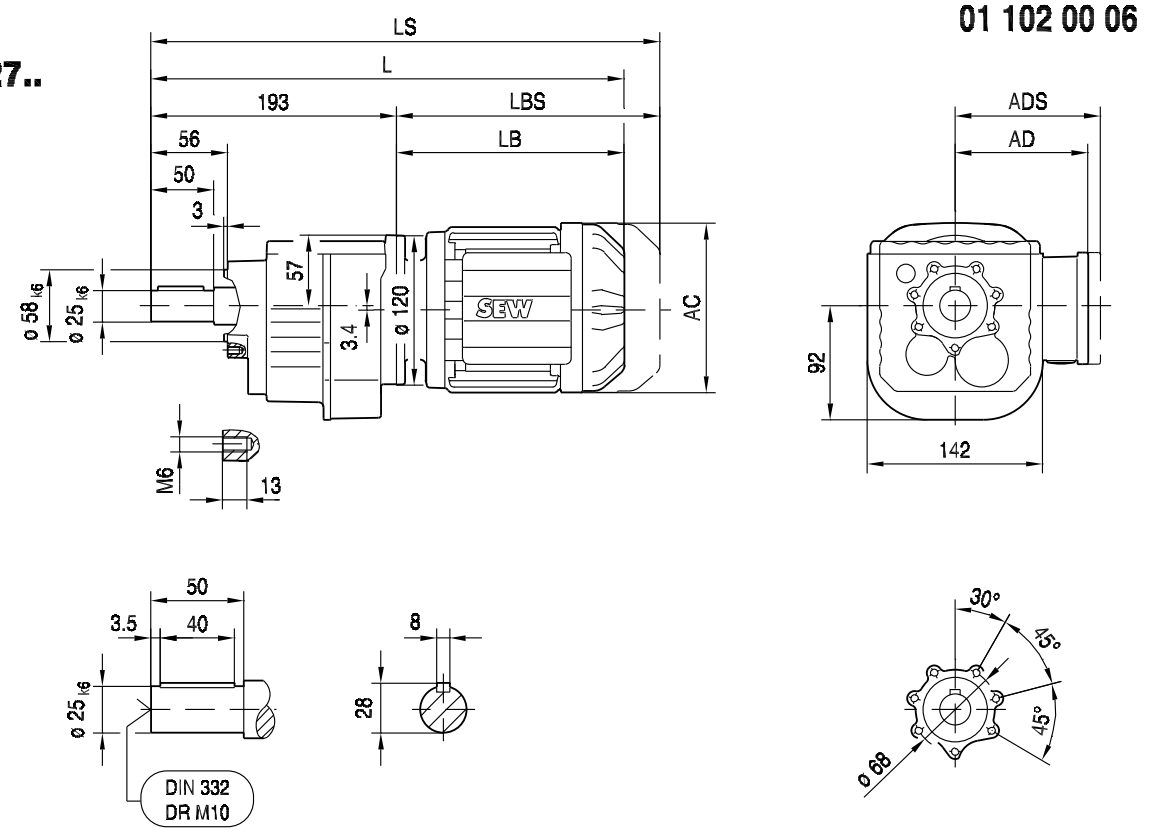
ø 160



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	390	402	427	436	467	471	491	521
LS	445	470	495	517	548	564	584	614
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

RZ27..

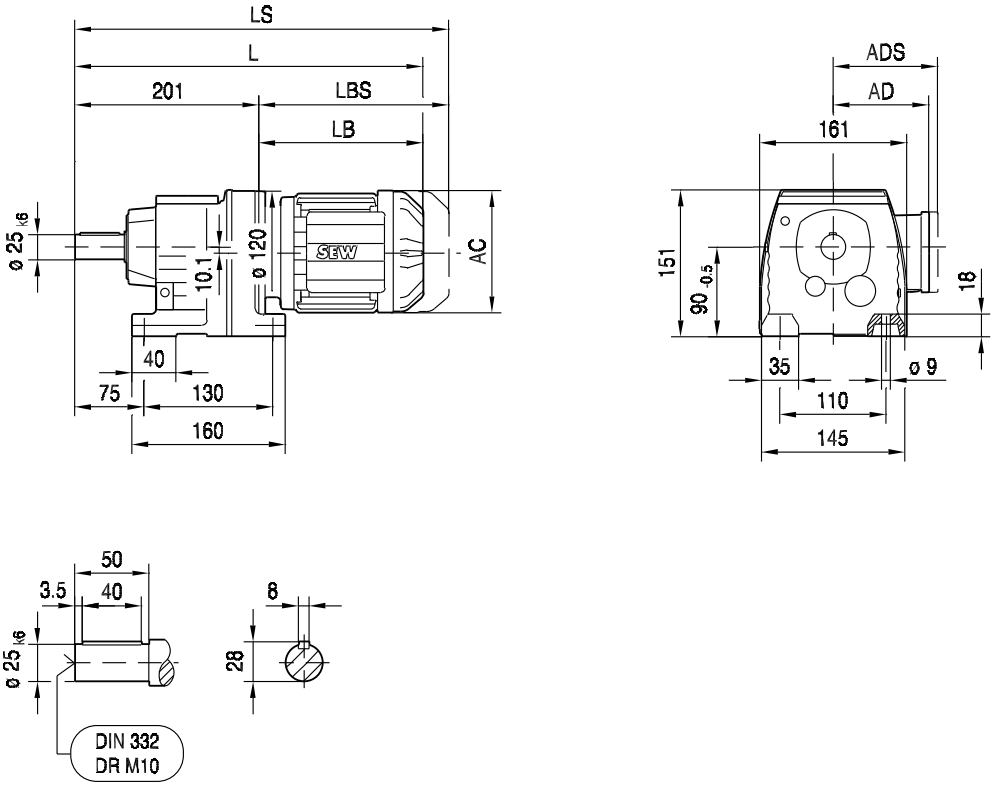
01 102 00 06



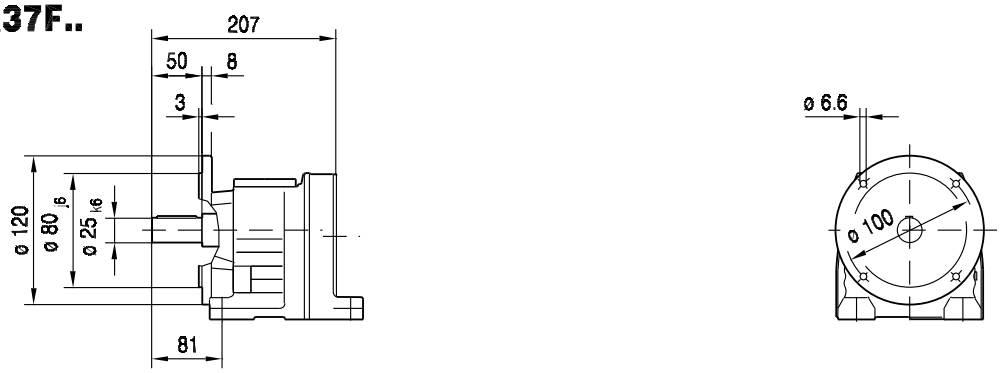
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	384	396	421	430	461	465	485	515
LS	439	464	489	511	542	558	578	608
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

01 103 00 06

R37..



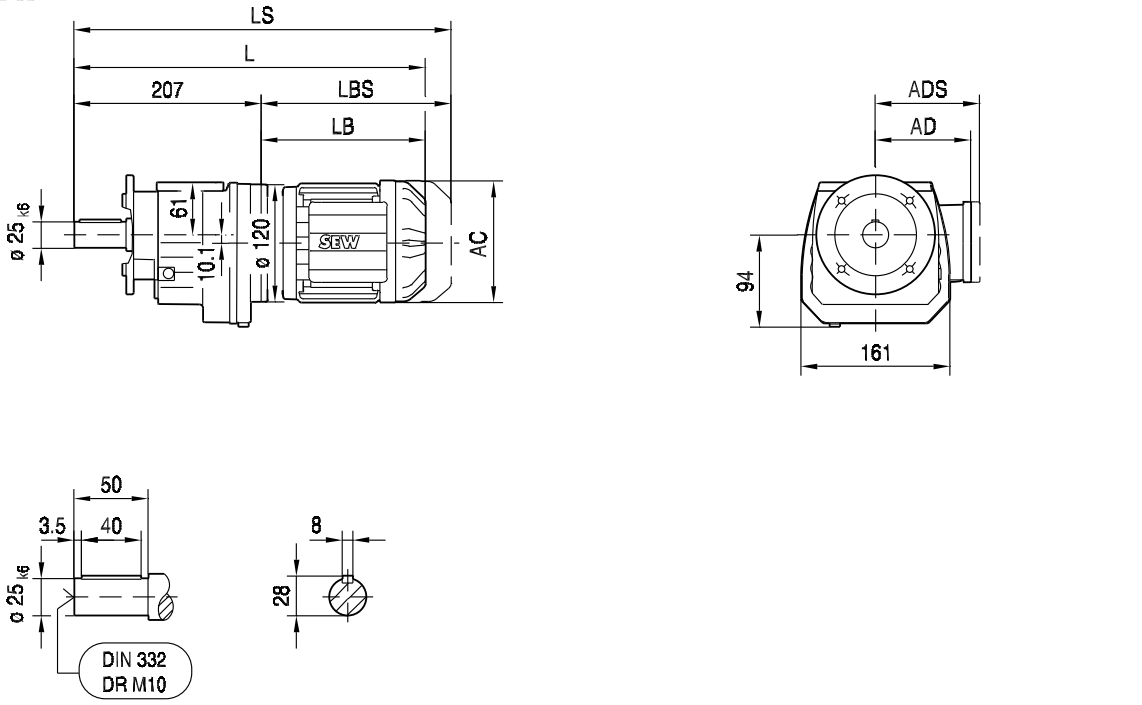
R37F..



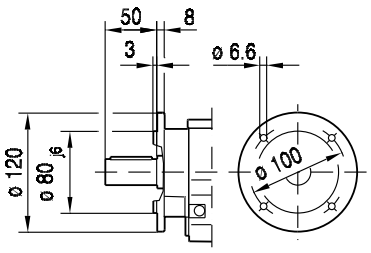
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	392	404	429	438	469	473	493	523
LS	447	472	497	519	550	566	586	616
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

01 104 00 06

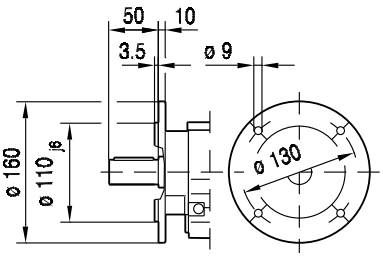
RF37..



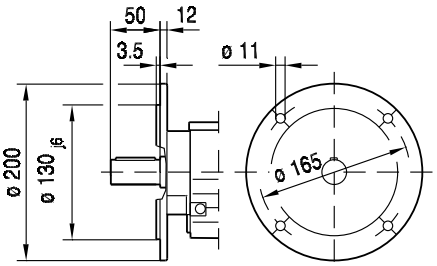
ø 120



ø 160



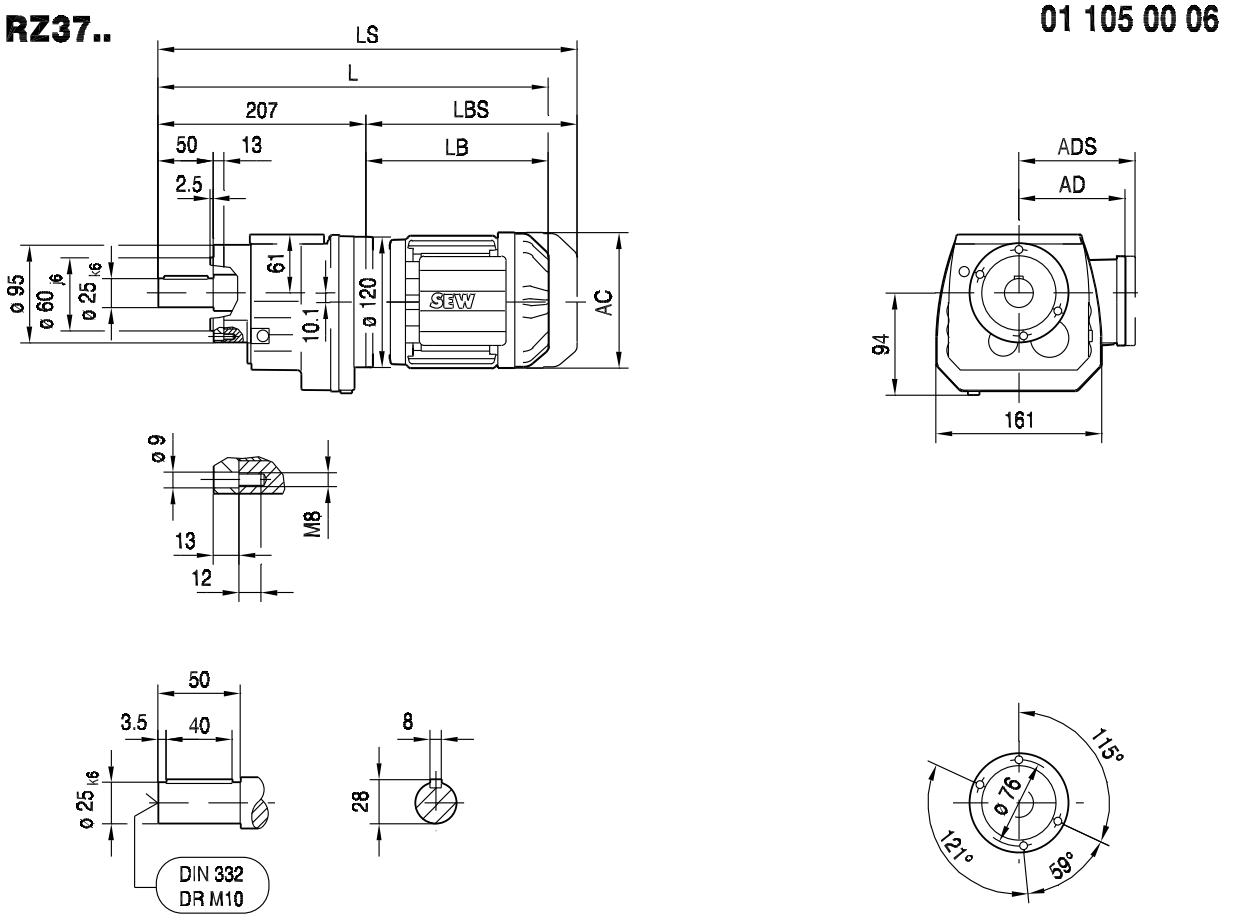
ø 200



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	398	410	435	444	475	479	499	529
LS	453	478	503	525	556	572	592	622
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

RZ37..

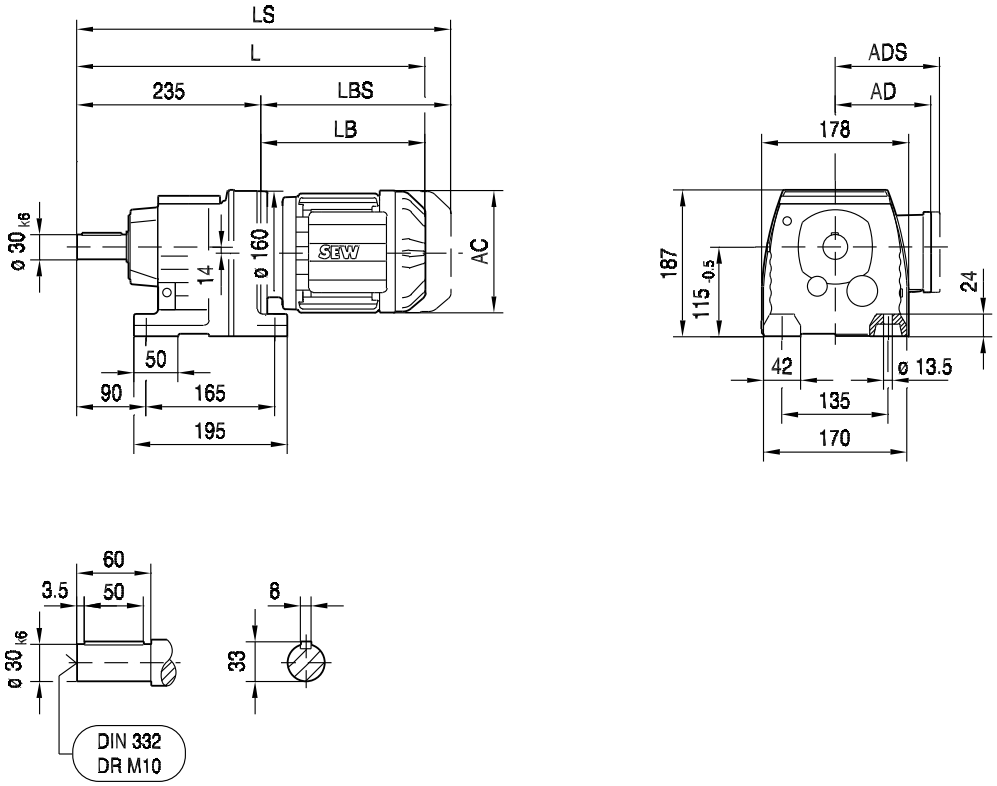
01 105 00 06



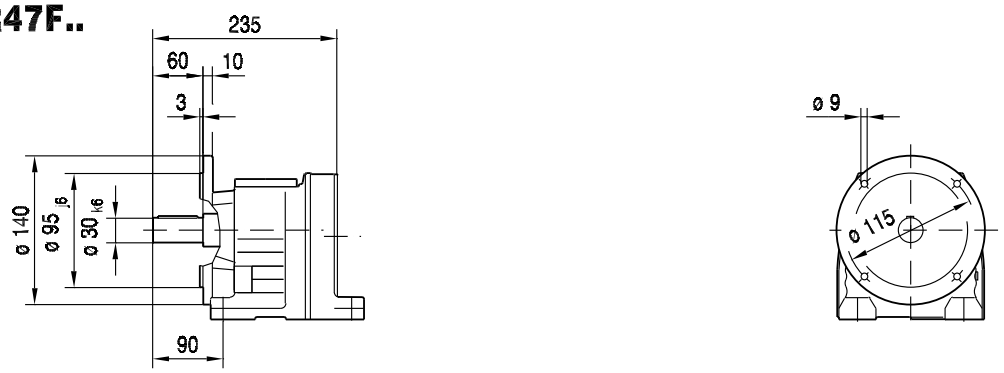
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	398	410	435	444	475	479	499	529
LS	453	478	503	525	556	572	592	622
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

01 106 00 06

R47..



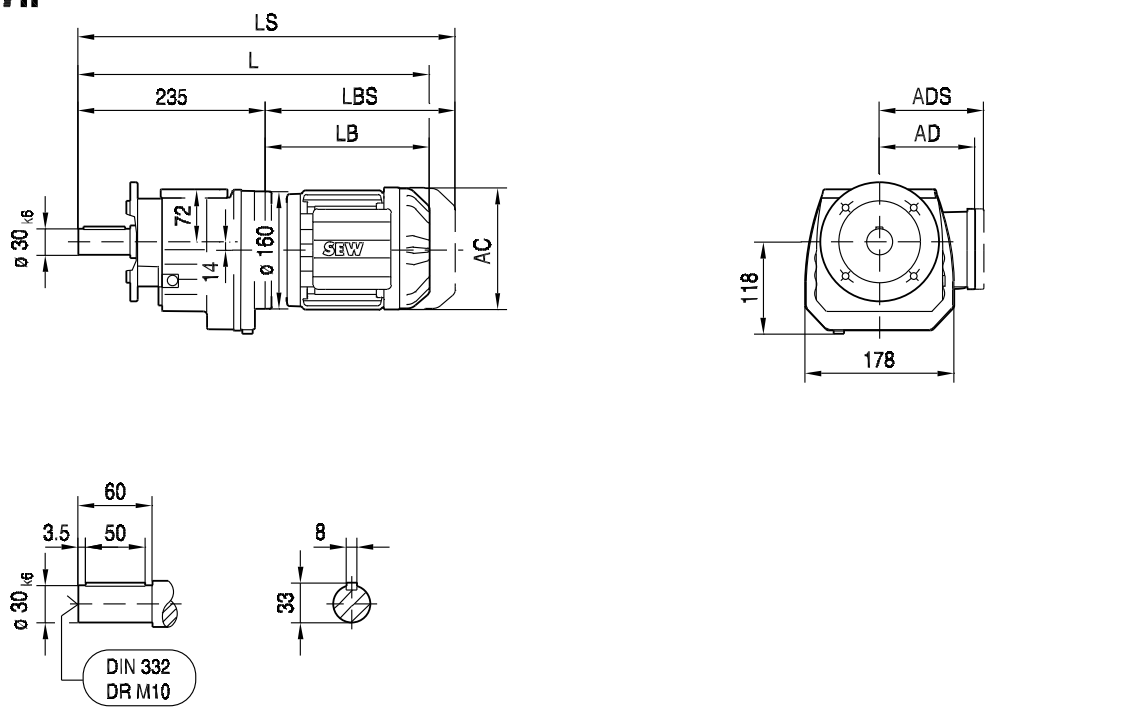
R47F..



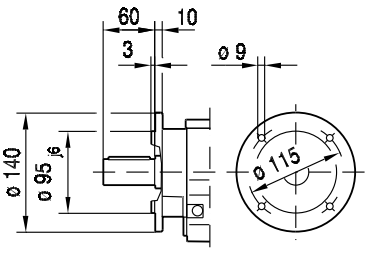
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	420	431	456	465	496	498	518	548	578	625
LS	475	499	524	546	577	591	611	641	671	737
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

01 107 00 06

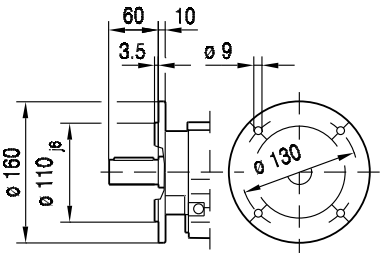
RF47..



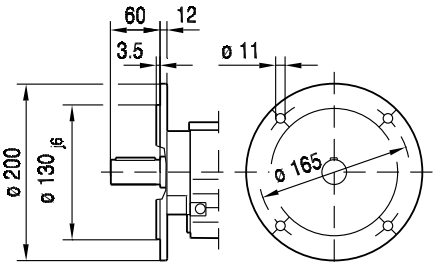
ø 140



ø 160



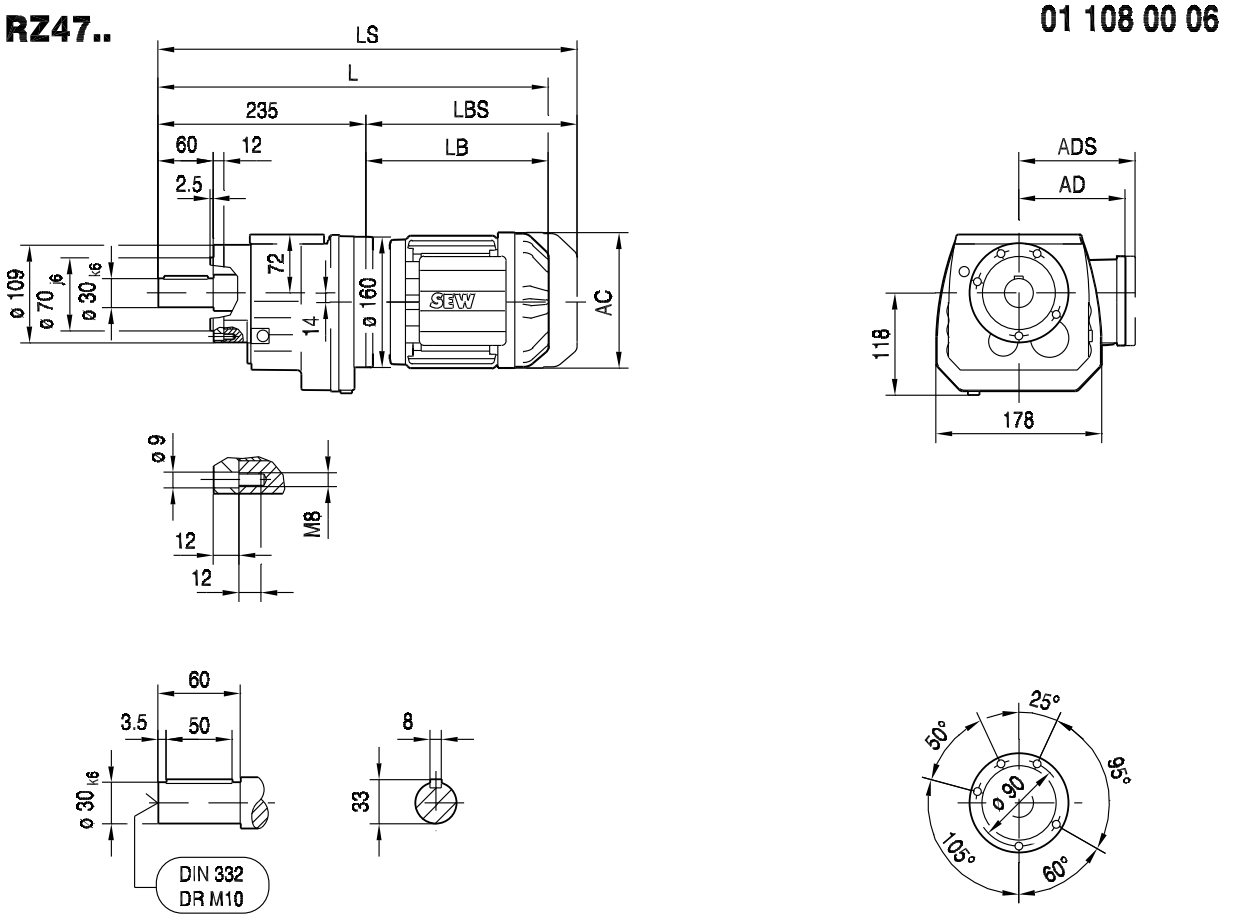
ø 200



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	420	431	456	465	496	498	518	548	578	625
LS	475	499	524	546	577	591	611	641	671	737
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

RZ47..

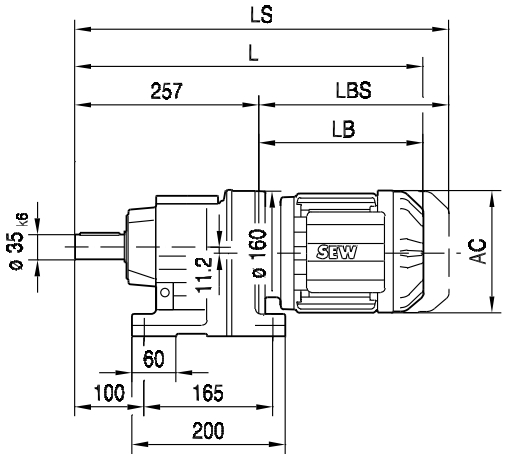
01 108 00 06

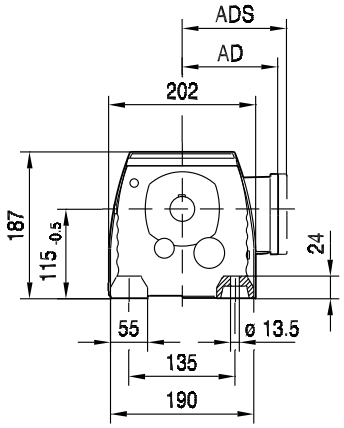


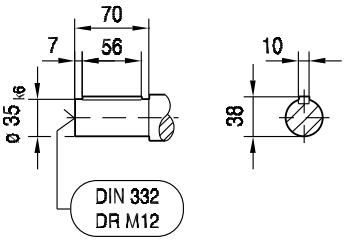
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	420	431	456	465	496	498	518	548	578	625
LS	475	499	524	546	577	591	611	641	671	737
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

01 109 00 06

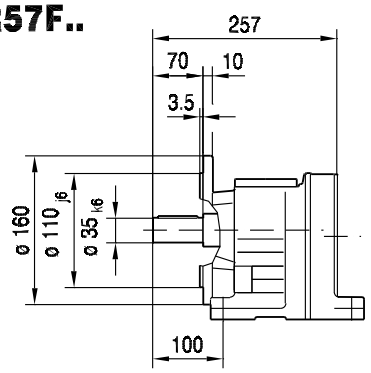
R57..

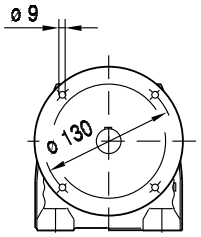






R57F..

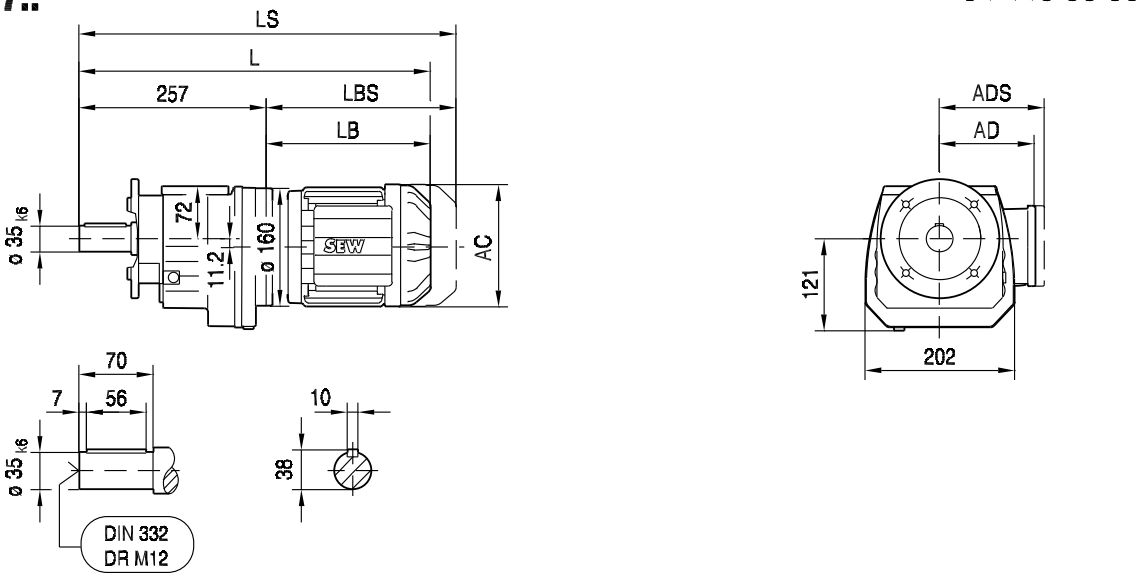


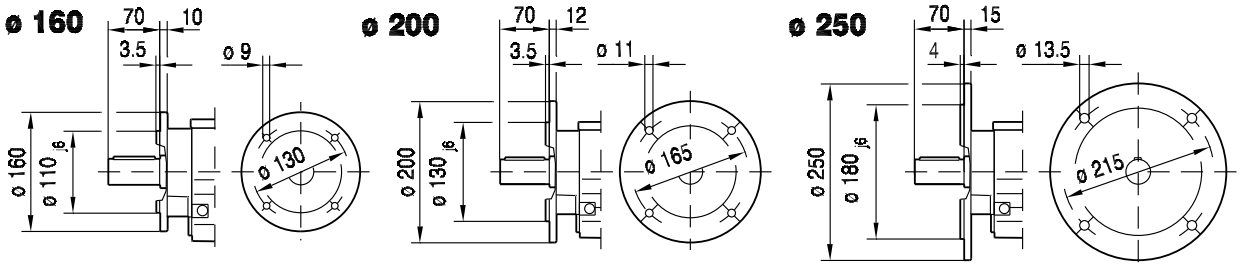


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	442	453	478	487	518	520	540	570	600	647	697
LS	497	521	546	568	599	613	633	663	693	759	809
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

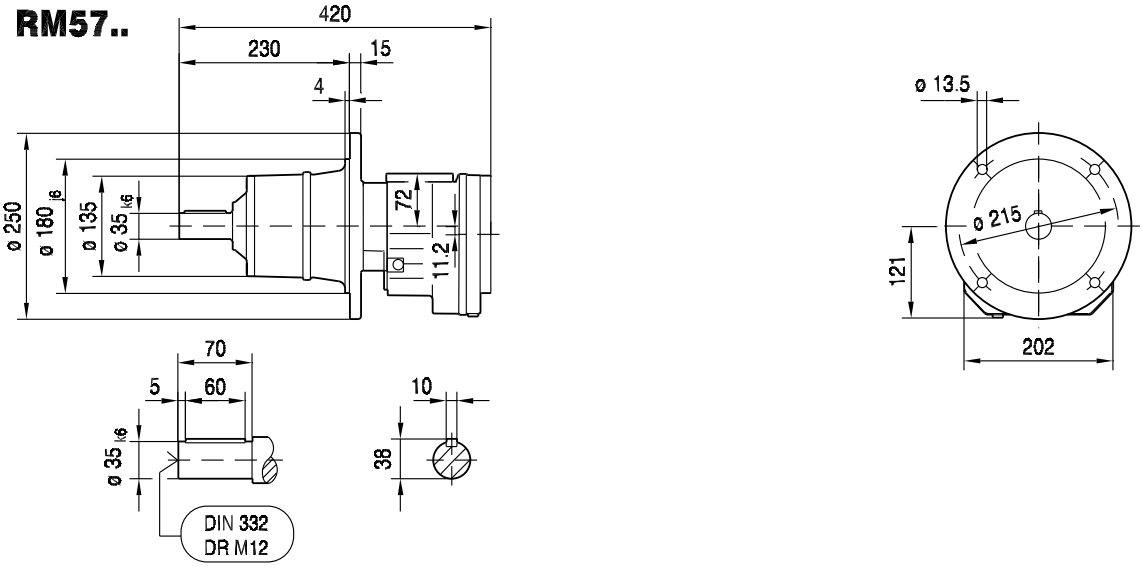
RF57..

01 110 00 06





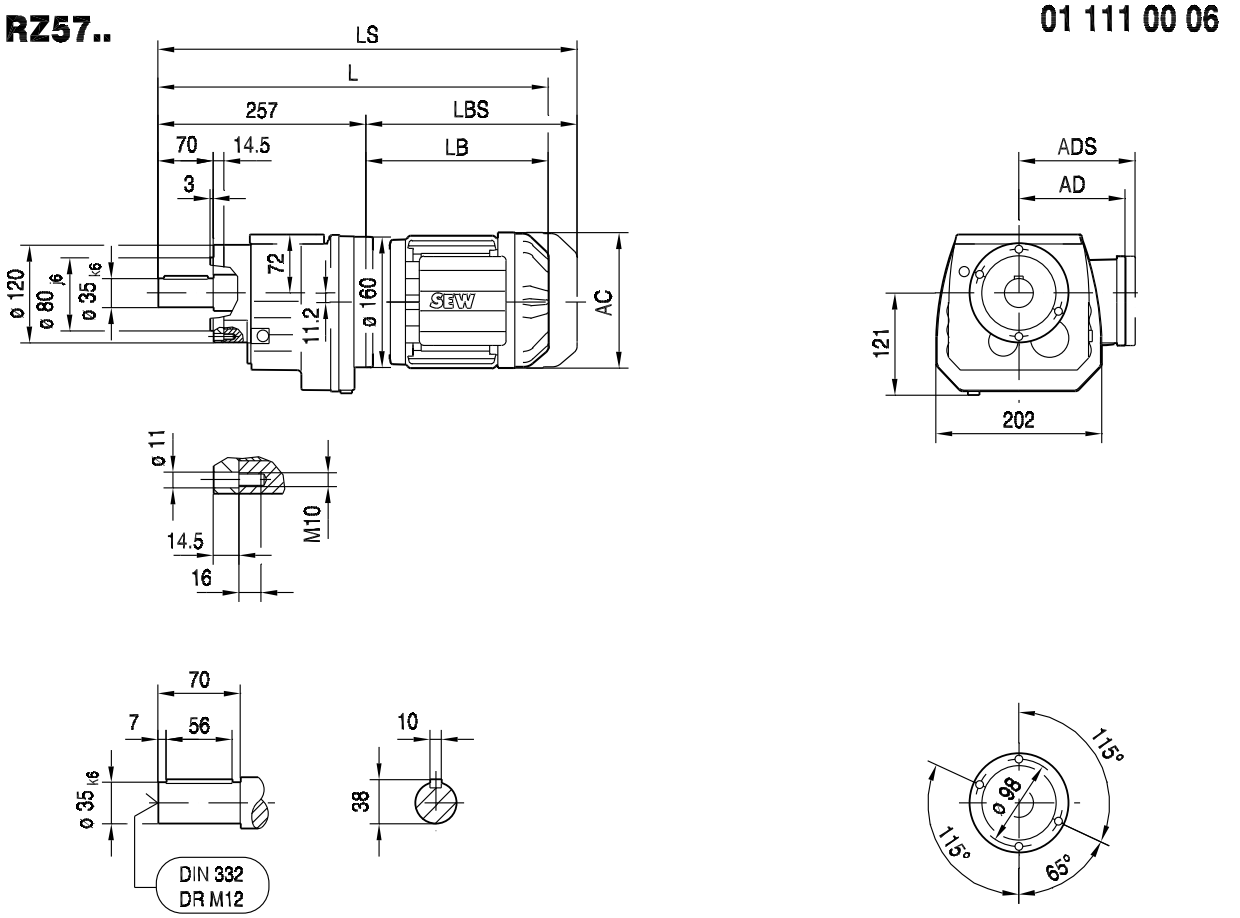
RM57..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	442	453	478	487	518	520	540	570	600	647	697
LS	497	521	546	568	599	613	633	663	693	759	809
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

RZ57..

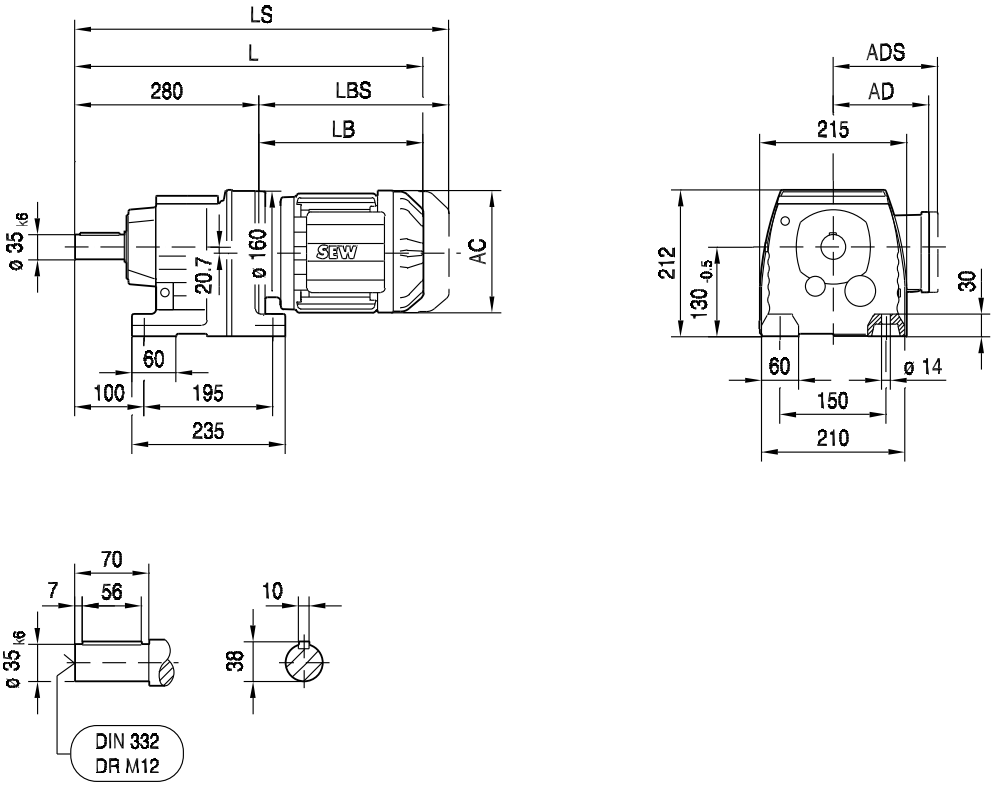
01 111 00 06



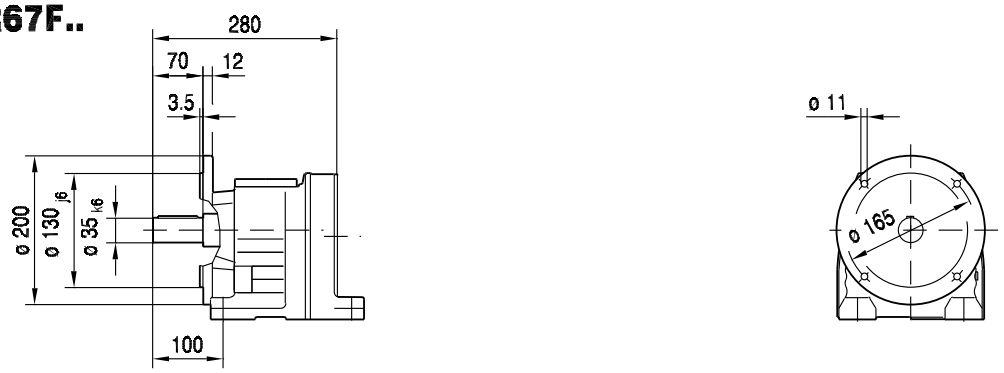
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	442	453	478	487	518	520	540	570	600	647	697
LS	497	521	546	568	599	613	633	663	693	759	809
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

01 112 00 06

R67..



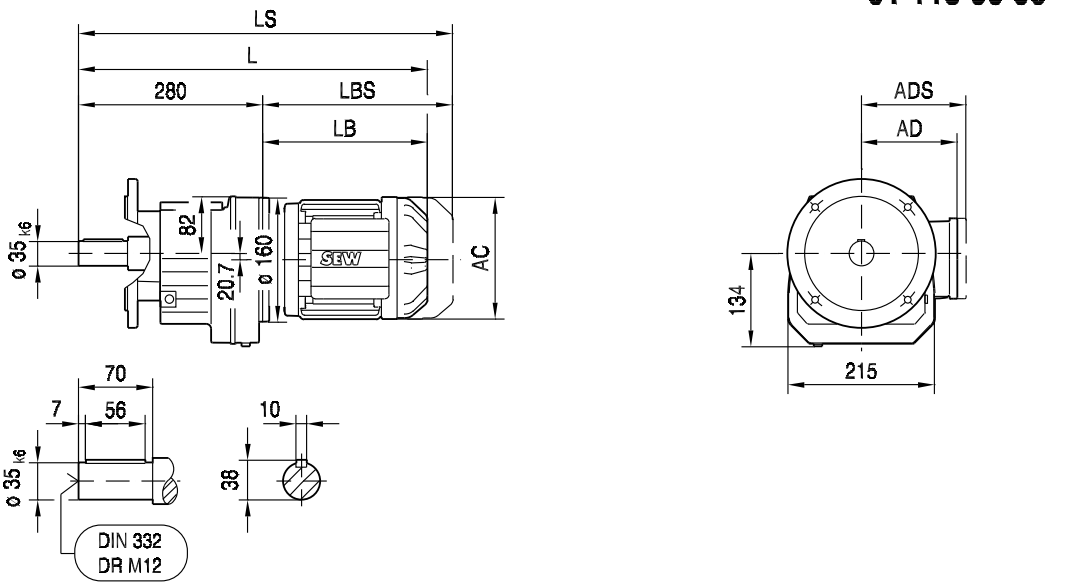
R67F..



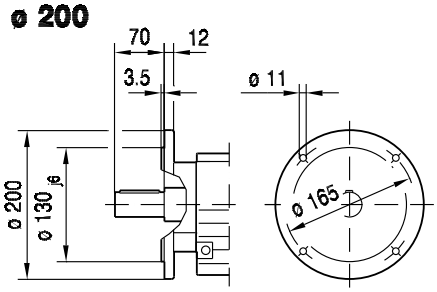
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	465	476	501	510	541	543	563	593	623	670	720
LS	520	544	569	591	622	636	656	686	716	782	832
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

01 113 00 06

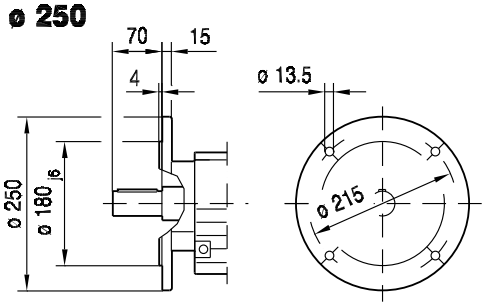
RF67..



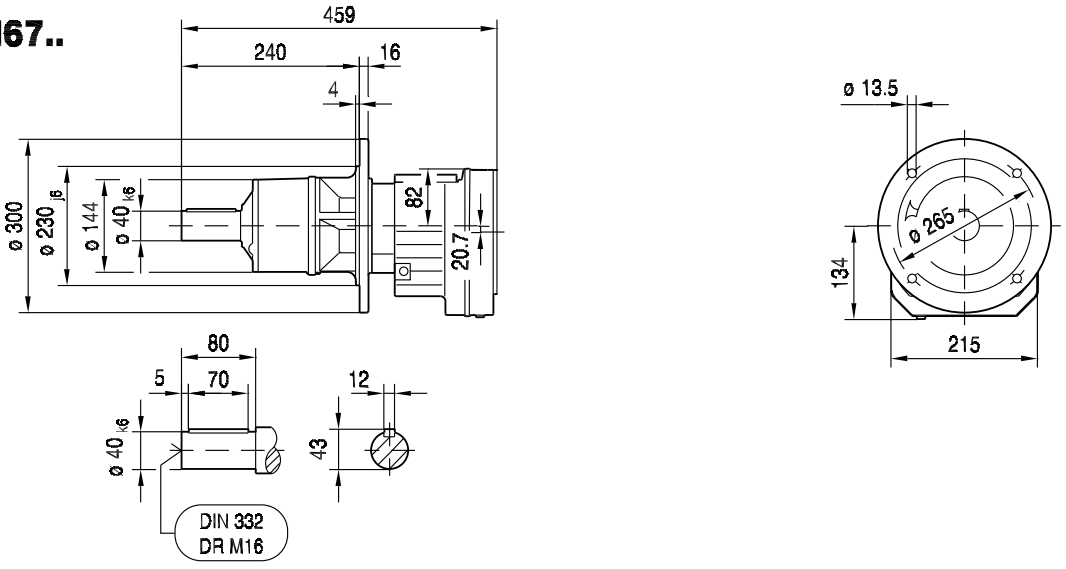
ø 200



ø 250



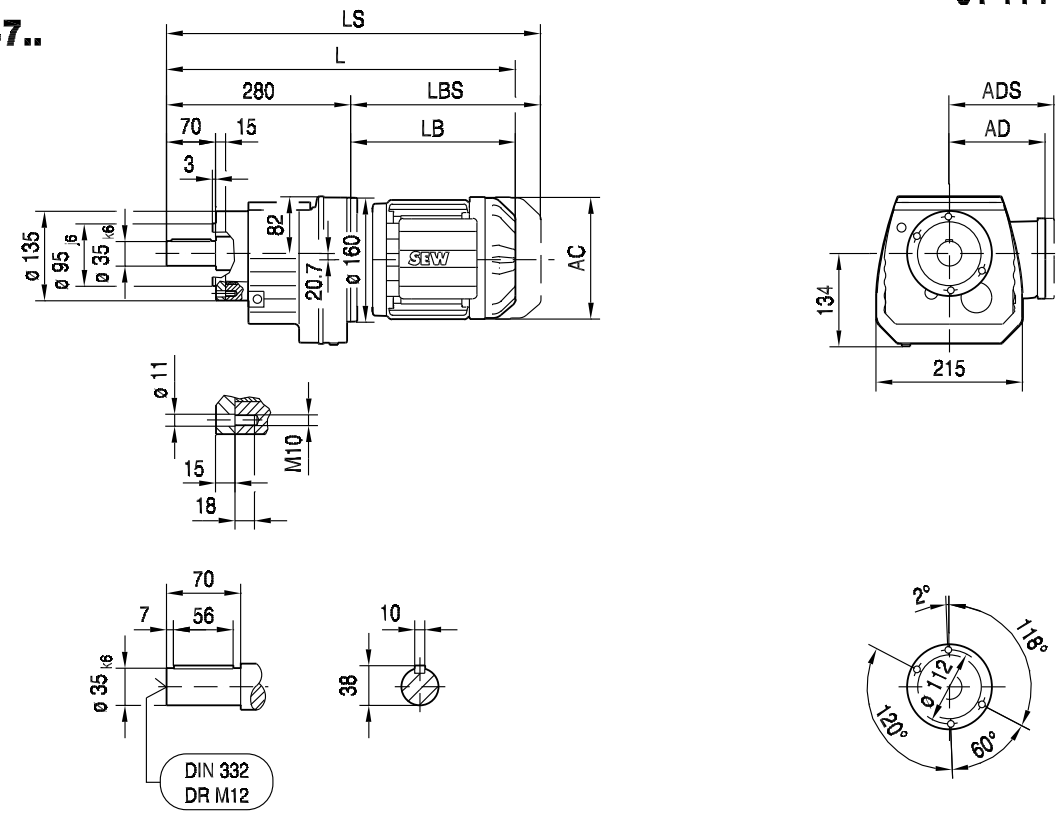
RM67..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	465	476	501	510	541	543	563	593	623	670	720
LS	520	544	569	591	622	636	656	686	716	782	832
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

01 114 00 06

RZ67..

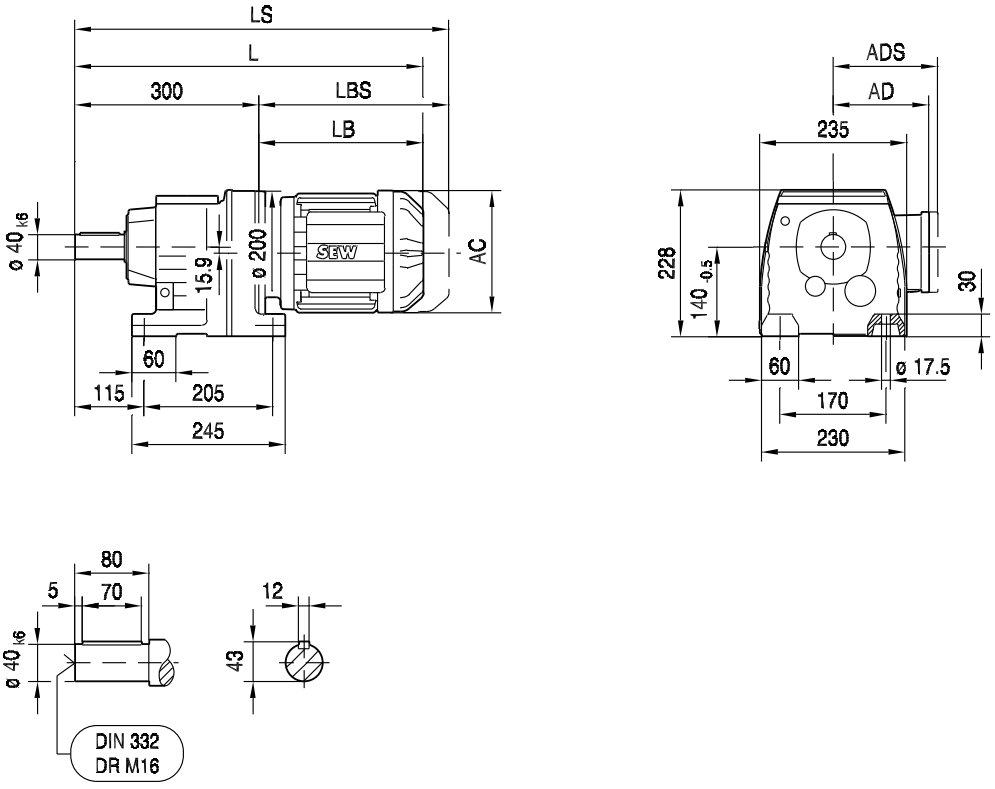


9

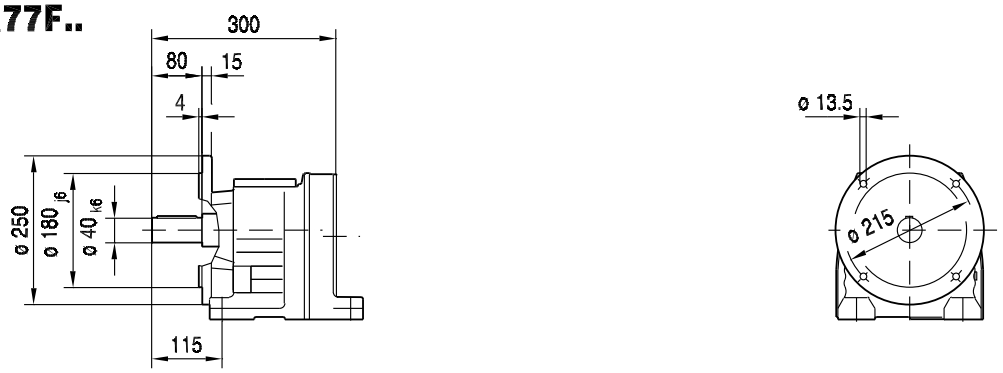
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	465	476	501	510	541	543	563	593	623	670	720
LS	520	544	569	591	622	636	656	686	716	782	832
LB	185	196	221	230	261	263	283	313	343	390	440
LBS	240	264	289	311	342	356	376	406	436	502	552

01 115 00 06

R77..



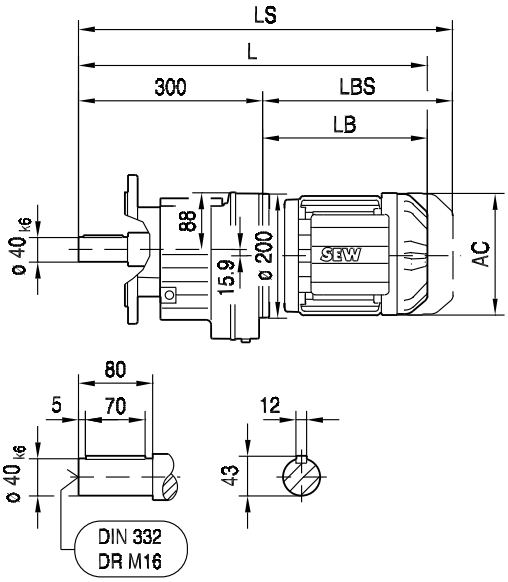
R77F..

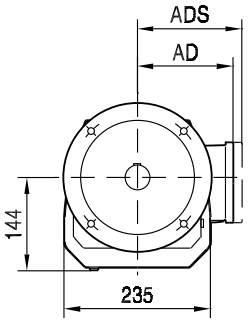


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	478	489	514	523	554	556	576	606	636	679	729	770
LS	533	557	582	604	635	649	669	699	729	791	841	907
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

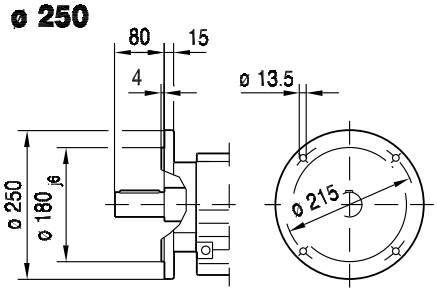
01 116 00 06

RF77..

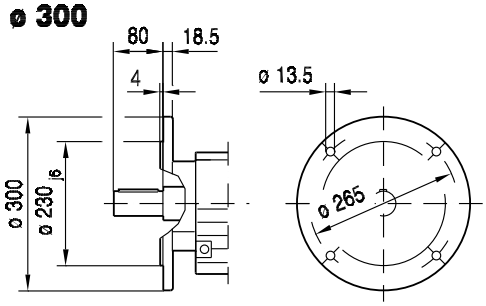




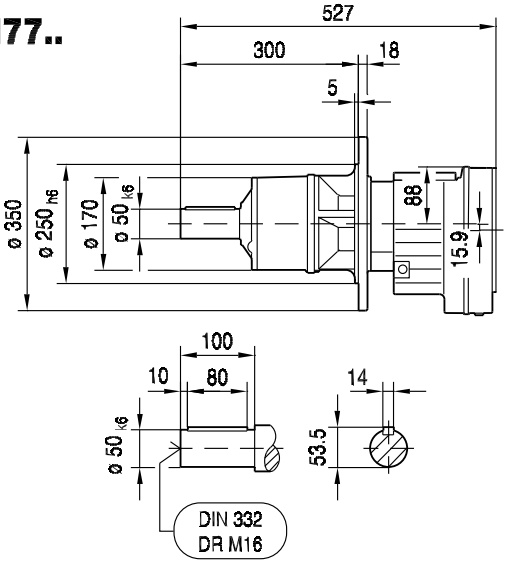
ø 250

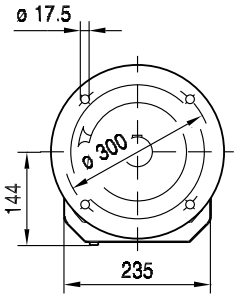


ø 300



RM77..

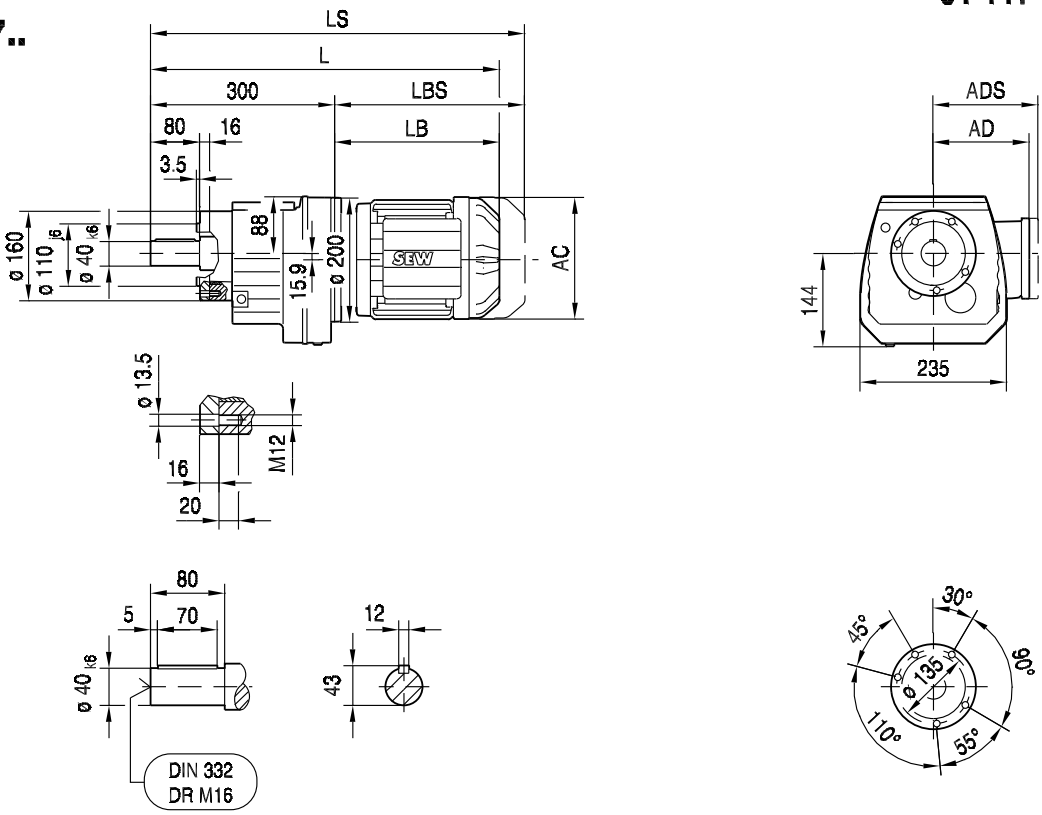




(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	478	489	514	523	554	556	576	606	636	679	729	770
LS	533	557	582	604	635	649	669	699	729	791	841	907
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

01 117 00 06

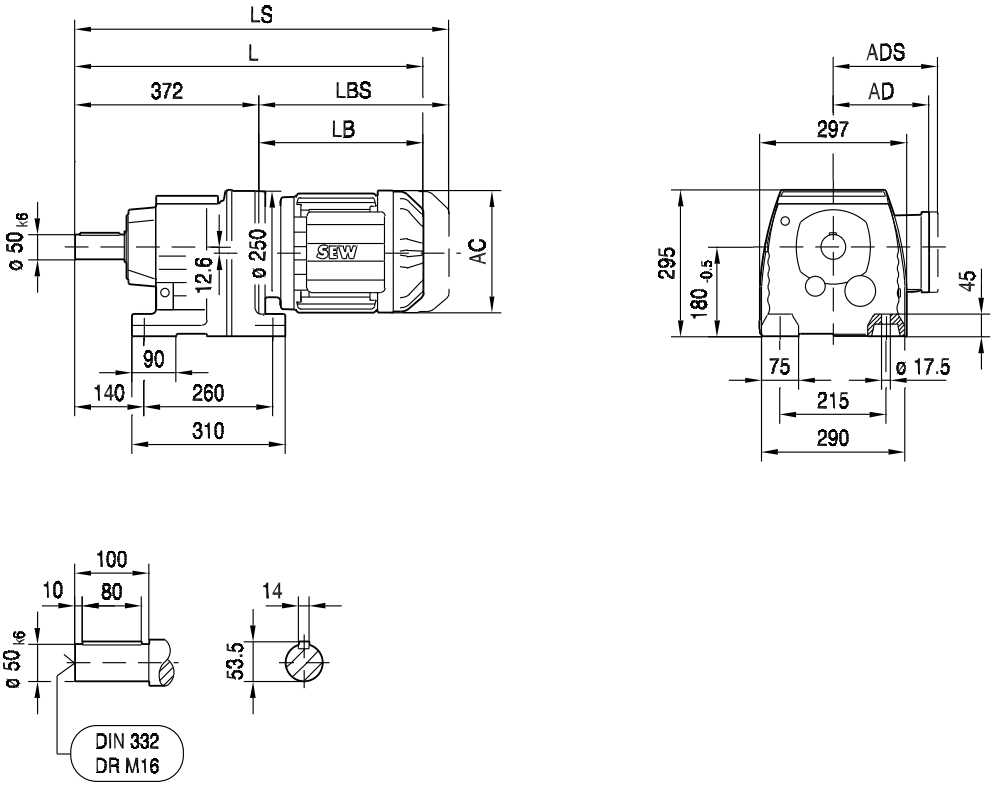
RZ77..



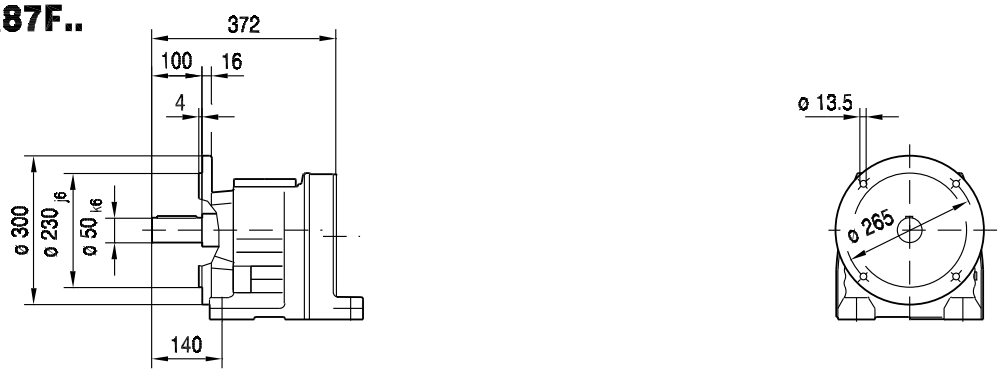
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	478	489	514	523	554	556	576	606	636	679	729	770
LS	533	557	582	604	635	649	669	699	729	791	841	907
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

01 118 00 06

R87..



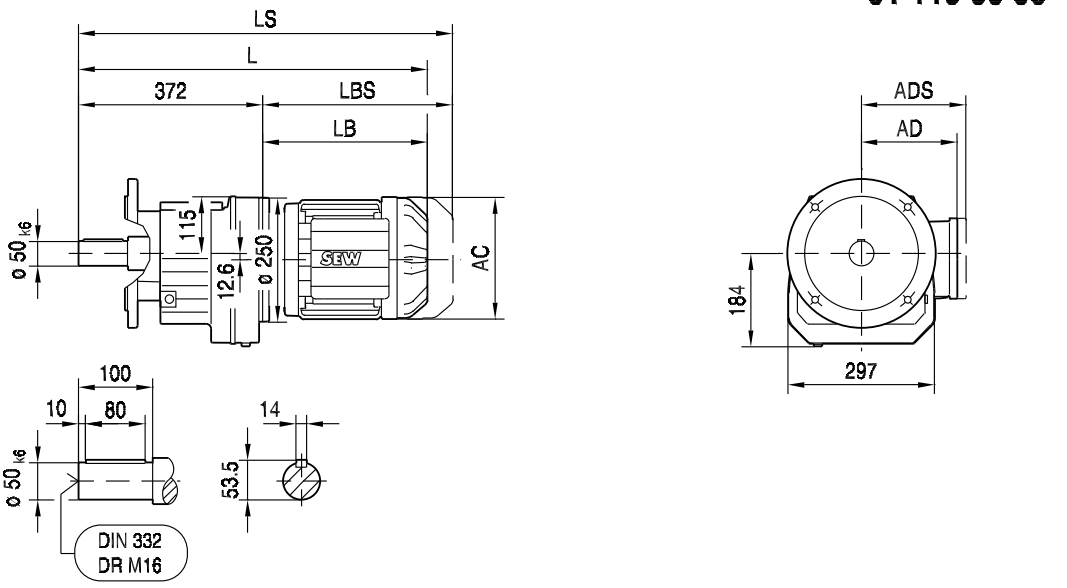
R87F..



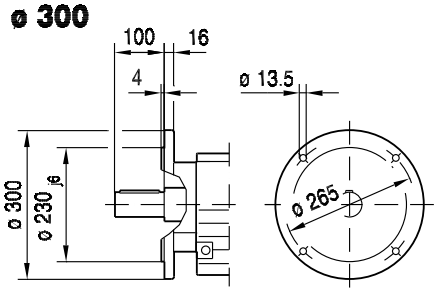
(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	139	156	156	179	179	197	197	221	221	270	316	316
AD	119	128	128	140	140	157	157	170	170	228	253	253
ADS	129	139	139	150	150	158	158	172	172	228	253	253
L	581	590	621	623	643	673	703	746	796	837	906	966
LS	649	671	702	716	736	766	796	858	908	974	1095	1155
LB	209	218	249	251	271	301	331	374	424	465	534	594
LBS	277	299	330	344	364	394	424	486	536	602	723	783

01 119 00 06

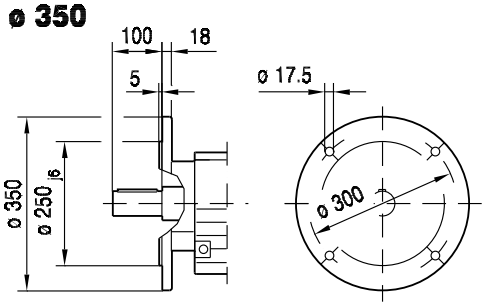
RF87..



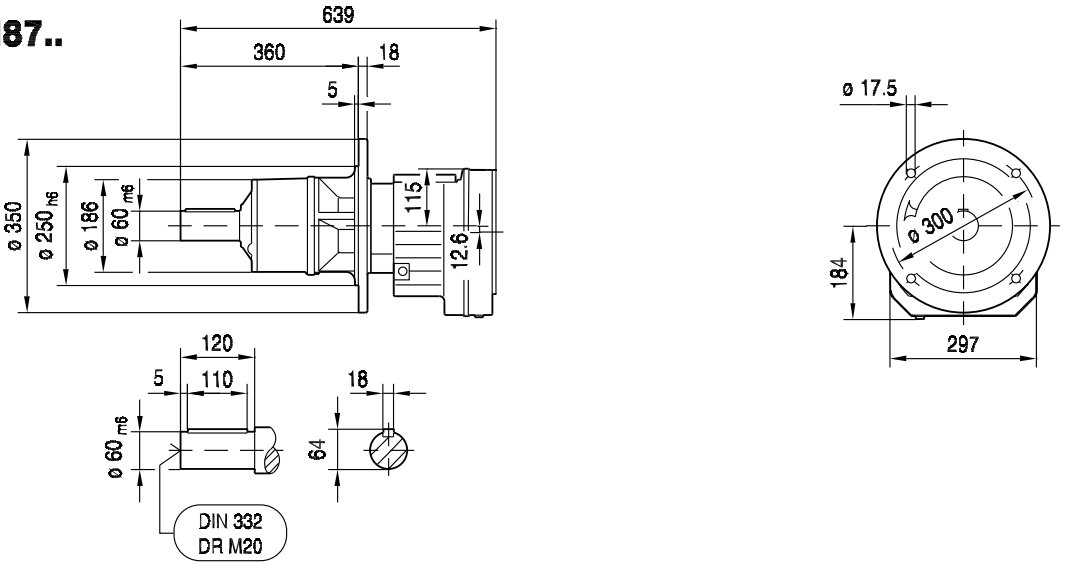
ø 300



ø 350



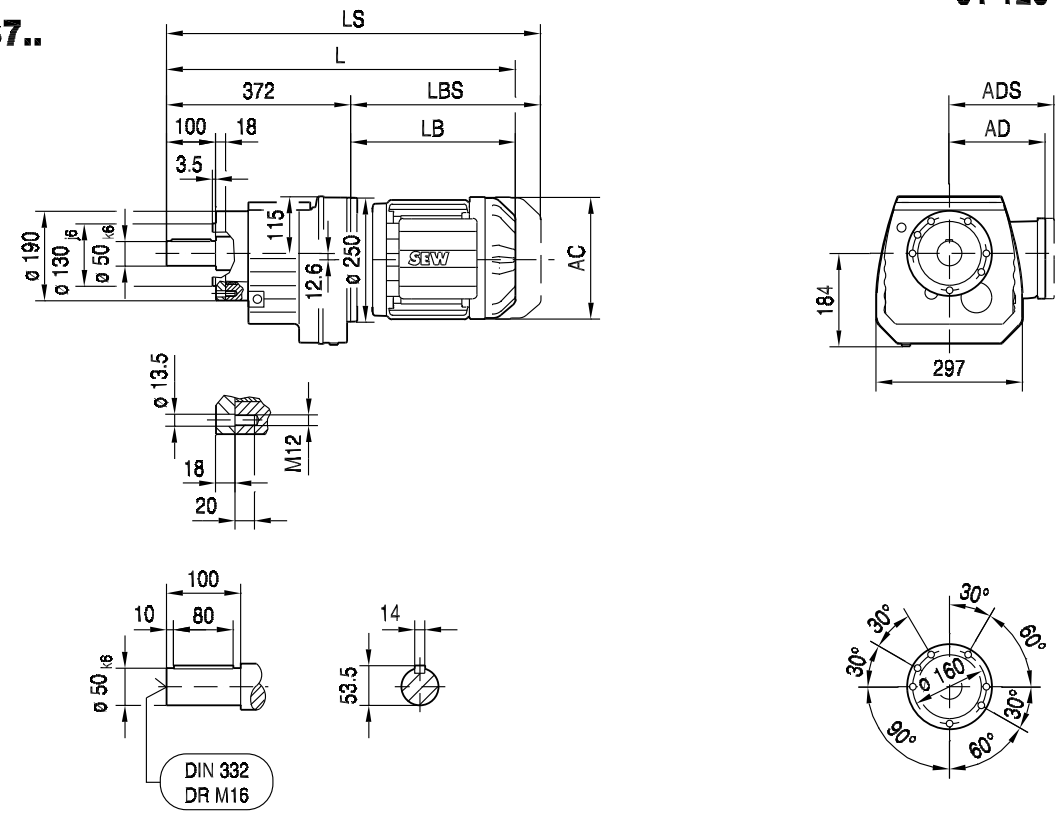
RM87..



(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	139	156	156	179	179	197	197	221	221	270	316	316
AD	119	128	128	140	140	157	157	170	170	228	253	253
ADS	129	139	139	150	150	158	158	172	172	228	253	253
L	581	590	621	623	643	673	703	746	796	837	906	966
LS	649	671	702	716	736	766	796	858	908	974	1095	1155
LB	209	218	249	251	271	301	331	374	424	465	534	594
LBS	277	299	330	344	364	394	424	486	536	602	723	783

01 120 00 06

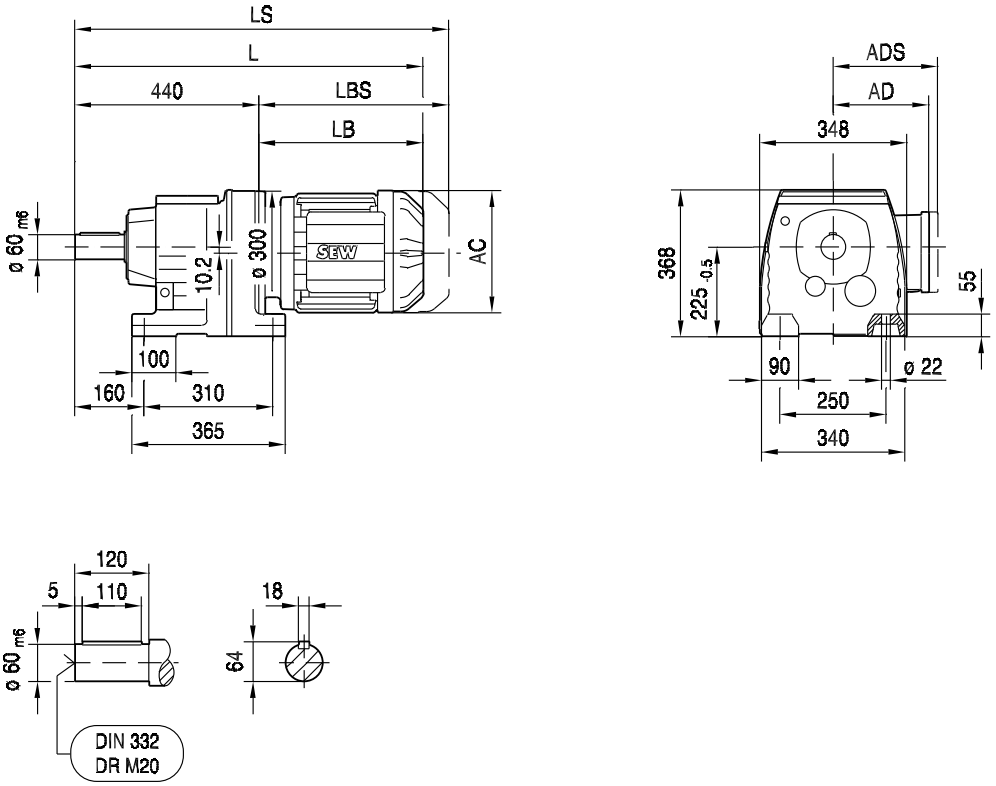
RZ87..



(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	139	156	156	179	179	197	197	221	221	270	316	316
AD	119	128	128	140	140	157	157	170	170	228	253	253
ADS	129	139	139	150	150	158	158	172	172	228	253	253
L	581	590	621	623	643	673	703	746	796	837	906	966
LS	649	671	702	716	736	766	796	858	908	974	1095	1155
LB	209	218	249	251	271	301	331	374	424	465	534	594
LBS	277	299	330	344	364	394	424	486	536	602	723	783

01 121 00 06

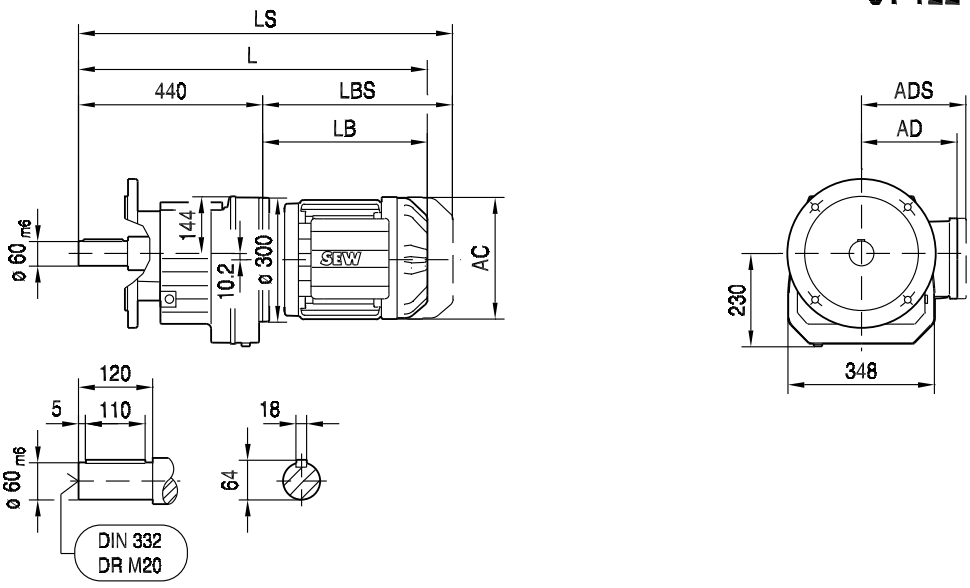
R97..



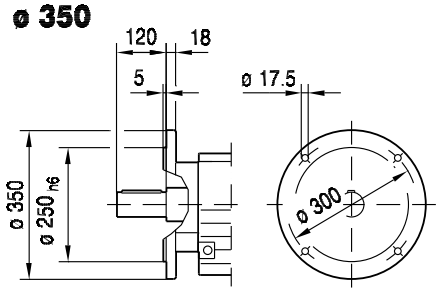
(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	139	156	156	179	179	197	197	221	221	270	316	316
AD	119	128	128	140	140	157	157	170	170	228	253	253
ADS	129	139	139	150	150	158	158	172	172	228	253	253
L	644	653	684	686	706	736	766	809	859	900	969	1029
LS	712	734	765	779	799	829	859	921	971	1037	1158	1218
LB	204	213	244	246	266	296	326	369	419	460	529	589
LBS	272	294	325	339	359	389	419	481	531	597	718	778

01 122 00 06

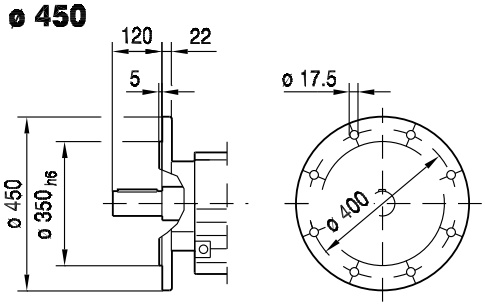
RF97..



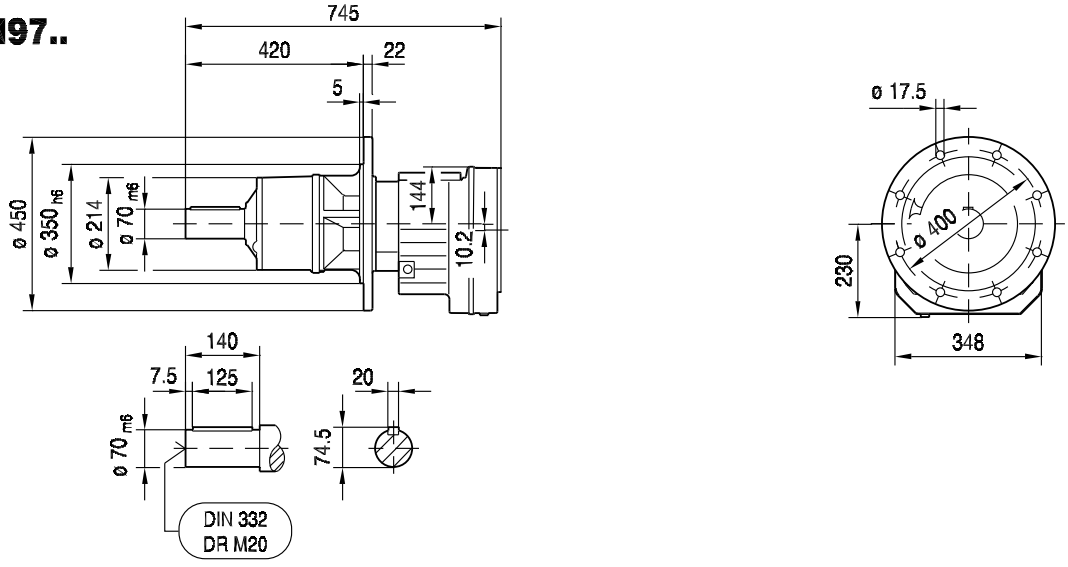
ø 350



ø 450



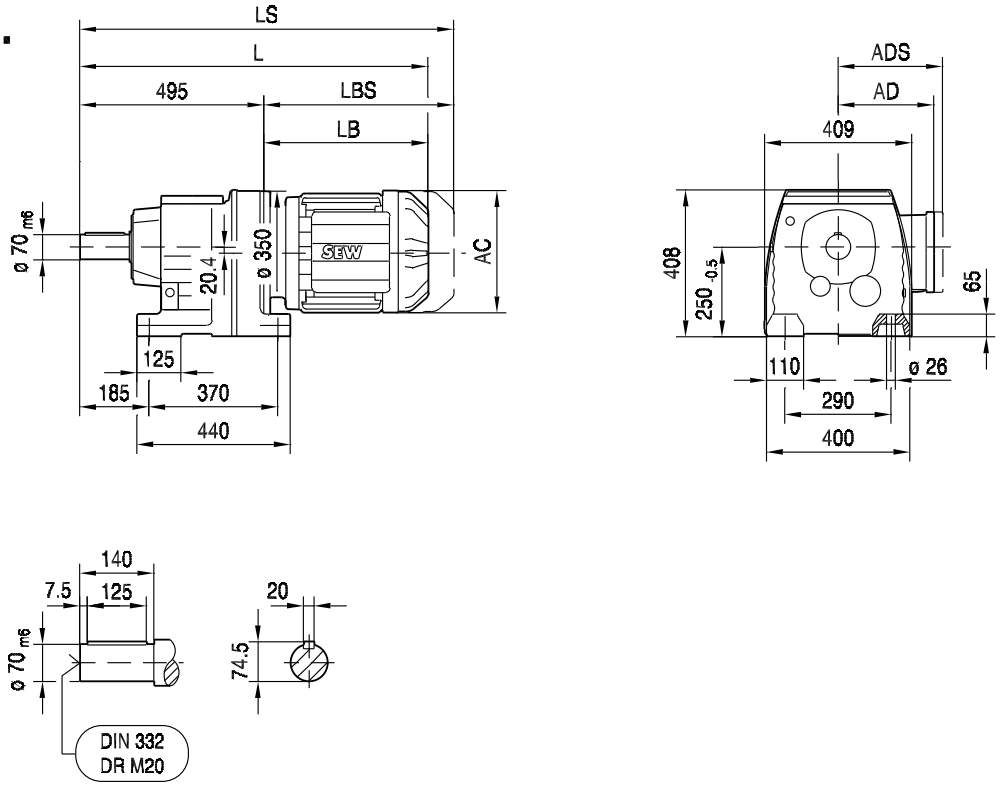
RM97..



(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	139	156	156	179	179	197	197	221	221	270	316	316
AD	119	128	128	140	140	157	157	170	170	228	253	253
ADS	129	139	139	150	150	158	158	172	172	228	253	253
L	644	653	684	686	706	736	766	809	859	900	969	1029
LS	712	734	765	779	799	829	859	921	971	1037	1158	1218
LB	204	213	244	246	266	296	326	369	419	460	529	589
LBS	272	294	325	339	359	389	419	481	531	597	718	778

01 123 00 06

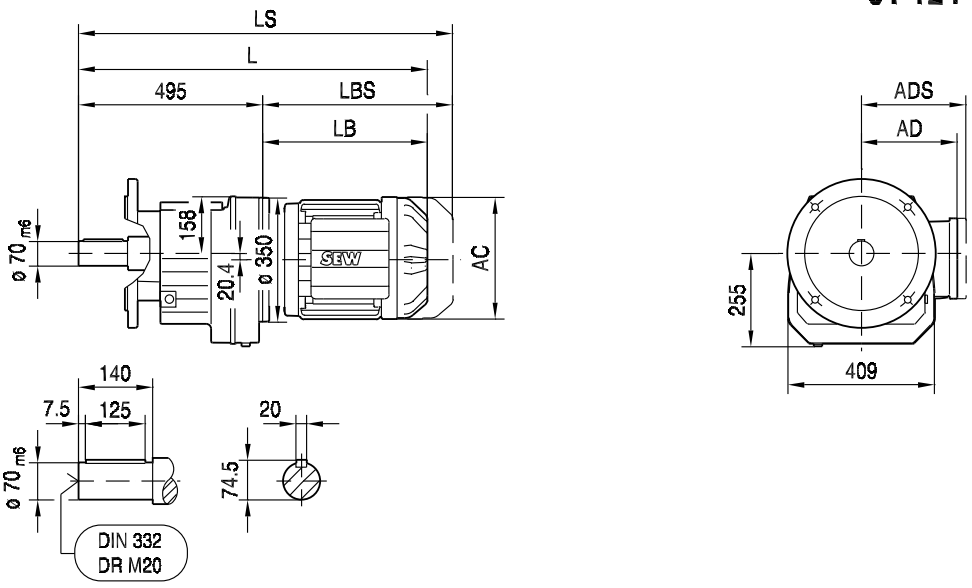
R107..



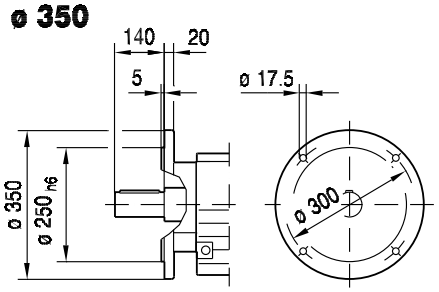
(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	755	785	815	858	908	949	1018	1078	1151	1201
LS	848	878	908	970	1020	1086	1207	1267	1356	1406
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

01 124 00 06

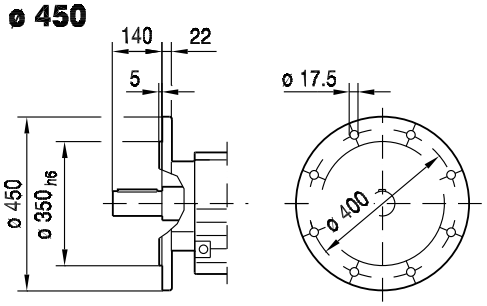
RF107..



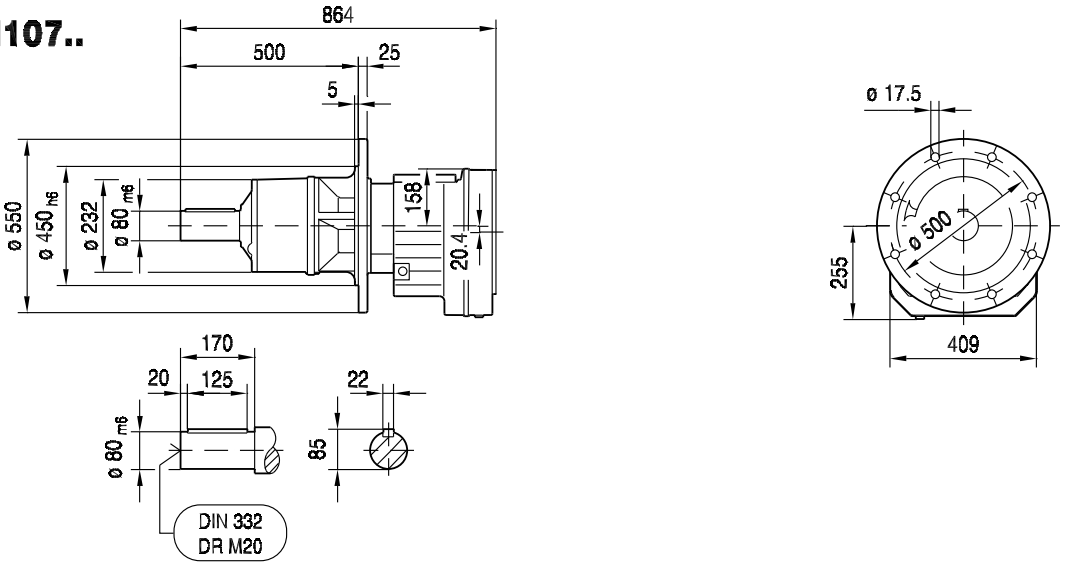
ø 350



ø 450



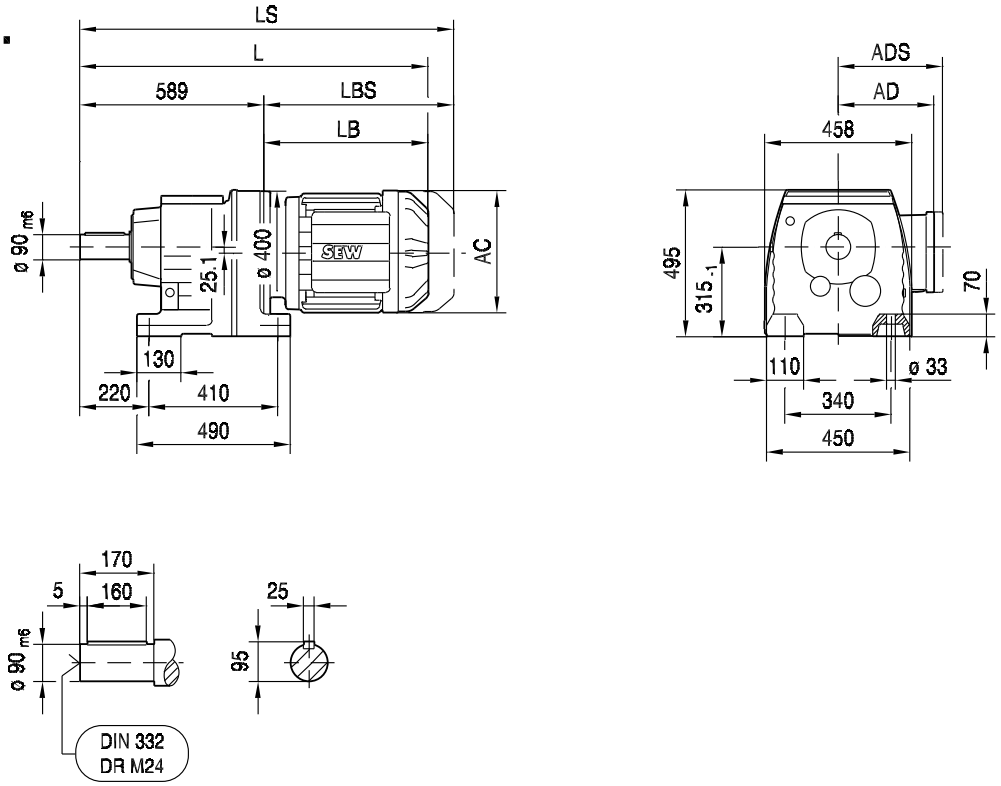
RM107..



(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	755	785	815	858	908	949	1018	1078	1151	1201
LS	848	878	908	970	1020	1086	1207	1267	1356	1406
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

01 125 00 06

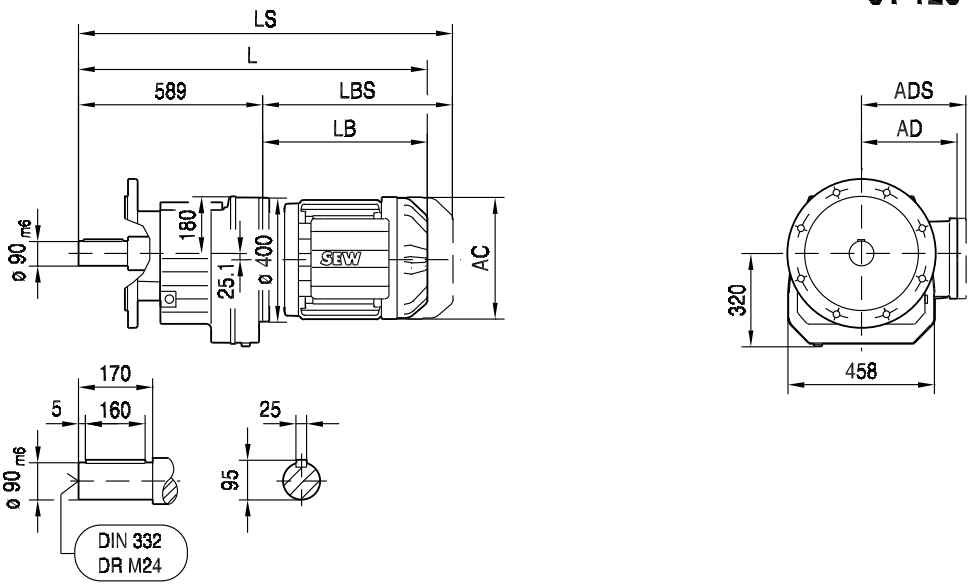
R137..



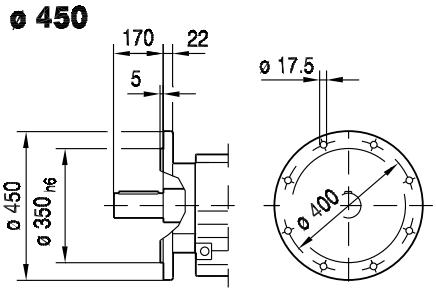
(→ 131)	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	
AC	221	221	270	316	316	394	394	
AD	170	170	228	253	253	283	283	
ADS	172	172	228	253	253	283	283	
L	945	995	1036	1105	1165	1238	1288	
LS	1057	1107	1173	1294	1354	1443	1493	
LB	356	406	447	516	576	649	699	
LBS	468	518	584	705	765	854	904	

01 126 00 06

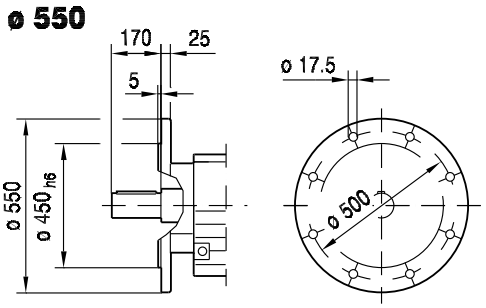
RF137..



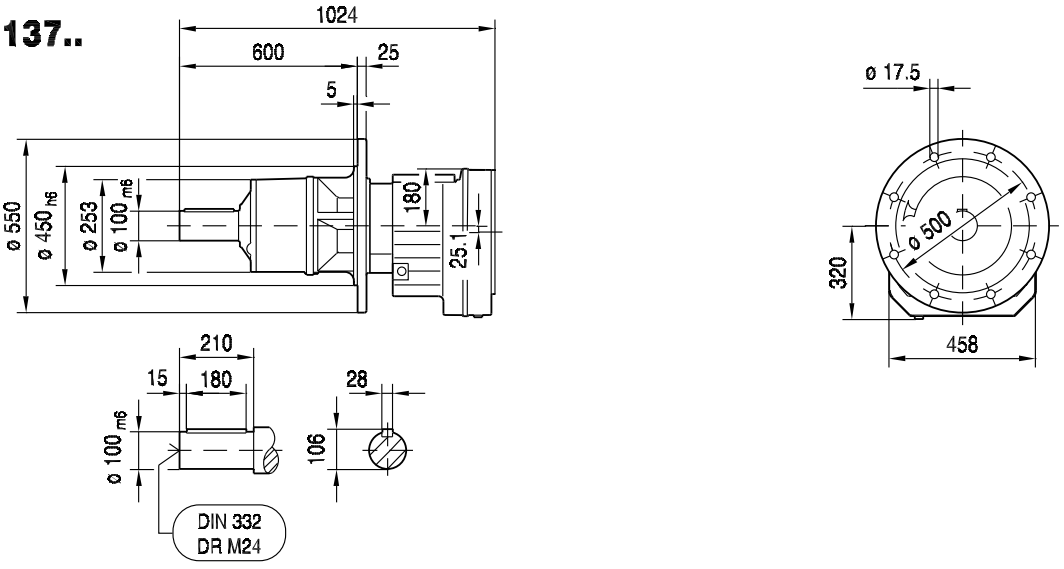
ø 450



ø 550



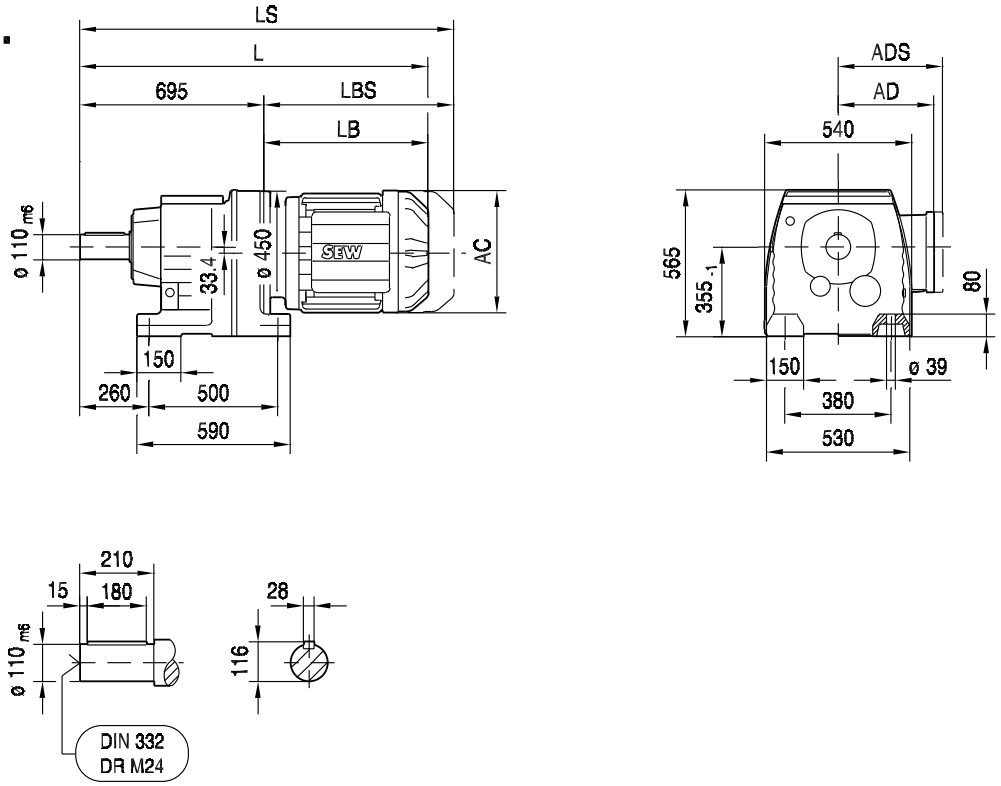
RM137..



(→ 131)	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	
AC	221	221	270	316	316	394	394	
AD	170	170	228	253	253	283	283	
ADS	172	172	228	253	253	283	283	
L	945	995	1036	1105	1165	1238	1288	
LS	1057	1107	1173	1294	1354	1443	1493	
LB	356	406	447	516	576	649	699	
LBS	468	518	584	705	765	854	904	

01 127 00 06

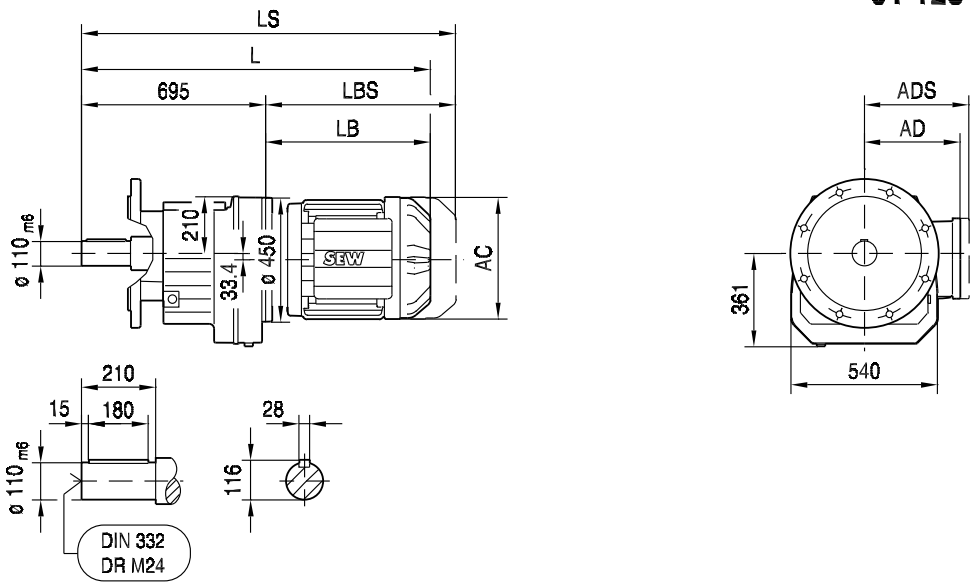
R147..



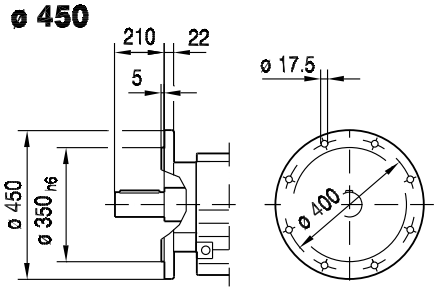
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1093	1134	1203	1263	1336	1386	1475	
LS	1205	1271	1392	1452	1541	1591	1660	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

01 128 00 06

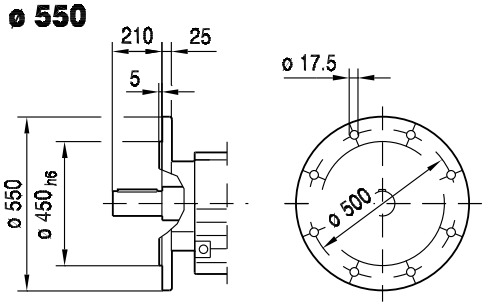
RF147..



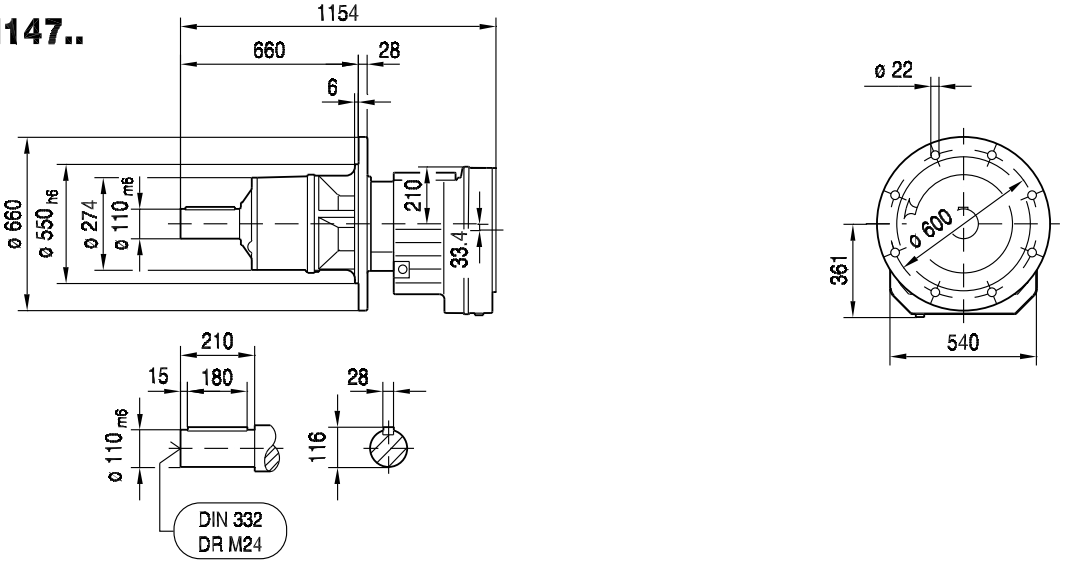
ø 450



ø 550



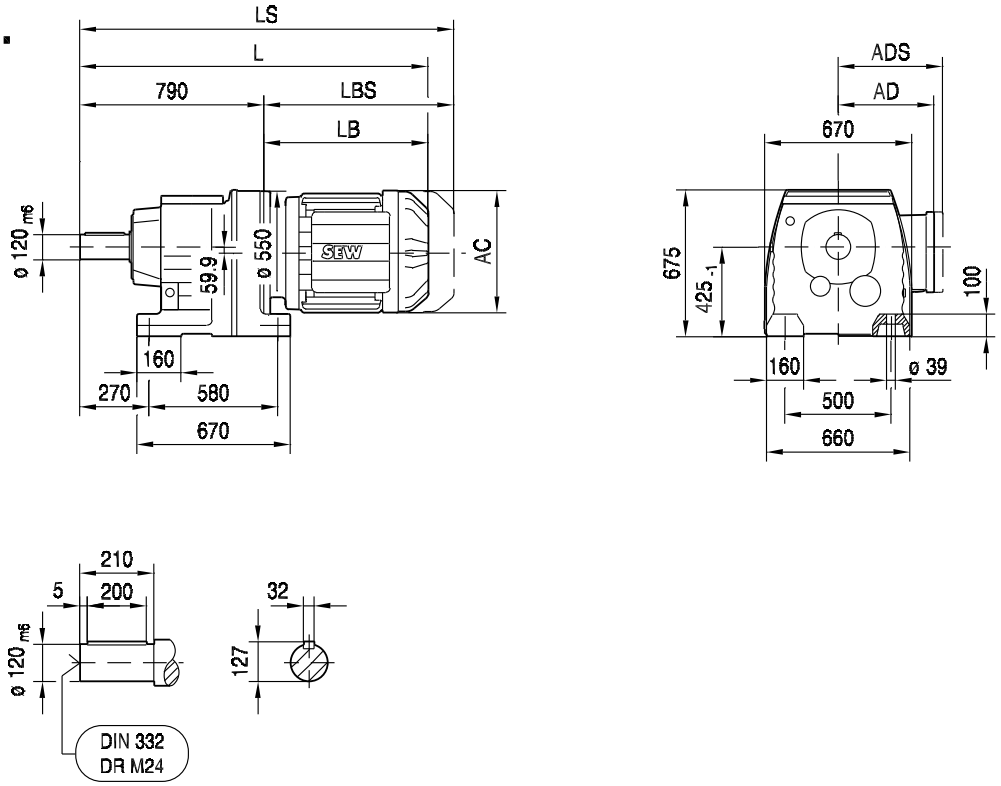
RM147..



(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1093	1134	1203	1263	1336	1386	1475	
LS	1205	1271	1392	1452	1541	1591	1660	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

01 129 00 06

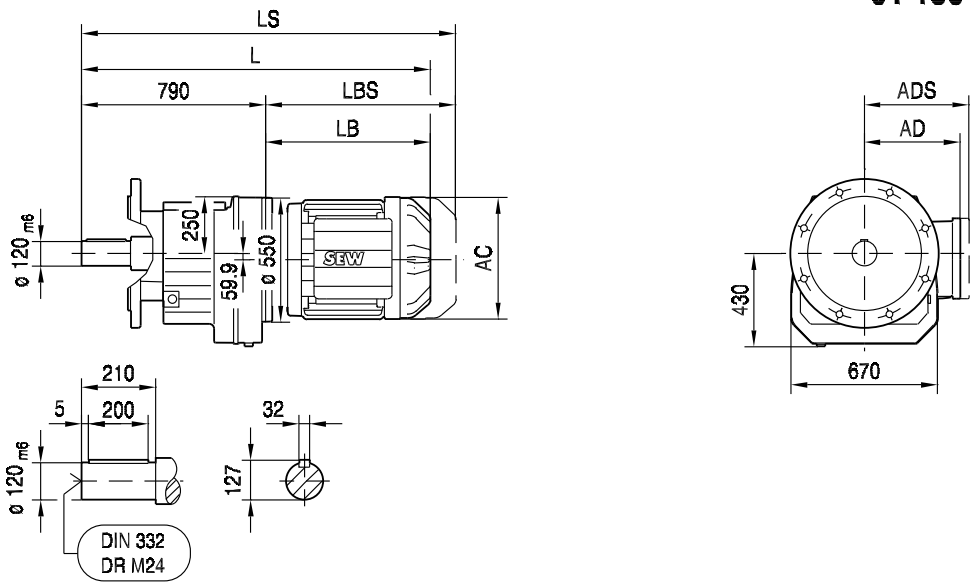
R167..



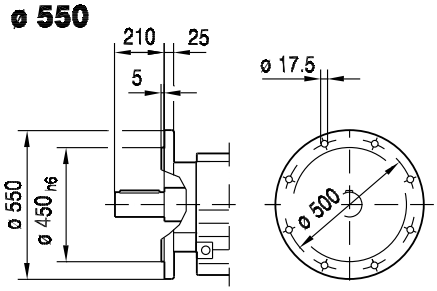
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1221	1290	1350	1423	1473	1561	1731	1861
LS	1358	1479	1539	1628	1678	1746	1982	2112
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

01 130 00 06

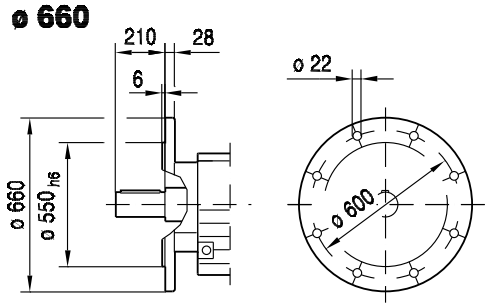
RF167..



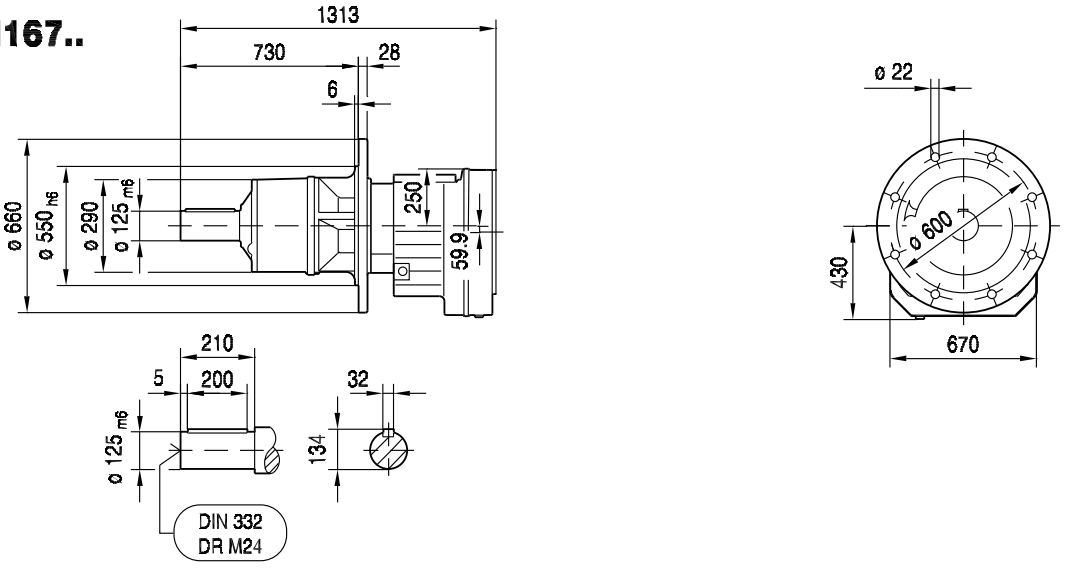
ø 550



ø 660

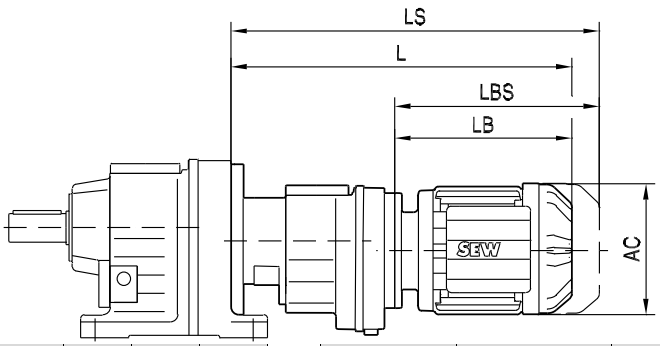


RM167..



(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1221	1290	1350	1423	1473	1561	1731	1861
LS	1358	1479	1539	1628	1678	1746	1982	2112
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

01 131 00 06

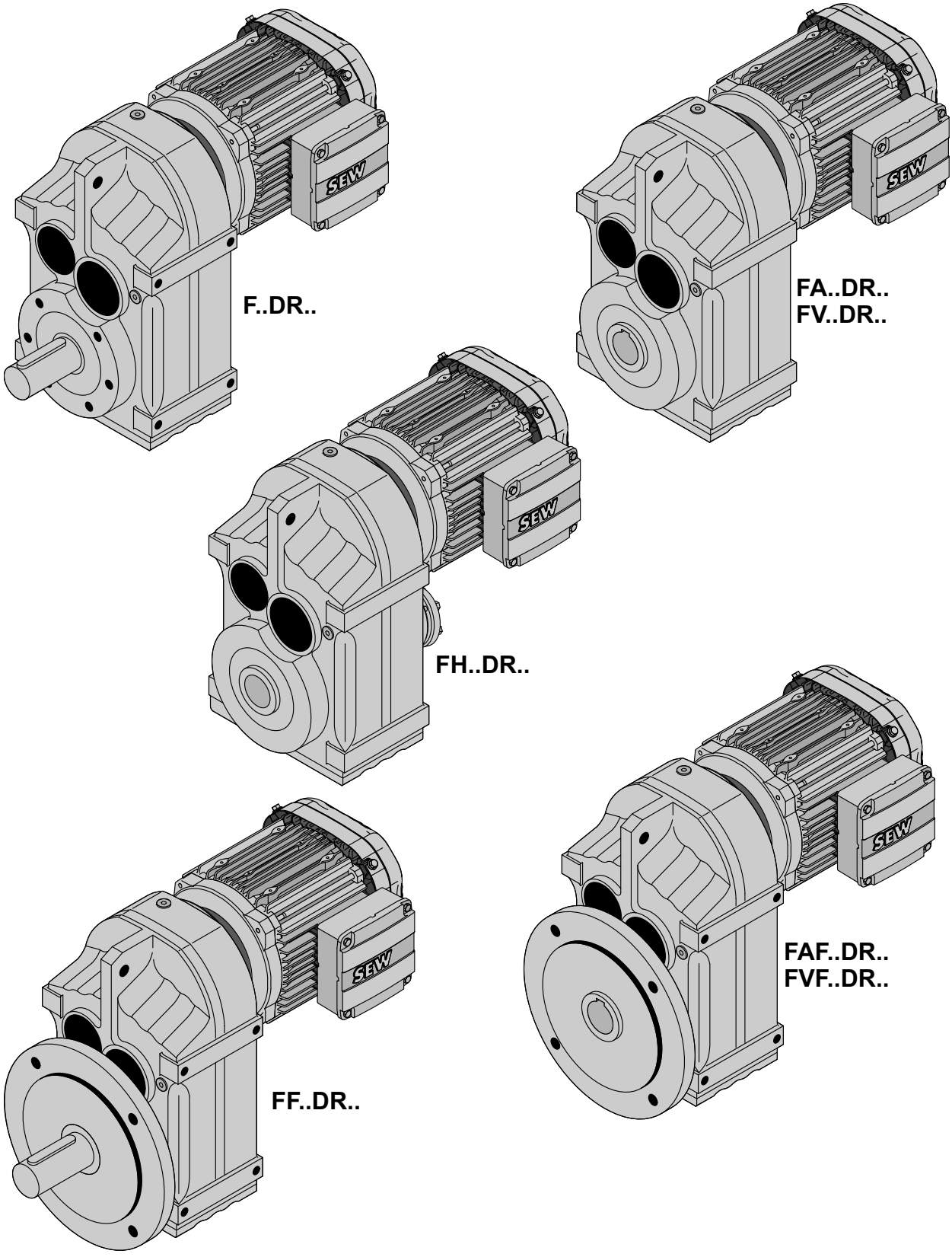


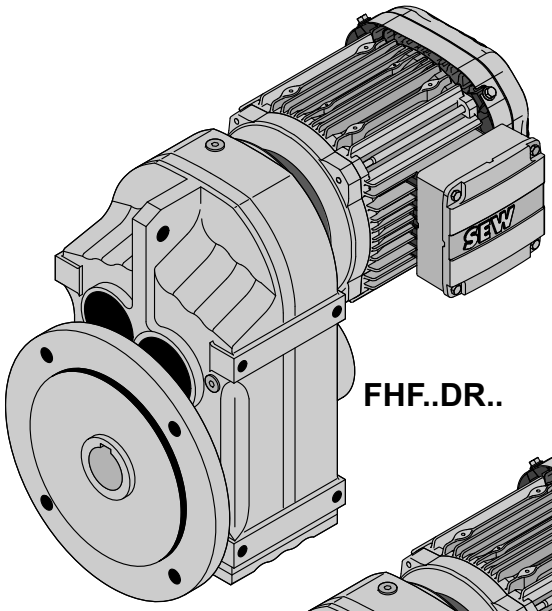
(→ 131)		AC	L	LS	LB	LBS
R..27R17	DR63..	132	324	379	149	204
R..37R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
R..47R37 R..57R37	DR63..	132	356	411	191	246
	DR71S..	139	367	435	202	270
	DR71M	139	392	460	227	295
R..67R37	DR63..	132	356	411	191	246
	DR71S..	139	367	435	202	270
	DR71M	139	392	460	227	295
	DR80S..	156	401	482	236	317
R..77R37	DR63..	132	348	403	191	246
	DR71S..	139	359	427	202	270
	DR71M..	139	384	452	227	295
	DR80S..	156	393	474	236	317
	DR80M..	156	424	505	267	348
R..87R57	DR63..	132	401	456	185	240
	DR71S..	139	412	479	196	263
	DR71M..	139	437	504	221	288
	DR80S..	156	446	527	230	311
	DR80M..	156	477	558	261	342
	DR90M..	179	478	572	262	356
R..97R57	DR63..	132	396	451	185	240
	DR71S..	139	407	474	196	263
	DR71M..	139	432	499	221	288
	DR80S..	156	441	522	230	311
	DR80M..	156	472	553	261	342
	DR90M..	179	473	567	262	356
	DR90L..	179	493	587	282	376
	DR100M..	197	523	617	312	406
R..107R77	DR63..	132	426	481	179	234
	DR71S..	139	437	504	190	257
	DR71M..	139	462	529	215	282
	DR80S..	156	470	551	223	304
	DR80M..	156	501	582	254	335
	DR90M..	179	501	595	254	348
	DR90L..	179	521	615	274	368
	DR100M..	197	551	645	304	398
	DR100LC..	197	581	675	334	428
R..137R77	DR63..	132	419	474	179	234
	DR71S..	139	430	497	190	257
	DR71M..	139	455	522	215	282
	DR80S..	156	463	544	223	304
	DR80M..	156	494	575	254	335
	DR90M..	179	494	588	254	348
	DR90L..	179	514	608	274	368

(→ 131)		AC	L	LS	LB	LBS
R..137R77	DR100M..	197	544	638	304	398
	DR100LC..	197	574	668	334	428
	DR132S..	221	619	731	379	491
	DR132M..	221	669	789	429	541
R..147R77	DR63..	132	411	466	179	234
	DR71S..	139	422	489	190	257
	DR71M..	139	447	514	215	282
	DR80S..	156	455	536	223	304
	DR80M..	156	486	567	254	335
	DR90M..	179	486	580	254	348
	DR90L..	179	506	600	274	368
	DR100M..	197	536	630	304	398
	DR100LC..	197	566	660	334	428
	DR132S..	221	611	723	379	491
R..147R87	DR90M..	179	530	624	250	344
	DR90L..	179	550	644	270	364
	DR100M..	197	580	674	300	394
	DR100LC..	197	610	704	330	424
	DR132S..	221	654	766	374	486
	DR132M/MC..	221	704	816	424	536
	DR160..	272	745	882	465	602
R..167R97	DR71M..	139	529	596	204	271
	DR80S..	156	538	619	213	294
	DR80M..	156	569	650	244	325
	DR90M..	179	569	663	244	338
	DR90L..	179	589	683	264	358
	DR100M..	197	619	713	294	388
	DR100LC..	197	649	743	324	418
	DR132S..	221	694	806	369	481
	DR132M/MC..	221	744	856	419	531
	DR160..	272	785	922	460	597
R..167R107	DR90L..	179	649	734	258	352
	DR100M..	197	670	764	288	382
	DR100LC..	197	700	794	318	412
	DR132S..	221	745	857	363	475
	DR132M/MC..	221	795	907	413	525
	DR160..	272	836	973	454	591
	DR180M..	317	922	1121	540	739

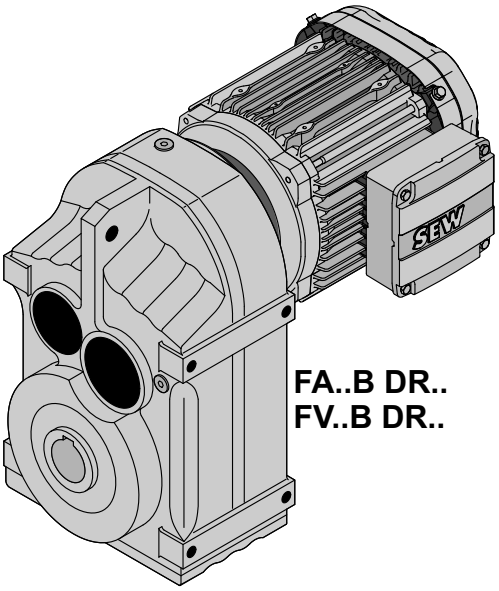
10 F..DRS

10.1 F, FA..(B), FV..(B), FH..(B), FT, FF, FAF, FVF, FHF, FAZ, FVZ..DRS

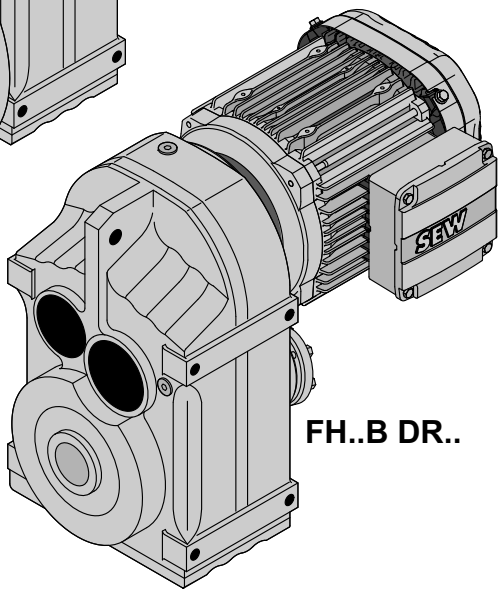




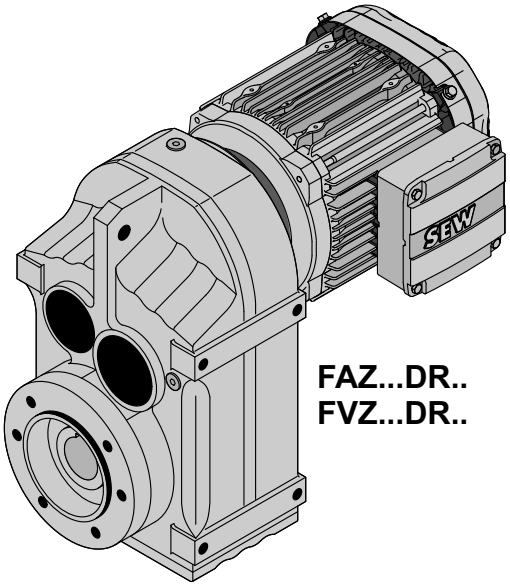
FHF..DR..



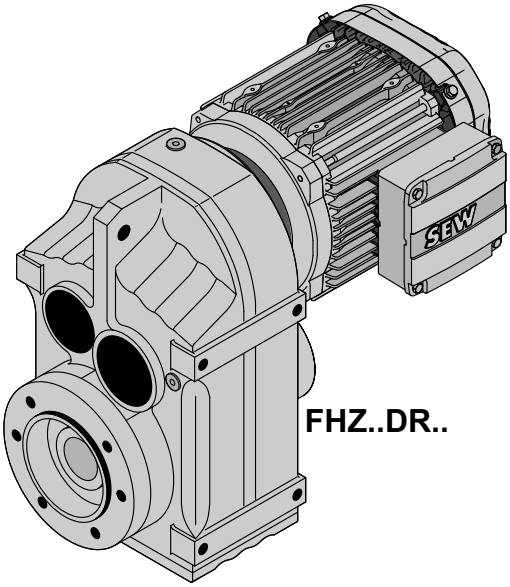
FA..B DR..
FV..B DR..



FH..B DR..



FAZ...DR..
FVZ...DR..



FHZ..DR..

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10.2 F.. → DRS

F27, n_e = 1400 1/min								130 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3				
9.9	130	4500	-	140.74				
11	130	4500	-	129.09				
13	130	4500	-	109.90				
15	130	4500	-	94.76				
16	130	4500	-	88.32				
18	130	4500	-	77.21				
19	130	4500	-	72.37				
22	130	4400	-	63.86				
25	130	4190	-	56.62				
28	130	3980	-	50.19				
30	130	3860	-	46.78				
34	130	3640	-	40.89				
37	130	3530	-	38.33				
41	130	3340	-	33.83				
				2				
47	130	3150	-	29.56				
52	130	3030	-	27.18				
60	130	2820	-	23.25				
69	130	2630	-	20.15				
74	130	2550	-	18.84				
86	130	2370	-	16.28				
101	130	2180	-	13.84				
113	130	2060	-	12.35				
133	130	1900	-	10.55				
142	130	1830	-	9.88				
149	130	1660	-	9.40				
172	123	1590	-	8.13				
203	114	1530	-	6.91				
227	109	1480	-	6.17				
266	100	1440	-	5.27				
284	96	1420	-	4.93				
337	87	1380	-	4.16				

F27R17, n_e = 1400 1/min						130 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				3 3		
0.16	130	4500	-	8972		
0.18	130	4500	-	7736		
0.19	130	4500	-	7211		
0.22	130	4500	-	6303		
0.26	130	4500	-	5435		
0.29	130	4500	-	4855		
0.33	130	4500	-	4243		
0.38	130	4500	-	3715		
0.43	130	4500	-	3247		
0.49	130	4500	-	2878		
0.56	130	4500	-	2515		
0.63	130	4500	-	2217		
				2 3		
0.74	130	4500	-	1898		
0.85	130	4500	-	1645		

F27R17, n_e = 1400 1/min						130 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
0.92	130	4500	-	1525		
1.1	130	4500	-	1322		
1.2	130	4500	-	1146		
1.4	130	4500	-	1013		
1.6	130	4500	-	890		
1.8	130	4500	-	778		
2.1	130	4500	-	682		
2.3	130	4500	-	602		
2.7	130	4500	-	520		
				3 2		
0.72	130	4500	-	1948		
0.77	130	4500	-	1826		
0.87	130	4500	-	1610		
1.0	130	4500	-	1399		
1.1	130	4500	-	1230		
1.5	130	4500	-	948		
1.7	130	4500	-	829		
1.9	130	4500	-	731		
2.2	130	4500	-	633		
2.5	130	4500	-	551		
2.9	130	4500	-	489		
3.3	130	4500	-	427		
3.7	130	4500	-	379		
4.3	130	4500	-	326		
4.9	130	4500	-	288		
5.6	130	4500	-	251		
6.3	130	4500	-	221		
8.1	130	4500	-	172		
9.2	130	4500	-	153		
11	130	4500	-	130		
				2 2		
3.1	130	4500	-	458		
3.5	130	4500	-	397		
4.1	130	4500	-	342		
4.6	130	4500	-	302		
5.3	130	4500	-	266		
5.9	130	4500	-	236		
6.6	130	4500	-	211		
7.5	130	4500	-	186		
9.9	130	4500	-	142		
11	130	4500	-	124		
13	130	4500	-	109		
15	130	4500	-	96		

F37, n_e = 1400 1/min								200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3				
11	200	4290	7	128.51				
12	200	4290	7	117.88				
14	200	4290	7	100.36				
16	200	4290	7	86.53				
17	200	4290	7	80.65				
20	200	4290	7	70.50				
21	200	4290	7	66.09				



F37, n_e = 1400 1/min								200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
24	200	4290	7	58.32				
26	200	4290	8	54.54				
27	200	4290	7	51.70				
30	200	4290	8	47.02				
32	200	4290	8	43.83				
37	200	4290	8	38.31				
39	200	4290	8	35.91				
44	200	4290	8	31.69				
50	200	4060	8	28.09				
59	200	3760	8	23.88				
				2				
59	200	3740	6	23.63				
68	200	3500	6	20.57				
73	200	3390	6	19.27				
82	200	3180	6	17.03				
89	200	3070	6	15.81				
98	200	2910	7	14.33				
109	200	2750	7	12.87				
126	190	2620	7	11.08				
134	185	2580	7	10.42				
156	175	2460	7	8.97				
175	170	2360	7	8.01				
188	145	2350	10	7.44				
208	140	2270	10	6.74				
231	135	2190	10	6.05				
269	125	2120	10	5.21				
286	120	2100	11	4.90				
332	110	2030	11	4.22				
371	105	1970	12	3.77				

F37R17, n_e = 1400 1/min						200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				3 3		
0.17	200	4290	-	8193		
0.20	200	4290	-	7064		
0.21	200	4290	-	6585		
0.24	200	4290	-	5756		
0.28	200	4290	-	4963		
0.32	200	4290	-	4434		
0.36	200	4290	-	3875		
0.41	200	4290	-	3392		
0.47	200	4290	-	2965		
0.54	200	4290	-	2587		
0.61	200	4290	-	2284		
0.70	200	4290	-	1997		
0.80	200	4290	-	1742		
0.91	200	4290	-	1545		
				2 3		
0.73	200	4290	-	1929		
0.83	200	4290	-	1679		
0.90	200	4290	-	1550		
1.0	200	4290	-	1356		
1.2	200	4290	-	1180		
1.3	200	4290	-	1044		

F37R17, n_e = 1400 1/min							200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	
1.5	200	4290	-	914			
1.7	200	4290	-	808			
2.0	200	4290	-	698			
2.3	200	4290	-	616			
2.6	200	4290	-	544			
3.0	200	4290	-	466			
3.4	200	4290	-	411			
3.8	200	4290	-	364			
				3 2			
1.0	200	4290	-	1370			
1.2	200	4290	-	1198			
1.3	200	4290	-	1047			
1.5	200	4290	-	915			
1.7	200	4290	-	807			
2.0	200	4290	-	707			
2.3	200	4290	-	617			
2.6	200	4290	-	538			
2.9	200	4290	-	477			
3.4	200	4290	-	412			
3.8	200	4290	-	365			
4.3	200	4290	-	322			
5.0	200	4290	-	278			
5.8	200	4290	-	242			
6.3	200	4290	-	221			
7.2	200	4290	-	195			
8.3	200	4290	-	168			
9.5	200	4290	-	147			
11	200	4290	-	127			
12	200	4290	-	121			
13	200	4290	-	108			
15	200	4290	-	91			
				2 2			
4.3	200	4290	-	326			
4.9	200	4290	-	285			
5.6	200	4290	-	250			
6.4	200	4290	-	219			
7.5	200	4290	-	186			
8.4	200	4290	-	167			
9.7	200	4290	-	145			
11	200	4290	-	129			
12	200	4290	-	118			
14	200	4290	-	98			
16	200	4290	-	87			

F47, n_e = 1400 1/min								400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3				
7.3	400	5920	6	190.76				
8.0	400	5920	6	175.38				
9.3	400	5920	6	150.06				
11	400	5920	6	130.07				
12	400	5920	6	121.57				
13	400	5920	6	105.09				
16	400	5920	6	89.29				



F47, n_e = 1400 1/min								400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
18	400	5920	6	79.72				
21	400	5920	6	68.09				
21	400	5920	7	65.36				
25	400	5920	7	56.49				
29	400	5920	7	48.00*				
33	400	5920	7	42.86				
38	400	5920	7	36.61				
41	400	5920	7	34.29				
48	400	5790	7	28.88				
				2				
45	400	5920	6	30.86				
48	400	5830	6	29.32				
54	400	5470	6	25.72				
64	400	5030	6	21.82				
71	400	4770	6	19.70				
81	400	4450	6	17.33				
86	400	4320	6	16.36				
101	400	3950	6	13.93				
111	400	3740	6	12.66				
128	400	3440	6	10.97				
156	330	3250	8	8.96				
178	380	2630	8	7.88				
188	380	2530	8	7.44*				
221	350	2470	8	6.34				
243	340	2390	9	5.76				
281	320	2310	9	4.99				

F47R17, n_e = 1400 1/min						400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				3 3		
0.11	400	5920	-	12251		
0.13	400	5920	-	10619		
0.14	400	5920	-	9846		
0.16	400	5920	-	8534		
0.19	400	5920	-	7460		
0.21	400	5920	-	6536		
0.24	400	5920	-	5746		
0.28	400	5920	-	5022		
0.32	400	5920	-	4401		
0.36	400	5920	-	3883		
0.41	400	5920	-	3443		
0.47	400	5920	-	2976		
0.53	400	5920	-	2629		
0.61	400	5920	-	2304		
0.69	400	5920	-	2033		
				2 3		
0.56	400	5920	-	2519		
0.58	400	5920	-	2394		
0.64	400	5920	-	2172		
0.69	400	5920	-	2025		
0.79	400	5920	-	1770		
0.89	400	5920	-	1576		
1.0	400	5920	-	1363		
1.2	400	5920	-	1192		

F47R17, n_e = 1400 1/min							400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	
1.3	400	5920	-	1061			
1.5	400	5920	-	931			
1.7	400	5920	-	822			
2.0	400	5920	-	706			
2.3	400	5920	-	619			
				3 2			
0.78	400	5920	-	1785			
0.89	400	5920	-	1578			
1.0	400	5920	-	1364			
1.2	400	5920	-	1203			
1.3	400	5920	-	1049			
1.5	400	5920	-	918			
1.7	400	5920	-	809			
2.0	400	5920	-	700			
2.3	400	5920	-	622			
2.6	400	5920	-	543			
2.9	400	5920	-	475			
3.3	400	5920	-	419			
3.8	400	5920	-	370			
4.3	400	5920	-	324			
4.9	400	5920	-	288			
5.6	400	5920	-	249			
6.4	400	5920	-	218			
7.3	400	5920	-	193			
8.0	400	5920	-	175			
9.5	400	5920	-	147			
11	400	5920	-	130			
				2 2			
2.7	400	5920	-	524			
2.9	400	5920	-	489			
3.3	400	5920	-	427			
3.7	400	5920	-	381			
4.2	400	5920	-	334			
4.7	400	5920	-	295			
5.5	400	5920	-	253			
6.5	400	5920	-	217			
7.4	400	5920	-	190			
7.9	400	5920	-	178			
9.4	400	5920	-	149			
11	400	5920	-	131			

F57, n_e = 1400 1/min										600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
				3						
7.0	600	9200	6	199.70						
7.6	600	9200	6	183.60						
8.9	600	9200	6	157.09						
10	600	9200	6	136.16						
11	600	9200	6	127.27						
13	600	9200	6	110.01						
15	600	9200	6	93.47						
17	600	9200	6	83.46						
19	600	9200	6	72.98						
21	600	9200	6	68.22						

F57, n_e = 1400 1/min										600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
24	600	9200	7	58.97						
28	600	9200	7	50.10						
31	600	9160	7	44.73						
37	600	8510	7	38.21						
39	600	8250	7	35.79						
46	590	7650	7	30.15						
				2						
35	290	10500	6	40.13						
41	500	8670	6	34.24						
47	545	7890	6	29.94						
49	535	7760	6	28.45						
56	575	7060	6	24.96						
66	600	6350	6	21.17						
73	600	6020	6	19.11						
83	600	5620	6	16.81						
88	600	5450	6	15.88						
104	600	4980	6	13.52						
114	600	4710	6	12.29						
132	600	4320	6	10.64						
150	420	4760	8	9.31						
171	420	4450	8	8.19						
181	420	4310	8	7.73						
213	420	3940	8	6.58						
234	420	3730	9	5.98						
270	415	3460	9	5.18						

F57R37, n_e = 1400 1/min								600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.09	600	9200	-	14832				
0.10	600	9200	-	13604				
0.11	600	9200	-	12602				
0.12	600	9200	-	11252				
0.14	600	9200	-	9986				
0.16	600	9200	-	8787				
0.18	600	9200	-	7908				
0.20	600	9200	-	6913				
0.23	600	9200	-	6030				
0.26	600	9200	-	5289				
0.30	600	9200	-	4654				
0.34	600	9200	-	4060				
0.39	600	9200	-	3564				
0.44	600	9200	-	3161				
0.51	600	9200	-	2737				
0.58	600	9200	-	2409				
0.66	600	9200	-	2131				
0.76	600	9200	-	1840				
0.86	600	9200	-	1623				
0.97	600	9200	-	1439				
1.1	600	9200	-	1238				
				2 3				
0.49	600	9200	-	2854				
0.54	600	9200	-	2576				
0.62	600	9200	-	2266				

F57R37, n_e = 1400 1/min								600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
0.70	600	9200	-	2012				
0.78	600	9200	-	1791				
0.87	600	9200	-	1617				
0.98	600	9200	-	1422				
1.1	600	9200	-	1243				
1.3	600	9200	-	1066				
1.5	600	9200	-	949				
1.6	600	9200	-	856				
1.9	600	9200	-	749				
2.1	600	9200	-	658				
2.6	600	9200	-	549				
2.9	600	9200	-	483				
				3 2				
1.3	600	9200	-	1106				
1.4	600	9200	-	967				
1.6	600	9200	-	851				
1.9	600	9200	-	738				
2.2	600	9200	-	646				
2.5	600	9200	-	558				
2.8	600	9200	-	506				
3.1	600	9200	-	452				
3.6	600	9200	-	386				
4.1	600	9200	-	338				
5.5	600	9200	-	255				
7.0	600	9200	-	201				
7.7	600	9200	-	181				
9.0	600	9200	-	155				
				2 2				
3.3	600	9200	-	426				
3.7	600	9200	-	382				
4.2	600	9200	-	330				
4.7	600	9200	-	298				
5.3	600	9200	-	262				
6.2	600	9200	-	226				
7.0	600	9200	-	200				
8.2	600	9200	-	170				
9.2	600	9200	-	152				
10	600	9200	-	134				

F67, n_e = 1400 1/min											820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3							
6.1	820	10300	6	228.99							
7.2	820	10300	6	195.39							
8.2	820	10300	6	170.85							
8.6	820	10300	6	162.31							
9.8	820	10300	6	142.40							
12	820	10300	6	120.79							
13	820	10300	6	109.04							
15	820	10300	6	95.94							
15	820	10300	6	90.59							
18	820	10300	6	79.76							
21	820	10300	6	67.65							
23	820	10300	6	61.07							

F67, n_e = 1400 1/min											820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
26	820	10300	6	53.73							
28	820	10300	6	50.74							
32	820	10300	6	43.20							
36	780	10700	6	39.26							
41	740	11000	6	34.01							
				2							
39	820	10300	5	36.30							
44	820	10300	5	32.08							
51	820	10300	5	27.41							
56	820	10300	5	25.13							
63	820	10300	5	22.05							
67	820	10300	5	20.90*							
77	820	10300	6	18.29							
85	820	10300	6	16.48							
97	820	10300	6	14.46							
110	820	10300	6	12.76							
124	820	10300	6	11.31							
145	820	10300	6	9.66							
154	530	11400	8	9.08							
163	570	10900	8	8.60							
186	610	10100	8	7.53							
206	620	9660	9	6.78							
235	610	9200	9	5.95							
267	590	8850	9	5.25							
300	560	8590	9	4.66							
353	500	8390	10	3.97							

F67R37, n_e = 1400 1/min								820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.07	820	10300	-	19199				
0.08	820	10300	-	17610				
0.09	820	10300	-	14992				
0.11	820	10300	-	12926				
0.12	820	10300	-	11480				
0.14	820	10300	-	10220				
0.16	820	10300	-	8933				
0.18	820	10300	-	7940				
0.20	820	10300	-	7096				
0.23	820	10300	-	6080				
0.26	820	10300	-	5341				
0.30	820	10300	-	4690				
0.34	820	10300	-	4091				
0.39	820	10300	-	3574				
0.45	820	10300	-	3133				
0.51	820	10300	-	2756				
0.57	820	10300	-	2439				
				2 3				
0.41	820	10300	-	3377				
0.48	820	10300	-	2912				
0.52	820	10300	-	2714				
0.59	820	10300	-	2372				
0.66	820	10300	-	2126				
0.75	820	10300	-	1859				

F67R37, n_e = 1400 1/min								820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
0.86	820	10300	-	1631				
0.97	820	10300	-	1437				
1.1	820	10300	-	1256				
1.2	820	10300	-	1126				
1.4	820	10300	-	984				
1.6	820	10300	-	864				
1.9	820	10300	-	722				
2.2	820	10300	-	634				
2.6	820	10300	-	539				
				3 2				
0.66	820	10300	-	2106				
0.74	820	10300	-	1884				
0.86	820	10300	-	1635				
0.98	820	10300	-	1429				
1.1	820	10300	-	1271				
1.3	820	10300	-	1102				
1.4	820	10300	-	970				
1.6	820	10300	-	858				
1.9	820	10300	-	755				
2.2	820	10300	-	641				
2.4	820	10300	-	572				
2.8	820	10300	-	509				
3.2	820	10300	-	437				
3.6	820	10300	-	384				
4.1	820	10300	-	338				
4.6	820	10300	-	305				
5.4	820	10300	-	257				
6.1	820	10300	-	231				
6.8	820	10300	-	205				
8.0	820	10300	-	175				
				2 2				
2.8	820	10300	-	500				
3.1	820	10300	-	454				
3.6	820	10300	-	392				
4.2	820	10300	-	333				
4.7	820	10300	-	297				
5.4	820	10300	-	261				
5.9	820	10300	-	238				
7.0	820	10300	-	200				
8.0	820	10300	-	176				

F77, n_e = 1400 1/min											1500 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3							
5.0	1500	15700	5	281.71							
5.3	1500	15700	5	262.93							
6.2	1500	15700	5	225.79							
7.1	1500	15700	5	198.31							
7.4	1500	15700	5	188.40							
8.4	1500	15700	5	166.47							
9.8	1500	15700	5	142.27							
11	1500	15700	5	130.42							
12	1500	15700	5	114.45							
13	1500	15700	5	108.46*							



F77, n_e = 1400 1/min											1500 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
15	1500	15700	5	94.93							
16	1500	15700	6	85.52							
19	1500	15700	6	75.02							
19	1500	15700	6	72.50							
21	1500	15700	6	66.46							
24	1500	15700	6	58.32							
25	1500	15700	6	55.27							
29	1500	15700	6	48.37							
32	1500	15700	6	43.58							
37	1500	15700	6	38.23							
41	1500	15700	6	33.74							
47	1500	15700	6	29.91							
55	1450	16100	6	25.54							
				 2							
38	1110	17900	5	36.58							
44	1380	16500	5	31.51							
49	1430	16200	5	28.75							
55	1500	15700	5	25.50*							
65	1500	15700	5	21.43							
71	1500	15700	5	19.70							
80	1500	15700	5	17.49							
90	1500	15700	5	15.64*							
100	1500	15700	5	14.06							
115	1500	14900	5	12.20							
128	1500	14200	6	10.93							
151	1080	13800	7	9.30							
169	1080	13100	7	8.26							
189	1080	12500	7	7.39							
211	1080	12000	8	6.64							
243	1080	11300	8	5.76							
271	1080	10700	8	5.16							
327	1010	10200	8	4.28							

F77R37, n_e = 1400 1/min								1500 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				 3  3				
0.07	1500	15700	-	19180				
0.08	1500	15700	-	17593				
0.09	1500	15700	-	16128				
0.09	1500	15700	-	14978				
0.10	1500	15700	-	13731				
0.12	1500	15700	-	12049				
0.13	1500	15700	-	11035				
0.14	1500	15700	-	9683				
0.17	1500	15700	-	8464				
0.19	1500	15700	-	7520				
0.21	1500	15700	-	6580				
0.24	1500	15700	-	5808				
0.28	1500	15700	-	5026				
0.32	1500	15700	-	4435				
0.37	1500	15700	-	3832				
0.41	1500	15700	-	3381				
0.47	1500	15700	-	2978				
0.54	1500	15700	-	2613				
0.61	1500	15700	-	2284				



F77R37, n_e = 1400 1/min								1500 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
0.69	1500	15700	-	2029				
				2 3				
0.28	1110	17900	-	4931				
0.31	1110	17900	-	4523				
0.36	1110	17900	-	3851				
0.42	1110	17900	-	3320				
0.45	1110	17900	-	3095				
0.52	1110	17900	-	2705				
0.55	1110	17900	-	2536				
0.63	1110	17900	-	2238				
0.69	1110	17900	-	2039				
0.80	1110	17900	-	1759				
0.85	1110	17900	-	1639				
0.98	1110	17900	-	1433				
1.0	1110	17900	-	1343				
1.2	1110	17900	-	1185				
1.3	1110	17900	-	1051				
1.6	1110	17900	-	893				
				3 2				
0.81	1500	15700	-	1728				
0.91	1500	15700	-	1544				
1.0	1500	15700	-	1354				
1.2	1500	15700	-	1200				
1.3	1500	15700	-	1053				
1.5	1500	15700	-	910				
1.7	1500	15700	-	810				
2.0	1500	15700	-	710				
2.3	1500	15700	-	615				
2.6	1500	15700	-	538				
2.9	1500	15700	-	480				
3.4	1500	15700	-	413				
3.8	1500	15700	-	367				
4.3	1500	15700	-	323				
5.0	1500	15700	-	280				
5.7	1500	15700	-	247				
6.3	1500	15700	-	221				
7.0	1500	15700	-	199				
				2 2				
1.7	1110	17900	-	815				
2.0	1110	17900	-	706				
2.1	1110	17900	-	660				
2.5	1110	17900	-	571				
2.9	1110	17900	-	485				
3.2	1110	17900	-	433				
3.8	1110	17900	-	370				
4.0	1110	17900	-	346				
4.8	1110	17900	-	292				

F87, n_e = 1400 1/min												3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
				3									
5.2	3000	19800	7	270.68									
5.5	3000	19800	7	255.37									
6.1	3000	19800	7	228.93									



F87, n_e = 1400 1/min														3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
7.1	3000	19800	7	197.20									
7.8	3000	19800	7	179.97									
8.8	3000	19800	7	159.61									
10	3000	19800	7	134.16									
11	3000	19800	7	123.29									
13	3000	19800	7	109.49									
14	3000	19800	7	97.89									
16	3000	19800	7	88.01									
18	3000	19800	7	76.39									
20	3000	19600	7	68.40									
25	3000	17700	7	56.75									
28	2940	16800	7	50.36									
31	2820	16200	8	45.28									
36	2720	15400	8	39.30									
40	2610	14900	8	35.19									
48	2510	13800	8	29.20									
				2									
41	2610	14600	7	33.92									
49	2450	13900	7	28.78									
53	3000	11100	7	26.50									
59	3000	10300	7	23.68									
66	3000	9530	7	21.32*									
73	3000	8840	7	19.31									
82	3000	8040	7	17.12									
90	3000	7390	7	15.48									
107	3000	6370	7	13.12*									
122	3000	5580	7	11.46									
146	2880	5050	7	9.58									
169	1530	8890	7	8.29									
190	1530	8280	7	7.35									
211	1530	7790	7	6.65									
249	1530	7020	7	5.63									
285	1530	6430	7	4.92									
340	1460	5980	7	4.12									

F87R57, n_e = 1400 1/min											3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3 3							
0.06	3000	19800	-	23042							
0.07	3000	19800	-	20462							
0.08	3000	19800	-	18238							
0.09	3000	19800	-	15877							
0.10	3000	19800	-	14099							
0.11	3000	19800	-	12205							
0.13	3000	19800	-	10433							
0.15	3000	19800	-	9381							
0.17	3000	19800	-	8142							
0.20	3000	19800	-	7100							
0.22	3000	19800	-	6273							
0.25	3000	19800	-	5510							
0.28	3000	19800	-	4954							
0.33	3000	19800	-	4245							
0.38	3000	19800	-	3721							
				2 3							
0.28	3000	19800	-	4952							



F87R57, n_e = 1400 1/min											3000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
0.31	3000	19800	-	4562							
0.36	3000	19800	-	3919							
0.40	3000	19800	-	3503							
0.44	3000	19800	-	3196							
0.49	3000	19800	-	2857							
0.55	3000	19800	-	2524							
0.66	3000	19800	-	2134							
0.73	3000	19800	-	1913							
0.82	3000	19800	-	1717							
0.95	3000	19800	-	1476							
1.1	3000	19800	-	1278							
1.2	3000	19800	-	1142							
1.4	3000	19800	-	988							
1.6	3000	19800	-	883							
1.9	3000	19800	-	748							
				3 2							
0.43	3000	19800	-	3244							
0.49	3000	19800	-	2881							
0.54	3000	19800	-	2576							
0.64	3000	19800	-	2199							
0.73	3000	19800	-	1930							
0.82	3000	19800	-	1709							
0.94	3000	19800	-	1493							
1.1	3000	19800	-	1300							
1.2	3000	19800	-	1148							
1.4	3000	19800	-	1010							
1.6	3000	19800	-	887							
1.8	3000	19800	-	780							
2.1	3000	19800	-	674							
2.3	3000	19800	-	609							
2.7	3000	19800	-	515							
3.1	3000	19800	-	452							
4.1	3000	19800	-	345							
4.7	3000	19800	-	300							
5.6	3000	19800	-	249							
				2 2							
2.1	3000	19800	-	662							
2.4	3000	19800	-	592							
2.7	3000	19800	-	519							
3.0	3000	19800	-	468							
3.5	3000	19800	-	398							
4.0	3000	19800	-	350							
4.4	3000	19800	-	315							
5.0	3000	19800	-	281							
5.8	3000	19800	-	240							
6.6	3000	19800	-	211							
7.3	3000	19800	-	193							

F97, n_e = 1400 1/min												4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
				3									
5.1	4300	29900	6	276.77									
5.5	4300	29900	6	253.41									
6.3	4300	29900	6	223.88									



F97, n_e = 1400 1/min														4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
7.4	4300	29900	6	189.92									
8.0	4300	29900	6	174.87									
9.0	4300	29900	6	156.30									
9.9	4300	29900	6	140.71									
11	4300	29900	6	127.42									
12	4300	29900	6	112.99									
14	4300	29900	6	102.16									
14	4300	29900	6	97.58									
16	4300	29900	6	89.85									
16	4300	29900	6	86.59									
17	4300	29900	6	80.31									
19	4300	29900	6	75.63									
19	4300	29900	6	72.29									
21	4300	29000	6	65.47									
24	4300	27200	6	58.06									
27	4300	25800	6	52.49									
31	4300	23600	6	44.49									
36	4300	21900	6	38.86									
43	4300	19800	6	32.50									
				2									
32	3070	27600	6	43.28									
38	3070	25500	6	36.64									
41	4300	20300	6	33.91									
46	4300	19000	6	30.39									
51	4300	17900	6	27.44*									
56	4300	16800	6	24.92									
63	4300	15600	6	22.11									
70	4300	14600	6	20.07									
81	4300	13200	6	17.25*									
93	4300	11900	6	15.06									
110	4300	10500	6	12.77									
125	4100	10000	6	11.16									
155	2360	13400	9	9.06									
170	2360	12600	9	8.22									
198	2360	11500	9	7.07									
227	2250	11100	9	6.17									
268	2150	10400	9	5.23									
306	2050	9950	9	4.57									
362	1800	9970	9	3.87									

F97R57, n_e = 1400 1/min											4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3 3							
0.05	4300	29900	-	29211							
0.05	4300	29900	-	26911							
0.06	4300	29900	-	23814							
0.07	4300	29900	-	20813							
0.08	4300	29900	-	18119							
0.09	4300	29900	-	15472							
0.10	4300	29900	-	14022							
0.11	4300	29900	-	12324							
0.13	4300	29900	-	10838							
0.15	4300	29900	-	9576							
0.17	4300	29900	-	8318							
0.19	4300	29900	-	7328							



F97R57, n_e = 1400 1/min											4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
0.22	4300	29900	-	6469							
0.25	4300	29900	-	5615							
0.28	4300	29900	-	4961							
0.32	4300	29900	-	4333							
				2 3							
0.22	4300	29900	-	6338							
0.25	4300	29900	-	5680							
0.28	4300	29900	-	5016							
0.32	4300	29900	-	4367							
0.36	4300	29900	-	3914							
0.42	4300	29900	-	3357							
0.47	4300	29900	-	3009							
0.57	4300	29900	-	2448							
0.64	4300	29900	-	2199							
0.71	4300	29900	-	1971							
0.80	4300	29900	-	1741							
0.95	4300	29900	-	1468							
1.1	4300	29900	-	1316							
1.2	4300	29900	-	1189							
1.4	4300	29900	-	1023							
				3 2							
0.36	4300	29900	-	3906							
0.42	4300	29900	-	3352							
0.48	4300	29900	-	2907							
0.55	4300	29900	-	2553							
0.62	4300	29900	-	2245							
0.71	4300	29900	-	1970							
0.81	4300	29900	-	1722							
0.92	4300	29900	-	1527							
1.1	4300	29900	-	1327							
1.2	4300	29900	-	1171							
1.4	4300	29900	-	1022							
1.6	4300	29900	-	898							
1.8	4300	29900	-	784							
2.0	4300	29900	-	690							
2.3	4300	29900	-	605							
2.6	4300	29900	-	529							
3.0	4300	29900	-	467							
3.4	4300	29900	-	406							
3.9	4300	29900	-	363							
4.9	4300	29900	-	285							
5.7	4300	29900	-	245							
6.7	4300	29900	-	208							
7.2	4300	29900	-	195							
				2 2							
1.6	4300	29900	-	892							
1.8	4300	29900	-	760							
2.1	4300	29900	-	667							
2.5	4300	29900	-	569							
2.7	4300	29900	-	510							
3.0	4300	29900	-	473							
3.5	4300	29900	-	403							
3.9	4300	29900	-	361							
4.4	4300	29900	-	317							
5.1	4300	29900	-	275							
5.8	4300	29900	-	242							



F107, n_e = 1400 1/min											7840 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
				3							
5.5	7680	49800	5	254.40*							
6.5	7680	49800	5	215.37							
7.0	7680	49800	5	199.31							
7.8	7680	49800	5	178.64							
8.7	7680	49800	5	161.28*							
9.6	7680	49800	5	146.49							
11	7680	49800	5	129.97							
12	7680	49800	5	117.94							
14	7680	49800	5	101.38*							
15	7680	49800	6	92.47*							
16	7680	49800	5	88.49							
17	7680	49800	6	83.99							
19	7680	49800	6	74.52							
21	7680	49800	6	67.62							
24	7680	47800	6	58.12*							
28	7680	45100	6	50.73							
33	7680	42000	6	43.03							
37	7680	39500	6	37.61							
44	7680	36500	6	31.80							
				2							
41	7400	38300	5	33.79*							
51	7840	33300	5	27.57							
56	7840	31500	5	25.14							
64	7840	28800	5	21.76*							
73	7840	26500	5	19.20*							
84	7840	23900	5	16.58							
95	7680	22400	5	14.67							
114	7000	22600	5	12.33							
141	6500	21500	5	9.96							
144	4910	23500	7	9.69							
167	4800	22000	7	8.37							
189	4600	21300	7	7.40							
225	4600	19000	7	6.22							
278	4600	16400	7	5.03							

F107R77, n_e = 1400 1/min											7840 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3 3							
0.06	7680	49800	-	25375							
0.06	7680	49800	-	21652							
0.07	7680	49800	-	18933							
0.08	7680	49800	-	16888							
0.09	7680	49800	-	14767							
0.12	7680	49800	-	11348							
0.14	7680	49800	-	10039							
0.16	7680	49800	-	8548							
0.18	7680	49800	-	7674							
0.21	7680	49800	-	6767							
0.24	7680	49800	-	5954							
0.27	7680	49800	-	5223							
0.31	7680	49800	-	4567							
0.35	7680	49800	-	3948							
0.40	7680	49800	-	3521							



F107R77, n_e = 1400 1/min											**7840 Nm**
n_a [1/min]	**M_{amax} [Nm]**	**F_{Ra} [N]**	**$\varphi_{(/R)}$ [']**	**i**	**DR63 DRS71S DRS71M**	**DRS80**	**DRS90M**	**DRS90L DRS100M**	**DRS100LC**	**DRS132S DRS132M**	**DRS132MC DRS160**
				2 3							
0.26	7840	49400	-	5383							
0.30	7840	49400	-	4593							
0.35	7840	49400	-	4016							
0.37	7840	49400	-	3815							
0.42	7840	49400	-	3347							
0.49	7840	49400	-	2839							
0.55	7840	49400	-	2563							
0.62	7840	49400	-	2255							
0.66	7840	49400	-	2129							
0.77	7840	49400	-	1813							
0.88	7840	49400	-	1590							
0.97	7840	49400	-	1436							
1.1	7840	49400	-	1263							
1.2	7840	49400	-	1193							
1.4	7840	49400	-	1015							
1.5	7840	49400	-	923							
1.8	7840	49400	-	800							
2.0	7840	49400	-	696							
				3 2							
0.46	7680	49800	-	3037							
0.51	7680	49800	-	2756							
0.59	7680	49800	-	2369							
0.68	7680	49800	-	2068							
0.77	7680	49800	-	1826							
0.88	7680	49800	-	1597							
1.0	7680	49800	-	1401							
1.1	7680	49800	-	1243							
1.3	7680	49800	-	1087							
1.5	7680	49800	-	950							
1.7	7680	49800	-	834							
1.9	7680	49800	-	736							
2.2	7680	49800	-	640							
2.5	7680	49800	-	560							
2.9	7680	49800	-	489							
3.2	7680	49800	-	436							
3.8	7680	49800	-	370							
4.2	7680	49800	-	333							
4.8	7680	49800	-	291							
5.5	7680	49800	-	255							
6.2	7680	49800	-	225							
7.4	7680	49800	-	190							
				2 2							
2.2	7840	49400	-	644							
2.4	7840	49400	-	591							
2.7	7840	49400	-	518							
2.9	7840	49400	-	491							
3.3	7840	49400	-	430							
3.6	7840	49400	-	387							
4.1	7840	49400	-	340							
4.7	7840	49400	-	300							
5.3	7840	49400	-	266							



F127, n_e = 1400 1/min										12000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280
				3					
8.2	12000	90000	5	170.83					
9.1	12000	90000	5	153.67*					
11	12000	90000	5	125.37					
12	12000	88000	5	114.34					
14	12000	83000	5	98.95					
16	12000	79000	5	87.31*					
19	12000	74300	5	75.41*					
20	12000	72100	5	70.07					
22	12000	69400	5	63.91					
25	12000	65200	5	55.31					
29	12000	61300	5	48.80					
33	12000	56800	5	42.15					
38	12000	53200	5	37.28					
45	12000	48300	5	31.33					
55	12000	42400	5	25.30					
				2					
52	8500	55300	5	26.86					
57	8500	53300	5	24.57					
65	12000	38000	5	21.38					
74	11000	38800	5	18.87					
86	11000	35400	5	16.36					
96	11000	32600	5	14.55					
112	10000	33300	5	12.54					
137	9500	30900	5	10.19					
158	7000	36400	6	8.86					
178	6000	37000	6	7.88					
206	7000	32200	7	6.80					
254	6000	31700	7	5.52					
299	6000	29500	7	4.68					

F127R77, n_e = 1400 1/min											12000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3 3							
0.06	12000	90000	-	24478							
0.06	12000	90000	-	22323							
0.07	12000	90000	-	19048							
0.08	12000	90000	-	16656							
0.10	12000	90000	-	14722							
0.11	12000	90000	-	12912							
0.12	12000	90000	-	11656							
0.14	12000	90000	-	10191							
0.16	12000	90000	-	8831							
0.18	12000	90000	-	7643							
0.21	12000	90000	-	6715							
0.24	12000	90000	-	5925							
0.27	12000	90000	-	5153							
0.31	12000	90000	-	4533							
0.36	12000	90000	-	3926							
0.41	12000	90000	-	3454							
0.46	12000	90000	-	3031							
				3 2							
0.52	12000	90000	-	2672							

F127R77, n_e = 1400 1/min											12000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
0.59	12000	90000	-	2357							
0.69	12000	90000	-	2038							
0.78	12000	90000	-	1784							
0.87	12000	90000	-	1606							
1.0	12000	90000	-	1390							
1.1	12000	90000	-	1220							
1.3	12000	90000	-	1077							
1.5	12000	90000	-	930							
1.7	12000	90000	-	820							
1.9	12000	90000	-	727							
2.2	12000	90000	-	648							
2.6	12000	90000	-	549							
2.8	12000	90000	-	495							
3.3	12000	90000	-	428							
3.7	12000	90000	-	376							

F127R87, n_e = 1400 1/min											12000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
				3 2								
2.9	12000	90000	-	483								
3.3	12000	90000	-	418								
3.7	12000	90000	-	374								
4.5	12000	90000	-	312								
4.8	12000	90000	-	293								
5.4	12000	90000	-	259								
6.3	12000	90000	-	223								
7.1	12000	90000	-	198								
8.4	12000	90000	-	166								

F157, n_e = 1400 1/min										18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
				3						
5.2	18000	100300	5	267.43						
6.4	18000	100300	5	217.62*						
7.9	18000	100300	5	178.20*						
8.6	18000	100300	5	162.96						
9.9	18000	100300	5	141.80*						
11	18000	100300	5	125.14						
13	18000	100300	5	108.49						
15	18000	100300	5	96.53*						
16	18000	95800	5	85.80*						
18	18000	92300	5	78.46						
21	18000	87000	5	68.28*						
23	18000	82500	5	60.25						
27	18000	77500	5	52.24						
30	18000	73600	5	46.48*						
35	18000	68900	5	40.06						
43	18000	62500	5	32.55						
51	18000	57800	5	27.60						
				2						
26	8000	98400	4	53.55						
32	10000	87800	4	43.94*						
39	11000	79300	4	35.75*						



F157, n_e = 1400 1/min											18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
49	17000	60800	4	28.60*						
55	15000	61500	4	25.43						
63	18000	51800	4	22.16						
71	17000	50900	4	19.77						
83	18000	44900	5	16.85						
100	17000	42500	5	13.96						
117	16000	40900	5	11.92						

F157R97, n_e = 1400 1/min														18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
				3 3									
0.04	18000	100300	-	31434									
0.05	18000	100300	-	26173									
0.06	18000	100300	-	23464									
0.07	18000	100300	-	20212									
0.08	18000	100300	-	17984									
0.09	18000	100300	-	16358									
0.10	18000	100300	-	13751									
0.11	18000	100300	-	12235									
0.14	18000	100300	-	10033									
0.16	18000	100300	-	9021									
0.17	18000	100300	-	8026									
0.20	18000	100300	-	7075									
0.22	18000	100300	-	6295									
0.26	18000	100300	-	5404									
0.29	18000	100300	-	4831									
0.34	18000	100300	-	4130									
0.39	18000	100300	-	3607									
0.44	18000	100300	-	3210									
0.50	18000	100300	-	2780									
0.97	18000	100300	-	1441									
				3 2									
0.58	18000	100300	-	2427									
0.64	18000	100300	-	2185									
0.72	18000	100300	-	1944									
0.84	18000	100300	-	1674									
1.1	18000	100300	-	1308									
1.2	18000	100300	-	1169									
1.5	18000	100300	-	953									
1.7	18000	100300	-	845									
1.8	18000	100300	-	764									
2.1	18000	100300	-	680									
2.4	18000	100300	-	576									
2.8	18000	100300	-	503									
3.1	18000	100300	-	446									
4.0	18000	100300	-	353									
4.6	18000	100300	-	302									
5.1	18000	100300	-	273									
6.0	18000	100300	-	232									
6.9	18000	100300	-	202									
7.1	18000	100300	-	197									

10.3 F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
0.12	**0.06**	13900	22323	86700	0.85						
	0.07	11800	19048	90000	1.00						
	0.08	10300	16656	90000	1.15	**FA**	**127R77**	**DR**	**63S4**	425	401
	0.09	9180	14722	90000	1.30	**FAF**	**127R77**	**DR**	**63S4**	465	401
	0.11	7990	12912	90000	1.50	**F**	**127R77**	**DR**	**63S4**	460	401
	0.12	7040	11656	90000	1.70	**FF**	**127R77**	**DR**	**63S4**	510	401
	0.14	6310	10191	90000	1.90						
	0.09	9200	14767	45500	0.85						
	0.12	7070	11348	51400	1.10						
	0.14	5740	10039	54600	1.35						
	0.16	4670	8548	57000	1.65	**FA**	**107R77**	**DR**	**63S4**	275	401
	0.18	4750	7674	56800	1.60	**FAF**	**107R77**	**DR**	**63S4**	295	401
	0.20	4090	6767	58200	1.90	**F**	**107R77**	**DR**	**63S4**	290	401
	0.23	3460	5954	59500	2.2	**FF**	**107R77**	**DR**	**63S4**	320	401
	0.26	2990	5223	60400	2.6						
	0.30	2840	4567	60700	2.7						
	0.39	2120	3521	62000	3.6						
	0.21	4140	6469	30400	1.05	**FA**	**97R57**	**DR**	**63S4**	185	401
	0.25	3820	5615	31300	1.15	**FAF**	**97R57**	**DR**	**63S4**	205	401
	0.28	3320	4961	32500	1.30	**F**	**97R57**	**DR**	**63S4**	190	401
	0.32	2900	4333	33500	1.50	**FF**	**97R57**	**DR**	**63S4**	225	401
	0.35	2690	3906	34000	1.60	**FA**	**97R57**	**DR**	**63S4**	180	401
	0.41	2320	3352	34800	1.85	**FAF**	**97R57**	**DR**	**63S4**	205	401
	0.47	1910	2907	35500	2.2	**F**	**97R57**	**DR**	**63S4**	190	401
	0.54	1750	2553	35800	2.4	**FF**	**97R57**	**DR**	**63S4**	225	401
						FA	**87R57**	**DR**	**63S4**	120	401
	0.33	2760	4245	23800	1.10	**FAF**	**87R57**	**DR**	**63S4**	130	401
	0.37	2210	3721	25800	1.35	**F**	**87R57**	**DR**	**63S4**	125	401
						FF	**87R57**	**DR**	**63S4**	140	401
	0.43	2240	3244	25700	1.35						
	0.48	1990	2881	26500	1.50						
	0.54	1780	2576	27100	1.70						
	0.63	1510	2199	27800	2.00	**FA**	**87R57**	**DR**	**63S4**	115	401
	0.72	1300	1930	28300	2.3	**FAF**	**87R57**	**DR**	**63S4**	130	401
	0.81	1170	1709	28600	2.6	**F**	**87R57**	**DR**	**63S4**	125	401
	0.92	1030	1493	28900	2.9	**FF**	**87R57**	**DR**	**63S4**	140	401
	1.1	820	1300	29300	3.7						
	1.2	745	1148	29500	4.0						
						FA	**77R37**	**DR**	**63S4**	65	401
	0.53	1820	2613	13000	0.80	**FAF**	**77R37**	**DR**	**63S4**	72	401
	0.60	1570	2284	15200	0.95	**F**	**77R37**	**DR**	**63S4**	69	401
	0.68	1380	2029	16400	1.10	**FF**	**77R37**	**DR**	**63S4**	80	401
	0.80	1180	1728	17500	1.25						
	0.89	1090	1544	17900	1.40						
	1.0	950	1354	18500	1.55	**FA**	**77R37**	**DR**	**63S4**	65	401
	1.2	840	1200	18800	1.75	**FAF**	**77R37**	**DR**	**63S4**	72	401
	1.3	740	1053	19100	2.0	**F**	**77R37**	**DR**	**63S4**	69	401
	1.5	630	910	19400	2.4	**FF**	**77R37**	**DR**	**63S4**	80	401
	1.7	525	810	19600	2.8						
	1.9	460	710	19800	3.2						
	0.97	960	1429	7070	0.85						
	1.1	860	1271	9840	0.95						
	1.2	725	1102	11100	1.15						
	1.4	635	970	11700	1.30	**FA**	**67R37**	**DR**	**63S4**	43	401
	1.6	560	858	12100	1.45	**FAF**	**67R37**	**DR**	**63S4**	49	401
	1.8	490	755	12400	1.65	**F**	**67R37**	**DR**	**63S4**	46	401
	2.2	415	641	12700	1.95	**FF**	**67R37**	**DR**	**63S4**	52	401
	2.4	390	572	12800	2.1						
	2.7	330	509	13000	2.5						
	3.2	285	437	13000	2.8						
	1.6	610	851	9100	1.00						
	1.9	520	738	9750	1.15	**FA**	**57R37**	**DR**	**63S4**	39	401
	2.1	455	646	10200	1.30	**FAF**	**57R37**	**DR**	**63S4**	45	401
	2.5	385	558	10600	1.55	**F**	**57R37**	**DR**	**63S4**	39	401
	2.7	345	506	10900	1.75	**FF**	**57R37**	**DR**	**63S4**	46	401
	3.0	295	452	11100	2.0						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**3.2**	310	426	11100	1.95	**FA**	**57R37**	**DR**	**63S4**	38	401
	3.6	270	382	11300	2.2	**FAF**	**57R37**	**DR**	**63S4**	44	401
	4.2	230	330	11500	2.6	**F**	**57R37**	**DR**	**63S4**	39	401
	4.6	210	298	11500	2.8	**FF**	**57R37**	**DR**	**63S4**	45	401
	5.3	185	262	11500	3.2						
	2.5	385	543	6100	1.05	**FA**	**47R17**	**DR**	**63S4**	24	401
	2.9	330	475	6740	1.20	**FAF**	**47R17**	**DR**	**63S4**	26	401
	3.3	290	419	7150	1.40	**F**	**47R17**	**DR**	**63S4**	25	401
						FF	**47R17**	**DR**	**63S4**	28	401
	2.6	380	524	6190	1.05						
	2.8	350	489	6530	1.15						
	3.2	300	427	7020	1.30	**FA**	**47R17**	**DR**	**63S4**	23	401
	3.6	265	381	7310	1.50	**FAF**	**47R17**	**DR**	**63S4**	26	401
	4.1	235	334	7550	1.70	**F**	**47R17**	**DR**	**63S4**	24	401
	4.7	205	295	7740	1.95	**FF**	**47R17**	**DR**	**63S4**	27	401
	5.4	172	253	7910	2.3						
	4.3	215	322	3990	0.90	**FA**	**37R17**	**DR**	**63S4**	19	401
	5.0	192	278	4400	1.05	**FAF**	**37R17**	**DR**	**63S4**	20	401
	5.7	162	242	4750	1.25	**F**	**37R17**	**DR**	**63S4**	19	401
	6.2	156	221	4820	1.30	**FF**	**37R17**	**DR**	**63S4**	21	401
	4.2	235	326	3710	0.85						
	4.8	200	285	4250	1.00	**FA**	**37R17**	**DR**	**63S4**	19	401
	5.5	177	250	4590	1.15	**FAF**	**37R17**	**DR**	**63S4**	20	401
	6.3	156	219	4820	1.30	**F**	**37R17**	**DR**	**63S4**	19	401
	7.4	132	186	5040	1.50	**FF**	**37R17**	**DR**	**63S4**	21	401
	8.3	118	167	5140	1.70						
	6.2	155	221	4500	0.85	**FA**	**27R17**	**DR**	**63S4**	13	401
	8.0	119	172	4500	1.10	**FAF**	**27R17**	**DR**	**63S4**	14	401
	9.0	104	153	4500	1.25	**F**	**27R17**	**DR**	**63S4**	13	401
	11	87	130	4500	1.50	**FF**	**27R17**	**DR**	**63S4**	14	401
	6.5	150	211	4500	0.85						
	7.4	131	186	4500	1.00	**FA**	**27R17**	**DR**	**63S4**	13	401
	9.7	102	142	4500	1.25	**FAF**	**27R17**	**DR**	**63S4**	13	401
	11	88	124	4500	1.45	**F**	**27R17**	**DR**	**63S4**	13	401
	13	77	109	4500	1.70	**FF**	**27R17**	**DR**	**63S4**	14	401
	14	67	96	4500	1.95						
	3.9	290	228.99	13000	2.8	**FA**	**67**	**DR**	**63M6**	32	368
	4.6	245	195.39	13000	3.3	**FAF**	**67**	**DR**	**63M6**	38	367
	5.3	215	170.85	13000	3.8	**F**	**67**	**DR**	**63M6**	35	366
	5.6	205	162.31	13000	4.0	**FF**	**67**	**DR**	**63M6**	41	367
	6.3	181	142.40	13000	4.5						
	4.5	250	199.70	11400	2.4						
	4.9	230	183.60	11500	2.6	**FA**	**57**	**DR**	**63M6**	28	363
	5.7	200	157.09	11500	3.0	**FAF**	**57**	**DR**	**63M6**	34	362
	6.6	173	136.16	11500	3.5	**F**	**57**	**DR**	**63M6**	28	361
	7.1	162	127.27	11500	3.7	**FF**	**57**	**DR**	**63M6**	35	362
	6.9	166	199.70	11500	3.6	**FA**	**57**	**DR**	**63S4**	28	363
	7.5	152	183.60	11500	3.9	**FAF**	**57**	**DR**	**63S4**	34	362
	8.8	130	157.09	11500	4.6	**F**	**57**	**DR**	**63S4**	28	361
	10	113	136.16	11500	5.3	**FF**	**57**	**DR**	**63S4**	35	362
	4.7	240	190.76	7510	1.65						
	5.1	220	175.38	7640	1.80						
	6.0	191	150.06	7820	2.1	**FA**	**47**	**DR**	**63M6**	21	358
	6.9	166	130.07	7940	2.4	**FAF**	**47**	**DR**	**63M6**	24	357
	7.4	155	121.57	7990	2.6	**F**	**47**	**DR**	**63M6**	22	356
	8.6	134	105.09	8060	3.0	**FF**	**47**	**DR**	**63M6**	25	357
	10	114	89.29	8130	3.5						
	11	102	79.72	8160	3.9						
	7.2	158	190.76	7970	2.5	**FA**	**47**	**DR**	**63S4**	21	358
	7.9	146	175.38	8020	2.8	**FAF**	**47**	**DR**	**63S4**	24	357
	9.2	125	150.06	8100	3.2	**F**	**47**	**DR**	**63S4**	22	356
	11	108	130.07	8150	3.7	**FF**	**47**	**DR**	**63S4**	25	357
	7.0	164	128.51	4740	1.20	**FA**	**37**	**DR**	**63M6**	16	353
	7.6	150	117.88	4880	1.35	**FAF**	**37**	**DR**	**63M6**	18	352
	9.0	128	100.36	5070	1.55	**F**	**37**	**DR**	**63M6**	16	351
	10	110	86.53	5190	1.80	**FF**	**37**	**DR**	**63M6**	18	352
	11	103	80.65	5240	1.95						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**11**	107	128.51	5220	1.85						
	12	98	117.88	5270	2.0	**FA**	**37**	**DR**	**63S4**	16	353
	14	83	100.36	5340	2.4	**FAF**	**37**	**DR**	**63S4**	18	352
	16	72	86.53	5400	2.8	**F**	**37**	**DR**	**63S4**	16	351
	17	67	80.65	5410	3.0	**FF**	**37**	**DR**	**63S4**	18	352
	8.2	140	109.90	4500	0.95	**FA**	**27**	**DR**	**63M6**	9.9	349
	9.5	121	94.76	4500	1.10	**FAF**	**27**	**DR**	**63M6**	11	348
	10	112	88.32	4500	1.15	**F**	**27**	**DR**	**63M6**	10	347
	12	98	77.21	4500	1.30	**FF**	**27**	**DR**	**63M6**	11	348
	9.8	117	140.74	4500	1.10						
	11	107	129.09	4500	1.20						
	13	91	109.90	4500	1.40						
	15	79	94.76	4500	1.65						
	16	73	88.32	4500	1.75						
	18	64	77.21	4500	2.0	**FA**	**27**	**DR**	**63S4**	9.9	349
	19	60	72.37	4500	2.2	**FAF**	**27**	**DR**	**63S4**	11	348
	22	53	63.86	4500	2.4	**F**	**27**	**DR**	**63S4**	10	347
	24	47	56.62	4500	2.8	**FF**	**27**	**DR**	**63S4**	11	348
	28	42	50.19	4500	3.1						
	30	39	46.78	4500	3.4						
	34	34	40.89	4500	3.8						
	36	32	38.33	4430	4.1						
	41	28	33.83	4270	4.6						
	47	24	29.56	4100	5.3						
	51	23	27.18	4000	5.8						
	59	19	23.25	3820	6.7						
	68	17	20.15	3650	7.8						
	73	16	18.84	3580	8.3						
	85	14	16.28	3420	9.6						
	100	12	13.84	3250	11						
	112	10	12.35	3140	13	**FA**	**27**	**DR**	**63S4**	9.6	349
	131	8.8	10.55	2990	15	**FAF**	**27**	**DR**	**63S4**	10	348
	140	8.2	9.88	2920	16	**F**	**27**	**DR**	**63S4**	10	347
	147	7.8	9.40	2870	17	**FF**	**27**	**DR**	**63S4**	11	348
	170	6.7	8.13	2740	18						
	200	5.7	6.91	2600	20						
	224	5.1	6.17	2510	21						
	262	4.4	5.27	2390	23						
	280	4.1	4.93	2340	23						
	332	3.5	4.16	2210	25						
0.18	**0.10**	13600	12912	87200	0.90						
	0.11	12100	11656	90000	1.00	**FA**	**127R77**	**DR**	**63M4**	425	401
	0.13	10700	10191	90000	1.10	**FAF**	**127R77**	**DR**	**63M4**	465	401
	0.15	8940	8831	90000	1.35	**F**	**127R77**	**DR**	**63M4**	460	401
	0.17	7740	7643	90000	1.55	**FF**	**127R77**	**DR**	**63M4**	510	401
	0.20	7130	6715	90000	1.70						
	0.15	8440	8548	47700	0.90						
	0.17	8130	7674	48600	0.95						
	0.20	7070	6767	51400	1.10	**FA**	**107R77**	**DR**	**63M4**	275	401
	0.22	6080	5954	53800	1.25	**FAF**	**107R77**	**DR**	**63M4**	295	401
	0.25	5290	5223	55700	1.45	**F**	**107R77**	**DR**	**63M4**	290	401
	0.29	4850	4567	56600	1.60	**FF**	**107R77**	**DR**	**63M4**	320	401
	0.37	3670	3521	59100	2.1						
	0.43	3250	3037	59900	2.4	**FA**	**107R77**	**DR**	**63M4**	275	401
	0.48	2950	2756	60500	2.6	**FAF**	**107R77**	**DR**	**63M4**	295	401
	0.56	2540	2369	61200	3.0	**F**	**107R77**	**DR**	**63M4**	290	401
	0.64	2210	2068	61800	3.5	**FF**	**107R77**	**DR**	**63M4**	315	401
						FA	**97R57**	**DR**	**63M4**	185	401
	0.30	4800	4333	22800	0.90	**FAF**	**97R57**	**DR**	**63M4**	205	401
						F	**97R57**	**DR**	**63M4**	190	401
						FF	**97R57**	**DR**	**63M4**	225	401



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**0.34**	4420	3906	29500	0.95						
	0.39	3800	3352	31300	1.15						
	0.45	3210	2907	32800	1.35						
	0.52	2890	2553	33600	1.50	**FA**	**97R57**	**DR**	**63M4**	180	401
	0.59	2540	2245	34300	1.70	**FAF**	**97R57**	**DR**	**63M4**	205	401
	0.67	2210	1970	35000	1.95	**F**	**97R57**	**DR**	**63M4**	190	401
	0.77	1950	1722	35500	2.2	**FF**	**97R57**	**DR**	**63M4**	225	401
	0.86	1730	1527	35900	2.5						
	0.99	1420	1327	36400	3.0						
	1.1	1330	1171	36500	3.2						
	0.51	2920	2576	22300	1.00						
	0.60	2490	2199	24800	1.20						
	0.68	2160	1930	25900	1.40						
	0.77	1930	1709	26600	1.55	**FA**	**87R57**	**DR**	**63M4**	115	401
	0.88	1690	1493	27300	1.75	**FAF**	**87R57**	**DR**	**63M4**	130	401
	1.0	1390	1300	28100	2.1	**F**	**87R57**	**DR**	**63M4**	125	401
	1.2	1250	1148	28400	2.4	**FF**	**87R57**	**DR**	**63M4**	140	401
	1.3	1080	1010	28800	2.8						
	1.5	970	887	29000	3.1						
	1.7	830	780	29300	3.6						
	0.86	1770	1544	13500	0.85						
	0.98	1550	1354	15300	0.95						
	1.1	1380	1200	16500	1.10	**FA**	**77R37**	**DR**	**63M4**	65	401
	1.2	1210	1053	17400	1.25	**FAF**	**77R37**	**DR**	**63M4**	72	401
	1.4	1030	910	18200	1.45	**F**	**77R37**	**DR**	**63M4**	69	401
	1.6	880	810	18700	1.70	**FF**	**77R37**	**DR**	**63M4**	80	401
	1.9	780	710	19000	1.90						
	2.2	690	615	19300	2.2						
	1.5	940	858	8660	0.85						
	1.8	820	755	10200	1.00						
	2.1	700	641	11200	1.15	**FA**	**67R37**	**DR**	**63M4**	43	401
	2.3	645	572	11600	1.25	**FAF**	**67R37**	**DR**	**63M4**	49	401
	2.6	555	509	12100	1.45	**F**	**67R37**	**DR**	**63M4**	46	401
	3.0	480	437	12500	1.70	**FF**	**67R37**	**DR**	**63M4**	52	401
	3.4	430	384	12700	1.90						
	2.6	575	500	12000	1.40						
	2.9	525	454	12300	1.55						
	3.4	450	392	12600	1.80	**FA**	**67R37**	**DR**	**63M4**	42	401
	4.0	380	333	12900	2.2	**FAF**	**67R37**	**DR**	**63M4**	48	401
	4.4	335	297	13000	2.4	**F**	**67R37**	**DR**	**63M4**	45	401
	5.1	295	261	13000	2.8	**FF**	**67R37**	**DR**	**63M4**	51	401
	5.6	260	238	13000	3.1						
	6.6	215	200	13000	3.7						
	2.4	635	558	7570	0.95						
	2.6	570	506	9420	1.05	**FA**	**57R37**	**DR**	**63M4**	39	401
	2.9	495	452	9930	1.20	**FAF**	**57R37**	**DR**	**63M4**	45	401
	3.4	425	386	10400	1.40	**F**	**57R37**	**DR**	**63M4**	39	401
	3.9	370	338	10700	1.60	**FF**	**57R37**	**DR**	**63M4**	46	401
	3.1	500	426	9910	1.20						
	3.5	445	382	10300	1.35						
	4.0	380	330	10700	1.55	**FA**	**57R37**	**DR**	**63M4**	38	401
	4.4	340	298	10900	1.75	**FAF**	**57R37**	**DR**	**63M4**	44	401
	5.0	300	262	11100	2.00	**F**	**57R37**	**DR**	**63M4**	39	401
	5.8	255	226	11400	2.3	**FF**	**57R37**	**DR**	**63M4**	45	401
	6.6	220	200	11500	2.7						
	3.6	410	370	5210	0.95	**FA**	**47R17**	**DR**	**63M4**	24	401
	4.1	375	324	6250	1.05	**FAF**	**47R17**	**DR**	**63M4**	26	401
	4.6	325	288	6810	1.20	**F**	**47R17**	**DR**	**63M4**	25	401
	5.3	275	249	7250	1.45	**FF**	**47R17**	**DR**	**63M4**	28	401
	4.0	385	334	6100	1.05						
	4.5	335	295	6680	1.20	**FA**	**47R17**	**DR**	**63M4**	23	401
	5.2	285	253	7190	1.40	**FAF**	**47R17**	**DR**	**63M4**	26	401
	6.1	250	217	7430	1.55	**F**	**47R17**	**DR**	**63M4**	24	401
	7.0	220	190	7650	1.80	**FF**	**47R17**	**DR**	**63M4**	27	401
	7.4	205	178	7740	1.95						
	7.1	215	186	4060	0.95	**FA**	**37R17**	**DR**	**63M4**	19	401
	7.9	194	167	4380	1.05	**FAF**	**37R17**	**DR**	**63M4**	20	401
	9.1	171	145	4660	1.15	**F**	**37R17**	**DR**	**63M4**	19	401
	10	151	129	4870	1.30	**FF**	**37R17**	**DR**	**63M4**	21	401



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**9.3**	166	142	4500	0.80	**FA**	**27R17**	**DR**	**63M4**	13	401
	11	144	124	4500	0.90	**FAF**	**27R17**	**DR**	**63M4**	13	401
	12	126	109	4500	1.05	**F**	**27R17**	**DR**	**63M4**	13	401
	14	110	96	4500	1.20	**FF**	**27R17**	**DR**	**63M4**	14	401
	3.1	555	281.71	19600	2.7	**FA**	**77**	**DR**	**63L6**	56	373
	3.3	515	262.93	19700	2.9	**FAF**	**77**	**DR**	**63L6**	63	372
	3.8	445	225.79	19800	3.4	**F**	**77**	**DR**	**63L6**	60	371
						FF	**77**	**DR**	**63L6**	71	372
	3.8	450	228.99	12600	1.80	**FA**	**67**	**DR**	**63L6**	33	368
	4.4	385	195.39	12900	2.1	**FAF**	**67**	**DR**	**63L6**	39	367
	5.1	335	170.85	13000	2.4	**F**	**67**	**DR**	**63L6**	36	366
						FF	**67**	**DR**	**63L6**	42	367
	5.8	295	228.99	13000	2.8	**FA**	**67**	**DR**	**63M4**	32	368
	6.8	250	195.39	13000	3.2	**FAF**	**67**	**DR**	**63M4**	38	367
	7.7	220	170.85	13000	3.7	**F**	**67**	**DR**	**63M4**	35	366
						FF	**67**	**DR**	**63M4**	41	367
	4.4	390	199.70	10600	1.50						
	4.7	360	183.60	10800	1.65	**FA**	**57**	**DR**	**63L6**	29	363
	5.5	310	157.09	11100	1.95	**FAF**	**57**	**DR**	**63L6**	34	362
	6.4	265	136.16	11300	2.2	**F**	**57**	**DR**	**63L6**	29	361
	6.8	250	127.27	11400	2.4	**FF**	**57**	**DR**	**63L6**	36	362
	7.9	215	110.01	11500	2.8						
	6.6	260	199.70	11300	2.3						
	7.2	235	183.60	11500	2.5	**FA**	**57**	**DR**	**63M4**	28	363
	8.4	200	157.09	11500	2.9	**FAF**	**57**	**DR**	**63M4**	34	362
	9.7	177	136.16	11500	3.4	**F**	**57**	**DR**	**63M4**	28	361
	10	166	127.27	11500	3.6	**FF**	**57**	**DR**	**63M4**	35	362
	4.6	375	190.76	6240	1.05						
	5.0	345	175.38	6600	1.15	**FA**	**47**	**DR**	**63L6**	22	358
	5.8	295	150.06	7090	1.35	**FAF**	**47**	**DR**	**63L6**	24	357
	6.7	255	130.07	7410	1.55	**F**	**47**	**DR**	**63L6**	22	356
	7.2	240	121.57	7530	1.65	**FF**	**47**	**DR**	**63L6**	26	357
	6.9	245	190.76	7470	1.60						
	7.5	225	175.38	7600	1.75	**FA**	**47**	**DR**	**63M4**	21	358
	8.8	195	150.06	7800	2.0	**FAF**	**47**	**DR**	**63M4**	24	357
	10	169	130.07	7920	2.4	**F**	**47**	**DR**	**63M4**	22	356
	11	158	121.57	7970	2.5	**FF**	**47**	**DR**	**63M4**	25	357
	7.4	230	117.88	3750	0.85						
	8.7	198	100.36	4320	1.00	**FA**	**37**	**DR**	**63L6**	17	353
	10	171	86.53	4660	1.15	**FAF**	**37**	**DR**	**63L6**	18	352
	11	159	80.65	4790	1.25	**F**	**37**	**DR**	**63L6**	17	351
	12	139	70.50	4970	1.45	**FF**	**37**	**DR**	**63L6**	19	352
	10	167	128.51	4700	1.20						
	11	154	117.88	4840	1.30						
	13	131	100.36	5040	1.55	**FA**	**37**	**DR**	**63M4**	16	353
	15	113	86.53	5180	1.75	**FAF**	**37**	**DR**	**63M4**	18	352
	16	105	80.65	5230	1.90	**F**	**37**	**DR**	**63M4**	16	351
	19	92	70.50	5300	2.2	**FF**	**37**	**DR**	**63M4**	18	352
	20	86	66.09	5330	2.3						
	23	76	58.32	5380	2.6						
	12	143	109.90	4500	0.90						
	14	123	94.76	4500	1.05						
	15	115	88.32	4500	1.15						
	17	100	77.21	4500	1.30						
	18	94	72.37	4500	1.40	**FA**	**27**	**DR**	**63M4**	9.9	349
	21	83	63.86	4500	1.55	**FAF**	**27**	**DR**	**63M4**	11	348
	23	74	56.62	4500	1.75	**F**	**27**	**DR**	**63M4**	10	347
	26	65	50.19	4500	2.00	**FF**	**27**	**DR**	**63M4**	11	348
	28	61	46.78	4500	2.1						
	32	53	40.89	4410	2.4						
	34	50	38.33	4340	2.6						
	39	44	33.83	4200	3.0						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**45**	38	29.56	4040	3.4						
	49	35	27.18	3950	3.7						
	57	30	23.25	3780	4.3						
	65	26	20.15	3630	5.0						
	70	24	18.84	3560	5.3						
	81	21	16.28	3410	6.1						
	95	18	13.84	3240	7.2						
	107	16	12.35	3140	8.1	**FA**	**27**	**DR**	**63M4**	9.6	349
	125	14	10.55	2990	9.5	**FAF**	**27**	**DR**	**63M4**	10	348
	134	13	9.88	2930	10	**F**	**27**	**DR**	**63M4**	10	347
	140	12	9.40	2870	11	**FF**	**27**	**DR**	**63M4**	11	348
	162	11	8.13	2750	12						
	191	9.0	6.91	2610	13						
	214	8.0	6.17	2520	14						
	251	6.9	5.27	2400	14						
	268	6.4	4.93	2350	15						
	318	5.4	4.16	2230	16						
	335	5.1	8.13	2190	24						
	394	4.4	6.91	2080	26	**FA**	**27**	**DR**	**63S2**	9.6	349
	441	3.9	6.17	2000	28	**FAF**	**27**	**DR**	**63S2**	10	348
	516	3.3	5.27	1910	30	**F**	**27**	**DR**	**63S2**	10	347
	551	3.1	4.93	1870	31	**FF**	**27**	**DR**	**63S2**	11	348
	655	2.6	4.16	1770	34						
0.25	**0.15**	13300	8831	87900	0.90						
	0.17	11500	7643	90000	1.05	**FA**	**127R77**	**DR**	**63L4**	425	401
	0.19	10400	6715	90000	1.15	**FAF**	**127R77**	**DR**	**63L4**	465	401
	0.22	9230	5925	90000	1.30	**F**	**127R77**	**DR**	**63L4**	465	401
	0.25	7940	5153	90000	1.50	**FF**	**127R77**	**DR**	**63L4**	510	401
	0.29	6890	4533	90000	1.75						
	0.22	9050	5954	46000	0.85	**FA**	**107R77**	**DR**	**63L4**	275	401
	0.25	7890	5223	49300	0.95	**FAF**	**107R77**	**DR**	**63L4**	295	401
	0.28	7120	4567	51300	1.10	**F**	**107R77**	**DR**	**63L4**	290	401
	0.37	5430	3521	55300	1.40	**FF**	**107R77**	**DR**	**63L4**	320	401
	0.43	4780	3037	56800	1.60						
	0.47	4340	2756	57700	1.75	**FA**	**107R77**	**DR**	**63L4**	275	401
	0.55	3730	2369	59000	2.1	**FAF**	**107R77**	**DR**	**63L4**	295	401
	0.63	3250	2068	59900	2.4	**F**	**107R77**	**DR**	**63L4**	290	401
	0.81	2490	1597	61300	3.1	**FF**	**107R77**	**DR**	**63L4**	320	401
	0.93	2150	1401	61900	3.6						
	0.45	4670	2907	27500	0.90						
	0.51	4180	2553	30300	1.05						
	0.58	3670	2245	31600	1.15						
	0.66	3200	1970	32800	1.35	**FA**	**97R57**	**DR**	**63L4**	185	401
	0.75	2820	1722	33700	1.50	**FAF**	**97R57**	**DR**	**63L4**	205	401
	0.85	2500	1527	34400	1.70	**F**	**97R57**	**DR**	**63L4**	190	401
	0.98	2090	1327	35200	2.0	**FF**	**97R57**	**DR**	**63L4**	225	401
	1.1	1910	1171	35500	2.2						
	1.3	1670	1022	36000	2.6						
	0.67	3130	1930	13500	0.95						
	0.76	2790	1709	23700	1.05						
	0.87	2440	1493	25000	1.25						
	1.0	2050	1300	26300	1.45	**FA**	**87R57**	**DR**	**63L4**	120	401
	1.1	1830	1148	26900	1.65	**FAF**	**87R57**	**DR**	**63L4**	130	401
	1.3	1590	1010	27600	1.90	**F**	**87R57**	**DR**	**63L4**	125	401
	1.5	1410	887	28000	2.1	**FF**	**87R57**	**DR**	**63L4**	140	401
	1.7	1230	780	28500	2.4						
	1.9	1040	674	28900	2.9						
	1.2	1740	1053	13900	0.85						
	1.4	1490	910	15700	1.00						
	1.6	1290	810	16900	1.15	**FA**	**77R37**	**DR**	**63L4**	66	401
	1.8	1130	710	17700	1.30	**FAF**	**77R37**	**DR**	**63L4**	72	401
	2.1	1000	615	18300	1.50	**F**	**77R37**	**DR**	**63L4**	70	401
	2.4	870	538	18700	1.70	**FF**	**77R37**	**DR**	**63L4**	80	401
	2.7	775	480	19000	1.95						
	3.2	660	413	19400	2.3						
	2.3	930	572	9150	0.90	**FA**	**67R37**	**DR**	**63L4**	44	401
	2.6	810	509	10400	1.00	**FAF**	**67R37**	**DR**	**63L4**	50	401
	3.0	700	437	11200	1.15	**F**	**67R37**	**DR**	**63L4**	46	401
						FF	**67R37**	**DR**	**63L4**	53	401



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**2.6**	830	500	10200	1.00						
	2.9	755	454	10800	1.10	**FA**	**67R37**	**DR**	**63L4**	42	401
	3.3	650	392	11600	1.25	**FAF**	**67R37**	**DR**	**63L4**	49	401
	3.9	550	333	12200	1.50	**F**	**67R37**	**DR**	**63L4**	45	401
	4.4	485	297	12500	1.70	**FF**	**67R37**	**DR**	**63L4**	51	401
	5.0	425	261	12700	1.90						
	5.5	385	238	12900	2.1						
	3.4	620	386	8830	0.95	**FA**	**57R37**	**DR**	**63L4**	40	401
	3.8	540	338	9640	1.10	**FAF**	**57R37**	**DR**	**63L4**	45	401
	5.1	405	255	10500	1.45	**F**	**57R37**	**DR**	**63L4**	40	401
						FF	**57R37**	**DR**	**63L4**	46	401
	3.4	635	382	7390	0.95						
	3.9	550	330	9570	1.10	**FA**	**57R37**	**DR**	**63L4**	39	401
	4.4	495	298	9950	1.20	**FAF**	**57R37**	**DR**	**63L4**	45	401
	5.0	435	262	10300	1.35	**F**	**57R37**	**DR**	**63L4**	39	401
	5.8	370	226	10700	1.60	**FF**	**57R37**	**DR**	**63L4**	46	401
	6.5	320	200	11000	1.85						
	7.6	275	170	11300	2.2						
	5.2	400	249	5880	1.00	**FA**	**47R17**	**DR**	**63L4**	24	401
	6.0	355	218	6470	1.10	**FAF**	**47R17**	**DR**	**63L4**	27	401
	6.7	315	193	6920	1.25	**F**	**47R17**	**DR**	**63L4**	25	401
	7.4	285	175	7180	1.40	**FF**	**47R17**	**DR**	**63L4**	28	401
	5.1	410	253	4980	0.95						
	6.0	365	217	6380	1.10	**FA**	**47R17**	**DR**	**63L4**	24	401
	6.8	315	190	6900	1.25	**FAF**	**47R17**	**DR**	**63L4**	26	401
	7.3	295	178	7090	1.35	**F**	**47R17**	**DR**	**63L4**	25	401
	8.7	245	149	7480	1.60	**FF**	**47R17**	**DR**	**63L4**	28	401
	9.9	215	131	7670	1.85						
	8.9	245	145	3420	0.80	**FA**	**37R17**	**DR**	**63L4**	20	401
	10	215	129	4040	0.90	**FAF**	**37R17**	**DR**	**63L4**	21	401
	11	198	118	4320	1.00	**F**	**37R17**	**DR**	**63L4**	20	401
	13	164	98	4740	1.20	**FF**	**37R17**	**DR**	**63L4**	22	401
	15	144	87	4940	1.40						
	3.2	750	281.71	19100	2.0	**FA**	**77**	**DRS**	**71S6**	58	373
	3.4	700	262.93	19300	2.1	**FAF**	**77**	**DRS**	**71S6**	65	372
	4.0	600	225.79	19500	2.5	**F**	**77**	**DRS**	**71S6**	62	371
	4.5	525	198.31	19600	2.8	**FF**	**77**	**DRS**	**71S6**	73	372
	4.8	500	188.40	19700	3.0						
	3.9	610	228.99	11800	1.35	**FA**	**67**	**DRS**	**71S6**	34	368
	4.6	520	195.39	12300	1.55	**FAF**	**67**	**DRS**	**71S6**	41	367
	5.2	455	170.85	12600	1.80	**F**	**67**	**DRS**	**71S6**	37	366
	5.5	430	162.31	12700	1.90	**FF**	**67**	**DRS**	**71S6**	43	367
	6.3	375	142.40	12900	2.2						
	5.7	420	228.99	12700	1.95	**FA**	**67**	**DR**	**63L4**	33	368
	6.6	355	195.39	13000	2.3	**FAF**	**67**	**DR**	**63L4**	39	367
	7.6	310	170.85	13000	2.6	**F**	**67**	**DR**	**63L4**	36	366
	8.0	295	162.31	13000	2.8	**FF**	**67**	**DR**	**63L4**	42	367
	9.1	260	142.40	13000	3.1						
	4.5	530	199.70	9700	1.15						
	4.9	485	183.60	9990	1.25	**FA**	**57**	**DRS**	**71S6**	31	363
	5.7	415	157.09	10500	1.45	**FAF**	**57**	**DRS**	**71S6**	36	362
	6.6	360	136.16	10800	1.65	**F**	**57**	**DRS**	**71S6**	31	361
	7.0	335	127.27	10900	1.75	**FF**	**57**	**DRS**	**71S6**	37	362
	8.1	290	110.01	11200	2.0						
	6.5	365	199.70	10800	1.65						
	7.1	335	183.60	10900	1.80	**FA**	**57**	**DR**	**63L4**	29	363
	8.3	285	157.09	11200	2.1	**FAF**	**57**	**DR**	**63L4**	34	362
	9.6	250	136.16	11400	2.4	**F**	**57**	**DR**	**63L4**	29	361
	10	230	127.27	11500	2.6	**FF**	**57**	**DR**	**63L4**	36	362
	12	200	110.01	11500	3.0						
	6.0	400	150.06	5920	1.00	**FA**	**47**	**DRS**	**71S6**	24	358
	6.9	345	130.07	6590	1.15	**FAF**	**47**	**DRS**	**71S6**	26	357
	7.4	320	121.57	6830	1.25	**F**	**47**	**DRS**	**71S6**	24	356
	8.5	280	105.09	7230	1.45	**FF**	**47**	**DRS**	**71S6**	27	357



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**6.8**	350	190.76	6550	1.15						
	7.4	320	175.38	6850	1.25						
	8.7	275	150.06	7270	1.45	**FA**	**47**	**DR**	**63L4**	22	358
	10.0	235	130.07	7540	1.65	**FAF**	**47**	**DR**	**63L4**	24	357
	11	220	121.57	7640	1.80	**F**	**47**	**DR**	**63L4**	22	356
	12	193	105.09	7810	2.1	**FF**	**47**	**DR**	**63L4**	26	357
	15	164	89.29	7950	2.4						
	10	235	128.51	3690	0.85						
	11	215	117.88	4040	0.90						
	13	184	100.36	4500	1.10						
	15	159	86.53	4790	1.25						
	16	148	80.65	4900	1.35						
	18	130	70.50	5060	1.55						
	20	121	66.09	5120	1.65	**FA**	**37**	**DR**	**63L4**	17	353
	22	107	58.32	5210	1.85	**FAF**	**37**	**DR**	**63L4**	18	352
	24	100	54.54	5260	2.0	**F**	**37**	**DR**	**63L4**	17	351
	25	95	51.70	5280	2.1	**FF**	**37**	**DR**	**63L4**	19	352
	28	86	47.02	5330	2.3						
	30	80	43.83	5360	2.5						
	34	70	38.31	5400	2.8						
	36	66	35.91	5420	3.0						
	41	58	31.69	5440	3.4						
	17	142	77.21	4500	0.90						
	18	133	72.37	4500	1.00						
	20	117	63.86	4500	1.10						
	23	104	56.62	4500	1.25	**FA**	**27**	**DR**	**63L4**	11	349
	26	92	50.19	4440	1.40	**FAF**	**27**	**DR**	**63L4**	11	348
	28	86	46.78	4370	1.50	**F**	**27**	**DR**	**63L4**	11	347
	32	75	40.89	4240	1.75	**FF**	**27**	**DR**	**63L4**	12	348
	34	70	38.33	4180	1.85						
	38	62	33.83	4060	2.1						
	44	54	29.56	3920	2.4						
	48	50	27.18	3840	2.6						
	56	43	23.25	3690	3.0						
	64	37	20.15	3550	3.5						
	69	35	18.84	3480	3.8						
	80	30	16.28	3350	4.4						
	94	25	13.84	3200	5.1						
	105	23	12.35	3090	5.7	**FA**	**27**	**DR**	**63L4**	10	349
	123	19	10.55	2950	6.7	**FAF**	**27**	**DR**	**63L4**	11	348
	132	18	9.88	2900	7.2	**F**	**27**	**DR**	**63L4**	11	347
	138	17	9.40	2840	7.5	**FF**	**27**	**DR**	**63L4**	12	348
	160	15	8.13	2720	8.3						
	188	13	6.91	2590	9.0						
	211	11	6.17	2500	9.6						
	247	9.7	5.27	2380	10						
	264	9.1	4.93	2340	11						
	313	7.6	4.16	2220	11						
	327	7.3	8.13	2180	17						
	385	6.2	6.91	2080	18	**FA**	**27**	**DR**	**63M2**	9.6	349
	431	5.5	6.17	2000	20	**FAF**	**27**	**DR**	**63M2**	10	348
	505	4.7	5.27	1910	21	**F**	**27**	**DR**	**63M2**	10	347
	539	4.4	4.93	1870	22	**FF**	**27**	**DR**	**63M2**	11	348
	640	3.7	4.16	1770	24						
0.37	**0.21**	14900	6715	84600	0.80						
	0.23	13200	5925	88100	0.90						
	0.27	11400	5153	90000	1.05	**FA**	**127R77**	**DRS**	**71S4**	430	401
	0.30	9930	4533	90000	1.20	**FAF**	**127R77**	**DRS**	**71S4**	465	401
	0.35	8690	3926	90000	1.40	**F**	**127R77**	**DRS**	**71S4**	465	401
	0.40	7560	3454	90000	1.60	**FF**	**127R77**	**DRS**	**71S4**	510	401
	0.46	6610	3031	90000	1.80						
	0.45	6850	3037	52000	1.10						
	0.50	6210	2756	53500	1.25	**FA**	**107R77**	**DRS**	**71S4**	275	401
	0.58	5340	2369	55500	1.45	**FAF**	**107R77**	**DRS**	**71S4**	295	401
	0.67	4660	2068	57000	1.65	**F**	**107R77**	**DRS**	**71S4**	290	401
	0.86	3570	1597	59300	2.2	**FF**	**107R77**	**DRS**	**71S4**	320	401



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**0.70**	4540	1970	29200	0.95						
	0.80	3990	1722	30800	1.10	**FA**	**97R57**	**DRS**	**71S4**	185	401
	0.90	3540	1527	32000	1.20	**FAF**	**97R57**	**DRS**	**71S4**	205	401
	1.0	2990	1327	33300	1.45	**F**	**97R57**	**DRS**	**71S4**	190	401
	1.2	2710	1171	33900	1.60	**FF**	**97R57**	**DRS**	**71S4**	225	401
	1.4	2370	1022	34700	1.80						
	1.5	2000	898	35400	2.1						
	1.1	2930	1300	22000	1.00						
	1.2	2610	1148	24400	1.15						
	1.4	2280	1010	25600	1.30	**FA**	**87R57**	**DRS**	**71S4**	120	401
	1.6	2010	887	26400	1.50	**FAF**	**87R57**	**DRS**	**71S4**	130	401
	1.8	1760	780	27100	1.70	**F**	**87R57**	**DRS**	**71S4**	125	401
	2.0	1500	674	27800	2.00	**FF**	**87R57**	**DRS**	**71S4**	140	401
	2.3	1370	609	28100	2.2						
	2.7	1150	515	28600	2.6						
	3.0	1020	452	28900	2.9						
	1.7	1840	810	11300	0.80						
	1.9	1620	710	14900	0.95						
	2.2	1420	615	16200	1.05	**FA**	**77R37**	**DRS**	**71S4**	68	401
	2.6	1240	538	17200	1.20	**FAF**	**77R37**	**DRS**	**71S4**	74	401
	2.9	1100	480	17900	1.35	**F**	**77R37**	**DRS**	**71S4**	72	401
	3.4	940	413	18500	1.60	**FF**	**77R37**	**DRS**	**71S4**	82	401
	3.8	840	367	18900	1.80						
	4.3	750	323	19100	2.0						
	3.6	880	384	9670	0.95	**FA**	**67R37**	**DRS**	**71S4**	46	401
	4.1	785	338	10600	1.05	**FAF**	**67R37**	**DRS**	**71S4**	52	401
	4.5	700	305	11200	1.15	**F**	**67R37**	**DRS**	**71S4**	48	401
	5.4	590	257	11900	1.40	**FF**	**67R37**	**DRS**	**71S4**	55	401
	6.0	520	231	12300	1.55						
	5.4	580	255	9330	1.05	**FA**	**57R37**	**DRS**	**71S4**	42	401
	6.9	455	201	10200	1.30	**FAF**	**57R37**	**DRS**	**71S4**	47	401
	7.6	410	181	10500	1.45	**F**	**57R37**	**DRS**	**71S4**	42	401
						FF	**57R37**	**DRS**	**71S4**	48	401
	5.3	615	262	9070	0.95						
	6.1	525	226	9740	1.15	**FA**	**57R37**	**DRS**	**71S4**	41	401
	6.9	460	200	10200	1.30	**FAF**	**57R37**	**DRS**	**71S4**	47	401
	8.1	390	170	10600	1.50	**F**	**57R37**	**DRS**	**71S4**	41	401
	9.0	345	152	10900	1.70	**FF**	**57R37**	**DRS**	**71S4**	48	401
	10	305	134	11100	1.95						
	7.9	400	175	5860	1.00	**FA**	**47R17**	**DRS**	**71S4**	26	401
	9.4	340	147	6660	1.15	**FAF**	**47R17**	**DRS**	**71S4**	29	401
	11	300	130	7050	1.35	**F**	**47R17**	**DRS**	**71S4**	27	401
						FF	**47R17**	**DRS**	**71S4**	30	401
	3.3	1050	270.68	28900	2.8	**FA**	**87**	**DRS**	**71M6**	99	378
	3.5	990	255.37	29000	3.0	**FAF**	**87**	**DRS**	**71M6**	110	377
	4.0	890	228.93	29200	3.4	**F**	**87**	**DRS**	**71M6**	105	376
						FF	**87**	**DRS**	**71M6**	120	377
	4.0	880	225.79	18700	1.70	**FA**	**77**	**DRS**	**71M6**	60	373
	4.6	770	198.31	19100	1.95	**FAF**	**77**	**DRS**	**71M6**	66	372
	4.8	735	188.40	19200	2.0	**F**	**77**	**DRS**	**71M6**	64	371
	5.4	645	166.47	19400	2.3	**FF**	**77**	**DRS**	**71M6**	74	372
	6.4	555	142.27	19600	2.7						
	4.9	720	281.71	19200	2.1	**FA**	**77**	**DRS**	**71S4**	58	373
	5.2	670	262.93	19300	2.2	**FAF**	**77**	**DRS**	**71S4**	65	372
	6.1	575	225.79	19500	2.6	**F**	**77**	**DRS**	**71S4**	62	371
	7.0	505	198.31	19700	3.0	**FF**	**77**	**DRS**	**71S4**	73	372
	4.6	760	195.39	10800	1.05	**FA**	**67**	**DRS**	**71M6**	36	368
	5.3	665	170.85	11500	1.25	**FAF**	**67**	**DRS**	**71M6**	42	367
	5.6	630	162.31	11700	1.30	**F**	**67**	**DRS**	**71M6**	39	366
	6.4	555	142.40	12100	1.45	**FF**	**67**	**DRS**	**71M6**	45	367
	7.5	470	120.79	12500	1.75						
	6.0	585	228.99	12000	1.40						
	7.1	500	195.39	12400	1.65	**FA**	**67**	**DRS**	**71S4**	34	368
	8.1	435	170.85	12700	1.85	**FAF**	**67**	**DRS**	**71S4**	41	367
	8.5	415	162.31	12800	1.95	**F**	**67**	**DRS**	**71S4**	37	366
	9.7	360	142.40	12900	2.2	**FF**	**67**	**DRS**	**71S4**	43	367
	11	305	120.79	13000	2.6						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**5.8**	610	157.09	9100	1.00	**FA**	**57**	**DRS**	**71M6**	32	363
	6.6	530	136.16	9700	1.15	**FAF**	**57**	**DRS**	**71M6**	37	362
	7.1	495	127.27	9940	1.20	**F**	**57**	**DRS**	**71M6**	32	361
	8.2	425	110.01	10400	1.40	**FF**	**57**	**DRS**	**71M6**	38	362
	6.9	510	199.70	9850	1.15						
	7.5	470	183.60	10100	1.30						
	8.8	400	157.09	10600	1.50	**FA**	**57**	**DRS**	**71S4**	31	363
	10	345	136.16	10900	1.70	**FAF**	**57**	**DRS**	**71S4**	36	362
	11	325	127.27	11000	1.85	**F**	**57**	**DRS**	**71S4**	31	361
	13	280	110.01	11200	2.1	**FF**	**57**	**DRS**	**71S4**	37	362
	15	235	93.47	11500	2.5						
	17	210	83.46	11500	2.8						
	9.2	380	150.06	6140	1.05						
	11	330	130.07	6740	1.20						
	13	265	105.09	7320	1.50	**FA**	**47**	**DRS**	**71S4**	24	358
	15	225	89.29	7600	1.75	**FAF**	**47**	**DRS**	**71S4**	26	357
	17	200	79.72	7750	1.95	**F**	**47**	**DRS**	**71S4**	24	356
	20	174	68.09	7900	2.3	**FF**	**47**	**DRS**	**71S4**	27	357
	21	167	65.36	7930	2.4						
	16	220	86.53	3960	0.90						
	17	205	80.65	4200	0.95						
	20	180	70.50	4550	1.10						
	21	169	66.09	4680	1.20						
	24	149	58.32	4880	1.35						
	25	140	54.54	4970	1.45	**FA**	**37**	**DRS**	**71S4**	19	353
	27	132	51.70	5030	1.50	**FAF**	**37**	**DRS**	**71S4**	20	352
	29	120	47.02	5120	1.65	**F**	**37**	**DRS**	**71S4**	19	351
	31	112	43.83	5180	1.80	**FF**	**37**	**DRS**	**71S4**	21	352
	36	98	38.31	5270	2.0						
	38	92	35.91	5300	2.2						
	44	81	31.69	5300	2.5						
	49	72	28.09	5140	2.8						
	58	61	23.88	4930	3.3						
	24	145	56.62	4080	0.90						
	28	128	50.19	4010	1.00	**FA**	**27**	**DRS**	**71S4**	13	349
	30	120	46.78	3970	1.10	**FAF**	**27**	**DRS**	**71S4**	13	348
	34	105	40.89	3880	1.25	**F**	**27**	**DRS**	**71S4**	13	347
	36	98	38.33	3840	1.35	**FF**	**27**	**DRS**	**71S4**	14	348
	41	87	33.83	3750	1.50						
	47	76	29.56	3650	1.70						
	51	70	27.18	3580	1.85						
	59	60	23.25	3460	2.2						
	68	52	20.15	3340	2.5						
	73	48	18.84	3290	2.7						
	85	42	16.28	3170	3.1						
	100	35	13.84	3040	3.7						
	112	32	12.35	2950	4.1	**FA**	**27**	**DRS**	**71S4**	12	349
	131	27	10.55	2820	4.8	**FAF**	**27**	**DRS**	**71S4**	13	348
	140	25	9.88	2770	5.1	**F**	**27**	**DRS**	**71S4**	13	347
	147	24	9.40	2710	5.4	**FF**	**27**	**DRS**	**71S4**	14	348
	170	21	8.13	2600	5.9						
	200	18	6.91	2490	6.4						
	224	16	6.17	2410	6.9						
	262	14	5.27	2300	7.4						
	280	13	4.93	2250	7.6						
	332	11	4.16	2140	8.2						
	326	11	8.13	2150	11						
	384	9.2	6.91	2050	12	**FA**	**27**	**DR**	**63L2**	10	349
	430	8.2	6.17	1980	13	**FAF**	**27**	**DR**	**63L2**	11	348
	503	7.0	5.27	1890	14	**F**	**27**	**DR**	**63L2**	11	347
	537	6.6	4.93	1850	15	**FF**	**27**	**DR**	**63L2**	12	348
	638	5.5	4.16	1750	16						
0.55	**0.22**	20100	6295	93100	0.90	**FA**	**157R97**	**DRS**	**71M4**	770	401
	0.26	16800	5404	103500	1.05	**FAF**	**157R97**	**DRS**	**71M4**	830	401
	0.50	8660	2780	119000	2.1	**F**	**157R97**	**DRS**	**71M4**	790	401
						FF	**157R97**	**DRS**	**71M4**	900	401



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**0.57**	7660	2427	120000	2.4	**FA**	**157R97**	**DRS**	**71M4**	760	401
	0.82	5440	1674	120000	3.3	**FAF**	**157R97**	**DRS**	**71M4**	820	401
	1.1	4200	1308	120000	4.3	**F**	**157R97**	**DRS**	**71M4**	790	401
	1.2	3680	1169	120000	4.9	**FF**	**157R97**	**DRS**	**71M4**	890	401
	0.35	13200	3926	88100	0.90	**FA**	**127R77**	**DRS**	**71M4**	430	401
	0.40	11500	3454	90000	1.05	**FAF**	**127R77**	**DRS**	**71M4**	465	401
	0.46	10100	3031	90000	1.20	**F**	**127R77**	**DRS**	**71M4**	465	401
						FF	**127R77**	**DRS**	**71M4**	510	401
	0.58	8120	2369	48600	0.95						
	0.67	7090	2068	51400	1.10						
	0.76	6090	1826	53800	1.25						
	0.86	5450	1597	55300	1.40	**FA**	**107R77**	**DRS**	**71M4**	275	401
	0.98	4750	1401	56900	1.60	**FAF**	**107R77**	**DRS**	**71M4**	300	401
	1.1	4140	1243	58100	1.85	**F**	**107R77**	**DRS**	**71M4**	295	401
	1.3	3710	1087	59000	2.1	**FF**	**107R77**	**DRS**	**71M4**	320	401
	1.4	3170	950	60100	2.4						
	1.7	2750	834	60800	2.8						
	2.2	2140	640	61900	3.6						
	1.0	4550	1327	29100	0.95						
	1.2	4080	1171	30500	1.05						
	1.4	3570	1022	31900	1.20						
	1.5	3050	898	33200	1.40						
	1.8	2700	784	34000	1.60	**FA**	**97R57**	**DRS**	**71M4**	185	401
	2.0	2340	690	34700	1.85	**FAF**	**97R57**	**DRS**	**71M4**	210	401
	2.3	2070	605	35300	2.1	**F**	**97R57**	**DRS**	**71M4**	195	401
	2.6	1790	529	35800	2.4	**FF**	**97R57**	**DRS**	**71M4**	225	401
	3.0	1580	467	36100	2.7						
	3.4	1360	406	36500	3.2						
	3.8	1220	363	36700	3.5						
	1.6	3050	887	17400	1.00						
	1.8	2670	780	24200	1.10						
	2.0	2290	674	25500	1.30	**FA**	**87R57**	**DRS**	**71M4**	120	401
	2.3	2080	609	26200	1.45	**FAF**	**87R57**	**DRS**	**71M4**	135	401
	2.7	1760	515	27100	1.70	**F**	**87R57**	**DRS**	**71M4**	125	401
	3.0	1550	452	27700	1.95	**FF**	**87R57**	**DRS**	**71M4**	140	401
	4.0	1160	345	28600	2.6						
	2.9	1660	480	14500	0.90	**FA**	**77R37**	**DRS**	**71M4**	69	401
	3.4	1420	413	16200	1.05	**FAF**	**77R37**	**DRS**	**71M4**	76	401
	3.8	1270	367	17100	1.20	**F**	**77R37**	**DRS**	**71M4**	73	401
	4.3	1120	323	17800	1.35	**FF**	**77R37**	**DRS**	**71M4**	83	401
	5.4	890	257	9610	0.90	**FA**	**67R37**	**DRS**	**71M4**	47	401
	6.0	790	231	10500	1.05	**FAF**	**67R37**	**DRS**	**71M4**	53	401
	6.7	705	205	11200	1.15	**F**	**67R37**	**DRS**	**71M4**	50	401
	7.9	600	175	11900	1.35	**FF**	**67R37**	**DRS**	**71M4**	56	401
	3.4	1550	270.68	27700	1.95						
	3.6	1460	255.37	27900	2.0	**FA**	**87**	**DRS**	**80S6**	100	378
	4.0	1310	228.93	28300	2.3	**FAF**	**87**	**DRS**	**80S6**	115	377
	4.6	1130	197.20	28700	2.6	**F**	**87**	**DRS**	**80S6**	105	376
	5.1	1030	179.97	28900	2.9	**FF**	**87**	**DRS**	**80S6**	120	377
	4.0	1290	225.79	17000	1.15	**FA**	**77**	**DRS**	**80S6**	62	373
	4.6	1130	198.31	17700	1.30	**FAF**	**77**	**DRS**	**80S6**	69	372
	4.9	1080	188.40	18000	1.40	**F**	**77**	**DRS**	**80S6**	66	371
						FF	**77**	**DRS**	**80S6**	77	372
	5.5	950	166.47	18500	1.55	**FA**	**77**	**DRS**	**80S6**	62	373
	6.4	810	142.27	18900	1.85	**FAF**	**77**	**DRS**	**80S6**	69	372
	7.0	745	130.42	19100	2.0	**F**	**77**	**DRS**	**80S6**	66	371
						FF	**77**	**DRS**	**80S6**	77	372
	6.1	850	225.79	18800	1.75						
	7.0	750	198.31	19100	2.00						
	7.3	715	188.40	19200	2.1						
	8.3	630	166.47	19400	2.4	**FA**	**77**	**DRS**	**71M4**	60	373
	9.7	540	142.27	19600	2.8	**FAF**	**77**	**DRS**	**71M4**	66	372
	11	495	130.42	19700	3.0	**F**	**77**	**DRS**	**71M4**	64	371
	12	435	114.45	19800	3.4	**FF**	**77**	**DRS**	**71M4**	74	372
	13	410	108.46*	19800	3.6						
	15	360	94.93	19900	4.2						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**7.1**	740	195.39	10900	1.10						
	8.1	650	170.85	11600	1.25						
	8.5	615	162.31	11800	1.35						
	9.7	540	142.40	12200	1.50	**FA**	**67**	**DRS**	**71M4**	36	368
	11	455	120.79	12600	1.80	**FAF**	**67**	**DRS**	**71M4**	42	367
	13	415	109.04	12800	2.00	**F**	**67**	**DRS**	**71M4**	39	366
	14	365	95.94	12900	2.2	**FF**	**67**	**DRS**	**71M4**	45	367
	15	340	90.59	13000	2.4						
	17	300	79.76	13000	2.7						
	8.8	595	157.09	9220	1.00						
	10	515	136.16	9800	1.15						
	11	480	127.27	10000	1.25						
	13	415	110.01	10500	1.45	**FA**	**57**	**DRS**	**71M4**	32	363
	15	355	93.47	10800	1.70	**FAF**	**57**	**DRS**	**71M4**	37	362
	17	315	83.46	11000	1.90	**F**	**57**	**DRS**	**71M4**	32	361
	19	275	72.98	11300	2.2	**FF**	**57**	**DRS**	**71M4**	38	362
	20	255	68.22	11400	2.3						
	23	220	58.97	11500	2.7						
	13	395	105.09	5920	1.00						
	15	335	89.29	6670	1.20						
	17	300	79.72	7030	1.30	**FA**	**47**	**DRS**	**71M4**	25	358
	20	255	68.09	7390	1.55	**FAF**	**47**	**DRS**	**71M4**	27	357
	21	245	65.36	7470	1.60	**F**	**47**	**DRS**	**71M4**	25	356
	24	215	56.49	7690	1.85	**FF**	**47**	**DRS**	**71M4**	29	357
	29	183	48.00*	7860	2.2						
	32	163	42.86	7950	2.4						
	24	220	58.32	3950	0.90						
	25	205	54.54	4180	0.95						
	27	197	51.70	4340	1.00						
	29	179	47.02	4570	1.10	**FA**	**37**	**DRS**	**71M4**	20	353
	31	167	43.83	4710	1.20	**FAF**	**37**	**DRS**	**71M4**	21	352
	36	146	38.31	4920	1.35	**F**	**37**	**DRS**	**71M4**	20	351
	38	137	35.91	5000	1.45	**FF**	**37**	**DRS**	**71M4**	22	352
	44	121	31.69	4980	1.65						
	49	107	28.09	4860	1.85						
	58	91	23.88	4680	2.2						
	58	90	23.63	4670	2.2						
	67	78	20.57	4520	2.6	**FA**	**37**	**DRS**	**71M4**	20	353
	72	73	19.27	4450	2.7	**FAF**	**37**	**DRS**	**71M4**	21	352
	81	65	17.03	4320	3.1	**F**	**37**	**DRS**	**71M4**	20	351
	96	54	14.33	4130	3.7	**FF**	**37**	**DRS**	**71M4**	22	352
	36	144	77.21	3410	0.90						
	39	135	72.37	3390	0.95	**FA**	**27**	**DRS**	**71M2**	14	349
	44	119	63.86	3350	1.10	**FAF**	**27**	**DRS**	**71M2**	14	348
	50	106	56.62	3290	1.25	**F**	**27**	**DRS**	**71M2**	14	347
	56	94	50.19	3230	1.40	**FF**	**27**	**DRS**	**71M2**	15	348
	59	88	23.25	3200	1.45						
	68	77	20.15	3120	1.70						
	73	72	18.84	3080	1.80						
	85	62	16.28	2990	2.1						
	100	53	13.84	2890	2.5						
	112	47	12.35	2810	2.8						
	131	40	10.55	2710	3.2	**FA**	**27**	**DRS**	**71M4**	13	349
	140	38	9.88	2660	3.5	**FAF**	**27**	**DRS**	**71M4**	14	348
	147	36	9.40	2600	3.6	**F**	**27**	**DRS**	**71M4**	14	347
	170	31	8.13	2500	4.0	**FF**	**27**	**DRS**	**71M4**	15	348
	200	26	6.91	2400	4.3						
	224	24	6.17	2330	4.6						
	262	20	5.27	2230	5.0						
	280	19	4.93	2190	5.1						
	332	16	4.16	2090	5.5						
	346	15	8.13	2070	8.1						
	407	13	6.91	1970	8.8	**FA**	**27**	**DRS**	**71M2**	13	349
	456	12	6.17	1910	9.5	**FAF**	**27**	**DRS**	**71M2**	14	348
	533	9.8	5.27	1820	10	**F**	**27**	**DRS**	**71M2**	14	347
	570	9.2	4.93	1790	10	**FF**	**27**	**DRS**	**71M2**	15	348
	676	7.8	4.16	1700	11						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75						**FA**	**157R97**	**DRS**	**80S4**	770	401
	0.51	11900	2780	114200	1.50	**FAF**	**157R97**	**DRS**	**80S4**	830	401
						F	**157R97**	**DRS**	**80S4**	790	401
						FF	**157R97**	**DRS**	**80S4**	900	401
	0.58	10500	2427	116400	1.70	**FA**	**157R97**	**DRS**	**80S4**	770	401
	0.84	7450	1674	120000	2.4	**FAF**	**157R97**	**DRS**	**80S4**	830	401
	1.1	5760	1308	120000	3.1	**F**	**157R97**	**DRS**	**80S4**	790	401
	1.2	5080	1169	120000	3.5	**FF**	**157R97**	**DRS**	**80S4**	890	401
						FA	**127R77**	**DRS**	**80S4**	430	401
	0.47	13700	3031	87100	0.90	**FAF**	**127R77**	**DRS**	**80S4**	470	401
						F	**127R77**	**DRS**	**80S4**	470	401
						FF	**127R77**	**DRS**	**80S4**	510	401
	0.53	12300	2672	89700	0.95						
	0.60	10800	2357	90000	1.10	**FA**	**127R77**	**DRS**	**80S4**	430	401
	0.69	9320	2038	90000	1.30	**FAF**	**127R77**	**DRS**	**80S4**	470	401
	0.79	8110	1784	90000	1.50	**F**	**127R77**	**DRS**	**80S4**	465	401
	0.88	7280	1606	90000	1.65	**FF**	**127R77**	**DRS**	**80S4**	510	401
	0.77	8280	1826	48200	0.95						
	0.88	7360	1597	50600	1.05						
	1.0	6420	1401	53000	1.20						
	1.1	5630	1243	54900	1.35	**FA**	**107R77**	**DRS**	**80S4**	280	401
	1.3	5010	1087	56300	1.55	**FAF**	**107R77**	**DRS**	**80S4**	300	401
	1.5	4300	950	57800	1.80	**F**	**107R77**	**DRS**	**80S4**	295	401
	1.7	3750	834	58900	2.0	**FF**	**107R77**	**DRS**	**80S4**	325	401
	2.2	2910	640	60500	2.6						
	3.2	1980	436	62200	3.9						
	1.4	4790	1022	23200	0.90						
	1.6	4130	898	30400	1.05						
	1.8	3640	784	31700	1.20						
	2.0	3170	690	32900	1.35	**FA**	**97R57**	**DRS**	**80S4**	190	401
	2.3	2790	605	33800	1.55	**FAF**	**97R57**	**DRS**	**80S4**	210	401
	2.7	2430	529	34600	1.75	**F**	**97R57**	**DRS**	**80S4**	195	401
	3.0	2140	467	35100	2.0	**FF**	**97R57**	**DRS**	**80S4**	230	401
	3.5	1850	406	35700	2.3						
	3.9	1650	363	36000	2.6						
	2.1	3100	674	15400	0.95						
	2.3	2810	609	23600	1.05	**FA**	**87R57**	**DRS**	**80S4**	125	401
	2.7	2380	515	25200	1.25	**FAF**	**87R57**	**DRS**	**80S4**	135	401
	3.1	2090	452	26200	1.45	**F**	**87R57**	**DRS**	**80S4**	130	401
	4.1	1570	345	27600	1.90	**FF**	**87R57**	**DRS**	**80S4**	145	401
						FA	**77R37**	**DRS**	**80S4**	71	401
	3.8	1710	367	14100	0.90	**FAF**	**77R37**	**DRS**	**80S4**	78	401
	4.4	1510	323	15600	1.00	**F**	**77R37**	**DRS**	**80S4**	75	401
	5.0	1300	280	16900	1.15	**FF**	**77R37**	**DRS**	**80S4**	86	401
						FA	**97**	**DRS**	**80M6**	170	383
	3.3	2160	276.77	35100	2.00	**FAF**	**97**	**DRS**	**80M6**	190	382
	3.6	1980	253.41	35400	2.2	**F**	**97**	**DRS**	**80M6**	175	381
	4.1	1750	223.88	35800	2.4	**FF**	**97**	**DRS**	**80M6**	210	382
	3.4	2110	270.68	26100	1.40	**FA**	**87**	**DRS**	**80M6**	105	378
	3.6	1990	255.37	26400	1.50	**FAF**	**87**	**DRS**	**80M6**	115	377
	4.0	1790	228.93	27000	1.65	**F**	**87**	**DRS**	**80M6**	110	376
	4.6	1540	197.20	27700	1.95	**FF**	**87**	**DRS**	**80M6**	125	377
						FA	**87**	**DRS**	**80M6**	105	378
	5.1	1400	179.97	28000	2.1	**FAF**	**87**	**DRS**	**80M6**	115	377
	5.7	1240	159.61	28400	2.4	**F**	**87**	**DRS**	**80M6**	110	376
						FF	**87**	**DRS**	**80M6**	125	377
						FA	**87**	**DRS**	**80S4**	100	378
	5.2	1370	270.68	28100	2.2	**FAF**	**87**	**DRS**	**80S4**	115	377
	5.5	1290	255.37	28300	2.3	**F**	**87**	**DRS**	**80S4**	105	376
	6.2	1160	228.93	28600	2.6	**FF**	**87**	**DRS**	**80S4**	120	377
	4.6	1550	198.31	15400	0.95	**FA**	**77**	**DRS**	**80M6**	65	373
	4.9	1470	188.40	15900	1.00	**FAF**	**77**	**DRS**	**80M6**	71	372
	5.5	1300	166.47	16900	1.15	**F**	**77**	**DRS**	**80M6**	69	371
	6.4	1110	142.27	17800	1.35	**FF**	**77**	**DRS**	**80M6**	79	372
						FA	**77**	**DRS**	**80M6**	65	373
	7.0	1020	130.42	18200	1.45	**FAF**	**77**	**DRS**	**80M6**	71	372
						F	**77**	**DRS**	**80M6**	69	371
						FF	**77**	**DRS**	**80M6**	79	372

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**6.2**	1140	225.79	17700	1.30	**FA**	**77**	**DRS**	**80S4**	62	373
	7.1	1000	198.31	18300	1.50	**FAF**	**77**	**DRS**	**80S4**	69	372
	7.5	950	188.40	18500	1.55	**F**	**77**	**DRS**	**80S4**	66	371
						FF	**77**	**DRS**	**80S4**	77	372
	8.5	840	166.47	18800	1.75						
	9.9	720	142.27	19200	2.1	**FA**	**77**	**DRS**	**80S4**	62	373
	11	660	130.42	19400	2.3	**FAF**	**77**	**DRS**	**80S4**	69	372
	12	580	114.45	19500	2.6	**F**	**77**	**DRS**	**80S4**	66	371
	13	550	108.46*	19600	2.7	**FF**	**77**	**DRS**	**80S4**	77	372
	8.2	860	170.85	9860	0.95	**FA**	**67**	**DRS**	**80S4**	38	368
	8.7	820	162.31	10300	1.00	**FAF**	**67**	**DRS**	**80S4**	44	367
	9.9	720	142.40	11100	1.15	**F**	**67**	**DRS**	**80S4**	41	366
	12	610	120.79	11800	1.35	**FF**	**67**	**DRS**	**80S4**	47	367
	13	550	109.04	12100	1.50						
	15	485	95.94	12500	1.70	**FA**	**67**	**DRS**	**80S4**	38	368
	16	460	90.59	12600	1.80	**FAF**	**67**	**DRS**	**80S4**	44	367
	18	405	79.76	12800	2.0	**F**	**67**	**DRS**	**80S4**	41	366
	21	340	67.65	13000	2.4	**FF**	**67**	**DRS**	**80S4**	47	367
	23	310	61.07	13000	2.6						
	11	645	127.27	6790	0.95						
	13	555	110.01	9510	1.05						
	15	470	93.47	10100	1.25						
	17	420	83.46	10400	1.40	**FA**	**57**	**DRS**	**80S4**	34	363
	19	370	72.98	10700	1.60	**FAF**	**57**	**DRS**	**80S4**	40	362
	21	345	68.22	10900	1.75	**F**	**57**	**DRS**	**80S4**	34	361
	24	295	58.97	11100	2.0	**FF**	**57**	**DRS**	**80S4**	41	362
	28	250	50.10	11400	2.4						
	32	225	44.73	11300	2.6						
	18	400	79.72	5850	1.00	**FA**	**47**	**DRS**	**80S4**	27	358
	21	345	68.09	6600	1.15	**FAF**	**47**	**DRS**	**80S4**	30	357
	22	330	65.36	6750	1.20	**F**	**47**	**DRS**	**80S4**	28	356
						FF	**47**	**DRS**	**80S4**	31	357
	25	285	56.49	7170	1.40						
	29	240	48.00*	7500	1.65	**FA**	**47**	**DRS**	**80S4**	27	358
	33	215	42.86	7670	1.85	**FAF**	**47**	**DRS**	**80S4**	30	357
	39	186	36.61	7840	2.2	**F**	**47**	**DRS**	**80S4**	28	356
	41	174	34.29	7810	2.3	**FF**	**47**	**DRS**	**80S4**	31	357
	49	147	28.88	7500	2.7						
	30	235	47.02	3640	0.85						
	32	220	43.83	3940	0.90	**FA**	**37**	**DRS**	**80S4**	22	353
	37	195	38.31	4370	1.05	**FAF**	**37**	**DRS**	**80S4**	24	352
	39	182	35.91	4530	1.10	**F**	**37**	**DRS**	**80S4**	22	351
	44	161	31.69	4600	1.25	**FF**	**37**	**DRS**	**80S4**	24	352
	50	143	28.09	4520	1.40						
	60	120	23.63	4390	1.65						
	69	104	20.57	4270	1.90	**FA**	**37**	**DRS**	**80S4**	22	353
	73	98	19.27	4220	2.0	**FAF**	**37**	**DRS**	**80S4**	23	352
	83	86	17.03	4110	2.3	**F**	**37**	**DRS**	**80S4**	22	351
	98	73	14.33	3950	2.8	**FF**	**37**	**DRS**	**80S4**	24	352
	110	65	12.87	3850	3.1						
	61	118	23.25	2910	1.10						
	70	102	20.15	2870	1.25						
	75	96	18.84	2840	1.35						
	87	83	16.28	2780	1.55						
	102	70	13.84	2710	1.85						
	114	63	12.35	2650	2.1						
	134	54	10.55	2570	2.4	**FA**	**27**	**DRS**	**80S4**	16	349
	143	50	9.88	2530	2.6	**FAF**	**27**	**DRS**	**80S4**	16	348
	150	48	9.40	2460	2.7	**F**	**27**	**DRS**	**80S4**	16	347
	173	41	8.13	2380	3.0	**FF**	**27**	**DRS**	**80S4**	17	348
	204	35	6.91	2300	3.2						
	229	31	6.17	2240	3.5						
	268	27	5.27	2150	3.7						
	286	25	4.93	2120	3.8						
	339	21	4.16	2020	4.1						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
0.75	**344**	21	8.13	2010	5.9						
	405	18	6.91	1930	6.4	**FA**	**27**	**DRS**	**80S2**	16	349
	454	16	6.17	1870	6.9	**FAF**	**27**	**DRS**	**80S2**	16	348
	532	14	5.27	1790	7.4	**F**	**27**	**DRS**	**80S2**	16	347
	568	13	4.93	1750	7.6	**FF**	**27**	**DRS**	**80S2**	17	348
	674	11	4.16	1670	8.2						
1.1						**FA**	**157R97**	**DRS**	**80M4**	770	401
	0.51	18000	2780	100000	1.00	**FAF**	**157R97**	**DRS**	**80M4**	830	401
						F	**157R97**	**DRS**	**80M4**	790	401
						FF	**157R97**	**DRS**	**80M4**	900	401
	0.58	15900	2427	105800	1.15						
	0.65	14200	2185	109800	1.25						
	0.73	12600	1944	112900	1.40						
	0.84	11100	1674	115500	1.60	**FA**	**157R97**	**DRS**	**80M4**	770	401
	1.1	8680	1308	119000	2.1	**FAF**	**157R97**	**DRS**	**80M4**	830	401
	1.2	7690	1169	120000	2.3	**F**	**157R97**	**DRS**	**80M4**	790	401
	1.5	6150	953	120000	2.9	**FF**	**157R97**	**DRS**	**80M4**	900	401
	1.7	5380	845	120000	3.4						
	3.2	2840	446	120000	6.3						
	4.7	1920	302	120000	9.4						
	0.69	13800	2038	86800	0.85						
	0.79	12000	1784	90000	1.00	**FA**	**127R77**	**DRS**	**80M4**	435	401
	0.88	10800	1606	90000	1.10	**FAF**	**127R77**	**DRS**	**80M4**	470	401
	1.0	9400	1390	90000	1.30	**F**	**127R77**	**DRS**	**80M4**	470	401
	1.2	8210	1220	90000	1.45	**FF**	**127R77**	**DRS**	**80M4**	510	401
	1.3	7300	1077	90000	1.65						
	1.1	8410	1243	47800	0.90						
	1.3	7430	1087	50400	1.05	**FA**	**107R77**	**DRS**	**80M4**	280	401
	1.5	6420	950	53000	1.20	**FAF**	**107R77**	**DRS**	**80M4**	305	401
	1.7	5610	834	54900	1.35	**F**	**107R77**	**DRS**	**80M4**	300	401
	1.9	4930	736	56500	1.55	**FF**	**107R77**	**DRS**	**80M4**	325	401
	2.2	4340	640	57700	1.75						
	2.0	4710	690	26300	0.90						
	2.3	4140	605	30400	1.05	**FA**	**97R57**	**DRS**	**80M4**	190	401
	2.7	3610	529	31800	1.20	**FAF**	**97R57**	**DRS**	**80M4**	215	401
	3.0	3190	467	32900	1.35	**F**	**97R57**	**DRS**	**80M4**	200	401
	3.5	2750	406	33900	1.55	**FF**	**97R57**	**DRS**	**80M4**	230	401
	3.9	2460	363	34500	1.75						
	3.1	3100	452	15300	0.95	**FA**	**87R57**	**DRS**	**80M4**	125	401
	4.1	2340	345	25300	1.30	**FAF**	**87R57**	**DRS**	**80M4**	140	401
	4.7	2030	300	26300	1.45	**F**	**87R57**	**DRS**	**80M4**	130	401
	5.7	1680	249	27300	1.80	**FF**	**87R57**	**DRS**	**80M4**	145	401
	3.4	3120	276.77	33000	1.40						
	3.7	2860	253.41	33600	1.50	**FA**	**97**	**DRS**	**90L6**	175	383
	4.2	2520	223.88	34400	1.70	**FAF**	**97**	**DRS**	**90L6**	195	382
	4.9	2140	189.92	35100	2.0	**F**	**97**	**DRS**	**90L6**	180	381
	5.3	1970	174.87	35400	2.2	**FF**	**97**	**DRS**	**90L6**	215	382
	5.1	2060	276.77	35300	2.1	**FA**	**97**	**DRS**	**80M4**	170	383
	5.6	1880	253.41	35600	2.3	**FAF**	**97**	**DRS**	**80M4**	190	382
	6.3	1660	223.88	36000	2.6	**F**	**97**	**DRS**	**80M4**	175	381
						FF	**97**	**DRS**	**80M4**	210	382
	4.1	2580	228.93	24500	1.15	**FA**	**87**	**DRS**	**90L6**	110	378
	4.7	2220	197.20	25700	1.35	**FAF**	**87**	**DRS**	**90L6**	125	377
	5.2	2030	179.97	26300	1.50	**F**	**87**	**DRS**	**90L6**	115	376
	5.8	1800	159.61	27000	1.65	**FF**	**87**	**DRS**	**90L6**	130	377
	5.2	2010	270.68	26400	1.50	**FA**	**87**	**DRS**	**80M4**	105	378
	5.5	1900	255.37	26700	1.60	**FAF**	**87**	**DRS**	**80M4**	115	377
	6.2	1700	228.93	27300	1.75	**F**	**87**	**DRS**	**80M4**	110	376
	7.2	1460	197.20	27900	2.0	**FF**	**87**	**DRS**	**80M4**	125	377
	7.8	1340	179.97	28200	2.2	**FA**	**87**	**DRS**	**80M4**	105	378
	8.8	1180	159.61	28600	2.5	**FAF**	**87**	**DRS**	**80M4**	115	377
	11	990	134.16	29000	3.0	**F**	**87**	**DRS**	**80M4**	110	376
	11	910	123.29	29100	3.3	**FF**	**87**	**DRS**	**80M4**	125	377
	7.1	1470	198.31	15900	1.00	**FA**	**77**	**DRS**	**80M4**	65	373
	7.5	1400	188.40	16300	1.05	**FAF**	**77**	**DRS**	**80M4**	71	372
	8.5	1240	166.47	17200	1.20	**F**	**77**	**DRS**	**80M4**	69	371
	9.9	1050	142.27	18100	1.40	**FF**	**77**	**DRS**	**80M4**	79	372

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	11	970	130.42	18400	1.55						
	12	850	114.45	18800	1.75	FA	77	DRS	80M4	65	373
	13	800	108.46*	19000	1.85	FAF	77	DRS	80M4	71	372
	15	705	94.93	19200	2.1	F	77	DRS	80M4	69	371
	16	635	85.52	19400	2.4	FF	77	DRS	80M4	79	372
	19	555	75.02	19600	2.7						
						FA	67	DRS	80M4	41	368
	12	890	120.79	9530	0.90	FAF	67	DRS	80M4	47	367
						F	67	DRS	80M4	44	366
						FF	67	DRS	80M4	50	367
	13	810	109.04	10400	1.00						
	15	710	95.94	11200	1.15						
	16	670	90.59	11400	1.20						
	18	590	79.76	11900	1.40						
	21	500	67.65	12400	1.65	FA	67	DRS	80M4	41	368
	23	455	61.07	12600	1.80	FAF	67	DRS	80M4	47	367
	26	400	53.73	12800	2.0	F	67	DRS	80M4	44	366
	28	375	50.74	12900	2.2	FF	67	DRS	80M4	50	367
	33	320	43.20	13000	2.6						
	36	290	39.26	13000	2.7						
	41	250	34.01	13000	2.9						
	17	620	83.46	8780	0.95						
	19	540	72.98	9620	1.10						
	21	505	68.22	9870	1.20						
	24	435	58.97	10300	1.35	FA	57	DRS	80M4	37	363
	28	370	50.10	10700	1.60	FAF	57	DRS	80M4	42	362
	32	330	44.73	10700	1.80	F	57	DRS	80M4	37	361
	37	280	38.21	10400	2.1	FF	57	DRS	80M4	43	362
	39	265	35.79	10200	2.2						
	47	220	30.15	9790	2.6						
						FA	47	DRS	80M4	30	358
	25	420	56.49	4180	0.95	FAF	47	DRS	80M4	32	357
	29	355	48.00*	6470	1.10	F	47	DRS	80M4	30	356
						FF	47	DRS	80M4	33	357
	33	315	42.86	6880	1.25	FA	47	DRS	80M4	30	358
	39	270	36.61	7290	1.45	FAF	47	DRS	80M4	32	357
	41	255	34.29	7260	1.55	F	47	DRS	80M4	30	356
	49	215	28.88	7030	1.85	FF	47	DRS	80M4	33	357
	46	225	30.86	7120	1.75						
	48	215	29.32	7050	1.85	FA	47	DRS	80M4	29	358
	55	192	25.72	6870	2.1	FAF	47	DRS	80M4	32	357
	65	162	21.82	6630	2.5	F	47	DRS	80M4	30	356
	72	147	19.70	6480	2.7	FF	47	DRS	80M4	33	357
						FA	37	DRS	80M4	25	353
	44	235	31.69	3690	0.85	FAF	37	DRS	80M4	26	352
	50	205	28.09	3970	0.95	F	37	DRS	80M4	25	351
	59	178	23.88	3930	1.10	FF	37	DRS	80M4	27	352
	69	153	20.57	3870	1.30						
	73	144	19.27	3840	1.40						
	83	127	17.03	3780	1.60	FA	37	DRS	80M4	25	353
	98	107	14.33	3670	1.85	FAF	37	DRS	80M4	26	352
	110	96	12.87	3600	2.1	F	37	DRS	80M4	25	351
	127	83	11.08	3500	2.3	FF	37	DRS	80M4	27	352
	135	78	10.42	3450	2.4						
	157	67	8.97	3340	2.6						
	70	150	20.15	2440	0.85						
	75	140	18.84	2440	0.95						
	87	121	16.28	2440	1.05						
	102	103	13.84	2420	1.25						
	114	92	12.35	2390	1.40						
	134	79	10.55	2340	1.65	FA	27	DRS	80M4	18	349
	143	74	9.88	2320	1.75	FAF	27	DRS	80M4	19	348
	150	70	9.40	2240	1.85	F	27	DRS	80M4	19	347
	173	61	8.13	2190	2.0	FF	27	DRS	80M4	20	348
	204	52	6.91	2140	2.2						
	229	46	6.17	2090	2.4						
	268	39	5.27	2030	2.6						
	286	37	4.93	2000	2.6						
	339	31	4.16	1920	2.8						



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**349**	30	8.13	1910	4.1						
	411	26	6.91	1840	4.5	**FA**	**27**	**DRS**	**80M2**	18	349
	461	23	6.17	1790	4.8	**FAF**	**27**	**DRS**	**80M2**	19	348
	539	20	5.27	1720	5.1	**F**	**27**	**DRS**	**80M2**	19	347
	576	18	4.93	1690	5.3	**FF**	**27**	**DRS**	**80M2**	20	348
	683	15	4.16	1620	5.6						
1.5	**0.58**	22300	2427	79500	0.80						
	0.64	19900	2185	93900	0.90						
	0.72	17700	1944	100900	1.00						
	0.84	15500	1674	106800	1.15	**FA**	**157R97**	**DRS**	**90M4**	770	401
	1.1	12100	1308	113900	1.50	**FAF**	**157R97**	**DRS**	**90M4**	830	401
	1.2	10700	1169	116200	1.65	**F**	**157R97**	**DRS**	**90M4**	790	401
	1.5	8650	953	119000	2.1	**FF**	**157R97**	**DRS**	**90M4**	900	401
	1.7	7590	845	120000	2.4						
	3.1	4010	446	120000	4.5						
	4.6	2710	302	120000	6.6						
	0.87	15000	1606	84400	0.80						
	1.0	13000	1390	88400	0.90						
	1.2	11400	1220	90000	1.05	**FA**	**127R77**	**DRS**	**90M4**	435	401
	1.3	10100	1077	90000	1.20	**FAF**	**127R77**	**DRS**	**90M4**	475	401
	1.5	8690	930	90000	1.40	**F**	**127R77**	**DRS**	**90M4**	475	401
	1.7	7650	820	90000	1.55	**FF**	**127R77**	**DRS**	**90M4**	520	401
	1.9	6760	727	90000	1.75						
	2.2	6090	648	90000	1.95						
	1.5	8910	950	46400	0.85						
	1.7	7790	834	49500	1.00						
	1.9	6860	736	51900	1.10	**FA**	**107R77**	**DRS**	**90M4**	285	401
	2.2	6020	640	54000	1.30	**FAF**	**107R77**	**DRS**	**90M4**	305	401
	2.5	5210	560	55800	1.45	**F**	**107R77**	**DRS**	**90M4**	305	401
	2.9	4540	489	57300	1.70	**FF**	**107R77**	**DRS**	**90M4**	330	401
	3.2	4090	436	58200	1.85						
	3.8	3470	370	59500	2.2						
	2.6	4990	529	13100	0.85	**FA**	**97R57**	**DRS**	**90M4**	195	401
	3.0	4410	467	29600	0.95	**FAF**	**97R57**	**DRS**	**90M4**	220	401
	3.5	3810	406	31300	1.15	**F**	**97R57**	**DRS**	**90M4**	205	401
	3.8	3420	363	32300	1.25	**FF**	**97R57**	**DRS**	**90M4**	235	401
						FA	**87R57**	**DRS**	**90M4**	130	401
	4.7	2820	300	23600	1.05	**FAF**	**87R57**	**DRS**	**90M4**	145	401
	5.6	2340	249	25400	1.30	**F**	**87R57**	**DRS**	**90M4**	135	401
						FF	**87R57**	**DRS**	**90M4**	150	401
	3.6	3930	254.40*	58600	1.95	**FA**	**107**	**DRS**	**100M6**	255	388
	4.3	3330	215.37	59700	2.3	**FAF**	**107**	**DRS**	**100M6**	275	387
	4.6	3080	199.31	60200	2.5	**F**	**107**	**DRS**	**100M6**	270	386
	5.2	2760	178.64	60800	2.8	**FF**	**107**	**DRS**	**100M6**	300	387
	3.3	4280	276.77	29900	1.00						
	3.6	3920	253.41	31000	1.10	**FA**	**97**	**DRS**	**100M6**	180	383
	4.1	3460	223.88	32200	1.25	**FAF**	**97**	**DRS**	**100M6**	200	382
	4.9	2940	189.92	33400	1.45	**F**	**97**	**DRS**	**100M6**	185	381
	5.3	2700	174.87	34000	1.60	**FF**	**97**	**DRS**	**100M6**	220	382
	5.1	2830	276.77	33700	1.50						
	5.5	2590	253.41	34200	1.65	**FA**	**97**	**DRS**	**90M4**	170	383
	6.2	2290	223.88	34800	1.90	**FAF**	**97**	**DRS**	**90M4**	195	382
	7.4	1940	189.92	35500	2.2	**F**	**97**	**DRS**	**90M4**	180	381
	8.0	1780	174.87	35800	2.4	**FF**	**97**	**DRS**	**90M4**	210	382
	5.2	2760	270.68	23800	1.10	**FA**	**87**	**DRS**	**90M4**	110	378
	5.5	2610	255.37	24400	1.15	**FAF**	**87**	**DRS**	**90M4**	120	377
	6.1	2340	228.93	25400	1.30	**F**	**87**	**DRS**	**90M4**	115	376
	7.1	2010	197.20	26400	1.50	**FF**	**87**	**DRS**	**90M4**	130	377
	7.8	1840	179.97	26900	1.65						
	8.8	1630	159.61	27500	1.85	**FA**	**87**	**DRS**	**90M4**	110	378
	10	1370	134.16	28100	2.2	**FAF**	**87**	**DRS**	**90M4**	120	377
	13	1120	109.49	28700	2.7	**F**	**87**	**DRS**	**90M4**	115	376
	14	1000	97.89	29000	3.0	**FF**	**87**	**DRS**	**90M4**	130	377
	8.4	1700	166.47	14200	0.90	**FA**	**77**	**DRS**	**90M4**	69	373
	9.8	1450	142.27	16000	1.05	**FAF**	**77**	**DRS**	**90M4**	75	372
	11	1330	130.42	16700	1.10	**F**	**77**	**DRS**	**90M4**	72	371
	12	1170	114.45	17600	1.30	**FF**	**77**	**DRS**	**90M4**	83	372



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**13**	1100	108.46*	17900	1.35						
	15	970	94.93	18400	1.55						
	16	870	85.52	18800	1.70						
	19	765	75.02	19100	1.95						
	19	740	72.50	19200	2.0	**FA**	**77**	**DRS**	**90M4**	69	373
	21	680	66.46	19300	2.2	**FAF**	**77**	**DRS**	**90M4**	75	372
	24	595	58.32	19500	2.5	**F**	**77**	**DRS**	**90M4**	72	371
	25	565	55.27	19600	2.6	**FF**	**77**	**DRS**	**90M4**	83	372
	29	490	48.37	19700	3.0						
	32	445	43.58	19800	3.4						
	37	390	38.23	19900	3.8						
						FA	**77**	**DRS**	**90M4**	67	373
	38	370	36.58	19900	3.0	**FAF**	**77**	**DRS**	**90M4**	74	372
	44	320	31.51	20000	4.3	**F**	**77**	**DRS**	**90M4**	71	371
						FF	**77**	**DRS**	**90M4**	82	372
	15	920	90.59	9230	0.90						
	18	810	79.76	10300	1.00						
	21	690	67.65	11300	1.20	**FA**	**67**	**DRS**	**90M4**	46	368
	23	620	61.07	11800	1.30	**FAF**	**67**	**DRS**	**90M4**	52	367
	26	545	53.73	12200	1.50	**F**	**67**	**DRS**	**90M4**	48	366
	28	515	50.74	12300	1.60	**FF**	**67**	**DRS**	**90M4**	55	367
	32	440	43.20	12700	1.85						
	36	400	39.26	12800	1.95						
	39	370	36.30	12900	2.2	**FA**	**67**	**DRS**	**90M4**	44	368
	44	325	32.08	13000	2.5	**FAF**	**67**	**DRS**	**90M4**	51	367
	51	280	27.41	13000	2.9	**F**	**67**	**DRS**	**90M4**	47	366
	56	255	25.13	13000	3.2	**FF**	**67**	**DRS**	**90M4**	53	367
	24	600	58.97	9180	1.00						
	28	510	50.10	9840	1.15	**FA**	**57**	**DRS**	**90M4**	42	363
	31	455	44.73	10000	1.30	**FAF**	**57**	**DRS**	**90M4**	47	362
	37	390	38.21	9750	1.55	**F**	**57**	**DRS**	**90M4**	42	361
	39	365	35.79	9640	1.65	**FF**	**57**	**DRS**	**90M4**	48	362
	46	305	30.15	9320	1.90						
						FA	**47**	**DRS**	**90M4**	34	358
	38	370	36.61	6260	1.05	**FAF**	**47**	**DRS**	**90M4**	37	357
	41	350	34.29	6550	1.15	**F**	**47**	**DRS**	**90M4**	35	356
	48	295	28.88	6500	1.35	**FF**	**47**	**DRS**	**90M4**	38	357
	45	315	30.86	6550	1.25						
	48	300	29.32	6510	1.35						
	54	260	25.72	6400	1.50	**FA**	**47**	**DRS**	**90M4**	33	358
	64	220	21.82	6230	1.80	**FAF**	**47**	**DRS**	**90M4**	36	357
	71	200	19.70	6120	2.00	**F**	**47**	**DRS**	**90M4**	34	356
	81	177	17.33	5970	2.3	**FF**	**47**	**DRS**	**90M4**	37	357
	86	167	16.36	5910	2.4						
	100	143	13.93	5710	2.8						
	68	210	20.57	3410	0.95						
	73	197	19.27	3410	1.00						
	82	174	17.03	3400	1.15						
	98	147	14.33	3350	1.35	**FA**	**37**	**DRS**	**90M4**	29	353
	109	132	12.87	3320	1.50	**FAF**	**37**	**DRS**	**90M4**	30	352
	126	113	11.08	3250	1.70	**F**	**37**	**DRS**	**90M4**	29	351
	134	107	10.42	3220	1.75	**FF**	**37**	**DRS**	**90M4**	31	352
	156	92	8.97	3150	1.90						
	175	82	8.01	3080	2.1						
	101	142	13.84	2080	0.90						
	113	126	12.35	2090	1.05						
	133	108	10.55	2090	1.20						
	142	101	9.88	2090	1.30						
	149	96	9.40	1990	1.35	**FA**	**27**	**DRS**	**90M4**	23	349
	172	83	8.13	1980	1.50	**FAF**	**27**	**DRS**	**90M4**	23	348
	203	71	6.91	1950	1.60	**F**	**27**	**DRS**	**90M4**	23	347
	227	63	6.17	1930	1.75	**FF**	**27**	**DRS**	**90M4**	24	348
	266	54	5.27	1890	1.85						
	284	50	4.93	1870	1.90						
	337	42	4.16	1820	2.0						



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**348**	41	8.13	1810	3.0						
	410	35	6.91	1750	3.3	**FA**	**27**	**DRS**	**90M2**	23	349
	459	31	6.17	1710	3.5	**FAF**	**27**	**DRS**	**90M2**	23	348
	537	27	5.27	1650	3.8	**F**	**27**	**DRS**	**90M2**	23	347
	574	25	4.93	1630	3.8	**FF**	**27**	**DRS**	**90M2**	24	348
	681	21	4.16	1560	4.1						
2.2						**FA**	**157R97**	**DRS**	**90L4**	780	401
	0.97	18800	1441	97500	0.95	**FAF**	**157R97**	**DRS**	**90L4**	840	401
						F	**157R97**	**DRS**	**90L4**	800	401
						FF	**157R97**	**DRS**	**90L4**	910	401
	1.1	17900	1308	100300	1.00						
	1.2	16000	1169	105700	1.10						
	1.5	12900	953	112400	1.40						
	1.7	11300	845	115100	1.60						
	1.8	10200	764	116900	1.75	**FA**	**157R97**	**DRS**	**90L4**	780	401
	2.1	9110	680	118400	2.00	**FAF**	**157R97**	**DRS**	**90L4**	830	401
	2.4	7640	576	120000	2.4	**F**	**157R97**	**DRS**	**90L4**	800	401
	3.1	6020	446	120000	3.0	**FF**	**157R97**	**DRS**	**90L4**	900	401
	4.6	4070	302	120000	4.4						
	5.1	3660	273	120000	4.9						
	6.0	3070	232	120000	5.9						
	7.1	2600	197	120000	6.9						
	1.3	14900	1077	84600	0.80						
	1.5	12800	930	88800	0.95						
	1.7	11300	820	90000	1.05	**FA**	**127R77**	**DRS**	**90L4**	440	401
	1.9	10000	727	90000	1.20	**FAF**	**127R77**	**DRS**	**90L4**	475	401
	2.2	9000	648	90000	1.35	**F**	**127R77**	**DRS**	**90L4**	475	401
	2.6	7630	549	90000	1.55	**FF**	**127R77**	**DRS**	**90L4**	520	401
	2.8	6860	495	90000	1.75						
	3.3	5940	428	90000	2.0						
	2.2	8890	640	46400	0.85						
	2.5	7730	560	49700	1.00	**FA**	**107R77**	**DRS**	**90L4**	290	401
	2.9	6740	489	52200	1.15	**FAF**	**107R77**	**DRS**	**90L4**	310	401
	3.2	6050	436	53900	1.25	**F**	**107R77**	**DRS**	**90L4**	305	401
	3.8	5130	370	56000	1.50	**FF**	**107R77**	**DRS**	**90L4**	330	401
	4.2	4620	333	57100	1.65						
						FA	**97R57**	**DRS**	**90L4**	200	401
	4.9	3970	285	30800	1.10	**FAF**	**97R57**	**DRS**	**90L4**	220	401
	5.7	3410	245	32300	1.25	**F**	**97R57**	**DRS**	**90L4**	205	401
						FF	**97R57**	**DRS**	**90L4**	240	401
	3.8	5590	254.40*	55000	1.35	**FA**	**107**	**DRS**	**112M6**	270	388
	4.4	4730	215.37	56900	1.60	**FAF**	**107**	**DRS**	**112M6**	290	387
	4.8	4380	199.31	57600	1.75	**F**	**107**	**DRS**	**112M6**	285	386
	5.4	3920	178.64	58600	1.95	**FF**	**107**	**DRS**	**112M6**	310	387
	5.5	3810	254.40*	58800	2.0	**FA**	**107**	**DRS**	**90L4**	250	388
	6.5	3230	215.37	59900	2.4	**FAF**	**107**	**DRS**	**90L4**	270	387
	7.0	2990	199.31	60400	2.6	**F**	**107**	**DRS**	**90L4**	265	386
	7.8	2680	178.64	61000	2.9	**FF**	**107**	**DRS**	**90L4**	295	387
	4.3	4920	223.88	17400	0.85	**FA**	**97**	**DRS**	**112M6**	195	383
	5.0	4170	189.92	30300	1.05	**FAF**	**97**	**DRS**	**112M6**	215	382
	5.5	3840	174.87	31200	1.10	**F**	**97**	**DRS**	**112M6**	200	381
	6.1	3430	156.30	32300	1.25	**FF**	**97**	**DRS**	**112M6**	235	382
	5.1	4150	276.77	30300	1.05						
	5.5	3800	253.41	31300	1.15						
	6.2	3350	223.88	32500	1.30	**FA**	**97**	**DRS**	**90L4**	175	383
	7.4	2840	189.92	33700	1.50	**FAF**	**97**	**DRS**	**90L4**	195	382
	8.0	2620	174.87	34100	1.65	**F**	**97**	**DRS**	**90L4**	180	381
	9.0	2340	156.30	34700	1.85	**FF**	**97**	**DRS**	**90L4**	215	382
	10.0	2110	140.71	35200	2.0						
	11	1910	127.42	35600	2.2						
	7.1	2950	197.20	21300	1.00	**FA**	**87**	**DRS**	**90L4**	110	378
	7.8	2700	179.97	24100	1.10	**FAF**	**87**	**DRS**	**90L4**	125	377
	8.8	2390	159.61	25200	1.25	**F**	**87**	**DRS**	**90L4**	115	376
	10	2010	134.16	26400	1.50	**FF**	**87**	**DRS**	**90L4**	130	377



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
2.2	**11**	1850	123.29	26900	1.60						
	13	1640	109.49	27400	1.85						
	14	1460	97.89	27900	2.0						
	16	1320	88.01	28300	2.3	**FA**	**87**	**DRS**	**90L4**	110	378
	18	1140	76.39	27900	2.6	**FAF**	**87**	**DRS**	**90L4**	125	377
	20	1020	68.40	27200	2.9	**F**	**87**	**DRS**	**90L4**	115	376
	25	850	56.75	26000	3.5	**FF**	**87**	**DRS**	**90L4**	130	377
	28	755	50.36	25200	3.9						
	31	675	45.28	24500	4.2						
	12	1710	114.45	14100	0.85	**FA**	**77**	**DRS**	**90L4**	71	373
	13	1620	108.46*	14800	0.90	**FAF**	**77**	**DRS**	**90L4**	78	372
	15	1420	94.93	16200	1.05	**F**	**77**	**DRS**	**90L4**	75	371
	16	1280	85.52	17000	1.15	**FF**	**77**	**DRS**	**90L4**	85	372
	19	1120	75.02	17800	1.35						
	21	990	66.46	18300	1.50	**FA**	**77**	**DRS**	**90L4**	71	373
	24	870	58.32	18800	1.70	**FAF**	**77**	**DRS**	**90L4**	78	372
	25	820	55.27	18900	1.80	**F**	**77**	**DRS**	**90L4**	75	371
	29	725	48.37	19200	2.1	**FF**	**77**	**DRS**	**90L4**	85	372
	32	650	43.58	19400	2.3						
	38	545	36.58	19600	2.0	**FA**	**77**	**DRS**	**90L4**	70	373
	44	470	31.51	19700	2.9	**FAF**	**77**	**DRS**	**90L4**	76	372
	49	430	28.75	19800	3.3	**F**	**77**	**DRS**	**90L4**	73	371
	55	380	25.50*	19900	3.9	**FF**	**77**	**DRS**	**90L4**	84	372
	23	910	61.07	9350	0.90						
	26	800	53.73	10400	1.00	**FA**	**67**	**DRS**	**90L4**	48	368
	28	760	50.74	10800	1.10	**FAF**	**67**	**DRS**	**90L4**	54	367
	32	645	43.20	11600	1.25	**F**	**67**	**DRS**	**90L4**	51	366
	36	585	39.26	12000	1.30	**FF**	**67**	**DRS**	**90L4**	57	367
	41	510	34.01	12400	1.45						
	44	480	32.08	12500	1.70						
	51	410	27.41	12800	2.00	**FA**	**67**	**DRS**	**90L4**	47	368
	56	375	25.13	12900	2.2	**FAF**	**67**	**DRS**	**90L4**	53	367
	63	330	22.05	13000	2.5	**F**	**67**	**DRS**	**90L4**	50	366
	67	310	20.90*	13000	2.6	**FF**	**67**	**DRS**	**90L4**	56	367
	77	270	18.29	13000	3.0						
	31	670	44.73	3720	0.90	**FA**	**57**	**DRS**	**90L4**	44	363
	37	570	38.21	8670	1.05	**FAF**	**57**	**DRS**	**90L4**	50	362
	39	535	35.79	8620	1.10	**F**	**57**	**DRS**	**90L4**	44	361
	46	450	30.15	8470	1.30	**FF**	**57**	**DRS**	**90L4**	51	362
	56	370	24.96	8250	1.55						
	66	315	21.17	8030	1.90	**FA**	**57**	**DRS**	**90L4**	44	363
	73	285	19.11	7880	2.1	**FAF**	**57**	**DRS**	**90L4**	49	362
	83	250	16.81	7680	2.4	**F**	**57**	**DRS**	**90L4**	44	361
	88	235	15.88	7590	2.5	**FF**	**57**	**DRS**	**90L4**	50	362
	54	385	25.72	5560	1.05						
	64	325	21.82	5520	1.20						
	71	295	19.70	5480	1.35						
	81	260	17.33	5410	1.55	**FA**	**47**	**DRS**	**90L4**	36	358
	86	245	16.36	5370	1.65	**FAF**	**47**	**DRS**	**90L4**	38	357
	100	205	13.93	5250	1.90	**F**	**47**	**DRS**	**90L4**	36	356
	111	190	12.66	5170	2.1	**FF**	**47**	**DRS**	**90L4**	40	357
	128	165	10.97	5040	2.4						
	156	134	8.96	4740	2.5						
	98	215	14.33	2790	0.95						
	109	193	12.87	2810	1.05						
	126	166	11.08	2820	1.15						
	134	156	10.42	2810	1.20						
	156	135	8.97	2790	1.30	**FA**	**37**	**DRS**	**90L4**	31	353
	175	120	8.01	2770	1.40	**FAF**	**37**	**DRS**	**90L4**	33	352
	208	101	6.74	2630	1.40	**F**	**37**	**DRS**	**90L4**	32	351
	231	91	6.05	2600	1.50	**FF**	**37**	**DRS**	**90L4**	34	352
	269	78	5.21	2540	1.60						
	286	74	4.90	2520	1.65						
	332	63	4.22	2460	1.75						
	372	56	3.77	2410	1.85						



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2	**173**	121	16.28	1710	1.05						
	204	103	13.84	1730	1.25						
	228	92	12.35	1730	1.40						
	267	79	10.55	1720	1.65						
	285	74	9.88	1710	1.75	**FA**	**27**	**DRS**	**90L2**	25	349
	347	61	8.13	1620	2.0	**FAF**	**27**	**DRS**	**90L2**	26	348
	408	52	6.91	1590	2.2	**F**	**27**	**DRS**	**90L2**	26	347
	457	46	6.17	1570	2.4	**FF**	**27**	**DRS**	**90L2**	26	348
	535	39	5.27	1530	2.6						
	572	37	4.93	1510	2.6						
	679	31	4.16	1460	2.8						
3.0	**1.2**	22000	1169	86000	0.80						
	1.5	17800	953	100800	1.00						
	1.7	15700	845	106400	1.15						
	1.8	14100	764	110000	1.25						
	2.1	12600	680	113000	1.45	**FA**	**157R97**	**DRS**	**100M4**	780	401
	2.4	10600	576	116400	1.70	**FAF**	**157R97**	**DRS**	**100M4**	840	401
	3.1	8310	446	119400	2.2	**F**	**157R97**	**DRS**	**100M4**	800	401
	4.6	5620	302	120000	3.2	**FF**	**157R97**	**DRS**	**100M4**	910	401
	5.1	5060	273	120000	3.6						
	6.0	4260	232	120000	4.2						
	7.1	3610	197	120000	5.0						
	1.9	13700	727	87000	0.85	**FA**	**127R77**	**DRS**	**100M4**	445	401
	2.2	12300	648	89800	0.95	**FAF**	**127R77**	**DRS**	**100M4**	480	401
	2.6	10400	549	90000	1.15	**F**	**127R77**	**DRS**	**100M4**	480	401
	2.8	9400	495	90000	1.30	**FF**	**127R77**	**DRS**	**100M4**	530	401
	3.2	8290	436	48100	0.95	**FA**	**107R77**	**DRS**	**100M4**	295	401
	3.8	7030	370	51500	1.10	**FAF**	**107R77**	**DRS**	**100M4**	315	401
	4.2	6330	333	53200	1.20	**F**	**107R77**	**DRS**	**100M4**	310	401
	4.8	5530	291	55100	1.40	**FF**	**107R77**	**DRS**	**100M4**	335	401
	3.7	7710	254.40*	49700	1.00	**FA**	**107**	**DRS**	**112M6**	270	388
	4.4	6520	215.37	52800	1.20	**FAF**	**107**	**DRS**	**112M6**	290	387
	4.7	6040	199.31	53900	1.25	**F**	**107**	**DRS**	**112M6**	285	386
	5.3	5410	178.64	55400	1.40	**FF**	**107**	**DRS**	**112M6**	310	387
	5.5	5200	254.40*	55900	1.50						
	6.5	4400	215.37	57600	1.75	**FA**	**107**	**DRS**	**100M4**	255	388
	7.0	4070	199.31	58300	1.90	**FAF**	**107**	**DRS**	**100M4**	275	387
	7.8	3650	178.64	59100	2.1	**F**	**107**	**DRS**	**100M4**	270	386
	8.7	3300	161.28*	59800	2.3	**FF**	**107**	**DRS**	**100M4**	300	387
	6.2	4580	223.88	29000	0.95	**FA**	**97**	**DRS**	**100M4**	180	383
	7.4	3880	189.92	31100	1.10	**FAF**	**97**	**DRS**	**100M4**	200	382
	8.0	3570	174.87	31900	1.20	**F**	**97**	**DRS**	**100M4**	185	381
						FF	**97**	**DRS**	**100M4**	220	382
	9.0	3190	156.30	32800	1.35						
	10.0	2870	140.71	33600	1.50	**FA**	**97**	**DRS**	**100M4**	180	383
	11	2600	127.42	34200	1.65	**FAF**	**97**	**DRS**	**100M4**	200	382
	12	2310	112.99	34800	1.85	**F**	**97**	**DRS**	**100M4**	185	381
	14	2090	102.16	35200	2.1	**FF**	**97**	**DRS**	**100M4**	220	382
	16	1830	89.85	35700	2.3						
	10	2740	134.16	23900	1.10	**FA**	**87**	**DRS**	**100M4**	115	378
	11	2520	123.29	24700	1.20	**FAF**	**87**	**DRS**	**100M4**	130	377
	13	2240	109.49	25700	1.35	**F**	**87**	**DRS**	**100M4**	120	376
						FF	**87**	**DRS**	**100M4**	135	377
	14	2000	97.89	26400	1.50						
	16	1800	88.01	26900	1.65	**FA**	**87**	**DRS**	**100M4**	115	378
	18	1560	76.39	26300	1.90	**FAF**	**87**	**DRS**	**100M4**	130	377
	20	1390	68.40	25700	2.1	**F**	**87**	**DRS**	**100M4**	120	376
	25	1160	56.75	24800	2.6	**FF**	**87**	**DRS**	**100M4**	135	377
	28	1030	50.36	24100	2.8						
	16	1750	85.52	13800	0.85	**FA**	**77**	**DRS**	**100M4**	76	373
	19	1530	75.02	15500	1.00	**FAF**	**77**	**DRS**	**100M4**	82	372
	21	1360	66.46	16600	1.10	**F**	**77**	**DRS**	**100M4**	80	371
						FF	**77**	**DRS**	**100M4**	90	372
	24	1190	58.32	17500	1.25						
	25	1130	55.27	17800	1.35	**FA**	**77**	**DRS**	**100M4**	76	373
	29	980	48.37	18300	1.50	**FAF**	**77**	**DRS**	**100M4**	82	372
	32	890	43.58	18700	1.70	**F**	**77**	**DRS**	**100M4**	80	371
	37	780	38.23	19000	1.90	**FF**	**77**	**DRS**	**100M4**	90	372

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
3.0	**38**	745	36.58	19100	1.50	**FA**	**77**	**DRS**	**100M4**	75	373
	44	640	31.51	19400	2.1	**FAF**	**77**	**DRS**	**100M4**	81	372
	49	585	28.75	19500	2.4	**F**	**77**	**DRS**	**100M4**	78	371
	55	520	25.50*	19700	2.9	**FF**	**77**	**DRS**	**100M4**	89	372
	65	435	21.43	19800	3.4						
	32	880	43.20	9690	0.95	**FA**	**67**	**DRS**	**100M4**	53	368
	36	800	39.26	10500	0.95	**FAF**	**67**	**DRS**	**100M4**	59	367
	41	695	34.01	11300	1.05	**F**	**67**	**DRS**	**100M4**	56	366
						FF	**67**	**DRS**	**100M4**	62	367
	44	655	32.08	11600	1.25						
	51	560	27.41	12100	1.45						
	56	510	25.13	12300	1.60	**FA**	**67**	**DRS**	**100M4**	52	368
	63	450	22.05	12600	1.80	**FAF**	**67**	**DRS**	**100M4**	58	367
	67	425	20.90*	12700	1.90	**F**	**67**	**DRS**	**100M4**	55	366
	77	370	18.29	12900	2.2	**FF**	**67**	**DRS**	**100M4**	61	367
	85	335	16.48	13000	2.4						
	97	295	14.46	13000	2.8						
	56	510	24.96	7440	1.15						
	66	430	21.17	7340	1.40						
	73	390	19.11	7260	1.55	**FA**	**57**	**DRS**	**100M4**	48	363
	83	340	16.81	7140	1.75	**FAF**	**57**	**DRS**	**100M4**	54	362
	88	320	15.88	7080	1.85	**F**	**57**	**DRS**	**100M4**	49	361
	104	275	13.52	6890	2.2	**FF**	**57**	**DRS**	**100M4**	55	362
	114	250	12.29	6780	2.4						
	132	215	10.64	6590	2.8						
	71	400	19.70	4750	1.00						
	81	350	17.33	4760	1.15						
	86	330	16.36	4760	1.20	**FA**	**47**	**DRS**	**100M4**	41	358
	100	285	13.93	4740	1.40	**FAF**	**47**	**DRS**	**100M4**	43	357
	111	255	12.66	4700	1.55	**F**	**47**	**DRS**	**100M4**	42	356
	128	220	10.97	4640	1.80	**FF**	**47**	**DRS**	**100M4**	45	357
	156	183	8.96	4370	1.80						
	126	225	11.08	2320	0.85						
	134	210	10.42	2350	0.85						
	156	184	8.97	2390	0.95						
	175	164	8.01	2410	1.05	**FA**	**37**	**DRS**	**100M4**	36	353
	208	138	6.74	2290	1.00	**FAF**	**37**	**DRS**	**100M4**	38	352
	231	124	6.05	2300	1.10	**F**	**37**	**DRS**	**100M4**	37	351
	269	107	5.21	2280	1.15	**FF**	**37**	**DRS**	**100M4**	39	352
	286	100	4.90	2280	1.20						
	332	86	4.22	2250	1.25						
	372	77	3.77	2220	1.35						
4.0	**1.7**	20400	845	92100	0.90						
	1.9	18400	764	98900	1.00						
	2.1	16400	680	104700	1.10						
	2.5	13800	576	110600	1.30	**FA**	**157R97**	**DRS**	**100LC4**	790	401
	3.2	10800	446	116100	1.65	**FAF**	**157R97**	**DRS**	**100LC4**	840	401
	4.8	7320	302	120000	2.5	**F**	**157R97**	**DRS**	**100LC4**	810	401
	5.3	6590	273	120000	2.7	**FF**	**157R97**	**DRS**	**100LC4**	910	401
	6.2	5560	232	120000	3.2						
	7.4	4710	197	120000	3.8						
	2.6	13500	549	87500	0.90	**FA**	**127R77**	**DRS**	**100LC4**	450	401
	2.9	12100	495	90000	1.00	**FAF**	**127R77**	**DRS**	**100LC4**	485	401
	3.4	10500	428	90000	1.15	**F**	**127R77**	**DRS**	**100LC4**	485	401
	3.8	9240	376	90000	1.30	**FF**	**127R77**	**DRS**	**100LC4**	530	401
	4.3	8200	333	48400	0.95	**FA**	**107R77**	**DRS**	**100LC4**	300	401
	5.0	7170	291	51100	1.05	**FAF**	**107R77**	**DRS**	**100LC4**	320	401
	5.7	6280	255	53300	1.20	**F**	**107R77**	**DRS**	**100LC4**	315	401
						FF	**107R77**	**DRS**	**100LC4**	340	401
	5.7	6720	254.40*	52300	1.15						
	6.7	5690	215.37	54700	1.35						
	7.2	5260	199.31	55700	1.45						
	8.1	4720	178.64	56900	1.65	**FA**	**107**	**DRS**	**100LC4**	260	388
	9.0	4260	161.28*	57900	1.80	**FAF**	**107**	**DRS**	**100LC4**	280	387
	9.9	3870	146.49	58700	2.00	**F**	**107**	**DRS**	**100LC4**	275	386
	11	3430	129.97	59600	2.2	**FF**	**107**	**DRS**	**100LC4**	305	387
	12	3110	117.94	60200	2.5						
	14	2670	101.38*	61000	2.9						



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
4.0	**8.3**	4620	174.87	28900	0.95	**FA**	**97**	**DRS**	**100LC4**	185	383
	9.2	4130	156.30	30400	1.05	**FAF**	**97**	**DRS**	**100LC4**	205	382
	10	3710	140.71	31500	1.15	**F**	**97**	**DRS**	**100LC4**	190	381
	11	3360	127.42	32400	1.30	**FF**	**97**	**DRS**	**100LC4**	225	382
	13	2980	112.99	33300	1.45						
	14	2700	102.16	34000	1.60						
	15	2570	97.58	34200	1.65	**FA**	**97**	**DRS**	**100LC4**	185	383
	16	2370	89.85	34700	1.80	**FAF**	**97**	**DRS**	**100LC4**	205	382
	18	2120	80.31	35200	2.0	**F**	**97**	**DRS**	**100LC4**	190	381
	20	1910	72.29	35600	2.2	**FF**	**97**	**DRS**	**100LC4**	225	382
	22	1730	65.47	35900	2.5						
	13	2890	109.49	23300	1.05	**FA**	**87**	**DRS**	**100LC4**	120	378
	15	2580	97.89	24500	1.15	**FAF**	**87**	**DRS**	**100LC4**	135	377
	16	2320	88.01	24500	1.30	**F**	**87**	**DRS**	**100LC4**	125	376
						FF	**87**	**DRS**	**100LC4**	140	377
	19	2010	76.39	24200	1.50						
	21	1800	68.40	23800	1.65	**FA**	**87**	**DRS**	**100LC4**	120	378
	25	1500	56.75	23200	2.0	**FAF**	**87**	**DRS**	**100LC4**	135	377
	29	1330	50.36	22700	2.2	**F**	**87**	**DRS**	**100LC4**	125	376
	32	1190	45.28	22200	2.4	**FF**	**87**	**DRS**	**100LC4**	140	377
	22	1750	66.46	13700	0.85	**FA**	**77**	**DRS**	**100LC4**	81	373
	25	1540	58.32	15400	0.95	**FAF**	**77**	**DRS**	**100LC4**	88	372
	26	1460	55.27	16000	1.05	**F**	**77**	**DRS**	**100LC4**	85	371
	30	1270	48.37	17000	1.15	**FF**	**77**	**DRS**	**100LC4**	95	372
	33	1150	43.58	17700	1.30						
	38	1010	38.23	18300	1.50	**FA**	**77**	**DRS**	**100LC4**	81	373
	43	890	33.74	18700	1.70	**FAF**	**77**	**DRS**	**100LC4**	88	372
	48	790	29.91	19000	1.90	**F**	**77**	**DRS**	**100LC4**	85	371
	57	675	25.54	19300	2.2	**FF**	**77**	**DRS**	**100LC4**	95	372
	46	830	31.51	18900	1.65						
	50	760	28.75	19100	1.90	**FA**	**77**	**DRS**	**100LC4**	80	373
	57	670	25.50*	19300	2.2	**FAF**	**77**	**DRS**	**100LC4**	86	372
	67	565	21.43	19600	2.6	**F**	**77**	**DRS**	**100LC4**	83	371
	73	520	19.70	19700	2.9	**FF**	**77**	**DRS**	**100LC4**	94	372
	53	720	27.41	11100	1.15						
	58	660	25.13	11500	1.25						
	66	580	22.05	12000	1.40						
	69	550	20.90*	12200	1.50						
	79	480	18.29	12500	1.70						
	88	435	16.48	12700	1.90						
	100	380	14.46	12900	2.2						
	113	335	12.76	13000	2.4	**FA**	**67**	**DRS**	**100LC4**	57	368
	128	295	11.31	13000	2.7	**FAF**	**67**	**DRS**	**100LC4**	63	367
	150	255	9.66	13000	3.2	**F**	**67**	**DRS**	**100LC4**	60	366
	159	240	9.08	12900	2.2	**FF**	**67**	**DRS**	**100LC4**	66	367
	168	225	8.60	12800	2.5						
	192	199	7.53	12400	3.1						
	213	179	6.78	12100	3.5						
	243	157	5.95	11700	3.9						
	275	139	5.25	11300	4.2						
	310	123	4.66	11000	4.6						
	364	105	3.97	10500	4.8						
	68	555	21.17	6490	1.05						
	76	505	19.11	6480	1.20						
	86	440	16.81	6450	1.35						
	91	415	15.88	6420	1.45						
	107	355	13.52	6330	1.70						
	118	320	12.29	6250	1.85	**FA**	**57**	**DRS**	**100LC4**	54	363
	136	280	10.64	6130	2.1	**FAF**	**57**	**DRS**	**100LC4**	59	362
	155	245	9.31	5830	1.70	**F**	**57**	**DRS**	**100LC4**	54	361
	176	215	8.19	5720	1.95	**FF**	**57**	**DRS**	**100LC4**	60	362
	187	200	7.73	5660	2.0						
	219	174	6.58	5500	2.4						
	241	158	5.98	5390	2.6						
	279	137	5.18	5230	3.0						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
5.5	**2.5**	19200	576	96500	0.95						
	2.9	16700	503	103900	1.10						
	3.2	14900	446	108100	1.20						
	4.1	11600	353	114600	1.55	**FA**	**157R97**	**DRS**	**132S4**	800	401
	4.8	10100	302	117100	1.75	**FAF**	**157R97**	**DRS**	**132S4**	860	401
	5.3	9140	273	118400	1.95	**F**	**157R97**	**DRS**	**132S4**	820	401
	6.2	7720	232	120000	2.3	**FF**	**157R97**	**DRS**	**132S4**	930	401
	7.1	6710	202	120000	2.7						
	7.4	6540	197	120000	2.8						
	3.5	14000	418	86400	0.85						
	3.9	12500	374	89300	0.95	**FA**	**127R87**	**DRS**	**132S4**	485	401
	4.6	10500	312	90000	1.15	**FAF**	**127R87**	**DRS**	**132S4**	520	401
	4.9	9840	293	90000	1.20	**F**	**127R87**	**DRS**	**132S4**	520	401
	5.6	8680	259	90000	1.40	**FF**	**127R87**	**DRS**	**132S4**	570	401
	6.5	7500	223	90000	1.60						
						FA	**127R77**	**DRS**	**132S4**	465	401
	3.4	14500	428	85500	0.85	**FAF**	**127R77**	**DRS**	**132S4**	500	401
	3.8	12700	376	89000	0.95	**F**	**127R77**	**DRS**	**132S4**	500	401
						FF	**127R77**	**DRS**	**132S4**	550	401
	6.7	7820	215.37	49400	1.00	**FA**	**107**	**DRS**	**132S4**	275	388
	7.2	7240	199.31	51000	1.05	**FAF**	**107**	**DRS**	**132S4**	295	387
	8.1	6490	178.64	52800	1.20	**F**	**107**	**DRS**	**132S4**	290	386
	9.0	5860	161.28*	54400	1.30	**FF**	**107**	**DRS**	**132S4**	320	387
	9.9	5320	146.49	55600	1.45						
	11	4720	129.97	56900	1.65						
	12	4280	117.94	57800	1.80	**FA**	**107**	**DRS**	**132S4**	275	388
	14	3680	101.38*	59100	2.1	**FAF**	**107**	**DRS**	**132S4**	295	387
	16	3360	92.47*	59700	2.3	**F**	**107**	**DRS**	**132S4**	290	386
	16	3210	88.49	60000	2.4	**FF**	**107**	**DRS**	**132S4**	320	387
	17	3050	83.99	60300	2.5						
	11	4630	127.42	28900	0.95	**FA**	**97**	**DRS**	**132S4**	200	383
	13	4100	112.99	30500	1.05	**FAF**	**97**	**DRS**	**132S4**	220	382
	14	3710	102.16	31500	1.15	**F**	**97**	**DRS**	**132S4**	205	381
						FF	**97**	**DRS**	**132S4**	240	382
	15	3540	97.58	32000	1.20						
	16	3260	89.85	32700	1.30						
	17	3140	86.59	33000	1.35						
	18	2910	80.31	33500	1.45	**FA**	**97**	**DRS**	**132S4**	200	383
	19	2740	75.63	33900	1.55	**FAF**	**97**	**DRS**	**132S4**	220	382
	20	2620	72.29	34100	1.65	**F**	**97**	**DRS**	**132S4**	205	381
	22	2370	65.47	34700	1.80	**FF**	**97**	**DRS**	**132S4**	240	382
	25	2110	58.06	34500	2.0						
	28	1900	52.49	33800	2.2						
	16	3190	88.01	9310	0.95	**FA**	**87**	**DRS**	**132S4**	135	378
	19	2770	76.39	21200	1.10	**FAF**	**87**	**DRS**	**132S4**	150	377
	21	2480	68.40	21200	1.20	**F**	**87**	**DRS**	**132S4**	140	376
	25	2060	56.75	21000	1.45	**FF**	**87**	**DRS**	**132S4**	155	377
	29	1830	50.36	20800	1.60						
	32	1640	45.28	20500	1.70	**FA**	**87**	**DRS**	**132S4**	135	378
	37	1420	39.30	20100	1.90	**FAF**	**87**	**DRS**	**132S4**	150	377
	41	1270	35.19	19800	2.0	**F**	**87**	**DRS**	**132S4**	140	376
	49	1060	29.20	19100	2.4	**FF**	**87**	**DRS**	**132S4**	155	377
	43	1230	33.92	19600	2.1	**FA**	**87**	**DRS**	**132S4**	135	378
	50	1040	28.78	19100	2.3	**FAF**	**87**	**DRS**	**132S4**	145	377
	55	960	26.50	18700	3.1	**F**	**87**	**DRS**	**132S4**	140	376
	61	860	23.68	18300	3.5	**FF**	**87**	**DRS**	**132S4**	155	377
	30	1750	48.37	13700	0.85						
	33	1580	43.58	15100	0.95	**FA**	**77**	**DRS**	**132S4**	96	373
	38	1380	38.23	16400	1.10	**FAF**	**77**	**DRS**	**132S4**	105	372
	43	1220	33.74	17300	1.20	**F**	**77**	**DRS**	**132S4**	100	371
	48	1080	29.91	18000	1.40	**FF**	**77**	**DRS**	**132S4**	110	372
	57	920	25.54	18600	1.55						
	57	920	25.50*	18600	1.60						
	67	775	21.43	19000	1.95						
	73	715	19.70	19200	2.1	**FA**	**77**	**DRS**	**132S4**	95	373
	83	635	17.49	19400	2.4	**FAF**	**77**	**DRS**	**132S4**	100	372
	92	565	15.64*	19600	2.6	**F**	**77**	**DRS**	**132S4**	98	371
	103	510	14.06	19200	2.9	**FF**	**77**	**DRS**	**132S4**	110	372
	118	440	12.20	18600	3.4						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
5.5	**66**	800	22.05	10500	1.00						
	69	755	20.90*	10800	1.10						
	79	660	18.29	11500	1.25						
	88	595	16.48	11900	1.35						
	100	525	14.46	12300	1.55						
	113	460	12.76	12600	1.75						
	128	410	11.31	12800	2.00	**FA**	**67**	**DRS**	**132S4**	72	368
	150	350	9.66	12900	2.3	**FAF**	**67**	**DRS**	**132S4**	78	367
	159	325	9.08	12400	1.60	**F**	**67**	**DRS**	**132S4**	75	366
	168	310	8.60	12300	1.80	**FF**	**67**	**DRS**	**132S4**	81	367
	192	270	7.53	11900	2.2						
	213	245	6.78	11700	2.5						
	243	215	5.95	11300	2.8						
	275	191	5.25	11000	3.1						
	310	169	4.66	10700	3.3						
	364	144	3.97	10300	3.5						
	86	610	16.81	5460	1.00						
	91	575	15.88	5490	1.05						
	107	490	13.52	5530	1.20						
	118	445	12.29	5530	1.35	**FA**	**57**	**DRS**	**132S4**	69	363
	136	385	10.64	5500	1.55	**FAF**	**57**	**DRS**	**132S4**	74	362
	176	295	8.19	5180	1.40	**F**	**57**	**DRS**	**132S4**	69	361
	187	280	7.73	5160	1.50	**FF**	**57**	**DRS**	**132S4**	75	362
	219	235	6.58	5060	1.75						
	241	215	5.98	5000	1.95						
	279	188	5.18	4890	2.2						
7.5	**4.6**	14300	312	85800	0.85						
	4.9	13400	293	87600	0.90	**FA**	**127R87**	**DRS**	**132M4**	495	401
	5.6	11900	259	90000	1.00	**FAF**	**127R87**	**DRS**	**132M4**	530	401
	6.5	10200	223	90000	1.15	**F**	**127R87**	**DRS**	**132M4**	530	401
	7.3	9090	198	90000	1.30	**FF**	**127R87**	**DRS**	**132M4**	580	401
	3.6	20000	267.43	93600	0.90						
	4.4	16300	217.62*	104900	1.10						
	5.4	13300	178.20*	111600	1.35						
	5.9	12200	162.96	113700	1.45						
	6.7	10600	141.80*	116300	1.70	**FA**	**157**	**DRS**	**160M6**	710	398
	7.6	9380	125.14	118100	1.90	**FAF**	**157**	**DRS**	**160M6**	770	397
	8.8	8130	108.49	119600	2.2	**F**	**157**	**DRS**	**160M6**	730	396
	9.9	7230	96.53*	120000	2.5	**FF**	**157**	**DRS**	**160M6**	840	397
	11	6430	85.80*	120000	2.8						
	12	5880	78.46	120000	3.1						
	14	5120	68.28*	120000	3.5						
	16	4510	60.25	120000	4.0						
	18	3910	52.24	119400	4.6						
	5.6	12800	170.83	88900	0.95	**FA**	**127**	**DRS**	**160M6**	455	393
	6.2	11500	153.67*	90000	1.05	**FAF**	**127**	**DRS**	**160M6**	490	392
	7.6	9400	125.37	90000	1.30	**F**	**127**	**DRS**	**160M6**	490	391
	8.4	8570	114.34	90000	1.40	**FF**	**127**	**DRS**	**160M6**	540	392
	8.5	8460	170.83	90000	1.40	**FA**	**127**	**DRS**	**132M4**	435	393
	9.4	7610	153.67*	90000	1.60	**FAF**	**127**	**DRS**	**132M4**	475	392
	12	6210	125.37	90000	1.95	**F**	**127**	**DRS**	**132M4**	475	391
						FF	**127**	**DRS**	**132M4**	520	392
	8.1	8850	178.64	46600	0.85	**FA**	**107**	**DRS**	**132M4**	285	388
	9.0	7990	161.28*	49000	0.95	**FAF**	**107**	**DRS**	**132M4**	305	387
	9.9	7260	146.49	50900	1.05	**F**	**107**	**DRS**	**132M4**	300	386
	11	6440	129.97	53000	1.20	**FF**	**107**	**DRS**	**132M4**	330	387
	12	5840	117.94	54400	1.30						
	14	5020	101.38*	56300	1.55						
	16	4580	92.47*	57200	1.70	**FA**	**107**	**DRS**	**132M4**	285	388
	16	4380	88.49	57600	1.75	**FAF**	**107**	**DRS**	**132M4**	305	387
	17	4160	83.99	58100	1.85	**F**	**107**	**DRS**	**132M4**	300	386
	19	3690	74.52	59000	2.1	**FF**	**107**	**DRS**	**132M4**	330	387
	21	3350	67.62	59700	2.3						
	15	4830	97.58	21600	0.90						
	16	4450	89.85	29400	0.95	**FA**	**97**	**DRS**	**132M4**	210	383
	17	4290	86.59	29900	1.00	**FAF**	**97**	**DRS**	**132M4**	230	382
	18	3980	80.31	30800	1.10	**F**	**97**	**DRS**	**132M4**	220	381
	19	3740	75.63	31500	1.15	**FF**	**97**	**DRS**	**132M4**	250	382
	20	3580	72.29	31900	1.20						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**22**	3240	65.47	32200	1.35						
	25	2870	58.06	31800	1.50	**FA**	**97**	**DRS**	**132M4**	210	383
	28	2600	52.49	31400	1.65	**FAF**	**97**	**DRS**	**132M4**	230	382
	32	2200	44.49	30600	1.95	**F**	**97**	**DRS**	**132M4**	220	381
	37	1920	38.86	29900	2.2	**FF**	**97**	**DRS**	**132M4**	250	382
	44	1610	32.50	28900	2.7						
	33	2140	43.28	30400	1.45	**FA**	**97**	**DRS**	**132M4**	205	383
	39	1810	36.64	29500	1.70	**FAF**	**97**	**DRS**	**132M4**	225	382
	43	1680	33.91	29100	2.6	**F**	**97**	**DRS**	**132M4**	210	381
	48	1500	30.39	28500	2.8	**FF**	**97**	**DRS**	**132M4**	245	382
	25	2810	56.75	18100	1.05						
	29	2490	50.36	18200	1.20	**FA**	**87**	**DRS**	**132M4**	145	378
	32	2240	45.28	18200	1.25	**FAF**	**87**	**DRS**	**132M4**	160	377
	37	1940	39.30	18100	1.40	**F**	**87**	**DRS**	**132M4**	150	376
	41	1740	35.19	18000	1.50	**FF**	**87**	**DRS**	**132M4**	170	377
	49	1440	29.20	17600	1.75						
	50	1420	28.78	17600	1.70						
	55	1310	26.50	17400	2.3						
	61	1170	23.68	17100	2.6	**FA**	**87**	**DRS**	**132M4**	145	378
	68	1050	21.32*	16800	2.8	**FAF**	**87**	**DRS**	**132M4**	155	377
	75	950	19.31	16500	3.1	**F**	**87**	**DRS**	**132M4**	150	376
	84	840	17.12	16100	3.5	**FF**	**87**	**DRS**	**132M4**	165	377
	93	765	15.48	15800	3.9						
	43	1670	33.74	14500	0.90	**FA**	**77**	**DRS**	**132M4**	105	373
	48	1480	29.91	15800	1.00	**FAF**	**77**	**DRS**	**132M4**	115	372
	57	1260	25.54	17100	1.15	**F**	**77**	**DRS**	**132M4**	110	371
						FF	**77**	**DRS**	**132M4**	120	372
	57	1260	25.50*	17100	1.20						
	67	1060	21.43	18100	1.40						
	73	970	19.70	18400	1.55						
	83	860	17.49	18800	1.75						
	92	775	15.64*	18900	1.95						
	103	695	14.06	18500	2.2						
	118	600	12.20	18000	2.5	**FA**	**77**	**DRS**	**132M4**	105	373
	132	540	10.93	17600	2.8	**FAF**	**77**	**DRS**	**132M4**	110	372
	155	460	9.30	16500	2.3	**F**	**77**	**DRS**	**132M4**	110	371
	175	405	8.26	16100	2.6	**FF**	**77**	**DRS**	**132M4**	120	372
	196	365	7.39	15700	3.0						
	218	325	6.64	15300	3.3						
	251	285	5.76	14800	3.8						
	280	255	5.16	14400	4.2						
	338	210	4.28	13800	4.8						
9.2	**4.2**	19500	353	95400	0.90						
	4.8	16800	302	103500	1.05	**FA**	**157R97**	**DRS**	**132MC4**	810	401
	5.4	15200	273	107600	1.20	**FAF**	**157R97**	**DRS**	**132MC4**	870	401
	6.3	12800	232	112500	1.40	**F**	**157R97**	**DRS**	**132MC4**	840	401
	7.2	11200	202	115400	1.60	**FF**	**157R97**	**DRS**	**132MC4**	940	401
	7.5	10900	197	115900	1.65						
	5.7	14400	259	85700	0.85	**FA**	**127R87**	**DRS**	**132MC4**	500	401
	6.6	12400	223	89500	0.95	**FAF**	**127R87**	**DRS**	**132MC4**	540	401
	7.4	11000	198	90000	1.10	**F**	**127R87**	**DRS**	**132MC4**	540	401
						FF	**127R87**	**DRS**	**132MC4**	580	401
	8.6	10200	170.83	90000	1.15						
	9.5	9210	153.67*	90000	1.30	**FA**	**127**	**DRS**	**132MC4**	440	393
	12	7510	125.37	90000	1.60	**FAF**	**127**	**DRS**	**132MC4**	475	392
	13	6850	114.34	90000	1.75	**F**	**127**	**DRS**	**132MC4**	475	391
	15	5930	98.95	90000	2.0	**FF**	**127**	**DRS**	**132MC4**	520	392
	10	8780	146.49	46800	0.85	**FA**	**107**	**DRS**	**132MC4**	290	388
	11	7790	129.97	49500	1.00	**FAF**	**107**	**DRS**	**132MC4**	310	387
	12	7070	117.94	51400	1.10	**F**	**107**	**DRS**	**132MC4**	305	386
	14	6070	101.38*	53800	1.25	**FF**	**107**	**DRS**	**132MC4**	330	387
	16	5540	92.47*	55100	1.40						
	17	5030	83.99	56200	1.50	**FA**	**107**	**DRS**	**132MC4**	290	388
	20	4460	74.52	57500	1.70	**FAF**	**107**	**DRS**	**132MC4**	310	387
	22	4050	67.62	58300	1.90	**F**	**107**	**DRS**	**132MC4**	305	386
	25	3480	58.12*	58100	2.2	**FF**	**107**	**DRS**	**132MC4**	330	387
	29	3040	50.73	56600	2.5						



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
9.2	**18**	4810	80.31	22500	0.90	**FA**	**97**	**DRS**	**132MC4**	215	383
	19	4530	75.63	29200	0.95	**FAF**	**97**	**DRS**	**132MC4**	235	382
	20	4330	72.29	29600	1.00	**F**	**97**	**DRS**	**132MC4**	220	381
	22	3920	65.47	29600	1.10	**FF**	**97**	**DRS**	**132MC4**	255	382
	25	3480	58.06	29500	1.25						
	28	3140	52.49	29300	1.35	**FA**	**97**	**DRS**	**132MC4**	215	383
	33	2660	44.49	28800	1.60	**FAF**	**97**	**DRS**	**132MC4**	235	382
	38	2330	38.86	28300	1.85	**F**	**97**	**DRS**	**132MC4**	220	381
	45	1940	32.50	27500	2.2	**FF**	**97**	**DRS**	**132MC4**	255	382
	43	2030	33.91	27700	2.1	**FA**	**97**	**DRS**	**132MC4**	210	383
	48	1820	30.39	27200	2.4	**FAF**	**97**	**DRS**	**132MC4**	230	382
	53	1640	27.44*	26700	2.6	**F**	**97**	**DRS**	**132MC4**	215	381
	59	1490	24.92	26200	2.9	**FF**	**97**	**DRS**	**132MC4**	250	382
	29	3020	50.36	16000	0.95						
	32	2710	45.28	16200	1.05	**FA**	**87**	**DRS**	**132MC4**	150	378
	37	2350	39.30	16400	1.15	**FAF**	**87**	**DRS**	**132MC4**	160	377
	42	2110	35.19	16400	1.25	**F**	**87**	**DRS**	**132MC4**	155	376
	50	1750	29.20	16300	1.45	**FF**	**87**	**DRS**	**132MC4**	170	377
	55	1580	26.50	16200	1.90						
	62	1420	23.68	16100	2.1						
	69	1270	21.32*	15900	2.4	**FA**	**87**	**DRS**	**132MC4**	145	378
	76	1150	19.31	15600	2.6	**FAF**	**87**	**DRS**	**132MC4**	160	377
	86	1020	17.12	15400	2.9	**F**	**87**	**DRS**	**132MC4**	155	376
	95	920	15.48	15100	3.2	**FF**	**87**	**DRS**	**132MC4**	170	377
	112	785	13.12*	14700	3.8						
	74	1180	19.70	17500	1.25						
	84	1040	17.49	18100	1.45						
	94	930	15.64*	18200	1.60						
	104	840	14.06	17900	1.80						
	120	730	12.20	17400	2.0						
	134	655	10.93	17100	2.3	**FA**	**77**	**DRS**	**132MC4**	110	373
	158	555	9.30	16000	1.95	**FAF**	**77**	**DRS**	**132MC4**	115	372
	177	495	8.26	15600	2.2	**F**	**77**	**DRS**	**132MC4**	115	371
	198	440	7.39	15200	2.4	**FF**	**77**	**DRS**	**132MC4**	125	372
	221	395	6.64	14900	2.7						
	254	345	5.76	14500	3.1						
	284	305	5.16	14100	3.5						
	342	255	4.28	13500	3.9						
11.0	**4.8**	20200	302	92800	0.90						
	5.3	18300	273	99300	1.00	**FA**	**157R97**	**DRS**	**160M4**	840	401
	6.3	15400	232	107000	1.15	**FAF**	**157R97**	**DRS**	**160M4**	890	401
	7.2	13400	202	111300	1.35	**F**	**157R97**	**DRS**	**160M4**	860	401
	7.4	13100	197	112000	1.35	**FF**	**157R97**	**DRS**	**160M4**	960	401
	6.5	14900	223	84600	0.80	**FA**	**127R87**	**DRS**	**160M4**	520	401
	7.4	13200	198	88000	0.90	**FAF**	**127R87**	**DRS**	**160M4**	560	401
	8.8	11100	166	90000	1.10	**F**	**127R87**	**DRS**	**160M4**	560	401
						FF	**127R87**	**DRS**	**160M4**	600	401
	5.5	19200	267.43	96400	0.95						
	6.7	15600	217.62*	106600	1.15						
	8.2	12800	178.20*	112600	1.40						
	9.0	11700	162.96	114600	1.55						
	10	10200	141.80*	117000	1.75	**FA**	**157**	**DRS**	**160M4**	710	398
	12	9000	125.14	118600	2.0	**FAF**	**157**	**DRS**	**160M4**	770	397
	13	7800	108.49	120000	2.3	**F**	**157**	**DRS**	**160M4**	730	396
	15	6940	96.53*	120000	2.6	**FF**	**157**	**DRS**	**160M4**	840	397
	17	6170	85.80*	117700	2.9						
	19	5640	78.46	115300	3.2						
	21	4910	68.28*	111600	3.7						
	8.6	12200	170.83	89900	1.00						
	9.5	11000	153.67*	90000	1.10						
	12	9020	125.37	90000	1.35	**FA**	**127**	**DRS**	**160M4**	455	393
	13	8220	114.34	90000	1.45	**FAF**	**127**	**DRS**	**160M4**	490	392
	15	7110	98.95	90000	1.70	**F**	**127**	**DRS**	**160M4**	490	391
	17	6280	87.31*	90000	1.90	**FF**	**127**	**DRS**	**160M4**	540	392
	19	5420	75.41*	88400	2.2						
	12	8480	117.94	47600	0.90	**FA**	**107**	**DRS**	**160M4**	310	388
	14	7290	101.38*	50800	1.05	**FAF**	**107**	**DRS**	**160M4**	330	387
	16	6650	92.47*	52500	1.15	**F**	**107**	**DRS**	**160M4**	325	386
						FF	**107**	**DRS**	**160M4**	355	387



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
11.0	**17**	6040	83.99	53900	1.25						
	20	5360	74.52	55500	1.45	**FA**	**107**	**DRS**	**160M4**	310	388
	22	4860	67.62	56600	1.60	**FAF**	**107**	**DRS**	**160M4**	330	387
	25	4180	58.12*	56300	1.85	**F**	**107**	**DRS**	**160M4**	325	386
	29	3650	50.73	55000	2.1	**FF**	**107**	**DRS**	**160M4**	355	387
	34	3090	43.03	53400	2.5						
	43	2430	33.79*	50800	3.0	**FA**	**107**	**DRS**	**160M4**	300	388
	53	1980	27.57	48600	4.0	**FAF**	**107**	**DRS**	**160M4**	320	387
	58	1800	25.14	47600	4.3	**F**	**107**	**DRS**	**160M4**	315	386
						FF	**107**	**DRS**	**160M4**	345	387
	22	4710	65.47	26400	0.90	**FA**	**97**	**DRS**	**160M4**	235	383
	25	4170	58.06	27100	1.05	**FAF**	**97**	**DRS**	**160M4**	255	382
	28	3770	52.49	27100	1.15	**F**	**97**	**DRS**	**160M4**	240	381
						FF	**97**	**DRS**	**160M4**	275	382
	33	3200	44.49	27000	1.35	**FA**	**97**	**DRS**	**160M4**	235	383
	38	2790	38.86	26700	1.55	**FAF**	**97**	**DRS**	**160M4**	255	382
	45	2330	32.50	26200	1.85	**F**	**97**	**DRS**	**160M4**	240	381
						FF	**97**	**DRS**	**160M4**	275	382
	43	2430	33.91	26300	1.75	**FA**	**97**	**DRS**	**160M4**	230	383
	48	2180	30.39	26000	1.95	**FAF**	**97**	**DRS**	**160M4**	250	382
	53	1970	27.44*	25600	2.2	**F**	**97**	**DRS**	**160M4**	235	381
	59	1790	24.92	25200	2.4	**FF**	**97**	**DRS**	**160M4**	270	382
	66	1590	22.11	24700	2.7						
	37	2820	39.30	14600	0.95	**FA**	**87**	**DRS**	**160M4**	170	378
	41	2530	35.19	14800	1.05	**FAF**	**87**	**DRS**	**160M4**	185	377
	50	2100	29.20	15000	1.20	**F**	**87**	**DRS**	**160M4**	175	376
						FF	**87**	**DRS**	**160M4**	190	377
	55	1900	26.50	15000	1.55						
	62	1700	23.68	15000	1.75	**FA**	**87**	**DRS**	**160M4**	170	378
	68	1530	21.32*	14900	1.95	**FAF**	**87**	**DRS**	**160M4**	180	377
	76	1380	19.31	14800	2.2	**F**	**87**	**DRS**	**160M4**	175	376
	85	1230	17.12	14600	2.4	**FF**	**87**	**DRS**	**160M4**	190	377
	94	1110	15.48	14400	2.7						
	111	940	13.12*	14100	3.2						
	74	1410	19.70	16300	1.05						
	83	1250	17.49	17200	1.20						
	93	1120	15.64*	17600	1.35						
	104	1010	14.06	17300	1.50						
	120	870	12.20	16900	1.70	**FA**	**77**	**DRS**	**160M4**	130	373
	134	785	10.93	16600	1.90	**FAF**	**77**	**DRS**	**160M4**	135	372
	157	665	9.30	15500	1.60	**F**	**77**	**DRS**	**160M4**	135	371
	177	590	8.26	15200	1.80	**FF**	**77**	**DRS**	**160M4**	145	372
	198	530	7.39	14900	2.0						
	220	475	6.64	14600	2.3						
	253	410	5.76	14200	2.6						
	283	370	5.16	13800	2.9						
	341	305	4.28	13300	3.3						
15.0	**6.3**	21100	232	89700	0.85	**FA**	**157R97**	**DRS**	**160MC4**	840	401
	7.2	18400	202	99000	1.00	**FAF**	**157R97**	**DRS**	**160MC4**	900	401
	7.5	17900	197	100500	1.00	**F**	**157R97**	**DRS**	**160MC4**	860	401
						FF	**157R97**	**DRS**	**160MC4**	970	401
	6.7	21200	217.62*	89000	0.85						
	8.2	17400	178.20*	101900	1.05						
	9.0	15900	162.96	105900	1.15						
	10	13800	141.80*	110600	1.30	**FA**	**157**	**DRS**	**160MC4**	710	398
	12	12200	125.14	113700	1.45	**FAF**	**157**	**DRS**	**160MC4**	770	397
	14	10600	108.49	116400	1.70	**F**	**157**	**DRS**	**160MC4**	740	396
	15	9430	96.53*	115700	1.90	**FF**	**157**	**DRS**	**160MC4**	840	397
	17	8380	85.80*	113200	2.2						
	19	7670	78.46	111100	2.4						
	21	6670	68.28*	108000	2.7						
	24	5890	60.25	105100	3.1						
	12	12200	125.37	89000	1.00						
	13	11100	114.34	88300	1.05	**FA**	**127**	**DRS**	**160MC4**	460	393
	15	9670	98.95	87000	1.25	**FAF**	**127**	**DRS**	**160MC4**	495	392
	17	8530	87.31*	85600	1.40	**F**	**127**	**DRS**	**160MC4**	495	391
	19	7370	75.41*	83800	1.65	**FF**	**127**	**DRS**	**160MC4**	540	392
	21	6850	70.07	82800	1.75						



F..DRS
F..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
15.0	**16**	9040	92.47*	46000	0.85	**FA**	**107**	**DRS**	**160MC4**	315	388
	17	8650	88.49	47100	0.90	**FAF**	**107**	**DRS**	**160MC4**	335	387
	17	8210	83.99	48400	0.95	**F**	**107**	**DRS**	**160MC4**	330	386
	20	7280	74.52	50800	1.05	**FF**	**107**	**DRS**	**160MC4**	360	387
	22	6610	67.62	52600	1.15						
	25	5680	58.12*	52200	1.35	**FA**	**107**	**DRS**	**160MC4**	315	388
	29	4960	50.73	51500	1.55	**FAF**	**107**	**DRS**	**160MC4**	335	387
	34	4200	43.03	50300	1.85	**F**	**107**	**DRS**	**160MC4**	330	386
	39	3670	37.61	49300	2.1	**FF**	**107**	**DRS**	**160MC4**	360	387
	46	3100	31.80	47900	2.5						
	43	3300	33.79*	48400	2.2	**FA**	**107**	**DRS**	**160MC4**	305	388
	53	2690	27.57	46700	2.9	**FAF**	**107**	**DRS**	**160MC4**	325	387
	58	2450	25.14	45800	3.2	**F**	**107**	**DRS**	**160MC4**	320	386
	67	2120	21.76*	44500	3.7	**FF**	**107**	**DRS**	**160MC4**	350	387
	33	4340	44.49	22900	1.00	**FA**	**97**	**DRS**	**160MC4**	240	383
	38	3790	38.86	23100	1.15	**FAF**	**97**	**DRS**	**160MC4**	260	382
	45	3170	32.50	23200	1.35	**F**	**97**	**DRS**	**160MC4**	245	381
						FF	**97**	**DRS**	**160MC4**	280	382
	43	3310	33.91	23200	1.30						
	48	2970	30.39	23200	1.45						
	53	2680	27.44*	23100	1.60						
	59	2430	24.92	22900	1.75	**FA**	**97**	**DRS**	**160MC4**	235	383
	66	2160	22.11	22600	2.00	**FAF**	**97**	**DRS**	**160MC4**	255	382
	73	1960	20.07	22400	2.2	**F**	**97**	**DRS**	**160MC4**	240	381
	85	1680	17.25*	21900	2.6	**FF**	**97**	**DRS**	**160MC4**	275	382
	97	1470	15.06	21400	2.9						
	115	1240	12.77	20800	3.4						
	131	1090	11.16	20200	3.8						
	55	2590	26.50	12400	1.15						
	62	2310	23.68	12600	1.30						
	69	2080	21.32*	12700	1.45						
	76	1880	19.31	12800	1.60						
	86	1670	17.12	12900	1.80						
	95	1510	15.48	12800	2.00						
	112	1280	13.12*	12700	2.3	**FA**	**87**	**DRS**	**160MC4**	175	378
	128	1120	11.46	12600	2.7	**FAF**	**87**	**DRS**	**160MC4**	185	377
	153	930	9.58	12300	3.1	**F**	**87**	**DRS**	**160MC4**	180	376
	177	810	8.29	11700	1.90	**FF**	**87**	**DRS**	**160MC4**	195	377
	199	715	7.35	11500	2.1						
	220	645	6.65	11300	2.4						
	260	550	5.63	11000	2.8						
	298	480	4.92	10700	3.2						
	356	400	4.12	10300	3.6						
18.5						**FA**	**157R97**	**DRS**	**180M4**	880	401
	7.2	22800	202	68200	0.80	**FAF**	**157R97**	**DRS**	**180M4**	940	401
	7.4	22200	197	82300	0.80	**F**	**157R97**	**DRS**	**180M4**	910	401
						FF	**157R97**	**DRS**	**180M4**	1010	401
	8.2	21500	178.20*	87900	0.85						
	9.0	19700	162.96	94800	0.90						
	10	17100	141.80*	102700	1.05						
	12	15100	125.14	107800	1.20						
	13	13100	108.49	112100	1.35	**FA**	**157**	**DRS**	**180M4**	760	398
	15	11600	96.53*	111400	1.55	**FAF**	**157**	**DRS**	**180M4**	820	397
	17	10300	85.80*	109300	1.75	**F**	**157**	**DRS**	**180M4**	780	396
	19	9490	78.46	107600	1.90	**FF**	**157**	**DRS**	**180M4**	880	397
	21	8260	68.28*	104900	2.2						
	24	7290	60.25	102400	2.5						
	28	6320	52.24	99400	2.8						
	13	13800	114.34	82200	0.85						
	15	11900	98.95	81700	1.00						
	17	10500	87.31*	81000	1.15	**FA**	**127**	**DRS**	**180M4**	500	393
	19	9120	75.41*	79800	1.30	**FAF**	**127**	**DRS**	**180M4**	540	392
	21	8470	70.07	79100	1.40	**F**	**127**	**DRS**	**180M4**	540	391
	23	7730	63.91	78100	1.55	**FF**	**127**	**DRS**	**180M4**	580	392
	26	6690	55.31	76500	1.80						
	30	5900	48.80	74900	2.0						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
18.5	**20**	9010	74.52	46100	0.85	**FA**	**107**	**DRS**	**180M4**	360	388
	22	8180	67.62	48500	0.95	**FAF**	**107**	**DRS**	**180M4**	380	387
	25	7030	58.12*	48700	1.10	**F**	**107**	**DRS**	**180M4**	375	386
	29	6130	50.73	48400	1.25	**FF**	**107**	**DRS**	**180M4**	405	387
	34	5200	43.03	47800	1.45	**FA**	**107**	**DRS**	**180M4**	360	388
	39	4550	37.61	47100	1.70	**FAF**	**107**	**DRS**	**180M4**	380	387
	46	3840	31.80	46000	2.0	**F**	**107**	**DRS**	**180M4**	375	386
						FF	**107**	**DRS**	**180M4**	405	387
	43	4080	33.79*	46400	1.80	**FA**	**107**	**DRS**	**180M4**	350	388
	53	3330	27.57	45000	2.4	**FAF**	**107**	**DRS**	**180M4**	370	387
	58	3040	25.14	44300	2.6	**F**	**107**	**DRS**	**180M4**	365	386
	67	2630	21.76*	43200	3.0	**FF**	**107**	**DRS**	**180M4**	395	387
						FA	**97**	**DRS**	**180M4**	285	383
	38	4700	38.86	20000	0.90	**FAF**	**97**	**DRS**	**180M4**	305	382
	45	3930	32.50	20600	1.10	**F**	**97**	**DRS**	**180M4**	290	381
						FF	**97**	**DRS**	**180M4**	325	382
	53	3320	27.44*	20900	1.30						
	59	3010	24.92	20900	1.45						
	66	2670	22.11	20900	1.60	**FA**	**97**	**DRS**	**180M4**	280	383
	73	2420	20.07	20800	1.75	**FAF**	**97**	**DRS**	**180M4**	300	382
	85	2080	17.25*	20500	2.1	**F**	**97**	**DRS**	**180M4**	285	381
	97	1820	15.06	20200	2.4	**FF**	**97**	**DRS**	**180M4**	320	382
	114	1540	12.77	19800	2.8						
	131	1350	11.16	19300	3.0						
	68	2570	21.32*	10900	1.15						
	76	2330	19.31	11100	1.30						
	85	2070	17.12	11400	1.45						
	94	1870	15.48	11500	1.60						
	111	1580	13.12*	11600	1.90						
	127	1380	11.46	11600	2.2	**FA**	**87**	**DRS**	**180M4**	215	378
	152	1150	9.58	11500	2.5	**FAF**	**87**	**DRS**	**180M4**	230	377
	176	1000	8.29	10900	1.55	**F**	**87**	**DRS**	**180M4**	225	376
	199	880	7.35	10800	1.70	**FF**	**87**	**DRS**	**180M4**	240	377
	220	800	6.65	10700	1.90						
	259	680	5.63	10500	2.2						
	297	595	4.92	10200	2.6						
	355	495	4.12	9910	2.9						
22	**10**	20400	141.80*	92400	0.90						
	12	18000	125.14	100200	1.00						
	13	15600	108.49	106700	1.15						
	15	13800	96.53*	107000	1.30						
	17	12300	85.80*	105400	1.45	**FA**	**157**	**DRS**	**180L4**	780	398
	19	11200	78.46	104000	1.60	**FAF**	**157**	**DRS**	**180L4**	840	397
	21	9820	68.28*	101800	1.85	**F**	**157**	**DRS**	**180L4**	800	396
	24	8660	60.25	99600	2.1	**FF**	**157**	**DRS**	**180L4**	900	397
	28	7510	52.24	97000	2.4						
	31	6680	46.48*	94800	2.7						
	36	5760	40.06	92000	3.1						
	45	4680	32.55	87900	3.8						
	15	14200	98.95	76300	0.85						
	17	12500	87.31*	76300	0.95						
	19	10800	75.41*	75700	1.10	**FA**	**127**	**DRS**	**180L4**	520	393
	21	10000	70.07	75300	1.20	**FAF**	**127**	**DRS**	**180L4**	560	392
	23	9190	63.91	74700	1.30	**F**	**127**	**DRS**	**180L4**	560	391
	26	7950	55.31	73500	1.50	**FF**	**127**	**DRS**	**180L4**	600	392
	30	7020	48.80	72300	1.70						
	35	6060	42.15	70700	2.00						
	25	8360	58.12*	45200	0.90	**FA**	**107**	**DRS**	**180L4**	380	388
	29	7300	50.73	45300	1.05	**FAF**	**107**	**DRS**	**180L4**	400	387
	34	6190	43.03	45100	1.25	**F**	**107**	**DRS**	**180L4**	395	386
						FF	**107**	**DRS**	**180L4**	425	387
						FA	**107**	**DRS**	**180L4**	380	388
	39	5410	37.61	44800	1.40	**FAF**	**107**	**DRS**	**180L4**	400	387
	46	4570	31.80	44100	1.70	**F**	**107**	**DRS**	**180L4**	395	386
						FF	**107**	**DRS**	**180L4**	425	387



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
22	**43**	4860	33.79*	44400	1.50	**FA**	**107**	**DRS**	**180L4**	370	388
	53	3960	27.57	43300	2.00	**FAF**	**107**	**DRS**	**180L4**	390	387
	58	3610	25.14	42800	2.2	**F**	**107**	**DRS**	**180L4**	385	386
	67	3130	21.76*	41900	2.5	**FF**	**107**	**DRS**	**180L4**	415	387
	76	2760	19.20*	41000	2.8						
	53	3940	27.44*	18700	1.10						
	59	3580	24.92	18900	1.20						
	66	3180	22.11	19100	1.35	**FA**	**97**	**DRS**	**180L4**	300	383
	73	2880	20.07	19200	1.50	**FAF**	**97**	**DRS**	**180L4**	320	382
	85	2480	17.25*	19100	1.75	**F**	**97**	**DRS**	**180L4**	305	381
	97	2160	15.06	19000	2.00	**FF**	**97**	**DRS**	**180L4**	340	382
	114	1830	12.77	18700	2.3						
	131	1600	11.16	18500	2.6						
	68	3060	21.32*	8970	1.00						
	76	2770	19.31	9410	1.10						
	85	2460	17.12	9840	1.20						
	94	2220	15.48	10100	1.35						
	111	1880	13.12*	10400	1.60						
	127	1640	11.46	10600	1.80	**FA**	**87**	**DRS**	**180L4**	235	378
	152	1370	9.58	10600	2.1	**FAF**	**87**	**DRS**	**180L4**	250	377
	176	1190	8.29	10100	1.30	**F**	**87**	**DRS**	**180L4**	240	376
	199	1050	7.35	10100	1.45	**FF**	**87**	**DRS**	**180L4**	255	377
	220	950	6.65	10000	1.60						
	259	810	5.63	9900	1.90						
	297	705	4.92	9750	2.2						
	355	590	4.12	9510	2.5						
30	**14**	21100	108.49	89600	0.85						
	15	18800	96.53*	96900	0.95						
	17	16700	85.80*	96400	1.10						
	19	15200	78.46	95800	1.20	**FA**	**157**	**DRS**	**180LC4**	790	398
	22	13300	68.28*	94600	1.35	**FAF**	**157**	**DRS**	**180LC4**	850	397
	24	11700	60.25	93300	1.55	**F**	**157**	**DRS**	**180LC4**	810	396
	28	10100	52.24	91500	1.75	**FF**	**157**	**DRS**	**180LC4**	920	397
	32	9050	46.48*	89900	2.00						
	37	7800	40.06	87700	2.3						
	19	14600	75.41*	64500	0.80						
	21	13600	70.07	65600	0.90						
	23	12400	63.91	66800	0.95						
	27	10700	55.31	66700	1.10	**FA**	**127**	**DRS**	**180LC4**	530	393
	30	9510	48.80	66300	1.25	**FAF**	**127**	**DRS**	**180LC4**	570	392
	35	8210	42.15	65500	1.45	**F**	**127**	**DRS**	**180LC4**	570	391
	39	7260	37.28	64700	1.65	**FF**	**127**	**DRS**	**180LC4**	620	392
	47	6100	31.33	63200	1.95						
	58	4930	25.30	61200	2.4						
	55	5230	26.86	61800	1.60	**FA**	**127**	**DRS**	**180LC4**	520	393
	60	4780	24.57	60900	1.80	**FAF**	**127**	**DRS**	**180LC4**	560	392
	69	4160	21.38	59400	2.9	**F**	**127**	**DRS**	**180LC4**	560	391
	78	3670	18.87	58000	3.0	**FF**	**127**	**DRS**	**180LC4**	600	392
	34	8380	43.03	39200	0.90	**FA**	**107**	**DRS**	**180LC4**	390	388
	39	7320	37.61	39600	1.05	**FAF**	**107**	**DRS**	**180LC4**	410	387
	46	6190	31.80	39700	1.25	**F**	**107**	**DRS**	**180LC4**	405	386
						FF	**107**	**DRS**	**180LC4**	435	387
	53	5370	27.57	39500	1.45						
	58	4890	25.14	39300	1.60						
	68	4240	21.76*	38800	1.85	**FA**	**107**	**DRS**	**180LC4**	380	388
	77	3740	19.20*	38300	2.1	**FAF**	**107**	**DRS**	**180LC4**	400	387
	89	3230	16.58	37600	2.4	**F**	**107**	**DRS**	**180LC4**	395	386
	100	2850	14.67	36900	2.7	**FF**	**107**	**DRS**	**180LC4**	425	387
	119	2400	12.33	35900	2.9						
	148	1940	9.96	34500	3.4						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
30	**66**	4300	22.11	15100	1.00						
	73	3910	20.07	15500	1.10						
	85	3360	17.25*	16000	1.30						
	98	2930	15.06	16300	1.45						
	115	2480	12.77	16400	1.75	**FA**	**97**	**DRS**	**180LC4**	310	383
	132	2170	11.16	16400	1.90	**FAF**	**97**	**DRS**	**180LC4**	330	382
	162	1760	9.06	15400	1.35	**F**	**97**	**DRS**	**180LC4**	315	381
	179	1600	8.22	15300	1.45	**FF**	**97**	**DRS**	**180LC4**	350	382
	208	1370	7.07	15100	1.70						
	238	1200	6.17	14900	1.85						
	281	1010	5.23	14600	2.1						
	321	890	4.57	14300	2.3						
37	**17**	20600	85.80*	88600	0.85						
	19	18800	78.46	88700	0.95						
	22	16400	68.28*	88400	1.10						
	24	14400	60.25	87800	1.25	**FA**	**157**	**DRS**	**225S4**	910	398
	28	12500	52.24	86800	1.45	**FAF**	**157**	**DRS**	**225S4**	970	397
	32	11100	46.48*	85700	1.60	**F**	**157**	**DRS**	**225S4**	930	396
	37	9620	40.06	84000	1.85	**FF**	**157**	**DRS**	**225S4**	1030	397
	45	7820	32.55	81400	2.3						
	53	6630	27.60	79100	2.7						
	27	13200	55.31	59100	0.90						
	30	11700	48.80	60700	1.00	**FA**	**127**	**DRS**	**225S4**	650	393
	35	10100	42.15	61100	1.20	**FAF**	**127**	**DRS**	**225S4**	690	392
	39	8960	37.28	60700	1.35	**F**	**127**	**DRS**	**225S4**	690	391
	47	7530	31.33	59900	1.60	**FF**	**127**	**DRS**	**225S4**	730	392
	58	6080	25.30	58500	1.95						
	55	6450	26.86	58900	1.30						
	60	5900	24.57	58300	1.45						
	69	5130	21.38	57100	2.3						
	78	4530	18.87	56000	2.4	**FA**	**127**	**DRS**	**225S4**	640	393
	90	3930	16.36	54600	2.8	**FAF**	**127**	**DRS**	**225S4**	680	392
	101	3490	14.55	53400	3.1	**F**	**127**	**DRS**	**225S4**	680	391
	117	3010	12.54	51900	3.3	**FF**	**127**	**DRS**	**225S4**	720	392
	144	2440	10.19	49600	3.9						
	166	2120	8.86	47700	3.3						
	186	1890	7.88	46500	3.2						
	53	6620	27.57	36200	1.20						
	58	6040	25.14	36200	1.30						
	68	5230	21.76*	36200	1.50						
	77	4610	19.20*	36000	1.70						
	89	3980	16.58	35600	1.95	**FA**	**107**	**DRS**	**225S4**	500	388
	100	3520	14.67	35100	2.2	**FAF**	**107**	**DRS**	**225S4**	520	387
	119	2960	12.33	34400	2.4	**F**	**107**	**DRS**	**225S4**	510	386
	148	2390	9.96	33300	2.7	**FF**	**107**	**DRS**	**225S4**	540	387
	152	2320	9.69	32400	2.1						
	176	2010	8.37	31700	2.4						
	199	1770	7.40	31000	2.6						
	236	1490	6.22	30000	3.1						
45	**22**	19800	68.28*	81400	0.90						
	25	17400	60.25	81600	1.05						
	28	15100	52.24	81300	1.20	**FA**	**157**	**DRS**	**225M4**	930	398
	32	13400	46.48*	80800	1.35	**FAF**	**157**	**DRS**	**225M4**	990	397
	37	11600	40.06	79800	1.55	**F**	**157**	**DRS**	**225M4**	950	396
	45	9450	32.55	78000	1.90	**FF**	**157**	**DRS**	**225M4**	1060	397
	54	8010	27.60	76200	2.2						
	30	14100	48.80	51600	0.85						
	35	12200	42.15	54300	1.00	**FA**	**127**	**DRS**	**225M4**	670	393
	40	10800	37.28	55800	1.10	**FAF**	**127**	**DRS**	**225M4**	710	392
	47	9090	31.33	56100	1.30	**F**	**127**	**DRS**	**225M4**	710	391
	58	7340	25.30	55400	1.65	**FF**	**127**	**DRS**	**225M4**	750	392



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
45	**55**	7800	26.86	55600	1.10						
	60	7130	24.57	55300	1.20						
	69	6200	21.38	54500	1.95						
	78	5470	18.87	53600	2.0						
	90	4740	16.36	52600	2.3	**FA**	**127**	**DRS**	**225M4**	660	393
	102	4220	14.55	51600	2.6	**FAF**	**127**	**DRS**	**225M4**	700	392
	118	3640	12.54	50300	2.8	**F**	**127**	**DRS**	**225M4**	700	391
	145	2950	10.19	48300	3.2	**FF**	**127**	**DRS**	**225M4**	740	392
	167	2570	8.86	46500	2.7						
	188	2280	7.88	45400	2.6						
	218	1970	6.80	44000	3.6						
	268	1600	5.52	41900	3.7						
	54	8000	27.57	31500	1.00						
	59	7300	25.14	32600	1.05						
	68	6310	21.76*	33200	1.25						
	77	5570	19.20*	33300	1.40						
	89	4810	16.58	33300	1.65	**FA**	**107**	**DRS**	**225M4**	520	388
	101	4250	14.67	33100	1.80	**FAF**	**107**	**DRS**	**225M4**	540	387
	120	3570	12.33	32600	1.95	**F**	**107**	**DRS**	**225M4**	540	386
	149	2890	9.96	31900	2.2	**FF**	**107**	**DRS**	**225M4**	560	387
	153	2810	9.69	30900	1.75						
	177	2430	8.37	30400	1.95						
	200	2140	7.40	29900	2.1						
	238	1800	6.22	29000	2.6						
55	**25**	21300	60.25	73800	0.85						
	28	18500	52.24	74600	0.95	**FA**	**157**	**DRS**	**225MC4**	940	398
	32	16400	46.48*	74800	1.10	**FAF**	**157**	**DRS**	**225MC4**	1000	397
	37	14200	40.06	74700	1.25	**F**	**157**	**DRS**	**225MC4**	960	396
	45	11500	32.55	73800	1.55	**FF**	**157**	**DRS**	**225MC4**	1070	397
	54	9790	27.60	72600	1.85						
	52	10100	28.60*	72900	1.65						
	58	9020	25.43	71900	1.65	**FA**	**157**	**DRS**	**225MC4**	930	398
	67	7860	22.16	70600	2.3	**FAF**	**157**	**DRS**	**225MC4**	990	397
	75	7010	19.77	69400	2.4	**F**	**157**	**DRS**	**225MC4**	960	396
	88	5980	16.85	67500	3.0	**FF**	**157**	**DRS**	**225MC4**	1060	397
	40	13200	37.28	47000	0.90	**FA**	**127**	**DRS**	**225MC4**	690	393
	47	11100	31.33	50000	1.10	**FAF**	**127**	**DRS**	**225MC4**	720	392
	58	8970	25.30	51600	1.35	**F**	**127**	**DRS**	**225MC4**	720	391
						FF	**127**	**DRS**	**225MC4**	770	392
	69	7580	21.38	51300	1.60						
	78	6690	18.87	50800	1.65						
	90	5800	16.36	50100	1.90						
	102	5160	14.55	49400	2.1						
	118	4450	12.54	48400	2.2	**FA**	**127**	**DRS**	**225MC4**	670	393
	145	3610	10.19	46800	2.6	**FAF**	**127**	**DRS**	**225MC4**	710	392
	167	3140	8.86	45100	2.2	**F**	**127**	**DRS**	**225MC4**	710	391
	188	2790	7.88	44100	2.1	**FF**	**127**	**DRS**	**225MC4**	760	392
	218	2410	6.80	42900	2.9						
	268	1950	5.52	41100	3.1						
	316	1660	4.68	39600	3.6						
75	**32**	22400	46.48*	62900	0.80	**FA**	**157**	**DV**	**280S4**	1200	398
	37	19300	40.06	64400	0.95	**FAF**	**157**	**DV**	**280S4**	1260	397
	45	15700	32.55	65400	1.15	**F**	**157**	**DV**	**280S4**	1220	396
	54	13300	27.60	65500	1.35	**FF**	**157**	**DV**	**280S4**	1330	397
	52	13800	28.60*	65500	1.25						
	58	12300	25.43	65400	1.20						
	67	10700	22.16	64900	1.70	**FA**	**157**	**DV**	**280S4**	1190	398
	75	9560	19.77	64300	1.80	**FAF**	**157**	**DV**	**280S4**	1250	397
	88	8150	16.85	63200	2.2	**F**	**157**	**DV**	**280S4**	1220	396
	106	6750	13.96	61600	2.5	**FF**	**157**	**DV**	**280S4**	1320	397
	124	5760	11.92	60100	2.8						
						FA	**127**	**DV**	**280S4**	950	393
	58	12200	25.30	44000	1.00	**FAF**	**127**	**DV**	**280S4**	980	392
						F	**127**	**DV**	**280S4**	980	391
						FF	**127**	**DV**	**280S4**	1030	392



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
75	**69**	10300	21.38	44800	1.15						
	78	9120	18.87	45100	1.20						
	90	7910	16.36	45200	1.40						
	102	7040	14.55	45000	1.55						
	118	6060	12.54	44600	1.65	**FA**	**127**	**DV**	**280S4**	940	393
	145	4930	10.19	43700	1.95	**FAF**	**127**	**DV**	**280S4**	970	392
	167	4280	8.86	42200	1.65	**F**	**127**	**DV**	**280S4**	970	391
	188	3810	7.88	41600	1.55	**FF**	**127**	**DV**	**280S4**	1020	392
	218	3280	6.80	40700	2.1						
	268	2670	5.52	39300	2.2						
	316	2260	4.68	38100	2.6						
90						**FA**	**157**	**DV**	**280M4**	1200	398
	45	18900	32.55	59100	0.95	**FAF**	**157**	**DV**	**280M4**	1260	397
	54	16000	27.60	60200	1.10	**F**	**157**	**DV**	**280M4**	1220	396
						FF	**157**	**DV**	**280M4**	1330	397
	67	12800	22.16	60600	1.40	**FA**	**157**	**DV**	**280M4**	1200	398
	75	11400	19.77	60500	1.50	**FAF**	**157**	**DV**	**280M4**	1260	397
	88	9780	16.85	59900	1.85	**F**	**157**	**DV**	**280M4**	1220	396
	106	8100	13.96	58900	2.1	**FF**	**157**	**DV**	**280M4**	1330	397
	124	6920	11.92	57800	2.3						
						FA	**127**	**DV**	**280M4**	950	393
	58	14600	25.30	33100	0.80	**FAF**	**127**	**DV**	**280M4**	990	392
						F	**127**	**DV**	**280M4**	990	391
						FF	**127**	**DV**	**280M4**	1030	392
	90	9490	16.36	41500	1.15						
	102	8450	14.55	41700	1.30						
	118	7280	12.54	41800	1.35	**FA**	**127**	**DV**	**280M4**	940	393
	145	5910	10.19	41400	1.60	**FAF**	**127**	**DV**	**280M4**	980	392
	167	5140	8.86	40100	1.35	**F**	**127**	**DV**	**280M4**	970	391
	188	4570	7.88	39700	1.30	**FF**	**127**	**DV**	**280M4**	1020	392
	218	3940	6.80	39000	1.75						
	268	3200	5.52	37900	1.85						
	316	2710	4.68	36900	2.2						
110						**FA**	**157**	**DRS**	**315K4**	1450	398
	54	19500	27.60	53100	0.90	**FAF**	**157**	**DRS**	**315K4**	1510	397
						F	**157**	**DRS**	**315K4**	1470	396
						FF	**157**	**DRS**	**315K4**	1580	397
						FA	**157**	**DRS**	**315K4/ERF/NS**	1440	398
	67	15700	22.16	54900	1.15	**FAF**	**157**	**DRS**	**315K4/ERF/NS**	1500	397
						F	**157**	**DRS**	**315K4/ERF/NS**	1470	396
						FF	**157**	**DRS**	**315K4/ERF/NS**	1570	397
	75	14000	19.77	55400	1.20	**FA**	**157**	**DRS**	**315K4**	1440	398
	88	11900	16.85	55600	1.50	**FAF**	**157**	**DRS**	**315K4**	1500	397
	106	9890	13.96	55300	1.70	**F**	**157**	**DRS**	**315K4**	1470	396
	124	8440	11.92	54700	1.90	**FF**	**157**	**DRS**	**315K4**	1570	397
132						**FA**	**157**	**DRS**	**315S4/ERF/NS**	1520	398
	67	18800	22.16	48600	0.95	**FAF**	**157**	**DRS**	**315S4/ERF/NS**	1580	397
	75	16800	19.77	49800	1.00	**F**	**157**	**DRS**	**315S4/ERF/NS**	1550	396
						FF	**157**	**DRS**	**315S4/ERF/NS**	1650	397
						FA	**157**	**DRS**	**315S4**	1520	398
	88	14300	16.85	50800	1.25	**FAF**	**157**	**DRS**	**315S4**	1580	397
	106	11800	13.96	51400	1.45	**F**	**157**	**DRS**	**315S4**	1550	396
	124	10100	11.92	51400	1.60	**FF**	**157**	**DRS**	**315S4**	1650	397
160						**FA**	**157**	**DRS**	**315M4**	1680	398
	88	17300	16.85	44800	1.05	**FAF**	**157**	**DRS**	**315M4**	1740	397
	106	14300	13.96	46400	1.20	**F**	**157**	**DRS**	**315M4**	1700	396
	124	12200	11.92	47100	1.30	**FF**	**157**	**DRS**	**315M4**	1810	397
200						**FA**	**157**	**DRS**	**315L4/ERF/NS**	1760	398
	88	21700	16.85	36100	0.85	**FAF**	**157**	**DRS**	**315L4/ERF/NS**	1820	397
						F	**157**	**DRS**	**315L4/ERF/NS**	1780	396
						FF	**157**	**DRS**	**315L4/ERF/NS**	1890	397
						FA	**157**	**DRS**	**315L4**	1760	398
	106	18000	13.96	39200	0.95	**FAF**	**157**	**DRS**	**315L4**	1820	397
	124	15300	11.92	41000	1.05	**F**	**157**	**DRS**	**315L4**	1780	396
						FF	**157**	**DRS**	**315L4**	1890	397

10.4 F..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
130	**0.15**	8972	4500						
	0.18	7736	4500						
	0.19	7211	4500						
	0.22	6303	4500						
	0.25	5435	4500	**FA**	**27R17**	**DR**	**63S4**	13	401
	0.28	4855	4500	**FAF**	**27R17**	**DR**	**63S4**	14	401
	0.33	4243	4500	**F**	**27R17**	**DR**	**63S4**	14	401
	0.37	3715	4500	**FF**	**27R17**	**DR**	**63S4**	14	401
	0.43	3247	4500						
	0.48	2878	4500						
	0.55	2515	4500						
	0.62	2217	4500						
	0.73	1898	4500						
	0.84	1645	4500						
	0.90	1525	4500						
	1.0	1322	4500						
	1.2	1146	4500	**FA**	**27R17**	**DR**	**63S4**	13	401
	1.4	1013	4500	**FAF**	**27R17**	**DR**	**63S4**	14	401
	1.6	890	4500	**F**	**27R17**	**DR**	**63S4**	13	401
	1.8	778	4500	**FF**	**27R17**	**DR**	**63S4**	14	401
	2.0	682	4500						
	2.3	602	4500						
	2.6	520	4500						
	3.0	458	4500						
	3.5	397	4500						
	4.0	342	4500	**FA**	**27R17**	**DR**	**63S4**	13	401
	4.6	302	4500	**FAF**	**27R17**	**DR**	**63S4**	13	401
	5.2	266	4500	**F**	**27R17**	**DR**	**63S4**	13	401
	5.8	236	4500	**FF**	**27R17**	**DR**	**63S4**	14	401
	6.5	211	4500						
	7.4	186	4500						
				FA	**27R17**	**DR**	**63M4**	13	401
	9.3	142	4500	**FAF**	**27R17**	**DR**	**63M4**	13	401
	11	124	4500	**F**	**27R17**	**DR**	**63M4**	13	401
				FF	**27R17**	**DR**	**63M4**	14	401
				FA	**27R17**	**DR**	**63L4**	13	401
	12	109	4500	**FAF**	**27R17**	**DR**	**63L4**	14	401
	14	96	4500	**F**	**27R17**	**DR**	**63L4**	14	401
				FF	**27R17**	**DR**	**63L4**	15	401
200	**0.17**	8193	4290						
	0.20	7064	4290						
	0.21	6585	4290						
	0.24	5756	4290						
	0.28	4963	4290	**FA**	**37R17**	**DR**	**63S4**	19	401
	0.31	4434	4290	**FAF**	**37R17**	**DR**	**63S4**	21	401
	0.36	3875	4290	**F**	**37R17**	**DR**	**63S4**	20	401
	0.41	3392	4290	**FF**	**37R17**	**DR**	**63S4**	22	401
	0.47	2965	4290						
	0.53	2587	4290						
	0.60	2284	4290						
	0.69	1997	4290						
	0.72	1929	4290						
	0.82	1679	4290						
	0.89	1550	4290						
	1.0	1356	4290						
	1.2	1180	4290						
	1.3	1044	4290	**FA**	**37R17**	**DR**	**63S4**	19	401
	1.5	914	4290	**FAF**	**37R17**	**DR**	**63S4**	21	401
	1.7	808	4290	**F**	**37R17**	**DR**	**63S4**	20	401
	2.0	698	4290	**FF**	**37R17**	**DR**	**63S4**	21	401
	2.2	616	4290						
	2.5	544	4290						
	3.0	466	4290						
	3.4	411	4290						
	3.8	364	4290						



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
200				**FA**	**37R17**	**DR**	**63S4**	19	401
	4.2	326	4290	**FAF**	**37R17**	**DR**	**63S4**	20	401
	4.8	285	4290	**F**	**37R17**	**DR**	**63S4**	19	401
				FF	**37R17**	**DR**	**63S4**	21	401
				FA	**37R17**	**DR**	**63M4**	19	401
	5.3	250	4290	**FAF**	**37R17**	**DR**	**63M4**	20	401
	6.0	219	4290	**F**	**37R17**	**DR**	**63M4**	19	401
	7.1	186	4290	**FF**	**37R17**	**DR**	**63M4**	21	401
				FA	**37R17**	**DR**	**63L4**	20	401
	7.8	167	4290	**FAF**	**37R17**	**DR**	**63L4**	21	401
	8.9	145	4290	**F**	**37R17**	**DR**	**63L4**	20	401
	10	129	4290	**FF**	**37R17**	**DR**	**63L4**	22	401
400	**0.11**	12251	5920						
	0.13	10619	5920						
	0.14	9846	5920						
	0.16	8534	5920						
	0.19	7460	5920						
	0.21	6536	5920	**FA**	**47R17**	**DR**	**63S4**	24	401
	0.24	5746	5920	**FAF**	**47R17**	**DR**	**63S4**	27	401
	0.27	5022	5920	**F**	**47R17**	**DR**	**63S4**	25	401
	0.31	4401	5920	**FF**	**47R17**	**DR**	**63S4**	28	401
	0.36	3883	5920						
	0.40	3443	5920						
	0.46	2976	5920						
	0.52	2629	5920						
	0.55	2519	5920						
	0.58	2394	5920						
	0.64	2172	5920						
	0.68	2025	5920						
	0.78	1770	5920						
	0.88	1576	5920	**FA**	**47R17**	**DR**	**63S4**	23	401
	1.0	1363	5920	**FAF**	**47R17**	**DR**	**63S4**	26	401
	1.2	1192	5920	**F**	**47R17**	**DR**	**63S4**	24	401
	1.3	1061	5920	**FF**	**47R17**	**DR**	**63S4**	27	401
	1.5	931	5920						
	1.7	822	5920						
	2.0	706	5920						
	2.2	619	5920						
	2.5	524	5920	**FA**	**47R17**	**DR**	**63M4**	23	401
	2.7	489	5920	**FAF**	**47R17**	**DR**	**63M4**	26	401
	3.1	427	5920	**F**	**47R17**	**DR**	**63M4**	24	401
	3.5	381	5920	**FF**	**47R17**	**DR**	**63M4**	27	401
				FA	**47R17**	**DR**	**63L4**	24	401
	3.9	334	5920	**FAF**	**47R17**	**DR**	**63L4**	26	401
	4.4	295	5920	**F**	**47R17**	**DR**	**63L4**	25	401
	5.1	253	5920	**FF**	**47R17**	**DR**	**63L4**	28	401
				FA	**47R17**	**DRS**	**71S4**	26	401
	6.4	217	5920	**FAF**	**47R17**	**DRS**	**71S4**	28	401
	7.3	190	5920	**F**	**47R17**	**DRS**	**71S4**	26	401
	7.8	178	5920	**FF**	**47R17**	**DRS**	**71S4**	30	401
				FA	**47R17**	**DRS**	**71M4**	27	401
	9.2	149	5920	**FAF**	**47R17**	**DRS**	**71M4**	30	401
	11	131	5920	**F**	**47R17**	**DRS**	**71M4**	28	401
				FF	**47R17**	**DRS**	**71M4**	31	401
600	**0.09**	14832	9200						
	0.10	13604	9200						
	0.11	12602	9200						
	0.12	11252	9200						
	0.14	9986	9200						
	0.16	8787	9200	**FA**	**57R37**	**DR**	**63S4**	39	401
	0.17	7908	9200	**FAF**	**57R37**	**DR**	**63S4**	45	401
	0.20	6913	9200	**F**	**57R37**	**DR**	**63S4**	39	401
	0.23	6030	9200	**FF**	**57R37**	**DR**	**63S4**	46	401
	0.26	5289	9200						
	0.30	4654	9200						
	0.34	4060	9200						
	0.39	3564	9200						
	0.44	3161	9200						



F..DRS
F..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
600	**0.48**	2854	9200						
	0.54	2576	9200						
	0.61	2266	9200						
	0.69	2012	9200						
	0.77	1791	9200	**FA**	**57R37**	**DR**	**63S4**	39	401
	0.85	1617	9200	**FAF**	**57R37**	**DR**	**63S4**	44	401
	0.97	1422	9200	**F**	**57R37**	**DR**	**63S4**	39	401
	1.1	1243	9200	**FF**	**57R37**	**DR**	**63S4**	45	401
	1.3	1066	9200						
	1.4	949	9200						
	1.6	856	9200						
	1.8	749	9200	**FA**	**57R37**	**DR**	**63M4**	39	401
	2.0	658	9200	**FAF**	**57R37**	**DR**	**63M4**	44	401
	2.4	549	9200	**F**	**57R37**	**DR**	**63M4**	39	401
				FF	**57R37**	**DR**	**63M4**	45	401
	2.7	483	9200	**FA**	**57R37**	**DR**	**63L4**	39	401
				FAF	**57R37**	**DR**	**63L4**	45	401
				F	**57R37**	**DR**	**63L4**	40	401
				FF	**57R37**	**DR**	**63L4**	46	401
	3.0	426	9200	**FA**	**57R37**	**DR**	**63L4**	39	401
	3.4	382	9200	**FAF**	**57R37**	**DR**	**63L4**	45	401
				F	**57R37**	**DR**	**63L4**	39	401
				FF	**57R37**	**DR**	**63L4**	46	401
	4.2	330	9200	**FA**	**57R37**	**DRS**	**71S4**	41	401
	4.6	298	9200	**FAF**	**57R37**	**DRS**	**71S4**	47	401
	5.3	262	9200	**F**	**57R37**	**DRS**	**71S4**	41	401
				FF	**57R37**	**DRS**	**71S4**	48	401
	6.1	226	9200	**FA**	**57R37**	**DRS**	**71M4**	42	401
	6.9	200	9200	**FAF**	**57R37**	**DRS**	**71M4**	48	401
				F	**57R37**	**DRS**	**71M4**	42	401
				FF	**57R37**	**DRS**	**71M4**	49	401
	8.2	170	9200	**FA**	**57R37**	**DRS**	**80S4**	44	401
	9.2	152	9200	**FAF**	**57R37**	**DRS**	**80S4**	50	401
	10	134	9200	**F**	**57R37**	**DRS**	**80S4**	45	401
				FF	**57R37**	**DRS**	**80S4**	51	401
820	**0.07**	19199	10300						
	0.08	17610	10300						
	0.09	14992	10300						
	0.11	12926	10300						
	0.12	11480	10300						
	0.14	10220	10300						
	0.15	8933	10300						
	0.17	7940	10300	**FA**	**67R37**	**DR**	**63S4**	43	401
	0.19	7096	10300	**FAF**	**67R37**	**DR**	**63S4**	49	401
	0.23	6080	10300	**F**	**67R37**	**DR**	**63S4**	46	401
	0.26	5341	10300	**FF**	**67R37**	**DR**	**63S4**	52	401
	0.29	4690	10300						
	0.34	4091	10300						
	0.39	3574	10300						
	0.44	3133	10300						
	0.50	2756	10300						
	0.57	2439	10300						
	0.41	3377	10300						
	0.47	2912	10300						
	0.51	2714	10300	**FA**	**67R37**	**DR**	**63S4**	42	401
	0.58	2372	10300	**FAF**	**67R37**	**DR**	**63S4**	48	401
	0.65	2126	10300	**F**	**67R37**	**DR**	**63S4**	45	401
	0.85	1631	10300	**FF**	**67R37**	**DR**	**63S4**	51	401
	0.96	1437	10300						
	1.1	1256	10300						
	1.2	1126	10300	**FA**	**67R37**	**DR**	**63M4**	42	401
	1.3	984	10300	**FAF**	**67R37**	**DR**	**63M4**	48	401
	1.5	864	10300	**F**	**67R37**	**DR**	**63M4**	45	401
				FF	**67R37**	**DR**	**63M4**	51	401
	1.8	722	10300	**FA**	**67R37**	**DR**	**63L4**	43	401
	2.0	634	10300	**FAF**	**67R37**	**DR**	**63L4**	49	401
	2.4	539	10300	**F**	**67R37**	**DR**	**63L4**	46	401
				FF	**67R37**	**DR**	**63L4**	52	401

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
820				**FA**	**67R37**	**DR**	**63S4**	43	401
	0.73	1884	10300	**FAF**	**67R37**	**DR**	**63S4**	49	401
				F	**67R37**	**DR**	**63S4**	46	401
				FF	**67R37**	**DR**	**63S4**	52	401
				FA	**67R37**	**DR**	**63L4**	42	401
	2.6	500	10300	**FAF**	**67R37**	**DR**	**63L4**	49	401
				F	**67R37**	**DR**	**63L4**	45	401
				FF	**67R37**	**DR**	**63L4**	51	401
				FA	**67R37**	**DRS**	**71S4**	44	401
	3.0	454	10300	**FAF**	**67R37**	**DRS**	**71S4**	51	401
	3.5	392	10300	**F**	**67R37**	**DRS**	**71S4**	47	401
				FF	**67R37**	**DRS**	**71S4**	53	401
	4.1	333	10300	**FA**	**67R37**	**DRS**	**71M4**	46	401
	4.6	297	10300	**FAF**	**67R37**	**DRS**	**71M4**	52	401
	5.3	261	10300	**F**	**67R37**	**DRS**	**71M4**	48	401
	5.8	238	10300	**FF**	**67R37**	**DRS**	**71M4**	54	401
				FA	**67R37**	**DRS**	**80S4**	48	401
	7.0	200	10300	**FAF**	**67R37**	**DRS**	**80S4**	54	401
				F	**67R37**	**DRS**	**80S4**	51	401
				FF	**67R37**	**DRS**	**80S4**	57	401
1500	**0.07**	19180	15700						
	0.08	17593	15700						
	0.09	16128	15700						
	0.09	14978	15700						
	0.10	13731	15700						
	0.11	12049	15700						
	0.13	11035	15700						
	0.14	9683	15700	**FA**	**77R37**	**DR**	**63S4**	65	401
	0.16	8464	15700	**FAF**	**77R37**	**DR**	**63S4**	72	401
	0.18	7520	15700	**F**	**77R37**	**DR**	**63S4**	69	401
	0.21	6580	15700	**FF**	**77R37**	**DR**	**63S4**	80	401
	0.24	5808	15700						
	0.27	5026	15700						
	0.31	4435	15700						
	0.36	3832	15700						
	0.46	2978	15700						
	0.53	2613	15700						
	0.60	2284	15700						
				FA	**77R37**	**DR**	**63M4**	65	401
	0.65	2029	15700	**FAF**	**77R37**	**DR**	**63M4**	72	401
				F	**77R37**	**DR**	**63M4**	69	401
				FF	**77R37**	**DR**	**63M4**	80	401
				FA	**77R37**	**DR**	**63M4**	65	401
	0.76	1728	15700	**FAF**	**77R37**	**DR**	**63M4**	72	401
	0.86	1544	15700	**F**	**77R37**	**DR**	**63M4**	69	401
	0.98	1354	15700	**FF**	**77R37**	**DR**	**63M4**	80	401
				FA	**77R37**	**DR**	**63L4**	66	401
	1.1	1200	15700	**FAF**	**77R37**	**DR**	**63L4**	72	401
	1.2	1053	15700	**F**	**77R37**	**DR**	**63L4**	70	401
				FF	**77R37**	**DR**	**63L4**	80	401
				FA	**77R37**	**DRS**	**71S4**	68	401
	1.5	910	15700	**FAF**	**77R37**	**DRS**	**71S4**	74	401
	1.7	810	15700	**F**	**77R37**	**DRS**	**71S4**	72	401
	1.9	710	15700	**FF**	**77R37**	**DRS**	**71S4**	82	401
				FA	**77R37**	**DRS**	**71M4**	69	401
	2.2	615	15700	**FAF**	**77R37**	**DRS**	**71M4**	76	401
	2.6	538	15700	**F**	**77R37**	**DRS**	**71M4**	73	401
	2.9	480	15700	**FF**	**77R37**	**DRS**	**71M4**	83	401
				FA	**77R37**	**DRS**	**80S4**	71	401
	3.4	413	15700	**FAF**	**77R37**	**DRS**	**80S4**	78	401
	3.8	367	15700	**F**	**77R37**	**DRS**	**80S4**	75	401
	4.3	323	15700	**FF**	**77R37**	**DRS**	**80S4**	86	401



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
3000	**0.06**	23042	19800						
	0.07	20462	19800						
	0.08	18238	19800						
	0.09	15877	19800						
	0.10	14099	19800						
	0.11	12205	19800	**FA**	**87R57**	**DR**	**63S4**	120	401
	0.13	10433	19800	**FAF**	**87R57**	**DR**	**63S4**	130	401
	0.15	9381	19800	**F**	**87R57**	**DR**	**63S4**	125	401
	0.17	8142	19800	**FF**	**87R57**	**DR**	**63S4**	140	401
	0.19	7100	19800						
	0.22	6273	19800						
	0.25	5510	19800						
	0.28	4954	19800						
				FA	**87R57**	**DR**	**63M4**	120	401
	0.31	4245	19800	**FAF**	**87R57**	**DR**	**63M4**	130	401
	0.35	3721	19800	**F**	**87R57**	**DR**	**63M4**	125	401
				FF	**87R57**	**DR**	**63M4**	140	401
				FA	**87R57**	**DR**	**63M4**	115	401
	0.41	3244	19800	**FAF**	**87R57**	**DR**	**63M4**	130	401
	0.46	2881	19800	**F**	**87R57**	**DR**	**63M4**	125	401
				FF	**87R57**	**DR**	**63M4**	140	401
				FA	**87R57**	**DR**	**63L4**	120	401
	0.50	2576	19800	**FAF**	**87R57**	**DR**	**63L4**	130	401
	0.59	2199	19800	**F**	**87R57**	**DR**	**63L4**	125	401
	0.67	1930	19800	**FF**	**87R57**	**DR**	**63L4**	140	401
				FA	**87R57**	**DRS**	**71S4**	120	401
	0.81	1709	19800	**FAF**	**87R57**	**DRS**	**71S4**	130	401
	0.92	1493	19800	**F**	**87R57**	**DRS**	**71S4**	125	401
				FF	**87R57**	**DRS**	**71S4**	140	401
	1.1	1300	19800	**FA**	**87R57**	**DRS**	**71M4**	120	401
	1.2	1148	19800	**FAF**	**87R57**	**DRS**	**71M4**	135	401
	1.4	1010	19800	**F**	**87R57**	**DRS**	**71M4**	125	401
	1.6	887	19800	**FF**	**87R57**	**DRS**	**71M4**	140	401
				FA	**87R57**	**DRS**	**80S4**	125	401
	1.8	780	19800	**FAF**	**87R57**	**DRS**	**80S4**	135	401
	2.1	674	19800	**F**	**87R57**	**DRS**	**80S4**	130	401
				FF	**87R57**	**DRS**	**80S4**	145	401
				FA	**87R57**	**DRS**	**80M4**	125	401
	2.3	609	19800	**FAF**	**87R57**	**DRS**	**80M4**	140	401
	2.7	515	19800	**F**	**87R57**	**DRS**	**80M4**	130	401
	3.1	452	19800	**FF**	**87R57**	**DRS**	**80M4**	145	401
				FA	**87R57**	**DRS**	**90M4**	130	401
	4.0	345	19800	**FAF**	**87R57**	**DRS**	**90M4**	145	401
				F	**87R57**	**DRS**	**90M4**	135	401
				FF	**87R57**	**DRS**	**90M4**	150	401
4300	**0.07**	20813	29900						
	0.08	18119	29900						
	0.09	15472	29900						
	0.10	14022	29900	**FA**	**97R57**	**DR**	**63S4**	185	401
	0.11	12324	29900	**FAF**	**97R57**	**DR**	**63S4**	205	401
	0.13	10838	29900	**F**	**97R57**	**DR**	**63S4**	190	401
	0.14	9576	29900	**FF**	**97R57**	**DR**	**63S4**	225	401
	0.17	8318	29900						
	0.19	7328	29900						
	0.20	6469	29900	**FA**	**97R57**	**DR**	**63M4**	185	401
	0.24	5615	29900	**FAF**	**97R57**	**DR**	**63M4**	205	401
	0.27	4961	29900	**F**	**97R57**	**DR**	**63M4**	190	401
	0.30	4333	29900	**FF**	**97R57**	**DR**	**63M4**	225	401
				FA	**97R57**	**DR**	**63M4**	180	401
	0.34	3906	29900	**FAF**	**97R57**	**DR**	**63M4**	205	401
				F	**97R57**	**DR**	**63M4**	190	401
				FF	**97R57**	**DR**	**63M4**	225	401
				FA	**97R57**	**DR**	**63L4**	185	401
	0.39	3352	29900	**FAF**	**97R57**	**DR**	**63L4**	205	401
	0.45	2907	29900	**F**	**97R57**	**DR**	**63L4**	190	401
				FF	**97R57**	**DR**	**63L4**	225	401



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
4300	**0.54**	2553	29900	**FA**	**97R57**	**DRS**	**71S4**	185	401
	0.61	2245	29900	**FAF**	**97R57**	**DRS**	**71S4**	205	401
	0.70	1970	29900	**F**	**97R57**	**DRS**	**71S4**	190	401
				FF	**97R57**	**DRS**	**71S4**	225	401
	0.80	1722	29900	**FA**	**97R57**	**DRS**	**71M4**	185	401
	0.90	1527	29900	**FAF**	**97R57**	**DRS**	**71M4**	210	401
	1.0	1327	29900	**F**	**97R57**	**DRS**	**71M4**	195	401
				FF	**97R57**	**DRS**	**71M4**	225	401
	1.2	1171	29900	**FA**	**97R57**	**DRS**	**80S4**	190	401
	1.4	1022	29900	**FAF**	**97R57**	**DRS**	**80S4**	210	401
				F	**97R57**	**DRS**	**80S4**	195	401
				FF	**97R57**	**DRS**	**80S4**	230	401
	1.6	898	29900	**FA**	**97R57**	**DRS**	**80M4**	190	401
	1.8	784	29900	**FAF**	**97R57**	**DRS**	**80M4**	215	401
	2.0	690	29900	**F**	**97R57**	**DRS**	**80M4**	200	401
				FF	**97R57**	**DRS**	**80M4**	230	401
	2.3	605	29900	**FA**	**97R57**	**DRS**	**90M4**	195	401
	2.6	529	29900	**FAF**	**97R57**	**DRS**	**90M4**	220	401
	3.0	467	29900	**F**	**97R57**	**DRS**	**90M4**	205	401
				FF	**97R57**	**DRS**	**90M4**	235	401
	3.5	406	29900	**FA**	**97R57**	**DRS**	**90L4**	200	401
	3.8	363	29900	**FAF**	**97R57**	**DRS**	**90L4**	220	401
				F	**97R57**	**DRS**	**90L4**	205	401
				FF	**97R57**	**DRS**	**90L4**	240	401
	4.9	285	29900	**FA**	**97R57**	**DRS**	**100M4**	205	401
	5.7	245	29900	**FAF**	**97R57**	**DRS**	**100M4**	225	401
				F	**97R57**	**DRS**	**100M4**	210	401
				FF	**97R57**	**DRS**	**100M4**	245	401
7680	**0.05**	25375	49800						
	0.06	21652	49800	**FA**	**107R77**	**DR**	**63S4**	275	401
	0.07	18933	49800	**FAF**	**107R77**	**DR**	**63S4**	295	401
	0.08	16888	49800	**F**	**107R77**	**DR**	**63S4**	290	401
	0.09	14767	49800	**FF**	**107R77**	**DR**	**63S4**	320	401
	0.12	11348	49800	**FA**	**107R77**	**DR**	**63M4**	275	401
	0.13	10039	49800	**FAF**	**107R77**	**DR**	**63M4**	295	401
	0.15	8548	49800	**F**	**107R77**	**DR**	**63M4**	290	401
	0.17	7674	49800	**FF**	**107R77**	**DR**	**63M4**	320	401
	0.19	6767	49800	**FA**	**107R77**	**DR**	**63L4**	275	401
	0.22	5954	49800	**FAF**	**107R77**	**DR**	**63L4**	295	401
	0.25	5223	49800	**F**	**107R77**	**DR**	**63L4**	290	401
				FF	**107R77**	**DR**	**63L4**	320	401
	0.30	4567	49800	**FA**	**107R77**	**DRS**	**71S4**	275	401
	0.39	3521	49800	**FAF**	**107R77**	**DRS**	**71S4**	300	401
				F	**107R77**	**DRS**	**71S4**	295	401
				FF	**107R77**	**DRS**	**71S4**	320	401
	0.45	3037	49800	**FA**	**107R77**	**DRS**	**71M4**	275	401
	0.50	2756	49800	**FAF**	**107R77**	**DRS**	**71M4**	300	401
	0.58	2369	49800	**F**	**107R77**	**DRS**	**71M4**	295	401
				FF	**107R77**	**DRS**	**71M4**	320	401
	0.68	2068	49800	**FA**	**107R77**	**DRS**	**80S4**	280	401
	0.77	1826	49800	**FAF**	**107R77**	**DRS**	**80S4**	300	401
				F	**107R77**	**DRS**	**80S4**	295	401
				FF	**107R77**	**DRS**	**80S4**	325	401
	0.88	1597	49800	**FA**	**107R77**	**DRS**	**80M4**	280	401
	1.0	1401	49800	**FAF**	**107R77**	**DRS**	**80M4**	305	401
	1.1	1243	49800	**F**	**107R77**	**DRS**	**80M4**	300	401
				FF	**107R77**	**DRS**	**80M4**	325	401
	1.3	1087	49800	**FA**	**107R77**	**DRS**	**90M4**	285	401
	1.5	950	49800	**FAF**	**107R77**	**DRS**	**90M4**	305	401
	1.7	834	49800	**F**	**107R77**	**DRS**	**90M4**	305	401
				FF	**107R77**	**DRS**	**90M4**	330	401
	1.9	736	49800	**FA**	**107R77**	**DRS**	**90L4**	290	401
	2.2	640	49800	**FAF**	**107R77**	**DRS**	**90L4**	310	401
	2.5	560	49800	**F**	**107R77**	**DRS**	**90L4**	305	401
				FF	**107R77**	**DRS**	**90L4**	330	401



F..DRS
F..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
7680				**FA**	**107R77**	**DRS**	**100M4**	295	401
	2.9	489	49800	**FAF**	**107R77**	**DRS**	**100M4**	315	401
	3.2	436	49800	**F**	**107R77**	**DRS**	**100M4**	310	401
				FF	**107R77**	**DRS**	**100M4**	335	401
				FA	**107R77**	**DRS**	**100LC4**	300	401
	3.9	370	49800	**FAF**	**107R77**	**DRS**	**100LC4**	320	401
	4.3	333	49800	**F**	**107R77**	**DRS**	**100LC4**	315	401
				FF	**107R77**	**DRS**	**100LC4**	340	401
12000				**FA**	**127R77**	**DR**	**63S4**	425	401
	0.06	24478	90000	**FAF**	**127R77**	**DR**	**63S4**	465	401
	0.06	22323	90000	**F**	**127R77**	**DR**	**63S4**	460	401
				FF	**127R77**	**DR**	**63S4**	510	401
	0.07	19048	90000						
	0.08	16656	90000	**FA**	**127R77**	**DR**	**63M4**	425	401
	0.09	14722	90000	**FAF**	**127R77**	**DR**	**63M4**	465	401
	0.10	12912	90000	**F**	**127R77**	**DR**	**63M4**	460	401
	0.11	11656	90000	**FF**	**127R77**	**DR**	**63M4**	510	401
				FA	**127R77**	**DR**	**63L4**	425	401
	0.13	10191	90000	**FAF**	**127R77**	**DR**	**63L4**	465	401
	0.15	8831	90000	**F**	**127R77**	**DR**	**63L4**	465	401
				FF	**127R77**	**DR**	**63L4**	510	401
				FA	**127R77**	**DRS**	**71S4**	430	401
	0.18	7643	90000	**FAF**	**127R77**	**DRS**	**71S4**	465	401
	0.21	6715	90000	**F**	**127R77**	**DRS**	**71S4**	465	401
	0.23	5925	90000	**FF**	**127R77**	**DRS**	**71S4**	510	401
				FA	**127R77**	**DRS**	**71M4**	430	401
	0.27	5153	90000	**FAF**	**127R77**	**DRS**	**71M4**	465	401
	0.30	4533	90000	**F**	**127R77**	**DRS**	**71M4**	465	401
	0.35	3926	90000	**FF**	**127R77**	**DRS**	**71M4**	510	401
				FA	**127R77**	**DRS**	**80S4**	430	401
	0.41	3454	90000	**FAF**	**127R77**	**DRS**	**80S4**	470	401
	0.46	3031	90000	**F**	**127R77**	**DRS**	**80S4**	470	401
				FF	**127R77**	**DRS**	**80S4**	510	401
				FA	**127R77**	**DRS**	**80S4**	430	401
				FAF	**127R77**	**DRS**	**80S4**	470	401
	0.52	2672	90000	**F**	**127R77**	**DRS**	**80S4**	465	401
				FF	**127R77**	**DRS**	**80S4**	510	401
				FA	**127R77**	**DRS**	**80M4**	435	401
	0.60	2357	90000	**FAF**	**127R77**	**DRS**	**80M4**	470	401
	0.69	2038	90000	**F**	**127R77**	**DRS**	**80M4**	470	401
	0.79	1784	90000	**FF**	**127R77**	**DRS**	**80M4**	510	401
				FA	**127R77**	**DRS**	**90M4**	435	401
	0.87	1606	90000	**FAF**	**127R77**	**DRS**	**90M4**	475	401
	1.0	1390	90000	**F**	**127R77**	**DRS**	**90M4**	475	401
				FF	**127R77**	**DRS**	**90M4**	520	401
				FA	**127R77**	**DRS**	**90L4**	440	401
	1.2	1220	90000	**FAF**	**127R77**	**DRS**	**90L4**	475	401
	1.3	1077	90000	**F**	**127R77**	**DRS**	**90L4**	475	401
	1.5	930	90000	**FF**	**127R77**	**DRS**	**90L4**	520	401
				FA	**127R77**	**DRS**	**100M4**	445	401
	1.7	820	90000	**FAF**	**127R77**	**DRS**	**100M4**	480	401
	1.9	727	90000	**F**	**127R77**	**DRS**	**100M4**	480	401
	2.2	648	90000	**FF**	**127R77**	**DRS**	**100M4**	530	401
				FA	**127R77**	**DRS**	**100LC4**	450	401
	2.6	549	90000	**FAF**	**127R77**	**DRS**	**100LC4**	485	401
	2.9	495	90000	**F**	**127R77**	**DRS**	**100LC4**	485	401
				FF	**127R77**	**DRS**	**100LC4**	530	401
				FA	**127R77**	**DRS**	**132S4**	460	401
	3.4	428	90000	**FAF**	**127R77**	**DRS**	**132S4**	500	401
	3.8	376	90000	**F**	**127R77**	**DRS**	**132S4**	500	401
				FF	**127R77**	**DRS**	**132S4**	540	401
				FA	**127R87**	**DRS**	**132S4**	485	401
	3.0	483	90000	**FAF**	**127R87**	**DRS**	**132S4**	520	401
	3.5	418	90000	**F**	**127R87**	**DRS**	**132S4**	520	401
	3.9	374	90000	**FF**	**127R87**	**DRS**	**132S4**	560	401



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
12000				**FA**	**127R87**	**DRS**	**132M4**	495	401
	4.6	312	90000	**FAF**	**127R87**	**DRS**	**132M4**	530	401
	4.9	293	90000	**F**	**127R87**	**DRS**	**132M4**	530	401
				FF	**127R87**	**DRS**	**132M4**	580	401
				FA	**127R87**	**DRS**	**132MC4**	500	401
	5.7	259	90000	**FAF**	**127R87**	**DRS**	**132MC4**	540	401
	6.6	223	90000	**F**	**127R87**	**DRS**	**132MC4**	540	401
				FF	**127R87**	**DRS**	**132MC4**	580	401
				FA	**127R87**	**DRS**	**160M4**	520	401
	7.4	198	90000	**FAF**	**127R87**	**DRS**	**160M4**	560	401
				F	**127R87**	**DRS**	**160M4**	560	401
				FF	**127R87**	**DRS**	**160M4**	600	401
18000	**0.04**	31434	100300						
	0.05	26173	100300						
	0.06	23464	100300	**FA**	**157R97**	**DRS**	**71M4**	770	401
	0.07	20212	100300	**FAF**	**157R97**	**DRS**	**71M4**	830	401
	0.08	17984	100300	**F**	**157R97**	**DRS**	**71M4**	790	401
	0.08	16358	100300	**FF**	**157R97**	**DRS**	**71M4**	900	401
	0.10	13751	100300						
	0.11	12235	100300						
				FA	**157R97**	**DRS**	**80S4**	770	401
	0.14	10033	100300	**FAF**	**157R97**	**DRS**	**80S4**	830	401
	0.16	9021	100300	**F**	**157R97**	**DRS**	**80S4**	790	401
	0.17	8026	100300	**FF**	**157R97**	**DRS**	**80S4**	900	401
				FA	**157R97**	**DRS**	**71M4**	770	401
	0.20	7075	100300	**FAF**	**157R97**	**DRS**	**71M4**	830	401
	0.22	6295	100300	**F**	**157R97**	**DRS**	**71M4**	790	401
				FF	**157R97**	**DRS**	**71M4**	900	401
				FA	**157R97**	**DRS**	**80S4**	770	401
	0.26	5404	100300	**FAF**	**157R97**	**DRS**	**80S4**	830	401
	0.29	4831	100300	**F**	**157R97**	**DRS**	**80S4**	790	401
				FF	**157R97**	**DRS**	**80S4**	900	401
				FA	**157R97**	**DRS**	**80M4**	770	401
	0.34	4130	100300	**FAF**	**157R97**	**DRS**	**80M4**	830	401
				F	**157R97**	**DRS**	**80M4**	790	401
				FF	**157R97**	**DRS**	**80M4**	900	401
				FA	**157R97**	**DRS**	**90L4**	780	401
	0.39	3607	100300	**FAF**	**157R97**	**DRS**	**90L4**	840	401
	0.44	3210	100300	**F**	**157R97**	**DRS**	**90L4**	800	401
				FF	**157R97**	**DRS**	**90L4**	910	401
				FA	**157R97**	**DRS**	**80M4**	770	401
	0.51	2780	100300	**FAF**	**157R97**	**DRS**	**80M4**	830	401
				F	**157R97**	**DRS**	**80M4**	790	401
				FF	**157R97**	**DRS**	**80M4**	900	401
				FA	**157R97**	**DRS**	**90L4**	780	401
	0.97	1441	100300	**FAF**	**157R97**	**DRS**	**90L4**	840	401
				F	**157R97**	**DRS**	**90L4**	800	401
				FF	**157R97**	**DRS**	**90L4**	910	401
				FA	**157R97**	**DRS**	**90M4**	770	401
	0.57	2427	100300	**FAF**	**157R97**	**DRS**	**90M4**	830	401
	0.64	2185	100300	**F**	**157R97**	**DRS**	**90M4**	790	401
				FF	**157R97**	**DRS**	**90M4**	900	401
				FA	**157R97**	**DRS**	**90L4**	780	401
	0.72	1944	100300	**FAF**	**157R97**	**DRS**	**90L4**	830	401
	0.84	1674	100300	**F**	**157R97**	**DRS**	**90L4**	800	401
				FF	**157R97**	**DRS**	**90L4**	900	401
				FA	**157R97**	**DRS**	**100M4**	780	401
	1.1	1308	100300	**FAF**	**157R97**	**DRS**	**100M4**	840	401
	1.2	1169	100300	**F**	**157R97**	**DRS**	**100M4**	800	401
				FF	**157R97**	**DRS**	**100M4**	910	401
				FA	**157R97**	**DRS**	**100LC4**	790	401
	1.5	953	100300	**FAF**	**157R97**	**DRS**	**100LC4**	840	401
	1.7	845	100300	**F**	**157R97**	**DRS**	**100LC4**	810	401
	1.9	764	100300	**FF**	**157R97**	**DRS**	**100LC4**	910	401
				FA	**157R97**	**DRS**	**132S4**	800	401
	2.1	680	100300	**FAF**	**157R97**	**DRS**	**132S4**	860	401
	2.5	576	100300	**F**	**157R97**	**DRS**	**132S4**	820	401
				FF	**157R97**	**DRS**	**132S4**	930	401

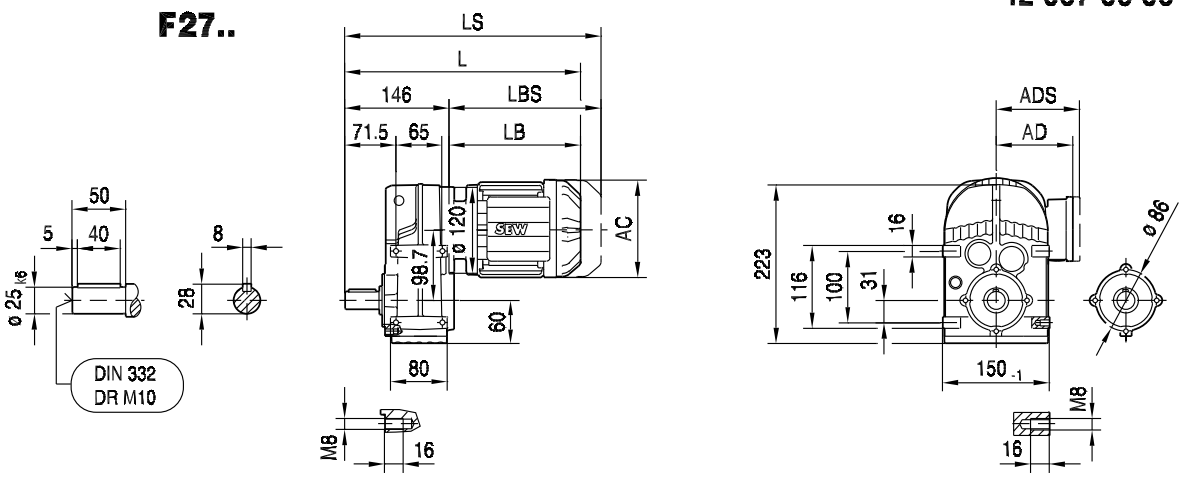


$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
18000				**FA**	**157R97**	**DRS**	**132M4**	810	401
	2.9	503	100300	**FAF**	**157R97**	**DRS**	**132M4**	870	401
	3.2	446	100300	**F**	**157R97**	**DRS**	**132M4**	830	401
				FF	**157R97**	**DRS**	**132M4**	940	401
				FA	**157R97**	**DRS**	**132MC4**	810	401
	4.2	353	100300	**FAF**	**157R97**	**DRS**	**132MC4**	870	401
				F	**157R97**	**DRS**	**132MC4**	840	401
				FF	**157R97**	**DRS**	**132MC4**	940	401
				FA	**157R97**	**DRS**	**160M4**	840	401
	4.8	302	100300	**FAF**	**157R97**	**DRS**	**160M4**	890	401
	5.3	273	100300	**F**	**157R97**	**DRS**	**160M4**	860	401
				FF	**157R97**	**DRS**	**160M4**	960	401
				FA	**157R97**	**DRS**	**160MC4**	840	401
	6.3	232	100300	**FAF**	**157R97**	**DRS**	**160MC4**	900	401
	7.2	202	100300	**F**	**157R97**	**DRS**	**160MC4**	860	401
				FF	**157R97**	**DRS**	**160MC4**	970	401
				FA	**157R97**	**DRS**	**180M4**	880	401
	7.4	197	100300	**FAF**	**157R97**	**DRS**	**180M4**	940	401
				F	**157R97**	**DRS**	**180M4**	910	401
				FF	**157R97**	**DRS**	**180M4**	1010	401

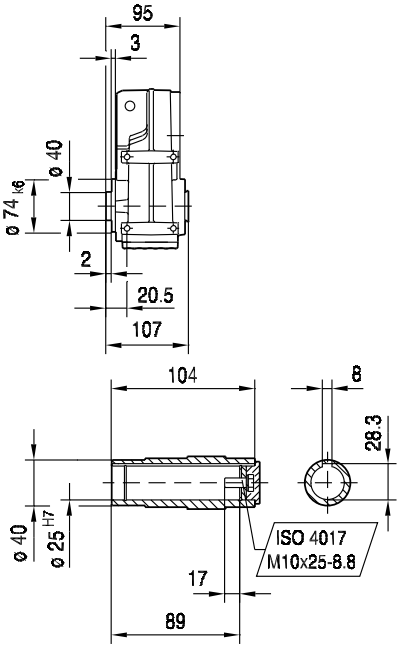
10.5 F..DRS [mm]

42 067 00 06

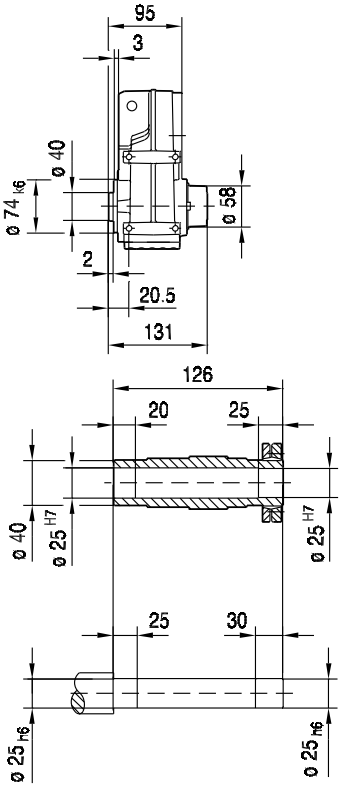
F27..



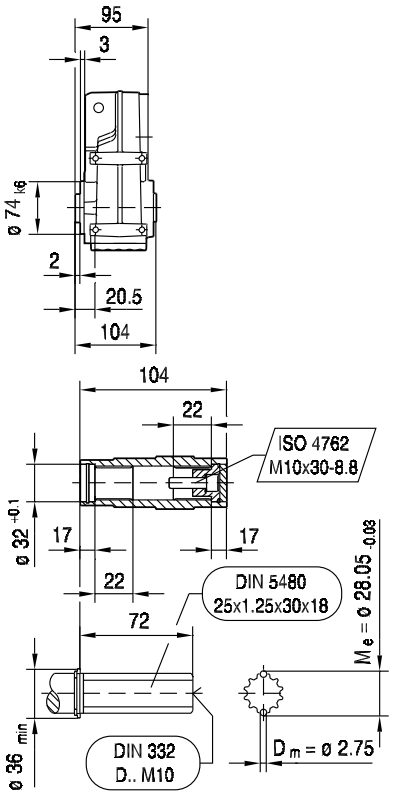
FA27B..



FH27B..
max. DR71..



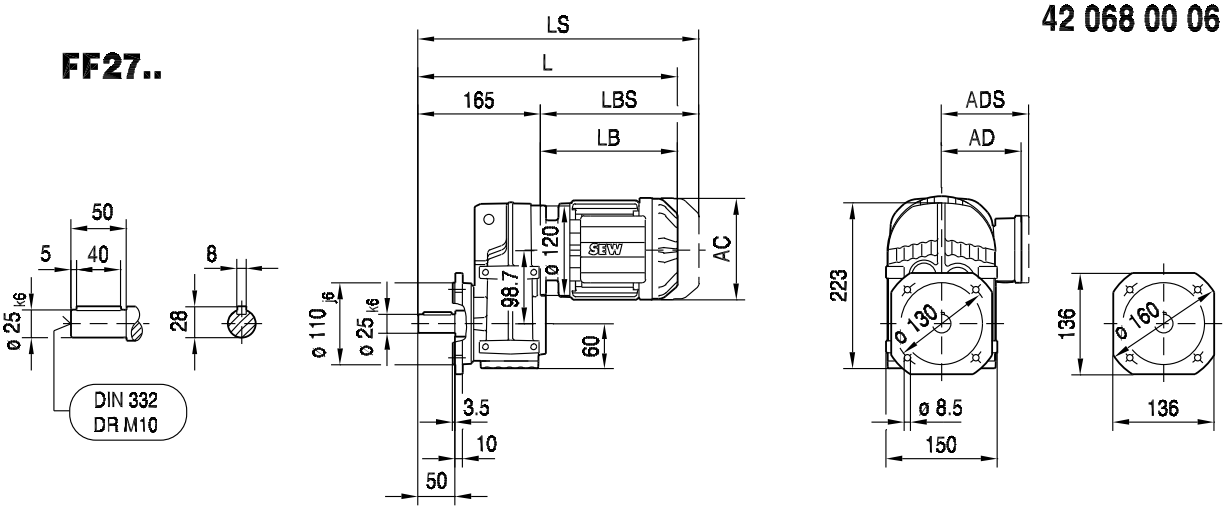
FV27B..



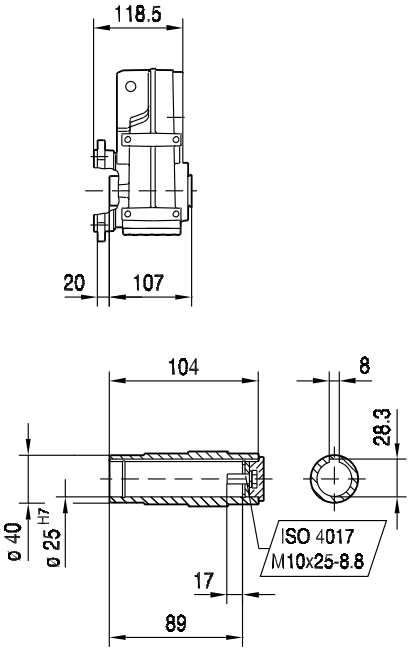
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	337	349	374	383	414	418		
LS	392	417	442	464	495	511		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

42 068 00 06

FF27..

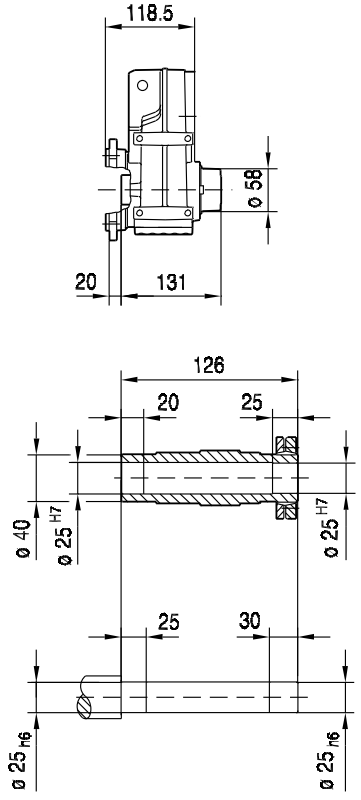


FAF27..

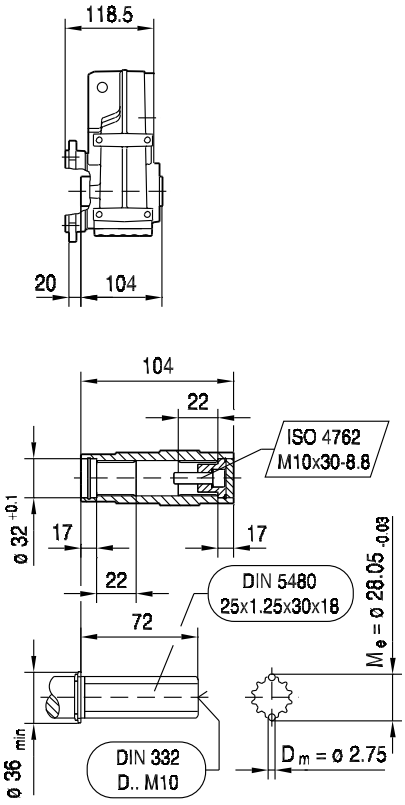


FHF27..

max. DR71..



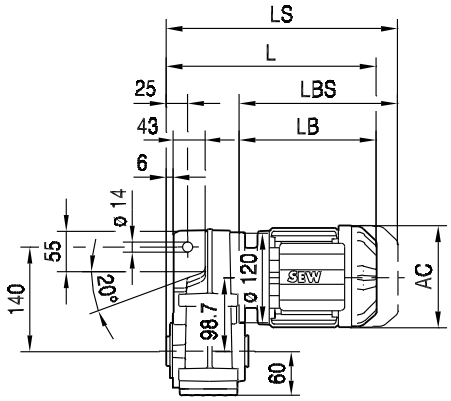
FVF27..

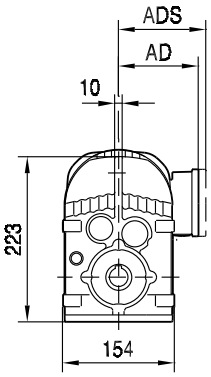


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	356	368	393	402	433	437		
LS	411	436	461	483	514	530		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

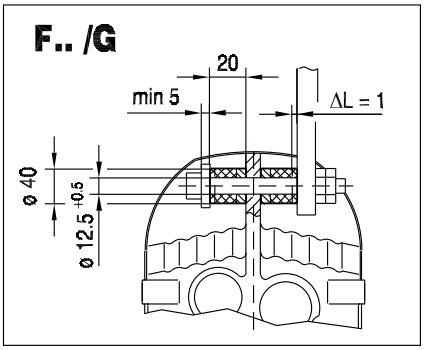
42 069 00 06

FA27..

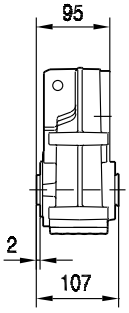


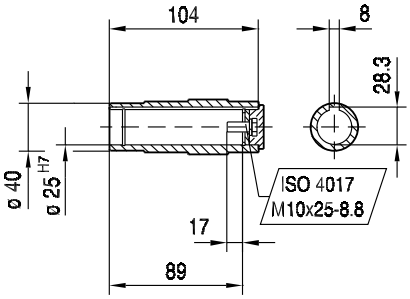


F.. /G



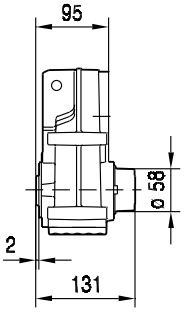
FA27..

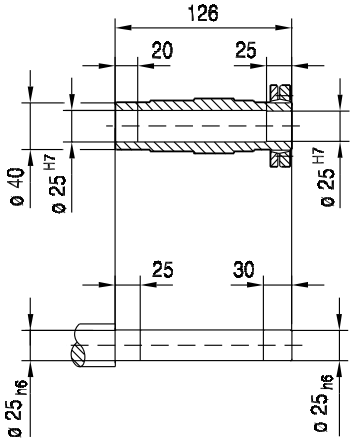




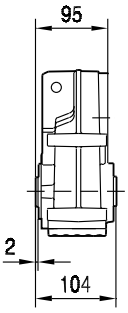
FH27..

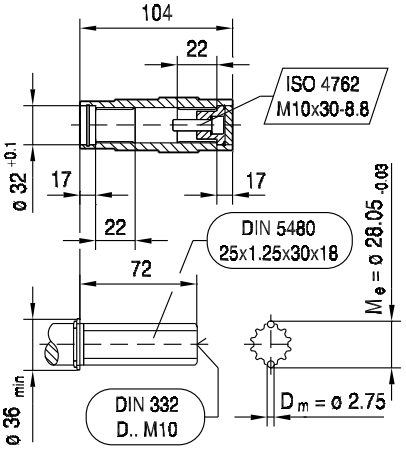
max. DR71..





FV27..

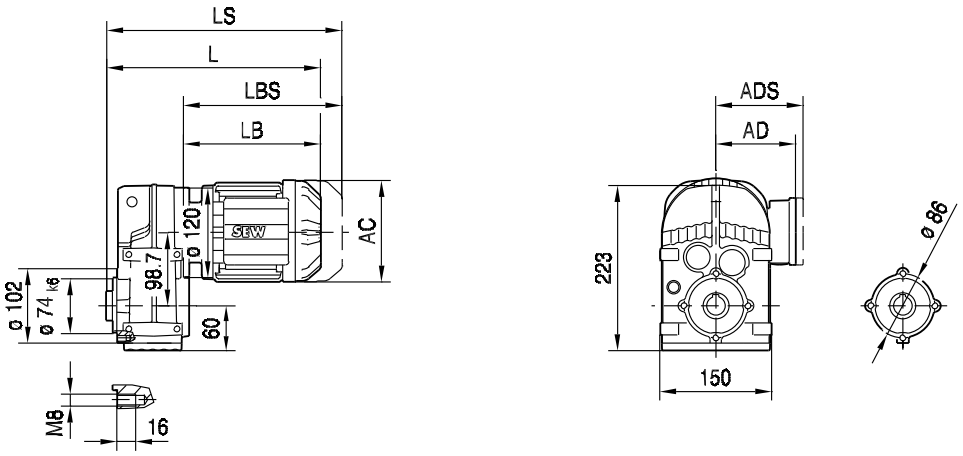




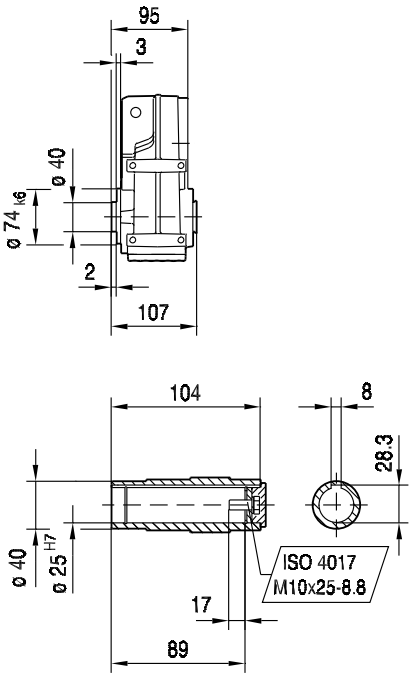
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	286	298	323	332	363	367		
LS	341	366	391	413	444	460		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

FAZ27..

42 070 00 06

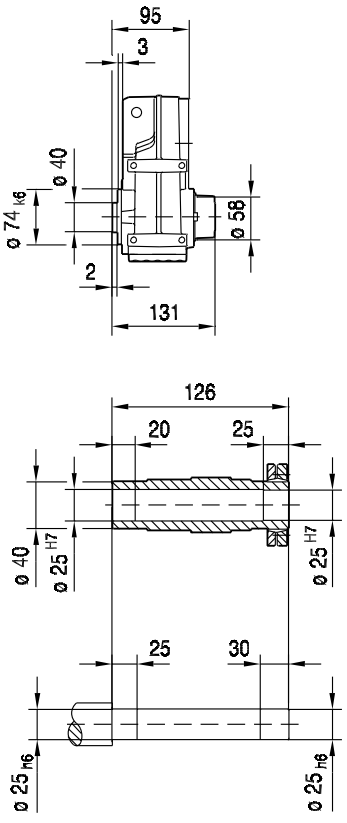


FAZ27..

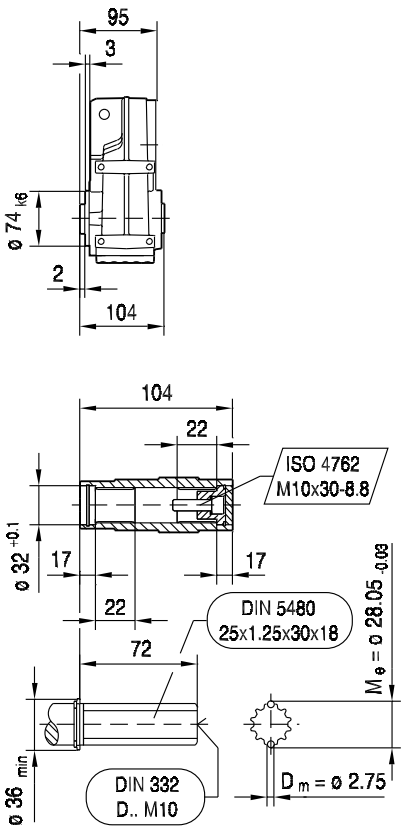


FHZ27..

max. DR71..



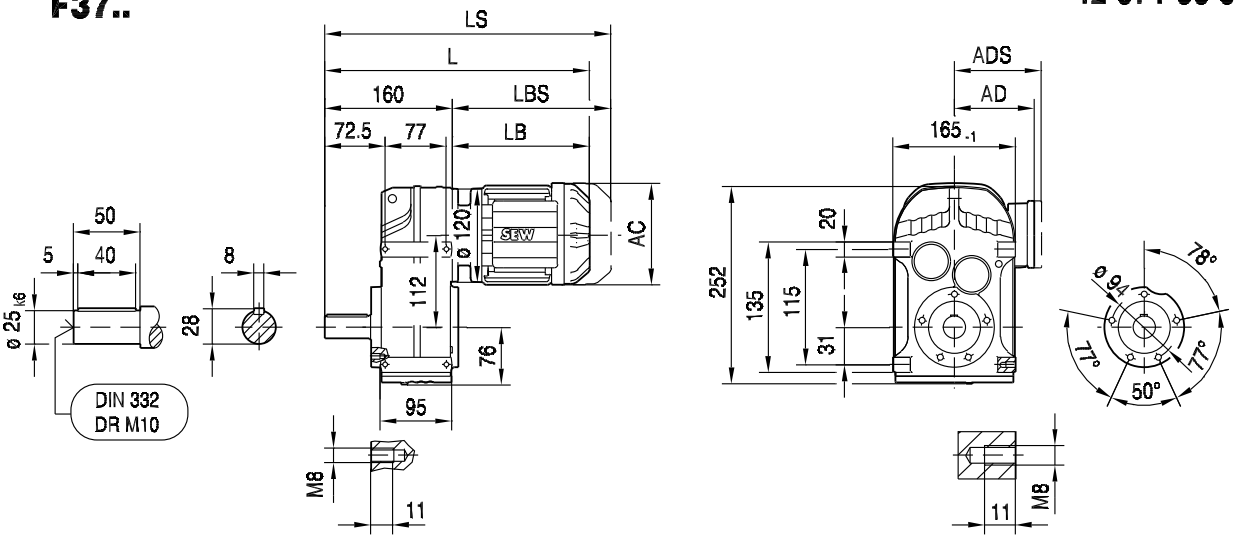
FVZ27..



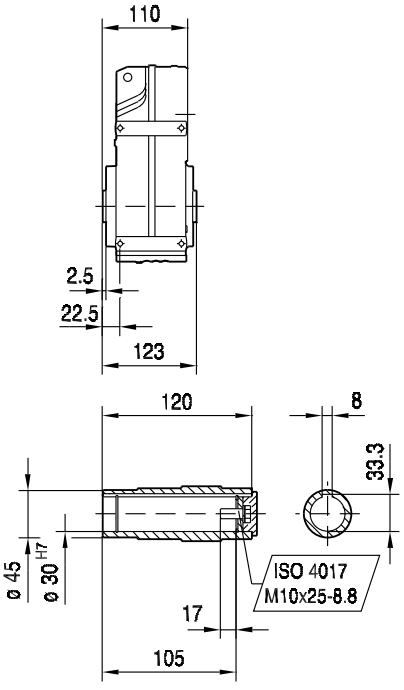
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	286	298	323	332	363	367		
LS	341	366	391	413	444	460		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

42 071 00 06

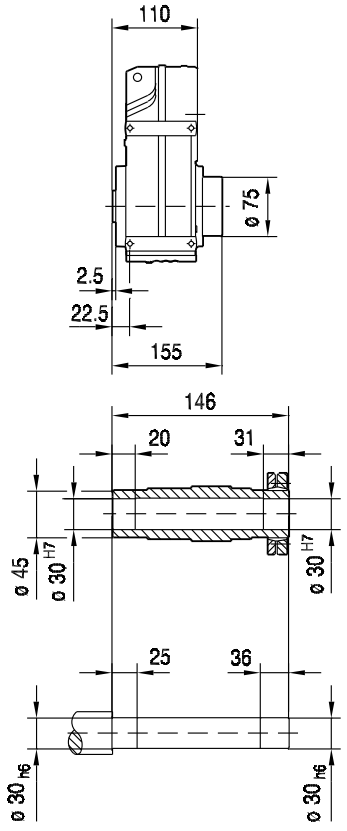
F37..



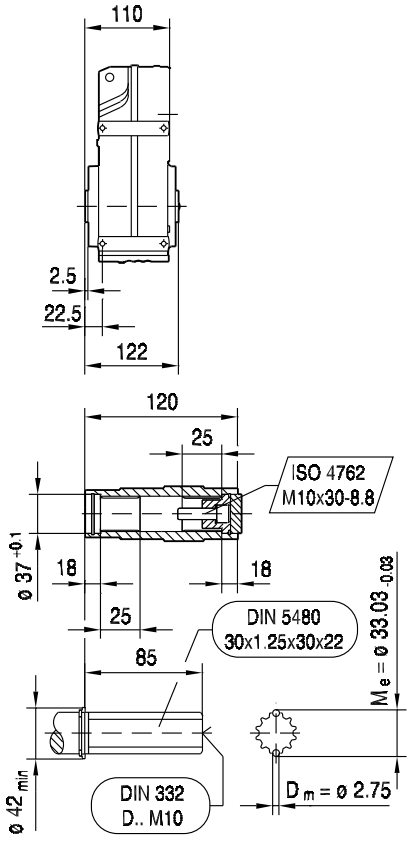
FA37B..



FH37B..



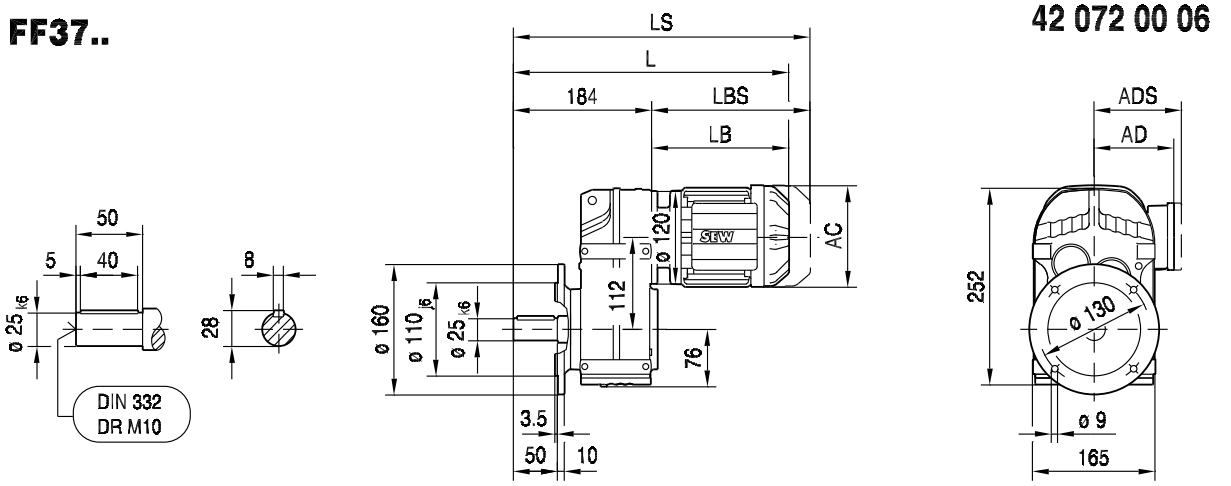
FV37B..



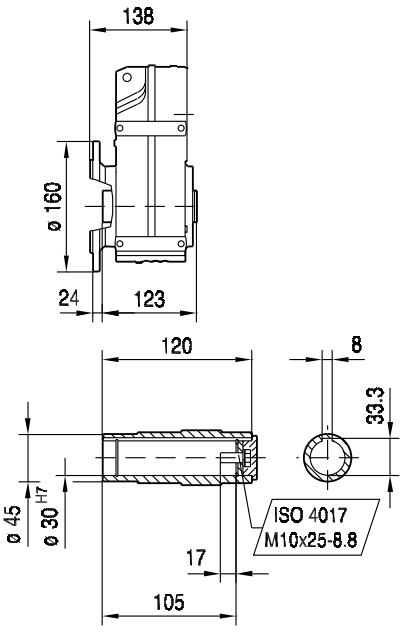
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	351	363	388	397	428	432	452	482
LS	406	431	456	478	509	525	545	575
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

FF37..

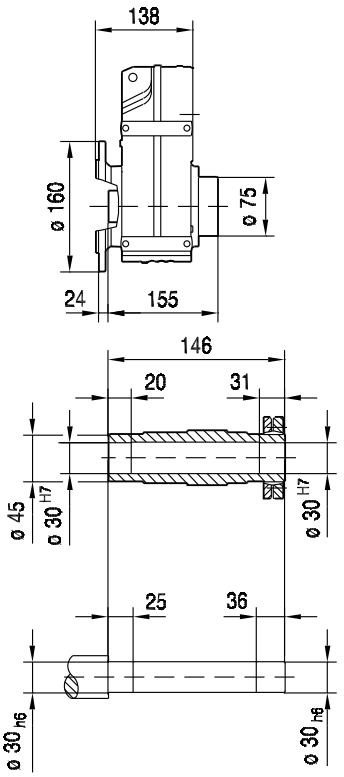
42 072 00 06



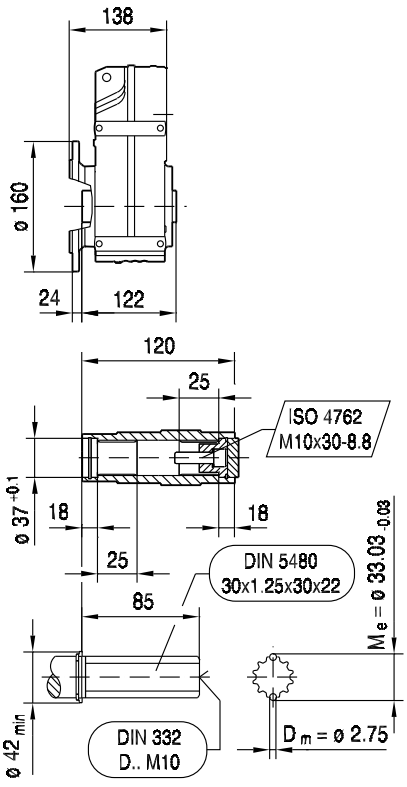
FAF37..



FHF37..



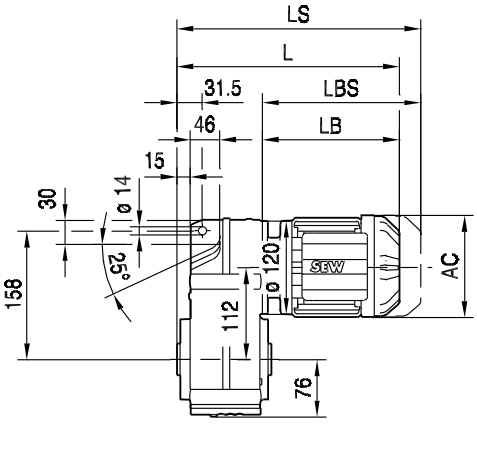
FVF37..

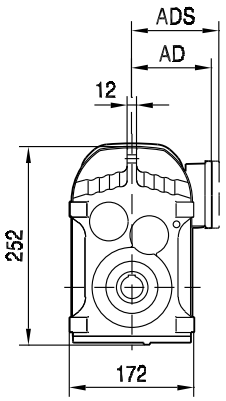


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	375	387	412	421	452	456	476	506
LS	430	455	480	502	533	549	569	599
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

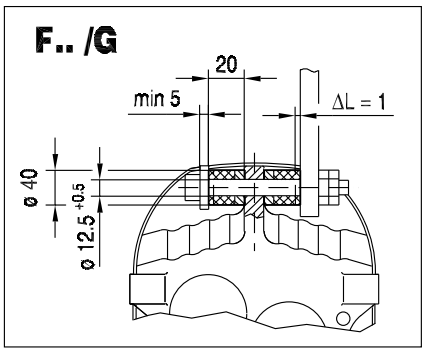
42 073 00 06

FA37..

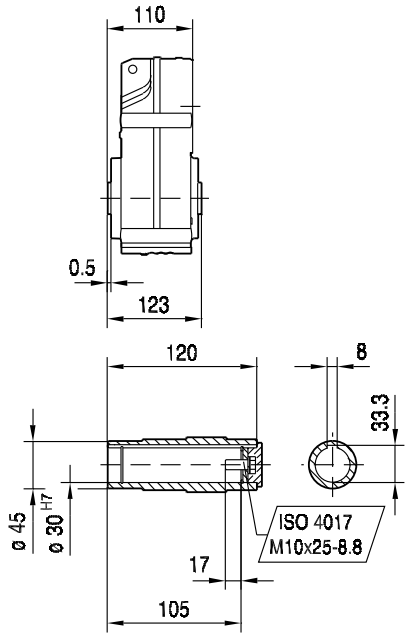




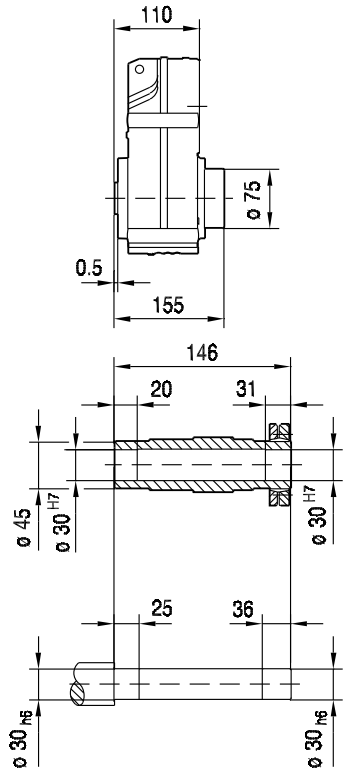
F.. /G



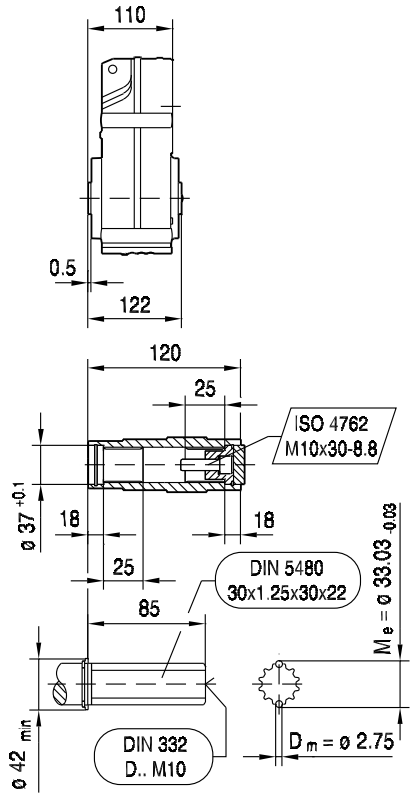
FA37..



FH37..



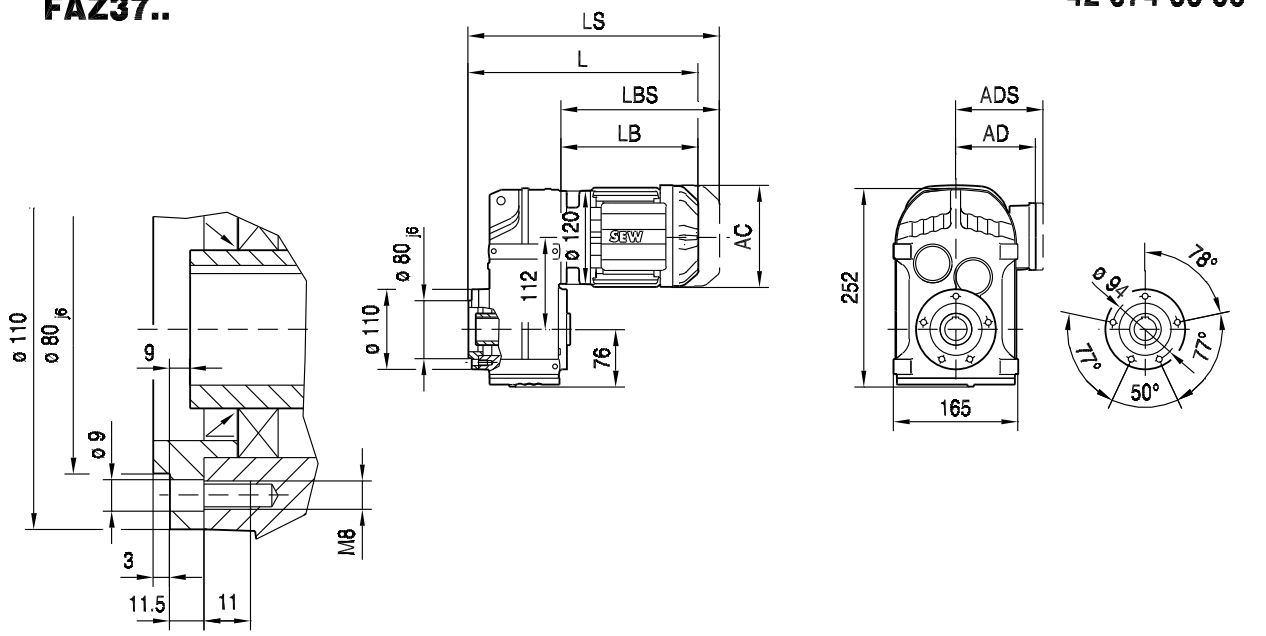
FV37..



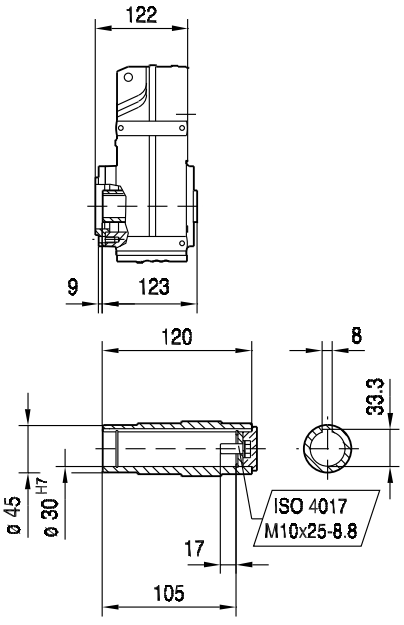
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	301	313	338	347	378	382	402	432
LS	356	381	406	428	459	475	495	525
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

42 074 00 06

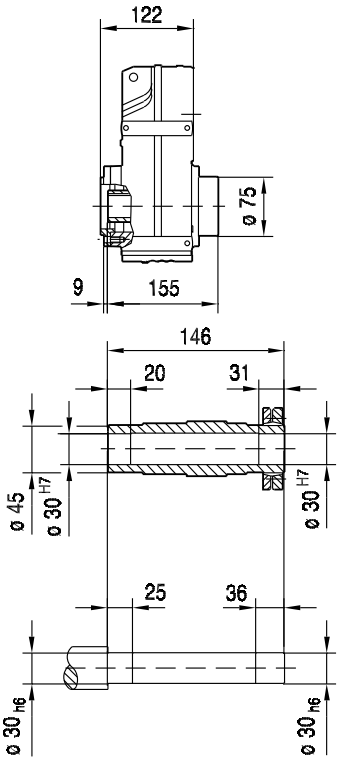
FAZ37..



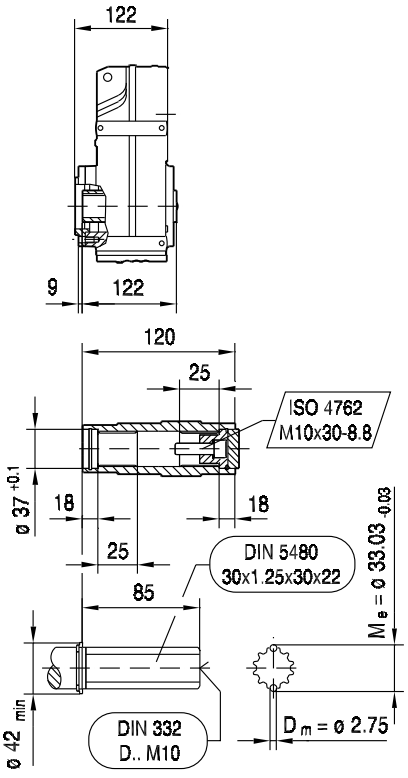
FAZ37..



FHZ37..



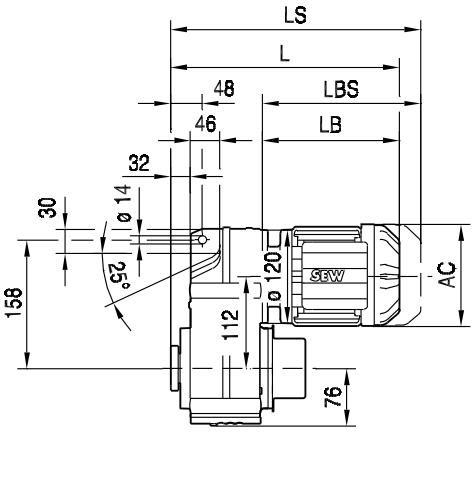
FVZ37..

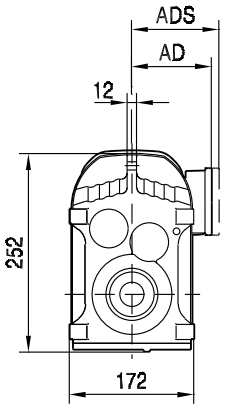


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	313	325	350	359	390	394	414	444
LS	368	393	418	440	471	487	507	537
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

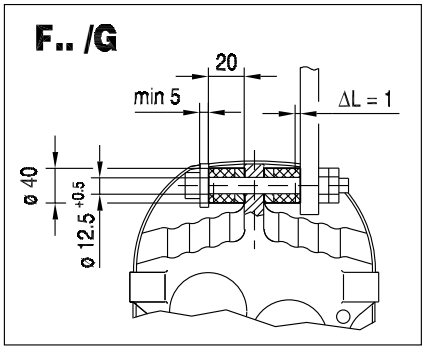
42 075 00 06

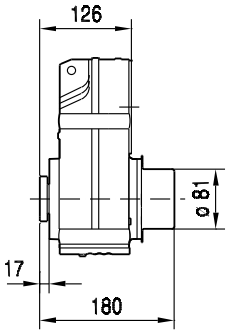
FT37..

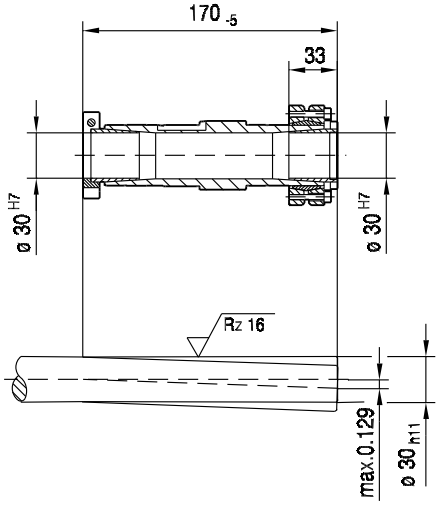


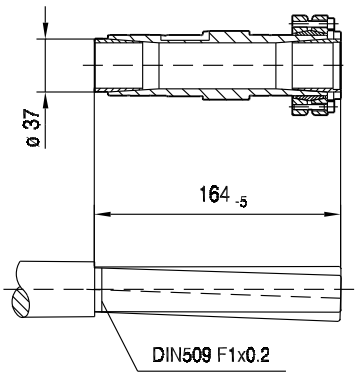


F.. /G





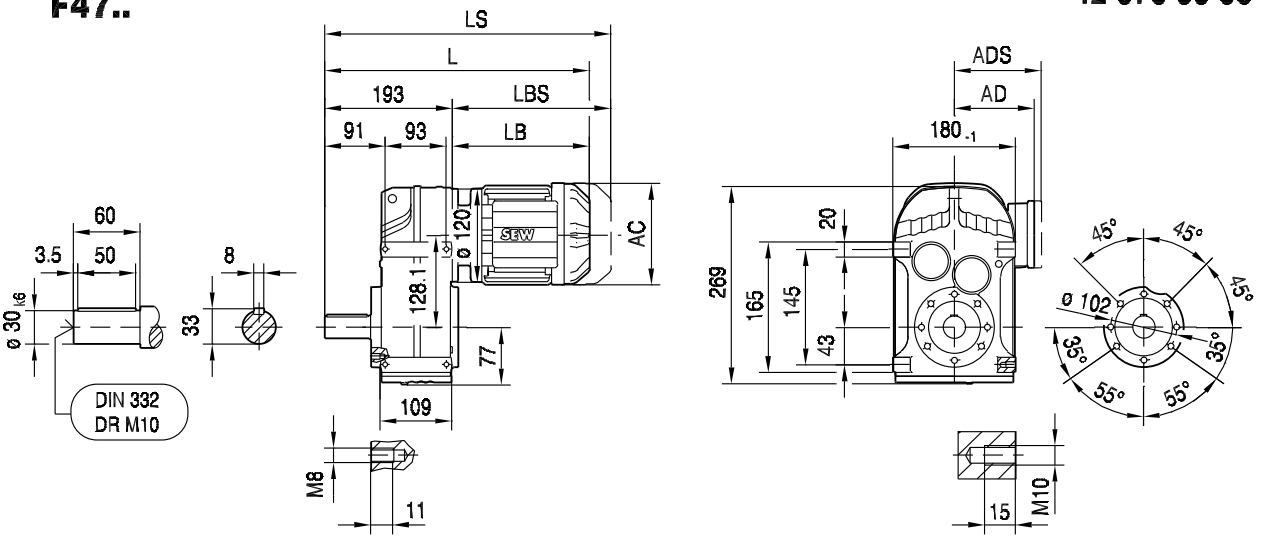




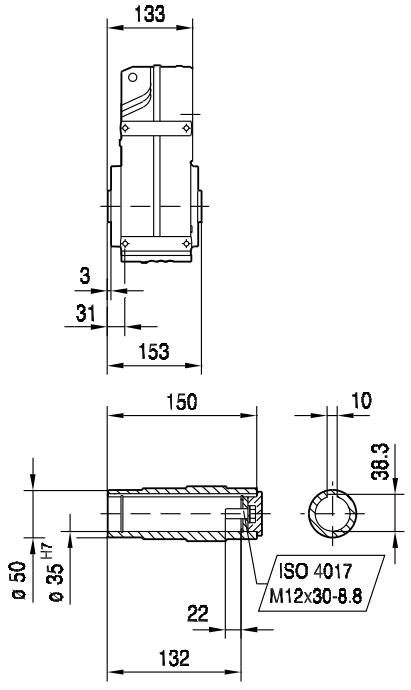
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	317	329	354	363	394	398	418	448
LS	372	397	422	444	475	491	511	541
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

42 076 00 06

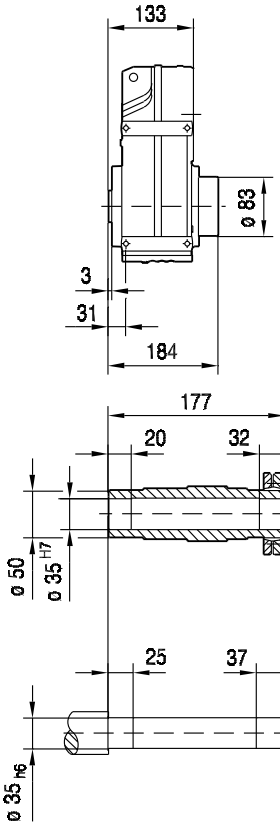
F47..



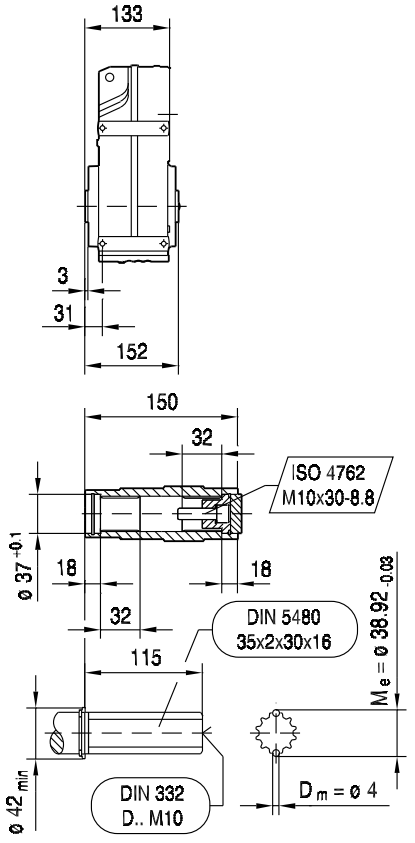
FA47B..



FH47B..



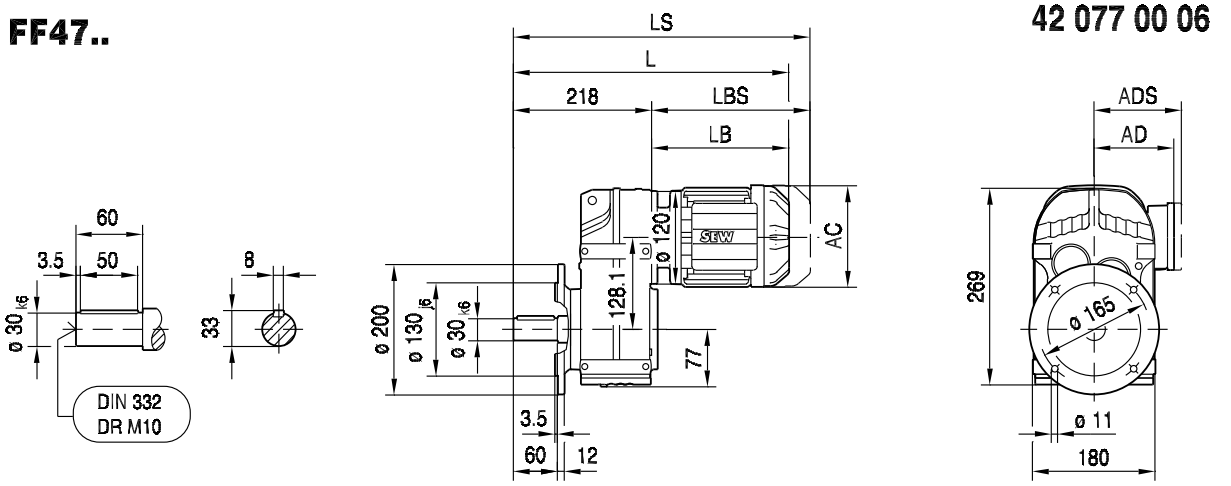
FV47B..



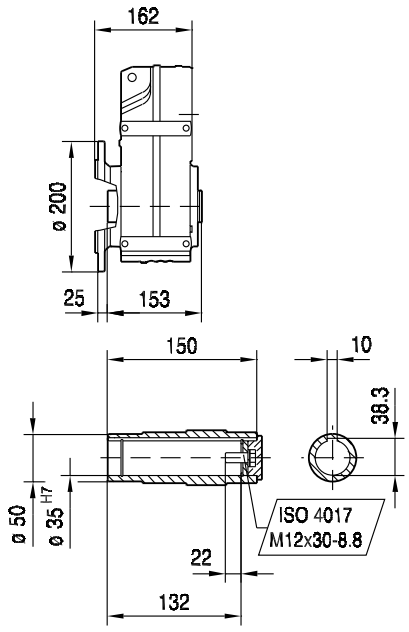
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	384	396	421	430	461	465	485	515
LS	439	464	489	511	542	558	578	608
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

FF47..

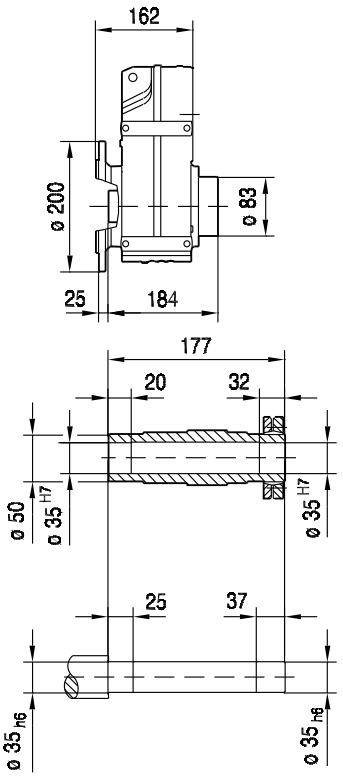
42 077 00 06



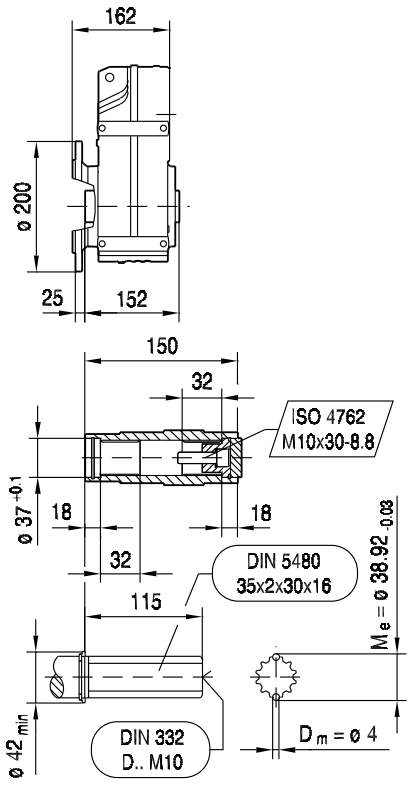
FAF47..



FHF47..



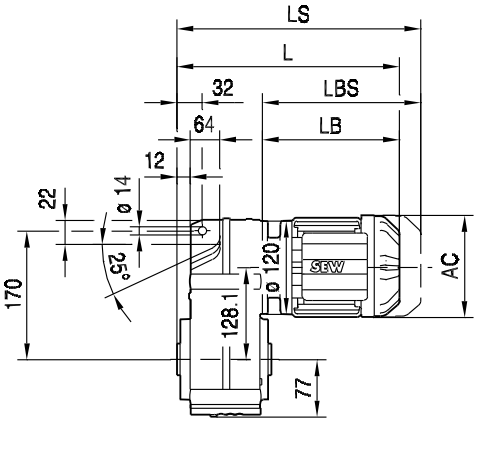
FVF47..

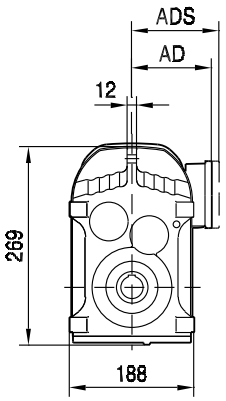


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	409	421	446	455	486	490	510	540
LS	464	489	514	536	567	583	603	633
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

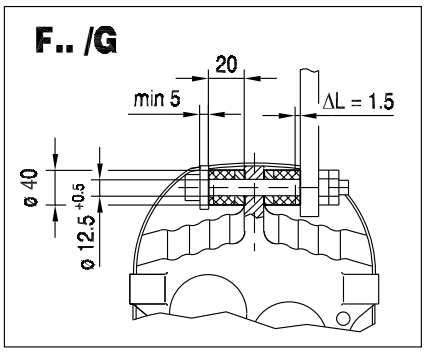
42 078 00 06

FA47..

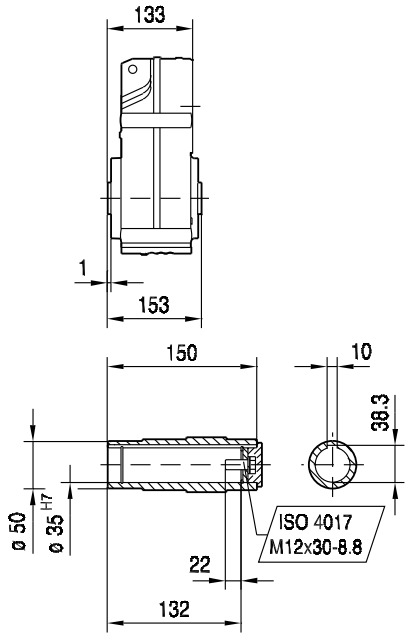




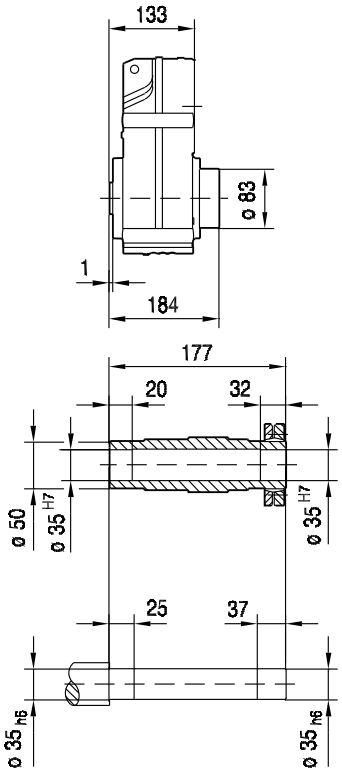
F.. /G



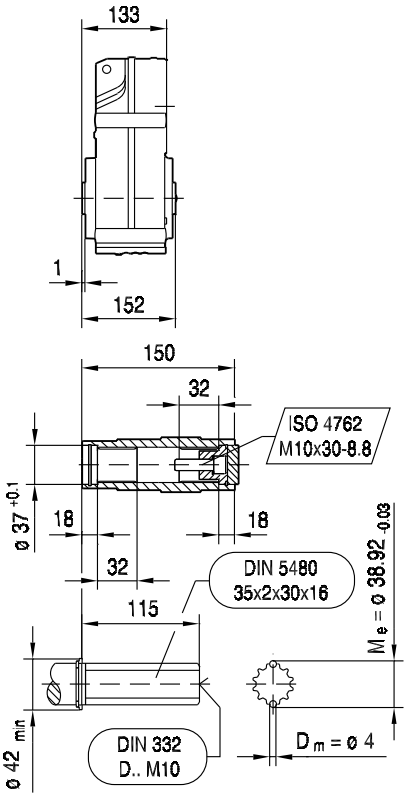
FA47..



FH47..



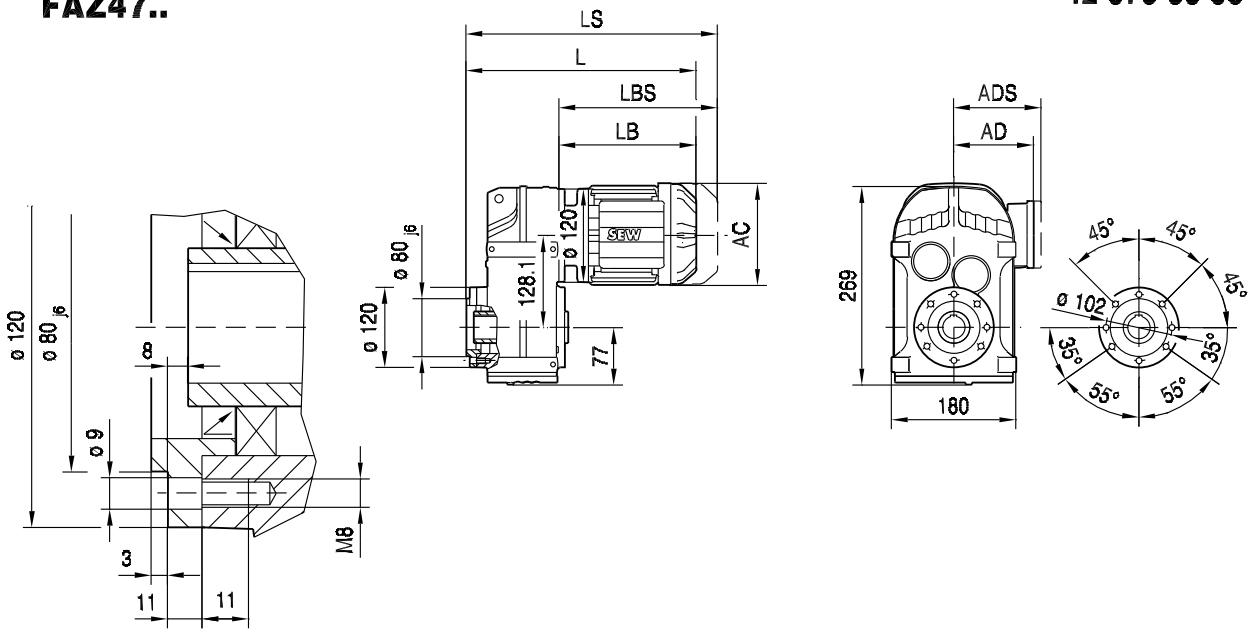
FV47..



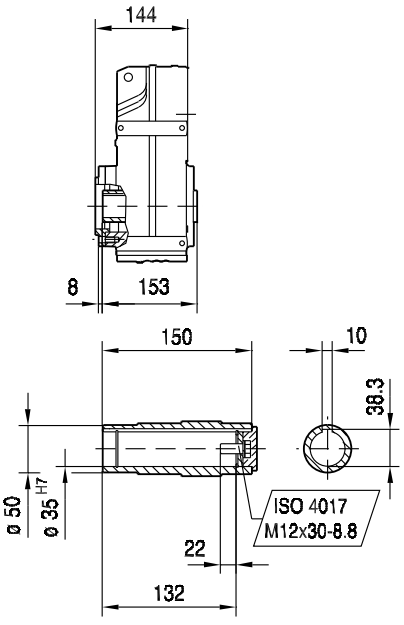
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	324	336	361	370	401	405	425	455
LS	379	404	429	451	482	498	518	548
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

42 079 00 06

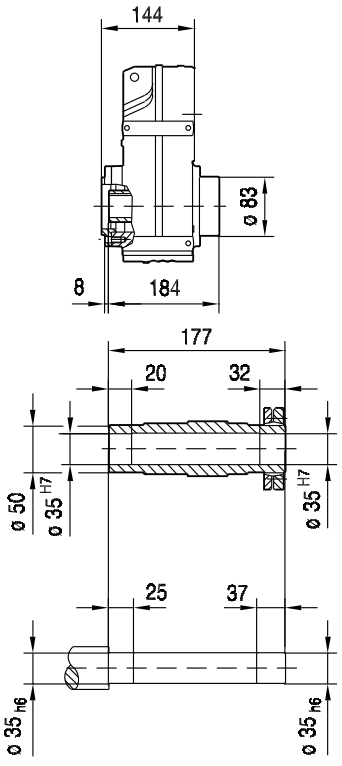
FAZ47..



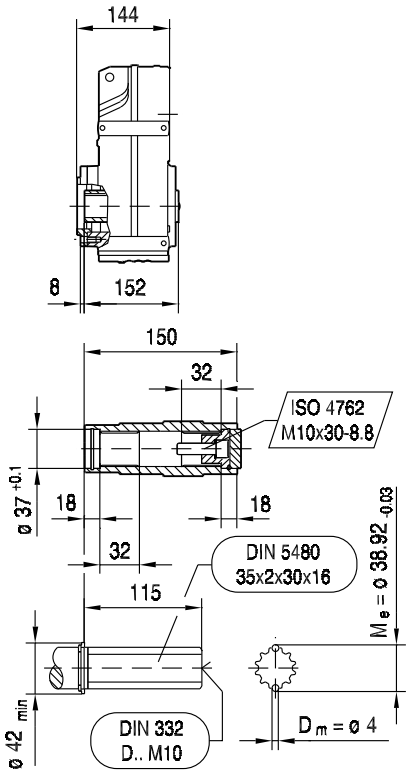
FAZ47..



FHZ47..



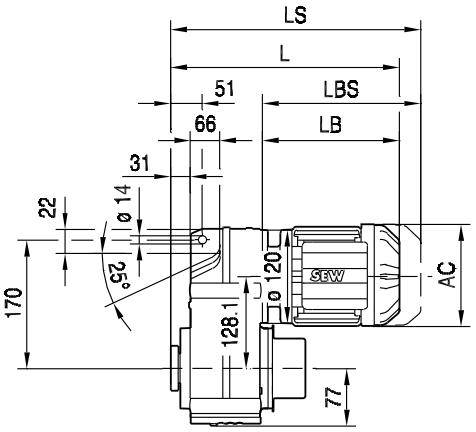
FVZ47..

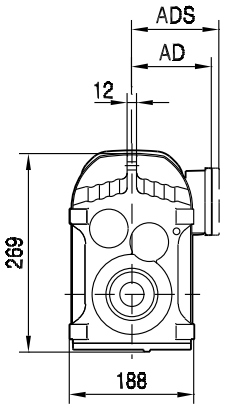


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	335	347	372	381	412	416	436	466
LS	390	415	440	462	493	509	529	559
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

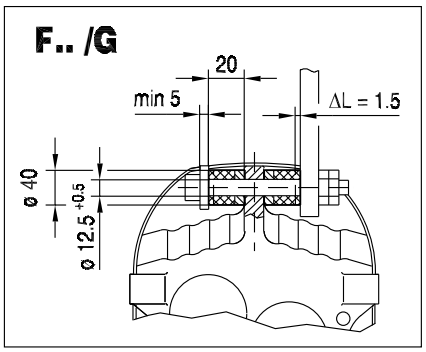
42 080 00 06

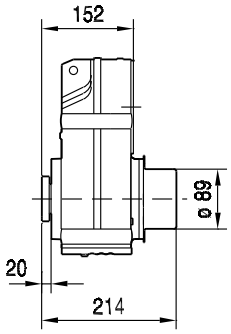
FT47..

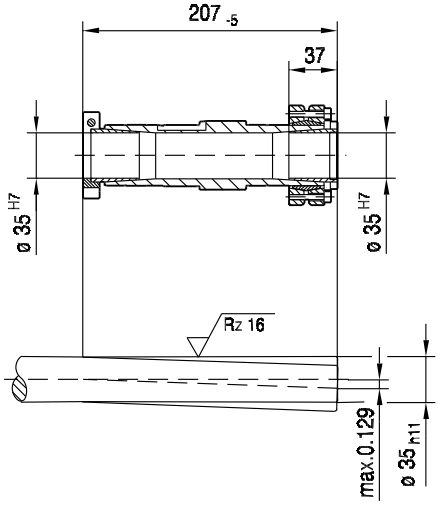


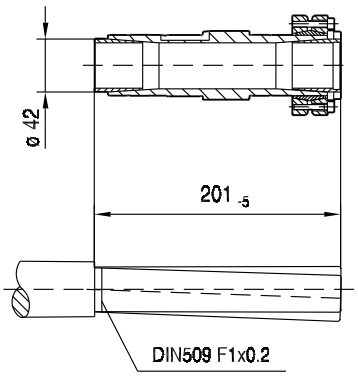


F.. /G





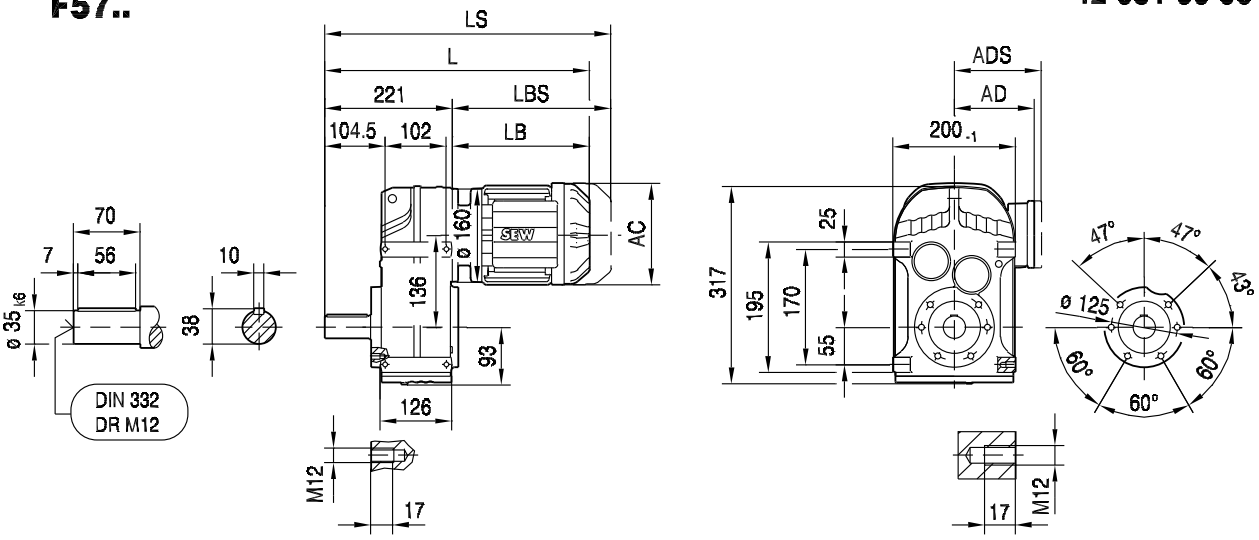




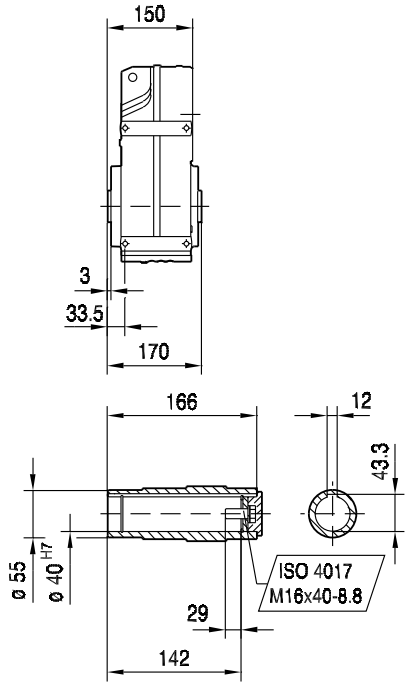
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	343	355	380	389	420	424	444	474
LS	398	423	448	470	501	517	537	567
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

42 081 00 06

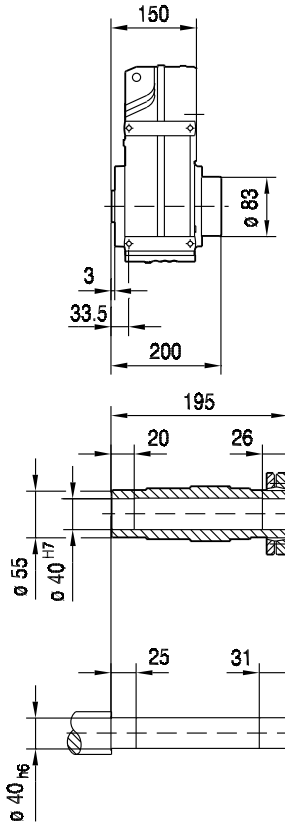
F57..



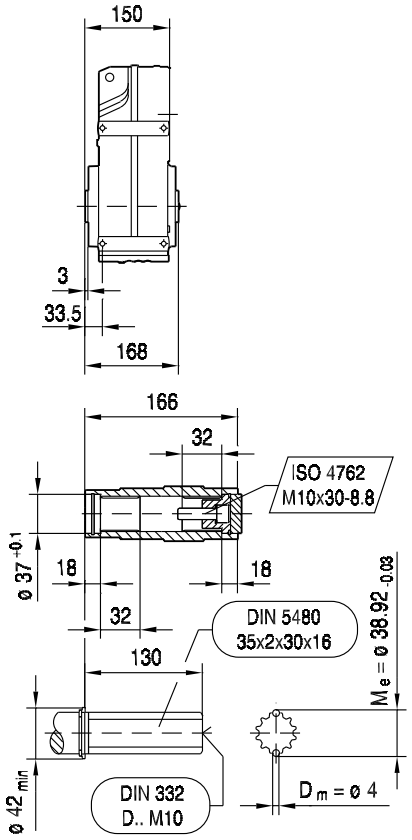
FA57B..



FH57B..
max. DR132S



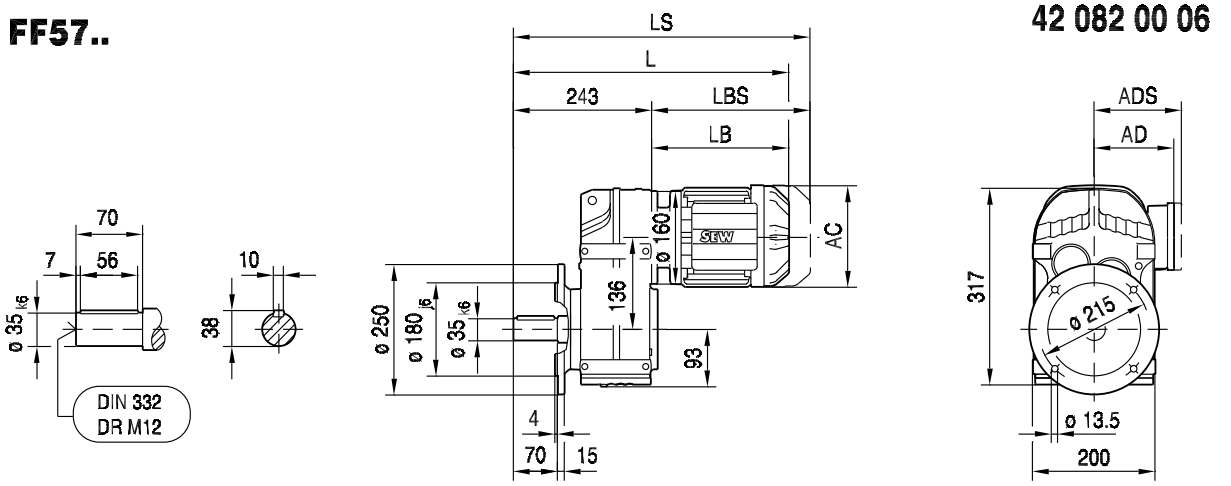
FV57B..



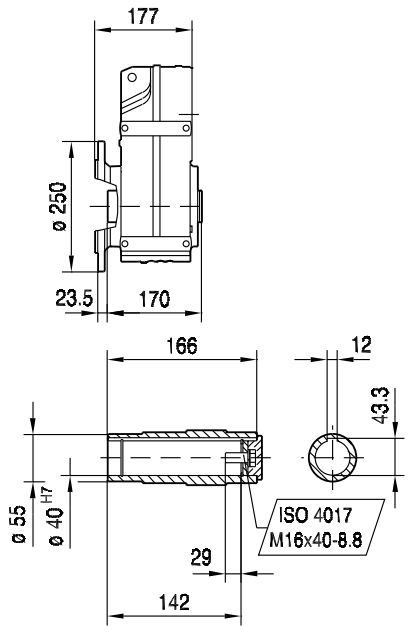
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	406	417	442	451	482	484	504	534	564	611
LS	461	485	510	532	563	577	597	627	657	723
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

FF57..

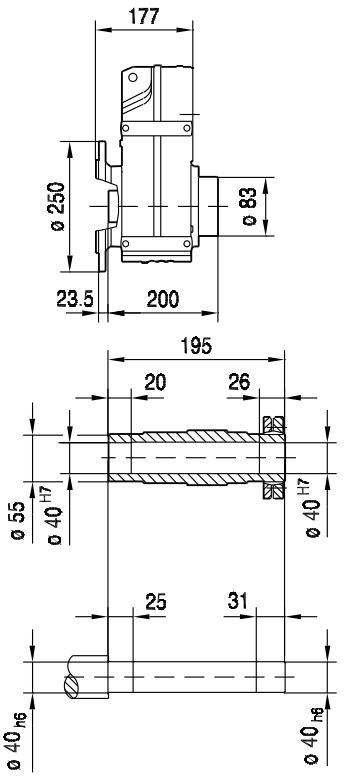
42 082 00 06



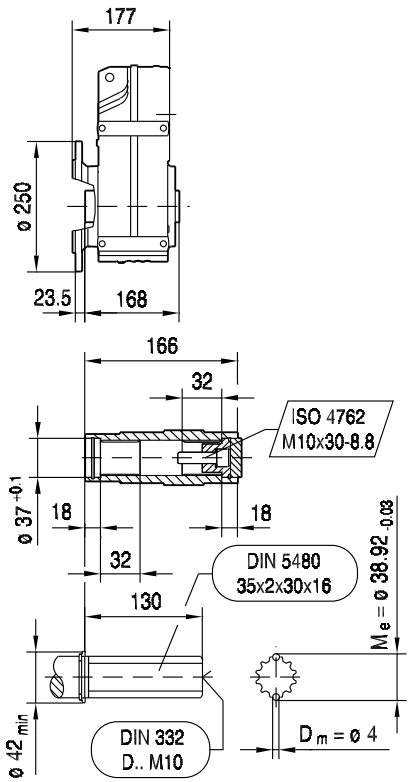
FAF57..



FHF57..
max. DR132S



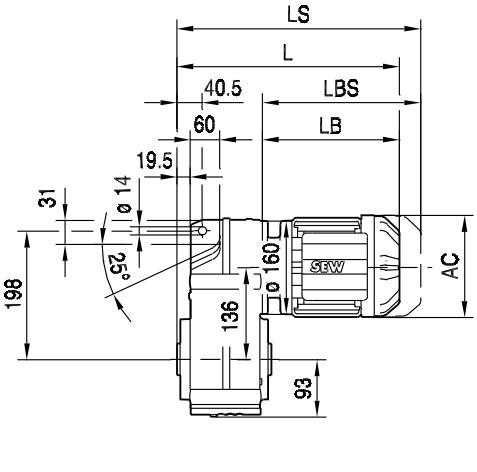
FVF57..

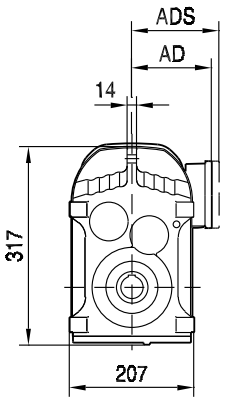


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	428	439	464	473	504	506	526	556	586	633
LS	483	507	532	554	585	599	619	649	679	745
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

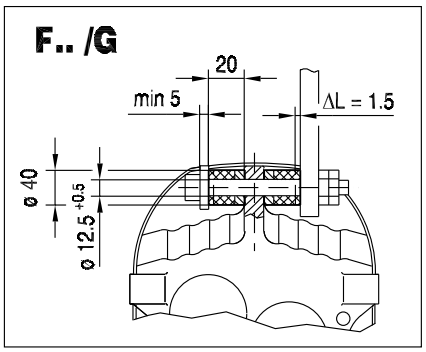
42 083 00 06

FA57..

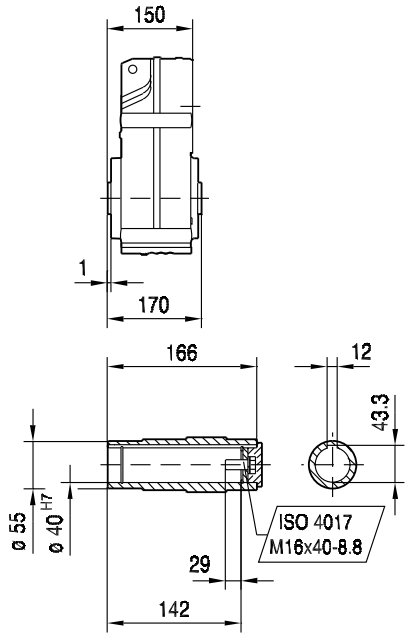




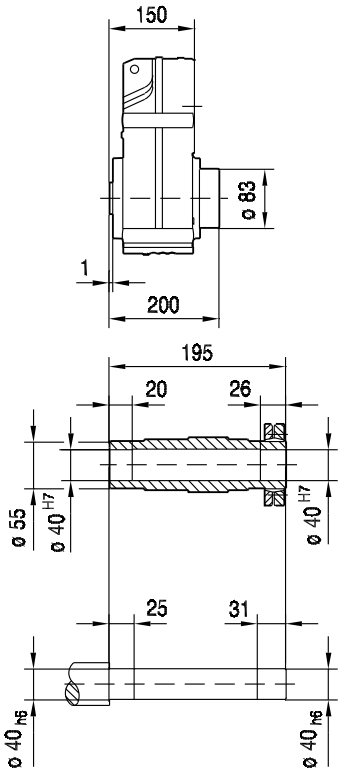
F.. /G



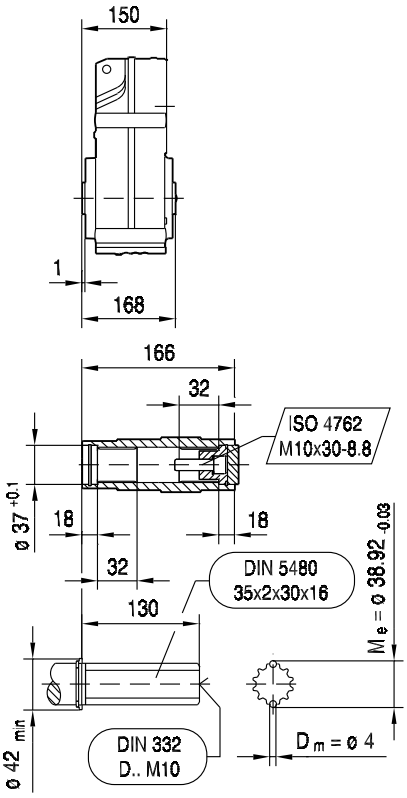
FA57..



FH57..
max. DR132S



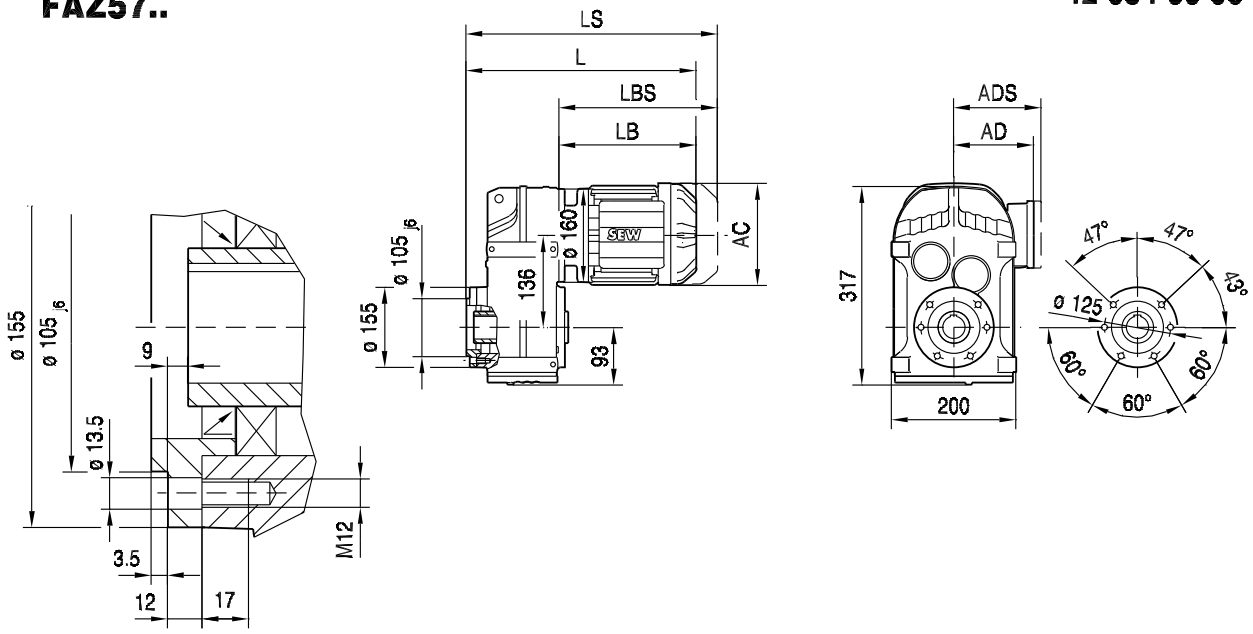
FV57..



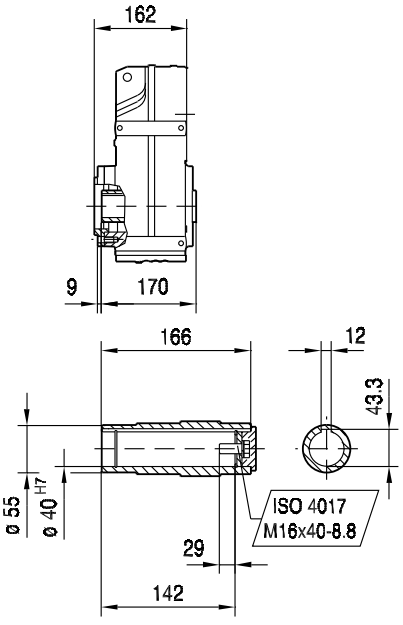
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	335	346	371	380	411	413	433	463	493	540
LS	390	414	439	461	492	506	526	556	586	652
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

42 084 00 06

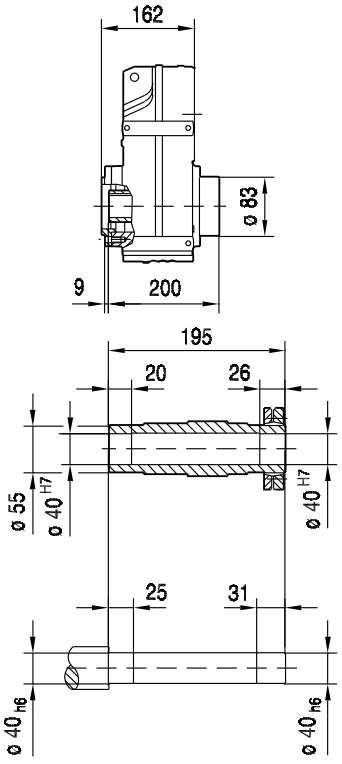
FAZ57..



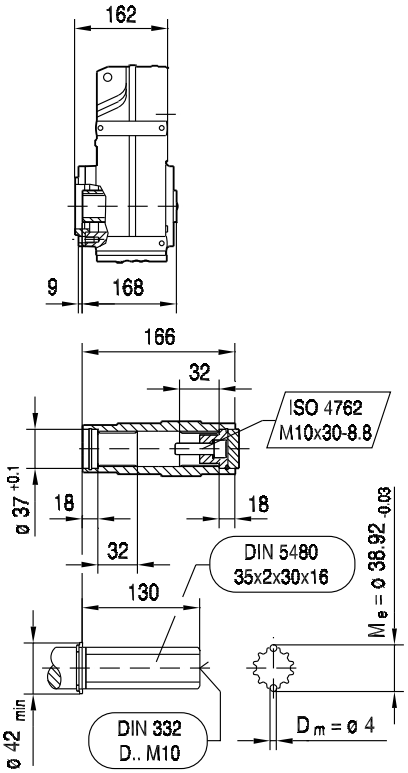
FAZ57..



FHZ57..
max. DR132S



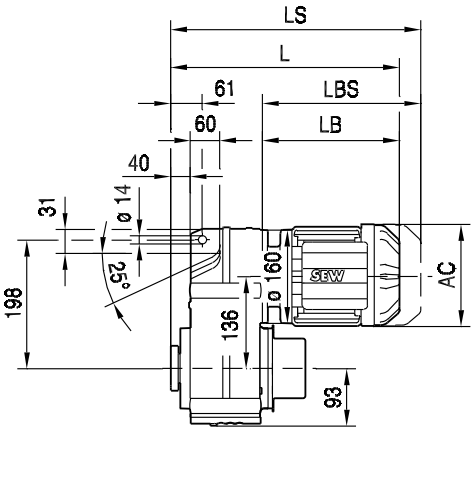
FVZ57..

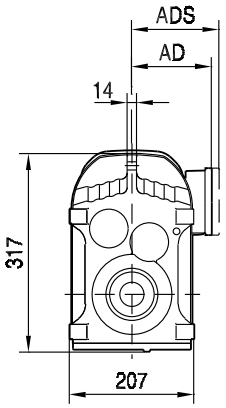


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	347	358	383	392	423	425	445	475	505	552
LS	402	426	451	473	504	518	538	568	598	664
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

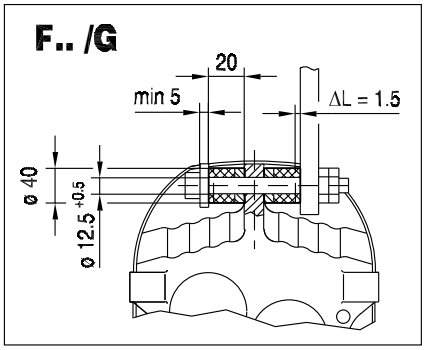
42 085 00 06

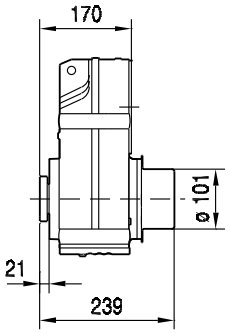
FT57..

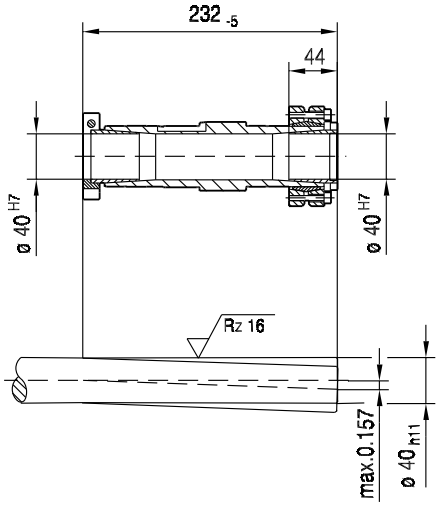


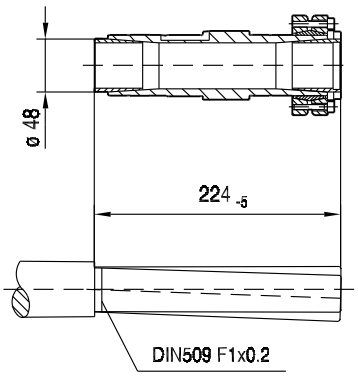


F.. /G





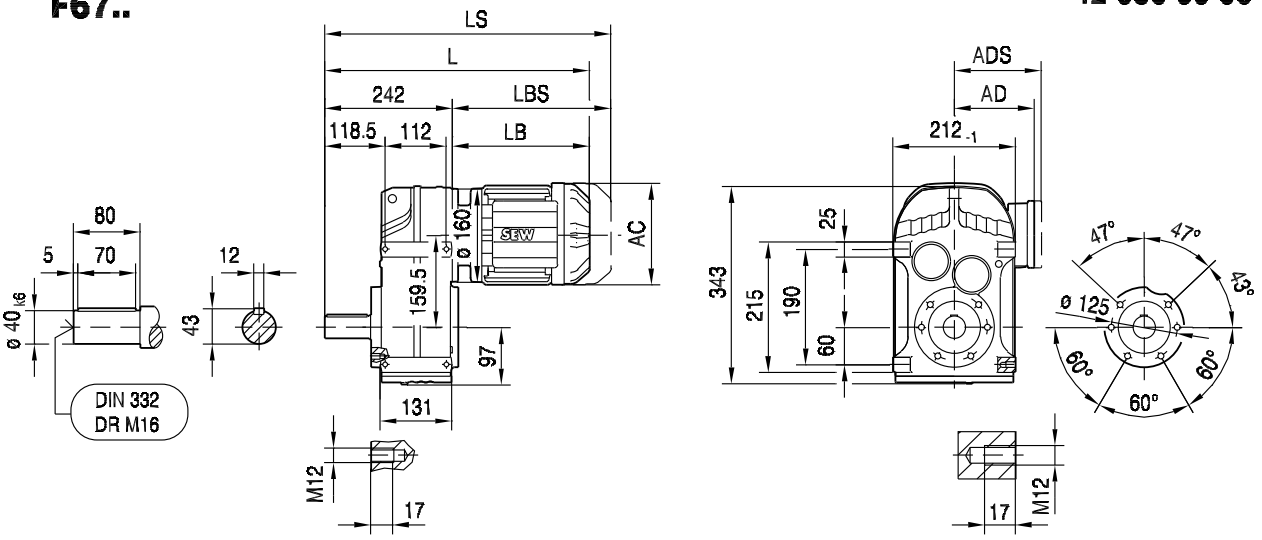




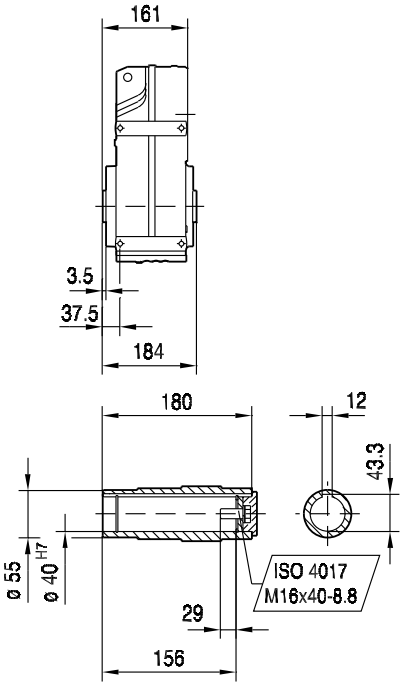
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	355	366	391	400	431	433	453	483	513	560
LS	410	434	459	481	512	526	546	576	606	672
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

42 086 00 06

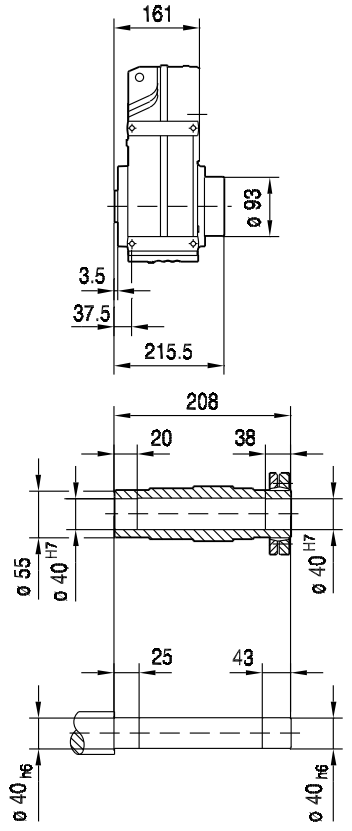
F67..



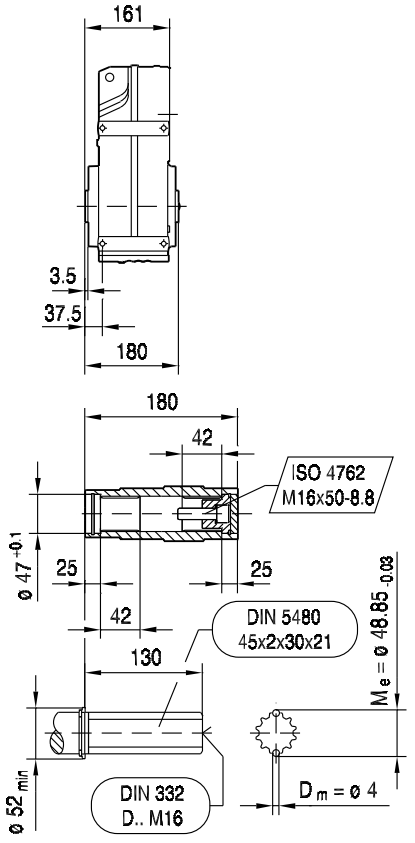
FA67B..



FH67B..
max. DR132S



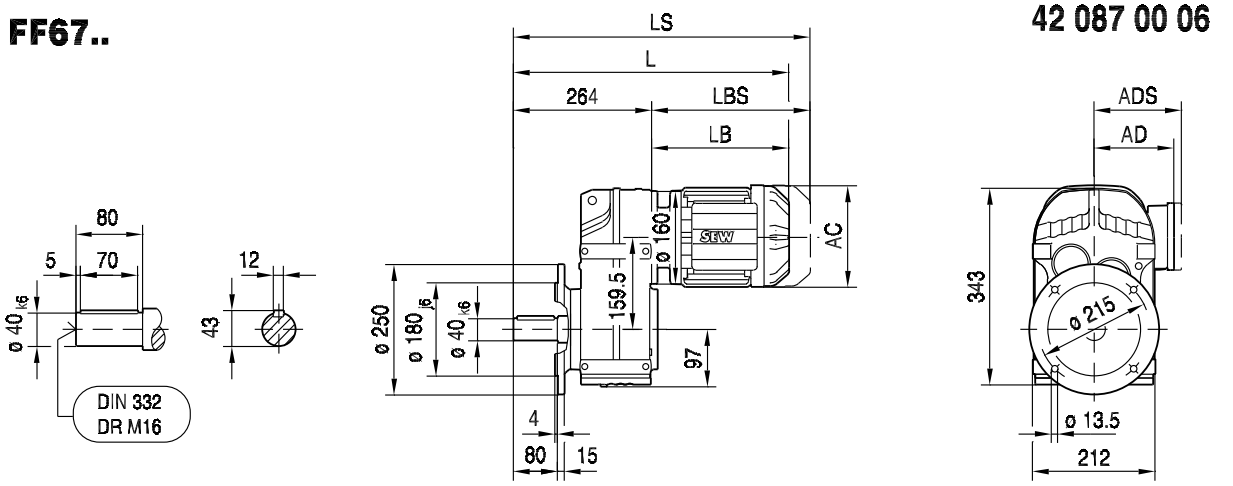
FV67B..



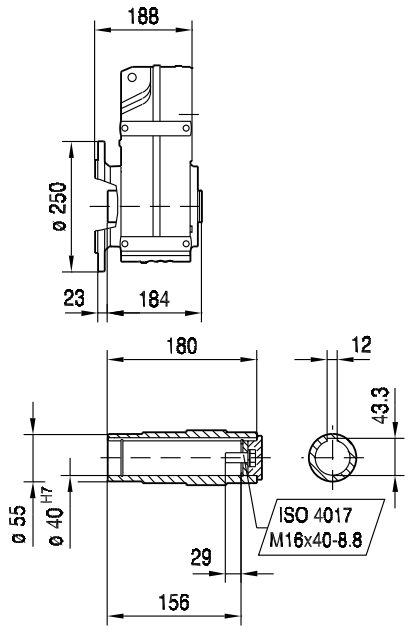
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	427	438	463	472	503	505	525	555	585	632
LS	482	506	531	553	584	598	618	648	678	744
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

FF67..

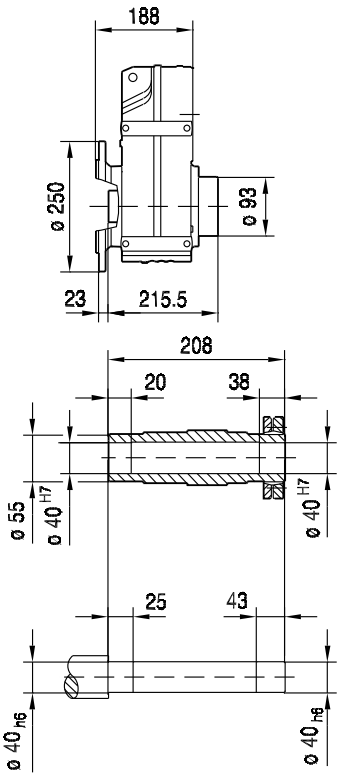
42 087 00 06



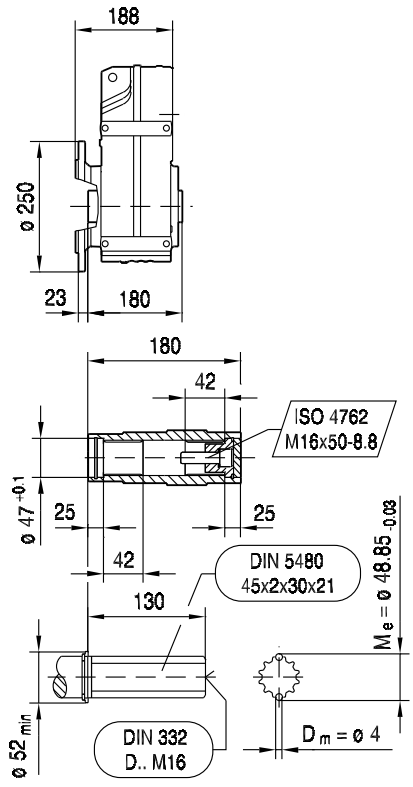
FAF67..



FHF67..
max. DR132S



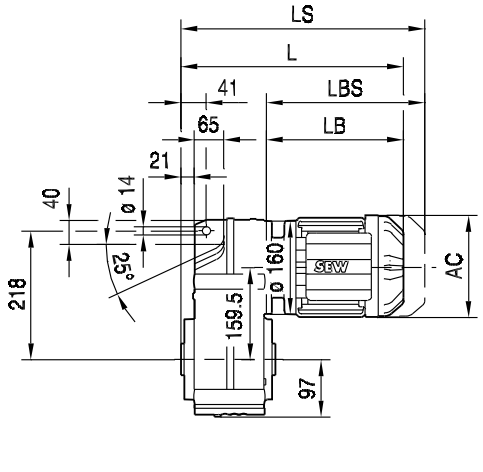
FVF67..

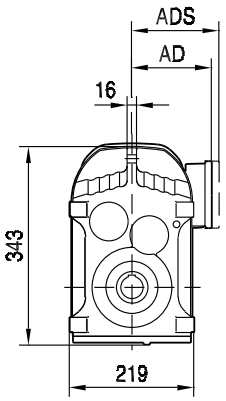


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	449	460	485	494	525	527	547	577	607	654
LS	504	528	553	575	606	620	640	670	700	766
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

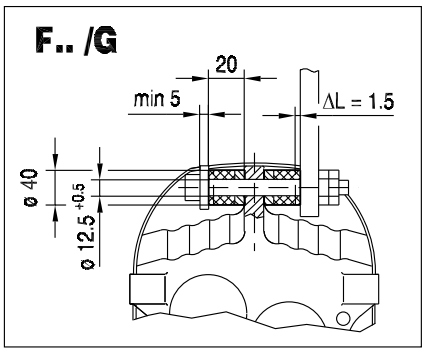
42 088 00 06

FA67..

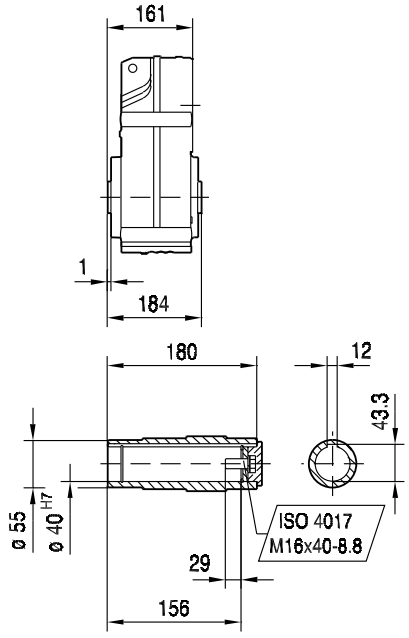




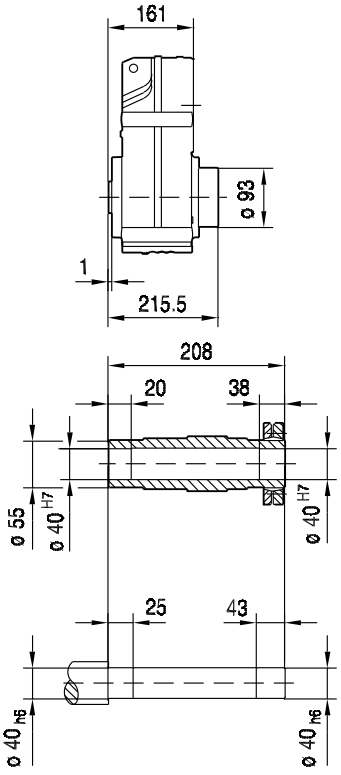
F.. /G



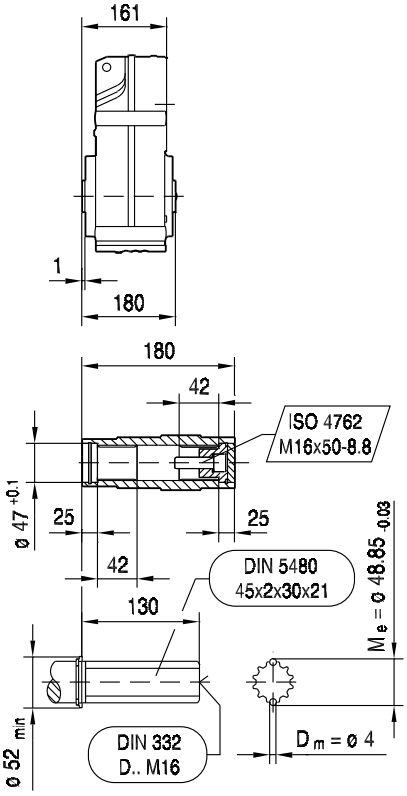
FA67..



FH67..
max. DR132S



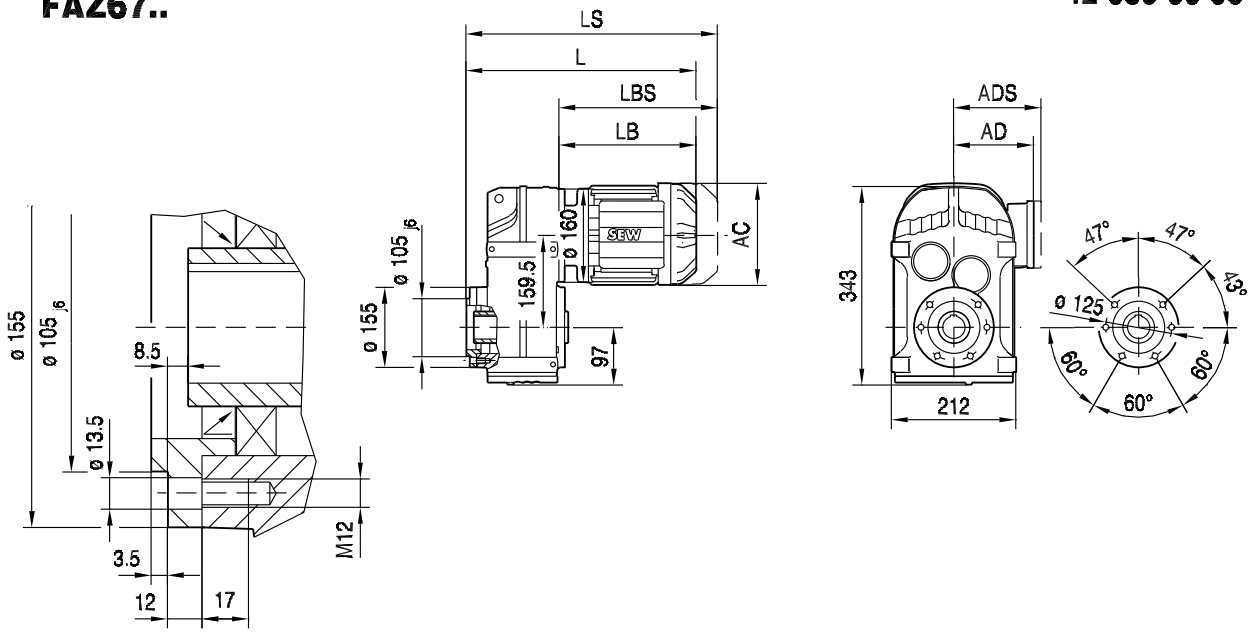
FV67..



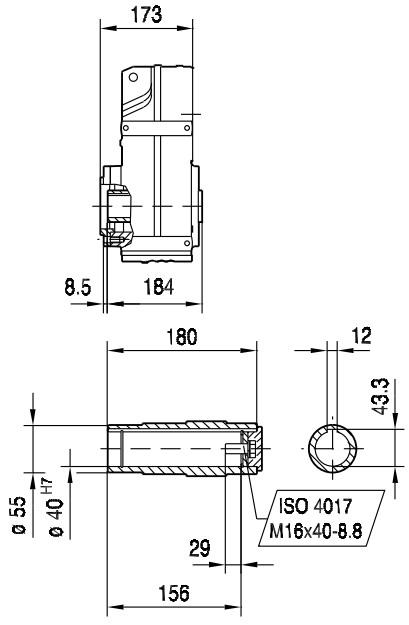
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	346	357	382	391	422	424	444	474	504	551
LS	401	425	450	472	503	517	537	567	597	663
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

42 089 00 06

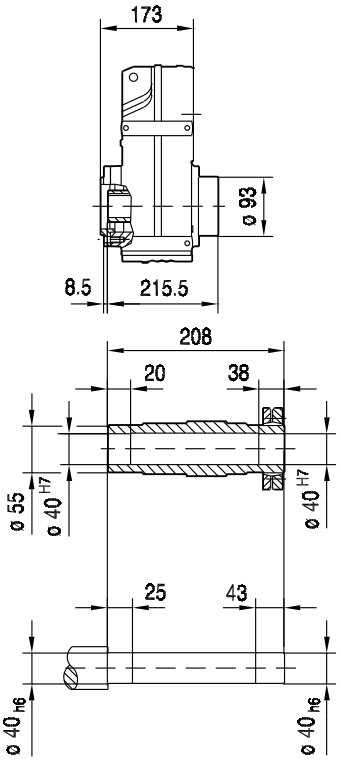
FAZ67..



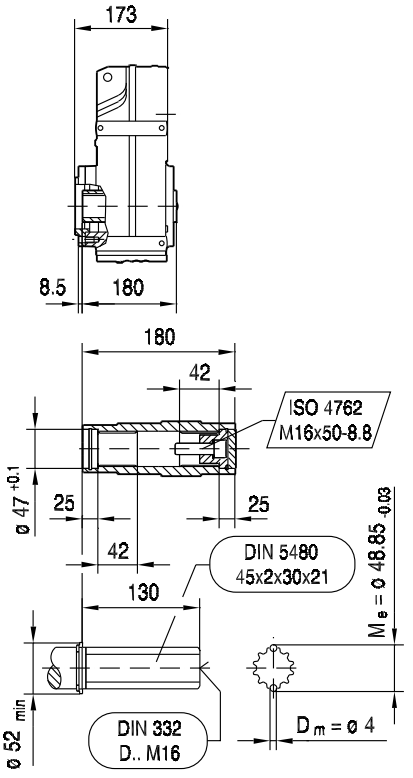
FAZ67..



FHZ67..
max. DR132S



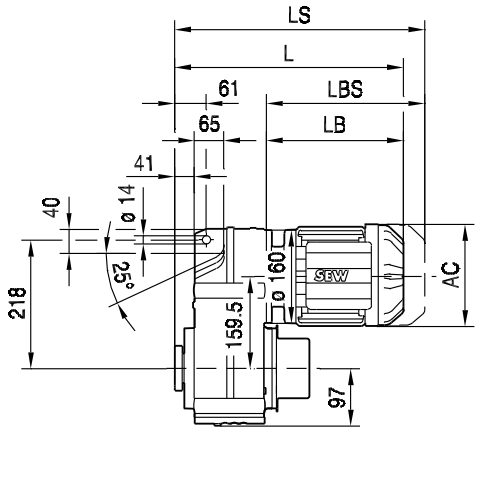
FVZ67..

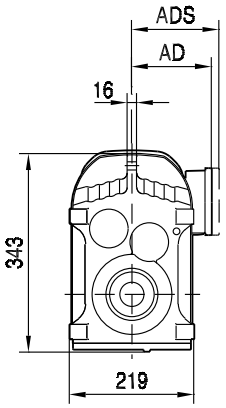


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	358	369	394	403	434	436	456	486	516	563
LS	413	437	462	484	515	529	549	579	609	675
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

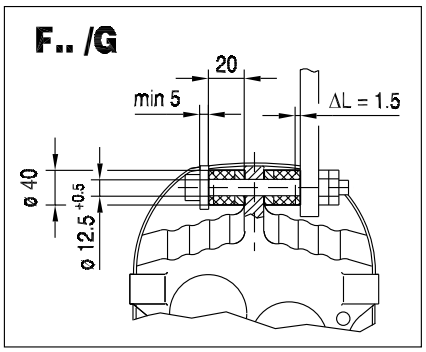
42 090 00 06

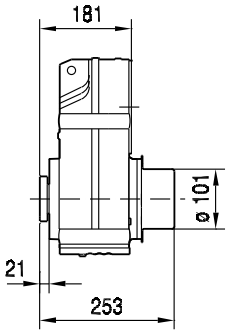
FT67..

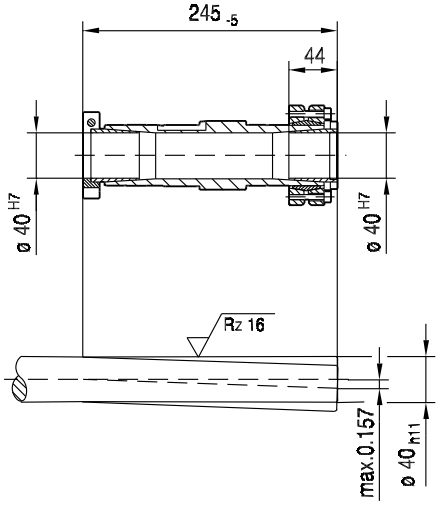


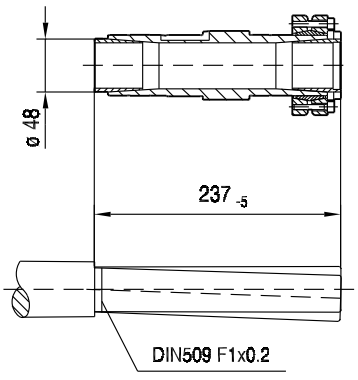


F.. /G





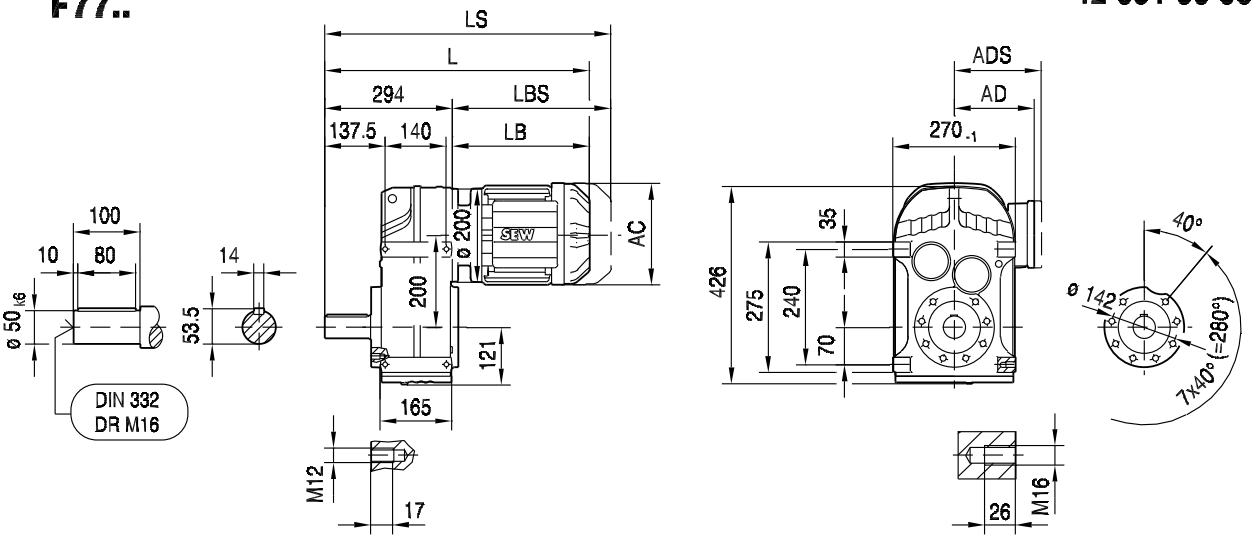




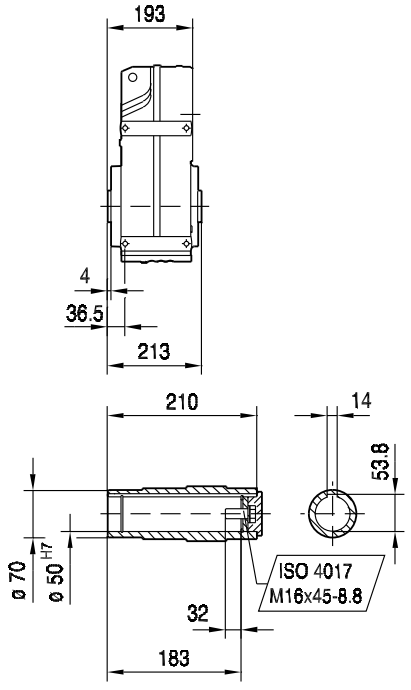
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	366	377	402	412	443	444	464	494	524	572
LS	421	445	470	493	524	537	557	587	617	684
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

42 091 00 06

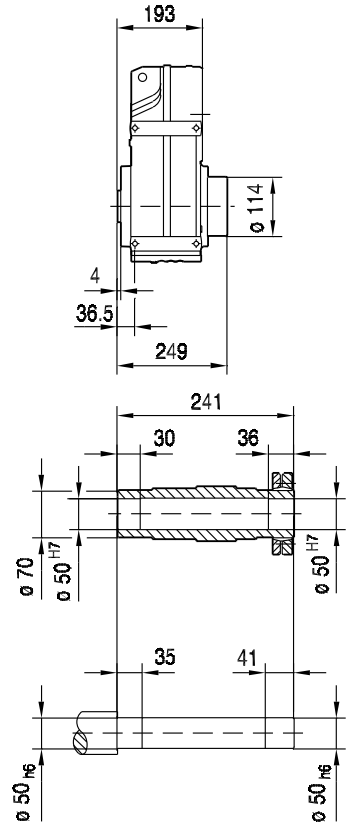
F77..



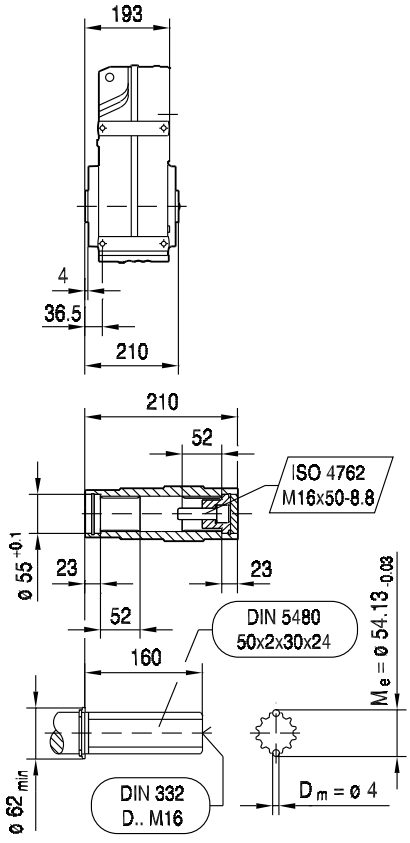
FA77B..



FH77B..



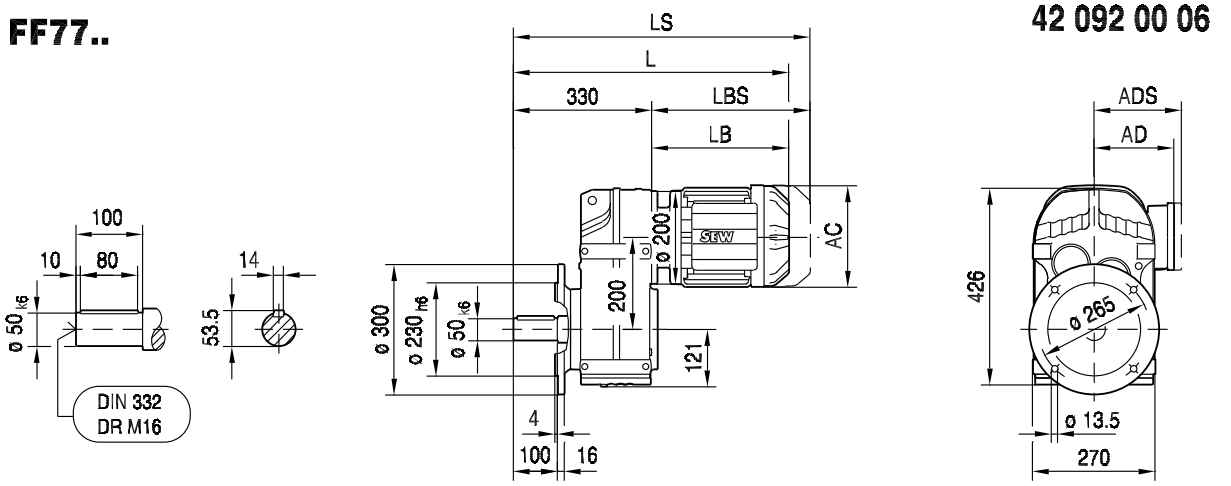
FV77B..



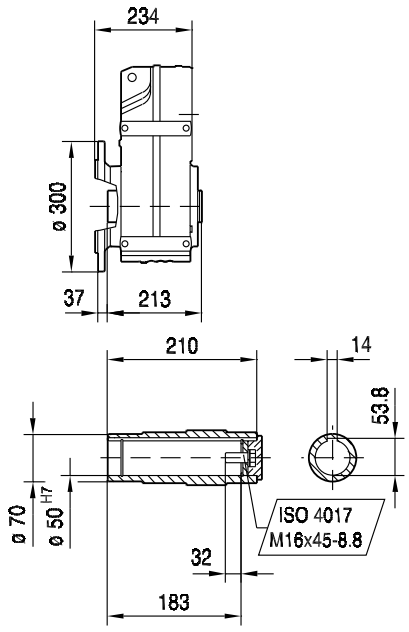
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	472	483	508	517	548	550	570	600	630	673	723	764
LS	527	551	576	598	629	643	663	693	723	785	835	901
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

FF77..

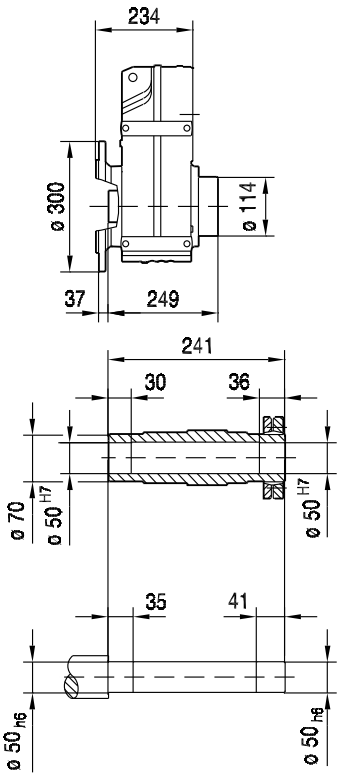
42 092 00 06



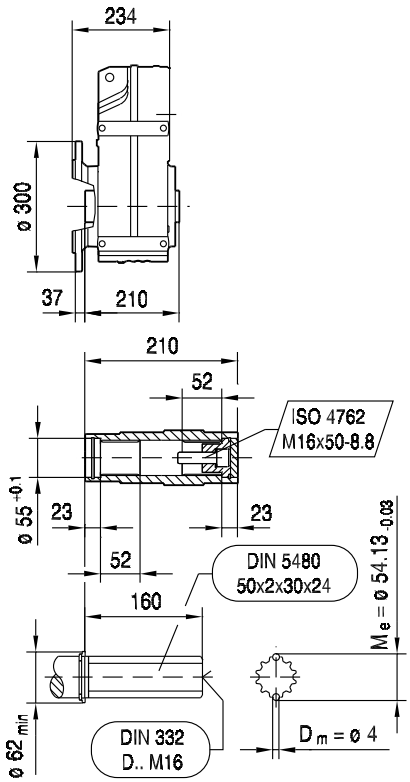
FAF77..



FHF77..



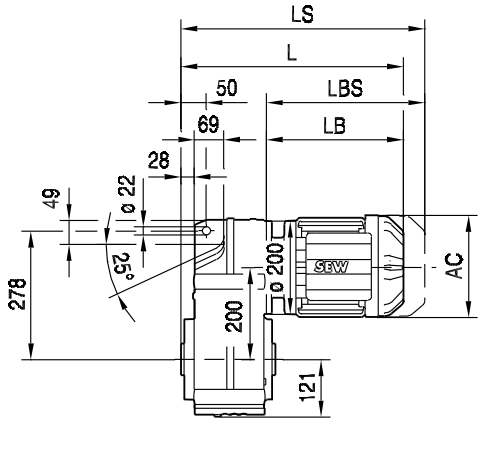
FVF77..

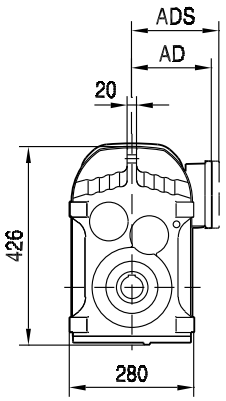


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	508	519	544	553	584	586	606	636	666	709	759	800
LS	563	587	612	634	665	679	699	729	759	821	871	937
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

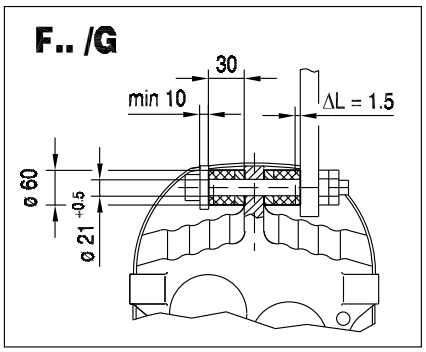
42 093 00 06

FA77..

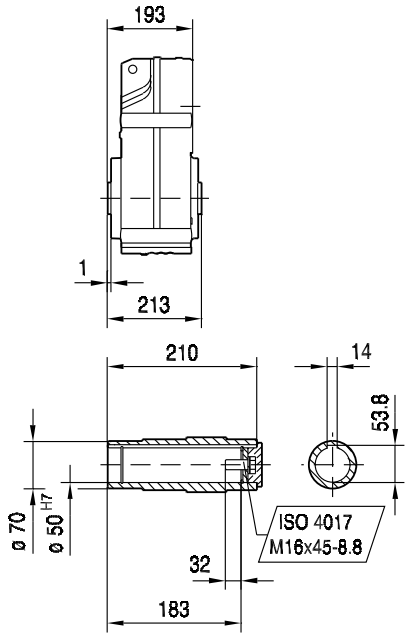




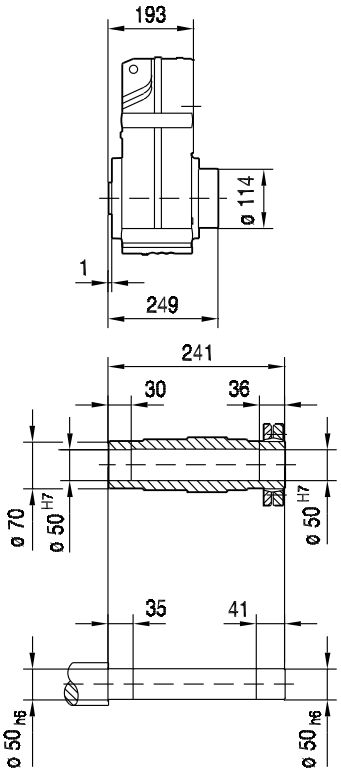
F.. /G



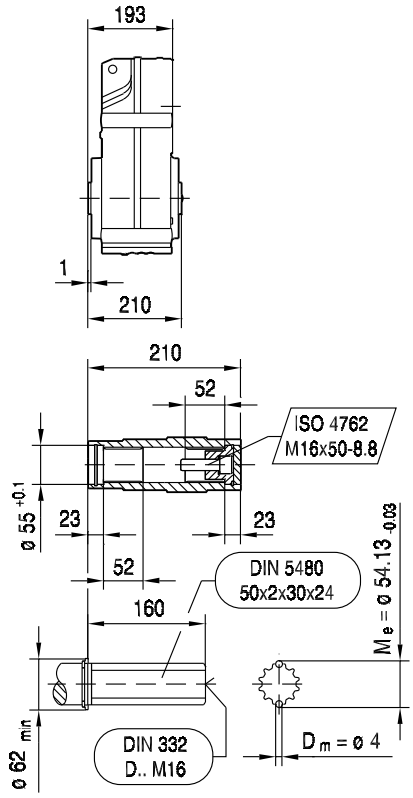
FA77..



FH77..



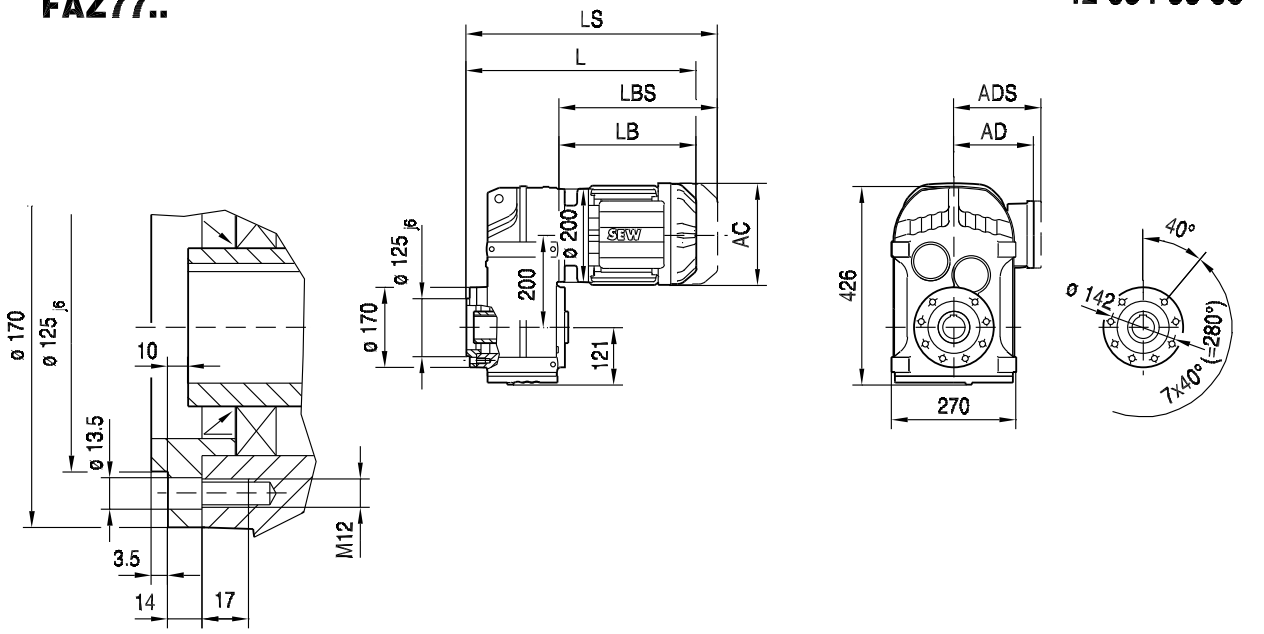
FV77..



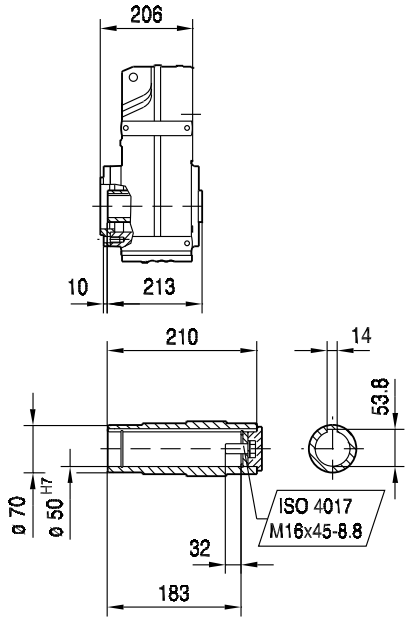
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	371	382	407	416	447	449	469	499	529	572	622	663
LS	426	450	475	497	528	542	562	592	622	684	734	800
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

42 094 00 06

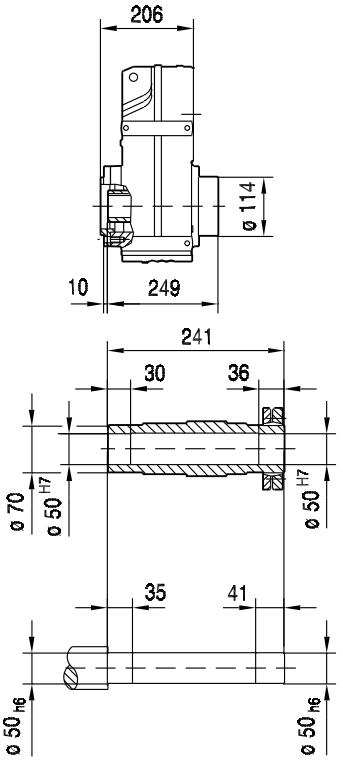
FAZ77..



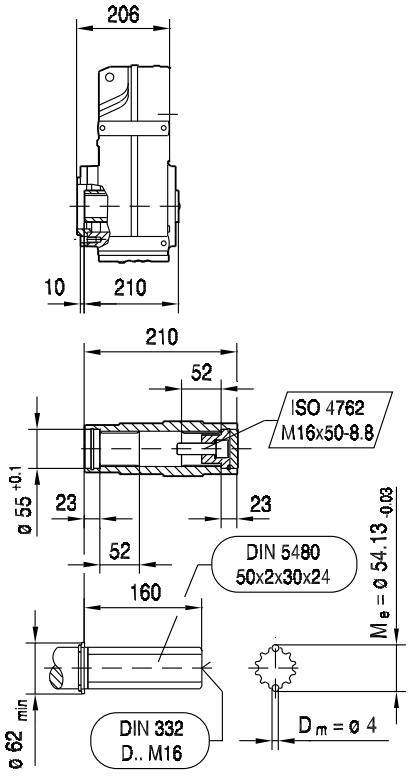
FAZ77..



FHZ77..



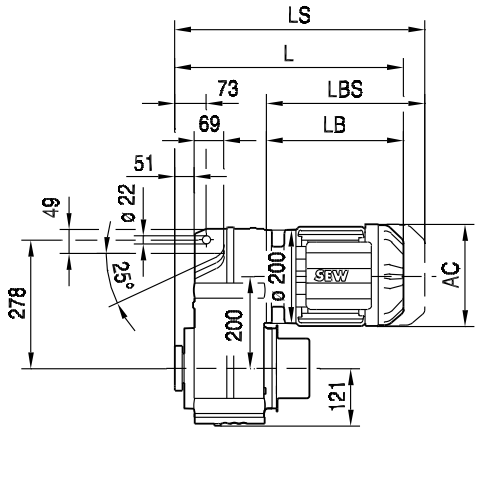
FVZ77..

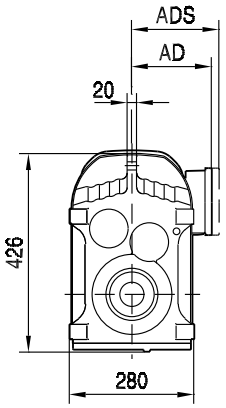


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	384	395	420	429	460	462	482	512	542	585	635	676
LS	439	463	488	510	541	555	575	605	635	697	747	813
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

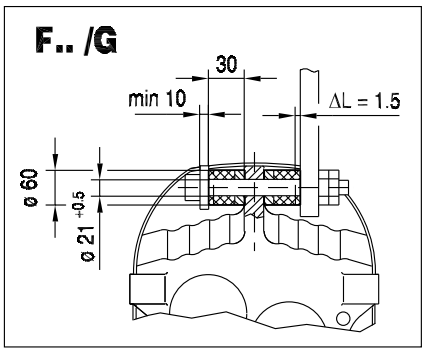
42 095 00 06

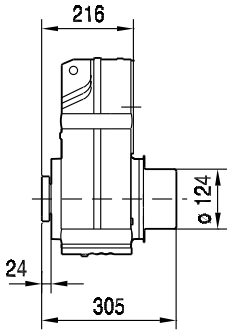
FT77..

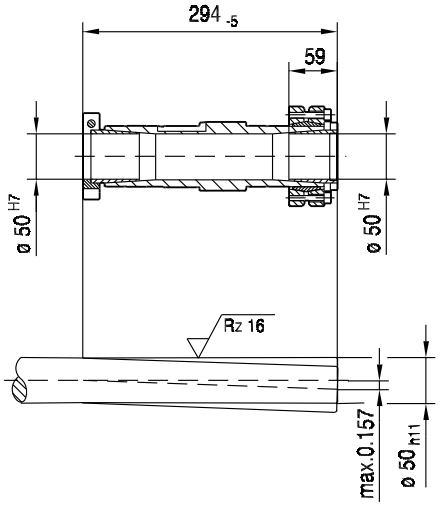


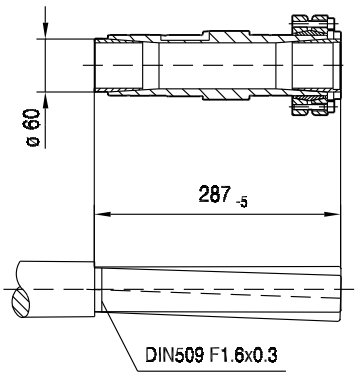


F.. /G





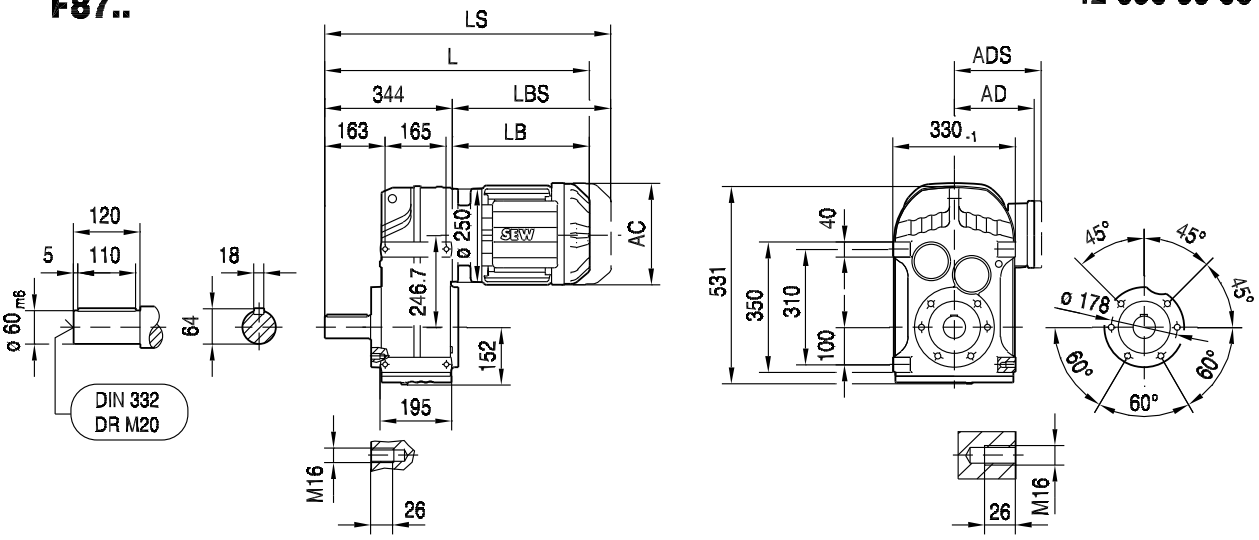




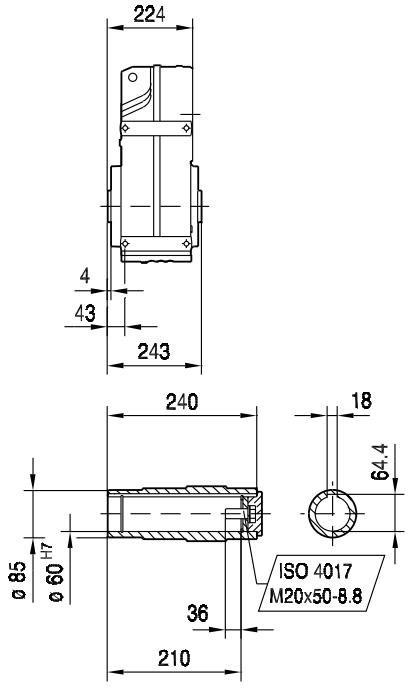
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	132	139	139	156	156	179	179	197	197	221	221	270
AD	105	119	119	128	128	140	140	157	157	170	170	228
ADS	105	129	129	139	139	150	150	158	158	172	172	228
L	394	405	430	439	470	472	492	522	552	595	645	686
LS	449	473	498	520	551	565	585	615	645	707	757	823
LB	178	189	214	223	254	256	276	306	336	379	429	470
LBS	233	257	282	304	335	349	369	399	429	491	541	607

42 096 00 06

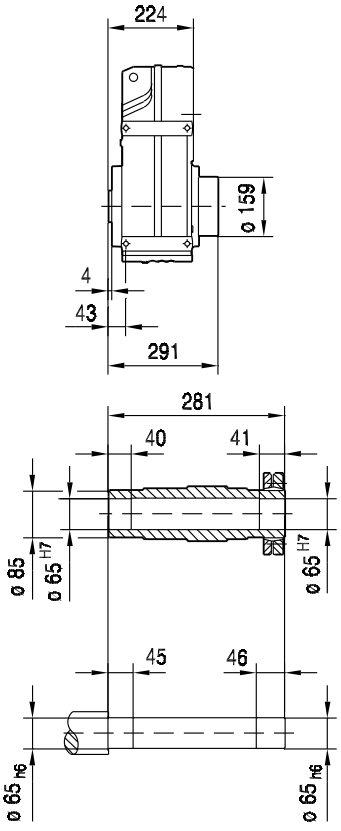
F87..



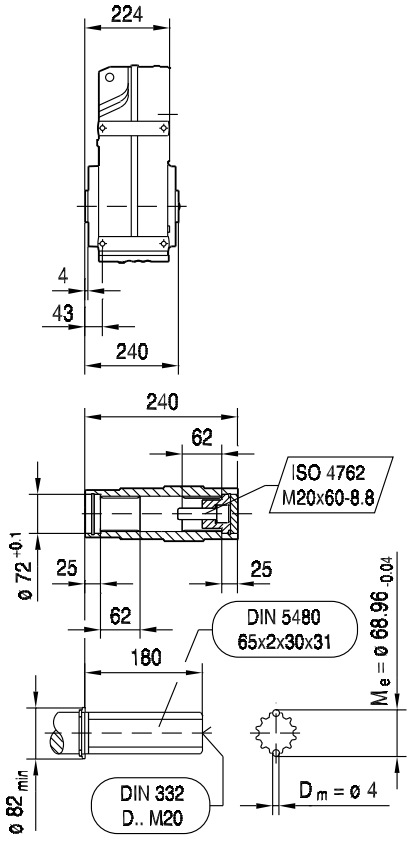
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FH87B..



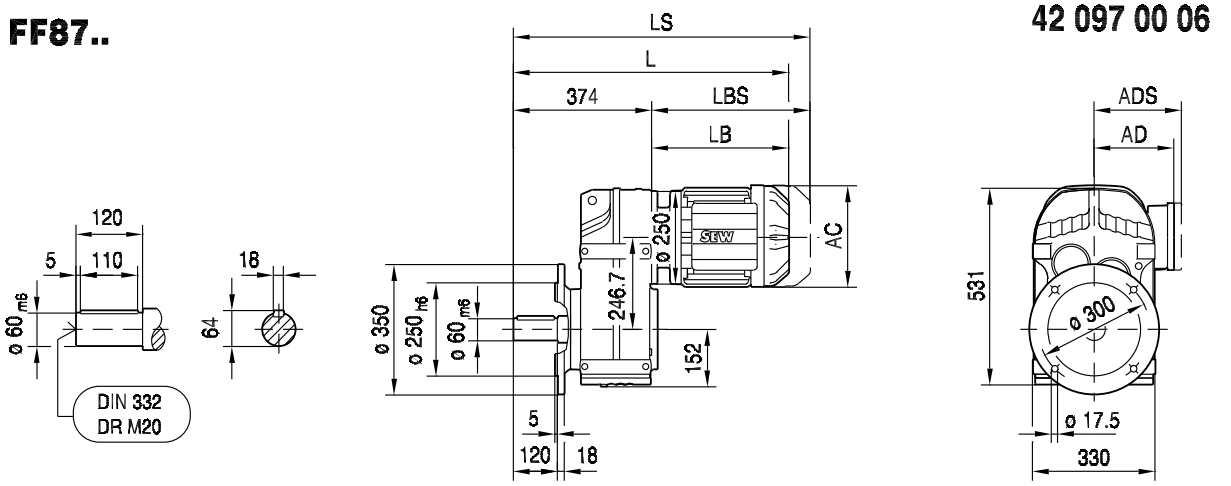
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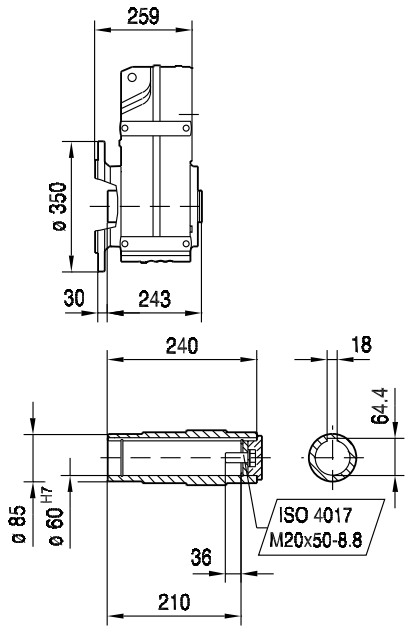
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	562	593	595	615	645	675	718	768	809	878	938
LS	643	674	688	708	738	768	830	880	946	1067	1127
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

FF87..

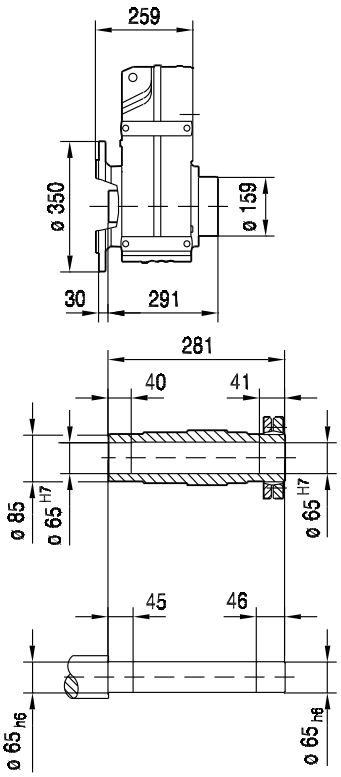
42 097 00 06



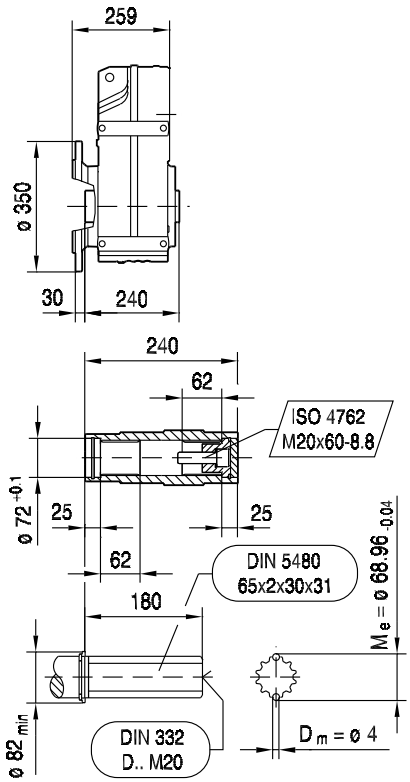
FAF87..



FHF87..



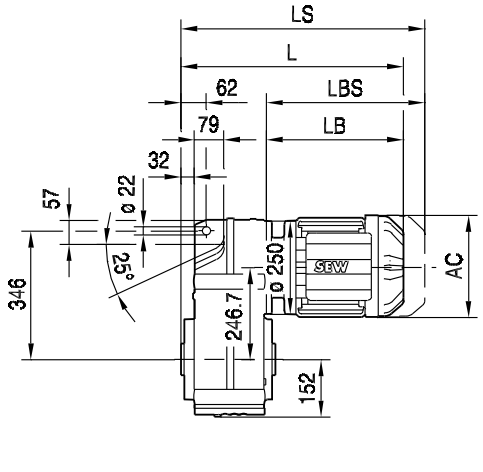
FVF87..

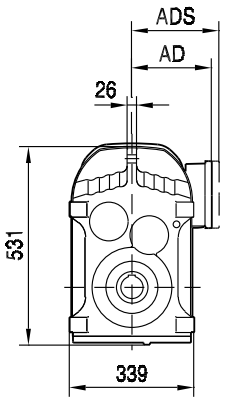


(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	592	623	625	645	675	705	748	798	839	908	968
LS	673	704	718	738	768	798	860	910	976	1097	1157
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

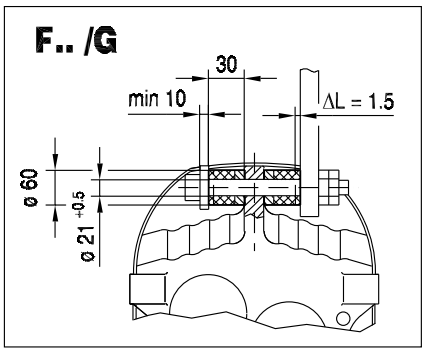
42 098 00 06

FA87..

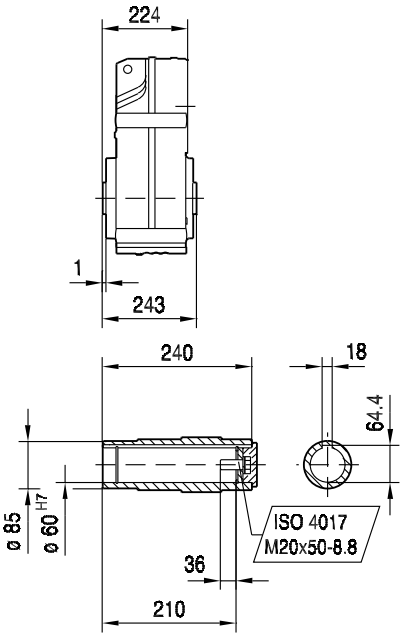




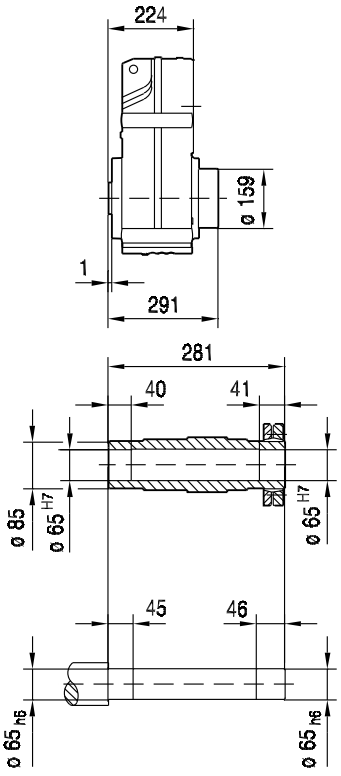
F.. /G



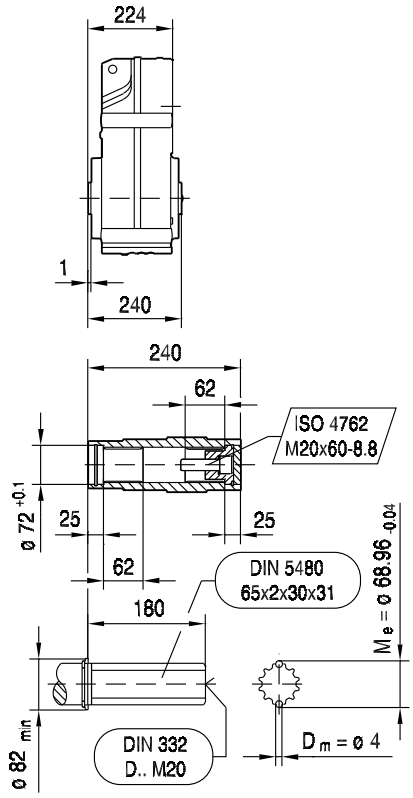
FA87..



FH87..



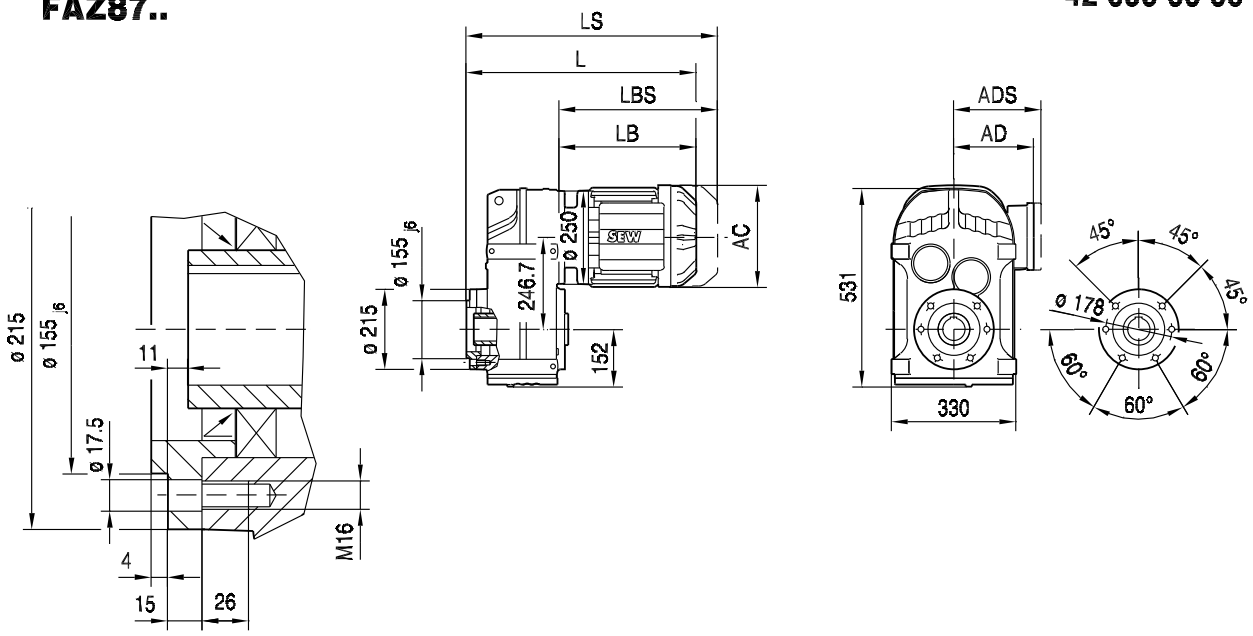
FV87..



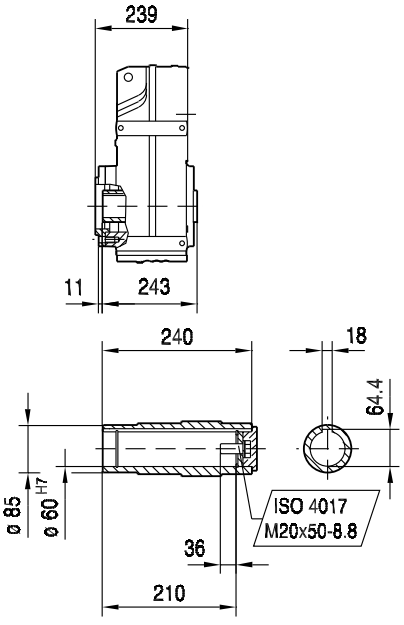
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	442	473	475	495	525	555	598	648	689	758	818
LS	523	554	568	588	618	648	710	760	826	947	1007
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

42 099 00 06

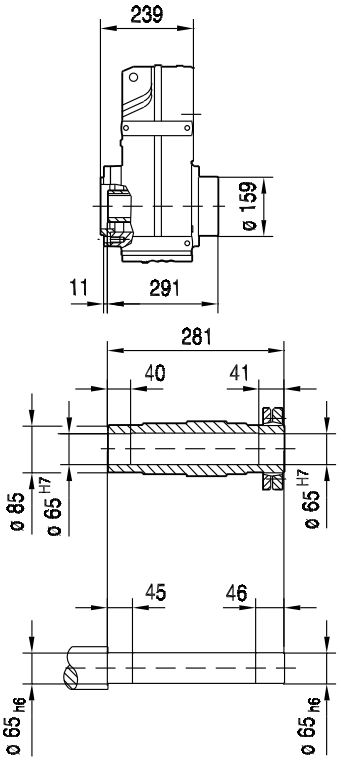
FAZ87..



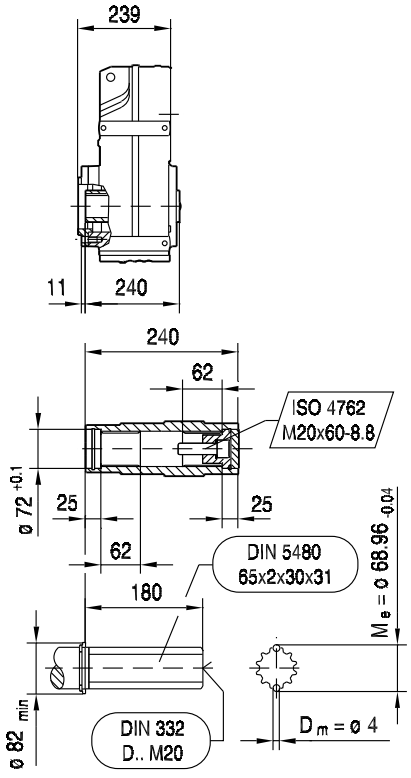
FAZ87..



FHZ87..



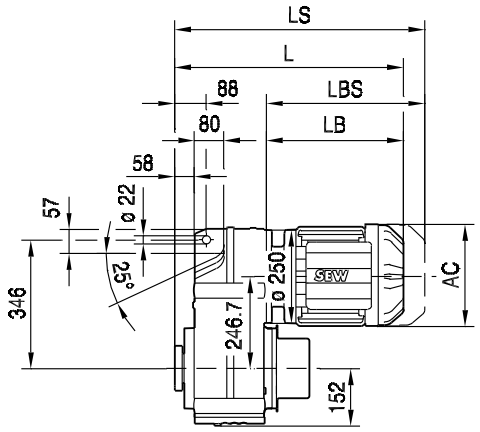
FVZ87..

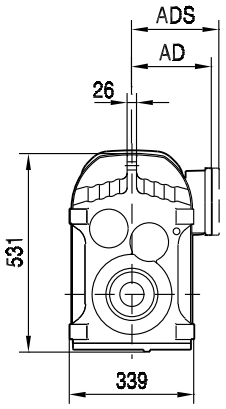


(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	457	488	490	510	540	570	613	663	704	773	833
LS	538	569	583	603	633	663	725	775	841	962	1022
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

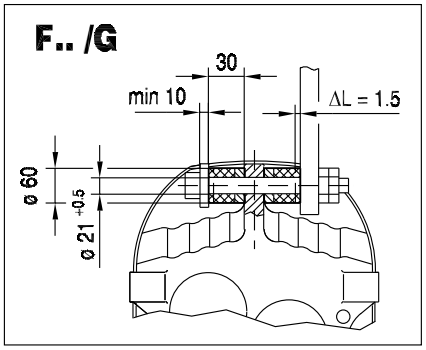
42 100 00 06

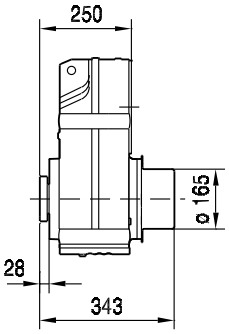
FT87..

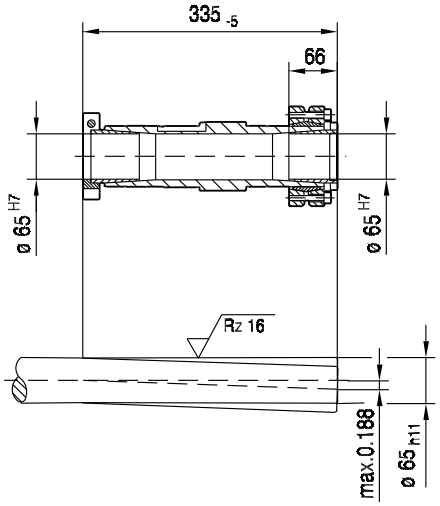


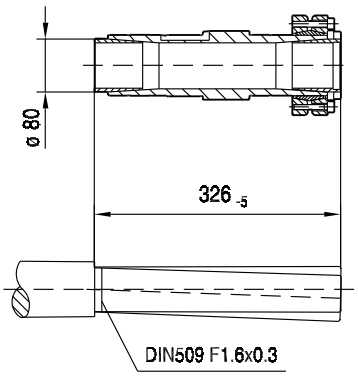


F.. /G





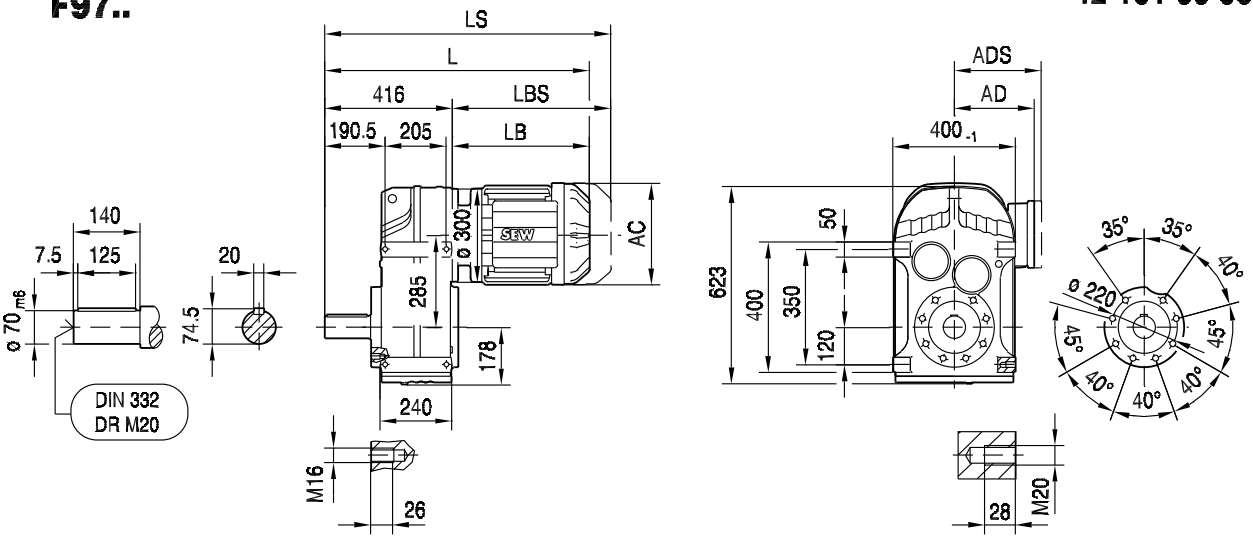




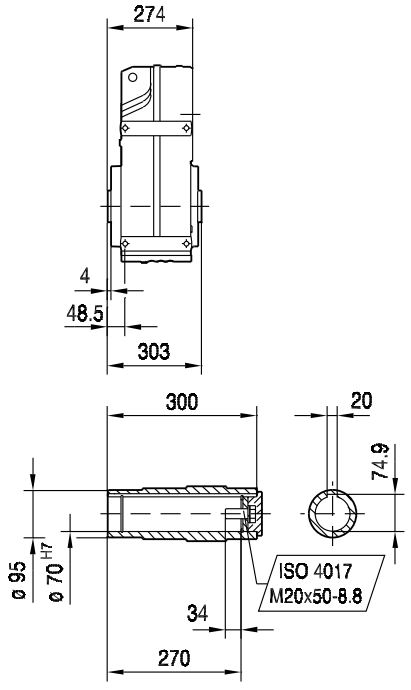
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	468	499	501	521	551	581	624	674	715	784	844
LS	549	580	594	614	644	674	736	786	852	973	1033
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

42 101 00 06

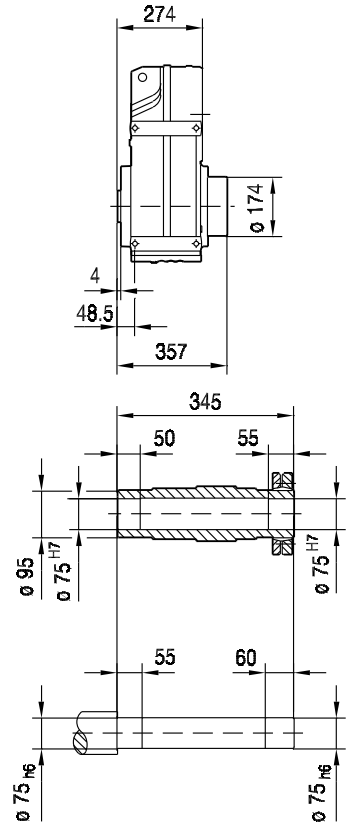
F97..



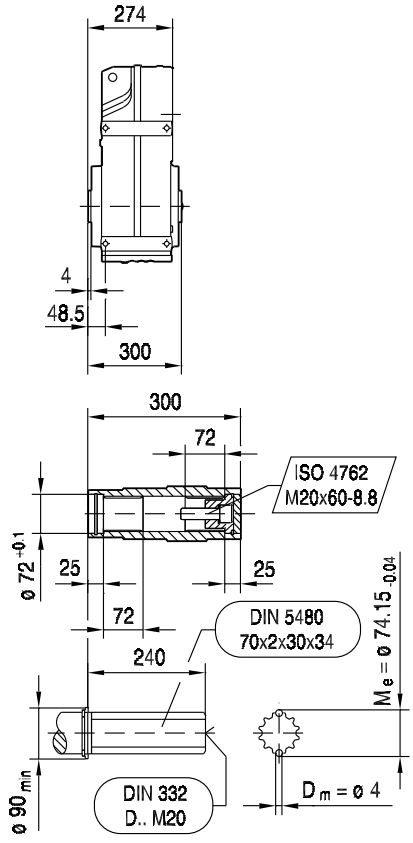
FA97B..



FH97B..



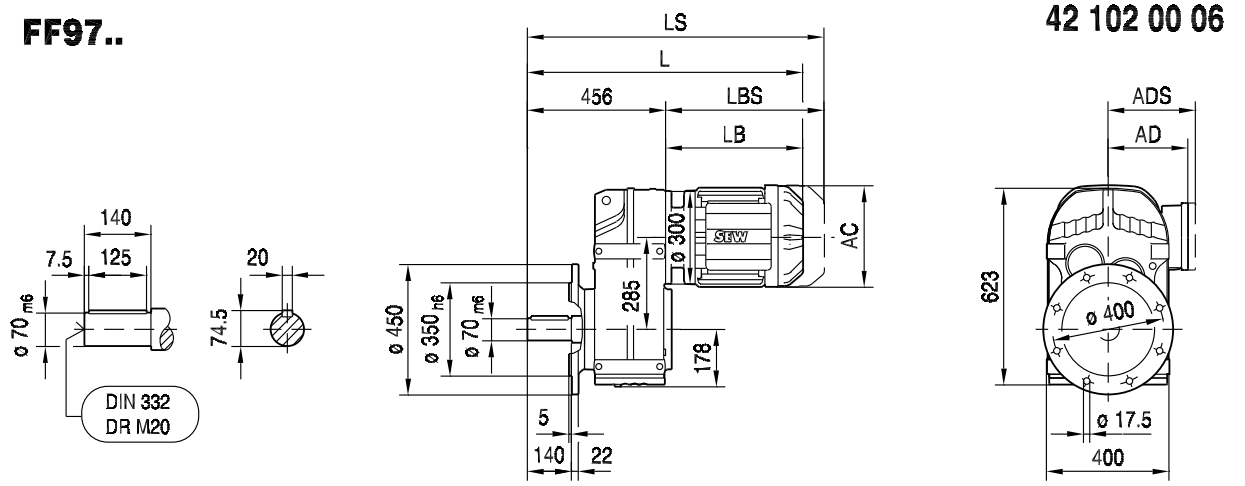
FV97B..



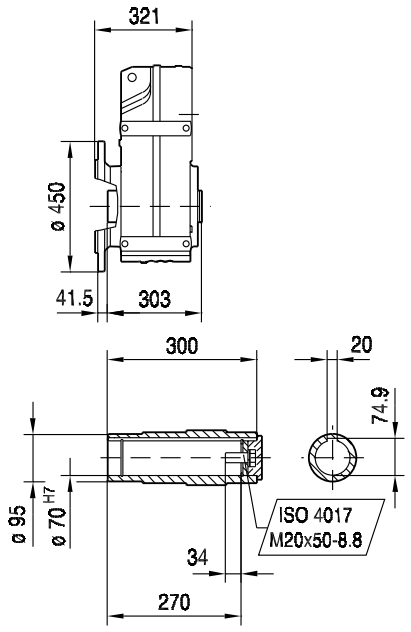
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	660	662	682	712	742	785	835	876	945	1005
LS	741	755	775	805	835	897	947	1013	1134	1194
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

FF97..

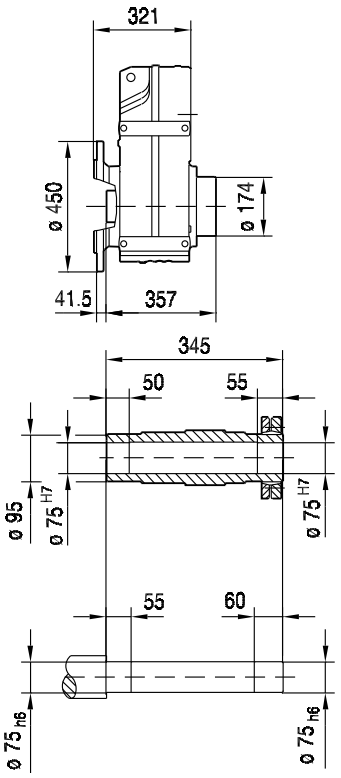
42 102 00 06



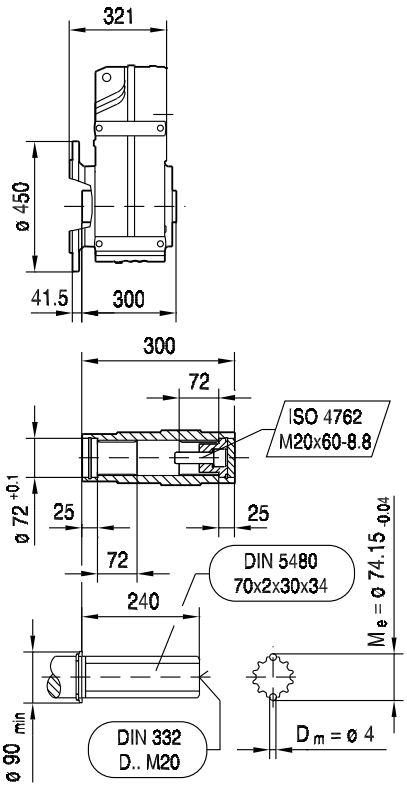
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FHF97..



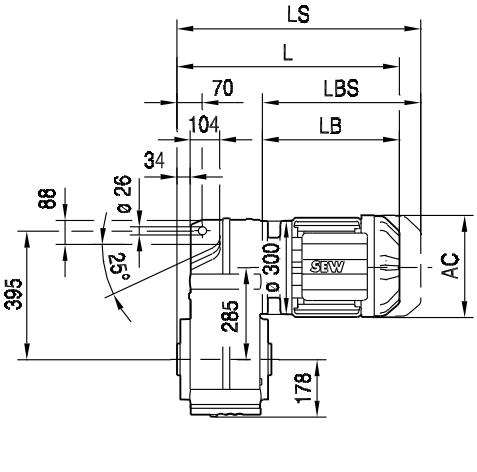
FVF97..

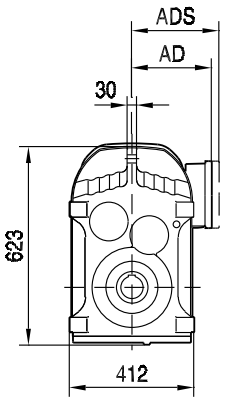


(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	700	702	722	752	782	825	875	916	985	1045
LS	781	795	815	845	875	937	987	1053	1174	1234
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

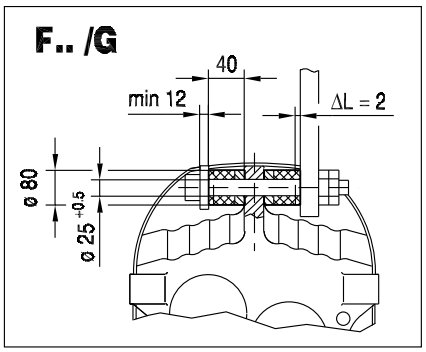
42 103 00 06

FA97..

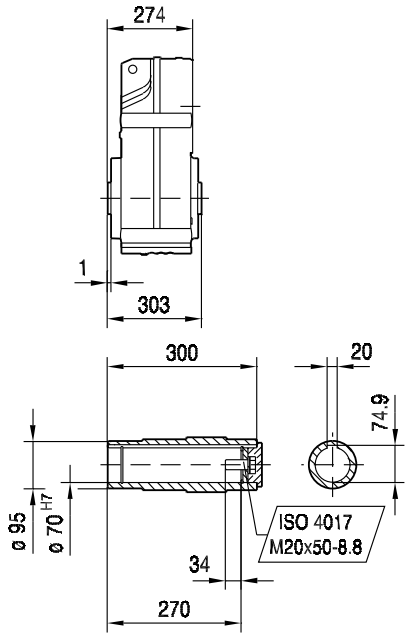




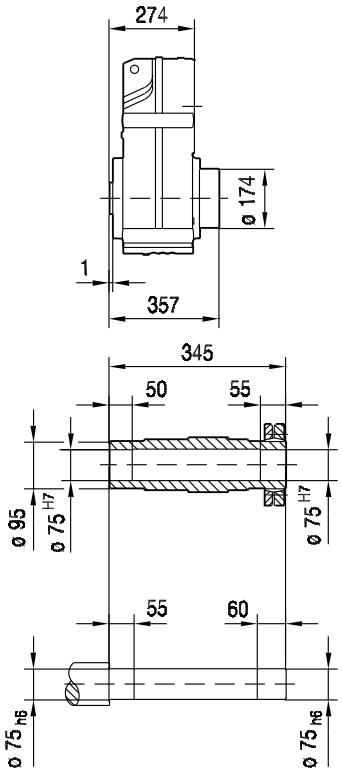
F.. /G



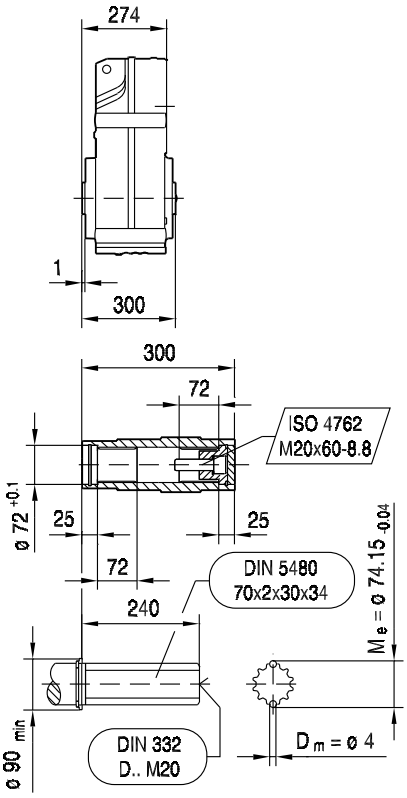
FA97..



FH97..



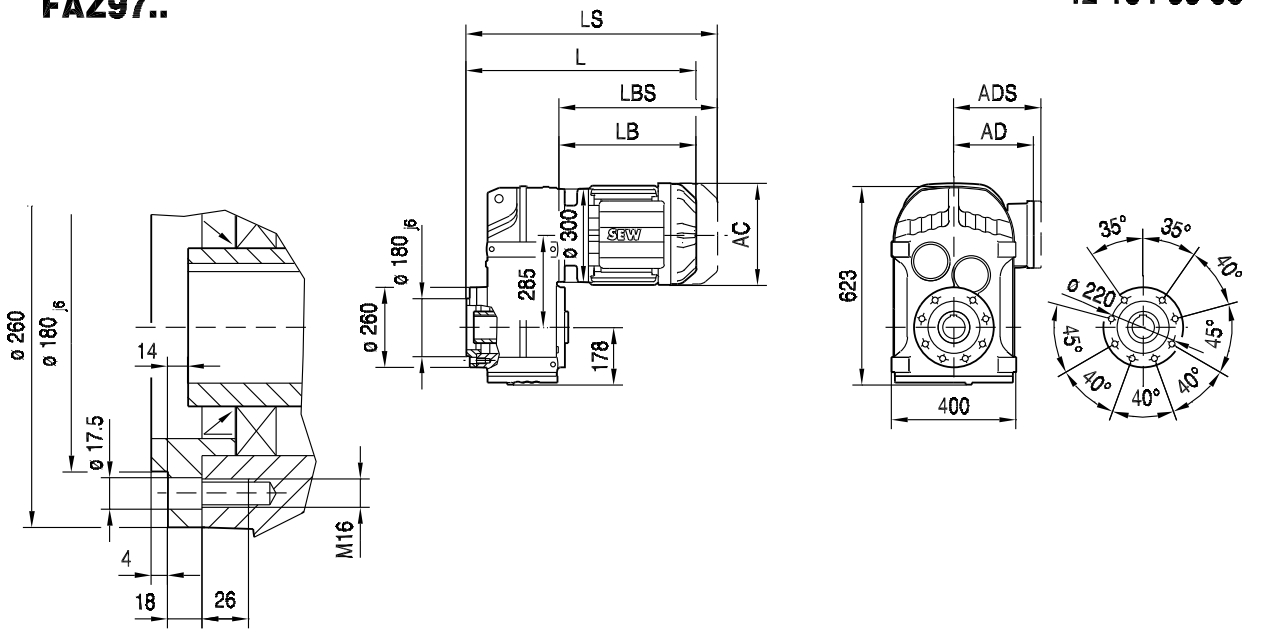
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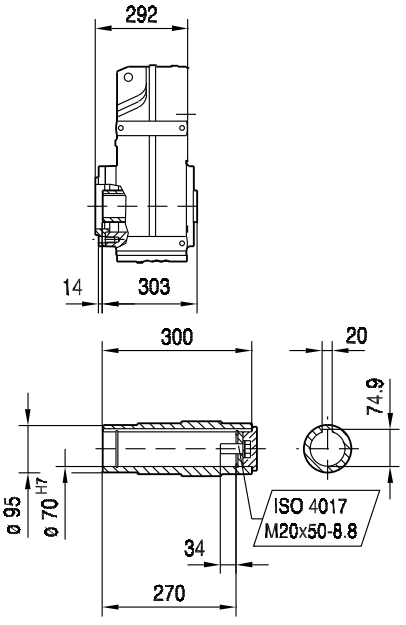
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	518	520	540	570	600	643	693	734	803	863
LS	599	613	633	663	693	755	805	871	992	1052
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

42 104 00 06

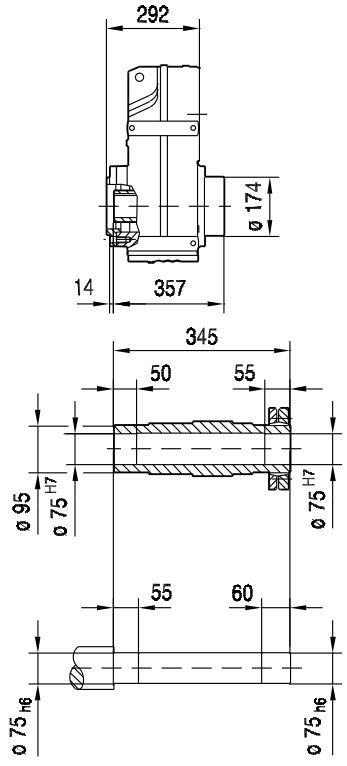
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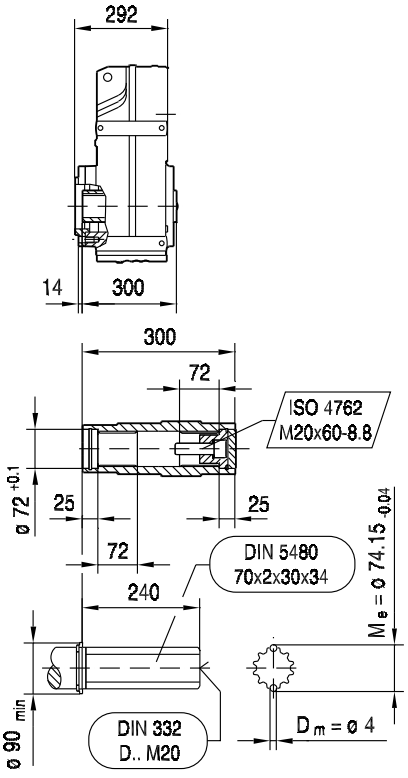
FAZ97..



FHZ97..



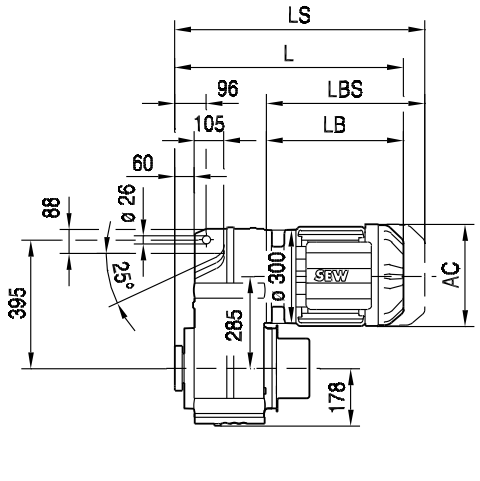
FVZ97..

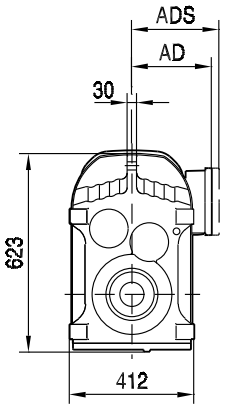


(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	536	538	558	588	618	661	711	752	821	881
LS	617	631	651	681	711	773	823	889	1010	1070
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

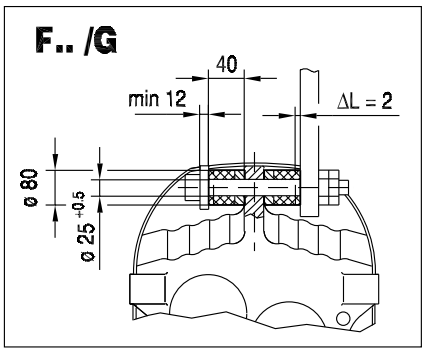
42 105 00 06

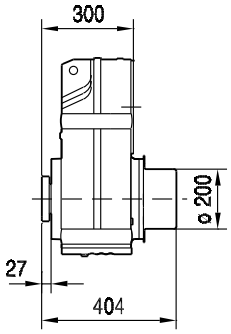
FT97..

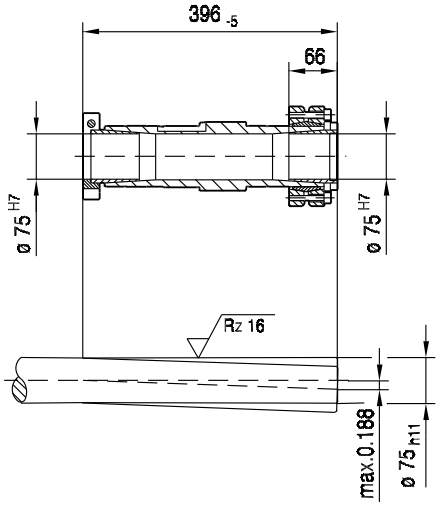


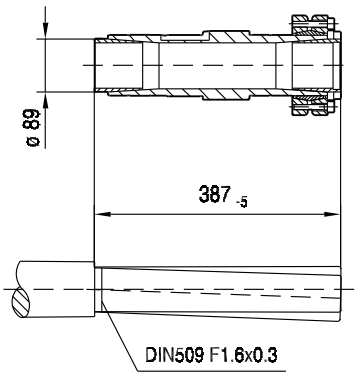


F.. /G





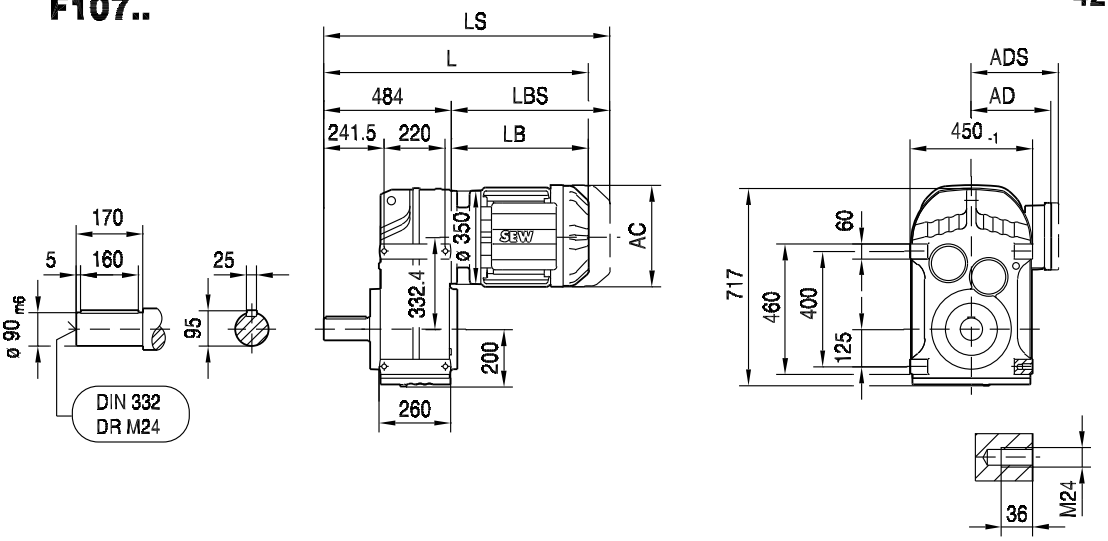




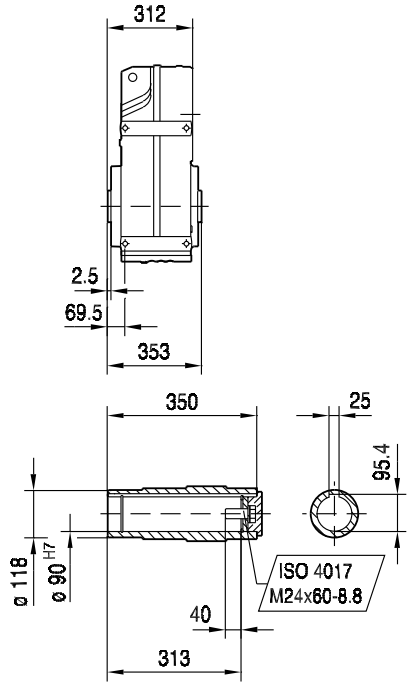
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	544	546	566	596	626	669	719	760	829	889
LS	625	639	659	689	719	781	831	897	1018	1078
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

42 106 00 06

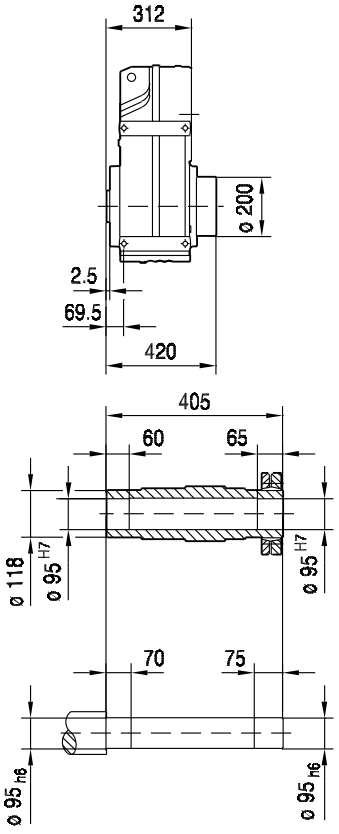
F107..



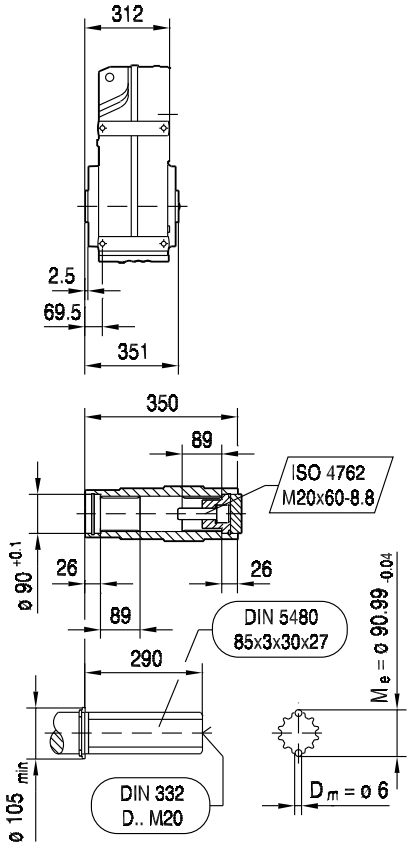
FA107B..



FH107B..



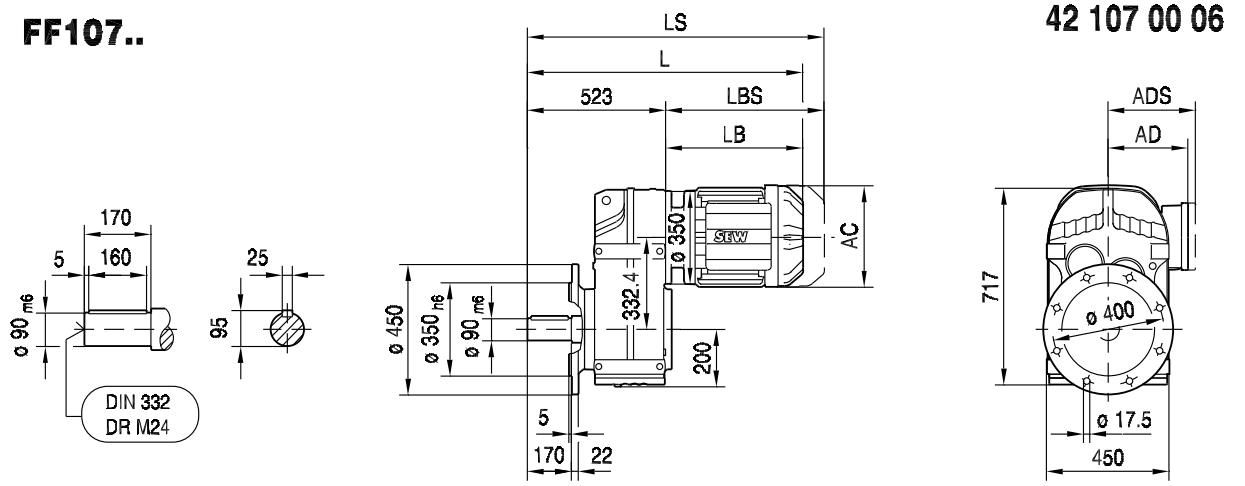
FV107B..



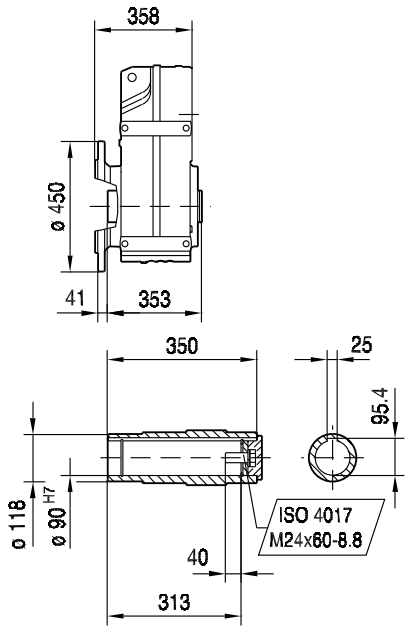
(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	744	774	804	847	897	938	1007	1067	1140	1190
LS	837	867	897	959	1009	1075	1196	1256	1345	1395
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

FF107..

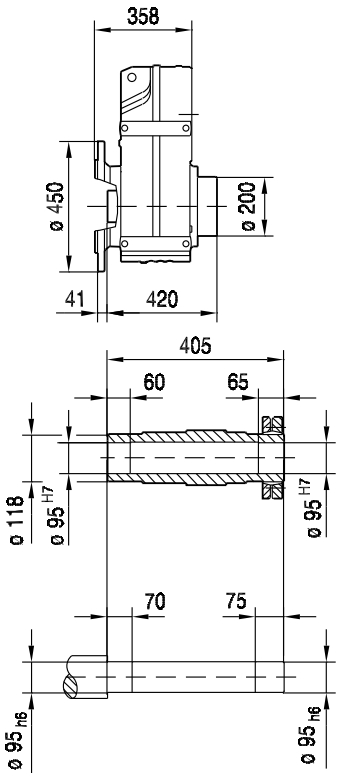
42 107 00 06



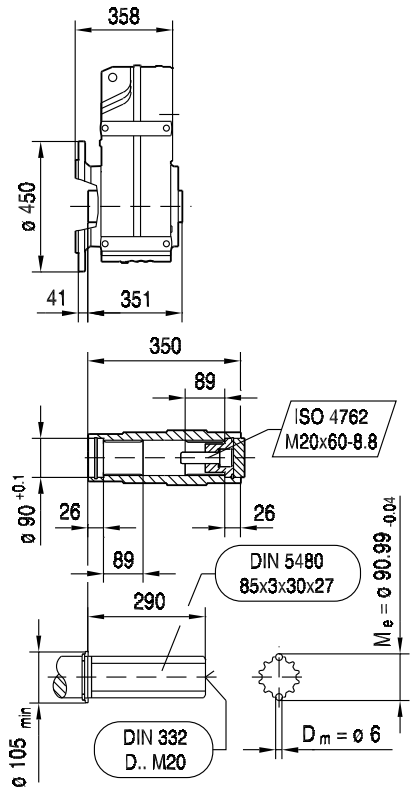
FAF107..



FHF107..



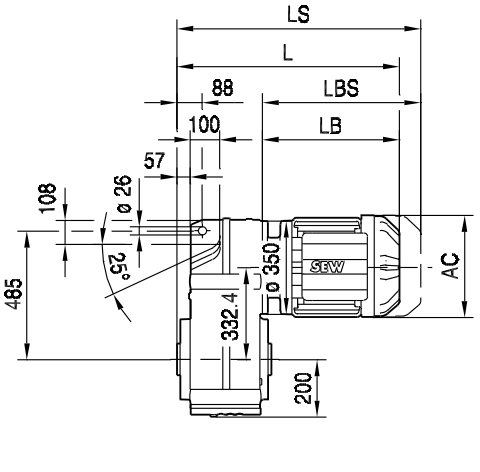
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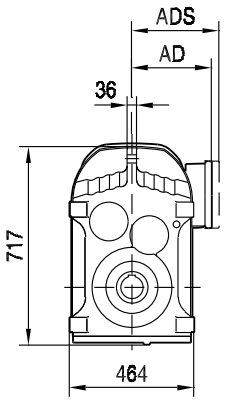


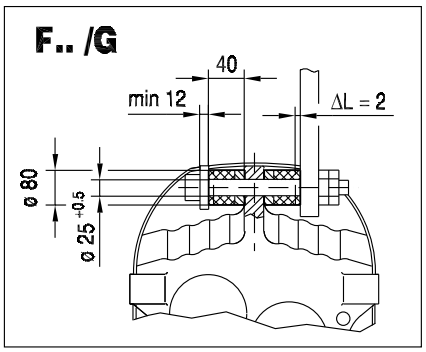
(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	783	813	843	886	936	977	1046	1106	1179	1229
LS	876	906	936	998	1048	1114	1235	1295	1384	1434
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

42 108 00 06

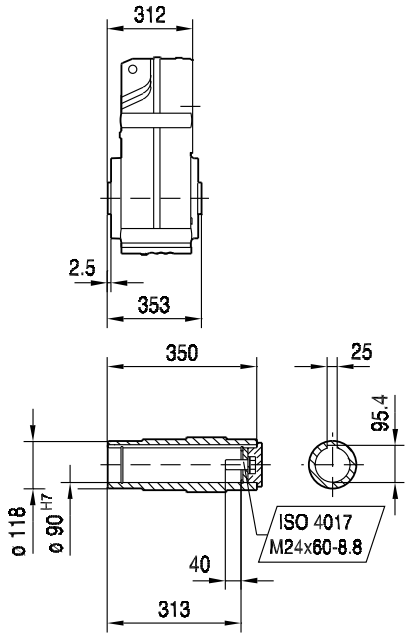
FA107..



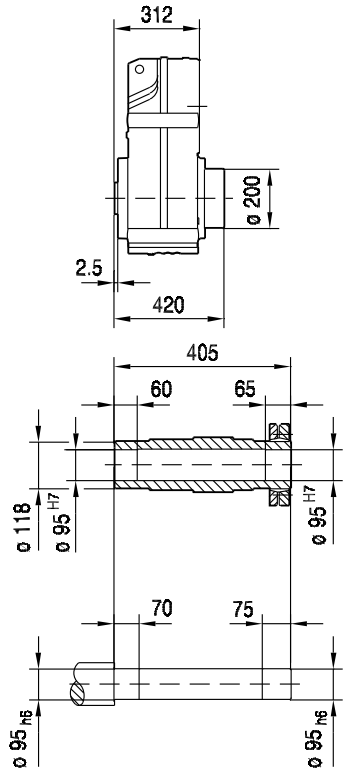




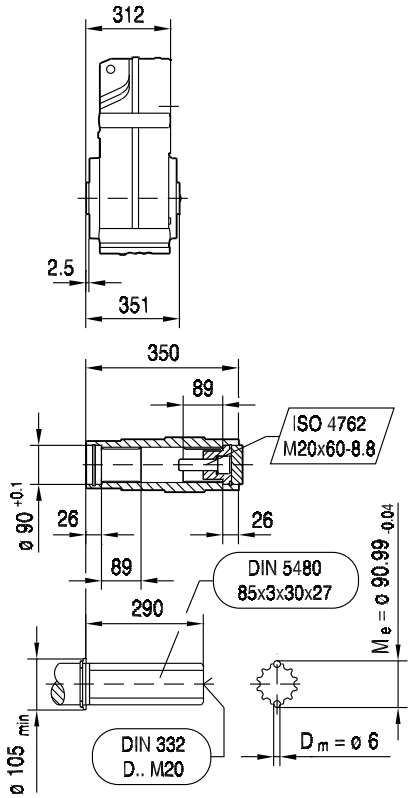
FA107..



FH107..



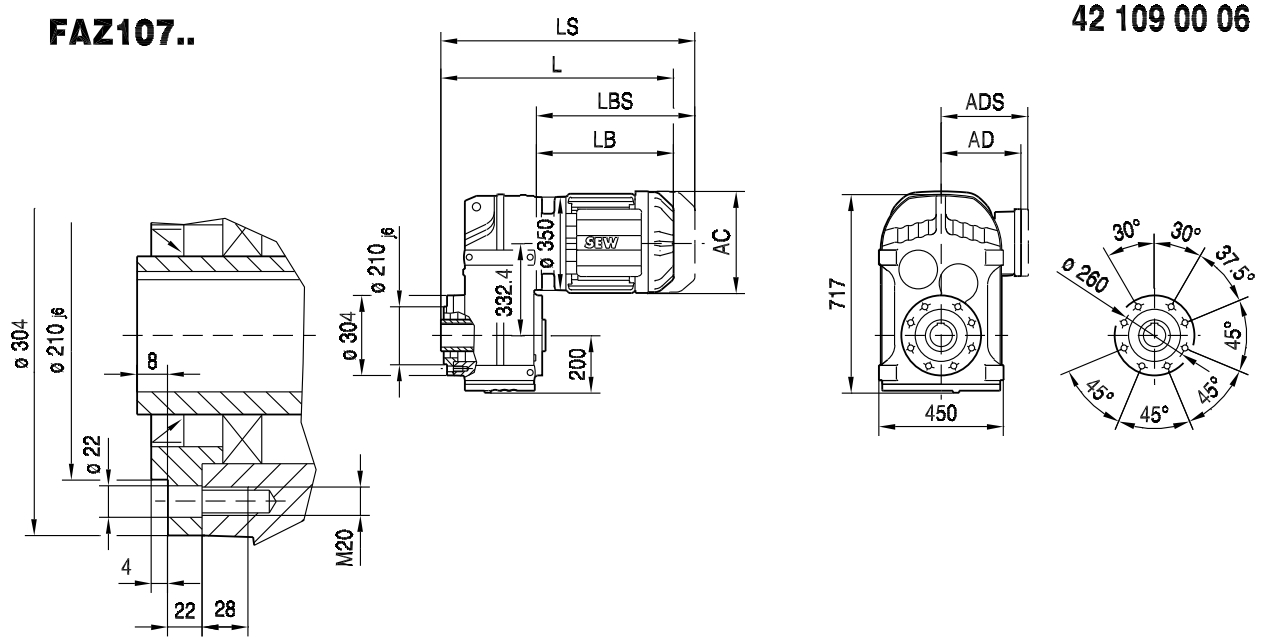
FV107..



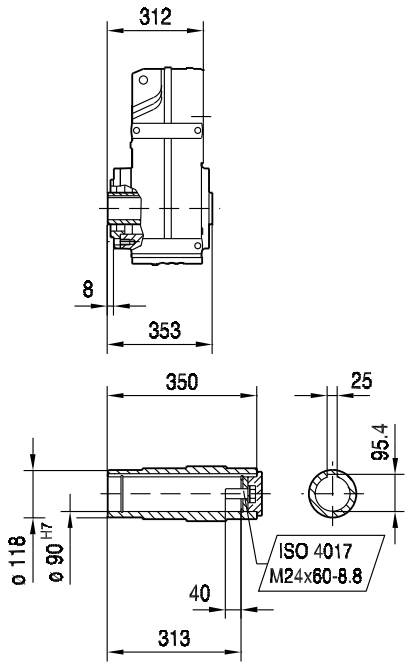
(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	572	602	632	675	725	766	835	895	968	1018
LS	665	695	725	787	837	903	1024	1084	1173	1223
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

42 109 00 06

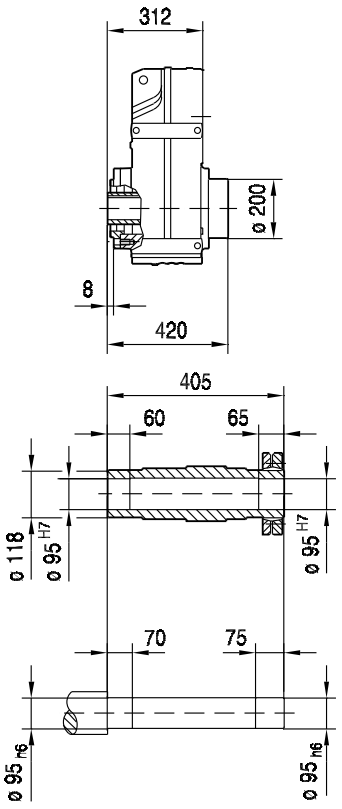
FAZ107..



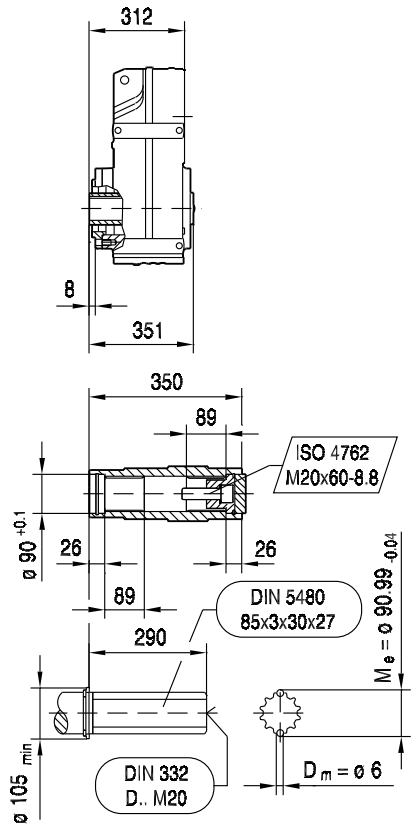
FAZ107..



FHZ107..



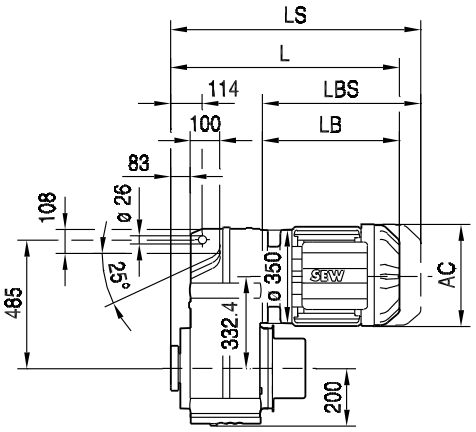
FVZ107..

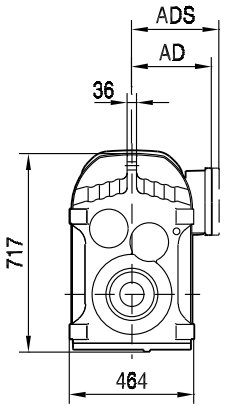


(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	572	602	632	675	725	766	835	895	968	1018
LS	665	695	725	787	837	903	1024	1084	1173	1223
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

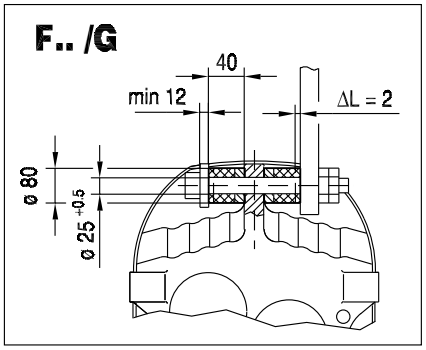
42 110 00 06

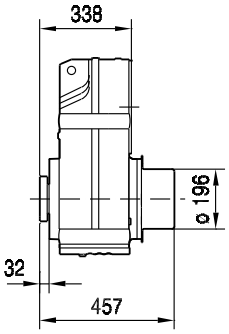
FT107..

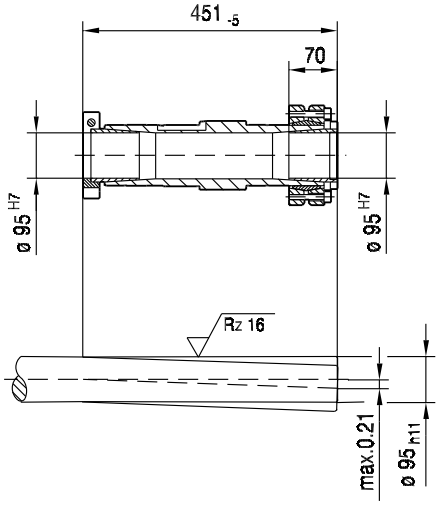


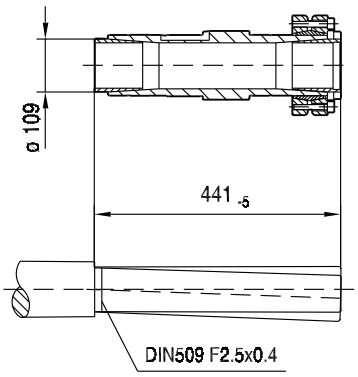


F.. /G





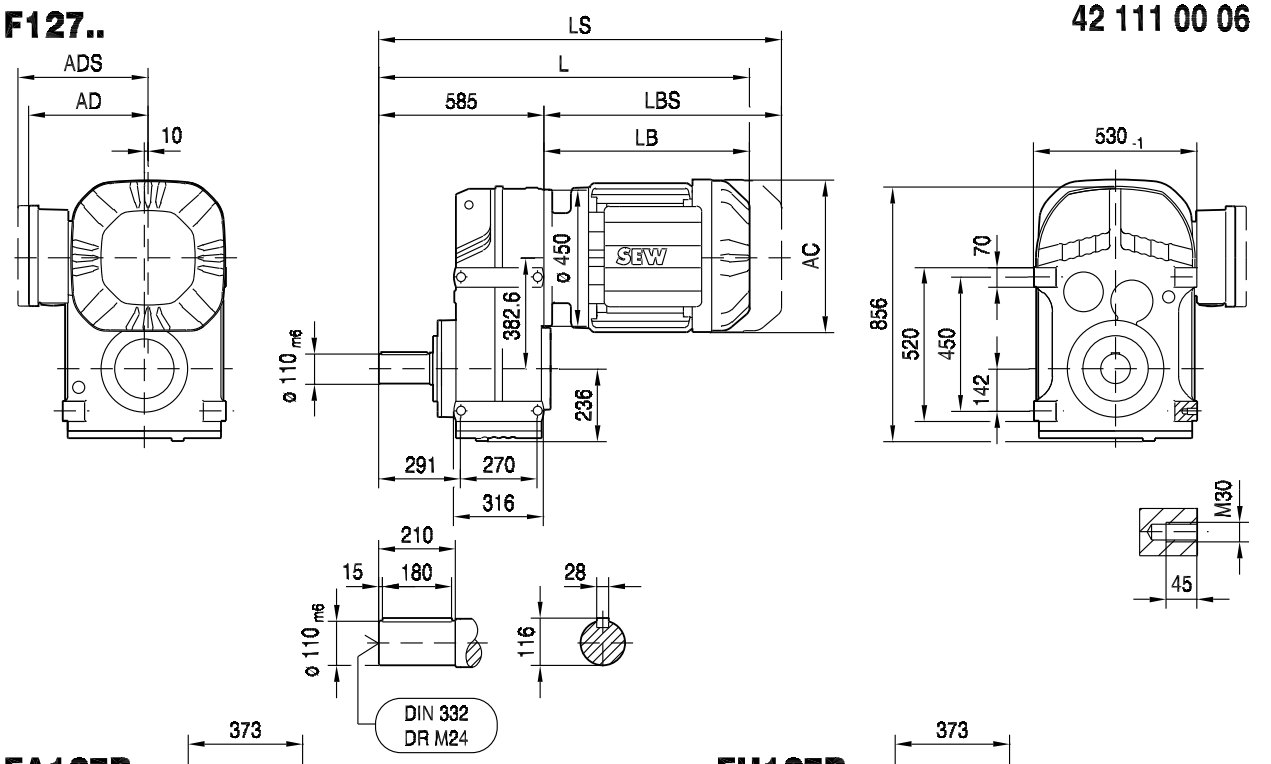




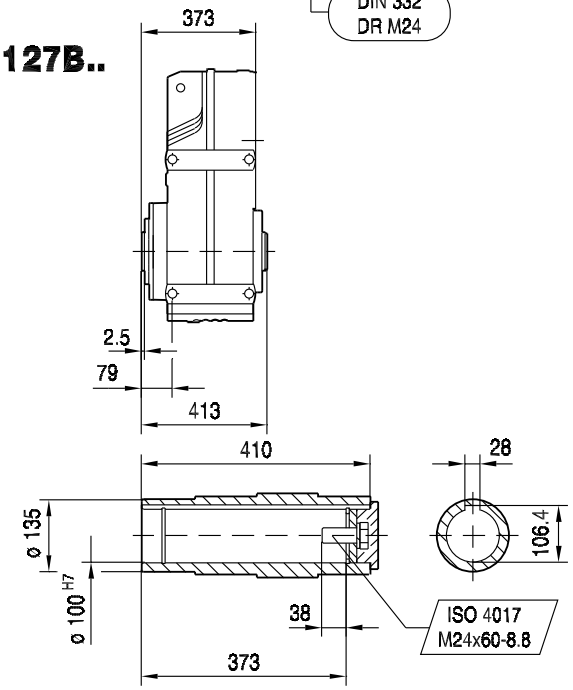
(→ 131)	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	179	197	197	221	221	270	316	316	394	394
AD	140	157	157	170	170	228	253	253	283	283
ADS	150	158	158	172	172	228	253	253	283	283
L	598	628	658	701	751	792	861	921	994	1044
LS	691	721	751	813	863	929	1050	1110	1199	1249
LB	260	290	320	363	413	454	523	583	656	706
LBS	353	383	413	475	525	591	712	772	861	911

F127..

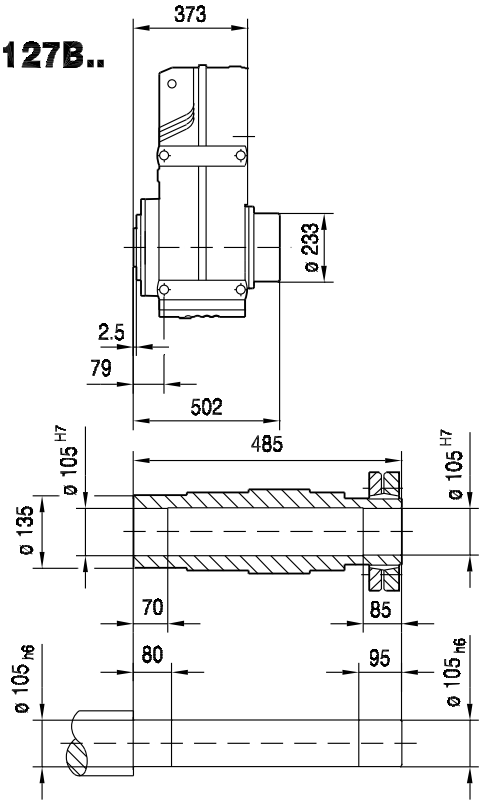
42 111 00 06



FA127B..



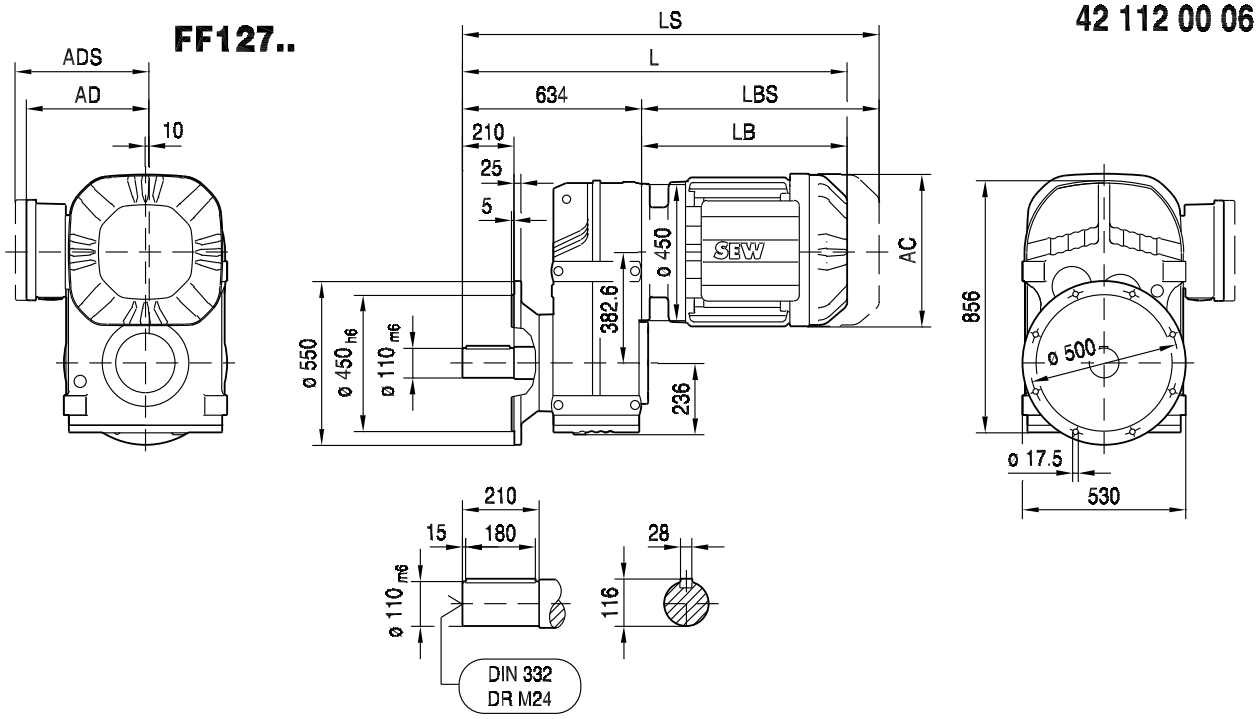
FH127B..



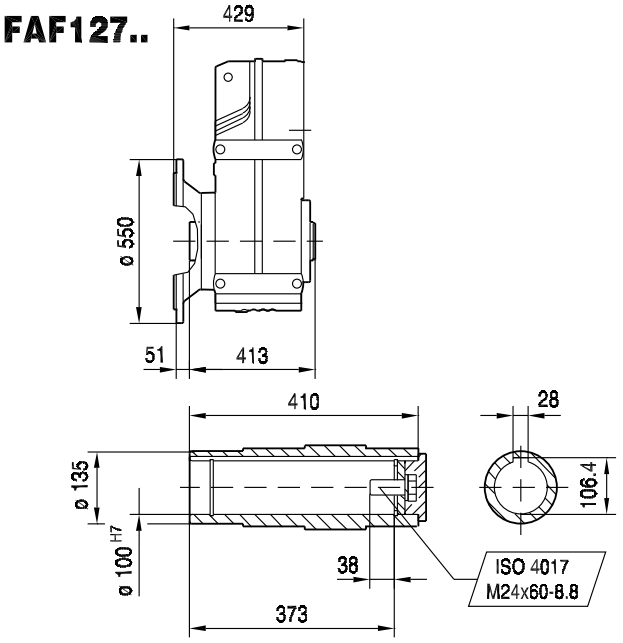
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	983	1024	1093	1153	1226	1276	1365	
LS	1095	1161	1282	1342	1431	1481	1550	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

42 112 00 06

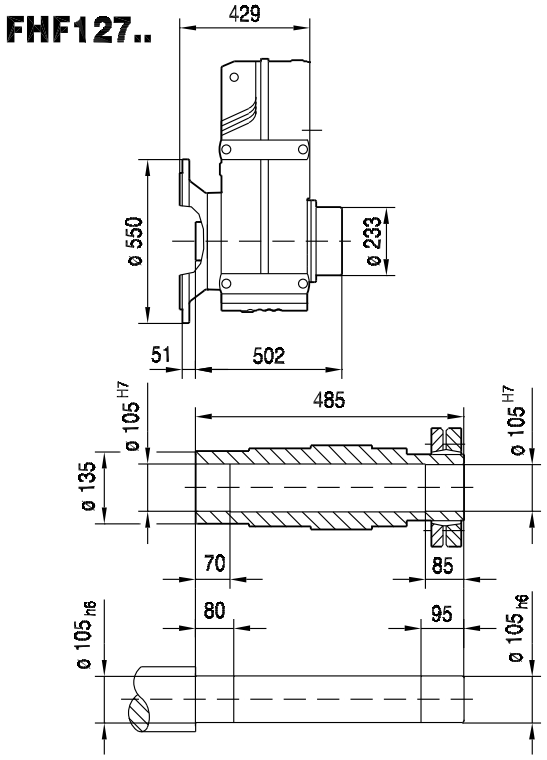
FF127..



FAF127..



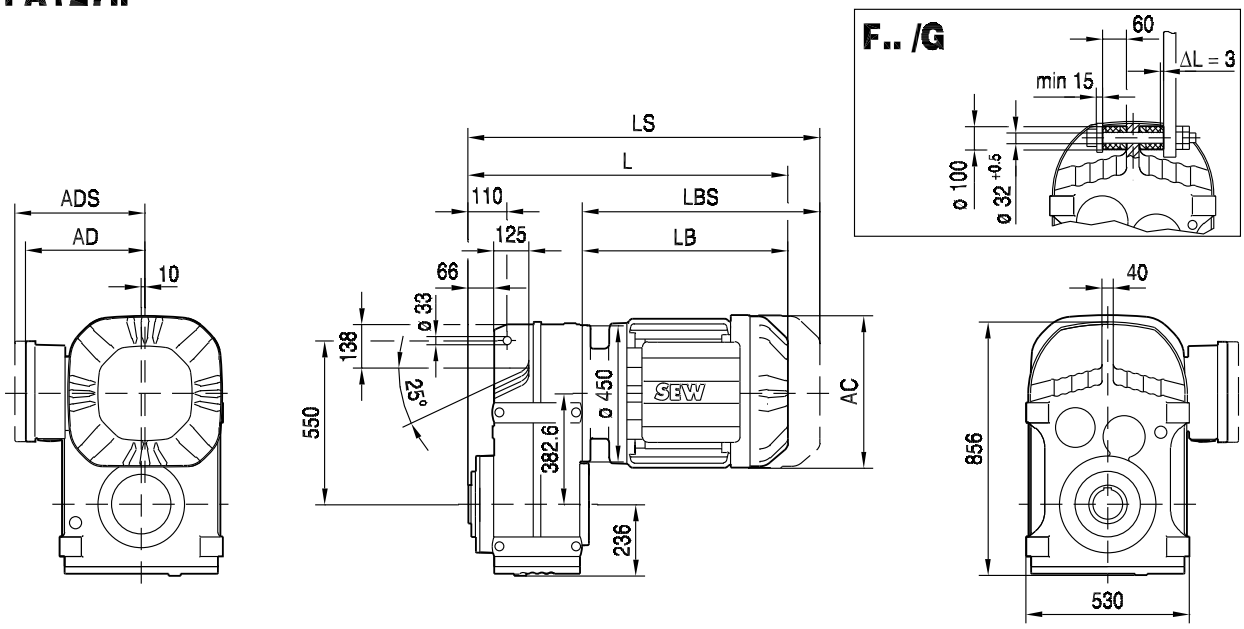
FHF127..



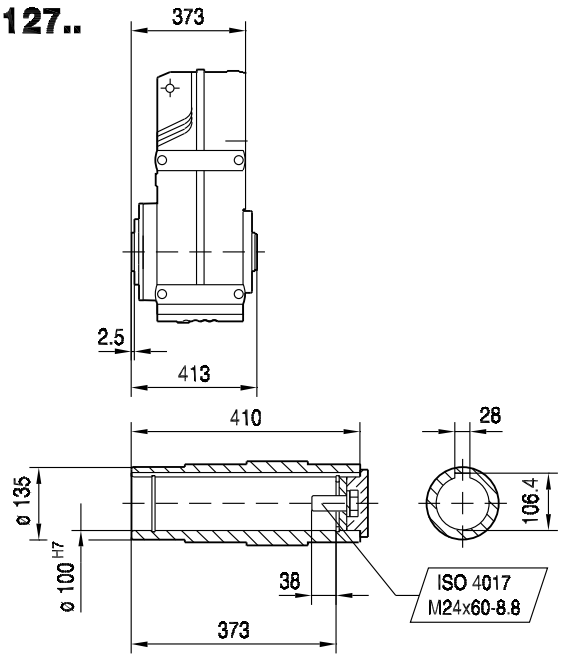
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1032	1073	1142	1202	1275	1325	1414	
LS	1144	1210	1331	1391	1480	1530	1599	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

FA127..

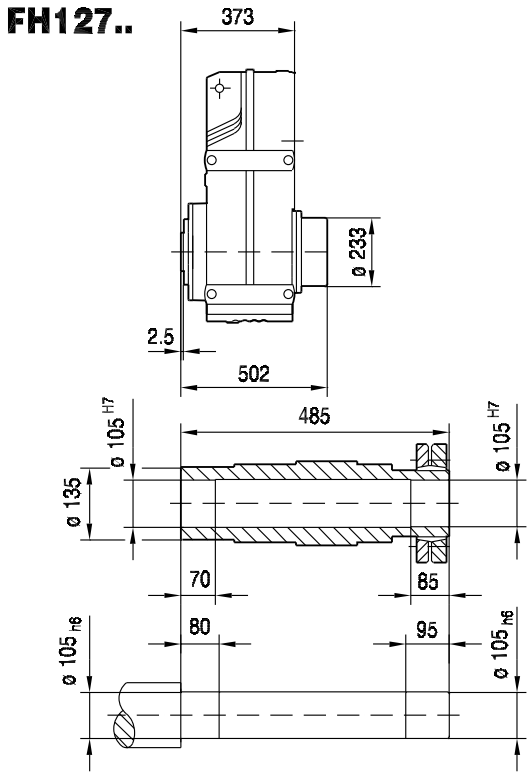
42 113 00 06



FA127..



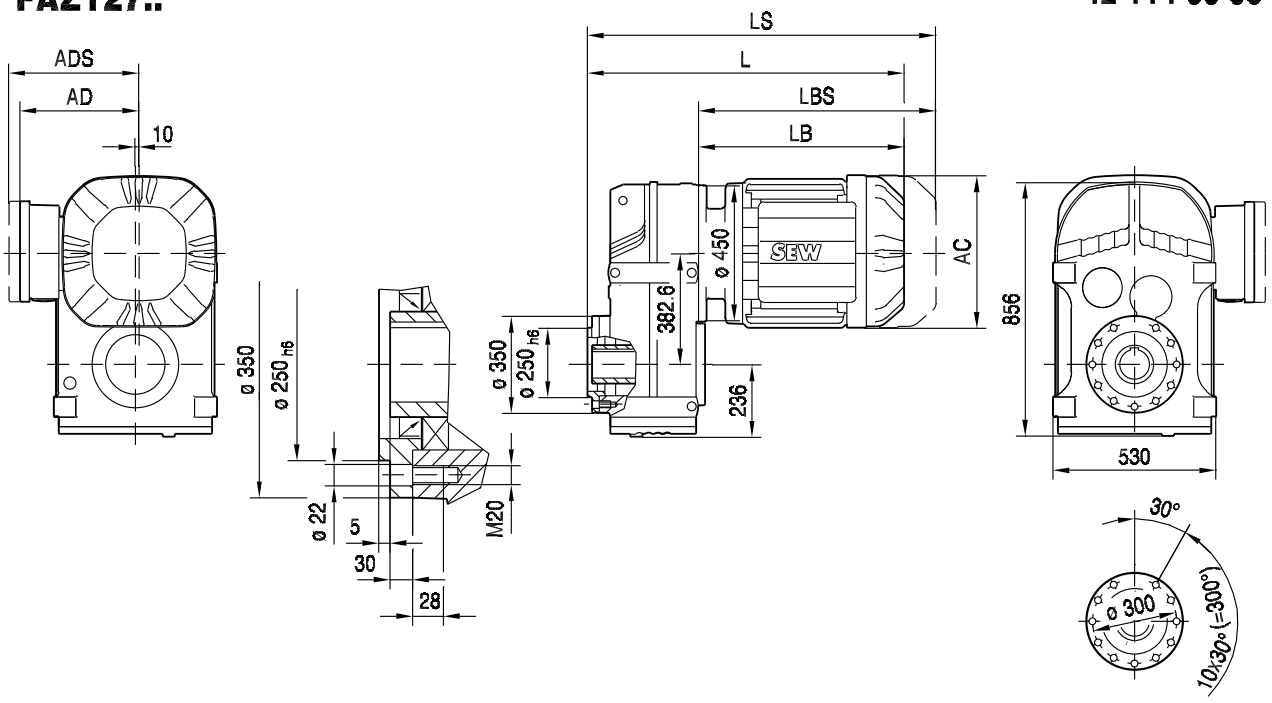
FH127..



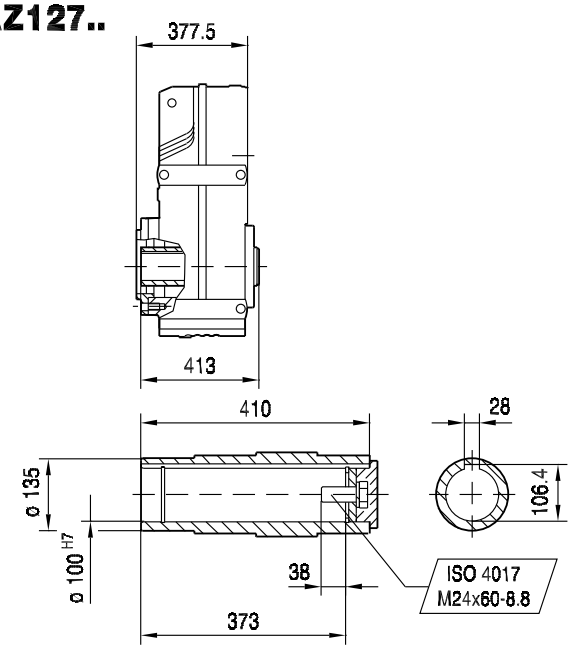
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	771	812	881	941	1014	1064	1153	
LS	883	949	1070	1130	1219	1269	1338	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

FAZ127..

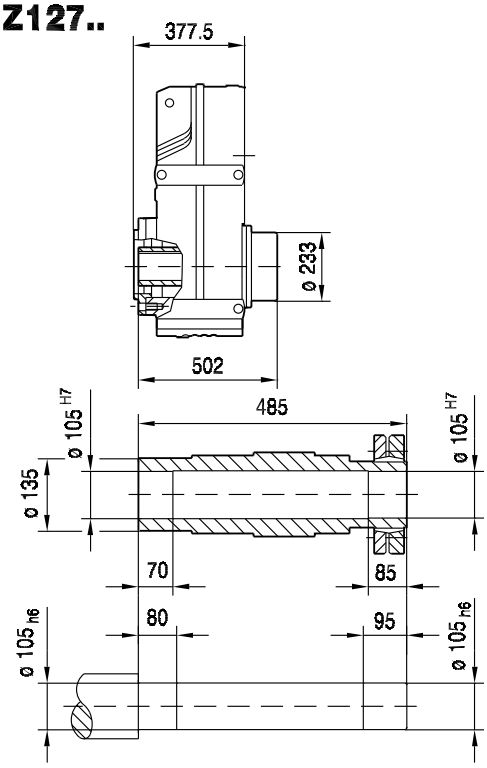
42 114 00 06



FAZ127..



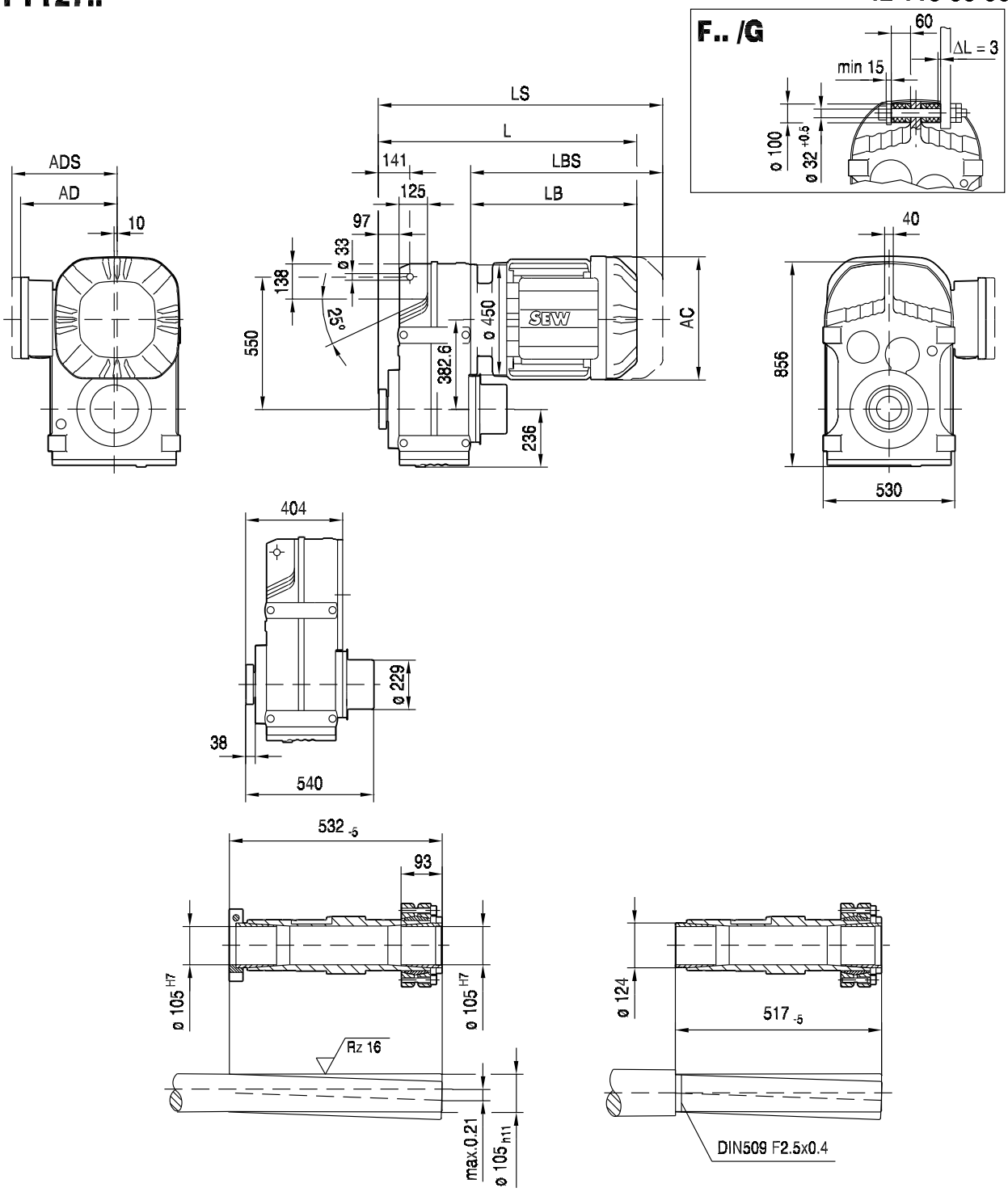
FHZ127..



(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	776	817	886	946	1019	1069	1158	
LS	888	954	1075	1135	1224	1274	1342	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

FT127..

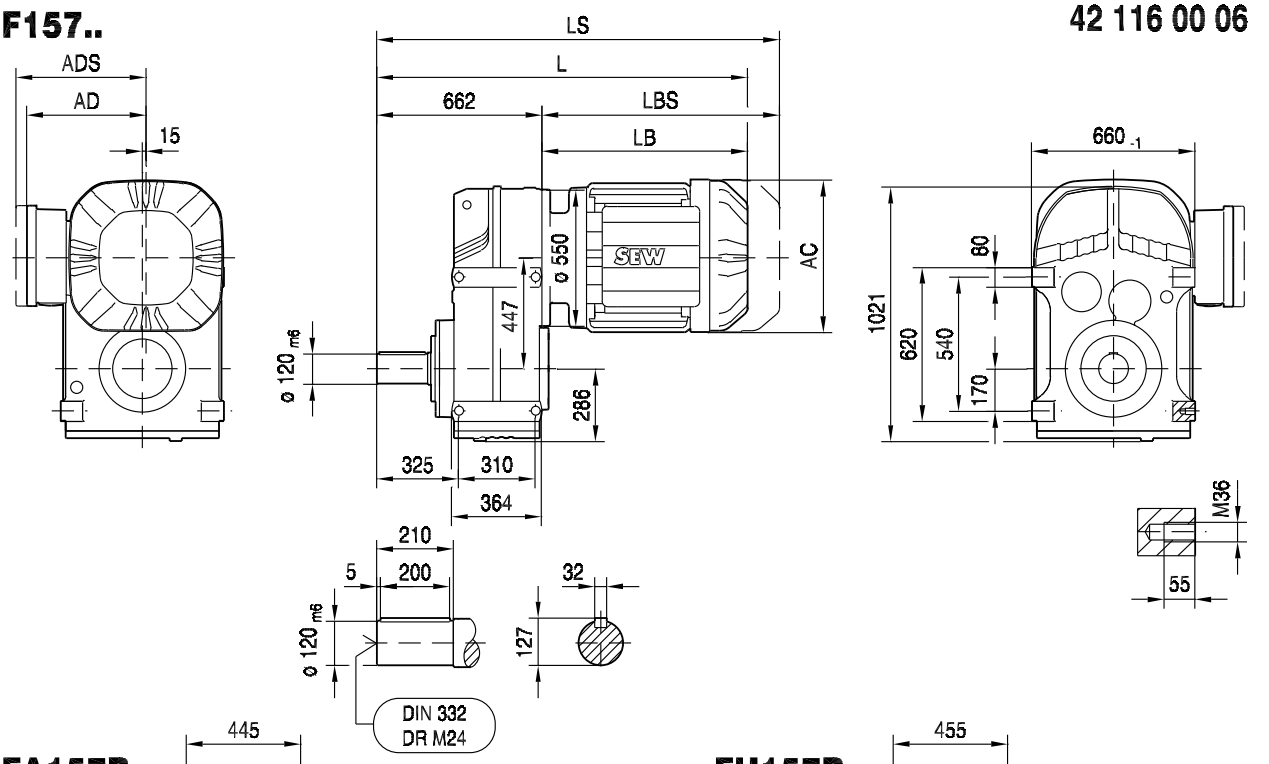
42 115 00 06



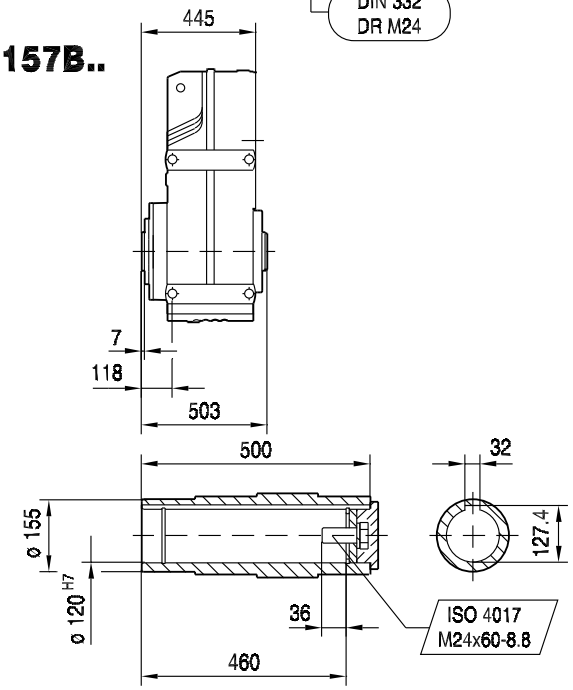
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	802	843	912	972	1045	1095	1184	
LS	914	980	1101	1161	1250	1300	1369	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

F157..

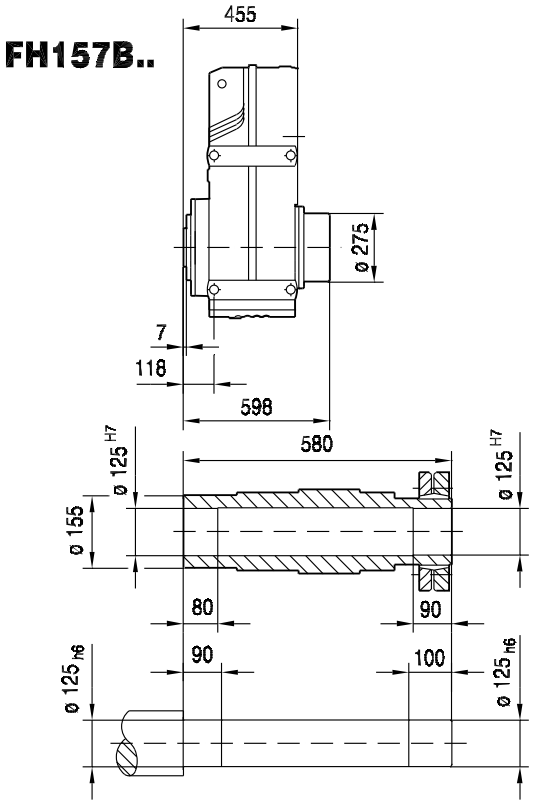
42 116 00 06



FA157B..



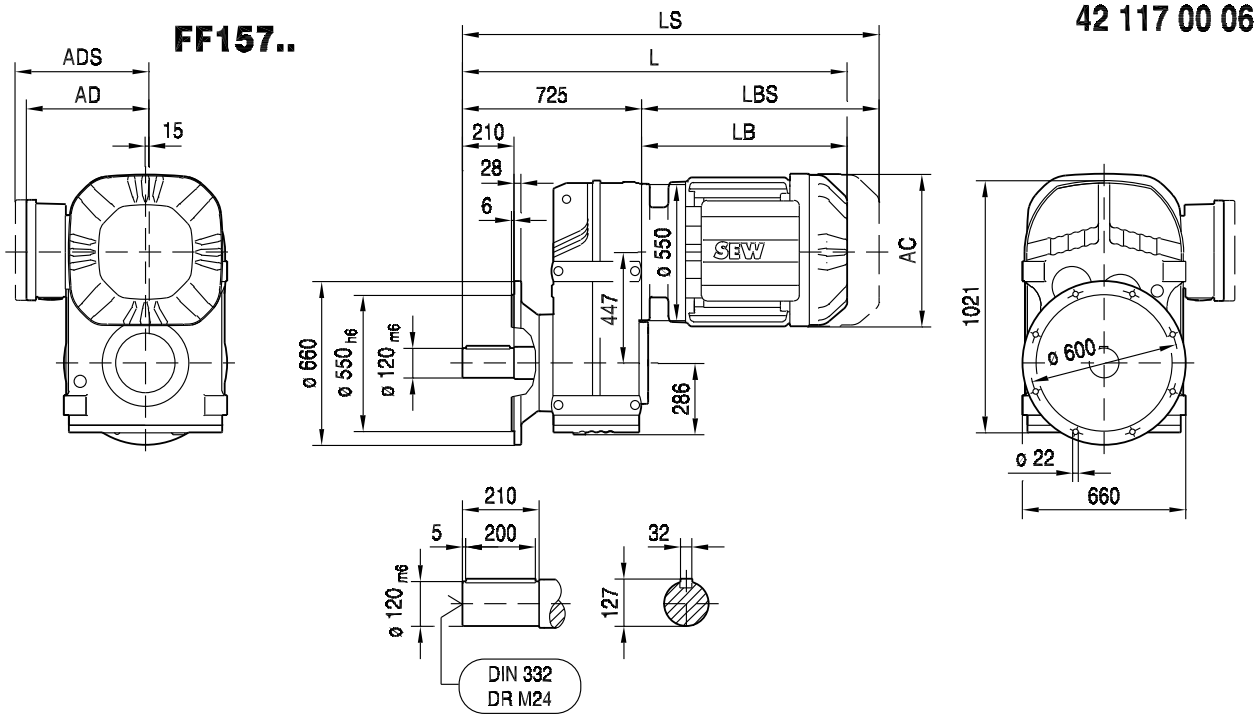
FH157B..



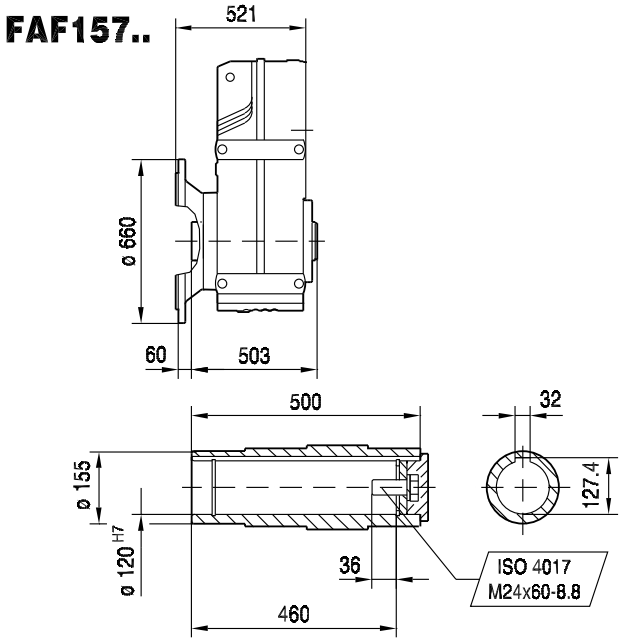
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1093	1162	1222	1295	1345	1433	1603	1733
LS	1230	1351	1411	1500	1550	1618	1854	1984
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

42 117 00 06

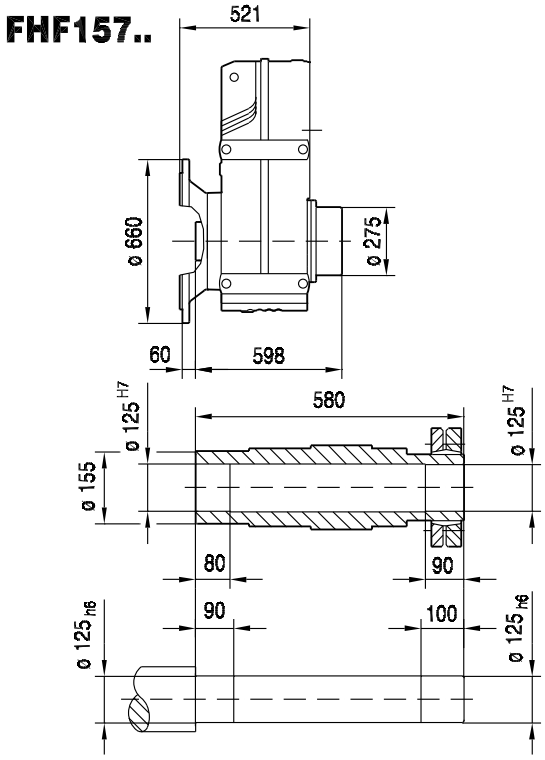
FF157..



FAF157..



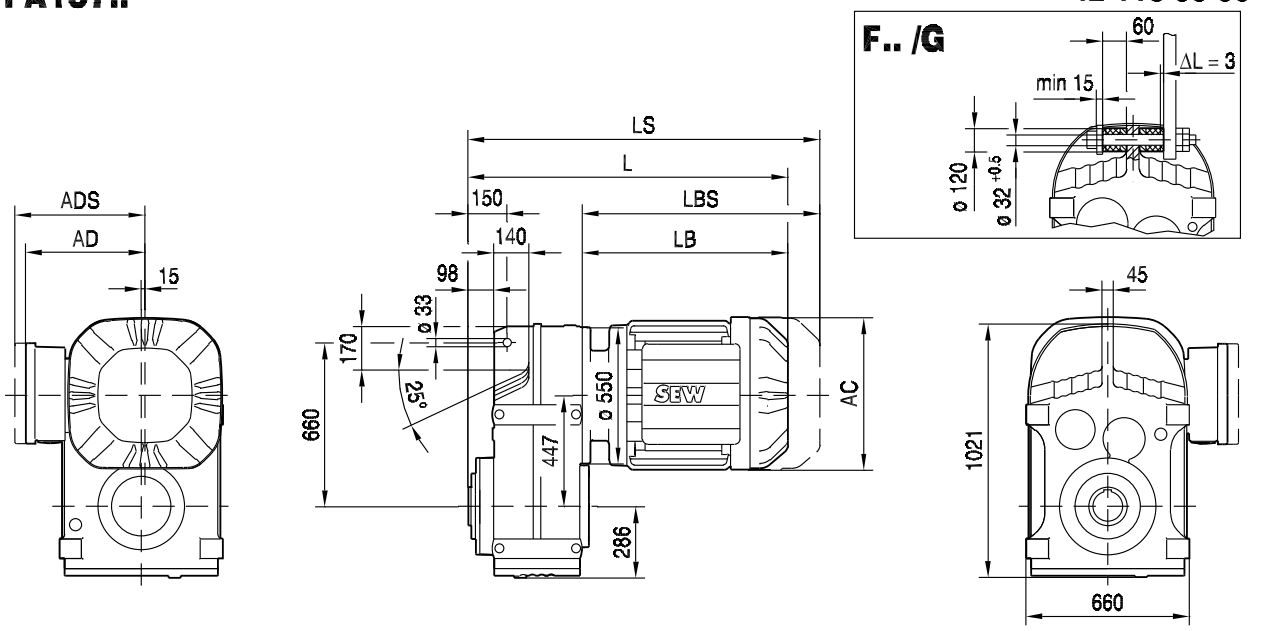
FHF157..



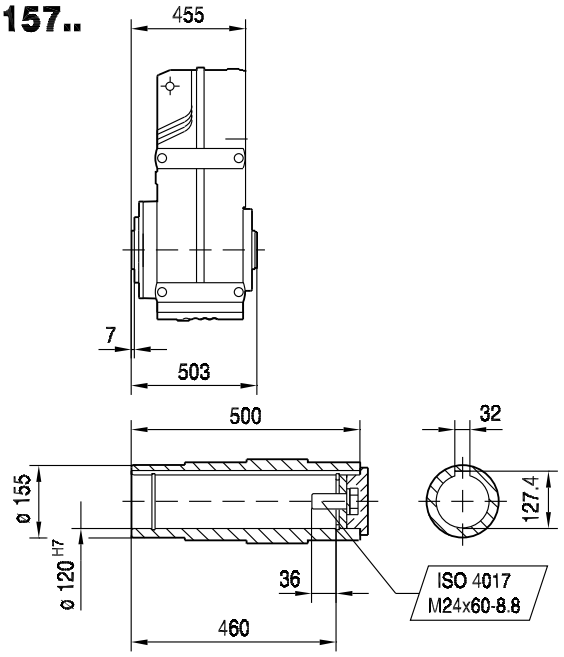
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1156	1225	1285	1358	1408	1496	1666	1796
LS	1293	1414	1474	1563	1613	1681	1917	2047
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

FA157..

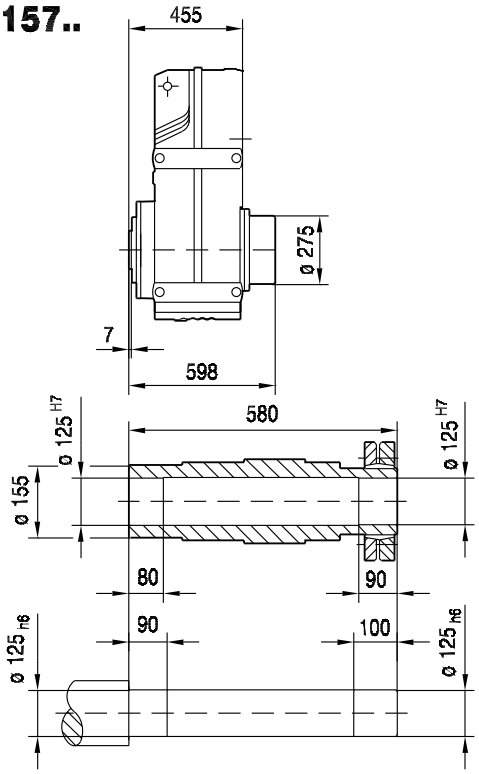
42 118 00 06



FA157..



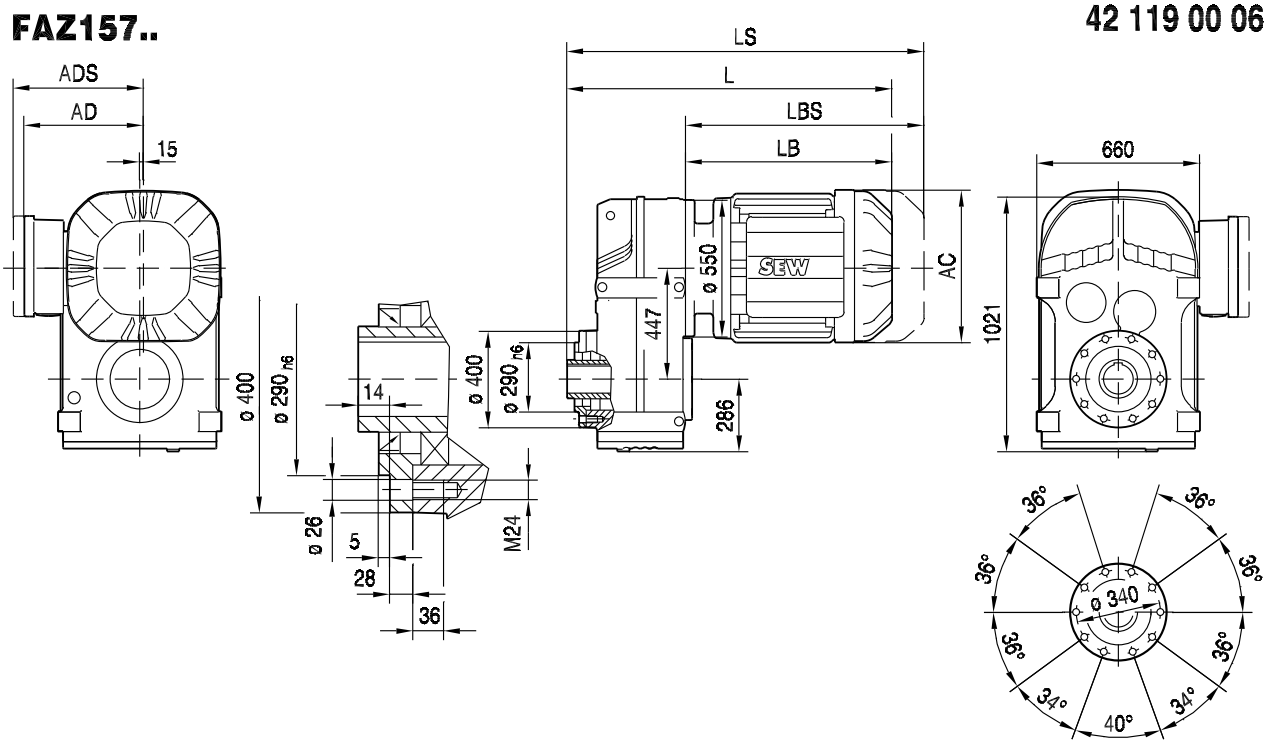
FH157..



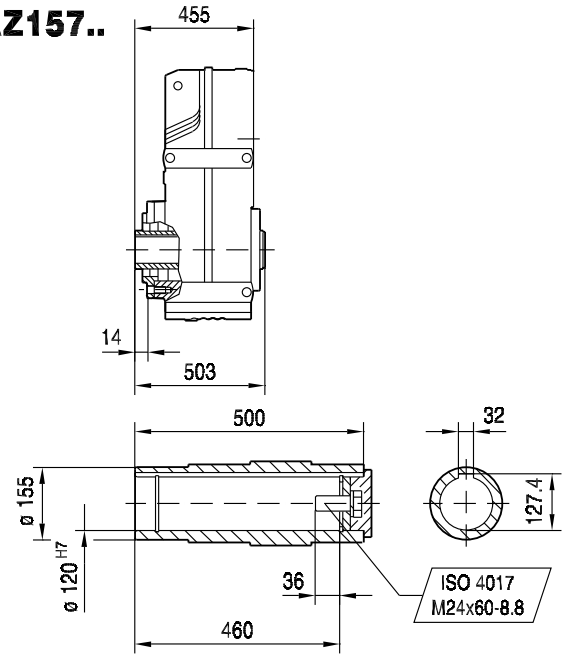
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	886	955	1015	1088	1138	1226	1396	1526
LS	1023	1144	1204	1293	1343	1411	1647	1777
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

FAZ157..

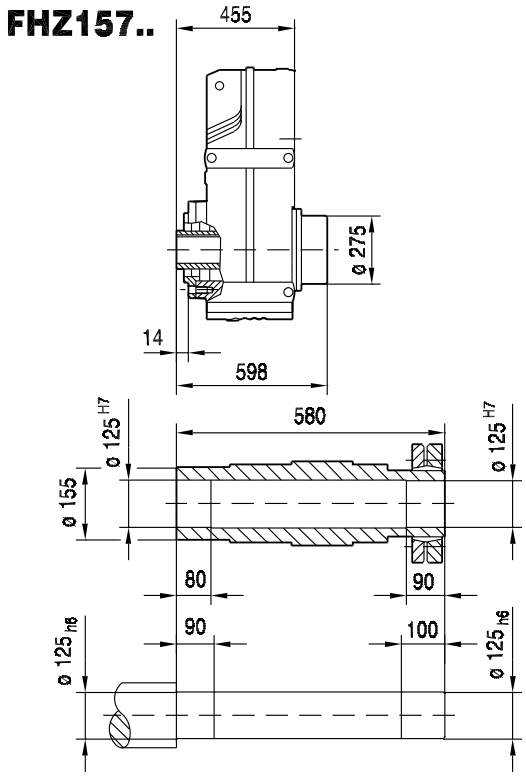
42 119 00 06



FAZ157..



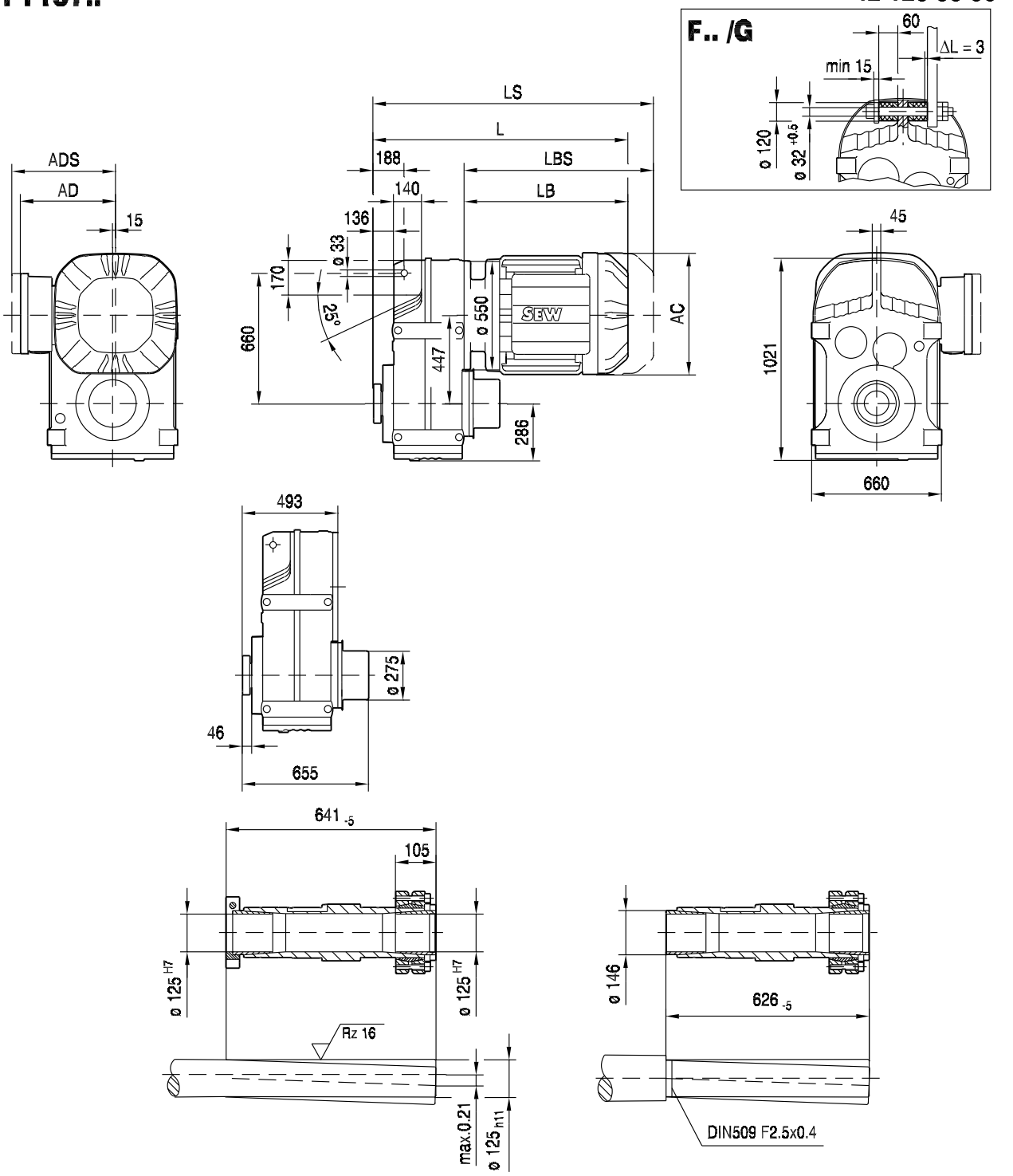
FHZ157..



(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	886	955	1015	1088	1138	1226	1396	1526
LS	1023	1144	1204	1293	1343	1411	1647	1777
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

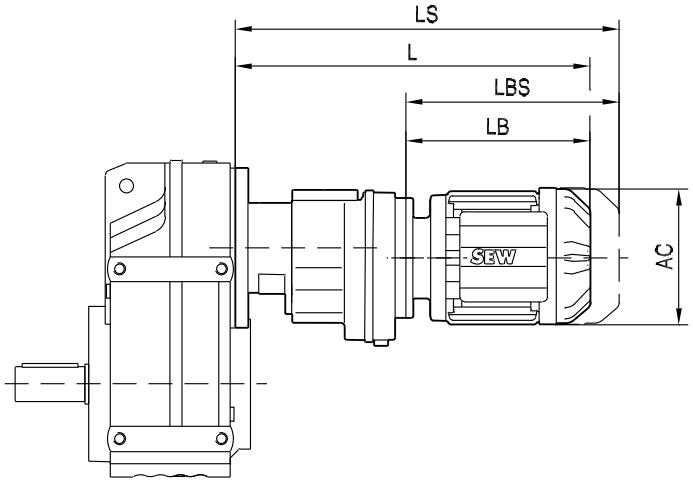
FT157..

42 120 00 06



(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	924	993	1053	1126	1176	1264	1434	1564
LS	1061	1182	1242	1331	1381	1449	1685	1815
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

42 121 00 06



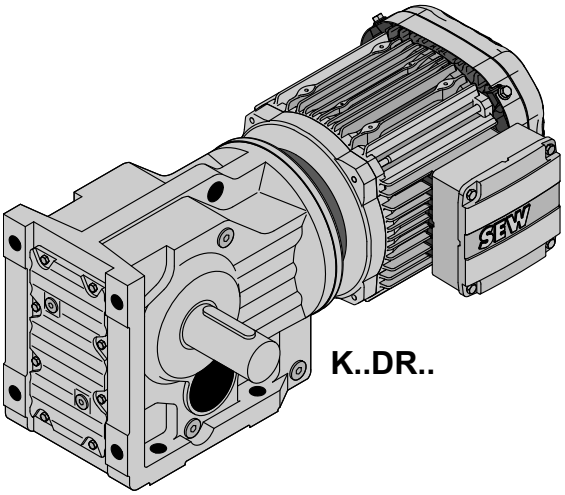
(→ 131)		AC	L	LS	LB	LBS
F..27R17	DR63..	132	324	379	149	204
F..37R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
F..47R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
	DR71M..	139	360	428	185	253
F..57R37	DR63..	132	356	411	191	246
	DR71S..	139	367	435	202	270
	DR71M..	139	392	460	227	295
	DR80S..	156	401	482	236	317
F..67R37	DR63..	132	356	411	191	246
	DR71S..	139	367	435	202	270
	DR71M..	139	392	460	227	295
	DR80S..	156	401	482	236	317
	DR80M..	156	432	513	267	348
F..77R37	DR63..	132	348	403	191	246
	DR71S..	139	359	427	202	270
	DR71M..	139	384	452	227	295
	DR80S..	156	393	474	236	317
	DR80M..	156	424	505	267	348
	DR90M..	179	426	519	269	362
F..87R57	DR63..	132	401	456	185	240
	DR71S..	139	412	479	196	263
	DR71M..	139	437	504	221	288
	DR80S..	156	446	527	230	311
	DR80M..	156	477	558	261	342
	DR90M..	179	478	572	262	356
	DR90L..	179	498	592	282	376
	DR100M..	197	528	622	312	406
F..97R57	DR63..	132	396	451	185	240
	DR71S..	139	407	474	196	263
	DR71M..	139	432	499	221	288
	DR80S..	156	441	522	230	311
	DR80M..	156	472	553	261	342
	DR90M..	179	473	567	262	356
	DR90L..	179	493	587	282	376
	DR100M..	197	523	617	312	406
	DR100LC..	197	553	647	342	436

(→ 131)		AC	L	LS	LB	LBS
F..107R77	DR63..	132	426	481	179	234
	DR71S..	139	437	504	190	257
	DR71M..	139	462	529	215	282
	DR80S..	156	470	551	223	304
	DR80M..	156	501	582	254	335
	DR90M..	179	501	595	254	348
	DR90L..	179	521	615	274	368
	DR100M..	197	551	645	304	398
	DR100LC..	197	581	675	334	428
	DR132S..	221	626	738	379	491
	DR132M..	221	676	788	429	541
F..127R77	DR63..	132	411	466	179	234
	DR71S..	139	422	489	190	257
	DR71M..	139	447	514	215	282
	DR80S..	156	455	536	223	304
	DR80M..	156	486	567	254	335
	DR90M..	179	486	580	254	348
	DR90L..	179	506	600	274	368
	DR100M..	197	536	630	304	398
	DR100LC..	197	566	660	334	428
	DR132S..	221	611	723	379	491
F..127R87	DR132S..	221	654	766	374	486
	DR132M/MC..	221	704	816	424	536
	DR160..	272	745	882	465	602
F..157R97	DR71M..	139	529	596	204	271
	DR80S..	156	538	619	213	294
	DR80M..	156	569	650	244	325
	DR90M..	179	569	663	244	338
	DR90L..	179	589	683	264	358
	DR100M..	197	619	713	294	388
	DR100LC..	197	649	743	324	418
	DR132S..	221	694	806	369	481
	DR132M/MC..	221	744	856	419	531
	DR160..	272	785	922	460	597
	DR180M..	317	871	1070	546	745

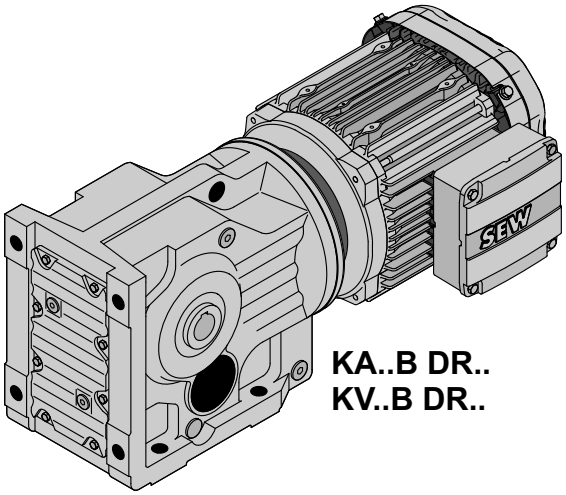


11 K..DRS

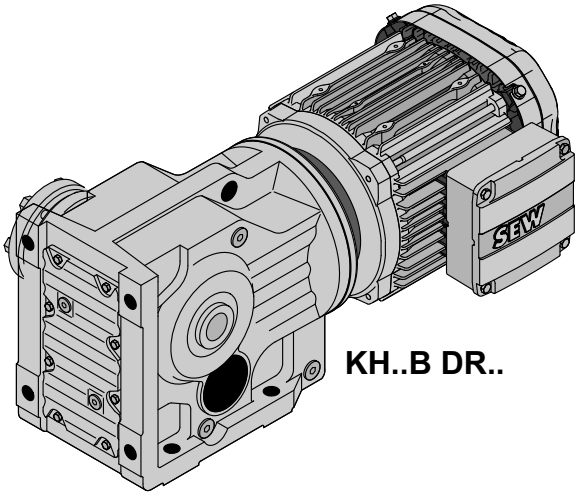
11.1 K, KA..(B), KV..(B), KH..(B), KT, KF, KAF, KVF, KHF, KAZ, KVZ..DRS



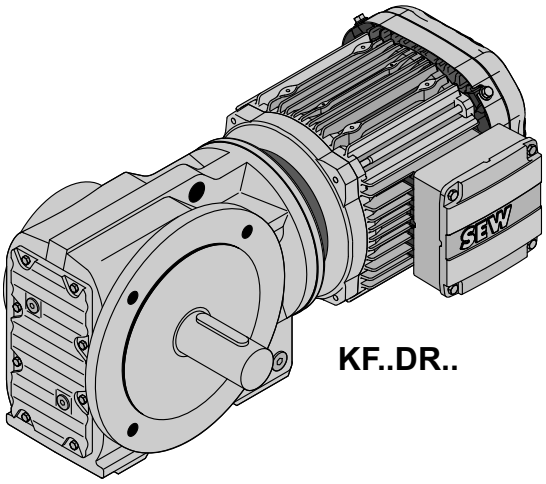
K..DR..



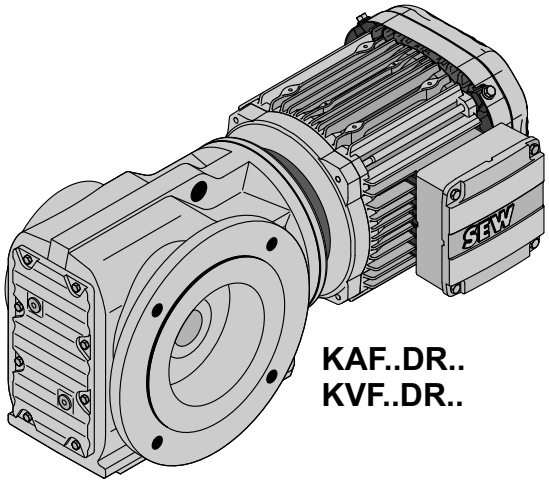
KA..B DR..
KV..B DR..



KH..B DR..

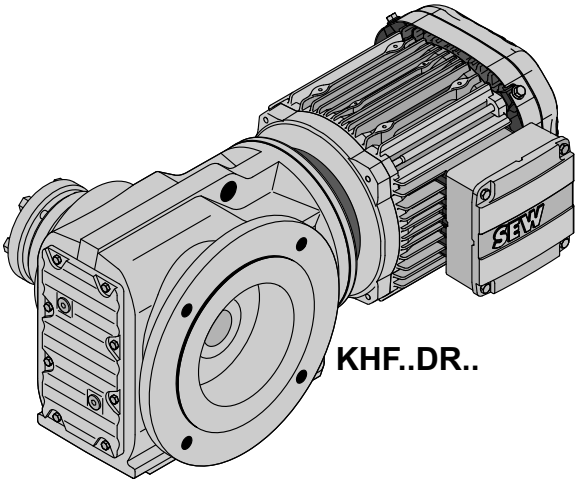


KF..DR..

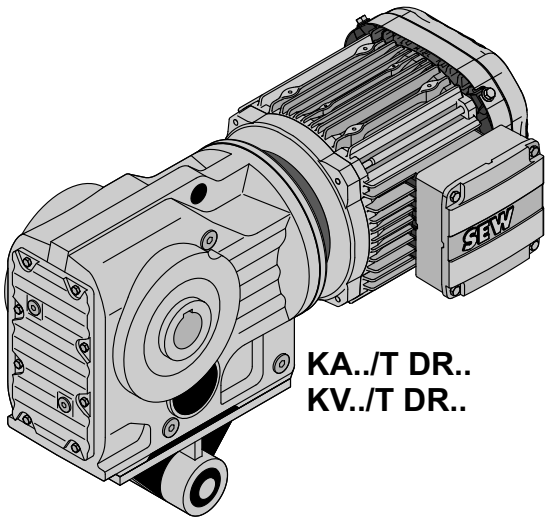


KAF..DR..
KVF..DR..

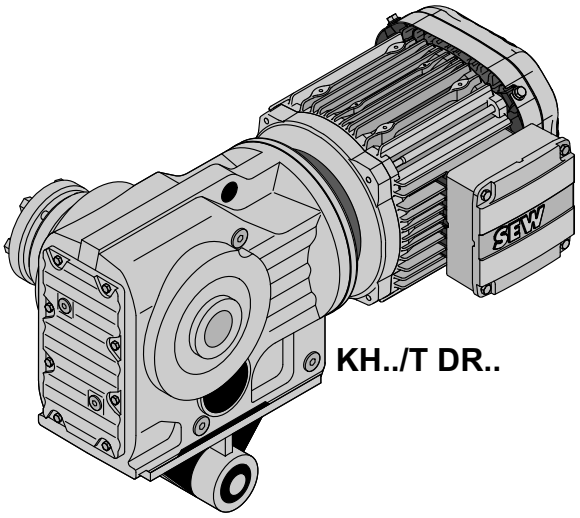
60405AXX



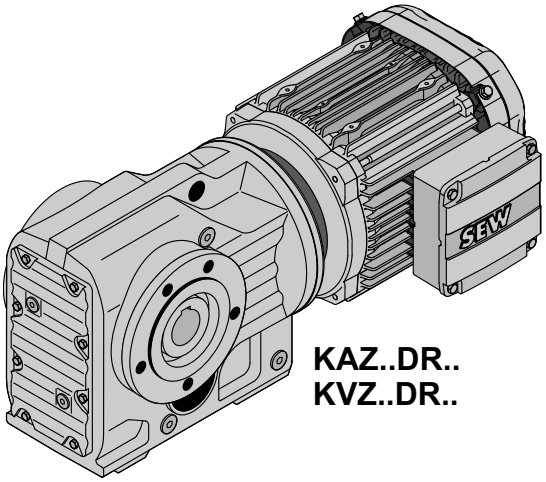
KHF..DR..



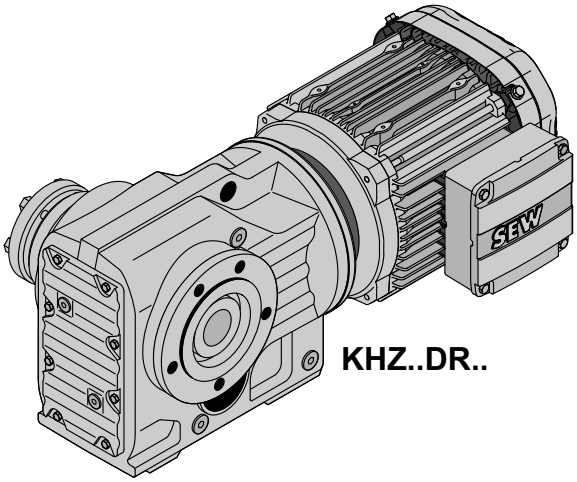
KA../T DR..
KV../T DR..



KH../T DR..



KAZ..DR..
KVZ..DR..



KHZ..DR..

60411AXX

11.2 K.. → DRS

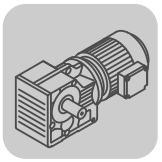
K37, n_e = 1400 1/min								200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
13	200	5640	7	106.38				
14	200	5640	7	97.81				
17	200	5640	7	83.69				
19	200	5520	7	72.54				
21	200	5360	7	67.80				
24	200	5020	7	58.60				
28	200	4660	7	49.79				
31	200	4420	7	44.46				
37	200	4100	7	37.97				
39	200	3970	7	35.57				
47	200	3650	7	29.96				
49	200	3580	8	28.83				
56	200	3330	8	24.99				
60	195	3260	8	23.36				
69	185	3110	8	20.19				
82	180	2900	8	17.15				
91	175	2780	9	15.31				
107	165	2650	9	13.08				
115	160	2600	12	12.14				
133	160	2410	12	10.49				
157	160	2200	12	8.91				
176	155	2110	13	7.96				
206	150	1980	13	6.80				
220	145	1950	13	6.37				
261	140	1810	13	5.36				
352	125	1660	13	3.98				

K37R17, n_e = 1400 1/min						200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
			3	3		
0.20	200	5640	-	6832		
0.24	200	5640	-	5922		
0.25	200	5640	-	5491		
0.29	200	5640	-	4759		
0.34	200	5640	-	4160		
0.38	200	5640	-	3645		
0.44	200	5640	-	3205		
0.50	200	5640	-	2801		
0.57	200	5640	-	2454		
0.65	200	5640	-	2166		
0.74	200	5640	-	1891		
0.84	200	5640	-	1660		
0.95	200	5640	-	1466		
1.1	200	5640	-	1288		
1.2	200	5640	-	1136		
			3	2		
1.4	200	5640	-	996		
1.6	200	5640	-	876		
1.8	200	5640	-	761		
2.1	200	5640	-	671		
2.4	200	5640	-	585		
2.7	200	5640	-	512		
3.1	200	5640	-	451		

K37R17, n_e = 1400 1/min						200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
3.5	200	5640	-	396		
4.0	200	5640	-	346		
4.6	200	5640	-	304		
5.2	200	5640	-	267		
6.0	200	5640	-	234		
6.8	200	5640	-	205		
7.7	200	5640	-	181		
8.8	200	5640	-	160		
10	200	5640	-	136		
11	200	5640	-	127		
13	200	5640	-	110		
15	200	5640	-	96		

K47, n_e = 1400 1/min									400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC
11	400	5920	6	131.87*					
12	400	5920	6	121.48*					
13	400	5920	6	104.37					
15	400	5920	6	90.86					
16	400	5920	6	85.12*					
19	400	5920	6	75.20*					
20	400	5920	6	69.84					
22	400	5920	7	63.30*					
25	400	5920	7	56.83					
29	400	5920	7	48.95*					
30	400	5920	7	46.03*					
35	400	5920	7	39.61					
40	400	5920	7	35.39					
45	400	5700	7	31.30					
48	400	5520	8	29.32					
54	400	5170	8	25.91					
58	400	4970	8	24.06					
64	400	4710	8	21.81					
72	400	4440	8	19.58					
83	380	4230	8	16.86					
88	380	4080	8	15.86					
103	360	3890	8	13.65					
115	350	3720	8	12.19					
119	280	4060	10	11.77					
133	280	3830	11	10.56					
154	280	3540	11	9.10					
164	270	3500	11	8.56					
190	250	3390	11	7.36					
213	240	3270	12	6.58					
241	230	3140	12	5.81					
302	205	2980	12	4.64					

K47R37, n_e = 1400 1/min								400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
			 3  3					
0.14	400	5920	-	10138				
0.16	400	5920	-	8534				
0.18	400	5920	-	7662				
0.21	400	5920	-	6826				

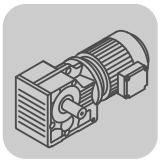


K47R37, n_e = 1400 1/min								400 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
0.23	400	5920	-	5983				
0.27	400	5920	-	5159				
0.30	400	5920	-	4601				
0.36	400	5920	-	3940				
0.40	400	5920	-	3477				
0.46	400	5920	-	3043				
0.51	400	5920	-	2733				
0.59	400	5920	-	2354				
0.68	400	5920	-	2063				
0.77	400	5920	-	1819				
0.88	400	5920	-	1586				
1.0	400	5920	-	1388				
			3	2				
1.1	400	5920	-	1222				
1.3	400	5920	-	1097				
1.5	400	5920	-	945				
1.7	400	5920	-	831				
1.9	400	5920	-	718				
2.2	400	5920	-	639				
2.5	400	5920	-	552				
2.8	400	5920	-	495				
3.3	400	5920	-	426				
3.7	400	5920	-	375				
4.3	400	5920	-	327				
4.8	400	5920	-	289				
5.5	400	5920	-	256				
6.2	400	5920	-	225				
7.1	400	5920	-	198				
8.2	400	5920	-	171				
9.2	400	5920	-	153				
11	400	5920	-	131				
13	400	5920	-	112				
14	400	5920	-	99				
15	400	5920	-	94				

K57, n_e = 1400 1/min										600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
9.6	600	7630	6	145.14*						
11	600	7630	6	123.85						
13	600	7630	6	108.29						
14	600	7630	6	102.88*						
16	600	7630	6	90.26*						
18	600	7630	6	76.56*						
20	600	7630	6	69.12						
23	600	7630	6	60.81*						
24	600	7630	6	57.42*						
29	600	7630	6	48.89						
32	600	7630	6	44.43						
36	600	7630	6	38.49						
39	600	7630	7	35.70						
46	600	7310	7	30.28						
51	600	6930	7	27.34						
58	600	6480	7	24.05						
62	600	6280	7	22.71						
72	575	5910	7	19.34						
80	555	5740	7	17.57						

K57, n_e = 1400 1/min										600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
92	535	5430	7	15.22						
106	510	5190	7	13.25						
117	415	5150	9	11.92						
124	415	4990	9	11.26						
146	405	4650	10	9.59						
161	390	4520	10	8.71						
185	365	4360	10	7.55						
213	345	4190	10	6.57						
299	300	3800	11	4.69						

K57R37, n_e = 1400 1/min								600 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.12	600	7630	-	12169				
0.13	600	7630	-	11162				
0.15	600	7630	-	9503				
0.16	600	7630	-	8547				
0.19	600	7630	-	7277				
0.22	600	7630	-	6478				
0.25	600	7630	-	5662				
0.28	600	7630	-	5033				
0.32	600	7630	-	4340				
0.36	600	7630	-	3854				
0.41	600	7630	-	3390				
0.48	600	7630	-	2924				
0.54	600	7630	-	2593				
0.62	600	7630	-	2249				
0.70	600	7630	-	1986				
				3 2				
0.80	600	7630	-	1743				
0.91	600	7630	-	1539				
1.0	600	7630	-	1354				
1.2	600	7630	-	1174				
1.4	600	7630	-	1036				
1.5	600	7630	-	906				
1.7	600	7630	-	806				
2.0	600	7630	-	699				
2.3	600	7630	-	615				
2.6	600	7630	-	544				
3.0	600	7630	-	473				
3.3	600	7630	-	421				
3.9	600	7630	-	362				
4.4	600	7630	-	319				
5.0	600	7630	-	280				
5.7	600	7630	-	246				
6.5	600	7630	-	215				
7.3	600	7630	-	192				
8.4	600	7630	-	166				
9.7	600	7630	-	145				
11	600	7630	-	129				
13	600	7630	-	111				
14	600	7630	-	97				



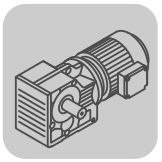
K67, n_e = 1400 1/min											820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
9.7	820	10300	6	144.79*							
11	820	10300	6	123.54							
13	820	10300	6	108.03							
14	820	10300	6	102.62							
16	820	10300	6	90.04							
18	820	10300	6	76.37							
20	820	10300	6	68.95							
23	820	10300	6	60.66							
24	820	10300	6	57.28							
29	820	10300	6	48.77							
32	820	10300	6	44.32							
36	800	10500	6	38.39							
39	820	10300	7	35.62							
46	820	10300	7	30.22							
51	820	10300	7	27.28							
58	800	10500	7	24.00							
62	780	10700	7	22.66							
73	760	10800	7	19.30							
80	740	11000	7	17.54							
92	700	11300	8	15.19							
106	670	11500	8	13.22							
112	530	12300	9	12.48							
132	500	11800	9	10.63							
145	480	11500	9	9.66							
167	440	11100	9	8.37							
192	420	10700	9	7.28							
269	350	9870	10	5.20							

K67R37, n_e = 1400 1/min								820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				3 3				
0.12	820	10300	-	12139				
0.13	820	10300	-	11134				
0.15	820	10300	-	9479				
0.17	820	10300	-	8173				
0.19	820	10300	-	7259				
0.22	820	10300	-	6462				
0.25	820	10300	-	5648				
0.29	820	10300	-	4846				
0.32	820	10300	-	4329				
0.37	820	10300	-	3750				
0.42	820	10300	-	3315				
0.48	820	10300	-	2917				
0.55	820	10300	-	2532				
0.62	820	10300	-	2244				
0.71	820	10300	-	1981				
				3 2				
0.81	820	10300	-	1739				
0.91	820	10300	-	1535				
1.0	820	10300	-	1351				
1.2	820	10300	-	1171				
1.4	820	10300	-	1034				
1.6	820	10300	-	903				
1.8	820	10300	-	793				
2.0	820	10300	-	697				

K67R37, n_e = 1400 1/min								820 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
2.3	820	10300	-	613				
2.6	820	10300	-	542				
3.0	820	10300	-	471				
3.3	820	10300	-	420				
3.9	820	10300	-	361				
4.3	820	10300	-	323				
5.0	820	10300	-	279				
5.7	820	10300	-	246				
6.5	820	10300	-	217				
7.3	820	10300	-	191				
8.4	820	10300	-	166				
9.7	820	10300	-	144				
11	820	10300	-	122				

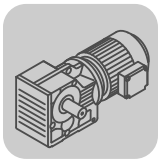
K77, n_e = 1400 1/min											1550 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
7.3	1450	16100	5	192.18							
7.8	1450	16100	5	179.37							
9.1	1550	15400	5	154.02							
10	1550	15400	5	135.28							
11	1550	15400	5	128.52							
12	1550	15400	5	113.56							
14	1550	15400	5	97.05							
16	1550	15400	5	88.97							
18	1550	15400	5	78.07							
19	1550	15400	5	73.99							
22	1550	15400	5	64.75							
24	1550	15400	6	58.34							
27	1550	15400	6	51.18							
31	1550	15400	6	45.16							
35	1550	15400	6	40.04							
36	1500	15700	6	38.39							
40	1550	15400	6	35.20							
45	1550	15400	6	30.89							
48	1550	15400	6	29.27							
55	1550	15400	6	25.62							
61	1550	15400	6	23.08							
69	1500	15700	6	20.25							
78	1450	16100	6	17.87							
88	1400	15500	6	15.84							
104	1340	14800	7	13.52							
113	1000	15100	8	12.36							
129	990	14400	8	10.84							
146	940	13900	8	9.56							
165	890	13500	8	8.48							
193	820	13100	8	7.24							

K77R37, n_e = 1400 1/min								1550 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
			3	3				
0.09	1550	15400	-	15310				
0.10	1550	15400	-	14043				
0.12	1550	15400	-	11955				
0.14	1550	15400	-	10217				



K77R37, n_e = 1400 1/min								1550 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
0.16	1550	15400	-	8809				
0.19	1550	15400	-	7528				
0.21	1550	15400	-	6606				
0.24	1550	15400	-	5774				
0.28	1550	15400	-	5089				
0.31	1550	15400	-	4489				
0.35	1550	15400	-	3961				
0.40	1550	15400	-	3485				
0.48	1550	15400	-	2901				
0.52	1550	15400	-	2717				
0.59	1550	15400	-	2370				
			3	2				
0.68	1550	15400	-	2050				
0.79	1550	15400	-	1772				
0.92	1550	15400	-	1514				
1.0	1550	15400	-	1388				
1.1	1550	15400	-	1218				
1.3	1550	15400	-	1053				
1.5	1550	15400	-	924				
1.7	1550	15400	-	815				
2.0	1550	15400	-	709				
2.3	1550	15400	-	622				
2.5	1550	15400	-	552				
2.9	1550	15400	-	485				
3.3	1550	15400	-	428				
3.8	1550	15400	-	367				
4.3	1550	15400	-	328				
4.8	1550	15400	-	290				
5.6	1550	15400	-	252				
6.3	1550	15400	-	221				
7.2	1550	15400	-	195				
8.0	1550	15400	-	175				
9.1	1550	15400	-	154				

K87, n_e = 1400 1/min												2700 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
7.1	2700	27300	5	197.37									
8.0	2700	27300	5	174.19									
8.5	2700	27300	5	164.34*									
9.5	2700	27300	5	147.32*									
11	2700	27300	5	126.91*									
12	2700	27300	5	115.82									
14	2700	27300	5	102.71*									
16	2700	27300	5	86.34									
18	2700	27300	5	79.34									
20	2700	27300	5	70.46									
22	2700	26200	5	63.00*									
25	2700	25000	5	56.64									
28	2700	23500	5	49.16									
32	2600	22800	6	44.02									
38	2500	21400	6	36.52*									
45	2700	19200	6	31.39									
50	2600	18500	6	27.88									
56	2500	18000	6	24.92									
62	2300	17900	6	22.41									
72	2300	16800	6	19.45									



K87, n_e = 1400 1/min														2700 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
80	2200	16300	6	17.42									
88	1800	16000	6	16.00									
97	2100	15300	6	14.45									
111	2000	14800	6	12.56									
125	1500	14900	7	11.17									
140	1500	14200	7	10.00									
169	1400	13500	7	8.29									
194	1300	13200	7	7.21									

K87R57, n_e = 1400 1/min											2700 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3 3							
0.09	2700	27300	-	14829							
0.11	2700	27300	-	13168							
0.12	2700	27300	-	11737							
0.14	2700	27300	-	10217							
0.15	2700	27300	-	9073							
0.18	2700	27300	-	7854							
0.20	2700	27300	-	6832							
0.24	2700	27300	-	5930							
0.27	2700	27300	-	5240							
0.31	2700	27300	-	4562							
0.35	2700	27300	-	4037							
0.39	2700	27300	-	3609							
0.45	2700	27300	-	3107							
0.51	2700	27300	-	2728							
0.59	2700	27300	-	2371							
				3 2							
0.67	2700	27300	-	2088							
0.76	2700	27300	-	1854							
0.84	2700	27300	-	1657							
0.99	2700	27300	-	1415							
1.1	2700	27300	-	1229							
1.3	2700	27300	-	1078							
1.5	2700	27300	-	951							
1.7	2700	27300	-	837							
1.9	2700	27300	-	726							
2.2	2700	27300	-	638							
2.5	2700	27300	-	562							
3.0	2700	27300	-	474							
3.3	2700	27300	-	426							
3.8	2700	27300	-	373							
4.2	2700	27300	-	330							
4.8	2700	27300	-	294							
5.6	2700	27300	-	250							
5.9	2700	27300	-	236							
7.0	2700	27300	-	201							
7.7	2700	27300	-	183							
8.8	2700	27300	-	159							
9.9	2600	27400	-	141							

K97, n_e = 1400 1/min													4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
8.0	4300	40000	7	176.05*									
9.1	4300	40000	7	153.21*									
10	4300	40000	7	140.28									
11	4300	40000	7	123.93*									
13	4300	40000	7	105.13									
14	4300	40000	7	96.80									
16	4300	38800	7	86.52									
18	4300	37100	7	77.89*									
20	4300	35600	7	70.54									
22	4300	33800	7	62.55									
25	4300	32300	7	56.55									
29	4300	30000	7	47.93*									
33	4300	28300	7	41.87									
37	4300	27100	7	38.30									
41	4300	25700	7	34.23									
45	4300	24500	7	30.82									
50	4300	23300	8	27.91									
57	4300	22000	8	24.75									
63	4300	20900	8	22.37									
74	4300	19100	8	18.96									
85	4300	17800	8	16.56									
101	4300	16100	8	13.85									
117	3890	16200	8	11.99									
134	2870	16400	10	10.41									
161	2660	15800	10	8.71									
186	2400	15700	10	7.54									

K97R57, n_e = 1400 1/min											4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				3 3							
0.08	4300	40000	-	18091							
0.08	4300	40000	-	16666							
0.09	4300	40000	-	14897							
0.11	4300	40000	-	13182							
0.12	4300	40000	-	11677							
0.14	4300	40000	-	10317							
0.15	4300	40000	-	9083							
0.17	4300	40000	-	8054							
0.20	4300	40000	-	6970							
0.23	4300	40000	-	6027							
0.26	4300	40000	-	5391							
0.30	4300	40000	-	4669							
0.34	4300	40000	-	4082							
0.39	4300	40000	-	3583							
0.45	4300	40000	-	3108							
0.51	4300	40000	-	2757							
				3 2							
0.58	4300	40000	-	2419							
0.66	4300	40000	-	2123							
0.75	4300	40000	-	1856							
0.86	4300	40000	-	1625							
0.98	4300	40000	-	1430							
1.1	4300	40000	-	1261							
1.3	4300	40000	-	1102							
1.5	4300	40000	-	957							

K97R57, n_e = 1400 1/min											4300 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
1.6	4300	40000	-	855							
1.9	4300	40000	-	743							
2.1	4300	40000	-	652							
2.4	4300	40000	-	573							
2.8	4300	40000	-	504							
3.2	4300	40000	-	437							
3.7	4300	40000	-	382							
4.1	4300	40000	-	342							
4.6	4300	40000	-	305							
5.4	4300	40000	-	258							
6.0	4300	40000	-	232							
7.0	4300	40000	-	199							

K107, n_e = 1400 1/min											8000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
9.8	8000	65000	6	143.47*							
12	8000	61500	6	121.46							
12	8000	59300	6	112.41*							
14	8000	56200	6	100.75							
15	8000	53500	6	90.96*							
17	8000	50900	6	82.61							
19	8000	47900	6	73.30							
21	8000	45400	6	66.52*							
24	8000	41700	6	57.17*							
28	7840	39300	6	49.90							
33	7360	37900	6	42.33*							
38	7200	35800	6	37.00*							
43	7200	33200	6	32.69							
45	6800	34200	6	31.28*							
48	7200	30700	6	29.00							
53	7200	28800	6	26.32							
62	7200	25800	6	22.62							
71	7200	23200	6	19.74							
84	7050	21000	7	16.75							
96	6890	19500	7	14.64							
104	4300	29200	9	13.43							
119	4300	27500	9	11.73							
141	4190	25800	9	9.94							
161	4070	24600	9	8.69							
190	3600	24400	9	7.35							

K107R77, n_e = 1400 1/min											8000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
			3	3							
0.10	8000	65000	-	14311							
0.11	8000	65000	-	12211							
0.13	8000	65000	-	10677							
0.15	8000	65000	-	9524							
0.17	8000	65000	-	8328							
0.19	8000	65000	-	7270							
0.23	8000	65000	-	6184							
0.25	8000	65000	-	5662							
0.27	8000	65000	-	5138							
0.32	8000	65000	-	4359							

K107R77, n_e = 1400 1/min											8000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
0.37	8000	65000	-	3810							
0.42	8000	65000	-	3358							
0.47	8000	65000	-	2977							
0.54	8000	65000	-	2599							
0.61	8000	65000	-	2286							
0.72	8000	65000	-	1939							
			3	2							
0.82	8000	65000	-	1713							
0.90	8000	65000	-	1554							
1.0	8000	65000	-	1336							
1.2	8000	65000	-	1166							
1.4	8000	65000	-	1030							
1.5	8000	65000	-	904							
1.8	8000	65000	-	793							
2.0	8000	65000	-	696							
2.3	8000	65000	-	615							
2.7	8000	65000	-	522							
3.0	8000	65000	-	461							
3.4	8000	65000	-	408							
3.8	8000	65000	-	364							
4.4	8000	65000	-	318							
4.9	8000	65000	-	286							
5.6	8000	65000	-	251							
6.3	8000	65000	-	222							
7.1	8000	65000	-	196							
8.0	7200	65000	-	174							
9.1	7200	65000	-	154							
10	7200	65000	-	140							

K127, n_e = 1400 1/min									13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280
9.6	13000	79200	5	146.07					
10	13000	79200	5	136.14					
11	13000	79200	5	122.48					
13	13000	79200	5	110.18					
16	13000	75100	5	89.89					
17	13000	72100	5	81.98					
20	13000	67700	5	70.95*					
22	13000	64000	5	62.60					
26	13000	59900	5	54.07					
29	13000	56500	5	47.82					
35	13000	52000	5	40.19					
39	13000	49400	6	36.25					
45	13000	45900	6	31.37					
51	13000	43000	6	27.68					
59	13000	39800	6	23.91					
66	13000	37200	6	21.15					
79	13000	32600	6	17.77					
98	12100	31000	6	14.35					
109	8530	35400	8	12.79					
130	8000	33900	8	10.74					
161	7230	32500	8	8.68					

K127R77, n_e = 1400 1/min											13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
				3 3							
0.08	13000	79200	-	17550							
0.09	13000	79200	-	16006							
0.09	13000	79200	-	14975							
0.11	13000	79200	-	12440							
0.13	13000	79200	-	10915							
0.14	13000	79200	-	9819							
0.17	13000	79200	-	8443							
0.19	13000	79200	-	7482							
0.21	13000	79200	-	6565							
0.24	13000	79200	-	5804							
0.28	13000	79200	-	5027							
0.32	13000	79200	-	4423							
0.36	13000	79200	-	3889							
0.42	13000	79200	-	3311							
0.47	13000	79200	-	3009							
0.54	13000	79200	-	2607							
0.62	13000	79200	-	2268							
				3 2							
0.73	13000	79200	-	1926							
0.80	13000	79200	-	1757							
0.91	13000	79200	-	1541							
1.0	13000	79200	-	1342							
1.2	13000	79200	-	1177							
1.4	13000	79200	-	1025							
1.6	13000	79200	-	899							
1.8	13000	79200	-	790							
2.0	13000	79200	-	704							
2.3	13000	79200	-	610							
2.6	13000	79200	-	549							
2.9	13000	79200	-	477							
3.3	13000	79200	-	418							

K127R87, n_e = 1400 1/min											13000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC
				3 2								
2.6	13000	79200	-	536								
3.0	13000	79200	-	473								
3.3	13000	79200	-	418								
3.8	13000	79200	-	367								
4.2	13000	79200	-	330								
4.9	13000	79200	-	287								
5.5	13000	79200	-	253								
6.6	13000	79200	-	213								
7.0	12000	79700	-	200								
8.4	12000	79700	-	166								
9.5	12000	79700	-	147								

K157, n_e = 1400 1/min										18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
9.3	18000	112200	5	150.41						
11	18000	106500	5	122.39						
14	18000	98000	5	100.22						

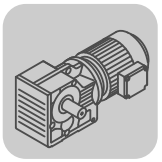
K157, n_e = 1400 1/min										18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
15	18000	94400	5	91.65						
18	18000	88900	5	79.75						
20	18000	84200	5	70.38						
23	18000	79000	5	61.02						
26	18000	74900	5	54.29						
30	18000	70000	5	46.79						
37	18000	63400	5	38.02						
45	18000	57500	6	31.30						
51	18000	54000	6	27.62						
58	18000	50000	6	23.95						
66	18000	47000	6	21.31						
76	18000	43200	6	18.37						
94	18000	38200	6	14.92						
111	17000	36700	6	12.65						

K157R97, n_e = 1400 1/min													18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
				3 3									
0.08	18000	112200	-	17679									
0.09	18000	112200	-	15729									
0.10	18000	112200	-	14721									
0.11	18000	112200	-	13097									
0.12	18000	112200	-	11368									
0.14	18000	112200	-	10114									
0.16	18000	112200	-	8718									
0.18	18000	112200	-	7734									
0.20	18000	112200	-	6881									
0.24	18000	112200	-	5931									
0.28	18000	112200	-	5074									
0.31	18000	112200	-	4514									
0.35	18000	112200	-	3979									
0.40	18000	112200	-	3516									
0.46	18000	112200	-	3051									
0.54	18000	112200	-	2610									
0.60	18000	112200	-	2322									
0.69	18000	112200	-	2029									
0.78	18000	112200	-	1805									
				3 2									
0.84	18000	112200	-	1659									
1.0	18000	112200	-	1365									
1.1	18000	112200	-	1229									
1.3	18000	112200	-	1093									
1.5	18000	112200	-	942									
1.6	18000	112200	-	854									
1.9	18000	112200	-	756									
2.1	18000	112200	-	661									
2.5	18000	112200	-	567									
2.8	18000	112200	-	504									
3.2	18000	112200	-	434									
3.7	18000	112200	-	379									
4.2	18000	112200	-	333									
4.8	18000	112200	-	291									

K157R107, n_e = 1400 1/min										18000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC	
				3 2						
3.6	18000	112200	-	385						
4.3	18000	112200	-	325						
4.7	18000	112200	-	299						
5.5	18000	112200	-	253						
6.1	18000	112200	-	230						
6.6	18000	112200	-	213						
7.5	18000	112200	-	187						
8.9	18000	112200	-	157						
11	18000	106500	-	122						
13	18000	100700	-	107						

K167, n_e = 1400 1/min										32000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
8.5	32000	150000	4	164.50						
10	32000	150000	5	134.99						
13	32000	150000	5	109.83						
16	32000	147200	5	87.86						
18	32000	140100	5	78.14						
21	32000	132000	5	68.07						
23	32000	125600	5	60.74						
27	32000	117000	5	51.77						
33	32000	107400	5	42.89						
38	32000	99700	5	36.61						
43	32000	93700	5	32.25						
49	32000	88600	5	28.77						
57	32000	81700	5	24.52						
69	32000	74000	5	20.32						
81	32000	67900	5	17.34						

K167R97, n_e = 1400 1/min														32000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	
				3 3										
0.07	32000	150000	-	19723										
0.08	32000	150000	-	17406										
0.09	32000	150000	-	15000										
0.11	32000	150000	-	13238										
0.12	32000	150000	-	11573										
0.14	32000	150000	-	10264										
0.16	32000	150000	-	8628										
0.21	32000	150000	-	6562										
0.26	32000	150000	-	5355										
0.29	32000	150000	-	4788										
0.34	32000	150000	-	4079										
0.41	32000	150000	-	3376										
0.51	32000	150000	-	2755										
0.62	32000	150000	-	2263										
				3 2										
0.64	32000	150000	-	2182										
0.82	32000	150000	-	1704										
0.99	32000	150000	-	1408										
1.1	32000	150000	-	1296										
1.3	32000	150000	-	1101										



K167R97, n_e = 1400 1/min — 32000 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
1.5	32000	150000	-	944									
1.7	32000	150000	-	843									
1.8	32000	150000	-	757									
2.2	32000	150000	-	632									
2.5	32000	150000	-	561									
2.9	32000	150000	-	481									
3.3	32000	150000	-	423									
3.8	32000	150000	-	369									

K167R107, n_e = 1400 1/min — 32000 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
				3 2							
4.4	32000	150000	-	318							
5.0	32000	150000	-	278							
5.7	32000	150000	-	244							
6.6	32000	150000	-	213							
6.8	32000	150000	-	206							
7.8	32000	150000	-	180							
8.8	32000	150000	-	160							
10	32000	150000	-	135							
12	32000	150000	-	118							

K187, n_e = 1400 1/min — 50000 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC DV280	DRS315K DRS315S	DRS315M DRS315L
7.8	50000	190000	4	179.86						
8.5	50000	190000	4	165.21						
9.7	50000	190000	4	144.59						
11	50000	188200	4	129.69						
12	50000	177200	4	112.60						
14	50000	169900	4	102.16						
16	50000	159000	4	88.00						
19	50000	147000	4	73.96						
22	50000	137600	4	64.04						
26	50000	126100	4	53.36						
31	50000	116600	4	45.50*						
33	50000	112700	4	42.51						
36	50000	107200	4	38.57						
42	50000	99100	4	33.23						
50	50000	90200	4	27.92						
58	47600	86800	4	24.18						
69	43900	84000	4	20.15						
81	41400	80800	4	17.18						

K187R97, n_e = 1400 1/min — 50000 Nm

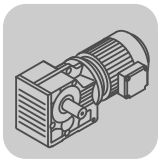
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
				3 3									
0.04	50000	189900	-	32625									
0.05	50000	189900	-	27165									
0.06	50000	189900	-	24353									
0.07	50000	189900	-	19144									
0.08	50000	189900	-	16978									
0.10	50000	189900	-	14272									

K187R97, n_e = 1400 1/min													50000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
0.11	50000	189900	-	13116									
0.12	50000	189900	-	11647									
0.13	50000	189900	-	10413									
0.15	50000	189900	-	9363									
0.17	50000	189900	-	8126									
0.19	50000	189900	-	7343									
0.21	50000	189900	-	6747									
0.23	50000	189900	-	5991									
0.26	50000	189900	-	5358									
0.29	50000	189900	-	4817									
0.32	50000	189900	-	4370									
0.50	50000	189900	-	2818									
				3 2									
0.39	50000	189900	-	3609									
0.46	50000	189900	-	3062									
0.56	50000	189900	-	2519									
0.62	50000	189900	-	2268									
0.68	50000	189900	-	2054									
0.77	50000	189900	-	1821									
0.87	50000	189900	-	1605									
1.0	50000	189900	-	1395									
1.2	50000	189900	-	1196									
1.3	50000	189900	-	1046									
1.5	50000	189900	-	945									
1.9	50000	189900	-	738									
2.3	50000	189900	-	621									
2.7	50000	189900	-	527									

K187R107, n_e = 1400 1/min											50000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M	DRS225MC
				3 2							
1.7	50000	189900	-	835							
1.9	50000	189900	-	729							
2.3	50000	189900	-	622							
2.7	50000	189900	-	520							
3.1	50000	189900	-	454							
3.9	50000	189900	-	355							
5.4	50000	189900	-	261							
6.3	50000	189900	-	221							
7.3	50000	189900	-	193							
8.6	50000	189900	-	163							

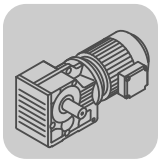
11.3 K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**0.08**	10800	17550	80300	1.20						
	0.09	9890	16006	80700	1.30						
	0.09	9260	14975	81000	1.40	**K**	**127R77**	**DR**	**63S4**	470	523
	0.11	7690	12440	81600	1.70	**KF**	**127R77**	**DR**	**63S4**	510	523
	0.13	6750	10915	81900	1.95	**KA**	**127R77**	**DR**	**63S4**	440	523
	0.14	6070	9819	82000	2.1	**KAF**	**127R77**	**DR**	**63S4**	480	523
	0.16	5180	8443	82300	2.5						
	0.18	4620	7482	82400	2.8						
	0.10	8850	14311	65000	0.90						
	0.11	7550	12211	65000	1.05						
	0.13	6600	10677	65000	1.20						
	0.14	5890	9524	65000	1.35	**K**	**107R77**	**DR**	**63S4**	310	523
	0.17	5150	8328	65000	1.55	**KF**	**107R77**	**DR**	**63S4**	320	523
	0.19	4490	7270	65000	1.80	**KA**	**107R77**	**DR**	**63S4**	280	523
	0.22	3700	6184	65000	2.2	**KAF**	**107R77**	**DR**	**63S4**	305	523
	0.24	3210	5662	65000	2.5						
	0.27	2910	5138	65000	2.7						
	0.32	2670	4359	65000	3.0						
	0.17	5460	8054	39400	0.80						
	0.20	4420	6970	40000	0.95						
	0.23	4000	6027	40000	1.05						
	0.26	3650	5391	40000	1.20	**K**	**97R57**	**DR**	**63S4**	180	523
	0.30	3020	4669	40000	1.40	**KF**	**97R57**	**DR**	**63S4**	200	523
	0.34	2730	4082	40000	1.55	**KA**	**97R57**	**DR**	**63S4**	160	523
	0.39	2370	3583	40000	1.80	**KAF**	**97R57**	**DR**	**63S4**	185	523
	0.44	2090	3108	40000	2.0						
	0.50	1770	2757	40000	2.4						
	0.57	1650	2419	40000	2.6						
	0.65	1420	2123	40000	3.0						
	0.74	1270	1856	40000	3.4	**K**	**97R57**	**DR**	**63S4**	180	523
	0.85	1040	1625	40000	4.1	**KF**	**97R57**	**DR**	**63S4**	200	523
	0.96	890	1430	40000	4.8	**KA**	**97R57**	**DR**	**63S4**	160	523
	1.1	860	1261	40000	5.0	**KAF**	**97R57**	**DR**	**63S4**	185	523
	1.2	755	1102	40000	5.7						
	0.26	3470	5240	26200	0.80						
	0.30	2890	4562	27000	0.95						
	0.34	2680	4037	27300	1.00	**K**	**87R57**	**DR**	**63S4**	120	523
	0.38	2390	3609	27600	1.15	**KF**	**87R57**	**DR**	**63S4**	130	523
	0.44	2060	3107	28000	1.30	**KA**	**87R57**	**DR**	**63S4**	105	523
	0.51	1730	2728	28300	1.55	**KAF**	**87R57**	**DR**	**63S4**	120	523
	0.58	1530	2371	28400	1.75						
	0.66	1430	2088	28500	1.90						
	0.74	1270	1854	28600	2.1						
	0.83	1130	1657	28700	2.4						
	0.97	960	1415	28800	2.8	**K**	**87R57**	**DR**	**63S4**	120	523
	1.1	830	1229	28900	3.2	**KF**	**87R57**	**DR**	**63S4**	125	523
	1.3	720	1078	28900	3.7	**KA**	**87R57**	**DR**	**63S4**	105	523
	1.4	610	951	29000	4.4	**KAF**	**87R57**	**DR**	**63S4**	120	523
	1.6	520	837	29000	5.2						
	1.9	450	726	29000	5.9						
						K	**77R37**	**DR**	**63S4**	69	523
	0.51	1840	2717	11500	0.85	**KF**	**77R37**	**DR**	**63S4**	78	523
	0.58	1530	2370	15500	1.00	**KA**	**77R37**	**DR**	**63S4**	62	523
						KAF	**77R37**	**DR**	**63S4**	70	523
	0.67	1430	2050	16100	1.10						
	0.78	1220	1772	17300	1.25						
	0.91	1040	1514	18100	1.50						
	0.99	960	1388	18500	1.60	**K**	**77R37**	**DR**	**63S4**	69	523
	1.1	840	1218	18900	1.85	**KF**	**77R37**	**DR**	**63S4**	77	523
	1.3	735	1053	19200	2.1	**KA**	**77R37**	**DR**	**63S4**	62	523
	1.5	645	924	19400	2.4	**KAF**	**77R37**	**DR**	**63S4**	70	523
	1.7	570	815	19600	2.7						
	2.0	445	709	19800	3.5						
	2.2	390	622	19900	3.9						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**1.0**	960	1351	6940	0.85						
	1.2	820	1171	10300	1.00						
	1.3	720	1034	11100	1.15						
	1.5	600	903	11900	1.35						
	1.7	570	793	12100	1.45						
	2.0	455	697	12600	1.80						
	2.2	400	613	12800	2.0	**K**	**67R37**	**DR**	**63S4**	45	523
	2.6	350	542	13000	2.3	**KF**	**67R37**	**DR**	**63S4**	51	523
	2.9	325	471	13000	2.5	**KA**	**67R37**	**DR**	**63S4**	42	523
	3.3	270	420	13000	3.0	**KAF**	**67R37**	**DR**	**63S4**	48	523
	3.8	245	361	13000	3.3						
	4.3	215	323	13000	3.8						
	5.0	181	279	13000	4.5						
	5.6	159	246	13000	5.2						
	6.4	139	217	13000	5.9						
	1.5	605	906	7580	1.00						
	1.7	545	806	8060	1.10						
	2.0	455	699	8620	1.30						
	2.2	400	615	8870	1.50						
	2.5	350	544	9080	1.70						
	2.9	320	473	9190	1.85	**K**	**57R37**	**DR**	**63S4**	39	523
	3.3	270	421	9390	2.2	**KF**	**57R37**	**DR**	**63S4**	44	523
	3.8	245	362	9470	2.4	**KA**	**57R37**	**DR**	**63S4**	37	523
	4.3	215	319	9570	2.8	**KAF**	**57R37**	**DR**	**63S4**	43	523
	4.9	181	280	9690	3.3						
	5.6	160	246	9760	3.8						
	6.4	141	215	9810	4.3						
	7.2	126	192	9850	4.8						
	2.5	380	552	6170	1.05						
	2.8	320	495	6840	1.25	**K**	**47R37**	**DR**	**63S4**	33	523
	3.2	285	426	7160	1.40	**KF**	**47R37**	**DR**	**63S4**	36	523
	3.7	240	375	7510	1.65	**KA**	**47R37**	**DR**	**63S4**	32	523
	4.2	225	327	7620	1.75	**KAF**	**47R37**	**DR**	**63S4**	35	523
	4.8	198	289	7780	2.0						
	4.0	240	346	3540	0.80						
	4.5	205	304	5570	0.95						
	5.2	189	267	5760	1.05	**K**	**37R17**	**DR**	**63S4**	19	523
	5.9	163	234	6010	1.20	**KF**	**37R17**	**DR**	**63S4**	21	523
	6.7	142	205	6180	1.40	**KA**	**37R17**	**DR**	**63S4**	19	523
	7.6	124	181	6300	1.60	**KAF**	**37R17**	**DR**	**63S4**	20	523
	8.6	109	160	6400	1.85						
	10	91	136	6490	2.2						
						K	**67**	**DR**	**63M6**	34	484
	6.2	184	144.79*	13000	4.4	**KF**	**67**	**DR**	**63M6**	40	485
						KA	**67**	**DR**	**63M6**	32	486
						KAF	**67**	**DR**	**63M6**	37	485
	6.2	185	145.14*	9680	3.2						
	7.3	158	123.85	9760	3.8	**K**	**57**	**DR**	**63M6**	28	479
	8.3	138	108.29	9820	4.4	**KF**	**57**	**DR**	**63M6**	33	480
	8.8	131	102.88*	9840	4.6	**KA**	**57**	**DR**	**63M6**	26	481
	10.0	115	90.26*	9880	5.2	**KAF**	**57**	**DR**	**63M6**	32	480
	12	98	76.56*	9930	6.2						
	9.5	120	145.14*	9870	5.0						
	11	103	123.85	9920	5.8	**K**	**57**	**DR**	**63S4**	28	479
	13	90	108.29	9950	6.7	**KF**	**57**	**DR**	**63S4**	33	480
	13	85	102.88*	9960	7.0	**KA**	**57**	**DR**	**63S4**	26	481
	15	75	90.26*	9990	8.0	**KAF**	**57**	**DR**	**63S4**	32	480
	6.8	168	131.87*	7930	2.4	**K**	**47**	**DR**	**63M6**	22	474
	7.4	155	121.48*	7990	2.6	**KF**	**47**	**DR**	**63M6**	26	475
	8.6	133	104.37	8070	3.0	**KA**	**47**	**DR**	**63M6**	22	476
						KAF	**47**	**DR**	**63M6**	24	475
						K	**47**	**DR**	**63S4**	22	474
	10	110	131.87*	8140	3.6	**KF**	**47**	**DR**	**63S4**	26	475
	11	101	121.48*	8170	4.0	**KA**	**47**	**DR**	**63S4**	22	476
						KAF	**47**	**DR**	**63S4**	24	475
	8.5	136	106.38	6230	1.50	**K**	**37**	**DR**	**63M6**	16	469
	9.2	124	97.81	6300	1.60	**KF**	**37**	**DR**	**63M6**	18	470
	11	107	83.69	6410	1.90	**KA**	**37**	**DR**	**63M6**	16	471
	12	92	72.54	6480	2.2	**KAF**	**37**	**DR**	**63M6**	18	470

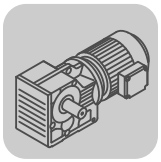
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**13**	88	106.38	6500	2.3						
	14	81	97.81	6530	2.5						
	16	70	83.69	6570	2.9						
	19	60	72.54	6600	3.3						
	20	56	67.80	6610	3.6						
	24	49	58.60	6430	4.1						
	28	41	49.79	6130	4.8						
	31	37	44.46	5930	5.4						
	36	32	37.97	5660	6.4	**K**	**37**	**DR**	**63S4**	16	469
	39	30	35.57	5550	6.8	**KF**	**37**	**DR**	**63S4**	18	470
	46	25	29.96	5270	8.0	**KA**	**37**	**DR**	**63S4**	16	471
	48	24	28.83	5200	8.4	**KAF**	**37**	**DR**	**63S4**	18	470
	55	21	24.99	4980	9.6						
	59	19	23.36	4880	10						
	68	17	20.19	4660	11						
	80	14	17.15	4430	13						
	90	13	15.31	4280	14						
	105	11	13.08	4070	15						
	114	10	12.14	3970	16						
0.18	**0.09**	15700	14975	74400	0.80						
	0.11	13100	12440	79100	1.00						
	0.12	11500	10915	80000	1.15						
	0.13	10300	9819	80500	1.25						
	0.16	8870	8443	81100	1.45	**K**	**127R77**	**DR**	**63M4**	470	523
	0.18	7880	7482	81500	1.65	**KF**	**127R77**	**DR**	**63M4**	510	523
	0.20	6910	6565	81800	1.90	**KA**	**127R77**	**DR**	**63M4**	440	523
	0.23	5880	5804	82100	2.2	**KAF**	**127R77**	**DR**	**63M4**	480	523
	0.26	5210	5027	82300	2.5						
	0.30	4480	4423	82400	2.9						
	0.34	3900	3889	82500	3.3						
	0.40	3240	3311	82600	4.0						
	0.16	8770	8328	65000	0.90						
	0.18	7660	7270	65000	1.05						
	0.21	6410	6184	65000	1.25						
	0.23	5690	5662	65000	1.40						
	0.26	5160	5138	65000	1.55	**K**	**107R77**	**DR**	**63M4**	310	523
	0.30	4580	4359	65000	1.75	**KF**	**107R77**	**DR**	**63M4**	320	523
	0.35	4000	3810	65000	2.0	**KA**	**107R77**	**DR**	**63M4**	280	523
	0.39	3400	3358	65000	2.4	**KAF**	**107R77**	**DR**	**63M4**	305	523
	0.44	3080	2977	65000	2.6						
	0.51	2690	2599	65000	3.0						
	0.58	2310	2286	65000	3.4						
	0.28	5050	4669	39800	0.85						
	0.32	4530	4082	40000	0.95	**K**	**97R57**	**DR**	**63M4**	180	523
	0.37	3940	3583	40000	1.10	**KF**	**97R57**	**DR**	**63M4**	200	523
	0.42	3450	3108	40000	1.25	**KA**	**97R57**	**DR**	**63M4**	160	523
	0.48	2980	2757	40000	1.45	**KAF**	**97R57**	**DR**	**63M4**	185	523
	0.55	2720	2419	40000	1.60						
	0.62	2360	2123	40000	1.80						
	0.71	2090	1856	40000	2.1						
	0.81	1760	1625	40000	2.4						
	0.92	1520	1430	40000	2.8	**K**	**97R57**	**DR**	**63M4**	180	523
	1.0	1420	1261	40000	3.0	**KF**	**97R57**	**DR**	**63M4**	200	523
	1.2	1240	1102	40000	3.5	**KA**	**97R57**	**DR**	**63M4**	160	523
	1.4	1080	957	40000	4.0	**KAF**	**97R57**	**DR**	**63M4**	185	523
	1.5	970	855	40000	4.4						
	1.8	770	743	40000	5.6						
	2.0	690	652	40000	6.2						
	0.42	3430	3107	26200	0.80	**K**	**87R57**	**DR**	**63M4**	120	523
	0.48	2920	2728	27000	0.90	**KF**	**87R57**	**DR**	**63M4**	130	523
	0.56	2560	2371	27400	1.05	**KA**	**87R57**	**DR**	**63M4**	105	523
						KAF	**87R57**	**DR**	**63M4**	120	523



K..DRS
K..DRS [kW]

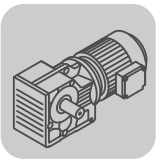
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**0.63**	2350	2088	27700	1.15						
	0.71	2080	1854	28000	1.30						
	0.80	1860	1657	28200	1.45						
	0.93	1590	1415	28400	1.70	**K**	**87R57**	**DR**	**63M4**	120	523
	1.1	1380	1229	28600	1.95	**KF**	**87R57**	**DR**	**63M4**	125	523
	1.2	1200	1078	28700	2.2	**KA**	**87R57**	**DR**	**63M4**	105	523
	1.4	1030	951	28800	2.6	**KAF**	**87R57**	**DR**	**63M4**	120	523
	1.6	890	837	28800	3.0						
	1.8	775	726	28900	3.5						
	0.87	1710	1514	14100	0.90						
	0.95	1570	1388	15200	1.00						
	1.1	1380	1218	16500	1.10						
	1.2	1200	1053	17400	1.30						
	1.4	1050	924	18100	1.45	**K**	**77R37**	**DR**	**63M4**	69	523
	1.6	930	815	18600	1.65	**KF**	**77R37**	**DR**	**63M4**	77	523
	1.9	760	709	19100	2.0	**KA**	**77R37**	**DR**	**63M4**	62	523
	2.1	665	622	19300	2.3	**KAF**	**77R37**	**DR**	**63M4**	70	523
	2.4	600	552	19500	2.6						
	2.7	525	485	19600	2.9						
	3.1	465	428	19800	3.3						
	3.6	410	367	19800	3.8						
	1.7	920	793	9240	0.90						
	1.9	760	697	10800	1.05						
	2.2	670	613	11500	1.20						
	2.4	590	542	12000	1.40	**K**	**67R37**	**DR**	**63M4**	45	523
	2.8	535	471	12200	1.50	**KF**	**67R37**	**DR**	**63M4**	51	523
	3.2	455	420	12600	1.80	**KA**	**67R37**	**DR**	**63M4**	42	523
	3.6	405	361	12800	2.0	**KAF**	**67R37**	**DR**	**63M4**	48	523
	4.1	360	323	12900	2.3						
	4.7	300	279	13000	2.7						
	2.4	590	544	7690	1.00						
	2.8	535	473	8150	1.10						
	3.1	455	421	8620	1.30						
	3.6	405	362	8840	1.45	**K**	**57R37**	**DR**	**63M4**	39	523
	4.1	360	319	9050	1.65	**KF**	**57R37**	**DR**	**63M4**	44	523
	4.7	300	280	9270	1.95	**KA**	**57R37**	**DR**	**63M4**	37	523
	5.4	265	246	9400	2.2	**KAF**	**57R37**	**DR**	**63M4**	43	523
	6.1	235	215	9510	2.5						
	6.9	210	192	9600	2.8						
	7.9	182	166	9690	3.3						
	3.5	405	375	5600	1.00						
	4.0	365	327	6320	1.10						
	4.6	325	289	6800	1.20						
	5.2	275	256	7240	1.45	**K**	**47R37**	**DR**	**63M4**	33	523
	5.9	250	225	7450	1.60	**KF**	**47R37**	**DR**	**63M4**	36	523
	6.7	215	198	7680	1.85	**KA**	**47R37**	**DR**	**63M4**	32	523
	7.7	188	171	7840	2.1	**KAF**	**47R37**	**DR**	**63M4**	35	523
	8.6	168	153	7930	2.4						
	10	147	131	8020	2.7						
	6.4	230	205	4860	0.85						
	7.3	200	181	5590	1.00	**K**	**37R17**	**DR**	**63M4**	19	523
	8.2	180	160	5860	1.10	**KF**	**37R17**	**DR**	**63M4**	21	523
	9.7	151	136	6110	1.35	**KA**	**37R17**	**DR**	**63M4**	19	523
	10	145	127	6160	1.40	**KAF**	**37R17**	**DR**	**63M4**	20	523
	6.0	285	144.79*	13000	2.9	**K**	**67**	**DR**	**63L6**	35	484
	7.0	240	123.54	13000	3.4	**KF**	**67**	**DR**	**63L6**	40	485
	8.0	210	108.03	13000	3.8	**KA**	**67**	**DR**	**63L6**	32	486
	8.5	200	102.62	13000	4.0	**KAF**	**67**	**DR**	**63L6**	38	485
	9.1	188	144.79*	13000	4.4	**K**	**67**	**DR**	**63M4**	34	484
	11	161	123.54	13000	5.1	**KF**	**67**	**DR**	**63M4**	40	485
	12	141	108.03	13000	5.8	**KA**	**67**	**DR**	**63M4**	32	486
						KAF	**67**	**DR**	**63M4**	37	485
	6.0	285	145.14*	9340	2.1						
	7.0	240	123.85	9480	2.4	**K**	**57**	**DR**	**63L6**	29	479
	8.0	210	108.29	9590	2.8	**KF**	**57**	**DR**	**63L6**	34	480
	8.5	200	102.88*	9620	3.0	**KA**	**57**	**DR**	**63L6**	27	481
	9.6	178	90.26*	9700	3.4	**KAF**	**57**	**DR**	**63L6**	32	480

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**9.1**	189	145.14*	9670	3.2						
	11	161	123.85	9750	3.7	**K**	**57**	**DR**	**63M4**	28	479
	12	141	108.29	9810	4.3	**KF**	**57**	**DR**	**63M4**	33	480
	13	134	102.88*	9830	4.5	**KA**	**57**	**DR**	**63M4**	26	481
	15	118	90.26*	9880	5.1	**KAF**	**57**	**DR**	**63M4**	32	480
	17	100	76.56*	9920	6.0						
	6.6	260	131.87*	7380	1.55						
	7.2	240	121.48*	7530	1.65	**K**	**47**	**DR**	**63L6**	23	474
	8.3	205	104.37	7740	1.95	**KF**	**47**	**DR**	**63L6**	26	475
	9.6	180	90.86	7880	2.2	**KA**	**47**	**DR**	**63L6**	22	476
	10	168	85.12*	7930	2.4	**KAF**	**47**	**DR**	**63L6**	25	475
	10	172	131.87*	7910	2.3						
	11	158	121.48*	7970	2.5	**K**	**47**	**DR**	**63M4**	22	474
	13	136	104.37	8060	2.9	**KF**	**47**	**DR**	**63M4**	26	475
	15	118	90.86	8120	3.4	**KA**	**47**	**DR**	**63M4**	22	476
	16	111	85.12*	8140	3.6	**KAF**	**47**	**DR**	**63M4**	24	475
	8.2	210	106.38	5520	0.95	**K**	**37**	**DR**	**63L6**	17	469
	8.9	193	97.81	5710	1.05	**KF**	**37**	**DR**	**63L6**	19	470
	10	165	83.69	5990	1.20	**KA**	**37**	**DR**	**63L6**	16	471
	12	143	72.54	6170	1.40	**KAF**	**37**	**DR**	**63L6**	18	470
	12	138	106.38	6210	1.45						
	14	127	97.81	6280	1.55						
	16	109	83.69	6400	1.85						
	18	94	72.54	6470	2.1						
	19	88	67.80	6500	2.3						
	23	76	58.60	6280	2.6						
	27	65	49.79	6010	3.1						
	30	58	44.46	5830	3.4						
	35	49	37.97	5580	4.0						
	37	46	35.57	5480	4.3	**K**	**37**	**DR**	**63M4**	16	469
	44	39	29.96	5220	5.1	**KF**	**37**	**DR**	**63M4**	18	470
	46	38	28.83	5160	5.3	**KA**	**37**	**DR**	**63M4**	16	471
	53	32	24.99	4950	6.2	**KAF**	**37**	**DR**	**63M4**	18	470
	57	30	23.36	4850	6.4						
	65	26	20.19	4650	7.0						
	77	22	17.15	4430	8.1						
	86	20	15.31	4280	8.8						
	101	17	13.08	4080	9.7						
	109	16	12.14	3980	10						
	126	14	10.49	3810	12						
	148	12	8.91	3620	14						
	166	10	7.96	3490	15						
0.25	**0.13**	15100	9819	75600	0.85						
	0.15	13000	8443	79200	1.00						
	0.17	11500	7482	79900	1.10						
	0.20	10100	6565	80600	1.30	**K**	**127R77**	**DR**	**63L4**	470	523
	0.22	8750	5804	81200	1.50	**KF**	**127R77**	**DR**	**63L4**	510	523
	0.26	7690	5027	81600	1.70	**KA**	**127R77**	**DR**	**63L4**	440	523
	0.29	6660	4423	81900	1.95	**KAF**	**127R77**	**DR**	**63L4**	480	523
	0.33	5820	3889	82100	2.2						
	0.39	4870	3311	82300	2.7						
	0.21	9460	6184	65000	0.85						
	0.23	8480	5662	65000	0.95						
	0.25	7690	5138	65000	1.05						
	0.30	6730	4359	65000	1.20	**K**	**107R77**	**DR**	**63L4**	310	523
	0.34	5880	3810	65000	1.35	**KF**	**107R77**	**DR**	**63L4**	320	523
	0.39	5060	3358	65000	1.60	**KA**	**107R77**	**DR**	**63L4**	285	523
	0.44	4550	2977	65000	1.75	**KAF**	**107R77**	**DR**	**63L4**	305	523
	0.50	3970	2599	65000	2.0						
	0.57	3440	2286	65000	2.3						
	0.67	2920	1939	65000	2.7						
	0.76	2670	1713	65000	3.0	**K**	**107R77**	**DR**	**63L4**	310	523
	0.84	2430	1554	65000	3.3	**KF**	**107R77**	**DR**	**63L4**	320	523
	0.97	2080	1336	65000	3.8	**KA**	**107R77**	**DR**	**63L4**	280	523
						KAF	**107R77**	**DR**	**63L4**	305	523
						K	**97R57**	**DR**	**63L4**	180	523
	0.42	4980	3108	39900	0.85	**KF**	**97R57**	**DR**	**63L4**	200	523
	0.47	4350	2757	40000	1.00	**KA**	**97R57**	**DR**	**63L4**	160	523
						KAF	**97R57**	**DR**	**63L4**	185	523

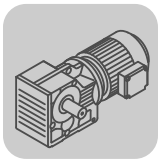


K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**0.54**	3920	2419	40000	1.10						
	0.61	3420	2123	40000	1.25						
	0.70	3010	1856	40000	1.40						
	0.80	2570	1625	40000	1.65	**K**	**97R57**	**DR**	**63L4**	180	523
	0.91	2240	1430	40000	1.90	**KF**	**97R57**	**DR**	**63L4**	200	523
	1.0	2050	1261	40000	2.1	**KA**	**97R57**	**DR**	**63L4**	160	523
	1.2	1790	1102	40000	2.4	**KAF**	**97R57**	**DR**	**63L4**	185	523
	1.4	1560	957	40000	2.7						
	1.5	1400	855	40000	3.1						
	0.62	3390	2088	26300	0.80						
	0.70	3010	1854	26900	0.90						
	0.78	2690	1657	27300	1.00						
	0.92	2290	1415	27800	1.15	**K**	**87R57**	**DR**	**63L4**	120	523
	1.1	1990	1229	28100	1.35	**KF**	**87R57**	**DR**	**63L4**	125	523
	1.2	1730	1078	28300	1.55	**KA**	**87R57**	**DR**	**63L4**	105	523
	1.4	1500	951	28500	1.80	**KAF**	**87R57**	**DR**	**63L4**	120	523
	1.6	1310	837	28600	2.1						
	1.8	1130	726	28700	2.4						
	2.0	1010	638	28800	2.7						
	1.2	1720	1053	14000	0.90						
	1.4	1510	924	15600	1.00						
	1.6	1330	815	16700	1.15						
	1.8	1110	709	17800	1.40						
	2.1	970	622	18400	1.60						
	2.4	870	552	18700	1.75						
	2.7	765	485	19100	2.0	**K**	**77R37**	**DR**	**63L4**	70	523
	3.0	675	428	19300	2.3	**KF**	**77R37**	**DR**	**63L4**	78	523
	3.5	590	367	19500	2.6	**KA**	**77R37**	**DR**	**63L4**	62	523
	4.0	525	328	19600	2.9	**KAF**	**77R37**	**DR**	**63L4**	70	523
	4.5	465	290	19700	3.3						
	5.2	400	252	19900	3.8						
	5.9	350	221	19900	4.4						
	6.7	310	195	20000	5.0						
	7.4	270	175	20000	5.6						
	2.1	970	613	5680	0.85						
	2.4	860	542	9920	0.95						
	2.8	775	471	10700	1.05						
	3.1	665	420	11500	1.25	**K**	**67R37**	**DR**	**63L4**	46	523
	3.6	590	361	11900	1.40	**KF**	**67R37**	**DR**	**63L4**	51	523
	4.0	520	323	12300	1.55	**KA**	**67R37**	**DR**	**63L4**	43	523
	4.7	440	279	12600	1.85	**KAF**	**67R37**	**DR**	**63L4**	49	523
	5.3	390	246	12800	2.1						
	6.0	345	217	13000	2.4						
	3.1	665	421	4200	0.90						
	3.6	590	362	7690	1.00						
	4.1	520	319	8260	1.15						
	4.6	440	280	8680	1.35						
	5.3	390	246	8920	1.55	**K**	**57R37**	**DR**	**63L4**	40	523
	6.0	345	215	9110	1.75	**KF**	**57R37**	**DR**	**63L4**	45	523
	6.8	305	192	9260	1.95	**KA**	**57R37**	**DR**	**63L4**	38	523
	7.8	265	166	9410	2.3	**KAF**	**57R37**	**DR**	**63L4**	43	523
	9.0	230	145	9530	2.6						
	10	210	129	9600	2.8						
	12	178	111	9700	3.4						
	13	156	97	9770	3.8						
	4.7	510	192.18	19700	2.8	**K**	**77**	**DRS**	**71S6**	62	489
	5.0	475	179.37	19700	3.0	**KF**	**77**	**DRS**	**71S6**	71	490
	5.8	410	154.02	19800	3.8	**KA**	**77**	**DRS**	**71S6**	55	491
	6.6	360	135.28	19900	4.3	**KAF**	**77**	**DRS**	**71S6**	63	490
	6.2	385	144.79*	12900	2.1	**K**	**67**	**DRS**	**71S6**	36	484
	7.2	325	123.54	13000	2.5	**KF**	**67**	**DRS**	**71S6**	42	485
	8.3	285	108.03	13000	2.8	**KA**	**67**	**DRS**	**71S6**	34	486
	8.7	270	102.62	13000	3.0	**KAF**	**67**	**DRS**	**71S6**	39	485
	9.0	265	144.79*	13000	3.1	**K**	**67**	**DR**	**63L4**	35	484
	11	225	123.54	13000	3.6	**KF**	**67**	**DR**	**63L4**	40	485
	12	198	108.03	13000	4.1	**KA**	**67**	**DR**	**63L4**	32	486
	13	188	102.62	13000	4.4	**KAF**	**67**	**DR**	**63L4**	38	485



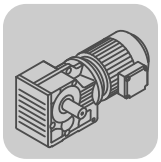
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**6.2**	385	145.14*	8940	1.55						
	7.2	330	123.85	9170	1.80	**K**	**57**	**DRS**	**71S6**	31	479
	8.3	285	108.29	9330	2.1	**KF**	**57**	**DRS**	**71S6**	35	480
	8.7	270	102.88*	9380	2.2	**KA**	**57**	**DRS**	**71S6**	28	481
	9.9	240	90.26*	9500	2.5	**KAF**	**57**	**DRS**	**71S6**	34	480
	12	200	76.56*	9620	2.9						
	9.0	265	145.14*	9410	2.2						
	10	225	123.85	9540	2.6	**K**	**57**	**DR**	**63L4**	29	479
	12	199	108.29	9640	3.0	**KF**	**57**	**DR**	**63L4**	34	480
	13	189	102.88*	9670	3.2	**KA**	**57**	**DR**	**63L4**	27	481
	14	166	90.26*	9740	3.6	**KAF**	**57**	**DR**	**63L4**	32	480
	17	141	76.56*	9810	4.3						
	6.8	350	131.87*	6540	1.15	**K**	**47**	**DRS**	**71S6**	25	474
	7.4	320	121.48*	6830	1.25	**KF**	**47**	**DRS**	**71S6**	28	475
	8.6	275	104.37	7240	1.45	**KA**	**47**	**DRS**	**71S6**	24	476
						KAF	**47**	**DRS**	**71S6**	27	475
						K	**47**	**DRS**	**71S6**	25	474
	9.8	240	90.86	7510	1.65	**KF**	**47**	**DRS**	**71S6**	28	475
	11	225	85.12*	7610	1.75	**KA**	**47**	**DRS**	**71S6**	24	476
						KAF	**47**	**DRS**	**71S6**	27	475
	9.9	240	131.87*	7510	1.65	**K**	**47**	**DR**	**63L4**	23	474
	11	220	121.48*	7640	1.80	**KF**	**47**	**DR**	**63L4**	26	475
	12	192	104.37	7820	2.1	**KA**	**47**	**DR**	**63L4**	22	476
	14	167	90.86	7930	2.4	**KAF**	**47**	**DR**	**63L4**	25	475
	15	156	85.12*	7980	2.6						
	11	220	83.69	5350	0.90	**K**	**37**	**DRS**	**71S6**	19	469
	12	194	72.54	5710	1.05	**KF**	**37**	**DRS**	**71S6**	21	470
	13	181	67.80	5840	1.10	**KA**	**37**	**DRS**	**71S6**	18	471
	15	156	58.60	6070	1.30	**KAF**	**37**	**DRS**	**71S6**	20	470
	18	133	49.79	6250	1.50						
	12	195	106.38	5690	1.00						
	13	180	97.81	5860	1.10						
	16	154	83.69	6090	1.30						
	18	133	72.54	6240	1.50						
	19	124	67.80	6220	1.60						
	22	108	58.60	6030	1.85						
	26	91	49.79	5810	2.2						
	29	82	44.46	5650	2.4						
	34	70	37.97	5430	2.9						
	37	65	35.57	5340	3.1						
	43	55	29.96	5100	3.6	**K**	**37**	**DR**	**63L4**	17	469
	45	53	28.83	5050	3.8	**KF**	**37**	**DR**	**63L4**	19	470
	52	46	24.99	4860	4.4	**KA**	**37**	**DR**	**63L4**	16	471
	56	43	23.36	4770	4.6	**KAF**	**37**	**DR**	**63L4**	18	470
	64	37	20.19	4580	5.0						
	76	32	17.15	4370	5.7						
	85	28	15.31	4220	6.2						
	99	24	13.08	4030	6.9						
	107	22	12.14	3940	7.2						
	124	19	10.49	3780	8.3						
	146	16	8.91	3590	9.8						
	163	15	7.96	3470	11						
	191	12	6.80	3300	12						
	204	12	6.37	3240	12						
0.37	**0.18**	16500	7482	72700	0.80						
	0.21	14500	6565	76900	0.90						
	0.24	12600	5804	79400	1.05	**K**	**127R77**	**DRS**	**71S4**	470	523
	0.27	11000	5027	80200	1.20	**KF**	**127R77**	**DRS**	**71S4**	510	523
	0.31	9610	4423	80800	1.35	**KA**	**127R77**	**DRS**	**71S4**	445	523
	0.35	8410	3889	81300	1.55	**KAF**	**127R77**	**DRS**	**71S4**	480	523
	0.42	7080	3311	81800	1.85						
	0.72	4280	1926	82400	3.0	**K**	**127R77**	**DRS**	**71S4**	470	523
	0.79	3900	1757	82500	3.3	**KF**	**127R77**	**DRS**	**71S4**	510	523
	0.90	3390	1541	82600	3.8	**KA**	**127R77**	**DRS**	**71S4**	445	523
						KAF	**127R77**	**DRS**	**71S4**	480	523



K..DRS
K..DRS [kW]

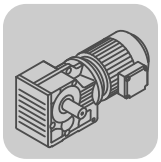
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**0.36**	8420	3810	65000	0.95						
	0.41	7290	3358	65000	1.10	**K**	**107R77**	**DRS**	**71S4**	310	523
	0.46	6530	2977	65000	1.20	**KF**	**107R77**	**DRS**	**71S4**	325	523
	0.53	5700	2599	65000	1.40	**KA**	**107R77**	**DRS**	**71S4**	285	523
	0.60	4960	2286	65000	1.60	**KAF**	**107R77**	**DRS**	**71S4**	310	523
	0.71	4210	1939	65000	1.90						
	0.81	3830	1713	65000	2.1	**K**	**107R77**	**DRS**	**71S4**	310	523
	0.89	3470	1554	65000	2.3	**KF**	**107R77**	**DRS**	**71S4**	325	523
	1.0	2990	1336	65000	2.7	**KA**	**107R77**	**DRS**	**71S4**	285	523
	1.2	2600	1166	65000	3.1	**KAF**	**107R77**	**DRS**	**71S4**	305	523
	0.65	4850	2123	40000	0.90						
	0.74	4270	1856	40000	1.00						
	0.85	3670	1625	40000	1.15						
	0.96	3200	1430	40000	1.35						
	1.1	2900	1261	40000	1.50	**K**	**97R57**	**DRS**	**71S4**	180	523
	1.2	2530	1102	40000	1.70	**KF**	**97R57**	**DRS**	**71S4**	200	523
	1.4	2220	957	40000	1.95	**KA**	**97R57**	**DRS**	**71S4**	160	523
	1.6	1980	855	40000	2.2	**KAF**	**97R57**	**DRS**	**71S4**	185	523
	1.9	1640	743	40000	2.6						
	2.1	1450	652	40000	3.0						
	2.4	1310	573	40000	3.3						
	0.97	3250	1415	26500	0.85						
	1.1	2820	1229	27100	0.95						
	1.3	2460	1078	27600	1.10						
	1.4	2140	951	27900	1.25						
	1.6	1870	837	28200	1.45	**K**	**87R57**	**DRS**	**71S4**	120	523
	1.9	1620	726	28400	1.65	**KF**	**87R57**	**DRS**	**71S4**	130	523
	2.2	1440	638	28500	1.85	**KA**	**87R57**	**DRS**	**71S4**	110	523
	2.5	1250	562	28600	2.2	**KAF**	**87R57**	**DRS**	**71S4**	120	523
	2.9	1050	474	28800	2.6						
	3.2	950	426	28800	2.8						
	3.7	830	373	28900	3.2						
	1.7	1880	815	7450	0.80						
	2.0	1590	709	15100	0.95						
	2.2	1390	622	16400	1.10						
	2.5	1250	552	17200	1.25						
	2.8	1090	485	17900	1.40						
	3.2	960	428	18400	1.60	**K**	**77R37**	**DRS**	**71S4**	72	523
	3.8	840	367	18900	1.85	**KF**	**77R37**	**DRS**	**71S4**	80	523
	4.2	745	328	19100	2.1	**KA**	**77R37**	**DRS**	**71S4**	64	523
	4.8	665	290	19400	2.3	**KAF**	**77R37**	**DRS**	**71S4**	72	523
	5.5	570	252	19600	2.7						
	6.2	500	221	19700	3.1						
	7.1	440	195	19800	3.5						
	7.9	390	175	19900	4.0						
	9.0	345	154	19900	4.5						
	3.3	940	420	8130	0.85						
	3.8	830	361	10200	1.00						
	4.3	740	323	10900	1.10						
	5.0	630	279	11700	1.30	**K**	**67R37**	**DRS**	**71S4**	48	523
	5.6	555	246	12100	1.50	**KF**	**67R37**	**DRS**	**71S4**	53	523
	6.4	490	217	12400	1.65	**KA**	**67R37**	**DRS**	**71S4**	45	523
	7.2	430	191	12700	1.90	**KAF**	**67R37**	**DRS**	**71S4**	51	523
	8.3	370	166	12900	2.2						
	9.6	325	144	13000	2.5						
	11	275	122	13000	2.9						
	4.9	630	280	7350	0.95						
	5.6	555	246	7980	1.10						
	6.4	490	215	8460	1.20						
	7.2	435	192	8720	1.40	**K**	**57R37**	**DRS**	**71S4**	42	523
	8.3	375	166	8980	1.60	**KF**	**57R37**	**DRS**	**71S4**	47	523
	9.6	330	145	9170	1.80	**KA**	**57R37**	**DRS**	**71S4**	40	523
	11	295	129	9290	2.0	**KAF**	**57R37**	**DRS**	**71S4**	45	523
	12	250	111	9460	2.4						
	14	220	97	9560	2.7						
						K	**87**	**DRS**	**71M6**	99	494
	4.6	770	197.37	28900	3.5	**KF**	**87**	**DRS**	**71M6**	110	495
	5.2	680	174.19	28900	4.0	**KA**	**87**	**DRS**	**71M6**	87	496
						KAF	**87**	**DRS**	**71M6**	100	495

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**5.9**	600	154.02	19500	2.6	**K**	**77**	**DRS**	**71M6**	64	489
	6.7	525	135.28	19600	2.9	**KF**	**77**	**DRS**	**71M6**	72	490
	7.0	500	128.52	19700	3.1	**KA**	**77**	**DRS**	**71M6**	56	491
	8.0	440	113.56	19800	3.5	**KAF**	**77**	**DRS**	**71M6**	64	490
	7.2	490	192.18	19700	3.0	**K**	**77**	**DRS**	**71S4**	62	489
	7.7	455	179.37	19800	3.2	**KF**	**77**	**DRS**	**71S4**	71	490
	9.0	390	154.02	19900	3.9	**KA**	**77**	**DRS**	**71S4**	55	491
						KAF	**77**	**DRS**	**71S4**	63	490
	7.3	480	123.54	12500	1.70	**K**	**67**	**DRS**	**71M6**	38	484
	8.4	420	108.03	12700	1.95	**KF**	**67**	**DRS**	**71M6**	43	485
	8.8	400	102.62	12800	2.0	**KA**	**67**	**DRS**	**71M6**	35	486
	10	350	90.04	13000	2.3	**KAF**	**67**	**DRS**	**71M6**	41	485
	9.5	370	144.79*	12900	2.2						
	11	315	123.54	13000	2.6	**K**	**67**	**DRS**	**71S4**	36	484
	13	275	108.03	13000	3.0	**KF**	**67**	**DRS**	**71S4**	42	485
	15	230	90.04	13000	3.6	**KA**	**67**	**DRS**	**71S4**	34	486
	18	196	76.37	13000	4.2	**KAF**	**67**	**DRS**	**71S4**	39	485
	7.3	480	123.85	8500	1.25						
	8.4	420	108.29	8780	1.40	**K**	**57**	**DRS**	**71M6**	32	479
	8.8	400	102.88*	8880	1.50	**KF**	**57**	**DRS**	**71M6**	37	480
	10	350	90.26*	9080	1.70	**KA**	**57**	**DRS**	**71M6**	30	481
	12	295	76.56*	9290	2.0	**KAF**	**57**	**DRS**	**71M6**	35	480
	13	265	69.12	9400	2.2						
	9.5	370	145.14*	9000	1.60						
	11	315	123.85	9220	1.90						
	13	275	108.29	9370	2.2	**K**	**57**	**DRS**	**71S4**	31	479
	13	260	102.88*	9420	2.3	**KF**	**57**	**DRS**	**71S4**	35	480
	15	230	90.26*	9530	2.6	**KA**	**57**	**DRS**	**71S4**	28	481
	18	196	76.56*	9640	3.1	**KAF**	**57**	**DRS**	**71S4**	34	480
	20	177	69.12	9700	3.4						
	8.7	405	104.37	5720	1.00	**K**	**47**	**DRS**	**71M6**	26	474
	10.0	350	90.86	6500	1.15	**KF**	**47**	**DRS**	**71M6**	29	475
	11	330	85.12*	6750	1.20	**KA**	**47**	**DRS**	**71M6**	25	476
	12	290	75.20*	7120	1.35	**KAF**	**47**	**DRS**	**71M6**	28	475
	10	335	131.87*	6690	1.20	**K**	**47**	**DRS**	**71S4**	25	474
	11	310	121.48*	6960	1.30	**KF**	**47**	**DRS**	**71S4**	28	475
	13	265	104.37	7330	1.50	**KA**	**47**	**DRS**	**71S4**	24	476
						KAF	**47**	**DRS**	**71S4**	27	475
	15	230	90.86	7580	1.70	**K**	**47**	**DRS**	**71S4**	25	474
	16	215	85.12*	7670	1.85	**KF**	**47**	**DRS**	**71S4**	28	475
	18	192	75.20*	7810	2.1	**KA**	**47**	**DRS**	**71S4**	24	476
	20	179	69.84	7880	2.2	**KAF**	**47**	**DRS**	**71S4**	27	475
	22	162	63.30*	7960	2.5						
	14	250	97.81	2520	0.80						
	16	210	83.69	5470	0.95						
	19	186	72.54	5690	1.10						
	20	174	67.80	5630	1.15						
	24	150	58.60	5500	1.35						
	28	128	49.79	5350	1.55						
	31	114	44.46	5230	1.75						
	36	97	37.97	5060	2.1						
	39	91	35.57	4990	2.2						
	46	77	29.96	4800	2.6						
	48	74	28.83	4750	2.7	**K**	**37**	**DRS**	**71S4**	19	469
	55	64	24.99	4590	3.1	**KF**	**37**	**DRS**	**71S4**	21	470
	59	60	23.36	4510	3.3	**KA**	**37**	**DRS**	**71S4**	18	471
	68	52	20.19	4350	3.6	**KAF**	**37**	**DRS**	**71S4**	20	470
	80	44	17.15	4160	4.1						
	90	39	15.31	4040	4.5						
	105	34	13.08	3860	4.9						
	114	31	12.14	3780	5.1						
	132	27	10.49	3630	6.0						
	155	23	8.91	3460	7.0						
	173	20	7.96	3350	7.6						
	203	17	6.80	3190	8.6						
	217	16	6.37	3130	8.9						
	257	14	5.36	2970	10						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**0.08**	54100	16978	190000	0.90						
	0.10	45400	14272	190000	1.10	**K**	**187R97**	**DRS**	**71M4**	1770	523
	0.11	41300	13116	190000	1.20	**KH**	**187R97**	**DRS**	**71M4**	1700	523
	0.12	36000	11647	190000	1.40						
	0.19	23300	7343	190000	2.1						
	0.12	36900	11573	150000	0.85						
	0.13	32700	10264	150000	1.00						
	0.16	27400	8628	150000	1.15	**K**	**167R97**	**DRS**	**71M4**	1180	523
	0.21	20800	6562	150000	1.55	**KH**	**167R97**	**DRS**	**71M4**	1150	523
	0.26	16500	5355	150000	1.95						
	0.34	12800	4079	150000	2.5						
	0.20	21900	6881	110000	0.80	**K**	**157R97**	**DRS**	**71M4**	790	523
	0.23	18800	5931	111700	0.95	**KF**	**157R97**	**DRS**	**71M4**	870	523
	0.35	12600	3979	114500	1.40	**KA**	**157R97**	**DRS**	**71M4**	750	523
	0.45	9710	3051	115400	1.85	**KAF**	**157R97**	**DRS**	**71M4**	810	523
	0.31	14600	4423	76600	0.90						
	0.35	12800	3889	79200	1.00	**K**	**127R77**	**DRS**	**71M4**	475	523
	0.42	10800	3311	80300	1.20	**KF**	**127R77**	**DRS**	**71M4**	520	523
	0.46	9840	3009	80700	1.30	**KA**	**127R77**	**DRS**	**71M4**	445	523
	0.53	8450	2607	81300	1.55	**KAF**	**127R77**	**DRS**	**71M4**	485	523
	0.72	6520	1926	81900	2.00						
	0.79	5940	1757	82100	2.2	**K**	**127R77**	**DRS**	**71M4**	470	523
	0.90	5180	1541	82300	2.5	**KF**	**127R77**	**DRS**	**71M4**	510	523
	1.0	4540	1342	82400	2.9	**KA**	**127R77**	**DRS**	**71M4**	445	523
	1.2	3950	1177	82500	3.3	**KAF**	**127R77**	**DRS**	**71M4**	480	523
	1.4	3460	1025	82600	3.8						
	0.46	9950	2977	65000	0.80	**K**	**107R77**	**DRS**	**71M4**	315	523
	0.53	8690	2599	65000	0.90	**KF**	**107R77**	**DRS**	**71M4**	325	523
	0.60	7590	2286	65000	1.05	**KA**	**107R77**	**DRS**	**71M4**	285	523
	0.71	6440	1939	65000	1.25	**KAF**	**107R77**	**DRS**	**71M4**	310	523
	0.81	5820	1713	65000	1.35						
	0.89	5280	1554	65000	1.50						
	1.0	4540	1336	65000	1.75	**K**	**107R77**	**DRS**	**71M4**	310	523
	1.2	3960	1166	65000	2.0	**KF**	**107R77**	**DRS**	**71M4**	325	523
	1.3	3400	1030	65000	2.4	**KA**	**107R77**	**DRS**	**71M4**	285	523
	1.5	2960	904	65000	2.7	**KAF**	**107R77**	**DRS**	**71M4**	310	523
	1.7	2680	793	65000	3.0						
	2.0	2330	696	65000	3.4						
	2.2	2010	615	65000	4.0						
	0.96	4860	1430	40000	0.90						
	1.1	4360	1261	40000	1.00						
	1.2	3810	1102	40000	1.15						
	1.4	3340	957	40000	1.30						
	1.6	2990	855	40000	1.45	**K**	**97R57**	**DRS**	**71M4**	180	523
	1.9	2500	743	40000	1.70	**KF**	**97R57**	**DRS**	**71M4**	200	523
	2.1	2210	652	40000	1.95	**KA**	**97R57**	**DRS**	**71M4**	165	523
	2.4	1980	573	40000	2.2	**KAF**	**97R57**	**DRS**	**71M4**	190	523
	2.7	1690	504	40000	2.5						
	3.2	1450	437	40000	3.0						
	3.6	1300	382	40000	3.3						
	4.5	1040	305	40000	4.1						
	1.4	3250	951	26500	0.85						
	1.6	2840	837	27100	0.95						
	1.9	2470	726	27600	1.10						
	2.2	2180	638	27900	1.25						
	2.5	1910	562	28100	1.40						
	2.9	1610	474	28400	1.70	**K**	**87R57**	**DRS**	**71M4**	120	523
	3.2	1440	426	28500	1.85	**KF**	**87R57**	**DRS**	**71M4**	130	523
	3.7	1270	373	28600	2.1	**KA**	**87R57**	**DRS**	**71M4**	110	523
	4.2	1100	330	28700	2.4	**KAF**	**87R57**	**DRS**	**71M4**	120	523
	4.7	990	294	28800	2.7						
	5.5	860	250	28900	3.1						
	5.8	810	236	28900	3.3						
	6.9	685	201	28900	3.9						

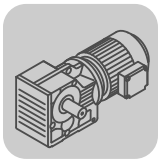
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**2.8**	1660	485	14600	0.95						
	3.2	1460	428	16000	1.05						
	3.8	1260	367	17100	1.20						
	4.2	1120	328	17800	1.35	**K**	**77R37**	**DRS**	**71M4**	73	523
	4.8	1000	290	18300	1.55	**KF**	**77R37**	**DRS**	**71M4**	81	523
	5.5	860	252	18800	1.80	**KA**	**77R37**	**DRS**	**71M4**	65	523
	6.2	755	221	19100	2.0	**KAF**	**77R37**	**DRS**	**71M4**	73	523
	7.1	665	195	19300	2.3						
	7.9	595	175	19500	2.6						
	9.0	525	154	19600	3.0						
	5.0	950	279	7650	0.85						
	5.6	840	246	10100	0.95						
	6.4	745	217	10900	1.10	**K**	**67R37**	**DRS**	**71M4**	49	523
	7.2	655	191	11600	1.25	**KF**	**67R37**	**DRS**	**71M4**	54	523
	8.3	565	166	12100	1.45	**KA**	**67R37**	**DRS**	**71M4**	46	523
	9.6	495	144	12400	1.65	**KAF**	**67R37**	**DRS**	**71M4**	52	523
	11	420	122	12700	1.95						
	7.2	655	192	5460	0.90						
	8.3	570	166	7870	1.05	**K**	**57R37**	**DRS**	**71M4**	43	523
	9.6	500	145	8420	1.20	**KF**	**57R37**	**DRS**	**71M4**	48	523
	11	445	129	8660	1.35	**KA**	**57R37**	**DRS**	**71M4**	41	523
	12	380	111	8960	1.55	**KAF**	**57R37**	**DRS**	**71M4**	47	523
	14	335	97	9140	1.80						
	4.6	1130	197.37	28700	2.4	**K**	**87**	**DRS**	**80S6**	100	494
	5.2	990	174.19	28800	2.7	**KF**	**87**	**DRS**	**80S6**	110	495
	5.6	940	164.34*	28800	2.9	**KA**	**87**	**DRS**	**80S6**	90	496
	6.2	840	147.32*	28900	3.2	**KAF**	**87**	**DRS**	**80S6**	105	495
	5.9	880	154.02	18700	1.75	**K**	**77**	**DRS**	**80S6**	66	489
	6.8	775	135.28	19100	2.0	**KF**	**77**	**DRS**	**80S6**	74	490
	7.1	735	128.52	19200	2.1	**KA**	**77**	**DRS**	**80S6**	59	491
	8.1	650	113.56	19400	2.4	**KAF**	**77**	**DRS**	**80S6**	66	490
	9.0	585	154.02	19500	2.6						
	10	510	135.28	19700	3.0	**K**	**77**	**DRS**	**71M4**	64	489
	11	485	128.52	19700	3.2	**KF**	**77**	**DRS**	**71M4**	72	490
	12	430	113.56	19800	3.6	**KA**	**77**	**DRS**	**71M4**	56	491
	14	365	97.05	19900	4.2	**KAF**	**77**	**DRS**	**71M4**	64	490
	7.4	705	123.54	11200	1.15	**K**	**67**	**DRS**	**80S6**	40	484
	8.5	620	108.03	11800	1.30	**KF**	**67**	**DRS**	**80S6**	46	485
	8.9	585	102.62	12000	1.40	**KA**	**67**	**DRS**	**80S6**	37	486
	10	515	90.04	12300	1.60	**KAF**	**67**	**DRS**	**80S6**	43	485
						K	**67**	**DRS**	**80S6**	40	484
						KF	**67**	**DRS**	**80S6**	46	485
	12	435	76.37	12700	1.85	**KA**	**67**	**DRS**	**80S6**	37	486
						KAF	**67**	**DRS**	**80S6**	43	485
	11	470	123.54	12500	1.75	**K**	**67**	**DRS**	**71M4**	38	484
	13	410	108.03	12800	2.00	**KF**	**67**	**DRS**	**71M4**	43	485
	15	340	90.04	13000	2.4	**KA**	**67**	**DRS**	**71M4**	35	486
	18	290	76.37	13000	2.8	**KAF**	**67**	**DRS**	**71M4**	41	485
	8.4	620	108.29	7450	0.95						
	8.9	590	102.88*	7710	1.00						
	10	515	90.26*	8280	1.15	**K**	**57**	**DRS**	**80S6**	34	479
	12	435	76.56*	8710	1.35	**KF**	**57**	**DRS**	**80S6**	39	480
	13	395	69.12	8900	1.50	**KA**	**57**	**DRS**	**80S6**	32	481
	15	345	60.81*	9100	1.70	**KAF**	**57**	**DRS**	**80S6**	38	480
	16	325	57.42*	9170	1.80						
	11	470	123.85	8560	1.25						
	13	410	108.29	8830	1.45						
	13	390	102.88*	8920	1.55	**K**	**57**	**DRS**	**71M4**	32	479
	15	340	90.26*	9120	1.75	**KF**	**57**	**DRS**	**71M4**	37	480
	18	290	76.56*	9320	2.1	**KA**	**57**	**DRS**	**71M4**	30	481
	20	260	69.12	9420	2.3	**KAF**	**57**	**DRS**	**71M4**	35	480
	23	230	60.81*	9530	2.6						
	24	215	57.42*	9570	2.8						
	13	395	104.37	5960	1.00						
	15	345	90.86	6600	1.15	**K**	**47**	**DRS**	**71M4**	26	474
	16	320	85.12*	6830	1.25	**KF**	**47**	**DRS**	**71M4**	29	475
	18	285	75.20*	7180	1.40	**KA**	**47**	**DRS**	**71M4**	25	476
	20	265	69.84	7340	1.50	**KAF**	**47**	**DRS**	**71M4**	28	475



K..DRS
K..DRS [kW]

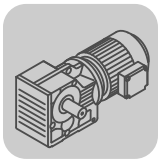
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**22**	240	63.30*	7520	1.65	**K**	**47**	**DRS**	**71M4**	26	474
	24	215	56.83	7680	1.85	**KF**	**47**	**DRS**	**71M4**	29	475
	28	186	48.95*	7840	2.2	**KA**	**47**	**DRS**	**71M4**	25	476
	30	175	46.03*	7900	2.3	**KAF**	**47**	**DRS**	**71M4**	28	475
	24	220	58.60	4840	0.90						
	28	190	49.79	4780	1.05						
	31	169	44.46	4730	1.20						
	36	144	37.97	4630	1.40						
	39	135	35.57	4580	1.50						
	46	114	29.96	4460	1.75						
	48	110	28.83	4420	1.80						
	55	95	24.99	4310	2.1						
	59	89	23.36	4250	2.2						
	68	77	20.19	4120	2.4	**K**	**37**	**DRS**	**71M4**	20	469
	80	65	17.15	3970	2.8	**KF**	**37**	**DRS**	**71M4**	22	470
	90	58	15.31	3860	3.0	**KA**	**37**	**DRS**	**71M4**	20	471
	105	50	13.08	3720	3.3	**KAF**	**37**	**DRS**	**71M4**	21	470
	114	46	12.14	3650	3.5						
	132	40	10.49	3510	4.0						
	155	34	8.91	3360	4.7						
	173	30	7.96	3260	5.1						
	203	26	6.80	3120	5.8						
	217	24	6.37	3060	6.0						
	257	20	5.36	2910	6.9						
	347	15	3.98	2670	8.3						
0.75	**0.11**	56600	13116	190000	0.90						
	0.12	49600	11647	190000	1.00						
	0.19	31900	7343	190000	1.55	**K**	**187R97**	**DRS**	**80S4**	1770	523
	0.21	29100	6747	190000	1.70	**KH**	**187R97**	**DRS**	**80S4**	1700	523
	0.24	25500	5991	190000	1.95						
	0.16	37500	8628	150000	0.85						
	0.21	28500	6562	150000	1.10						
	0.26	22800	5355	150000	1.40	**K**	**167R97**	**DRS**	**80S4**	1190	523
	0.35	17600	4079	150000	1.80	**KH**	**167R97**	**DRS**	**80S4**	1150	523
	0.42	14600	3376	150000	2.2						
						K	**157R97**	**DRS**	**80S4**	790	523
	0.35	17300	3979	112500	1.05	**KF**	**157R97**	**DRS**	**80S4**	870	523
	0.46	13200	3051	114200	1.35	**KA**	**157R97**	**DRS**	**80S4**	760	523
						KAF	**157R97**	**DRS**	**80S4**	810	523
						K	**157R97**	**DRS**	**80S4**	790	523
	0.85	7310	1659	115900	2.5	**KF**	**157R97**	**DRS**	**80S4**	870	523
	1.0	5890	1365	116200	3.1	**KA**	**157R97**	**DRS**	**80S4**	750	523
						KAF	**157R97**	**DRS**	**80S4**	810	523
	0.43	14700	3311	76400	0.90	**K**	**127R77**	**DRS**	**80S4**	475	523
	0.47	13300	3009	79000	0.95	**KF**	**127R77**	**DRS**	**80S4**	520	523
	0.54	11500	2607	80000	1.15	**KA**	**127R77**	**DRS**	**80S4**	450	523
						KAF	**127R77**	**DRS**	**80S4**	485	523
	0.73	8810	1926	81200	1.50						
	0.80	8030	1757	81400	1.60						
	0.91	7010	1541	81800	1.85	**K**	**127R77**	**DRS**	**80S4**	475	523
	1.0	6130	1342	82000	2.1	**KF**	**127R77**	**DRS**	**80S4**	520	523
	1.2	5350	1177	82200	2.4	**KA**	**127R77**	**DRS**	**80S4**	445	523
	1.4	4680	1025	82400	2.8	**KAF**	**127R77**	**DRS**	**80S4**	485	523
	1.6	4090	899	82500	3.2						
	0.82	7860	1713	65000	1.00						
	0.91	7130	1554	65000	1.10						
	1.1	6130	1336	65000	1.30						
	1.2	5350	1166	65000	1.50	**K**	**107R77**	**DRS**	**80S4**	315	523
	1.4	4630	1030	65000	1.75	**KF**	**107R77**	**DRS**	**80S4**	325	523
	1.6	4030	904	65000	2.00	**KA**	**107R77**	**DRS**	**80S4**	285	523
	1.8	3620	793	65000	2.2	**KAF**	**107R77**	**DRS**	**80S4**	310	523
	2.0	3160	696	65000	2.5						
	2.3	2740	615	65000	2.9						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**1.3**	5120	1102	39800	0.85						
	1.5	4490	957	40000	0.95						
	1.6	4010	855	40000	1.05						
	1.9	3390	743	40000	1.25						
	2.2	2980	652	40000	1.45						
	2.5	2670	573	40000	1.60	**K**	**97R57**	**DRS**	**80S4**	185	523
	2.8	2290	504	40000	1.85	**KF**	**97R57**	**DRS**	**80S4**	205	523
	3.2	1970	437	40000	2.2	**KA**	**97R57**	**DRS**	**80S4**	165	523
	3.7	1750	382	40000	2.4	**KAF**	**97R57**	**DRS**	**80S4**	190	523
	4.6	1410	305	40000	3.0						
	5.5	1190	258	40000	3.6						
	6.1	1070	232	40000	4.0						
	7.1	910	199	40000	4.7						
	1.9	3330	726	26400	0.80						
	2.2	2940	638	27000	0.90						
	2.5	2570	562	27400	1.05						
	3.0	2170	474	27900	1.25						
	3.3	1950	426	28100	1.40	**K**	**87R57**	**DRS**	**80S4**	125	523
	3.8	1710	373	28300	1.55	**KF**	**87R57**	**DRS**	**80S4**	135	523
	4.3	1500	330	28500	1.80	**KA**	**87R57**	**DRS**	**80S4**	110	523
	4.8	1340	294	28600	2.0	**KAF**	**87R57**	**DRS**	**80S4**	125	523
	5.6	1160	250	28700	2.3						
	6.0	1090	236	28700	2.5						
	7.0	920	201	28800	2.9						
	3.8	1700	367	14200	0.90						
	4.3	1510	328	15600	1.00	**K**	**77R37**	**DRS**	**80S4**	75	523
	4.9	1340	290	16700	1.15	**KF**	**77R37**	**DRS**	**80S4**	83	523
	5.6	1160	252	17600	1.35	**KA**	**77R37**	**DRS**	**80S4**	68	523
	6.4	1020	221	18200	1.50	**KAF**	**77R37**	**DRS**	**80S4**	76	523
	5.2	1360	174.19	28600	2.00	**K**	**87**	**DRS**	**80M6**	105	494
	5.6	1280	164.34*	28600	2.1	**KF**	**87**	**DRS**	**80M6**	115	495
	6.2	1150	147.32*	28700	2.3	**KA**	**87**	**DRS**	**80M6**	92	496
	7.2	990	126.91*	28800	2.7	**KAF**	**87**	**DRS**	**80M6**	105	495
	7.1	1000	197.37	28800	2.7	**K**	**87**	**DRS**	**80S4**	100	494
	8.1	880	174.19	28800	3.0	**KF**	**87**	**DRS**	**80S4**	110	495
	8.6	830	164.34*	28900	3.2	**KA**	**87**	**DRS**	**80S4**	90	496
	9.6	745	147.32*	28900	3.6	**KAF**	**87**	**DRS**	**80S4**	105	495
	6.8	1050	135.28	18100	1.45	**K**	**77**	**DRS**	**80M6**	69	489
	7.1	1000	128.52	18300	1.55	**KF**	**77**	**DRS**	**80M6**	77	490
	8.1	880	113.56	18700	1.75	**KA**	**77**	**DRS**	**80M6**	61	491
						KAF	**77**	**DRS**	**80M6**	69	490
						K	**77**	**DRS**	**80M6**	69	489
	9.4	755	97.05	19100	2.0	**KF**	**77**	**DRS**	**80M6**	77	490
	10	695	88.97	19300	2.2	**KA**	**77**	**DRS**	**80M6**	61	491
						KAF	**77**	**DRS**	**80M6**	69	490
	9.2	780	154.02	19000	2.00						
	10	685	135.28	19300	2.3	**K**	**77**	**DRS**	**80S4**	66	489
	11	650	128.52	19400	2.4	**KF**	**77**	**DRS**	**80S4**	74	490
	12	575	113.56	19500	2.7	**KA**	**77**	**DRS**	**80S4**	59	491
	15	490	97.05	19700	3.1	**KAF**	**77**	**DRS**	**80S4**	66	490
	11	625	123.54	11700	1.30	**K**	**67**	**DRS**	**80S4**	40	484
	13	545	108.03	12200	1.50	**KF**	**67**	**DRS**	**80S4**	46	485
	16	455	90.04	12600	1.80	**KA**	**67**	**DRS**	**80S4**	37	486
						KAF	**67**	**DRS**	**80S4**	43	485
	18	385	76.37	12900	2.1	**K**	**67**	**DRS**	**80S4**	40	484
	20	350	68.95	13000	2.3	**KF**	**67**	**DRS**	**80S4**	46	485
	23	305	60.66	13000	2.7	**KA**	**67**	**DRS**	**80S4**	37	486
	25	290	57.28	13000	2.8	**KAF**	**67**	**DRS**	**80S4**	43	485
	11	625	123.85	7390	0.95						
	13	550	108.29	8030	1.10						
	14	520	102.88*	8250	1.15						
	16	455	90.26*	8620	1.30	**K**	**57**	**DRS**	**80S4**	34	479
	18	385	76.56*	8930	1.55	**KF**	**57**	**DRS**	**80S4**	39	480
	20	350	69.12	9090	1.70	**KA**	**57**	**DRS**	**80S4**	32	481
	23	305	60.81*	9250	1.95	**KAF**	**57**	**DRS**	**80S4**	38	480
	25	290	57.42*	9320	2.1						
	29	245	48.89	9470	2.4						
	32	225	44.43	9550	2.7						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**19**	380	75.20*	6170	1.05	**K**	**47**	**DRS**	**80S4**	28	474
	20	350	69.84	6500	1.15	**KF**	**47**	**DRS**	**80S4**	32	475
	22	320	63.30*	6860	1.25	**KA**	**47**	**DRS**	**80S4**	27	476
						KAF	**47**	**DRS**	**80S4**	30	475
	25	285	56.83	7160	1.40						
	29	245	48.95*	7470	1.60	**K**	**47**	**DRS**	**80S4**	28	474
	31	230	46.03*	7570	1.70	**KF**	**47**	**DRS**	**80S4**	32	475
	36	200	39.61	7760	2.00	**KA**	**47**	**DRS**	**80S4**	27	476
	40	180	35.39	7720	2.2	**KAF**	**47**	**DRS**	**80S4**	30	475
	45	159	31.30	7520	2.5						
	32	225	44.46	4170	0.90						
	37	193	37.97	4150	1.05						
	40	181	35.57	4130	1.10						
	47	152	29.96	4070	1.30						
	49	146	28.83	4050	1.35						
	56	127	24.99	3980	1.60						
	60	119	23.36	3940	1.65						
	70	102	20.19	3850	1.80						
	82	87	17.15	3740	2.1	**K**	**37**	**DRS**	**80S4**	22	469
	92	78	15.31	3650	2.2	**KF**	**37**	**DRS**	**80S4**	24	470
	108	66	13.08	3530	2.5	**KA**	**37**	**DRS**	**80S4**	22	471
	116	62	12.14	3480	2.6	**KAF**	**37**	**DRS**	**80S4**	23	470
	134	53	10.49	3360	3.0						
	158	45	8.91	3230	3.5						
	177	40	7.96	3140	3.8						
	207	34	6.80	3010	4.4						
	221	32	6.37	2960	4.5						
	263	27	5.36	2830	5.2						
	354	20	3.98	2600	6.2						
1.1	**0.15**	59200	9363	190000	0.85						
	0.17	50700	8126	190000	1.00						
	0.19	48000	7343	190000	1.05						
	0.21	43900	6747	190000	1.15	**K**	**187R97**	**DRS**	**80M4**	1770	523
	0.24	38600	5991	190000	1.30	**KH**	**187R97**	**DRS**	**80M4**	1700	523
	0.26	34200	5358	190000	1.45						
	0.29	30400	4817	190000	1.65						
	0.32	27600	4370	190000	1.80						
	0.26	34500	5355	150000	0.95						
	0.29	30500	4788	150000	1.05						
	0.35	26500	4079	150000	1.20	**K**	**167R97**	**DRS**	**80M4**	1190	523
	0.42	22000	3376	150000	1.45	**KH**	**167R97**	**DRS**	**80M4**	1150	523
	0.51	17700	2755	150000	1.80						
	0.65	14400	2182	150000	2.2						
	0.83	11200	1704	150000	2.8	**K**	**167R97**	**DRS**	**80M4**	1190	523
	1.0	9310	1408	150000	3.4	**KH**	**167R97**	**DRS**	**80M4**	1150	523
	1.1	8530	1296	150000	3.8						
	0.40	22400	3516	109600	0.80	**K**	**157R97**	**DRS**	**80M4**	800	523
	0.46	19900	3051	111100	0.90	**KF**	**157R97**	**DRS**	**80M4**	870	523
	0.54	16500	2610	112900	1.10	**KA**	**157R97**	**DRS**	**80M4**	760	523
	0.61	14600	2322	113700	1.20	**KAF**	**157R97**	**DRS**	**80M4**	820	523
	0.85	10900	1659	115000	1.65						
	1.0	8910	1365	115600	2.0	**K**	**157R97**	**DRS**	**80M4**	790	523
	1.2	7940	1229	115800	2.3	**KF**	**157R97**	**DRS**	**80M4**	870	523
	1.3	7070	1093	116000	2.5	**KA**	**157R97**	**DRS**	**80M4**	760	523
	1.5	6090	942	116100	3.0	**KAF**	**157R97**	**DRS**	**80M4**	810	523
	1.6	5460	854	116200	3.3						
	0.73	13000	1926	79100	1.00						
	0.80	11900	1757	79800	1.10						
	0.91	10400	1541	80500	1.25						
	1.0	9100	1342	81000	1.45						
	1.2	7960	1177	81500	1.65	**K**	**127R77**	**DRS**	**80M4**	480	523
	1.4	6950	1025	81800	1.85	**KF**	**127R77**	**DRS**	**80M4**	520	523
	1.6	6080	899	82000	2.1	**KA**	**127R77**	**DRS**	**80M4**	450	523
	1.8	5230	790	82200	2.5	**KAF**	**127R77**	**DRS**	**80M4**	485	523
	2.0	4740	704	82400	2.7						
	2.3	4080	610	82500	3.2						
	2.6	3680	549	82500	3.5						
	3.0	3160	477	82600	4.1						

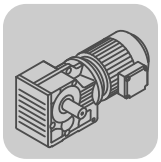
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**1.2**	7930	1166	65000	1.00						
	1.4	6910	1030	65000	1.15						
	1.6	6030	904	65000	1.30						
	1.8	5380	793	65000	1.50						
	2.0	4700	696	65000	1.70	**K**	**107R77**	**DRS**	**80M4**	315	523
	2.3	4110	615	65000	1.95	**KF**	**107R77**	**DRS**	**80M4**	330	523
	2.7	3480	522	65000	2.3	**KA**	**107R77**	**DRS**	**80M4**	290	523
	3.1	3060	461	65000	2.6	**KAF**	**107R77**	**DRS**	**80M4**	315	523
	3.4	2700	408	65000	3.0						
	3.9	2440	364	65000	3.3						
	4.4	2130	318	65000	3.7						
	1.9	5030	743	39900	0.85						
	2.2	4420	652	40000	0.95						
	2.5	3950	573	40000	1.10	**K**	**97R57**	**DRS**	**80M4**	185	523
	2.8	3400	504	40000	1.25	**KF**	**97R57**	**DRS**	**80M4**	205	523
	3.2	2940	437	40000	1.45	**KA**	**97R57**	**DRS**	**80M4**	170	523
	3.7	2600	382	40000	1.65	**KAF**	**97R57**	**DRS**	**80M4**	195	523
	4.1	2290	342	40000	1.85						
	3.0	3220	474	26600	0.85						
	3.3	2890	426	27000	0.95						
	3.8	2550	373	27500	1.05	**K**	**87R57**	**DRS**	**80M4**	125	523
	4.3	2230	330	27800	1.20	**KF**	**87R57**	**DRS**	**80M4**	135	523
	4.8	1990	294	28100	1.35	**KA**	**87R57**	**DRS**	**80M4**	115	523
	5.6	1720	250	28300	1.55	**KAF**	**87R57**	**DRS**	**80M4**	125	523
	6.0	1620	236	28400	1.65						
	7.0	1370	201	28600	1.95						
	5.3	1980	176.05*	40000	2.2	**K**	**97**	**DRS**	**90L6**	170	499
	6.1	1730	153.21*	40000	2.5	**KF**	**97**	**DRS**	**90L6**	190	500
	6.6	1580	140.28	40000	2.7	**KA**	**97**	**DRS**	**90L6**	150	501
	7.5	1390	123.93*	40000	3.1	**KAF**	**97**	**DRS**	**90L6**	175	500
						K	**97**	**DRS**	**80M4**	165	499
	8.0	1310	176.05*	40000	3.3	**KF**	**97**	**DRS**	**80M4**	185	500
	9.2	1140	153.21*	40000	3.8	**KA**	**97**	**DRS**	**80M4**	145	501
	10	1040	140.28	40000	4.1	**KAF**	**97**	**DRS**	**80M4**	170	500
						K	**87**	**DRS**	**90L6**	110	494
	6.3	1660	147.32*	28300	1.60	**KF**	**87**	**DRS**	**90L6**	120	495
	7.3	1430	126.91*	28500	1.90	**KA**	**87**	**DRS**	**90L6**	99	496
						KAF	**87**	**DRS**	**90L6**	110	495
	8.1	1290	174.19	28600	2.1						
	8.6	1220	164.34*	28700	2.2	**K**	**87**	**DRS**	**80M4**	105	494
	9.6	1090	147.32*	28700	2.5	**KF**	**87**	**DRS**	**80M4**	115	495
	11	940	126.91*	28800	2.9	**KA**	**87**	**DRS**	**80M4**	92	496
	12	860	115.82	28900	3.1	**KAF**	**87**	**DRS**	**80M4**	105	495
						K	**77**	**DRS**	**90L6**	75	489
	8.2	1280	113.56	17000	1.20	**KF**	**77**	**DRS**	**90L6**	83	490
	9.6	1090	97.05	17900	1.40	**KA**	**77**	**DRS**	**90L6**	68	491
						KAF	**77**	**DRS**	**90L6**	75	490
	10	1000	135.28	18300	1.55	**K**	**77**	**DRS**	**80M4**	69	489
	11	950	128.52	18500	1.60	**KF**	**77**	**DRS**	**80M4**	77	490
	12	840	113.56	18800	1.85	**KA**	**77**	**DRS**	**80M4**	61	491
						KAF	**77**	**DRS**	**80M4**	69	490
	15	720	97.05	19200	2.1	**K**	**77**	**DRS**	**80M4**	69	489
	16	660	88.97	19400	2.3	**KF**	**77**	**DRS**	**80M4**	77	490
	18	580	78.07	19500	2.7	**KA**	**77**	**DRS**	**80M4**	61	491
	19	550	73.99	19600	2.8	**KAF**	**77**	**DRS**	**80M4**	69	490
	13	800	108.03	10400	1.00						
	14	760	102.62	10800	1.05	**K**	**67**	**DRS**	**80M4**	43	484
	16	670	90.04	11500	1.20	**KF**	**67**	**DRS**	**80M4**	48	485
	18	565	76.37	12100	1.45	**KA**	**67**	**DRS**	**80M4**	40	486
	20	510	68.95	12300	1.60	**KAF**	**67**	**DRS**	**80M4**	46	485
	23	450	60.66	12600	1.80						
	25	425	57.28	12700	1.90	**K**	**67**	**DRS**	**80M4**	43	484
	29	360	48.77	12900	2.3	**KF**	**67**	**DRS**	**80M4**	48	485
	32	330	44.32	13000	2.5	**KA**	**67**	**DRS**	**80M4**	40	486
	37	285	38.39	13000	2.8	**KAF**	**67**	**DRS**	**80M4**	46	485



K..DRS
K..DRS [kW]

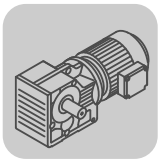
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**16**	670	90.26*	3500	0.90						
	18	570	76.56*	7870	1.05	**K**	**57**	**DRS**	**80M4**	37	479
	20	510	69.12	8300	1.15	**KF**	**57**	**DRS**	**80M4**	42	480
	23	450	60.81*	8640	1.30	**KA**	**57**	**DRS**	**80M4**	35	481
	25	425	57.42*	8760	1.40	**KAF**	**57**	**DRS**	**80M4**	40	480
	29	360	48.89	9030	1.65						
	32	330	44.43	9170	1.80						
	37	285	38.49	9340	2.1						
	39	265	35.70	9410	2.3						
	47	225	30.28	9550	2.7						
	52	200	27.34	9500	3.0						
	59	179	24.05	9200	3.4						
	62	169	22.71	9070	3.6						
	73	144	19.34	8710	4.0						
	80	131	17.57	8490	4.2	**K**	**57**	**DRS**	**80M4**	37	479
	93	113	15.22	8170	4.7	**KF**	**57**	**DRS**	**80M4**	42	480
	106	99	13.25	7860	5.2	**KA**	**57**	**DRS**	**80M4**	35	481
	118	89	11.92	7550	4.7	**KAF**	**57**	**DRS**	**80M4**	40	480
	125	84	11.26	7440	5.0						
	147	71	9.59	7110	5.7						
	162	65	8.71	6920	6.0						
	187	56	7.55	6630	6.5						
	215	49	6.57	6370	7.1						
	301	35	4.69	5760	8.6						
	25	420	56.83	3810	0.95	**K**	**47**	**DRS**	**80M4**	31	474
	29	360	48.95*	6390	1.10	**KF**	**47**	**DRS**	**80M4**	34	475
	31	340	46.03*	6640	1.15	**KA**	**47**	**DRS**	**80M4**	30	476
						KAF	**47**	**DRS**	**80M4**	33	475
	36	295	39.61	7100	1.35						
	40	260	35.39	7080	1.50						
	45	230	31.30	6950	1.70	**K**	**47**	**DRS**	**80M4**	31	474
	48	215	29.32	6880	1.85	**KF**	**47**	**DRS**	**80M4**	34	475
	54	193	25.91	6720	2.1	**KA**	**47**	**DRS**	**80M4**	30	476
	65	162	21.81	6500	2.5	**KAF**	**47**	**DRS**	**80M4**	33	475
	72	146	19.58	6350	2.7						
	47	220	29.96	3420	0.90						
	56	186	24.99	3440	1.05						
	60	174	23.36	3440	1.10						
	70	150	20.19	3410	1.25						
	82	128	17.15	3370	1.40						
	92	114	15.31	3320	1.55						
	108	98	13.08	3250	1.70	**K**	**37**	**DRS**	**80M4**	25	469
	116	90	12.14	3220	1.75	**KF**	**37**	**DRS**	**80M4**	27	470
	134	78	10.49	3140	2.0	**KA**	**37**	**DRS**	**80M4**	24	471
	158	66	8.91	3040	2.4	**KAF**	**37**	**DRS**	**80M4**	26	470
	177	59	7.96	2970	2.6						
	207	51	6.80	2870	3.0						
	221	47	6.37	2820	3.1						
	263	40	5.36	2710	3.5						
	354	30	3.98	2510	4.2						
1.5	**0.21**	61200	6747	190000	0.80						
	0.23	54000	5991	190000	0.95						
	0.26	47900	5358	190000	1.05	**K**	**187R97**	**DRS**	**90M4**	1770	523
	0.29	42800	4817	190000	1.15	**KH**	**187R97**	**DRS**	**90M4**	1710	523
	0.32	38800	4370	190000	1.30						
	0.39	33200	3609	190000	1.50						
	0.46	28200	3062	190000	1.75	**K**	**187R97**	**DRS**	**90M4**	1770	523
	0.56	22900	2519	190000	2.2	**KH**	**187R97**	**DRS**	**90M4**	1700	523
	0.62	20500	2268	190000	2.4						
	0.34	37000	4079	150000	0.85	**K**	**167R97**	**DRS**	**90M4**	1190	523
	0.41	30700	3376	150000	1.05	**KH**	**167R97**	**DRS**	**90M4**	1150	523
	0.51	24800	2755	150000	1.30						
	0.64	20100	2182	150000	1.60						
	0.82	15600	1704	150000	2.0	**K**	**167R97**	**DRS**	**90M4**	1190	523
	0.99	12900	1408	150000	2.5	**KH**	**167R97**	**DRS**	**90M4**	1150	523
	1.1	11900	1296	150000	2.7						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5											
	0.60	20600	2322	110700	0.85	**K**	**157R97**	**DRS**	**90M4**	800	523
						KF	**157R97**	**DRS**	**90M4**	880	523
						KA	**157R97**	**DRS**	**90M4**	760	523
						KAF	**157R97**	**DRS**	**90M4**	820	523
	0.84	15200	1659	113400	1.20						
	1.0	12400	1365	114500	1.45						
	1.1	11100	1229	115000	1.60	**K**	**157R97**	**DRS**	**90M4**	800	523
	1.3	9910	1093	115300	1.80	**KF**	**157R97**	**DRS**	**90M4**	870	523
	1.5	8540	942	115700	2.1	**KA**	**157R97**	**DRS**	**90M4**	760	523
	1.6	7680	854	115800	2.3	**KAF**	**157R97**	**DRS**	**90M4**	820	523
	2.5	5050	567	116300	3.6						
	2.8	4490	504	116400	4.0						
	2.6	4860	536	82300	2.7	**K**	**127R87**	**DRS**	**90M4**	500	523
	3.4	3830	418	82500	3.4	**KF**	**127R87**	**DRS**	**90M4**	540	523
	3.8	3370	367	82600	3.8	**KA**	**127R87**	**DRS**	**90M4**	475	523
						KAF	**127R87**	**DRS**	**90M4**	510	523
	0.80	16400	1757	72900	0.80						
	0.91	14400	1541	77100	0.90						
	1.0	12500	1342	79400	1.05						
	1.2	11000	1177	80200	1.20						
	1.4	9610	1025	80800	1.35	**K**	**127R77**	**DRS**	**90M4**	480	523
	1.6	8410	899	81300	1.55	**KF**	**127R77**	**DRS**	**90M4**	520	523
	1.8	7290	790	81700	1.80	**KA**	**127R77**	**DRS**	**90M4**	455	523
	2.0	6570	704	81900	2.00	**KAF**	**127R77**	**DRS**	**90M4**	490	523
	2.3	5660	610	82100	2.3						
	2.6	5110	549	82300	2.5						
	2.9	4400	477	82400	3.0						
	3.4	3890	418	82500	3.3						
	1.4	9580	1030	65000	0.85						
	1.6	8380	904	65000	0.95						
	1.8	7440	793	65000	1.10						
	2.0	6510	696	65000	1.25	**K**	**107R77**	**DRS**	**90M4**	320	523
	2.3	5700	615	65000	1.40	**KF**	**107R77**	**DRS**	**90M4**	335	523
	2.7	4840	522	65000	1.65	**KA**	**107R77**	**DRS**	**90M4**	295	523
	3.0	4260	461	65000	1.90	**KAF**	**107R77**	**DRS**	**90M4**	320	523
	3.4	3760	408	65000	2.1						
	3.8	3390	364	65000	2.4						
	4.4	2960	318	65000	2.7						
	2.4	5460	573	39400	0.80						
	2.8	4710	504	40000	0.90						
	3.2	4070	437	40000	1.05						
	3.7	3590	382	40000	1.20	**K**	**97R57**	**DRS**	**90M4**	190	523
	4.1	3180	342	40000	1.35	**KF**	**97R57**	**DRS**	**90M4**	210	523
	4.6	2890	305	40000	1.50	**KA**	**97R57**	**DRS**	**90M4**	175	523
	5.4	2440	258	40000	1.75	**KAF**	**97R57**	**DRS**	**90M4**	200	523
	6.0	2200	232	40000	1.95						
	7.0	1880	199	40000	2.3						
	4.2	3080	330	26800	0.85						
	4.8	2760	294	27200	1.00	**K**	**87R57**	**DRS**	**90M4**	130	523
	5.6	2370	250	27700	1.15	**KF**	**87R57**	**DRS**	**90M4**	140	523
	5.9	2240	236	27800	1.20	**KA**	**87R57**	**DRS**	**90M4**	120	523
	7.0	1900	201	28100	1.40	**KAF**	**87R57**	**DRS**	**90M4**	130	523
	7.7	1720	183	28300	1.55						
	5.2	2720	176.05*	40000	1.60	**K**	**97**	**DRS**	**100M6**	175	499
	6.0	2370	153.21*	40000	1.80	**KF**	**97**	**DRS**	**100M6**	195	500
	6.6	2170	140.28	40000	2.00	**KA**	**97**	**DRS**	**100M6**	155	501
	7.5	1910	123.93*	40000	2.2	**KAF**	**97**	**DRS**	**100M6**	180	500
	8.0	1800	176.05*	40000	2.4	**K**	**97**	**DRS**	**90M4**	170	499
	9.1	1560	153.21*	40000	2.7	**KF**	**97**	**DRS**	**90M4**	190	500
	10.0	1430	140.28	40000	3.0	**KA**	**97**	**DRS**	**90M4**	150	501
	11	1260	123.93*	40000	3.4	**KAF**	**97**	**DRS**	**90M4**	175	500
	6.3	2280	147.32*	27800	1.20	**K**	**87**	**DRS**	**100M6**	115	494
	7.3	1960	126.91*	28100	1.35	**KF**	**87**	**DRS**	**100M6**	125	495
	8.0	1790	115.82	28200	1.50	**KA**	**87**	**DRS**	**100M6**	105	496
	9.0	1590	102.71*	28400	1.70	**KAF**	**87**	**DRS**	**100M6**	115	495

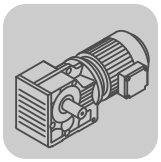


K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**8.0**	1780	174.19	28300	1.50						
	8.5	1680	164.34*	28300	1.60	**K**	**87**	**DRS**	**90M4**	110	494
	9.5	1500	147.32*	28500	1.80	**KF**	**87**	**DRS**	**90M4**	120	495
	11	1290	126.91*	28600	2.1	**KA**	**87**	**DRS**	**90M4**	96	496
	12	1180	115.82	28700	2.3	**KAF**	**87**	**DRS**	**90M4**	110	495
	14	1050	102.71*	28800	2.6						
	16	880	86.34	28800	3.1						
	8.2	1750	113.56	13700	0.90	**K**	**77**	**DRS**	**100M6**	80	489
	9.5	1500	97.05	15700	1.05	**KF**	**77**	**DRS**	**100M6**	88	490
	10	1370	88.97	16500	1.15	**KA**	**77**	**DRS**	**100M6**	72	491
	12	1200	78.07	17400	1.30	**KAF**	**77**	**DRS**	**100M6**	80	490
	10	1380	135.28	16500	1.10	**K**	**77**	**DRS**	**90M4**	72	489
	11	1310	128.52	16800	1.20	**KF**	**77**	**DRS**	**90M4**	81	490
	12	1160	113.56	17600	1.35	**KA**	**77**	**DRS**	**90M4**	65	491
	14	990	97.05	18300	1.55	**KAF**	**77**	**DRS**	**90M4**	73	490
	16	910	88.97	18600	1.70						
	18	795	78.07	19000	1.95						
	19	755	73.99	19100	2.0	**K**	**77**	**DRS**	**90M4**	72	489
	22	660	64.75	19400	2.3	**KF**	**77**	**DRS**	**90M4**	81	490
	24	595	58.34	19500	2.6	**KA**	**77**	**DRS**	**90M4**	65	491
	27	520	51.18	19700	3.0	**KAF**	**77**	**DRS**	**90M4**	73	490
	31	460	45.16	19800	3.4						
	35	405	40.04	19800	3.8						
	16	920	90.04	9290	0.90						
	18	780	76.37	10600	1.05	**K**	**67**	**DRS**	**90M4**	48	484
	20	705	68.95	11200	1.15	**KF**	**67**	**DRS**	**90M4**	53	485
	23	620	60.66	11800	1.30	**KA**	**67**	**DRS**	**90M4**	45	486
	24	585	57.28	12000	1.40	**KAF**	**67**	**DRS**	**90M4**	51	485
	29	495	48.77	12400	1.65						
	32	450	44.32	12600	1.80						
	36	390	38.39	12800	2.0	**K**	**67**	**DRS**	**90M4**	48	484
	39	360	35.62	12900	2.2	**KF**	**67**	**DRS**	**90M4**	53	485
	46	305	30.22	13000	2.6	**KA**	**67**	**DRS**	**90M4**	45	486
	51	275	27.28	13000	2.9	**KAF**	**67**	**DRS**	**90M4**	51	485
	58	245	24.00	13000	3.3						
	23	620	60.81*	7450	0.95	**K**	**57**	**DRS**	**90M4**	42	479
	24	585	57.42*	7730	1.00	**KF**	**57**	**DRS**	**90M4**	47	480
	29	500	48.89	8420	1.20	**KA**	**57**	**DRS**	**90M4**	40	481
	32	450	44.43	8640	1.30	**KAF**	**57**	**DRS**	**90M4**	45	480
	36	390	38.49	8910	1.50						
	39	365	35.70	9030	1.65						
	46	305	30.28	9200	1.95	**K**	**57**	**DRS**	**90M4**	42	479
	51	275	27.34	9020	2.2	**KF**	**57**	**DRS**	**90M4**	47	480
	58	245	24.05	8790	2.4	**KA**	**57**	**DRS**	**90M4**	40	481
	62	230	22.71	8680	2.6	**KAF**	**57**	**DRS**	**90M4**	45	480
	72	198	19.34	8380	2.9						
	35	405	39.61	5850	1.00	**K**	**47**	**DRS**	**90M4**	36	474
	40	360	35.39	6360	1.10	**KF**	**47**	**DRS**	**90M4**	39	475
	45	320	31.30	6310	1.25	**KA**	**47**	**DRS**	**90M4**	35	476
						KAF	**47**	**DRS**	**90M4**	38	475
	48	300	29.32	6280	1.35						
	54	265	25.91	6200	1.50						
	64	220	21.81	6060	1.80						
	72	200	19.58	5960	2.0	**K**	**47**	**DRS**	**90M4**	36	474
	83	172	16.86	5800	2.2	**KF**	**47**	**DRS**	**90M4**	39	475
	88	162	15.86	5740	2.3	**KA**	**47**	**DRS**	**90M4**	35	476
	103	140	13.65	5570	2.6	**KAF**	**47**	**DRS**	**90M4**	38	475
	115	125	12.19	5440	2.8						
	119	120	11.77	5340	2.3						



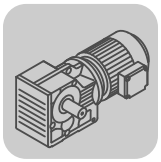
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**60**	235	23.36	2860	0.80						
	69	205	20.19	2910	0.90						
	82	176	17.15	2940	1.05						
	91	157	15.31	2950	1.10						
	107	134	13.08	2930	1.25						
	115	124	12.14	2920	1.30	**K**	**37**	**DRS**	**90M4**	29	469
	133	107	10.49	2880	1.50	**KF**	**37**	**DRS**	**90M4**	31	470
	157	91	8.91	2820	1.75	**KA**	**37**	**DRS**	**90M4**	29	471
	176	81	7.96	2780	1.90	**KAF**	**37**	**DRS**	**90M4**	30	470
	206	70	6.80	2700	2.2						
	220	65	6.37	2670	2.2						
	261	55	5.36	2580	2.6						
	352	41	3.98	2420	3.1						
2.2	**0.32**	58100	4370	190000	0.85	**K**	**187R97**	**DRS**	**90L4**	1780	523
	0.50	36600	2818	190000	1.35	**KH**	**187R97**	**DRS**	**90L4**	1710	523
	0.39	49300	3609	190000	1.00						
	0.46	41800	3062	190000	1.20						
	0.56	34200	2519	190000	1.45						
	0.62	30600	2268	190000	1.65	**K**	**187R97**	**DRS**	**90L4**	1770	523
	0.68	27600	2054	190000	1.80	**KH**	**187R97**	**DRS**	**90L4**	1710	523
	0.77	24300	1821	190000	2.0						
	0.87	21600	1605	190000	2.3						
	0.51	36900	2755	150000	0.85	**K**	**167R97**	**DRS**	**90L4**	1190	523
	0.62	29700	2263	150000	1.10	**KH**	**167R97**	**DRS**	**90L4**	1160	523
	0.64	29800	2182	150000	1.05						
	0.82	23200	1704	150000	1.40						
	0.99	19200	1408	150000	1.65	**K**	**167R97**	**DRS**	**90L4**	1190	523
	1.1	17600	1296	150000	1.80	**KH**	**167R97**	**DRS**	**90L4**	1150	523
	1.3	14700	1101	150000	2.2						
	1.5	12700	944	150000	2.5						
	0.84	22600	1659	109500	0.80						
	1.0	18500	1365	111900	0.95						
	1.1	16600	1229	112900	1.10	**K**	**157R97**	**DRS**	**90L4**	800	523
	1.3	14700	1093	113700	1.20	**KF**	**157R97**	**DRS**	**90L4**	880	523
	1.5	12700	942	114400	1.40	**KA**	**157R97**	**DRS**	**90L4**	760	523
	1.6	11400	854	114900	1.55	**KAF**	**157R97**	**DRS**	**90L4**	820	523
	1.8	9950	756	115300	1.80						
	2.6	7250	536	81700	1.80						
	3.0	6340	473	82000	2.0	**K**	**127R87**	**DRS**	**90L4**	500	523
	3.4	5710	418	82100	2.3	**KF**	**127R87**	**DRS**	**90L4**	550	523
	3.8	5010	367	82300	2.6	**KA**	**127R87**	**DRS**	**90L4**	475	523
	4.2	4490	330	82400	2.9	**KAF**	**127R87**	**DRS**	**90L4**	510	523
	1.4	14100	1025	77600	0.90						
	1.6	12400	899	79500	1.05						
	1.8	10800	790	80300	1.20	**K**	**127R77**	**DRS**	**90L4**	485	523
	2.0	9710	704	80800	1.35	**KF**	**127R77**	**DRS**	**90L4**	530	523
	2.3	8380	610	81300	1.55	**KA**	**127R77**	**DRS**	**90L4**	455	523
	2.6	7560	549	81600	1.70	**KAF**	**127R77**	**DRS**	**90L4**	495	523
	2.9	6530	477	81900	2.00						
	3.4	5760	418	82100	2.3						
	2.3	8450	615	65000	0.95						
	2.7	7160	522	65000	1.10						
	3.0	6310	461	65000	1.25	**K**	**107R77**	**DRS**	**90L4**	325	523
	3.4	5580	408	65000	1.45	**KF**	**107R77**	**DRS**	**90L4**	335	523
	3.8	5010	364	65000	1.60	**KA**	**107R77**	**DRS**	**90L4**	295	523
	4.4	4380	318	65000	1.85	**KAF**	**107R77**	**DRS**	**90L4**	320	523
	4.9	3940	286	65000	2.0						
	5.6	3450	251	65000	2.3						
	3.7	5290	382	39600	0.80						
	4.1	4710	342	40000	0.90	**K**	**97R57**	**DRS**	**90L4**	195	523
	4.6	4270	305	40000	1.00	**KF**	**97R57**	**DRS**	**90L4**	215	523
	5.4	3600	258	40000	1.20	**KA**	**97R57**	**DRS**	**90L4**	175	523
	6.0	3240	232	40000	1.30	**KAF**	**97R57**	**DRS**	**90L4**	200	523
	7.0	2780	199	40000	1.55						
	6.2	3370	153.21*	40000	1.30	**K**	**97**	**DRS**	**112M6**	190	499
	6.8	3080	140.28	40000	1.40	**KF**	**97**	**DRS**	**112M6**	210	500
	7.7	2720	123.93*	40000	1.60	**KA**	**97**	**DRS**	**112M6**	170	501
						KAF	**97**	**DRS**	**112M6**	195	500



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2						**K**	**97**	**DRS**	**112M6**	190	499
	9.1	2310	105.13	40000	1.85	**KF**	**97**	**DRS**	**112M6**	210	500
						KA	**97**	**DRS**	**112M6**	170	501
						KAF	**97**	**DRS**	**112M6**	195	500
	8.0	2640	176.05*	40000	1.65	**K**	**97**	**DRS**	**90L4**	170	499
	9.1	2290	153.21*	40000	1.85	**KF**	**97**	**DRS**	**90L4**	190	500
	10.0	2100	140.28	40000	2.0	**KA**	**97**	**DRS**	**90L4**	150	501
	11	1850	123.93*	40000	2.3	**KAF**	**97**	**DRS**	**90L4**	175	500
						K	**97**	**DRS**	**90L4**	170	499
	13	1570	105.13	40000	2.7	**KF**	**97**	**DRS**	**90L4**	190	500
	14	1450	96.80	40000	3.0	**KA**	**97**	**DRS**	**90L4**	150	501
						KAF	**97**	**DRS**	**90L4**	175	500
	9.5	2210	147.32*	27800	1.20	**K**	**87**	**DRS**	**90L4**	110	494
	11	1900	126.91*	28100	1.40	**KF**	**87**	**DRS**	**90L4**	120	495
	12	1730	115.82	28300	1.55	**KA**	**87**	**DRS**	**90L4**	99	496
						KAF	**87**	**DRS**	**90L4**	110	495
	14	1540	102.71*	28400	1.75						
	16	1290	86.34	28600	2.1	**K**	**87**	**DRS**	**90L4**	110	494
	18	1190	79.34	28700	2.3	**KF**	**87**	**DRS**	**90L4**	120	495
	20	1050	70.46	28800	2.6	**KA**	**87**	**DRS**	**90L4**	99	496
	22	940	63.00*	28800	2.9	**KAF**	**87**	**DRS**	**90L4**	110	495
	12	1700	113.56	14200	0.90						
	14	1450	97.05	16000	1.05	**K**	**77**	**DRS**	**90L4**	75	489
	16	1330	88.97	16700	1.15	**KF**	**77**	**DRS**	**90L4**	83	490
	18	1170	78.07	17600	1.30	**KA**	**77**	**DRS**	**90L4**	68	491
	19	1110	73.99	17900	1.40	**KAF**	**77**	**DRS**	**90L4**	75	490
	22	970	64.75	18400	1.60						
	24	870	58.34	18800	1.75						
	27	765	51.18	19100	2.0						
	31	675	45.16	19300	2.3	**K**	**77**	**DRS**	**90L4**	75	489
	35	600	40.04	19500	2.6	**KF**	**77**	**DRS**	**90L4**	83	490
	40	525	35.20	19600	2.9	**KA**	**77**	**DRS**	**90L4**	68	491
	45	460	30.89	19800	3.3	**KAF**	**77**	**DRS**	**90L4**	75	490
	48	435	29.27	19800	3.5						
	55	380	25.62	19900	4.0						
	23	910	60.66	9420	0.90						
	24	850	57.28	9940	0.95						
	29	730	48.77	11000	1.10	**K**	**67**	**DRS**	**90L4**	50	484
	32	665	44.32	11500	1.25	**KF**	**67**	**DRS**	**90L4**	56	485
	36	575	38.39	12000	1.40	**KA**	**67**	**DRS**	**90L4**	47	486
	39	530	35.62	12200	1.55	**KAF**	**67**	**DRS**	**90L4**	53	485
	46	450	30.22	12600	1.80						
	51	405	27.28	12800	2.0						
	58	360	24.00	12900	2.2						
	62	340	22.66	13000	2.3						
	73	285	19.30	13000	2.6						
	80	260	17.54	13000	2.8						
	92	225	15.19	13000	3.1	**K**	**67**	**DRS**	**90L4**	50	484
	106	198	13.22	13000	3.4	**KF**	**67**	**DRS**	**90L4**	56	485
	112	187	12.48	13000	2.8	**KA**	**67**	**DRS**	**90L4**	47	486
	132	160	10.63	13000	3.1	**KAF**	**67**	**DRS**	**90L4**	53	485
	145	145	9.66	13000	3.3						
	167	126	8.37	13000	3.5						
	192	109	7.28	12800	3.8						
	269	78	5.20	11700	4.5						
	32	665	44.43	4450	0.90	**K**	**57**	**DRS**	**90L4**	44	479
	36	575	38.49	7820	1.05	**KF**	**57**	**DRS**	**90L4**	49	480
	39	535	35.70	8140	1.10	**KA**	**57**	**DRS**	**90L4**	42	481
	46	450	30.28	8260	1.30	**KAF**	**57**	**DRS**	**90L4**	48	480
	51	410	27.34	8170	1.45						
	58	360	24.05	8040	1.65						
	62	340	22.71	7980	1.75						
	72	290	19.34	7770	2.00	**K**	**57**	**DRS**	**90L4**	44	479
	80	260	17.57	7640	2.1	**KF**	**57**	**DRS**	**90L4**	49	480
	92	225	15.22	7440	2.3	**KA**	**57**	**DRS**	**90L4**	42	481
	106	199	13.25	7230	2.6	**KAF**	**57**	**DRS**	**90L4**	48	480
	117	179	11.92	6900	2.3						
	124	169	11.26	6820	2.5						

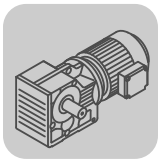
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2	**54**	385	25.91	5250	1.05	**K**	**47**	**DRS**	**90L4**	38	474
	64	325	21.81	5260	1.20	**KF**	**47**	**DRS**	**90L4**	42	475
	72	290	19.58	5240	1.35	**KA**	**47**	**DRS**	**90L4**	38	476
						KAF	**47**	**DRS**	**90L4**	40	475
	83	250	16.86	5190	1.50						
	88	235	15.86	5160	1.60						
	103	200	13.65	5080	1.75	**K**	**47**	**DRS**	**90L4**	38	474
	115	183	12.19	5000	1.90	**KF**	**47**	**DRS**	**90L4**	42	475
	119	177	11.77	4890	1.60	**KA**	**47**	**DRS**	**90L4**	38	476
	133	158	10.56	4810	1.75	**KAF**	**47**	**DRS**	**90L4**	40	475
	154	136	9.10	4700	2.0						
	107	196	13.08	2360	0.85						
	133	157	10.49	2430	1.00						
	157	134	8.91	2440	1.20	**K**	**37**	**DRS**	**90L4**	31	469
	176	119	7.96	2430	1.30	**KF**	**37**	**DRS**	**90L4**	34	470
	206	102	6.80	2410	1.45	**KA**	**37**	**DRS**	**90L4**	31	471
	220	96	6.37	2400	1.50	**KAF**	**37**	**DRS**	**90L4**	33	470
	261	80	5.36	2350	1.75						
	352	60	3.98	2250	2.1						
3.0	**0.50**	50800	2818	190000	1.00	**K**	**187R97**	**DRS**	**100M4**	1780	523
						KH	**187R97**	**DRS**	**100M4**	1710	523
	0.46	57400	3062	190000	0.85						
	0.56	47000	2519	190000	1.05						
	0.62	42200	2268	190000	1.20						
	0.68	38100	2054	190000	1.30	**K**	**187R97**	**DRS**	**100M4**	1780	523
	0.77	33600	1821	190000	1.50	**KH**	**187R97**	**DRS**	**100M4**	1710	523
	0.87	29700	1605	190000	1.70						
	1.0	25400	1395	190000	1.95						
	1.2	22000	1196	190000	2.3						
	0.82	31900	1704	150000	1.00						
	0.99	26400	1408	150000	1.20						
	1.1	24200	1296	150000	1.30	**K**	**167R97**	**DRS**	**100M4**	1200	523
	1.3	20300	1101	150000	1.55	**KH**	**167R97**	**DRS**	**100M4**	1160	523
	1.5	17500	944	150000	1.85						
	1.7	15400	843	150000	2.1						
	1.8	13900	757	150000	2.3						
	1.1	22800	1229	109300	0.80						
	1.3	20300	1093	110900	0.90						
	1.5	17500	942	112400	1.05	**K**	**157R97**	**DRS**	**100M4**	800	523
	1.6	15800	854	113200	1.15	**KF**	**157R97**	**DRS**	**100M4**	880	523
	1.8	13800	756	114000	1.30	**KA**	**157R97**	**DRS**	**100M4**	770	523
	2.5	10400	567	115200	1.70	**KAF**	**157R97**	**DRS**	**100M4**	830	523
	2.8	9310	504	115500	1.95						
	2.6	9970	536	80700	1.30						
	3.0	8750	473	81200	1.50	**K**	**127R87**	**DRS**	**100M4**	510	523
	3.4	7860	418	81500	1.65	**KF**	**127R87**	**DRS**	**100M4**	550	523
	3.8	6880	367	81800	1.90	**KA**	**127R87**	**DRS**	**100M4**	480	523
	4.2	6170	330	82000	2.1	**KAF**	**127R87**	**DRS**	**100M4**	520	523
	4.9	5300	287	82200	2.4						
	1.8	14800	790	76300	0.90						
	2.0	13300	704	79000	1.00	**K**	**127R77**	**DRS**	**100M4**	490	523
	2.3	11400	610	80000	1.15	**KF**	**127R77**	**DRS**	**100M4**	530	523
	2.6	10300	549	80500	1.25	**KA**	**127R77**	**DRS**	**100M4**	460	523
	2.9	8960	477	81100	1.45	**KAF**	**127R77**	**DRS**	**100M4**	500	523
	3.4	7890	418	81500	1.65						
	3.0	8650	461	65000	0.90						
	3.4	7660	408	65000	1.05						
	3.8	6860	364	65000	1.15						
	4.4	6000	318	65000	1.35						
	4.9	5400	286	65000	1.50	**K**	**107R77**	**DRS**	**100M4**	330	523
	5.6	4730	251	65000	1.70	**KF**	**107R77**	**DRS**	**100M4**	340	523
	6.3	4160	222	65000	1.90	**KA**	**107R77**	**DRS**	**100M4**	300	523
	7.1	3690	196	65000	2.2	**KAF**	**107R77**	**DRS**	**100M4**	325	523
	8.1	3300	174	65000	2.2						
	9.1	2920	154	65000	2.5						
	10	2650	140	65000	2.7						



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
3.0	**5.4**	4930	258	40000	0.85	**K**	**97R57**	**DRS**	**100M4**	200	523
	6.0	4430	232	40000	0.95	**KF**	**97R57**	**DRS**	**100M4**	220	523
	7.0	3800	199	40000	1.15	**KA**	**97R57**	**DRS**	**100M4**	180	523
						KAF	**97R57**	**DRS**	**100M4**	205	523
	6.6	4340	143.47*	65000	1.85	**K**	**107**	**DRS**	**112M6**	305	504
	7.8	3680	121.46	65000	2.2	**KF**	**107**	**DRS**	**112M6**	315	505
	8.4	3400	112.41*	65000	2.4	**KA**	**107**	**DRS**	**112M6**	275	506
	9.4	3050	100.75	65000	2.6	**KAF**	**107**	**DRS**	**112M6**	300	505
						K	**107**	**DRS**	**100M4**	290	504
	9.8	2930	143.47*	65000	2.7	**KF**	**107**	**DRS**	**100M4**	300	505
	12	2480	121.46	65000	3.2	**KA**	**107**	**DRS**	**100M4**	265	506
						KAF	**107**	**DRS**	**100M4**	285	505
						K	**97**	**DRS**	**112M6**	190	499
	7.6	3750	123.93*	40000	1.15	**KF**	**97**	**DRS**	**112M6**	210	500
						KA	**97**	**DRS**	**112M6**	170	501
						KAF	**97**	**DRS**	**112M6**	195	500
	9.0	3180	105.13	40000	1.35	**K**	**97**	**DRS**	**112M6**	190	499
	9.8	2930	96.80	40000	1.45	**KF**	**97**	**DRS**	**112M6**	210	500
	11	2620	86.52	40000	1.65	**KA**	**97**	**DRS**	**112M6**	170	501
						KAF	**97**	**DRS**	**112M6**	195	500
	8.0	3600	176.05*	40000	1.20	**K**	**97**	**DRS**	**100M4**	175	499
	9.1	3130	153.21*	40000	1.35	**KF**	**97**	**DRS**	**100M4**	195	500
	10.0	2870	140.28	40000	1.50	**KA**	**97**	**DRS**	**100M4**	155	501
	11	2530	123.93*	40000	1.70	**KAF**	**97**	**DRS**	**100M4**	180	500
	13	2150	105.13	40000	2.0						
	14	1980	96.80	40000	2.2						
	16	1770	86.52	40000	2.4	**K**	**97**	**DRS**	**100M4**	175	499
	18	1590	77.89*	40000	2.7	**KF**	**97**	**DRS**	**100M4**	195	500
	20	1440	70.54	40000	3.0	**KA**	**97**	**DRS**	**100M4**	155	501
	22	1270	62.55	40000	3.4	**KAF**	**97**	**DRS**	**100M4**	180	500
	25	1150	56.55	40000	3.7						
	9.5	3010	147.32*	26900	0.90	**K**	**87**	**DRS**	**100M4**	115	494
	11	2590	126.91*	27400	1.05	**KF**	**87**	**DRS**	**100M4**	125	495
	12	2360	115.82	27700	1.15	**KA**	**87**	**DRS**	**100M4**	105	496
	14	2100	102.71*	28000	1.30	**KAF**	**87**	**DRS**	**100M4**	115	495
	16	1760	86.34	28300	1.55						
	18	1620	79.34	28400	1.65						
	20	1440	70.46	28500	1.85	**K**	**87**	**DRS**	**100M4**	115	494
	22	1280	63.00*	28600	2.1	**KF**	**87**	**DRS**	**100M4**	125	495
	25	1150	56.64	28700	2.3	**KA**	**87**	**DRS**	**100M4**	105	496
	28	1000	49.16	28800	2.7	**KAF**	**87**	**DRS**	**100M4**	115	495
	32	900	44.02	28800	2.9						
	38	745	36.52*	28400	3.4						
	16	1820	88.97	13100	0.85						
	18	1590	78.07	15000	0.95	**K**	**77**	**DRS**	**100M4**	80	489
	19	1510	73.99	15600	1.00	**KF**	**77**	**DRS**	**100M4**	88	490
	22	1320	64.75	16800	1.15	**KA**	**77**	**DRS**	**100M4**	72	491
	24	1190	58.34	17500	1.30	**KAF**	**77**	**DRS**	**100M4**	80	490
	27	1040	51.18	18100	1.50						
	31	920	45.16	18600	1.70	**K**	**77**	**DRS**	**100M4**	80	489
	35	810	40.04	18900	1.90	**KF**	**77**	**DRS**	**100M4**	88	490
	40	720	35.20	19200	2.2	**KA**	**77**	**DRS**	**100M4**	72	491
	45	630	30.89	19400	2.4	**KAF**	**77**	**DRS**	**100M4**	80	490
	32	900	44.32	9450	0.90						
	36	785	38.39	10600	1.00	**K**	**67**	**DRS**	**100M4**	55	484
	39	725	35.62	11100	1.15	**KF**	**67**	**DRS**	**100M4**	61	485
	46	615	30.22	11800	1.35	**KA**	**67**	**DRS**	**100M4**	52	486
	51	555	27.28	12100	1.45	**KAF**	**67**	**DRS**	**100M4**	58	485
	58	490	24.00	12400	1.65						
	62	460	22.66	12600	1.70						
	73	390	19.30	12800	1.95						
	80	355	17.54	13000	2.1	**K**	**67**	**DRS**	**100M4**	55	484
	92	310	15.19	13000	2.2	**KF**	**67**	**DRS**	**100M4**	61	485
	106	270	13.22	13000	2.5	**KA**	**67**	**DRS**	**100M4**	52	486
	112	255	12.48	13000	2.1	**KAF**	**67**	**DRS**	**100M4**	58	485
	132	215	10.63	13000	2.3						
	145	198	9.66	13000	2.4						

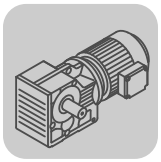
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
3.0	**46**	615	30.28	7180	0.95	**K**	**57**	**DRS**	**100M4**	49	479
	51	555	27.34	7190	1.05	**KF**	**57**	**DRS**	**100M4**	54	480
	58	490	24.05	7180	1.20	**KA**	**57**	**DRS**	**100M4**	47	481
						KAF	**57**	**DRS**	**100M4**	53	480
	62	460	22.71	7160	1.30						
	72	395	19.34	7080	1.45						
	80	355	17.57	7020	1.55						
	92	310	15.22	6890	1.70						
	106	270	13.25	6750	1.90	**K**	**57**	**DRS**	**100M4**	49	479
	117	240	11.92	6420	1.70	**KF**	**57**	**DRS**	**100M4**	54	480
	124	230	11.26	6360	1.80	**KA**	**57**	**DRS**	**100M4**	47	481
	146	196	9.59	6200	2.1	**KAF**	**57**	**DRS**	**100M4**	53	480
	161	178	8.71	6090	2.2						
	186	154	7.55	5920	2.4						
	213	134	6.57	5750	2.6						
	298	96	4.69	5320	3.1						
	72	400	19.58	4430	1.00	**K**	**47**	**DRS**	**100M4**	43	474
	83	345	16.86	4490	1.10	**KF**	**47**	**DRS**	**100M4**	47	475
	88	320	15.86	4500	1.15	**KA**	**47**	**DRS**	**100M4**	42	476
						KAF	**47**	**DRS**	**100M4**	45	475
	103	275	13.65	4510	1.30						
	115	245	12.19	4490	1.40						
	119	240	11.77	4370	1.15						
	133	215	10.56	4350	1.30	**K**	**47**	**DRS**	**100M4**	43	474
	154	186	9.10	4290	1.50	**KF**	**47**	**DRS**	**100M4**	47	475
	164	175	8.56	4270	1.55	**KA**	**47**	**DRS**	**100M4**	42	476
	190	151	7.36	4190	1.65	**KAF**	**47**	**DRS**	**100M4**	45	475
	213	135	6.58	4120	1.80						
	241	119	5.81	4030	1.95						
	302	95	4.64	3860	2.2						
	157	182	8.91	2000	0.90						
	176	163	7.96	2040	0.95	**K**	**37**	**DRS**	**100M4**	37	469
	206	139	6.80	2080	1.10	**KF**	**37**	**DRS**	**100M4**	39	470
	220	130	6.37	2080	1.10	**KA**	**37**	**DRS**	**100M4**	36	471
	261	110	5.36	2090	1.30	**KAF**	**37**	**DRS**	**100M4**	38	470
	352	81	3.98	2050	1.55						
4.0	**1.7**	19700	835	190000	2.5	**K**	**187R107**	**DRS**	**100LC4**	1830	523
	2.8	12400	520	190000	4.0	**KH**	**187R107**	**DRS**	**100LC4**	1760	523
	0.57	61000	2519	190000	0.80						
	0.64	54800	2268	190000	0.90						
	0.70	49500	2054	190000	1.00						
	0.79	43700	1821	190000	1.15						
	0.90	38700	1605	190000	1.30	**K**	**187R97**	**DRS**	**100LC4**	1780	523
	1.0	33200	1395	190000	1.50	**KH**	**187R97**	**DRS**	**100LC4**	1720	523
	1.2	28700	1196	190000	1.75						
	1.4	25100	1046	190000	2.00						
	1.5	22600	945	190000	2.2						
	1.0	34200	1408	150000	0.95						
	1.1	31400	1296	150000	1.00						
	1.3	26400	1101	150000	1.20						
	1.5	22700	944	150000	1.40	**K**	**167R97**	**DRS**	**100LC4**	1200	523
	1.7	20000	843	150000	1.60	**KH**	**167R97**	**DRS**	**100LC4**	1160	523
	1.9	18100	757	150000	1.75						
	2.3	15100	632	150000	2.1						
	1.7	20500	854	110800	0.85						
	1.9	18000	756	112200	1.00	**K**	**157R97**	**DRS**	**100LC4**	810	523
	2.6	13600	567	114100	1.30	**KF**	**157R97**	**DRS**	**100LC4**	890	523
	2.9	12100	504	114600	1.50	**KA**	**157R97**	**DRS**	**100LC4**	770	523
	3.3	10300	434	115200	1.75	**KAF**	**157R97**	**DRS**	**100LC4**	830	523
	2.7	12900	536	79200	1.00						
	3.0	11300	473	80000	1.15						
	3.5	10200	418	80600	1.25	**K**	**127R87**	**DRS**	**100LC4**	510	523
	3.9	8930	367	81100	1.45	**KF**	**127R87**	**DRS**	**100LC4**	560	523
	4.4	8010	330	81500	1.60	**KA**	**127R87**	**DRS**	**100LC4**	485	523
	5.0	6890	287	81800	1.90	**KAF**	**127R87**	**DRS**	**100LC4**	520	523
	5.7	6090	253	82000	2.1						



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
4.0	**2.4**	14900	610	76200	0.85	**K**	**127R77**	**DRS**	**100LC4**	495	523
	2.6	13400	549	78900	0.95	**KF**	**127R77**	**DRS**	**100LC4**	540	523
	3.0	11600	477	79900	1.10	**KA**	**127R77**	**DRS**	**100LC4**	465	523
	3.4	10200	418	80600	1.25	**KAF**	**127R77**	**DRS**	**100LC4**	500	523
	4.0	8890	364	65000	0.90						
	4.6	7770	318	65000	1.05						
	5.0	6990	286	65000	1.15						
	5.8	6130	251	65000	1.30	**K**	**107R77**	**DRS**	**100LC4**	335	523
	6.5	5400	222	65000	1.50	**KF**	**107R77**	**DRS**	**100LC4**	345	523
	7.4	4780	196	65000	1.65	**KA**	**107R77**	**DRS**	**100LC4**	305	523
	8.3	4270	174	65000	1.70	**KAF**	**107R77**	**DRS**	**100LC4**	330	523
	9.4	3780	154	65000	1.90						
	10	3430	140	65000	2.1						
						K	**97R57**	**DRS**	**100LC4**	205	523
	7.2	4930	199	40000	0.85	**KF**	**97R57**	**DRS**	**100LC4**	225	523
						KA	**97R57**	**DRS**	**100LC4**	185	523
						KAF	**97R57**	**DRS**	**100LC4**	210	523
	6.4	5930	146.07	82100	2.2	**K**	**127**	**DRS**	**132S6**	470	509
	6.9	5530	136.14	82200	2.4	**KF**	**127**	**DRS**	**132S6**	510	510
	7.7	4970	122.48	82300	2.6	**KA**	**127**	**DRS**	**132S6**	440	511
	8.5	4470	110.18	82400	2.9	**KAF**	**127**	**DRS**	**132S6**	475	510
	6.6	5830	143.47*	65000	1.35						
	7.7	4930	121.46	65000	1.60	**K**	**107**	**DRS**	**132S6**	305	504
	8.4	4560	112.41*	65000	1.75	**KF**	**107**	**DRS**	**132S6**	320	505
	9.3	4090	100.75	65000	1.95	**KA**	**107**	**DRS**	**132S6**	280	506
	10	3690	90.96*	65000	2.2	**KAF**	**107**	**DRS**	**132S6**	305	505
	10	3790	143.47*	65000	2.1						
	12	3210	121.46	65000	2.5						
	13	2970	112.41*	65000	2.7	**K**	**107**	**DRS**	**100LC4**	295	504
	14	2660	100.75	65000	3.0	**KF**	**107**	**DRS**	**100LC4**	310	505
	16	2400	90.96*	65000	3.3	**KA**	**107**	**DRS**	**100LC4**	270	506
	17	2180	82.61	65000	3.7	**KAF**	**107**	**DRS**	**100LC4**	290	505
	20	1930	73.30	65000	4.1						
	9.4	4050	153.21*	40000	1.05	**K**	**97**	**DRS**	**100LC4**	180	499
	10	3700	140.28	40000	1.15	**KF**	**97**	**DRS**	**100LC4**	200	500
	12	3270	123.93*	40000	1.30	**KA**	**97**	**DRS**	**100LC4**	160	501
						KAF	**97**	**DRS**	**100LC4**	185	500
	14	2770	105.13	40000	1.55						
	15	2550	96.80	40000	1.70	**K**	**97**	**DRS**	**100LC4**	180	499
	17	2280	86.52	40000	1.90	**KF**	**97**	**DRS**	**100LC4**	200	500
	19	2050	77.89*	40000	2.1	**KA**	**97**	**DRS**	**100LC4**	160	501
	20	1860	70.54	40000	2.3	**KAF**	**97**	**DRS**	**100LC4**	185	500
	12	3060	115.82	26800	0.90	**K**	**87**	**DRS**	**100LC4**	120	494
	14	2710	102.71*	27300	1.00	**KF**	**87**	**DRS**	**100LC4**	130	495
	17	2280	86.34	27800	1.20	**KA**	**87**	**DRS**	**100LC4**	110	496
	18	2090	79.34	28000	1.30	**KAF**	**87**	**DRS**	**100LC4**	120	495
	21	1860	70.46	28200	1.45						
	23	1660	63.00*	28300	1.60	**K**	**87**	**DRS**	**100LC4**	120	494
	26	1490	56.64	28500	1.80	**KF**	**87**	**DRS**	**100LC4**	130	495
	29	1290	49.16	28600	2.1	**KA**	**87**	**DRS**	**100LC4**	110	496
	33	1160	44.02	28200	2.2	**KAF**	**87**	**DRS**	**100LC4**	120	495
	40	960	36.52*	27200	2.6						
	22	1710	64.75	14100	0.90						
	25	1540	58.34	15400	1.00	**K**	**77**	**DRS**	**100LC4**	85	489
	28	1350	51.18	16600	1.15	**KF**	**77**	**DRS**	**100LC4**	93	490
	32	1190	45.16	17500	1.30	**KA**	**77**	**DRS**	**100LC4**	77	491
	36	1050	40.04	18100	1.45	**KAF**	**77**	**DRS**	**100LC4**	85	490
	38	1010	38.39	18300	1.50						
	41	930	35.20	18600	1.65						
	47	810	30.89	18900	1.90	**K**	**77**	**DRS**	**100LC4**	85	489
	49	770	29.27	19100	2.0	**KF**	**77**	**DRS**	**100LC4**	93	490
	56	675	25.62	19300	2.3	**KA**	**77**	**DRS**	**100LC4**	77	491
	63	610	23.08	19500	2.5	**KAF**	**77**	**DRS**	**100LC4**	85	490
	71	535	20.25	19600	2.8						
	48	795	30.22	10500	1.05	**K**	**67**	**DRS**	**100LC4**	60	484
	53	720	27.28	11100	1.15	**KF**	**67**	**DRS**	**100LC4**	66	485
	60	630	24.00	11700	1.25	**KA**	**67**	**DRS**	**100LC4**	57	486
	64	595	22.66	11900	1.30	**KAF**	**67**	**DRS**	**100LC4**	63	485

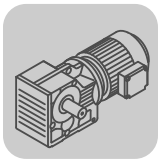
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
4.0	**75**	505	19.30	12400	1.50						
	82	460	17.54	12600	1.60						
	95	400	15.19	12800	1.75						
	109	345	13.22	13000	1.90	**K**	**67**	**DRS**	**100LC4**	60	484
	116	325	12.48	13000	1.60	**KF**	**67**	**DRS**	**100LC4**	66	485
	136	280	10.63	13000	1.80	**KA**	**67**	**DRS**	**100LC4**	57	486
	150	255	9.66	12800	1.90	**KAF**	**67**	**DRS**	**100LC4**	63	485
	173	220	8.37	12500	2.00						
	198	192	7.28	12100	2.2						
	278	138	5.20	11200	2.6						
	60	635	24.05	6130	0.95						
	64	600	22.71	6170	1.00						
	75	510	19.34	6220	1.10						
	82	460	17.57	6230	1.20						
	95	400	15.22	6200	1.35						
	109	350	13.25	6140	1.45	**K**	**57**	**DRS**	**100LC4**	54	479
	121	315	11.92	5800	1.30	**KF**	**57**	**DRS**	**100LC4**	59	480
	128	295	11.26	5780	1.40	**KA**	**57**	**DRS**	**100LC4**	52	481
	151	250	9.59	5690	1.60	**KAF**	**57**	**DRS**	**100LC4**	58	480
	166	230	8.71	5630	1.70						
	191	200	7.55	5510	1.85						
	220	174	6.57	5390	2.00						
	308	124	4.69	5050	2.4						
5.5	**0.79**	60600	1821	190000	0.80						
	0.90	53500	1605	190000	0.95						
	1.0	46100	1395	190000	1.10						
	1.2	39800	1196	190000	1.25	**K**	**187R97**	**DRS**	**132S4**	1800	523
	1.4	34800	1046	190000	1.45	**KH**	**187R97**	**DRS**	**132S4**	1730	523
	1.5	31300	945	190000	1.60						
	2.0	24500	738	190000	2.0						
	2.3	20600	621	190000	2.4						
	1.3	36600	1101	150000	0.85						
	1.5	31500	944	150000	1.00						
	1.7	27900	843	150000	1.15						
	1.9	25100	757	150000	1.25	**K**	**167R97**	**DRS**	**132S4**	1220	523
	2.3	21000	632	150000	1.50	**KH**	**167R97**	**DRS**	**132S4**	1180	523
	2.6	18400	561	150000	1.75						
	3.0	16000	481	150000	2.0						
	3.4	13900	423	150000	2.3						
	2.2	21700	661	110100	0.85						
	2.6	18800	567	111700	0.95	**K**	**157R97**	**DRS**	**132S4**	820	523
	2.9	16700	504	112800	1.05	**KF**	**157R97**	**DRS**	**132S4**	900	523
	3.3	14300	434	113800	1.25	**KA**	**157R97**	**DRS**	**132S4**	790	523
	3.8	12400	379	114500	1.45	**KAF**	**157R97**	**DRS**	**132S4**	850	523
	4.3	11000	333	115000	1.65						
	3.5	14100	418	77700	0.90						
	3.9	12300	367	79600	1.05						
	4.4	11000	330	80200	1.15						
	5.0	9540	287	80900	1.35	**K**	**127R87**	**DRS**	**132S4**	530	523
	5.7	8440	253	81300	1.55	**KF**	**127R87**	**DRS**	**132S4**	570	523
	6.8	7090	213	81800	1.85	**KA**	**127R87**	**DRS**	**132S4**	500	523
	7.2	6760	200	81800	1.75	**KAF**	**127R87**	**DRS**	**132S4**	540	523
	8.7	5590	166	82200	2.1						
	9.8	4930	147	82300	2.4						
	6.5	7450	222	65000	1.05						
	7.4	6600	196	65000	1.20	**K**	**107R77**	**DRS**	**132S4**	350	523
	8.3	5900	174	65000	1.20	**KF**	**107R77**	**DRS**	**132S4**	360	523
	9.4	5220	154	65000	1.40	**KA**	**107R77**	**DRS**	**132S4**	320	523
	10	4740	140	65000	1.50	**KAF**	**107R77**	**DRS**	**132S4**	345	523
	7.0	7440	136.14	81600	1.75	**K**	**127**	**DRS**	**160S6**	490	509
	7.8	6700	122.48	81900	1.95	**KF**	**127**	**DRS**	**160S6**	530	510
	8.7	6020	110.18	82100	2.2	**KA**	**127**	**DRS**	**160S6**	460	511
	11	4910	89.89	82300	2.6	**KAF**	**127**	**DRS**	**160S6**	500	510
	8.5	6140	112.41*	65000	1.30	**K**	**107**	**DRS**	**160S6**	335	504
	9.5	5510	100.75	65000	1.45	**KF**	**107**	**DRS**	**160S6**	350	505
	11	4970	90.96*	65000	1.60	**KA**	**107**	**DRS**	**160S6**	310	506
						KAF	**107**	**DRS**	**160S6**	330	505



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
5.5						**K**	**107**	**DRS**	**160S6**	335	504
	12	4510	82.61	65000	1.75	**KF**	**107**	**DRS**	**160S6**	350	505
						KA	**107**	**DRS**	**160S6**	310	506
						KAF	**107**	**DRS**	**160S6**	330	505
	10	5210	143.47*	65000	1.55						
	12	4410	121.46	65000	1.80	**K**	**107**	**DRS**	**132S4**	310	504
	13	4080	112.41*	65000	1.95	**KF**	**107**	**DRS**	**132S4**	320	505
	14	3660	100.75	65000	2.2	**KA**	**107**	**DRS**	**132S4**	280	506
	16	3300	90.96*	65000	2.4	**KAF**	**107**	**DRS**	**132S4**	305	505
	17	3000	82.61	65000	2.7						
	12	4500	123.93*	40000	0.95	**K**	**97**	**DRS**	**132S4**	195	499
	14	3820	105.13	40000	1.15	**KF**	**97**	**DRS**	**132S4**	215	500
	15	3510	96.80	40000	1.20	**KA**	**97**	**DRS**	**132S4**	175	501
	17	3140	86.52	40000	1.35	**KAF**	**97**	**DRS**	**132S4**	200	500
	19	2830	77.89*	40000	1.50						
	20	2560	70.54	40000	1.70	**K**	**97**	**DRS**	**132S4**	195	499
	23	2270	62.55	40000	1.90	**KF**	**97**	**DRS**	**132S4**	215	500
	26	2050	56.55	39700	2.1	**KA**	**97**	**DRS**	**132S4**	175	501
	30	1740	47.93*	38500	2.5	**KAF**	**97**	**DRS**	**132S4**	200	500
	17	3130	86.34	26700	0.85						
	18	2880	79.34	27000	0.95	**K**	**87**	**DRS**	**132S4**	135	494
	21	2560	70.46	27500	1.05	**KF**	**87**	**DRS**	**132S4**	145	495
	23	2280	63.00*	27400	1.20	**KA**	**87**	**DRS**	**132S4**	125	496
	26	2050	56.64	27200	1.30	**KAF**	**87**	**DRS**	**132S4**	135	495
	29	1780	49.16	26800	1.50						
	33	1600	44.02	26500	1.60	**K**	**87**	**DRS**	**132S4**	135	494
	40	1320	36.52*	25800	1.90	**KF**	**87**	**DRS**	**132S4**	145	495
	46	1140	31.39	25200	2.4	**KA**	**87**	**DRS**	**132S4**	125	496
	52	1010	27.88	24600	2.6	**KAF**	**87**	**DRS**	**132S4**	135	495
	32	1640	45.16	14700	0.95						
	36	1450	40.04	16000	1.05	**K**	**77**	**DRS**	**132S4**	100	489
	47	1120	30.89	17800	1.40	**KF**	**77**	**DRS**	**132S4**	110	490
	49	1060	29.27	18100	1.45	**KA**	**77**	**DRS**	**132S4**	93	491
	56	930	25.62	18600	1.65	**KAF**	**77**	**DRS**	**132S4**	100	490
	63	830	23.08	18900	1.85						
	71	735	20.25	19200	2.0						
	81	645	17.87	19400	2.2	**K**	**77**	**DRS**	**132S4**	100	489
	91	575	15.84	19200	2.4	**KF**	**77**	**DRS**	**132S4**	110	490
	107	490	13.52	18600	2.7	**KA**	**77**	**DRS**	**132S4**	93	491
	117	445	12.36	17900	2.2	**KAF**	**77**	**DRS**	**132S4**	100	490
	133	390	10.84	17400	2.5						
	60	870	24.00	9820	0.90						
	64	820	22.66	10300	0.95	**K**	**67**	**DRS**	**132S4**	75	484
	75	700	19.30	11300	1.10	**KF**	**67**	**DRS**	**132S4**	81	485
	82	635	17.54	11700	1.15	**KA**	**67**	**DRS**	**132S4**	73	486
	95	550	15.19	12200	1.25	**KAF**	**67**	**DRS**	**132S4**	78	485
	109	480	13.22	12500	1.40						
	116	450	12.48	12600	1.15						
	136	385	10.63	12400	1.30	**K**	**67**	**DRS**	**132S4**	75	484
	150	350	9.66	12200	1.35	**KF**	**67**	**DRS**	**132S4**	81	485
	173	300	8.37	11900	1.45	**KA**	**67**	**DRS**	**132S4**	73	486
	198	260	7.28	11600	1.60	**KAF**	**67**	**DRS**	**132S4**	78	485
	278	189	5.20	10800	1.85						
7.5	**1.7**	37700	835	190000	1.30	**K**	**187R107**	**DRS**	**132M4**	1860	523
	2.0	32800	729	190000	1.50	**KH**	**187R107**	**DRS**	**132M4**	1790	523
	2.3	27900	622	190000	1.80						
	1.2	54500	1196	190000	0.90						
	1.4	47700	1046	190000	1.05						
	1.5	43000	945	190000	1.15	**K**	**187R97**	**DRS**	**132M4**	1810	523
	2.0	33600	738	190000	1.50	**KH**	**187R97**	**DRS**	**132M4**	1740	523
	2.3	28200	621	190000	1.75						
	2.8	23900	527	190000	2.1						
	1.7	38300	843	150000	0.85						
	1.9	34400	757	150000	0.95						
	2.3	28800	632	150000	1.10						
	2.6	25300	561	150000	1.25	**K**	**167R97**	**DRS**	**132M4**	1230	523
	3.0	21900	481	150000	1.45	**KH**	**167R97**	**DRS**	**132M4**	1190	523
	3.4	19100	423	150000	1.65						
	3.9	16700	369	150000	1.90						

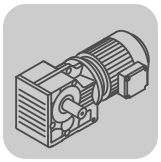
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**3.3**	19700	434	111300	0.90	**K**	**157R97**	**DRS**	**132M4**	830	523
	3.8	17100	379	112600	1.05	**KF**	**157R97**	**DRS**	**132M4**	910	523
	4.3	15100	333	113500	1.20	**KA**	**157R97**	**DRS**	**132M4**	800	523
	5.0	13100	291	114300	1.35	**KAF**	**157R97**	**DRS**	**132M4**	860	523
	4.4	15100	330	75700	0.85						
	5.0	13000	287	79100	1.00						
	5.7	11500	253	79900	1.10	**K**	**127R87**	**DRS**	**132M4**	540	523
	6.8	9720	213	80800	1.35	**KF**	**127R87**	**DRS**	**132M4**	580	523
	7.2	9260	200	81000	1.30	**KA**	**127R87**	**DRS**	**132M4**	510	523
	8.7	7660	166	81600	1.55	**KAF**	**127R87**	**DRS**	**132M4**	550	523
	9.8	6760	147	81800	1.75						
	5.8	12300	164.50	150000	2.6	**K**	**167**	**DRS**	**160M6**	1130	519
	7.1	10100	134.99	150000	3.2	**KH**	**167**	**DRS**	**160M6**	1090	520
	6.4	11200	150.41	114900	1.60						
	7.8	9170	122.39	115500	1.95	**K**	**157**	**DRS**	**160M6**	730	514
	9.5	7510	100.22	115900	2.4	**KF**	**157**	**DRS**	**160M6**	810	515
	10	6870	91.65	116000	2.6	**KA**	**157**	**DRS**	**160M6**	700	516
	12	5980	79.75	116200	3.0	**KAF**	**157**	**DRS**	**160M6**	750	515
	7.0	10200	136.14	80600	1.25	**K**	**127**	**DRS**	**160M6**	500	509
	7.8	9180	122.48	81000	1.40	**KF**	**127**	**DRS**	**160M6**	540	510
	8.7	8260	110.18	81400	1.55	**KA**	**127**	**DRS**	**160M6**	470	511
	11	6740	89.89	81900	1.95	**KAF**	**127**	**DRS**	**160M6**	510	510
	9.9	7240	146.07	81700	1.80						
	11	6740	136.14	81900	1.95						
	12	6070	122.48	82000	2.1	**K**	**127**	**DRS**	**132M4**	480	509
	13	5460	110.18	82200	2.4	**KF**	**127**	**DRS**	**132M4**	520	510
	16	4450	89.89	82400	2.9	**KA**	**127**	**DRS**	**132M4**	455	511
	18	4060	81.98	82500	3.2	**KAF**	**127**	**DRS**	**132M4**	490	510
	20	3510	70.95*	82600	3.7						
	10	7110	143.47*	65000	1.15	**K**	**107**	**DRS**	**132M4**	320	504
	12	6020	121.46	65000	1.35	**KF**	**107**	**DRS**	**132M4**	330	505
	13	5570	112.41*	65000	1.45	**KA**	**107**	**DRS**	**132M4**	295	506
						KAF	**107**	**DRS**	**132M4**	315	505
	14	4990	100.75	65000	1.60						
	16	4500	90.96*	64100	1.75						
	17	4090	82.61	63100	1.95						
	20	3630	73.30	61800	2.2	**K**	**107**	**DRS**	**132M4**	320	504
	22	3290	66.52*	60700	2.4	**KF**	**107**	**DRS**	**132M4**	330	505
	25	2830	57.17*	59000	2.8	**KA**	**107**	**DRS**	**132M4**	295	506
	29	2470	49.90	57300	3.2	**KAF**	**107**	**DRS**	**132M4**	315	505
	34	2090	42.33*	55300	3.5						
	39	1830	37.00*	53700	3.9						
	15	4790	96.80	38300	0.90						
	17	4280	86.52	38300	1.00	**K**	**97**	**DRS**	**132M4**	205	499
	19	3860	77.89*	38100	1.10	**KF**	**97**	**DRS**	**132M4**	225	500
	20	3490	70.54	37900	1.25	**KA**	**97**	**DRS**	**132M4**	190	501
	23	3100	62.55	37500	1.40	**KAF**	**97**	**DRS**	**132M4**	215	500
	26	2800	56.55	37100	1.55						
	30	2370	47.93*	36300	1.80	**K**	**97**	**DRS**	**132M4**	205	499
	35	2070	41.87	35600	2.1	**KF**	**97**	**DRS**	**132M4**	225	500
	38	1890	38.30	35100	2.3	**KA**	**97**	**DRS**	**132M4**	190	501
	42	1690	34.23	34400	2.5	**KAF**	**97**	**DRS**	**132M4**	215	500
	23	3120	63.00*	24100	0.85						
	26	2800	56.64	24200	0.95	**K**	**87**	**DRS**	**132M4**	145	494
	29	2430	49.16	24200	1.10	**KF**	**87**	**DRS**	**132M4**	155	495
	33	2180	44.02	24100	1.20	**KA**	**87**	**DRS**	**132M4**	135	496
	40	1810	36.52*	23800	1.40	**KAF**	**87**	**DRS**	**132M4**	150	495
	46	1550	31.39	23500	1.75						
	52	1380	27.88	23100	1.90						
	58	1230	24.92	22800	2.0	**K**	**87**	**DRS**	**132M4**	145	494
	64	1110	22.41	22400	2.1	**KF**	**87**	**DRS**	**132M4**	155	495
	74	960	19.45	21900	2.4	**KA**	**87**	**DRS**	**132M4**	135	496
	83	860	17.42	21500	2.6	**KAF**	**87**	**DRS**	**132M4**	150	495
	90	790	16.00	20600	2.3						
	100	715	14.45	20700	2.9						



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**47**	1530	30.89	15500	1.00	**K**	**77**	**DRS**	**132M4**	110	489
	49	1450	29.27	16000	1.05	**KF**	**77**	**DRS**	**132M4**	120	490
	56	1260	25.62	17100	1.20	**KA**	**77**	**DRS**	**132M4**	105	491
	63	1140	23.08	17700	1.35	**KAF**	**77**	**DRS**	**132M4**	110	490
	71	1000	20.25	18300	1.50						
	81	880	17.87	18500	1.65						
	91	780	15.84	18200	1.80						
	107	670	13.52	17700	2.0	**K**	**77**	**DRS**	**132M4**	110	489
	117	610	12.36	17000	1.65	**KF**	**77**	**DRS**	**132M4**	120	490
	133	535	10.84	16600	1.85	**KA**	**77**	**DRS**	**132M4**	105	491
	151	470	9.56	16300	2.00	**KAF**	**77**	**DRS**	**132M4**	110	490
	170	420	8.48	15900	2.1						
	200	355	7.24	15400	2.3						
9.2	**1.8**	45800	835	190000	1.10						
	2.0	39900	729	190000	1.25						
	2.4	34000	622	190000	1.45	**K**	**187R107**	**DRS**	**132MC4**	1860	523
	2.8	28800	520	190000	1.75	**KH**	**187R107**	**DRS**	**132MC4**	1790	523
	3.2	25000	454	190000	2.00						
	1.4	57800	1046	190000	0.85						
	1.6	52200	945	190000	0.95						
	2.0	40800	738	190000	1.20	**K**	**187R97**	**DRS**	**132MC4**	1810	523
	2.4	34300	621	190000	1.45	**KH**	**187R97**	**DRS**	**132MC4**	1750	523
	2.8	29000	527	190000	1.70						
	4.6	17600	318	150000	1.80						
	5.3	15300	278	150000	2.1						
	6.0	13200	244	150000	2.4	**K**	**167R107**	**DRS**	**132MC4**	1280	523
	6.9	11500	213	150000	2.8	**KH**	**167R107**	**DRS**	**132MC4**	1240	523
	7.1	11200	206	150000	2.8						
	2.3	34900	632	150000	0.90						
	2.6	30800	561	150000	1.05						
	3.0	26600	481	150000	1.20	**K**	**167R97**	**DRS**	**132MC4**	1230	523
	3.5	23200	423	150000	1.40	**KH**	**167R97**	**DRS**	**132MC4**	1190	523
	4.0	20300	369	150000	1.60						
	3.8	20800	385	110600	0.85						
	4.5	17500	325	112400	1.05	**K**	**157R107**	**DRS**	**132MC4**	880	523
	4.9	16300	299	113000	1.10	**KF**	**157R107**	**DRS**	**132MC4**	960	523
	5.8	13800	253	114000	1.30	**KA**	**157R107**	**DRS**	**132MC4**	850	523
	6.4	12400	230	114600	1.45	**KAF**	**157R107**	**DRS**	**132MC4**	910	523
	3.9	20800	379	110600	0.85	**K**	**157R97**	**DRS**	**132MC4**	840	523
	4.4	18300	333	112000	1.00	**KF**	**157R97**	**DRS**	**132MC4**	920	523
	5.0	15900	291	113100	1.15	**KA**	**157R97**	**DRS**	**132MC4**	800	523
						KAF	**157R97**	**DRS**	**132MC4**	860	523
	5.8	14000	253	77900	0.95						
	6.9	11700	213	79800	1.10	**K**	**127R87**	**DRS**	**132MC4**	540	523
	7.3	11200	200	80100	1.05	**KF**	**127R87**	**DRS**	**132MC4**	590	523
	8.8	9290	166	81000	1.30	**KA**	**127R87**	**DRS**	**132MC4**	520	523
	10.0	8200	147	81400	1.45	**KAF**	**127R87**	**DRS**	**132MC4**	550	523
	11	8160	136.14	81400	1.60						
	12	7340	122.48	81700	1.75	**K**	**127**	**DRS**	**132MC4**	485	509
	13	6600	110.18	81900	1.95	**KF**	**127**	**DRS**	**132MC4**	530	510
	16	5390	89.89	82200	2.4	**KA**	**127**	**DRS**	**132MC4**	455	511
	18	4910	81.98	82300	2.6	**KAF**	**127**	**DRS**	**132MC4**	495	510
	13	6740	112.41*	62300	1.20	**K**	**107**	**DRS**	**132MC4**	325	504
	15	6040	100.75	61700	1.30	**KF**	**107**	**DRS**	**132MC4**	335	505
	16	5450	90.96*	61000	1.45	**KA**	**107**	**DRS**	**132MC4**	295	506
						KAF	**107**	**DRS**	**132MC4**	320	505
	18	4950	82.61	60300	1.60						
	20	4390	73.30	59300	1.80	**K**	**107**	**DRS**	**132MC4**	325	504
	22	3980	66.52*	58400	2.0	**KF**	**107**	**DRS**	**132MC4**	335	505
	26	3420	57.17*	57000	2.3	**KA**	**107**	**DRS**	**132MC4**	295	506
	29	2990	49.90	55500	2.6	**KAF**	**107**	**DRS**	**132MC4**	320	505
	35	2530	42.33*	53800	2.9						
	19	4670	77.89*	35100	0.90	**K**	**97**	**DRS**	**132MC4**	210	499
	21	4220	70.54	35100	1.00	**KF**	**97**	**DRS**	**132MC4**	230	500
	23	3750	62.55	35000	1.15	**KA**	**97**	**DRS**	**132MC4**	190	501
	26	3390	56.55	34800	1.25	**KAF**	**97**	**DRS**	**132MC4**	215	500

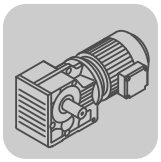
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
9.2	**31**	2870	47.93*	34400	1.50						
	35	2510	41.87	33900	1.70						
	38	2290	38.30	33500	1.85	**K**	**97**	**DRS**	**132MC4**	210	499
	43	2050	34.23	33000	2.1	**KF**	**97**	**DRS**	**132MC4**	230	500
	48	1840	30.82	32400	2.3	**KA**	**97**	**DRS**	**132MC4**	190	501
	53	1670	27.91	31900	2.6	**KAF**	**97**	**DRS**	**132MC4**	215	500
	59	1480	24.75	31200	2.9						
	30	2940	49.16	22000	0.90	**K**	**87**	**DRS**	**132MC4**	150	494
	33	2630	44.02	22200	1.00	**KF**	**87**	**DRS**	**132MC4**	160	495
	40	2190	36.52*	22200	1.15	**KA**	**87**	**DRS**	**132MC4**	140	496
	47	1880	31.39	22100	1.45	**KAF**	**87**	**DRS**	**132MC4**	150	495
	53	1670	27.88	21900	1.55						
	59	1490	24.92	21600	1.65						
	65	1340	22.41	21400	1.70						
	75	1160	19.45	21000	1.95	**K**	**87**	**DRS**	**132MC4**	150	494
	84	1040	17.42	20600	2.1	**KF**	**87**	**DRS**	**132MC4**	160	495
	92	950	16.00	19700	1.90	**KA**	**87**	**DRS**	**132MC4**	140	496
	101	860	14.45	20000	2.4	**KAF**	**87**	**DRS**	**132MC4**	150	495
	117	750	12.56	19500	2.7						
	131	665	11.17	18600	2.2						
	147	595	10.00	18200	2.5						
	63	1380	23.08	16500	1.10	**K**	**77**	**DRS**	**132MC4**	115	489
	72	1210	20.25	17400	1.25	**KF**	**77**	**DRS**	**132MC4**	120	490
	82	1070	17.87	17600	1.35	**KA**	**77**	**DRS**	**132MC4**	105	491
	93	940	15.84	17300	1.45	**KAF**	**77**	**DRS**	**132MC4**	115	490
	108	810	13.52	17000	1.65						
	119	740	12.36	16200	1.35	**K**	**77**	**DRS**	**132MC4**	115	489
	135	645	10.84	16000	1.50	**KF**	**77**	**DRS**	**132MC4**	120	490
	153	570	9.56	15600	1.65	**KA**	**77**	**DRS**	**132MC4**	105	491
	173	505	8.48	15300	1.75	**KAF**	**77**	**DRS**	**132MC4**	115	490
	202	430	7.24	14900	1.90						
11.0	**1.8**	55200	835	190000	0.90						
	2.0	48000	729	190000	1.05						
	2.4	40900	622	190000	1.20	**K**	**187R107**	**DRS**	**160M4**	1880	523
	2.8	34700	520	190000	1.45	**KH**	**187R107**	**DRS**	**160M4**	1810	523
	3.2	30200	454	190000	1.65						
	4.1	23300	355	190000	2.1						
	2.0	49000	738	190000	1.00	**K**	**187R97**	**DRS**	**160M4**	1830	523
	2.4	41200	621	190000	1.20	**KH**	**187R97**	**DRS**	**160M4**	1770	523
	2.8	34800	527	190000	1.45						
	4.6	21200	318	150000	1.50						
	5.3	18400	278	150000	1.75						
	6.0	16000	244	150000	2.0	**K**	**167R107**	**DRS**	**160M4**	1300	523
	6.8	13900	213	150000	2.3	**KH**	**167R107**	**DRS**	**160M4**	1260	523
	7.1	13600	206	150000	2.4						
	2.6	37000	561	150000	0.85						
	3.0	31900	481	150000	1.00	**K**	**167R97**	**DRS**	**160M4**	1250	523
	3.4	27900	423	150000	1.15	**KH**	**167R97**	**DRS**	**160M4**	1210	523
	4.0	24400	369	150000	1.30						
						K	**157R97**	**DRS**	**160M4**	860	523
	4.4	22000	333	109900	0.80	**KF**	**157R97**	**DRS**	**160M4**	940	523
	5.0	19200	291	111500	0.95	**KA**	**157R97**	**DRS**	**160M4**	820	523
						KAF	**157R97**	**DRS**	**160M4**	880	523
	6.8	14100	213	77600	0.90	**K**	**127R87**	**DRS**	**160M4**	560	523
	7.3	13400	200	78900	0.90	**KF**	**127R87**	**DRS**	**160M4**	610	523
	8.8	11100	166	80100	1.05	**KA**	**127R87**	**DRS**	**160M4**	540	523
	10.0	9860	147	80700	1.20	**KAF**	**127R87**	**DRS**	**160M4**	570	523
	8.9	11800	164.50	150000	2.7	**K**	**167**	**DRS**	**160M4**	1130	519
	11	9710	134.99	150000	3.3	**KH**	**167**	**DRS**	**160M4**	1090	520
	9.7	10800	150.41	115100	1.65	**K**	**157**	**DRS**	**160M4**	730	514
	12	8800	122.39	115600	2.0	**KF**	**157**	**DRS**	**160M4**	810	515
	15	7210	100.22	115900	2.5	**KA**	**157**	**DRS**	**160M4**	700	516
	16	6590	91.65	116100	2.7	**KAF**	**157**	**DRS**	**160M4**	750	515



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
11.0	**11**	9790	136.14	80800	1.35						
	12	8810	122.48	81200	1.50	**K**	**127**	**DRS**	**160M4**	500	509
	13	7920	110.18	81500	1.65	**KF**	**127**	**DRS**	**160M4**	540	510
	16	6460	89.89	81900	2.0	**KA**	**127**	**DRS**	**160M4**	470	511
	18	5890	81.98	82100	2.2	**KAF**	**127**	**DRS**	**160M4**	510	510
	21	5100	70.95*	82300	2.6						
	13	8080	112.41*	57700	1.00	**K**	**107**	**DRS**	**160M4**	345	504
	14	7240	100.75	58200	1.10	**KF**	**107**	**DRS**	**160M4**	355	505
	16	6540	90.96*	57900	1.20	**KA**	**107**	**DRS**	**160M4**	315	506
	18	5940	82.61	57500	1.35	**KAF**	**107**	**DRS**	**160M4**	340	505
	20	5270	73.30	56800	1.50						
	22	4780	66.52*	56100	1.65	**K**	**107**	**DRS**	**160M4**	345	504
	26	4110	57.17*	55000	1.95	**KF**	**107**	**DRS**	**160M4**	355	505
	29	3590	49.90	53900	2.2	**KA**	**107**	**DRS**	**160M4**	315	506
	34	3040	42.33*	52400	2.4	**KAF**	**107**	**DRS**	**160M4**	340	505
	39	2660	37.00*	51100	2.7						
	21	5070	70.54	32200	0.85	**K**	**97**	**DRS**	**160M4**	230	499
	23	4500	62.55	32500	0.95	**KF**	**97**	**DRS**	**160M4**	250	500
	26	4060	56.55	32500	1.05	**KA**	**97**	**DRS**	**160M4**	210	501
	30	3440	47.93*	32400	1.25	**KAF**	**97**	**DRS**	**160M4**	235	500
	35	3010	41.87	32200	1.45						
	38	2750	38.30	32000	1.55						
	43	2460	34.23	31600	1.75	**K**	**97**	**DRS**	**160M4**	230	499
	47	2210	30.82	31200	1.95	**KF**	**97**	**DRS**	**160M4**	250	500
	52	2000	27.91	30800	2.1	**KA**	**97**	**DRS**	**160M4**	210	501
	59	1780	24.75	30200	2.4	**KAF**	**97**	**DRS**	**160M4**	235	500
	65	1600	22.37	29700	2.7						
	33	3160	44.02	20100	0.80						
	40	2620	36.52*	20500	0.95	**K**	**87**	**DRS**	**160M4**	170	494
	47	2250	31.39	20600	1.20	**KF**	**87**	**DRS**	**160M4**	180	495
	52	2000	27.88	20600	1.30	**KA**	**87**	**DRS**	**160M4**	160	496
	59	1790	24.92	20500	1.40	**KAF**	**87**	**DRS**	**160M4**	170	495
	65	1610	22.41	20300	1.45						
	75	1390	19.45	20100	1.65						
	84	1250	17.42	19800	1.75						
	91	1150	16.00	18800	1.55	**K**	**87**	**DRS**	**160M4**	170	494
	101	1030	14.45	19300	2.0	**KF**	**87**	**DRS**	**160M4**	180	495
	116	900	12.56	18900	2.2	**KA**	**87**	**DRS**	**160M4**	160	496
	131	800	11.17	18000	1.85	**KAF**	**87**	**DRS**	**160M4**	170	495
	146	715	10.00	17600	2.1						
	176	595	8.29	17100	2.4						
	202	515	7.21	16600	2.5						
	63	1660	23.08	14600	0.95						
	72	1450	20.25	16000	1.05						
	82	1280	17.87	16600	1.15						
	92	1130	15.84	16500	1.25	**K**	**77**	**DRS**	**160M4**	135	489
	108	970	13.52	16200	1.40	**KF**	**77**	**DRS**	**160M4**	145	490
	118	880	12.36	15500	1.15	**KA**	**77**	**DRS**	**160M4**	130	491
	135	775	10.84	15300	1.25	**KAF**	**77**	**DRS**	**160M4**	135	490
	153	685	9.56	15100	1.35						
	172	610	8.48	14800	1.45						
	202	520	7.24	14400	1.55						
15.0	**2.4**	55900	622	190000	0.90						
	2.8	47400	520	190000	1.05						
	3.2	41200	454	190000	1.20	**K**	**187R107**	**DRS**	**160MC4**	1890	523
	4.1	31900	355	190000	1.55	**KH**	**187R107**	**DRS**	**160MC4**	1820	523
	5.6	23700	261	190000	2.1						
	4.6	28900	318	150000	1.10						
	5.3	25200	278	150000	1.25						
	6.0	21800	244	150000	1.45						
	6.9	19000	213	150000	1.70	**K**	**167R107**	**DRS**	**160MC4**	1300	523
	7.1	18600	206	150000	1.70	**KH**	**167R107**	**DRS**	**160MC4**	1270	523
	8.1	16000	180	150000	2.00						
	9.2	14500	160	150000	2.2						

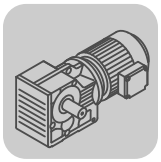
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
15.0	**6.4**	20500	230	110800	0.90						
	6.9	19300	213	111500	0.95	**K**	**157R107**	**DRS**	**160MC4**	910	523
	7.8	16600	187	112800	1.10	**KF**	**157R107**	**DRS**	**160MC4**	990	523
	9.3	14100	157	113900	1.25	**KA**	**157R107**	**DRS**	**160MC4**	870	523
	12	11000	122	115000	1.60	**KAF**	**157R107**	**DRS**	**160MC4**	930	523
	14	9670	107	115400	1.85						
	8.9	16000	164.50	150000	2.00	**K**	**167**	**DRS**	**160MC4**	1130	519
	11	13100	134.99	150000	2.4	**KH**	**167**	**DRS**	**160MC4**	1090	520
	9.7	14700	150.41	113700	1.20						
	12	11900	122.39	114700	1.50	**K**	**157**	**DRS**	**160MC4**	740	514
	15	9790	100.22	114100	1.85	**KF**	**157**	**DRS**	**160MC4**	820	515
	16	8960	91.65	112400	2.0	**KA**	**157**	**DRS**	**160MC4**	700	516
	18	7790	79.75	109500	2.3	**KAF**	**157**	**DRS**	**160MC4**	760	515
	11	13300	136.14	79000	1.00	**K**	**127**	**DRS**	**160MC4**	500	509
	12	11900	122.48	79700	1.10	**KF**	**127**	**DRS**	**160MC4**	550	510
	13	10700	110.18	80300	1.20	**KA**	**127**	**DRS**	**160MC4**	475	511
						KAF	**127**	**DRS**	**160MC4**	510	510
	16	8780	89.89	81200	1.50						
	18	8010	81.98	81500	1.60	**K**	**127**	**DRS**	**160MC4**	500	509
	21	6930	70.95*	81500	1.85	**KF**	**127**	**DRS**	**160MC4**	550	510
	23	6120	62.60	79900	2.1	**KA**	**127**	**DRS**	**160MC4**	475	511
	27	5280	54.07	77900	2.5	**KAF**	**127**	**DRS**	**160MC4**	510	510
	31	4670	47.82	76200	2.8						
	16	8890	90.96*	48200	0.90	**K**	**107**	**DRS**	**160MC4**	350	504
	18	8070	82.61	49400	1.00	**KF**	**107**	**DRS**	**160MC4**	360	505
	20	7160	73.30	50500	1.10	**KA**	**107**	**DRS**	**160MC4**	320	506
	22	6500	66.52*	51000	1.25	**KAF**	**107**	**DRS**	**160MC4**	345	505
	26	5590	57.17*	50600	1.45						
	29	4870	49.90	50000	1.60						
	35	4130	42.33*	49100	1.80	**K**	**107**	**DRS**	**160MC4**	350	504
	40	3610	37.00*	48200	2.00	**KF**	**107**	**DRS**	**160MC4**	360	505
	45	3190	32.69	47300	2.2	**KA**	**107**	**DRS**	**160MC4**	320	506
	47	3050	31.28*	46900	2.2	**KAF**	**107**	**DRS**	**160MC4**	345	505
	51	2830	29.00	46300	2.5						
	31	4680	47.93*	28100	0.90						
	35	4090	41.87	28400	1.05	**K**	**97**	**DRS**	**160MC4**	235	499
	38	3740	38.30	28500	1.15	**KF**	**97**	**DRS**	**160MC4**	255	500
	43	3340	34.23	28500	1.30	**KA**	**97**	**DRS**	**160MC4**	215	501
	48	3010	30.82	28400	1.45	**KAF**	**97**	**DRS**	**160MC4**	240	500
	53	2720	27.91	28200	1.60						
	59	2410	24.75	28000	1.80	**K**	**97**	**DRS**	**160MC4**	235	499
	65	2180	22.37	27700	1.95	**KF**	**97**	**DRS**	**160MC4**	255	500
	77	1850	18.96	27200	2.3	**KA**	**97**	**DRS**	**160MC4**	215	501
	88	1610	16.56	26600	2.7	**KAF**	**97**	**DRS**	**160MC4**	240	500
	47	3060	31.39	17300	0.90						
	53	2720	27.88	17600	0.95	**K**	**87**	**DRS**	**160MC4**	175	494
	59	2430	24.92	17800	1.05	**KF**	**87**	**DRS**	**160MC4**	185	495
	65	2190	22.41	18000	1.05	**KA**	**87**	**DRS**	**160MC4**	165	496
	75	1900	19.45	18000	1.20	**KAF**	**87**	**DRS**	**160MC4**	175	495
	84	1700	17.42	18000	1.30						
	92	1560	16.00	16800	1.15						
	101	1410	14.45	17800	1.50						
	117	1220	12.56	17600	1.65	**K**	**87**	**DRS**	**160MC4**	175	494
	131	1090	11.17	16600	1.35	**KF**	**87**	**DRS**	**160MC4**	185	495
	147	970	10.00	16400	1.55	**KA**	**87**	**DRS**	**160MC4**	165	496
	177	810	8.29	16000	1.75	**KAF**	**87**	**DRS**	**160MC4**	175	495
	203	705	7.21	15700	1.85						
18.5	**2.8**	58700	520	190000	0.85						
	3.2	51200	454	190000	1.00						
	4.1	39600	355	190000	1.25	**K**	**187R107**	**DRS**	**180M4**	1930	523
	5.6	29400	261	190000	1.70	**KH**	**187R107**	**DRS**	**180M4**	1860	523
	6.6	24900	221	190000	2.0						



K..DRS
K..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
18.5	**4.6**	35900	318	150000	0.90						
	5.3	31300	278	150000	1.00						
	6.0	27100	244	150000	1.20						
	6.8	23700	213	150000	1.35						
	7.1	23100	206	150000	1.40	**K**	**167R107**	**DRS**	**180M4**	1350	523
	8.1	19900	180	150000	1.60	**KH**	**167R107**	**DRS**	**180M4**	1310	523
	9.2	18000	160	150000	1.80						
	11	15200	135	150000	2.1						
	12	13200	118	150000	2.4						
	7.8	20700	187	110700	0.85	**K**	**157R107**	**DRS**	**180M4**	960	523
	9.3	17600	157	112400	1.00	**KF**	**157R107**	**DRS**	**180M4**	1030	523
	12	13700	122	113900	1.30	**KA**	**157R107**	**DRS**	**180M4**	920	523
	14	12000	107	112100	1.50	**KAF**	**157R107**	**DRS**	**180M4**	980	523
	8.1	21700	179.86	190000	2.3						
	8.8	19900	165.21	190000	2.5	**K**	**187**	**DRS**	**180M4**	1760	521
	10	17400	144.59	190000	2.9	**KH**	**187**	**DRS**	**180M4**	1690	522
	11	15600	129.69	190000	3.2						
	11	16300	134.99	150000	1.95						
	13	13200	109.83	150000	2.4	**K**	**167**	**DRS**	**180M4**	1170	519
	17	10600	87.86	150000	3.0	**KH**	**167**	**DRS**	**180M4**	1140	520
	12	14800	122.39	111700	1.20						
	15	12100	100.22	109200	1.50						
	16	11000	91.65	107900	1.60						
	18	9650	79.75	105600	1.85	**K**	**157**	**DRS**	**180M4**	780	514
	21	8510	70.38	103400	2.1	**KF**	**157**	**DRS**	**180M4**	860	515
	24	7380	61.02	100800	2.4	**KA**	**157**	**DRS**	**180M4**	740	516
	27	6560	54.29	98600	2.7	**KAF**	**157**	**DRS**	**180M4**	800	515
	31	5660	46.79	95600	3.2						
	38	4600	38.02	91400	3.9						
	13	13300	110.18	79000	1.00	**K**	**127**	**DRS**	**180M4**	550	509
	16	10800	89.89	79000	1.20	**KF**	**127**	**DRS**	**180M4**	590	510
	18	9910	81.98	78500	1.30	**KA**	**127**	**DRS**	**180M4**	520	511
						KAF	**127**	**DRS**	**180M4**	560	510
	21	8580	70.95*	77500	1.50						
	23	7570	62.60	76400	1.70						
	27	6540	54.07	74900	2.00	**K**	**127**	**DRS**	**180M4**	550	509
	31	5780	47.82	73500	2.2	**KF**	**127**	**DRS**	**180M4**	590	510
	36	4860	40.19	71300	2.7	**KA**	**127**	**DRS**	**180M4**	520	511
	40	4380	36.25	70000	3.0	**KAF**	**127**	**DRS**	**180M4**	560	510
	47	3790	31.37	68000	3.4						
	53	3340	27.68	66300	3.9						
	20	8860	73.30	42700	0.90	**K**	**107**	**DRS**	**180M4**	395	504
	22	8040	66.52*	44200	1.00	**KF**	**107**	**DRS**	**180M4**	405	505
	26	6910	57.17*	45700	1.15	**KA**	**107**	**DRS**	**180M4**	365	506
	29	6030	49.90	46600	1.30	**KAF**	**107**	**DRS**	**180M4**	390	505
	34	5120	42.33*	46300	1.45						
	39	4470	37.00*	45700	1.60						
	45	3950	32.69	45100	1.80						
	47	3780	31.28*	44900	1.80	**K**	**107**	**DRS**	**180M4**	395	504
	50	3500	29.00	44400	2.0	**KF**	**107**	**DRS**	**180M4**	405	505
	55	3180	26.32	43800	2.3	**KA**	**107**	**DRS**	**180M4**	365	506
	65	2730	22.62	42800	2.6	**KAF**	**107**	**DRS**	**180M4**	390	505
	74	2380	19.74	41700	3.0						
	87	2020	16.75	40500	3.5						
	35	5060	41.87	25100	0.85	**K**	**97**	**DRS**	**180M4**	280	499
	47	3720	30.82	26000	1.15	**KF**	**97**	**DRS**	**180M4**	300	500
	52	3370	27.91	26000	1.25	**KA**	**97**	**DRS**	**180M4**	260	501
	59	2990	24.75	26000	1.45	**KAF**	**97**	**DRS**	**180M4**	285	500
	65	2700	22.37	25900	1.60						
	77	2290	18.96	25700	1.85	**K**	**97**	**DRS**	**180M4**	280	499
	88	2000	16.56	25300	2.2	**KF**	**97**	**DRS**	**180M4**	300	500
	105	1670	13.85	24800	2.6	**KA**	**97**	**DRS**	**180M4**	260	501
	122	1450	11.99	24300	2.7	**KAF**	**97**	**DRS**	**180M4**	285	500

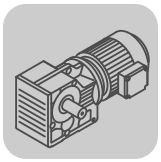
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
18.5	**59**	3010	24.92	15500	0.85						
	65	2710	22.41	15900	0.85						
	75	2350	19.45	16200	1.00						
	84	2100	17.42	16400	1.05	**K**	**87**	**DRS**	**180M4**	220	494
	101	1740	14.45	16500	1.20	**KF**	**87**	**DRS**	**180M4**	230	495
	116	1510	12.56	16400	1.30	**KA**	**87**	**DRS**	**180M4**	210	496
	131	1350	11.17	15400	1.10	**KAF**	**87**	**DRS**	**180M4**	220	495
	146	1200	10.00	15300	1.25						
	176	1000	8.29	15200	1.40						
	202	870	7.21	15000	1.50						
22	**3.2**	61000	454	190000	0.80						
	4.1	47200	355	190000	1.05						
	5.6	35000	261	190000	1.40	**K**	**187R107**	**DRS**	**180L4**	1950	523
	6.6	29700	221	190000	1.70	**KH**	**187R107**	**DRS**	**180L4**	1880	523
	7.6	25900	193	190000	1.95						
	8.9	21800	163	190000	2.3						
	5.3	37300	278	150000	0.85						
	6.0	32400	244	150000	1.00						
	6.8	28200	213	150000	1.15						
	7.1	27500	206	150000	1.15	**K**	**167R107**	**DRS**	**180L4**	1370	523
	8.1	23800	180	150000	1.35	**KH**	**167R107**	**DRS**	**180L4**	1330	523
	9.2	21400	160	150000	1.50						
	11	18100	135	150000	1.75						
	12	15800	118	150000	2.0						
	9.3	21000	157	109400	0.85	**K**	**157R107**	**DRS**	**180L4**	970	523
	12	16400	122	108100	1.10	**KF**	**157R107**	**DRS**	**180L4**	1050	523
	14	14300	107	107000	1.25	**KA**	**157R107**	**DRS**	**180L4**	940	523
						KAF	**157R107**	**DRS**	**180L4**	1000	523
	8.1	25800	179.86	190000	1.95						
	8.8	23700	165.21	190000	2.1	**K**	**187**	**DRS**	**180L4**	1780	521
	10	20800	144.59	190000	2.4	**KH**	**187**	**DRS**	**180L4**	1710	522
	11	18600	129.69	190000	2.7						
	11	19400	134.99	150000	1.65						
	13	15800	109.83	150000	2.0	**K**	**167**	**DRS**	**180L4**	1190	519
	17	12600	87.86	150000	2.5	**KH**	**167**	**DRS**	**180L4**	1160	520
	19	11200	78.14	150000	2.8						
	12	17600	122.39	105500	1.00						
	15	14400	100.22	104100	1.25						
	16	13100	91.65	103300	1.35						
	18	11400	79.75	101600	1.55	**K**	**157**	**DRS**	**180L4**	800	514
	21	10100	70.38	99900	1.80	**KF**	**157**	**DRS**	**180L4**	880	515
	24	8780	61.02	97700	2.0	**KA**	**157**	**DRS**	**180L4**	760	516
	27	7810	54.29	95800	2.3	**KAF**	**157**	**DRS**	**180L4**	820	515
	31	6730	46.79	93300	2.7						
	38	5470	38.02	89500	3.3						
	16	12900	89.89	73900	1.00	**K**	**127**	**DRS**	**180L4**	570	509
	18	11700	81.98	73800	1.10	**KF**	**127**	**DRS**	**180L4**	610	510
	21	10200	70.95*	73400	1.25	**KA**	**127**	**DRS**	**180L4**	540	511
	23	9000	62.60	72800	1.45	**KAF**	**127**	**DRS**	**180L4**	580	510
	27	7770	54.07	71800	1.65						
	31	6880	47.82	70700	1.90						
	36	5780	40.19	69000	2.2	**K**	**127**	**DRS**	**180L4**	570	509
	40	5210	36.25	67900	2.5	**KF**	**127**	**DRS**	**180L4**	610	510
	47	4510	31.37	66200	2.9	**KA**	**127**	**DRS**	**180L4**	540	511
	53	3980	27.68	64700	3.3	**KAF**	**127**	**DRS**	**180L4**	580	510
	61	3430	23.91	62800	3.8						
	69	3040	21.15	61200	4.3						
	26	8220	57.17*	39600	0.95	**K**	**107**	**DRS**	**180L4**	415	504
	29	7180	49.90	41500	1.10	**KF**	**107**	**DRS**	**180L4**	425	505
	34	6090	42.33*	42800	1.20	**KA**	**107**	**DRS**	**180L4**	385	506
						KAF	**107**	**DRS**	**180L4**	410	505



K..DRS
K..DRS [kW]

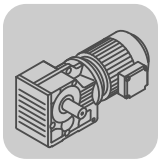
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
22	**39**	5320	37.00*	43200	1.35						
	45	4700	32.69	42900	1.55						
	47	4500	31.28*	42800	1.50						
	50	4170	29.00	42500	1.75						
	55	3780	26.32	42000	1.90	**K**	**107**	**DRS**	**180L4**	415	504
	65	3250	22.62	41200	2.2	**KF**	**107**	**DRS**	**180L4**	425	505
	74	2840	19.74	40400	2.5	**KA**	**107**	**DRS**	**180L4**	385	506
	87	2400	16.75	39300	2.9	**KAF**	**107**	**DRS**	**180L4**	410	505
	100	2100	14.64	38400	3.3						
	109	1930	13.43	36800	2.2						
	125	1680	11.73	35900	2.6						
	147	1430	9.94	34800	2.9						
	47	4430	30.82	23500	0.95	**K**	**97**	**DRS**	**180L4**	300	499
	52	4010	27.91	23800	1.05	**KF**	**97**	**DRS**	**180L4**	320	500
	59	3560	24.75	24100	1.20	**KA**	**97**	**DRS**	**180L4**	280	501
	65	3210	22.37	24200	1.35	**KAF**	**97**	**DRS**	**180L4**	305	500
	77	2720	18.96	24200	1.60						
	88	2380	16.56	24000	1.80	**K**	**97**	**DRS**	**180L4**	300	499
	105	1990	13.85	23700	2.2	**KF**	**97**	**DRS**	**180L4**	320	500
	122	1720	11.99	23300	2.2	**KA**	**97**	**DRS**	**180L4**	280	501
	140	1490	10.41	21800	1.90	**KAF**	**97**	**DRS**	**180L4**	305	500
	168	1250	8.71	21400	2.1						
	75	2790	19.45	14400	0.80						
	84	2500	17.42	14800	0.90						
	101	2070	14.45	15100	1.00	**K**	**87**	**DRS**	**180L4**	240	494
	116	1800	12.56	15300	1.10	**KF**	**87**	**DRS**	**180L4**	250	495
	131	1600	11.17	14200	0.95	**KA**	**87**	**DRS**	**180L4**	225	496
	146	1430	10.00	14200	1.05	**KAF**	**87**	**DRS**	**180L4**	240	495
	176	1190	8.29	14300	1.15						
	202	1030	7.21	14200	1.25						
30	**5.6**	47600	261	190000	1.05						
	6.6	40300	221	190000	1.25	**K**	**187R107**	**DRS**	**180LC4**	1960	523
	7.6	35200	193	190000	1.40	**KH**	**187R107**	**DRS**	**180LC4**	1890	523
	9.0	29700	163	190000	1.70						
	6.9	38400	213	150000	0.85						
	7.1	37400	206	150000	0.85						
	8.2	32400	180	150000	1.00	**K**	**167R107**	**DRS**	**180LC4**	1380	523
	9.2	29100	160	150000	1.10	**KH**	**167R107**	**DRS**	**180LC4**	1340	523
	11	24600	135	150000	1.30						
	12	21500	118	150000	1.50						
	8.2	35000	179.86	190000	1.45						
	8.9	32100	165.21	190000	1.55						
	10	28100	144.59	190000	1.75						
	11	25200	129.69	190000	2.00	**K**	**187**	**DRS**	**180LC4**	1790	521
	13	21900	112.60	190000	2.3	**KH**	**187**	**DRS**	**180LC4**	1720	522
	14	19900	102.16	190000	2.5						
	17	17100	88.00	190000	2.9						
	13	21400	109.83	150000	1.50						
	17	17100	87.86	150000	1.85						
	19	15200	78.14	150000	2.1	**K**	**167**	**DRS**	**180LC4**	1200	519
	22	13200	68.07	150000	2.4	**KH**	**167**	**DRS**	**180LC4**	1170	520
	24	11800	60.74	150000	2.7						
	15	19500	100.22	92700	0.90						
	16	17800	91.65	92800	1.00						
	18	15500	79.75	92400	1.15						
	21	13700	70.38	91800	1.30	**K**	**157**	**DRS**	**180LC4**	810	514
	24	11800	61.02	90700	1.50	**KF**	**157**	**DRS**	**180LC4**	890	515
	27	10500	54.29	89500	1.70	**KA**	**157**	**DRS**	**180LC4**	770	516
	31	9110	46.79	87800	1.95	**KAF**	**157**	**DRS**	**180LC4**	830	515
	39	7400	38.02	85100	2.4						
	47	6100	31.30	82200	3.0						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
30	**21**	13800	70.95*	64200	0.95						
	23	12200	62.60	64600	1.05						
	27	10500	54.07	64700	1.25						
	31	9310	47.82	64400	1.40	**K**	**127**	**DRS**	**180LC4**	580	509
	37	7830	40.19	63700	1.65	**KF**	**127**	**DRS**	**180LC4**	620	510
	41	7060	36.25	63100	1.85	**KA**	**127**	**DRS**	**180LC4**	550	511
	47	6110	31.37	62000	2.1	**KAF**	**127**	**DRS**	**180LC4**	590	510
	53	5390	27.68	61000	2.4						
	62	4650	23.91	59600	2.8						
	35	8240	42.33*	32400	0.90	**K**	**107**	**DRS**	**180LC4**	425	504
	40	7200	37.00*	34700	1.00	**KF**	**107**	**DRS**	**180LC4**	435	505
	47	6090	31.28*	36600	1.10	**KA**	**107**	**DRS**	**180LC4**	395	506
						KAF	**107**	**DRS**	**180LC4**	420	505
	51	5650	29.00	37200	1.25						
	56	5120	26.32	37700	1.40						
	65	4400	22.62	37700	1.65						
	74	3840	19.74	37400	1.85	**K**	**107**	**DRS**	**180LC4**	425	504
	88	3260	16.75	36700	2.2	**KF**	**107**	**DRS**	**180LC4**	435	505
	100	2850	14.64	36100	2.4	**KA**	**107**	**DRS**	**180LC4**	395	506
	109	2610	13.43	34400	1.65	**KAF**	**107**	**DRS**	**180LC4**	420	505
	125	2280	11.73	33800	1.90						
	148	1930	9.94	33000	2.2						
	169	1690	8.69	32200	2.4						
	59	4820	24.75	19600	0.90						
	66	4350	22.37	20100	1.00						
	78	3690	18.96	20700	1.15	**K**	**97**	**DRS**	**180LC4**	310	499
	89	3220	16.56	21000	1.35	**KF**	**97**	**DRS**	**180LC4**	330	500
	106	2690	13.85	21200	1.60	**KA**	**97**	**DRS**	**180LC4**	290	501
	123	2330	11.99	21100	1.65	**KAF**	**97**	**DRS**	**180LC4**	315	500
	141	2020	10.41	19500	1.40						
	169	1690	8.71	19400	1.55						
37	**5.6**	58800	261	190000	0.85						
	6.6	49800	221	190000	1.00	**K**	**187R107**	**DRS**	**225S4**	2080	523
	7.6	43500	193	190000	1.15	**KH**	**187R107**	**DRS**	**225S4**	2010	523
	9.0	36700	163	190000	1.35						
	8.2	40000	180	150000	0.80						
	9.2	35900	160	150000	0.90	**K**	**167R107**	**DRS**	**225S4**	1500	523
	11	30400	135	150000	1.05	**KH**	**167R107**	**DRS**	**225S4**	1460	523
	12	26600	118	150000	1.20						
	8.2	43200	179.86	190000	1.15						
	8.9	39700	165.21	190000	1.25						
	10	34700	144.59	190000	1.45						
	11	31100	129.69	190000	1.60	**K**	**187**	**DRS**	**225S4**	1910	521
	13	27000	112.60	190000	1.85	**KH**	**187**	**DRS**	**225S4**	1840	522
	14	24500	102.16	190000	2.0						
	17	21100	88.00	190000	2.4						
	13	26300	109.83	150000	1.20						
	17	21100	87.86	150000	1.50						
	19	18700	78.14	150000	1.70	**K**	**167**	**DRS**	**225S4**	1320	519
	22	16300	68.07	150000	1.95	**KH**	**167**	**DRS**	**225S4**	1290	520
	24	14500	60.74	150000	2.2						
	28	12400	51.77	150000	2.6						
						K	**157**	**DRS**	**225S4**	930	514
	16	22000	91.65	83600	0.80	**KF**	**157**	**DRS**	**225S4**	1010	515
	18	19100	79.75	84500	0.95	**KA**	**157**	**DRS**	**225S4**	890	516
						KAF	**157**	**DRS**	**225S4**	950	515
	21	16900	70.38	84800	1.05						
	24	14600	61.02	84600	1.25	**K**	**157**	**DRS**	**225S4**	930	514
	27	13000	54.29	84100	1.40	**KF**	**157**	**DRS**	**225S4**	1010	515
	31	11200	46.79	83200	1.60	**KA**	**157**	**DRS**	**225S4**	890	516
	39	9130	38.02	81300	1.95	**KAF**	**157**	**DRS**	**225S4**	950	515
	47	7520	31.30	79100	2.4						
	23	15000	62.60	57500	0.85	**K**	**127**	**DRS**	**225S4**	700	509
	27	12900	54.07	58500	1.00	**KF**	**127**	**DRS**	**225S4**	740	510
	31	11400	47.82	59000	1.15	**KA**	**127**	**DRS**	**225S4**	670	511
	37	9650	40.19	59100	1.35	**KAF**	**127**	**DRS**	**225S4**	710	510



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
37	**41**	8710	36.25	59000	1.50						
	47	7530	31.37	58500	1.70						
	53	6650	27.68	57800	1.95						
	62	5740	23.91	56900	2.3	**K**	**127**	**DRS**	**225S4**	700	509
	70	5080	21.15	56000	2.6	**KF**	**127**	**DRS**	**225S4**	740	510
	83	4270	17.77	54500	3.0	**KA**	**127**	**DRS**	**225S4**	670	511
	102	3440	14.35	52500	3.5	**KAF**	**127**	**DRS**	**225S4**	710	510
	115	3070	12.79	50200	2.8						
	137	2580	10.74	48600	3.1						
	169	2080	8.68	46600	3.5						
	40	8890	37.00*	25800	0.80						
	47	7510	31.28*	29700	0.90						
	51	6960	29.00	30900	1.05						
	56	6320	26.32	32200	1.15						
	65	5430	22.62	33600	1.30	**K**	**107**	**DRS**	**225S4**	540	504
	74	4740	19.74	34400	1.50	**KF**	**107**	**DRS**	**225S4**	550	505
	88	4020	16.75	34500	1.75	**KA**	**107**	**DRS**	**225S4**	520	506
	100	3510	14.64	34200	1.95	**KAF**	**107**	**DRS**	**225S4**	540	505
	109	3220	13.43	32300	1.35						
	125	2810	11.73	32000	1.55						
	148	2380	9.94	31400	1.75						
	169	2080	8.69	30900	1.95						
45	**6.7**	60200	221	190000	0.85	**K**	**187R107**	**DRS**	**225M4**	2100	523
	7.6	52600	193	190000	0.95	**KH**	**187R107**	**DRS**	**225M4**	2030	523
	9.0	44400	163	190000	1.10						
	11	36800	135	150000	0.85	**K**	**167R107**	**DRS**	**225M4**	1520	523
	13	32100	118	150000	1.00	**KH**	**167R107**	**DRS**	**225M4**	1480	523
	8.2	52200	179.86	190000	0.95						
	9.0	47900	165.21	190000	1.05						
	10	41900	144.59	190000	1.20						
	11	37600	129.69	190000	1.35	**K**	**187**	**DRS**	**225M4**	1930	521
	13	32600	112.60	190000	1.55	**KH**	**187**	**DRS**	**225M4**	1860	522
	14	29600	102.16	190000	1.70						
	17	25500	88.00	190000	1.95						
	20	21400	73.96	187400	2.3						
	13	31800	109.83	150000	1.00						
	17	25500	87.86	150000	1.25						
	19	22600	78.14	150000	1.40						
	22	19700	68.07	150000	1.60	**K**	**167**	**DRS**	**225M4**	1340	519
	24	17600	60.74	148900	1.80	**KH**	**167**	**DRS**	**225M4**	1310	520
	29	15000	51.77	145200	2.1						
	34	12400	42.89	140400	2.6						
	21	20400	70.38	76800	0.90						
	24	17700	61.02	77700	1.00						
	27	15700	54.29	78000	1.15						
	32	13500	46.79	77800	1.30	**K**	**157**	**DRS**	**225M4**	950	514
	39	11000	38.02	76900	1.65	**KF**	**157**	**DRS**	**225M4**	1030	515
	47	9080	31.30	75400	2.00	**KA**	**157**	**DRS**	**225M4**	910	516
	54	8020	27.62	74300	2.2	**KAF**	**157**	**DRS**	**225M4**	970	515
	62	6950	23.95	72800	2.6						
	69	6180	21.31	71400	2.9						
	81	5330	18.37	69600	3.4						
	31	13800	47.82	52800	0.95	**K**	**127**	**DRS**	**225M4**	720	509
	37	11600	40.19	53900	1.10	**KF**	**127**	**DRS**	**225M4**	760	510
	41	10500	36.25	54200	1.25	**KA**	**127**	**DRS**	**225M4**	690	511
						KAF	**127**	**DRS**	**225M4**	730	510
	47	9100	31.37	54400	1.45						
	53	8030	27.68	54200	1.60						
	62	6930	23.91	53800	1.85						
	70	6130	21.15	53200	2.1	**K**	**127**	**DRS**	**225M4**	720	509
	83	5150	17.77	52200	2.5	**KF**	**127**	**DRS**	**225M4**	760	510
	103	4160	14.35	50600	2.9	**KA**	**127**	**DRS**	**225M4**	690	511
	116	3710	12.79	48300	2.3	**KAF**	**127**	**DRS**	**225M4**	730	510
	138	3110	10.74	47000	2.6						
	171	2510	8.68	45200	2.9						
	51	8410	29.00	22900	0.85	**K**	**107**	**DRS**	**225M4**	560	504
	56	7630	26.32	25300	0.95	**KF**	**107**	**DRS**	**225M4**	580	505
	65	6560	22.62	28100	1.10	**KA**	**107**	**DRS**	**225M4**	540	506
	75	5730	19.74	29800	1.25	**KAF**	**107**	**DRS**	**225M4**	560	505

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N] [1)]	SEW f_B					m [kg]	
45	**88**	4860	16.75	31100	1.45						
	101	4240	14.64	31700	1.60	**K**	**107**	**DRS**	**225M4**	560	504
	110	3890	13.43	29900	1.10	**KF**	**107**	**DRS**	**225M4**	580	505
	126	3400	11.73	29900	1.25	**KA**	**107**	**DRS**	**225M4**	540	506
	149	2880	9.94	29600	1.45	**KAF**	**107**	**DRS**	**225M4**	560	505
	170	2520	8.69	29300	1.60						
55	**10**	51300	144.59	190000	0.95						
	11	46000	129.69	190000	1.10						
	13	39900	112.60	188500	1.25						
	14	36200	102.16	187000	1.40	**K**	**187**	**DRS**	**225MC4**	1940	521
	17	31200	88.00	184200	1.60	**KH**	**187**	**DRS**	**225MC4**	1870	522
	20	26200	73.96	180100	1.90						
	23	22700	64.04	176200	2.2						
	17	31100	87.86	145300	1.05						
	19	27700	78.14	144600	1.15						
	22	24100	68.07	143200	1.30						
	24	21500	60.74	141700	1.50	**K**	**167**	**DRS**	**225MC4**	1360	519
	29	18300	51.77	139100	1.75	**KH**	**167**	**DRS**	**225MC4**	1320	520
	34	15200	42.89	135400	2.1						
	40	12900	36.61	131900	2.5						
	24	21600	61.02	69000	0.85						
	27	19200	54.29	70300	0.95						
	32	16600	46.79	71200	1.10						
	39	13400	38.02	71500	1.35						
	47	11100	31.30	71000	1.60	**K**	**157**	**DRS**	**225MC4**	960	514
	54	9800	27.62	70400	1.85	**KF**	**157**	**DRS**	**225MC4**	1040	515
	62	8490	23.95	69400	2.1	**KA**	**157**	**DRS**	**225MC4**	930	516
	69	7560	21.31	68400	2.4	**KAF**	**157**	**DRS**	**225MC4**	990	515
	81	6510	18.37	67000	2.8						
	99	5290	14.92	64700	3.4						
	117	4490	12.65	62800	3.8						
	37	14200	40.19	47400	0.90	**K**	**127**	**DRS**	**225MC4**	730	509
	47	11100	31.37	49300	1.15	**KF**	**127**	**DRS**	**225MC4**	770	510
	53	9820	27.68	49700	1.30	**KA**	**127**	**DRS**	**225MC4**	700	511
						KAF	**127**	**DRS**	**225MC4**	740	510
	62	8480	23.91	49900	1.55						
	70	7500	21.15	49800	1.75						
	83	6300	17.77	49300	2.1	**K**	**127**	**DRS**	**225MC4**	730	509
	103	5090	14.35	48300	2.4	**KF**	**127**	**DRS**	**225MC4**	770	510
	116	4530	12.79	45900	1.90	**KA**	**127**	**DRS**	**225MC4**	700	511
	138	3810	10.74	45000	2.1	**KAF**	**127**	**DRS**	**225MC4**	740	510
	171	3070	8.68	43600	2.4						
75	**11**	62700	129.69	164100	0.80						
	13	54400	112.60	166100	0.90						
	14	49400	102.16	166600	1.00						
	17	42500	88.00	166600	1.15	**K**	**187**	**DV**	**280S4**	2200	521
	20	35700	73.96	165300	1.40	**KH**	**187**	**DV**	**280S4**	2130	522
	23	30900	64.04	163400	1.60						
	28	25800	53.36	160100	1.95						
	33	22000	45.50*	156700	2.3						
	19	37800	78.14	126100	0.85						
	22	32900	68.07	127100	0.95						
	24	29300	60.74	127300	1.10						
	29	25000	51.77	126800	1.30						
	34	20700	42.89	125200	1.55	**K**	**167**	**DV**	**280S4**	1620	519
	40	17700	36.61	123200	1.80	**KH**	**167**	**DV**	**280S4**	1580	520
	46	15600	32.25	121300	2.0						
	51	13900	28.77	119300	2.3						
	60	11800	24.52	116300	2.7						
	39	18300	38.02	60800	1.00						
	47	15100	31.30	62200	1.20						
	54	13300	27.62	62600	1.35	**K**	**157**	**DV**	**280S4**	1220	514
	62	11500	23.95	62600	1.55	**KF**	**157**	**DV**	**280S4**	1300	515
	69	10300	21.31	62400	1.75	**KA**	**157**	**DV**	**280S4**	1190	516
	81	8880	18.37	61800	2.0	**KAF**	**157**	**DV**	**280S4**	1250	515
	99	7220	14.92	60500	2.5						
	117	6120	12.65	59300	2.8						



K..DRS
K..DRS [kW]

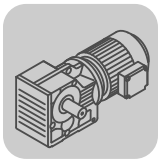
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
75	**47**	15100	31.37	39200	0.85						
	53	13300	27.68	40800	0.95						
	62	11500	23.91	42200	1.10						
	70	10200	21.15	42900	1.25	**K**	**127**	**DV**	**280S4**	990	509
	83	8590	17.77	43500	1.50	**KF**	**127**	**DV**	**280S4**	1030	510
	103	6940	14.35	43700	1.75	**KA**	**127**	**DV**	**280S4**	960	511
	116	6180	12.79	41100	1.40	**KAF**	**127**	**DV**	**280S4**	1000	510
	138	5190	10.74	41000	1.55						
	171	4190	8.68	40400	1.70						
90	**14**	59300	102.16	151300	0.85						
	17	51100	88.00	153400	1.00						
	20	42900	73.96	154200	1.15						
	23	37100	64.04	153800	1.35	**K**	**187**	**DV**	**280M4**	2200	521
	28	30900	53.36	152200	1.60	**KH**	**187**	**DV**	**280M4**	2140	522
	33	26400	45.50*	149900	1.90						
	35	24600	42.51	148700	2.0						
	38	22300	38.57	146900	2.2						
	22	39500	68.07	115100	0.80						
	24	35200	60.74	116600	0.90						
	29	30000	51.77	117600	1.05						
	34	24900	42.89	117600	1.30						
	40	21200	36.61	116700	1.50	**K**	**167**	**DV**	**280M4**	1620	519
	46	18700	32.25	115500	1.70	**KH**	**167**	**DV**	**280M4**	1580	520
	51	16700	28.77	114200	1.90						
	60	14200	24.52	111900	2.2						
	73	11700	20.32	108800	2.7						
	85	10000	17.34	106000	3.2						
	39	22000	38.02	52700	0.80						
	62	13900	23.95	57500	1.30	**K**	**157**	**DV**	**280M4**	1230	514
	69	12300	21.31	57900	1.45	**KF**	**157**	**DV**	**280M4**	1310	515
	81	10600	18.37	57900	1.70	**KA**	**157**	**DV**	**280M4**	1190	516
	99	8660	14.92	57400	2.1	**KAF**	**157**	**DV**	**280M4**	1250	515
	117	7340	12.65	56600	2.3						
	62	13800	23.91	36400	0.95						
	70	12200	21.15	37800	1.05						
	83	10300	17.77	39200	1.25	**K**	**127**	**DV**	**280M4**	990	509
	103	8330	14.35	40200	1.45	**KF**	**127**	**DV**	**280M4**	1040	510
	116	7420	12.79	37600	1.15	**KA**	**127**	**DV**	**280M4**	970	511
	138	6230	10.74	38000	1.30	**KAF**	**127**	**DV**	**280M4**	1000	510
	171	5030	8.68	38000	1.45						
110	**17**	62300	88.00	135900	0.80						
	20	52400	73.96	139500	0.95						
	23	45300	64.04	141000	1.10	**K**	**187**	**DRS**	**315K4**	2450	521
	28	37800	53.36	141500	1.30	**KH**	**187**	**DRS**	**315K4**	2380	522
	33	32200	45.50*	140800	1.55						
	35	30100	42.51	140200	1.65	**K**	**187**	**DRS**	**315K4/ERF/NS**	2450	521
						KH	**187**	**DRS**	**315K4/ERF/NS**	2380	522
	38	27300	38.57	139200	1.85						
	45	23500	33.23	137100	2.1	**K**	**187**	**DRS**	**315K4**	2450	521
	53	19700	27.92	134100	2.5	**KH**	**187**	**DRS**	**315K4**	2380	522
	29	36600	51.77	105400	0.85						
	35	30400	42.89	107500	1.05	**K**	**167**	**DRS**	**315K4**	1870	519
	40	25900	36.61	108100	1.25	**KH**	**167**	**DRS**	**315K4**	1830	520
	46	22800	32.25	107900	1.40	**K**	**167**	**DRS**	**315K4/ERF/NS**	1870	519
						KH	**167**	**DRS**	**315K4/ERF/NS**	1830	520
	52	20300	28.77	107400	1.55						
	60	17300	24.52	106100	1.85	**K**	**167**	**DRS**	**315K4**	1870	519
	73	14400	20.32	104000	2.2	**KH**	**167**	**DRS**	**315K4**	1830	520
	85	12200	17.34	101800	2.6						
						K	**157**	**DRS**	**315K4/ERF/NS**	1470	514
	62	16900	23.95	50800	1.05	**KF**	**157**	**DRS**	**315K4/ERF/NS**	1550	515
						KA	**157**	**DRS**	**315K4/ERF/NS**	1440	516
						KAF	**157**	**DRS**	**315K4/ERF/NS**	1500	515
	70	15100	21.31	51800	1.20	**K**	**157**	**DRS**	**315K4**	1470	514
	81	13000	18.37	52700	1.40	**KF**	**157**	**DRS**	**315K4**	1550	515
	99	10500	14.92	53200	1.70	**KA**	**157**	**DRS**	**315K4**	1440	516
	117	8970	12.65	53000	1.90	**KAF**	**157**	**DRS**	**315K4**	1500	515

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
132	**20**	62900	73.96	123200	0.80	**K**	**187**	**DRS**	**315S4**	2530	521
						KH	**187**	**DRS**	**315S4**	2460	522
	23	54500	64.04	127000	0.90						
	28	45400	53.36	129800	1.10	**K**	**187**	**DRS**	**315S4**	2530	521
	33	38700	45.50*	130800	1.30	**KH**	**187**	**DRS**	**315S4**	2460	522
	35	36200	42.51	130900	1.40	**K**	**187**	**DRS**	**315S4/ERF/NS**	2530	521
	38	32800	38.57	130700	1.50	**KH**	**187**	**DRS**	**315S4/ERF/NS**	2460	522
	45	28200	33.23	129800	1.75						
	53	23700	27.92	128000	2.1						
	61	20500	24.18	125900	2.3	**K**	**187**	**DRS**	**315S4**	2530	521
	73	17100	20.15	122800	2.6	**KH**	**187**	**DRS**	**315S4**	2460	522
	86	14600	17.18	119800	2.8						
	34	36500	42.89	96300	0.90	**K**	**167**	**DRS**	**315S4**	1950	519
	40	31100	36.61	98500	1.05	**KH**	**167**	**DRS**	**315S4**	1910	520
	46	27400	32.25	99500	1.15	**K**	**167**	**DRS**	**315S4/ERF/NS**	1950	519
	51	24500	28.77	99900	1.30	**KH**	**167**	**DRS**	**315S4/ERF/NS**	1910	520
	60	20800	24.52	99800	1.55						
	73	17300	20.32	98800	1.85	**K**	**167**	**DRS**	**315S4**	1950	519
	85	14700	17.34	97300	2.2	**KH**	**167**	**DRS**	**315S4**	1910	520
						K	**157**	**DRS**	**315S4/ERF/NS**	1550	514
	62	20300	23.95	43300	0.90	**KF**	**157**	**DRS**	**315S4/ERF/NS**	1630	515
	69	18100	21.31	45200	1.00	**KA**	**157**	**DRS**	**315S4/ERF/NS**	1520	516
						KAF	**157**	**DRS**	**315S4/ERF/NS**	1580	515
	81	15600	18.37	47000	1.15	**K**	**157**	**DRS**	**315S4**	1550	514
	99	12700	14.92	48500	1.40	**KF**	**157**	**DRS**	**315S4**	1630	515
	117	10700	12.65	49100	1.60	**KA**	**157**	**DRS**	**315S4**	1520	516
						KAF	**157**	**DRS**	**315S4**	1580	515
160	**28**	54900	53.36	114900	0.90						
	33	46800	45.50*	118100	1.05						
	45	34200	33.23	120500	1.45						
	53	28700	27.92	120100	1.75	**K**	**187**	**DRS**	**315M4**	2690	521
	61	24900	24.18	119200	1.90	**KH**	**187**	**DRS**	**315M4**	2620	522
	74	20700	20.15	117200	2.1						
	86	17600	17.18	114900	2.3						
	41	37700	36.61	86500	0.85						
	60	25200	24.52	91700	1.25	**K**	**167**	**DRS**	**315M4**	2110	519
	73	20900	20.32	92000	1.55	**KH**	**167**	**DRS**	**315M4**	2070	520
	86	17800	17.34	91600	1.80						
						K	**157**	**DRS**	**315M4**	1710	514
	81	18900	18.37	39800	0.95	**KF**	**157**	**DRS**	**315M4**	1790	515
	99	15300	14.92	42600	1.15	**KA**	**157**	**DRS**	**315M4**	1680	516
	117	13000	12.65	44100	1.30	**KAF**	**157**	**DRS**	**315M4**	1730	515
200	**33**	58600	45.50*	99900	0.85	**K**	**187**	**DRS**	**315L4**	2770	521
						KH	**187**	**DRS**	**315L4**	2700	522
	45	42800	33.23	107300	1.15	**K**	**187**	**DRS**	**315L4/ERF/NS**	2770	521
						KH	**187**	**DRS**	**315L4/ERF/NS**	2700	522
	53	36000	27.92	109000	1.40						
	61	31100	24.18	109500	1.55	**K**	**187**	**DRS**	**315L4**	2770	521
	74	25900	20.15	109200	1.70	**KH**	**187**	**DRS**	**315L4**	2700	522
	86	22100	17.18	108100	1.85						
	60	31600	24.52	80100	1.00	**K**	**167**	**DRS**	**315L4/ERF/NS**	2190	519
						KH	**167**	**DRS**	**315L4/ERF/NS**	2150	520
	73	26200	20.32	82400	1.20	**K**	**167**	**DRS**	**315L4**	2190	519
	85	22300	17.34	83400	1.45	**KH**	**167**	**DRS**	**315L4**	2150	520
						K	**157**	**DRS**	**315L4**	1790	514
	99	19200	14.92	34200	0.95	**KF**	**157**	**DRS**	**315L4**	1870	515
	117	16300	12.65	36900	1.05	**KA**	**157**	**DRS**	**315L4**	1760	516
						KAF	**157**	**DRS**	**315L4**	1810	515

11.4 K..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
200	**0.20**	6832	5640						
	0.23	5922	5640						
	0.25	5491	5640						
	0.29	4759	5640						
	0.33	4160	5640						
	0.38	3645	5640	**K**	**37R17**	**DR**	**63S4**	19	523
	0.43	3205	5640	**KF**	**37R17**	**DR**	**63S4**	22	523
	0.49	2801	5640	**KA**	**37R17**	**DR**	**63S4**	19	523
	0.56	2454	5640	**KAF**	**37R17**	**DR**	**63S4**	21	523
	0.64	2166	5640						
	0.73	1891	5640						
	0.83	1660	5640						
	0.94	1466	5640						
	1.1	1288	5640						
	1.2	1136	5640						
	1.4	996	5640						
	1.6	876	5640						
	1.8	761	5640						
	2.1	671	5640	**K**	**37R17**	**DR**	**63S4**	19	523
	2.4	585	5640	**KF**	**37R17**	**DR**	**63S4**	21	523
	2.7	512	5640	**KA**	**37R17**	**DR**	**63S4**	19	523
	3.1	451	5640	**KAF**	**37R17**	**DR**	**63S4**	20	523
	3.5	396	5640						
	4.0	346	5640						
	4.5	304	5640						
	4.9	267	5640	**K**	**37R17**	**DR**	**63M4**	19	523
	5.6	234	5640	**KF**	**37R17**	**DR**	**63M4**	21	523
	6.4	205	5640	**KA**	**37R17**	**DR**	**63M4**	19	523
	7.3	181	5640	**KAF**	**37R17**	**DR**	**63M4**	20	523
	8.1	160	5640	**K**	**37R17**	**DR**	**63L4**	20	523
	9.5	136	5640	**KF**	**37R17**	**DR**	**63L4**	22	523
	10	127	5640	**KA**	**37R17**	**DR**	**63L4**	19	523
				KAF	**37R17**	**DR**	**63L4**	21	523
				K	**37R17**	**DRS**	**71S4**	21	523
	12	110	5640	**KF**	**37R17**	**DRS**	**71S4**	24	523
	14	96	5640	**KA**	**37R17**	**DRS**	**71S4**	21	523
				KAF	**37R17**	**DRS**	**71S4**	23	523
400	**0.14**	10138	5920						
	0.16	8534	5920						
	0.18	7662	5920						
	0.20	6826	5920						
	0.23	5983	5920						
	0.27	5159	5920						
	0.30	4601	5920	**K**	**47R37**	**DR**	**63S4**	34	523
	0.35	3940	5920	**KF**	**47R37**	**DR**	**63S4**	37	523
	0.40	3477	5920	**KA**	**47R37**	**DR**	**63S4**	33	523
	0.45	3043	5920	**KAF**	**47R37**	**DR**	**63S4**	36	523
	0.51	2733	5920						
	0.59	2354	5920						
	0.67	2063	5920						
	0.76	1819	5920						
	0.87	1586	5920						
	0.99	1388	5920						
	1.1	1222	5920						
	1.3	1097	5920	**K**	**47R37**	**DR**	**63S4**	33	523
	1.5	945	5920	**KF**	**47R37**	**DR**	**63S4**	36	523
	1.7	831	5920	**KA**	**47R37**	**DR**	**63S4**	32	523
	1.9	718	5920	**KAF**	**47R37**	**DR**	**63S4**	35	523
	2.2	639	5920						
	2.4	552	5920	**K**	**47R37**	**DR**	**63M4**	33	523
	2.7	495	5920	**KF**	**47R37**	**DR**	**63M4**	36	523
	3.1	426	5920	**KA**	**47R37**	**DR**	**63M4**	32	523
	3.5	375	5920	**KAF**	**47R37**	**DR**	**63M4**	35	523
	4.0	327	5920	**K**	**47R37**	**DR**	**63L4**	34	523
	4.5	289	5920	**KF**	**47R37**	**DR**	**63L4**	37	523
	5.1	256	5920	**KA**	**47R37**	**DR**	**63L4**	33	523
				KAF	**47R37**	**DR**	**63L4**	36	523

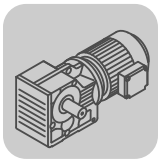
$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
400				**K**	**47R37**	**DRS**	**71S4**	36	523
	6.2	225	5920	**KF**	**47R37**	**DRS**	**71S4**	39	523
	7.0	198	5920	**KA**	**47R37**	**DRS**	**71S4**	35	523
				KAF	**47R37**	**DRS**	**71S4**	38	523
	8.1	171	5920	**K**	**47R37**	**DRS**	**71M4**	37	523
	9.0	153	5920	**KF**	**47R37**	**DRS**	**71M4**	40	523
	11	131	5920	**KA**	**47R37**	**DRS**	**71M4**	36	523
				KAF	**47R37**	**DRS**	**71M4**	39	523
600	**0.11**	12169	7630						
	0.12	11162	7630						
	0.15	9503	7630						
	0.16	8547	7630						
	0.19	7277	7630						
	0.21	6478	7630						
	0.24	5662	7630	**K**	**57R37**	**DR**	**63S4**	39	523
	0.27	5033	7630	**KF**	**57R37**	**DR**	**63S4**	44	523
	0.32	4340	7630	**KA**	**57R37**	**DR**	**63S4**	37	523
	0.36	3854	7630	**KAF**	**57R37**	**DR**	**63S4**	43	523
	0.41	3390	7630						
	0.47	2924	7630						
	0.53	2593	7630						
	0.61	2249	7630						
	0.70	1986	7630						
	0.79	1743	7630						
	0.90	1539	7630	**K**	**57R37**	**DR**	**63S4**	39	523
	1.0	1354	7630	**KF**	**57R37**	**DR**	**63S4**	44	523
	1.2	1174	7630	**KA**	**57R37**	**DR**	**63S4**	37	523
	1.3	1036	7630	**KAF**	**57R37**	**DR**	**63S4**	43	523
	1.5	906	7630						
	1.6	806	7630	**K**	**57R37**	**DR**	**63M4**	39	523
	1.9	699	7630	**KF**	**57R37**	**DR**	**63M4**	44	523
	2.2	615	7630	**KA**	**57R37**	**DR**	**63M4**	37	523
				KAF	**57R37**	**DR**	**63M4**	43	523
	2.4	544	7630	**K**	**57R37**	**DR**	**63L4**	40	523
	2.8	473	7630	**KF**	**57R37**	**DR**	**63L4**	45	523
	3.1	421	7630	**KA**	**57R37**	**DR**	**63L4**	38	523
				KAF	**57R37**	**DR**	**63L4**	43	523
	3.8	362	7630	**K**	**57R37**	**DRS**	**71S4**	42	523
	4.3	319	7630	**KF**	**57R37**	**DRS**	**71S4**	47	523
	4.9	280	7630	**KA**	**57R37**	**DRS**	**71S4**	40	523
				KAF	**57R37**	**DRS**	**71S4**	45	523
	5.6	246	7630	**K**	**57R37**	**DRS**	**71M4**	43	523
	6.4	215	7630	**KF**	**57R37**	**DRS**	**71M4**	48	523
	7.2	192	7630	**KA**	**57R37**	**DRS**	**71M4**	41	523
				KAF	**57R37**	**DRS**	**71M4**	47	523
	8.4	166	7630	**K**	**57R37**	**DRS**	**80S4**	45	523
	9.7	145	7630	**KF**	**57R37**	**DRS**	**80S4**	50	523
	11	129	7630	**KA**	**57R37**	**DRS**	**80S4**	43	523
				KAF	**57R37**	**DRS**	**80S4**	49	523
				K	**57R37**	**DRS**	**80M4**	48	523
	13	111	7630	**KF**	**57R37**	**DRS**	**80M4**	53	523
	14	97	7630	**KA**	**57R37**	**DRS**	**80M4**	46	523
				KAF	**57R37**	**DRS**	**80M4**	51	523
820	**0.11**	12139	10300						
	0.12	11134	10300						
	0.15	9479	10300						
	0.17	8173	10300						
	0.19	7259	10300						
	0.21	6462	10300						
	0.24	5648	10300	**K**	**67R37**	**DR**	**63S4**	45	523
	0.28	4846	10300	**KF**	**67R37**	**DR**	**63S4**	51	523
	0.32	4329	10300	**KA**	**67R37**	**DR**	**63S4**	43	523
	0.37	3750	10300	**KAF**	**67R37**	**DR**	**63S4**	48	523
	0.42	3315	10300						
	0.47	2917	10300						
	0.55	2532	10300						
	0.62	2244	10300						
	0.70	1981	10300						



K..DRS
K..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
820	**0.79**	1739	10300	**K**	**67R37**	**DR**	**63S4**	45	523
	0.90	1535	10300	**KF**	**67R37**	**DR**	**63S4**	51	523
	1.0	1351	10300	**KA**	**67R37**	**DR**	**63S4**	42	523
	1.2	1171	10300	**KAF**	**67R37**	**DR**	**63S4**	48	523
	1.3	1034	10300	**K**	**67R37**	**DR**	**63M4**	45	523
	1.5	903	10300	**KF**	**67R37**	**DR**	**63M4**	51	523
	1.7	793	10300	**KA**	**67R37**	**DR**	**63M4**	42	523
				KAF	**67R37**	**DR**	**63M4**	48	523
	1.9	697	10300	**K**	**67R37**	**DR**	**63L4**	46	523
	2.1	613	10300	**KF**	**67R37**	**DR**	**63L4**	51	523
	2.4	542	10300	**KA**	**67R37**	**DR**	**63L4**	43	523
				KAF	**67R37**	**DR**	**63L4**	49	523
	2.9	471	10300	**K**	**67R37**	**DRS**	**71S4**	48	523
	3.3	420	10300	**KF**	**67R37**	**DRS**	**71S4**	53	523
	3.8	361	10300	**KA**	**67R37**	**DRS**	**71S4**	45	523
				KAF	**67R37**	**DRS**	**71S4**	51	523
	4.3	323	10300	**K**	**67R37**	**DRS**	**71M4**	49	523
	5.0	279	10300	**KF**	**67R37**	**DRS**	**71M4**	54	523
	5.6	246	10300	**KA**	**67R37**	**DRS**	**71M4**	46	523
				KAF	**67R37**	**DRS**	**71M4**	52	523
	6.4	217	10300	**K**	**67R37**	**DRS**	**80S4**	51	523
	7.3	191	10300	**KF**	**67R37**	**DRS**	**80S4**	57	523
				KA	**67R37**	**DRS**	**80S4**	48	523
				KAF	**67R37**	**DRS**	**80S4**	54	523
1550	**0.09**	15310	15400						
	0.10	14043	15400						
	0.12	11955	15400						
	0.14	10217	15400						
	0.16	8809	15400						
	0.18	7528	15400	**K**	**77R37**	**DR**	**63S4**	69	523
	0.21	6606	15400	**KF**	**77R37**	**DR**	**63S4**	78	523
	0.24	5774	15400	**KA**	**77R37**	**DR**	**63S4**	62	523
	0.27	5089	15400	**KAF**	**77R37**	**DR**	**63S4**	70	523
	0.31	4489	15400						
	0.35	3961	15400						
	0.40	3485	15400						
	0.48	2901	15400						
	0.51	2717	15400						
	0.56	2370	15400	**K**	**77R37**	**DR**	**63M4**	69	523
				KF	**77R37**	**DR**	**63M4**	78	523
				KA	**77R37**	**DR**	**63M4**	62	523
				KAF	**77R37**	**DR**	**63M4**	70	523
	0.64	2050	15400	**K**	**77R37**	**DR**	**63M4**	69	523
	0.75	1772	15400	**KF**	**77R37**	**DR**	**63M4**	77	523
	0.87	1514	15400	**KA**	**77R37**	**DR**	**63M4**	62	523
	0.95	1388	15400	**KAF**	**77R37**	**DR**	**63M4**	70	523
	1.1	1218	15400	**K**	**77R37**	**DR**	**63L4**	70	523
	1.2	1053	15400	**KF**	**77R37**	**DR**	**63L4**	78	523
				KA	**77R37**	**DR**	**63L4**	62	523
				KAF	**77R37**	**DR**	**63L4**	70	523
	1.5	924	15400	**K**	**77R37**	**DRS**	**71S4**	72	523
	1.7	815	15400	**KF**	**77R37**	**DRS**	**71S4**	80	523
	2.0	709	15400	**KA**	**77R37**	**DRS**	**71S4**	64	523
				KAF	**77R37**	**DRS**	**71S4**	72	523
	2.2	622	15400	**K**	**77R37**	**DRS**	**71M4**	73	523
	2.5	552	15400	**KF**	**77R37**	**DRS**	**71M4**	81	523
	2.8	485	15400	**KA**	**77R37**	**DRS**	**71M4**	65	523
				KAF	**77R37**	**DRS**	**71M4**	73	523
	3.3	428	15400	**K**	**77R37**	**DRS**	**80S4**	75	523
	3.8	367	15400	**KF**	**77R37**	**DRS**	**80S4**	83	523
				KA	**77R37**	**DRS**	**80S4**	68	523
				KAF	**77R37**	**DRS**	**80S4**	76	523
	4.3	328	15400	**K**	**77R37**	**DRS**	**80M4**	78	523
	4.9	290	15400	**KF**	**77R37**	**DRS**	**80M4**	86	523
	5.6	252	15400	**KA**	**77R37**	**DRS**	**80M4**	70	523
				KAF	**77R37**	**DRS**	**80M4**	78	523

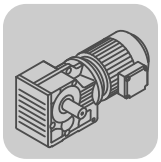
$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} 1) [N]					m [kg]	
2700	**0.09**	14829	27300						
	0.10	13168	27300						
	0.12	11737	27300						
	0.14	10217	27300	**K**	**87R57**	**DR**	**63S4**	120	523
	0.15	9073	27300	**KF**	**87R57**	**DR**	**63S4**	130	523
	0.18	7854	27300	**KA**	**87R57**	**DR**	**63S4**	105	523
	0.20	6832	27300	**KAF**	**87R57**	**DR**	**63S4**	120	523
	0.23	5930	27300						
	0.26	5240	27300						
	0.30	4562	27300						
	0.33	4037	27300	**K**	**87R57**	**DR**	**63M4**	120	523
	0.37	3609	27300	**KF**	**87R57**	**DR**	**63M4**	130	523
	0.42	3107	27300	**KA**	**87R57**	**DR**	**63M4**	105	523
	0.48	2728	27300	**KAF**	**87R57**	**DR**	**63M4**	120	523
				K	**87R57**	**DR**	**63L4**	120	523
	0.55	2371	27300	**KF**	**87R57**	**DR**	**63L4**	130	523
				KA	**87R57**	**DR**	**63L4**	105	523
				KAF	**87R57**	**DR**	**63L4**	120	523
				K	**87R57**	**DR**	**63L4**	120	523
	0.62	2088	27300	**KF**	**87R57**	**DR**	**63L4**	125	523
	0.70	1854	27300	**KA**	**87R57**	**DR**	**63L4**	105	523
				KAF	**87R57**	**DR**	**63L4**	120	523
				K	**87R57**	**DRS**	**71S4**	120	523
	0.83	1657	27300	**KF**	**87R57**	**DRS**	**71S4**	130	523
	0.97	1415	27300	**KA**	**87R57**	**DRS**	**71S4**	110	523
	1.1	1229	27300	**KAF**	**87R57**	**DRS**	**71S4**	120	523
				K	**87R57**	**DRS**	**71M4**	120	523
	1.3	1078	27300	**KF**	**87R57**	**DRS**	**71M4**	130	523
	1.4	951	27300	**KA**	**87R57**	**DRS**	**71M4**	110	523
	1.6	837	27300	**KAF**	**87R57**	**DRS**	**71M4**	120	523
				K	**87R57**	**DRS**	**80S4**	125	523
	1.9	726	27300	**KF**	**87R57**	**DRS**	**80S4**	135	523
	2.2	638	27300	**KA**	**87R57**	**DRS**	**80S4**	110	523
				KAF	**87R57**	**DRS**	**80S4**	125	523
				K	**87R57**	**DRS**	**80M4**	125	523
	2.5	562	27300	**KF**	**87R57**	**DRS**	**80M4**	135	523
	3.0	474	27300	**KA**	**87R57**	**DRS**	**80M4**	115	523
	3.3	426	27300	**KAF**	**87R57**	**DRS**	**80M4**	125	523
				K	**87R57**	**DRS**	**90M4**	130	523
	3.7	373	27300	**KF**	**87R57**	**DRS**	**90M4**	140	523
	4.2	330	27300	**KA**	**87R57**	**DRS**	**90M4**	120	523
	4.8	294	27300	**KAF**	**87R57**	**DRS**	**90M4**	130	523
				K	**87R57**	**DRS**	**90L4**	135	523
	5.6	250	27300	**KF**	**87R57**	**DRS**	**90L4**	145	523
	5.9	236	27300	**KA**	**87R57**	**DRS**	**90L4**	120	523
	7.0	201	27300	**KAF**	**87R57**	**DRS**	**90L4**	135	523
4300	**0.08**	18091	40000						
	0.08	16666	40000						
	0.09	14897	40000						
	0.10	13182	40000	**K**	**97R57**	**DR**	**63S4**	180	523
	0.12	11677	40000	**KF**	**97R57**	**DR**	**63S4**	200	523
	0.13	10317	40000	**KA**	**97R57**	**DR**	**63S4**	160	523
	0.15	9083	40000	**KAF**	**97R57**	**DR**	**63S4**	185	523
	0.17	8054	40000						
	0.20	6970	40000						
	0.22	6027	40000	**K**	**97R57**	**DR**	**63M4**	180	523
	0.24	5391	40000	**KF**	**97R57**	**DR**	**63M4**	200	523
	0.28	4669	40000	**KA**	**97R57**	**DR**	**63M4**	160	523
	0.32	4082	40000	**KAF**	**97R57**	**DR**	**63M4**	185	523
				K	**97R57**	**DR**	**63L4**	180	523
	0.36	3583	40000	**KF**	**97R57**	**DR**	**63L4**	200	523
	0.42	3108	40000	**KA**	**97R57**	**DR**	**63L4**	160	523
	0.47	2757	40000	**KAF**	**97R57**	**DR**	**63L4**	185	523
				K	**97R57**	**DRS**	**71S4**	180	523
	0.57	2419	40000	**KF**	**97R57**	**DRS**	**71S4**	200	523
	0.65	2123	40000	**KA**	**97R57**	**DRS**	**71S4**	160	523
				KAF	**97R57**	**DRS**	**71S4**	185	523



K..DRS
K..R..DRS [Nm]

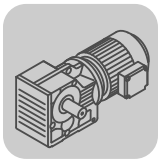
$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [N] 1)					m [kg]	
4300	**0.74**	1856	40000	**K**	**97R57**	**DRS**	**71M4**	180	523
	0.85	1625	40000	**KF**	**97R57**	**DRS**	**71M4**	200	523
	0.96	1430	40000	**KA**	**97R57**	**DRS**	**71M4**	165	523
	1.1	1261	40000	**KAF**	**97R57**	**DRS**	**71M4**	190	523
				K	**97R57**	**DRS**	**80S4**	185	523
	1.3	1102	40000	**KF**	**97R57**	**DRS**	**80S4**	205	523
	1.5	957	40000	**KA**	**97R57**	**DRS**	**80S4**	165	523
				KAF	**97R57**	**DRS**	**80S4**	190	523
				K	**97R57**	**DRS**	**80M4**	185	523
	1.6	855	40000	**KF**	**97R57**	**DRS**	**80M4**	205	523
	1.9	743	40000	**KA**	**97R57**	**DRS**	**80M4**	170	523
	2.2	652	40000	**KAF**	**97R57**	**DRS**	**80M4**	195	523
				K	**97R57**	**DRS**	**90M4**	190	523
	2.4	573	40000	**KF**	**97R57**	**DRS**	**90M4**	210	523
	2.8	504	40000	**KA**	**97R57**	**DRS**	**90M4**	175	523
				KAF	**97R57**	**DRS**	**90M4**	200	523
				K	**97R57**	**DRS**	**90L4**	195	523
	3.2	437	40000	**KF**	**97R57**	**DRS**	**90L4**	215	523
	3.7	382	40000	**KA**	**97R57**	**DRS**	**90L4**	175	523
	4.1	342	40000	**KAF**	**97R57**	**DRS**	**90L4**	200	523
				K	**97R57**	**DRS**	**100M4**	200	523
	4.6	305	40000	**KF**	**97R57**	**DRS**	**100M4**	220	523
	5.4	258	40000	**KA**	**97R57**	**DRS**	**100M4**	180	523
	6.0	232	40000	**KAF**	**97R57**	**DRS**	**100M4**	205	523
				K	**97R57**	**DRS**	**100LC4**	205	523
	7.2	199	40000	**KF**	**97R57**	**DRS**	**100LC4**	225	523
				KA	**97R57**	**DRS**	**100LC4**	185	523
				KAF	**97R57**	**DRS**	**100LC4**	210	523
8000				**K**	**107R77**	**DR**	**63S4**	310	523
	0.10	14311	65000	**KF**	**107R77**	**DR**	**63S4**	320	523
				KA	**107R77**	**DR**	**63S4**	280	523
				KAF	**107R77**	**DR**	**63S4**	305	523
	0.11	12211	65000	**K**	**107R77**	**DR**	**63M4**	310	523
	0.12	10677	65000	**KF**	**107R77**	**DR**	**63M4**	320	523
	0.14	9524	65000	**KA**	**107R77**	**DR**	**63M4**	280	523
	0.16	8328	65000	**KAF**	**107R77**	**DR**	**63M4**	305	523
				K	**107R77**	**DR**	**63L4**	310	523
	0.18	7270	65000	**KF**	**107R77**	**DR**	**63L4**	320	523
	0.21	6184	65000	**KA**	**107R77**	**DR**	**63L4**	285	523
	0.23	5662	65000	**KAF**	**107R77**	**DR**	**63L4**	305	523
				K	**107R77**	**DRS**	**71S4**	310	523
	0.27	5138	65000	**KF**	**107R77**	**DRS**	**71S4**	325	523
	0.32	4359	65000	**KA**	**107R77**	**DRS**	**71S4**	285	523
	0.36	3810	65000	**KAF**	**107R77**	**DRS**	**71S4**	310	523
				K	**107R77**	**DRS**	**71M4**	315	523
	0.41	3358	65000	**KF**	**107R77**	**DRS**	**71M4**	325	523
	0.46	2977	65000	**KA**	**107R77**	**DRS**	**71M4**	285	523
	0.53	2599	65000	**KAF**	**107R77**	**DRS**	**71M4**	310	523
				K	**107R77**	**DRS**	**80S4**	315	523
	0.61	2286	65000	**KF**	**107R77**	**DRS**	**80S4**	330	523
	0.72	1939	65000	**KA**	**107R77**	**DRS**	**80S4**	290	523
				KAF	**107R77**	**DRS**	**80S4**	310	523
				K	**107R77**	**DRS**	**80M4**	315	523
	0.82	1713	65000	**KF**	**107R77**	**DRS**	**80M4**	330	523
	0.91	1554	65000	**KA**	**107R77**	**DRS**	**80M4**	290	523
	1.1	1336	65000	**KAF**	**107R77**	**DRS**	**80M4**	315	523
				K	**107R77**	**DRS**	**90M4**	320	523
	1.2	1166	65000	**KF**	**107R77**	**DRS**	**90M4**	335	523
	1.4	1030	65000	**KA**	**107R77**	**DRS**	**90M4**	295	523
	1.5	904	65000	**KAF**	**107R77**	**DRS**	**90M4**	320	523
				K	**107R77**	**DRS**	**90L4**	325	523
	1.8	793	65000	**KF**	**107R77**	**DRS**	**90L4**	335	523
	2.0	696	65000	**KA**	**107R77**	**DRS**	**90L4**	295	523
	2.3	615	65000	**KAF**	**107R77**	**DRS**	**90L4**	320	523
				K	**107R77**	**DRS**	**100M4**	330	523
	2.7	522	65000	**KF**	**107R77**	**DRS**	**100M4**	340	523
	3.0	461	65000	**KA**	**107R77**	**DRS**	**100M4**	300	523
				KAF	**107R77**	**DRS**	**100M4**	325	523

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} 1) [N]					m [kg]	
8000				**K**	**107R77**	**DRS**	**100LC4**	335	523
	3.5	408	65000	**KF**	**107R77**	**DRS**	**100LC4**	345	523
	4.0	364	65000	**KA**	**107R77**	**DRS**	**100LC4**	305	523
				KAF	**107R77**	**DRS**	**100LC4**	330	523
				K	**107R77**	**DRS**	**132S4**	345	523
	4.6	318	65000	**KF**	**107R77**	**DRS**	**132S4**	360	523
	5.0	286	65000	**KA**	**107R77**	**DRS**	**132S4**	320	523
	5.8	251	65000	**KAF**	**107R77**	**DRS**	**132S4**	345	523
13000	**0.08**	17550	79200	**K**	**127R77**	**DR**	**63M4**	470	523
	0.08	16006	79200	**KF**	**127R77**	**DR**	**63M4**	510	523
	0.09	14975	79200	**KA**	**127R77**	**DR**	**63M4**	440	523
	0.11	12440	79200	**KAF**	**127R77**	**DR**	**63M4**	480	523
				K	**127R77**	**DR**	**63L4**	470	523
	0.12	10915	79200	**KF**	**127R77**	**DR**	**63L4**	510	523
	0.13	9819	79200	**KA**	**127R77**	**DR**	**63L4**	440	523
	0.15	8443	79200	**KAF**	**127R77**	**DR**	**63L4**	480	523
				K	**127R77**	**DRS**	**71S4**	470	523
	0.18	7482	79200	**KF**	**127R77**	**DRS**	**71S4**	510	523
	0.21	6565	79200	**KA**	**127R77**	**DRS**	**71S4**	445	523
				KAF	**127R77**	**DRS**	**71S4**	480	523
				K	**127R77**	**DRS**	**71M4**	475	523
	0.24	5804	79200	**KF**	**127R77**	**DRS**	**71M4**	520	523
	0.27	5027	79200	**KA**	**127R77**	**DRS**	**71M4**	445	523
	0.31	4423	79200	**KAF**	**127R77**	**DRS**	**71M4**	485	523
				K	**127R77**	**DRS**	**80S4**	475	523
	0.36	3889	79200	**KF**	**127R77**	**DRS**	**80S4**	520	523
	0.42	3311	79200	**KA**	**127R77**	**DRS**	**80S4**	450	523
	0.47	3009	79200	**KAF**	**127R77**	**DRS**	**80S4**	485	523
				K	**127R77**	**DRS**	**80M4**	480	523
	0.54	2607	79200	**KF**	**127R77**	**DRS**	**80M4**	520	523
	0.62	2268	79200	**KA**	**127R77**	**DRS**	**80M4**	450	523
				KAF	**127R77**	**DRS**	**80M4**	490	523
				K	**127R77**	**DRS**	**80M4**	480	523
	0.73	1926	79200	**KF**	**127R77**	**DRS**	**80M4**	520	523
				KA	**127R77**	**DRS**	**80M4**	450	523
				KAF	**127R77**	**DRS**	**80M4**	485	523
				K	**127R77**	**DRS**	**90M4**	480	523
	0.79	1757	79200	**KF**	**127R77**	**DRS**	**90M4**	520	523
	0.90	1541	79200	**KA**	**127R77**	**DRS**	**90M4**	455	523
				KAF	**127R77**	**DRS**	**90M4**	490	523
				K	**127R77**	**DRS**	**90L4**	485	523
	1.0	1342	79200	**KF**	**127R77**	**DRS**	**90L4**	530	523
	1.2	1177	79200	**KA**	**127R77**	**DRS**	**90L4**	455	523
	1.4	1025	79200	**KAF**	**127R77**	**DRS**	**90L4**	495	523
				K	**127R77**	**DRS**	**100M4**	490	523
	1.6	899	79200	**KF**	**127R77**	**DRS**	**100M4**	530	523
	1.8	790	79200	**KA**	**127R77**	**DRS**	**100M4**	460	523
	2.0	704	79200	**KAF**	**127R77**	**DRS**	**100M4**	500	523
				K	**127R77**	**DRS**	**100LC4**	495	523
	2.4	610	79200	**KF**	**127R77**	**DRS**	**100LC4**	540	523
	2.6	549	79200	**KA**	**127R77**	**DRS**	**100LC4**	465	523
				KAF	**127R77**	**DRS**	**100LC4**	500	523
				K	**127R77**	**DRS**	**132S4**	510	523
	3.0	477	79200	**KF**	**127R77**	**DRS**	**132S4**	550	523
	3.4	418	79200	**KA**	**127R77**	**DRS**	**132S4**	480	523
				KAF	**127R77**	**DRS**	**132S4**	520	523
				K	**127R87**	**DRS**	**132S4**	530	523
	2.7	536	79200	**KF**	**127R87**	**DRS**	**132S4**	570	523
	3.0	473	79200	**KA**	**127R87**	**DRS**	**132S4**	500	523
	3.5	418	79200	**KAF**	**127R87**	**DRS**	**132S4**	540	523
				K	**127R87**	**DRS**	**132M4**	540	523
	3.9	367	79200	**KF**	**127R87**	**DRS**	**132M4**	580	523
	4.4	330	79200	**KA**	**127R87**	**DRS**	**132M4**	510	523
	5.0	287	79200	**KAF**	**127R87**	**DRS**	**132M4**	550	523
				K	**127R87**	**DRS**	**132MC4**	540	523
	5.8	253	79200	**KF**	**127R87**	**DRS**	**132MC4**	590	523
				KA	**127R87**	**DRS**	**132MC4**	520	523
				KAF	**127R87**	**DRS**	**132MC4**	550	523



$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [N]					m [kg]	
18000	**0.08**	17679	112200						
	0.09	15729	112200						
	0.09	14721	112200	**K**	**157R97**	**DRS**	**71M4**	790	523
	0.11	13097	112200	**KF**	**157R97**	**DRS**	**71M4**	870	523
	0.12	11368	112200	**KA**	**157R97**	**DRS**	**71M4**	750	523
	0.14	10114	112200	**KAF**	**157R97**	**DRS**	**71M4**	810	523
	0.16	8718	112200						
	0.18	7734	112200						
				K	**157R97**	**DRS**	**80S4**	790	523
	0.28	5074	112200	**KF**	**157R97**	**DRS**	**80S4**	870	523
	0.31	4514	112200	**KA**	**157R97**	**DRS**	**80S4**	760	523
				KAF	**157R97**	**DRS**	**80S4**	810	523
				K	**157R97**	**DRS**	**80M4**	800	523
	0.35	3979	112200	**KF**	**157R97**	**DRS**	**80M4**	870	523
	0.40	3516	112200	**KA**	**157R97**	**DRS**	**80M4**	760	523
	0.46	3051	112200	**KAF**	**157R97**	**DRS**	**80M4**	820	523
				K	**157R97**	**DRS**	**90M4**	800	523
	0.53	2610	112200	**KF**	**157R97**	**DRS**	**90M4**	880	523
	0.60	2322	112200	**KA**	**157R97**	**DRS**	**90M4**	760	523
				KAF	**157R97**	**DRS**	**90M4**	820	523
				K	**157R97**	**DRS**	**90L4**	800	523
	0.69	2029	112200	**KF**	**157R97**	**DRS**	**90L4**	880	523
	0.78	1805	112200	**KA**	**157R97**	**DRS**	**90L4**	760	523
				KAF	**157R97**	**DRS**	**90L4**	820	523
				K	**157R97**	**DRS**	**90L4**	800	523
	0.84	1659	112200	**KF**	**157R97**	**DRS**	**90L4**	880	523
	1.0	1365	112200	**KA**	**157R97**	**DRS**	**90L4**	760	523
				KAF	**157R97**	**DRS**	**90L4**	820	523
				K	**157R97**	**DRS**	**100M4**	800	523
	1.1	1229	112200	**KF**	**157R97**	**DRS**	**100M4**	880	523
	1.3	1093	112200	**KA**	**157R97**	**DRS**	**100M4**	770	523
				KAF	**157R97**	**DRS**	**100M4**	830	523
				K	**157R97**	**DRS**	**100LC4**	810	523
	1.5	942	112200	**KF**	**157R97**	**DRS**	**100LC4**	890	523
	1.7	854	112200	**KA**	**157R97**	**DRS**	**100LC4**	770	523
	1.9	756	112200	**KAF**	**157R97**	**DRS**	**100LC4**	830	523
				K	**157R97**	**DRS**	**132S4**	820	523
	2.2	661	112200	**KF**	**157R97**	**DRS**	**132S4**	900	523
	2.6	567	112200	**KA**	**157R97**	**DRS**	**132S4**	780	523
				KAF	**157R97**	**DRS**	**132S4**	840	523
				K	**157R97**	**DRS**	**132M4**	830	523
	2.9	504	112200	**KF**	**157R97**	**DRS**	**132M4**	910	523
	3.3	434	112200	**KA**	**157R97**	**DRS**	**132M4**	800	523
				KAF	**157R97**	**DRS**	**132M4**	860	523
				K	**157R97**	**DRS**	**132MC4**	840	523
	3.9	379	112200	**KF**	**157R97**	**DRS**	**132MC4**	920	523
	4.4	333	112200	**KA**	**157R97**	**DRS**	**132MC4**	800	523
				KAF	**157R97**	**DRS**	**132MC4**	860	523
				K	**157R97**	**DRS**	**160M4**	860	523
	5.0	291	112200	**KF**	**157R97**	**DRS**	**160M4**	940	523
				KA	**157R97**	**DRS**	**160M4**	820	523
				KAF	**157R97**	**DRS**	**160M4**	880	523
				K	**157R107**	**DRS**	**132MC4**	880	523
	3.8	385	112200	**KF**	**157R107**	**DRS**	**132MC4**	960	523
				KA	**157R107**	**DRS**	**132MC4**	850	523
				KAF	**157R107**	**DRS**	**132MC4**	910	523
				K	**157R107**	**DRS**	**160M4**	910	523
	4.5	325	112200	**KF**	**157R107**	**DRS**	**160M4**	980	523
	4.9	299	112200	**KA**	**157R107**	**DRS**	**160M4**	870	523
				KAF	**157R107**	**DRS**	**160M4**	930	523
				K	**157R107**	**DRS**	**160MC4**	910	523
	5.8	253	112200	**KF**	**157R107**	**DRS**	**160MC4**	990	523
	6.4	230	112200	**KA**	**157R107**	**DRS**	**160MC4**	870	523
	6.9	213	112200	**KAF**	**157R107**	**DRS**	**160MC4**	930	523

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
32000	**0.07**	19723	150000						
	0.08	17406	150000						
	0.09	15000	150000	**K**	**167R97**	**DRS**	**71M4**	1180	523
	0.10	13238	150000	**KH**	**167R97**	**DRS**	**71M4**	1150	523
	0.12	11573	150000						
	0.13	10264	150000						
	0.16	8628	150000	**K**	**167R97**	**DRS**	**80S4**	1190	523
				KH	**167R97**	**DRS**	**80S4**	1150	523
	0.21	6562	150000	**K**	**167R97**	**DRS**	**80M4**	1190	523
	0.26	5355	150000	**KH**	**167R97**	**DRS**	**80M4**	1150	523
	0.29	4788	150000	**K**	**167R97**	**DRS**	**90M4**	1190	523
	0.34	4079	150000	**KH**	**167R97**	**DRS**	**90M4**	1150	523
	0.41	3376	150000	**K**	**167R97**	**DRS**	**90L4**	1190	523
	0.51	2755	150000	**KH**	**167R97**	**DRS**	**90L4**	1160	523
	0.62	2263	150000	**K**	**167R97**	**DRS**	**100M4**	1200	523
				KH	**167R97**	**DRS**	**100M4**	1160	523
	0.64	2182	150000	**K**	**167R97**	**DRS**	**100M4**	1200	523
				KH	**167R97**	**DRS**	**100M4**	1160	523
	0.85	1704	150000	**K**	**167R97**	**DRS**	**100LC4**	1200	523
	1.0	1408	150000	**KH**	**167R97**	**DRS**	**100LC4**	1160	523
	1.1	1296	150000	**K**	**167R97**	**DRS**	**132S4**	1210	523
	1.3	1101	150000	**KH**	**167R97**	**DRS**	**132S4**	1180	523
	1.5	944	150000	**K**	**167R97**	**DRS**	**132M4**	1230	523
	1.7	843	150000	**KH**	**167R97**	**DRS**	**132M4**	1190	523
	1.9	757	150000						
	2.3	632	150000	**K**	**167R97**	**DRS**	**132MC4**	1230	523
				KH	**167R97**	**DRS**	**132MC4**	1190	523
	2.6	561	150000	**K**	**167R97**	**DRS**	**160M4**	1250	523
				KH	**167R97**	**DRS**	**160M4**	1210	523
	3.0	481	150000	**K**	**167R97**	**DRS**	**160MC4**	1260	523
	3.5	423	150000	**KH**	**167R97**	**DRS**	**160MC4**	1220	523
	4.0	369	150000						
	4.6	318	150000	**K**	**167R107**	**DRS**	**180M4**	1350	523
				KH	**167R107**	**DRS**	**180M4**	1310	523
	5.3	278	150000	**K**	**167R107**	**DRS**	**180L4**	1370	523
	6.0	244	150000	**KH**	**167R107**	**DRS**	**180L4**	1330	523
	6.9	213	150000	**K**	**167R107**	**DRS**	**180LC4**	1380	523
	7.1	206	150000	**KH**	**167R107**	**DRS**	**180LC4**	1340	523
	8.2	180	150000						
	9.2	160	150000	**K**	**167R107**	**DRS**	**225S4**	1500	523
				KH	**167R107**	**DRS**	**225S4**	1460	523
	11	135	150000	**K**	**167R107**	**DRS**	**225M4**	1520	523
	13	118	150000	**KH**	**167R107**	**DRS**	**225M4**	1480	523
50000	**0.04**	32625	190000						
	0.05	27165	190000	**K**	**187R97**	**DRS**	**71M4**	1770	523
	0.06	24353	190000	**KH**	**187R97**	**DRS**	**71M4**	1700	523
	0.07	19144	190000						
	0.08	16978	190000						
	0.10	14272	190000	**K**	**187R97**	**DRS**	**80S4**	1770	523
	0.11	13116	190000	**KH**	**187R97**	**DRS**	**80S4**	1700	523
	0.12	11647	190000						
	0.14	10413	190000	**K**	**187R97**	**DRS**	**80M4**	1770	523
	0.15	9363	190000	**KH**	**187R97**	**DRS**	**80M4**	1700	523
	0.17	8126	190000						
	0.19	7343	190000	**K**	**187R97**	**DRS**	**90M4**	1770	523
	0.21	6747	190000	**KH**	**187R97**	**DRS**	**90M4**	1710	523
	0.23	5991	190000						
	0.26	5358	190000	**K**	**187R97**	**DRS**	**90L4**	1780	523
	0.29	4817	190000	**KH**	**187R97**	**DRS**	**90L4**	1710	523
	0.32	4370	190000						
	0.39	3609	190000	**K**	**187R97**	**DRS**	**100M4**	1780	523
	0.46	3062	190000	**KH**	**187R97**	**DRS**	**100M4**	1710	523
	0.57	2519	190000	**K**	**187R97**	**DRS**	**100LC4**	1780	523
	0.64	2268	190000	**KH**	**187R97**	**DRS**	**100LC4**	1720	523



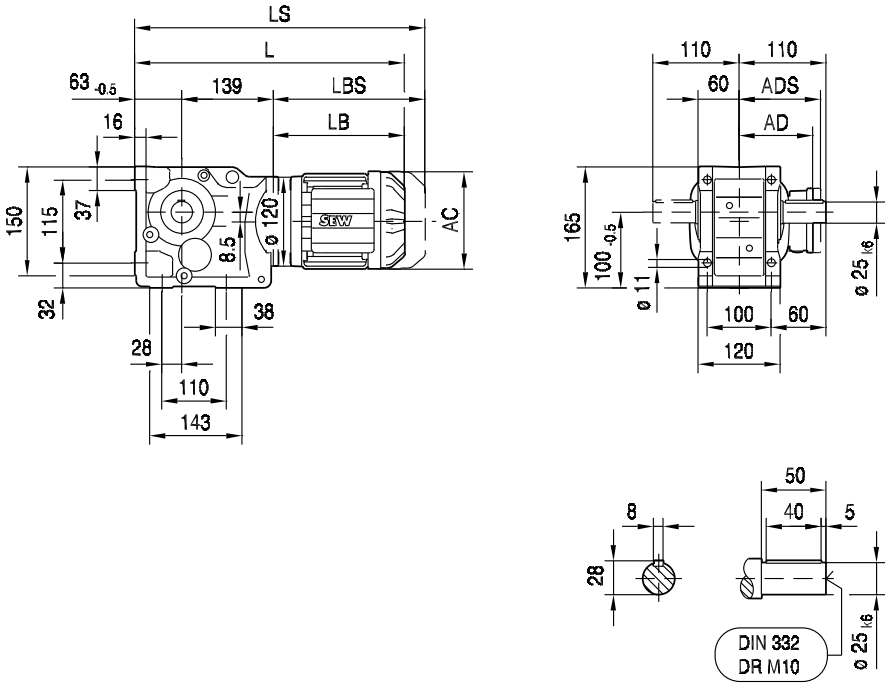
K..DRS
K..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
50000	**0.70**	2054	190000	**K**	**187R97**	**DRS**	**132S4**	1800	523
	0.79	1821	190000	**KH**	**187R97**	**DRS**	**132S4**	1730	523
	0.90	1605	190000						
	1.0	1395	190000	**K**	**187R97**	**DRS**	**132M4**	1810	523
	1.2	1196	190000	**KH**	**187R97**	**DRS**	**132M4**	1740	523
	1.4	1046	190000	**K**	**187R97**	**DRS**	**132MC4**	1810	523
	1.6	945	190000	**KH**	**187R97**	**DRS**	**132MC4**	1750	523
	2.0	738	190000	**K**	**187R97**	**DRS**	**160MC4**	1840	523
	2.4	621	190000	**KH**	**187R97**	**DRS**	**160MC4**	1770	523
	2.8	527	190000	**K**	**187R97**	**DRS**	**180M4**	1880	523
				KH	**187R97**	**DRS**	**180M4**	1820	523
	1.8	835	190000	**K**	**187R107**	**DRS**	**160M4**	1880	523
				KH	**187R107**	**DRS**	**160M4**	1810	523
	2.0	729	190000	**K**	**187R107**	**DRS**	**160MC4**	1890	523
	2.4	622	190000	**KH**	**187R107**	**DRS**	**160MC4**	1820	523
	2.8	520	190000	**K**	**187R107**	**DRS**	**180M4**	1930	523
	3.2	454	190000	**KH**	**187R107**	**DRS**	**180M4**	1860	523
	4.1	355	190000	**K**	**187R107**	**DRS**	**180LC4**	1960	523
				KH	**187R107**	**DRS**	**180LC4**	1890	523
	5.6	261	190000	**K**	**187R107**	**DRS**	**225S4**	2080	523
				KH	**187R107**	**DRS**	**225S4**	2010	523
	6.7	221	190000	**K**	**187R107**	**DRS**	**225M4**	2100	523
	7.6	193	190000	**KH**	**187R107**	**DRS**	**225M4**	2030	523
	9.0	163	190000	**K**	**187R107**	**DRS**	**225MC4**	2110	523
				KH	**187R107**	**DRS**	**225MC4**	2050	523

11.5 K..DRS [mm]

33 078 00 06

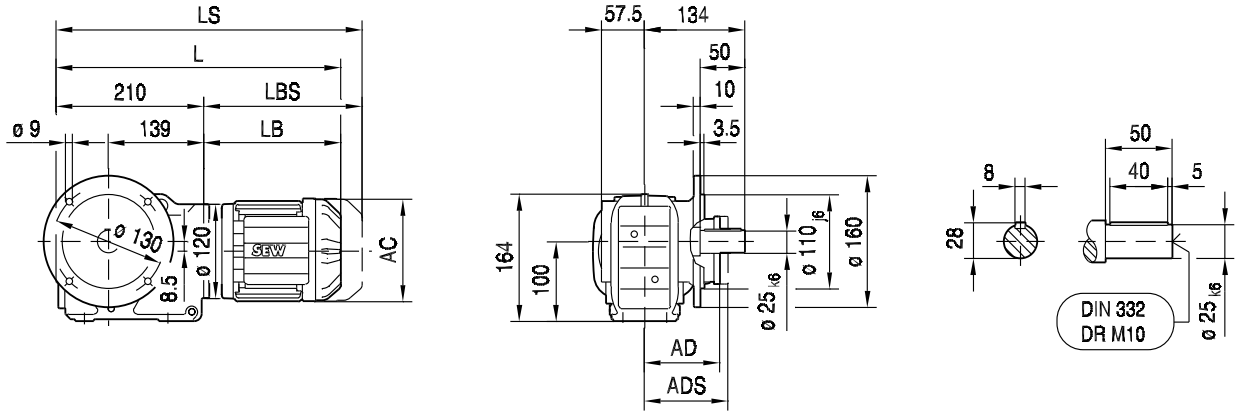
K37..



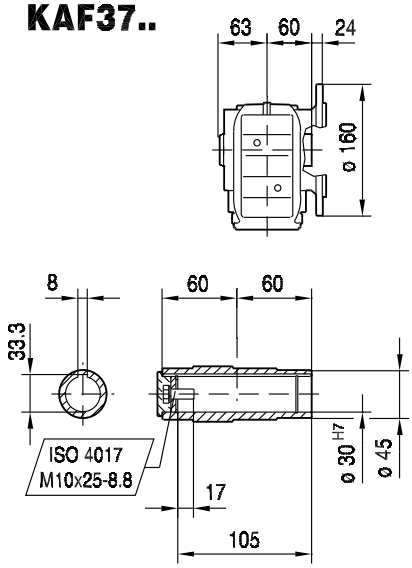
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	393	405	430	439	470	474	494	524
LS	448	473	498	520	551	567	587	617
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

33 079 00 06

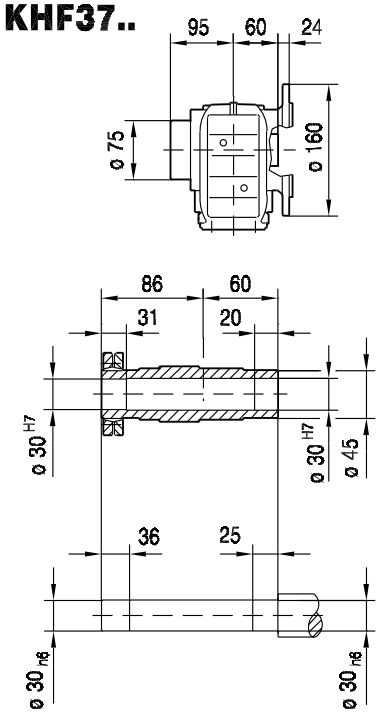
KF37..



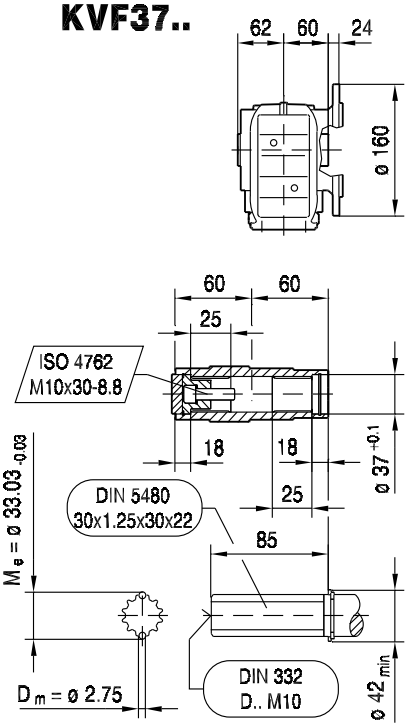
KAF37..



KHF37..



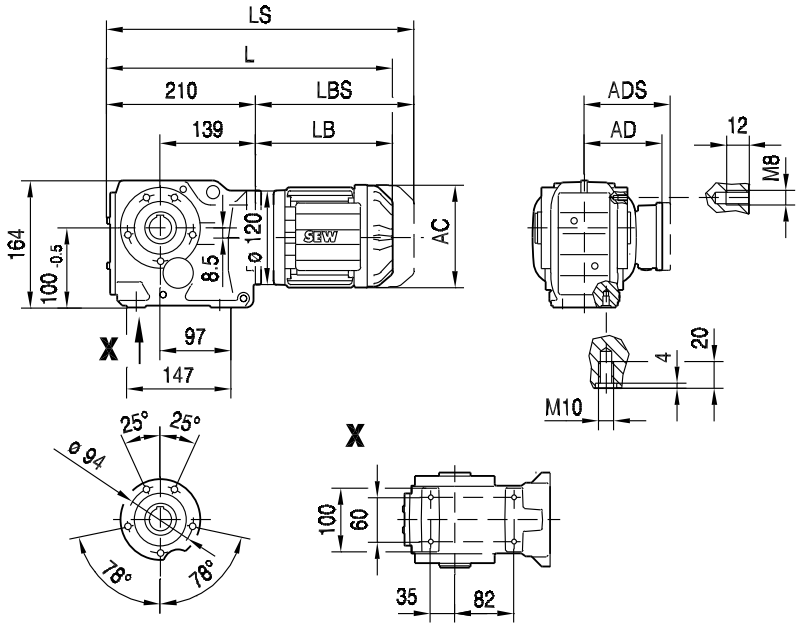
KVF37..



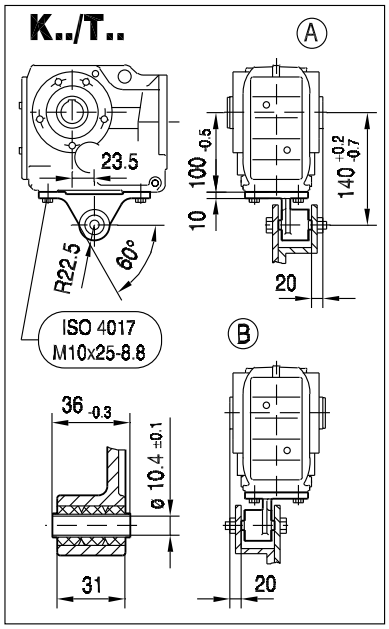
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	401	413	438	447	478	482	502	532
LS	456	481	506	528	559	575	595	625
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

33 080 00 06

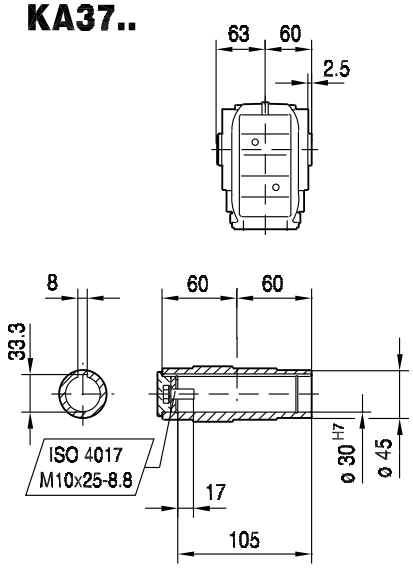
KA37..



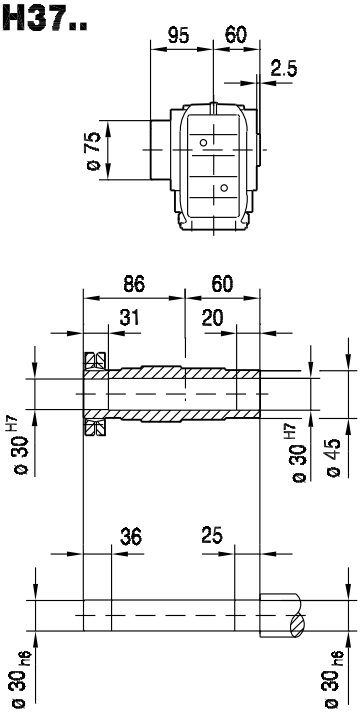
K../T..



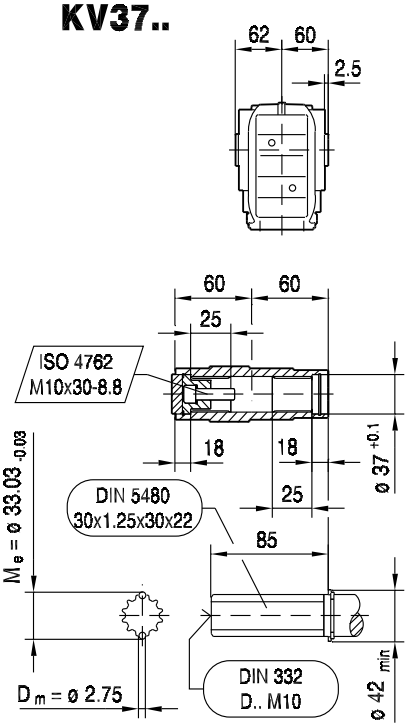
KA37..



KH37..



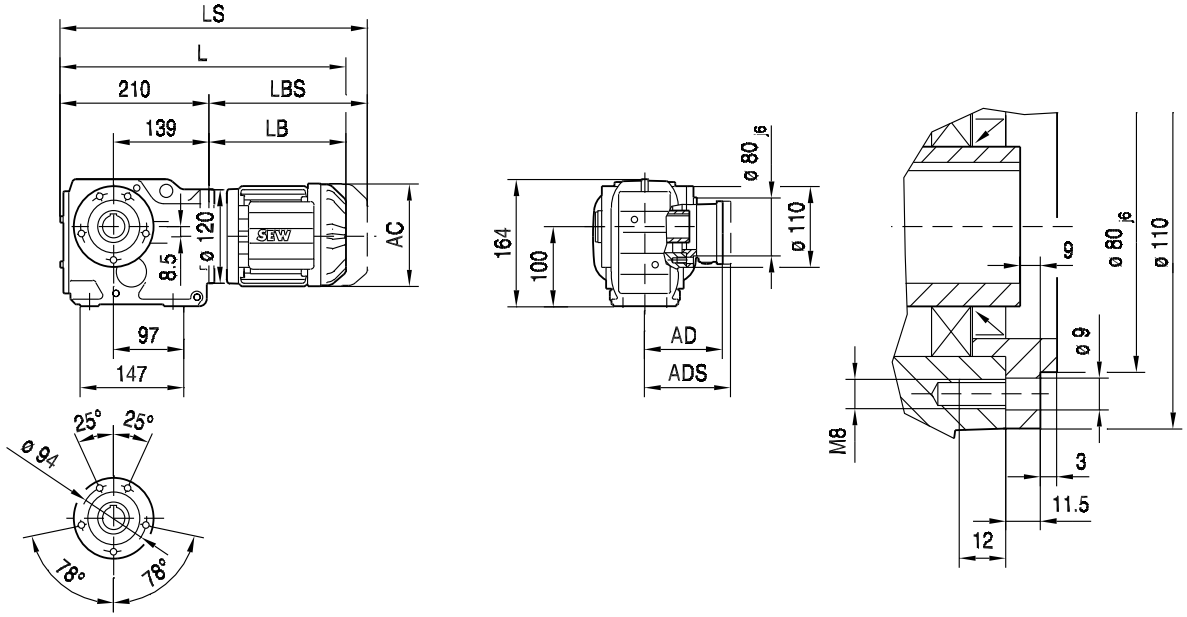
KV37..



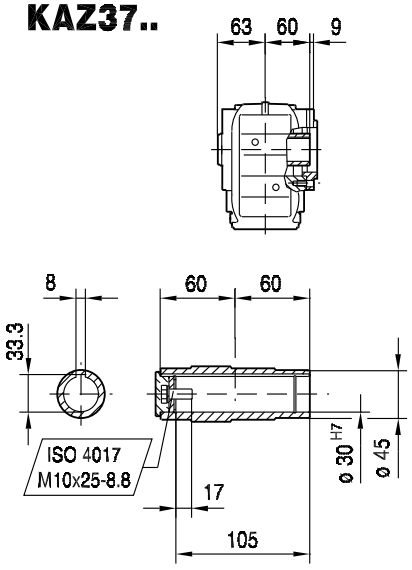
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	401	413	438	447	478	482	502	532
LS	456	481	506	528	559	575	595	625
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

33 081 00 06

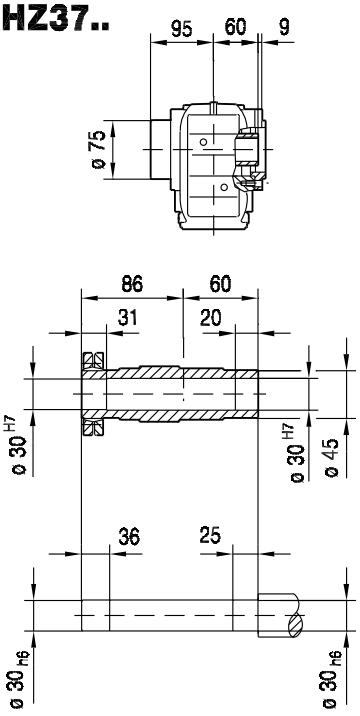
KAZ37..



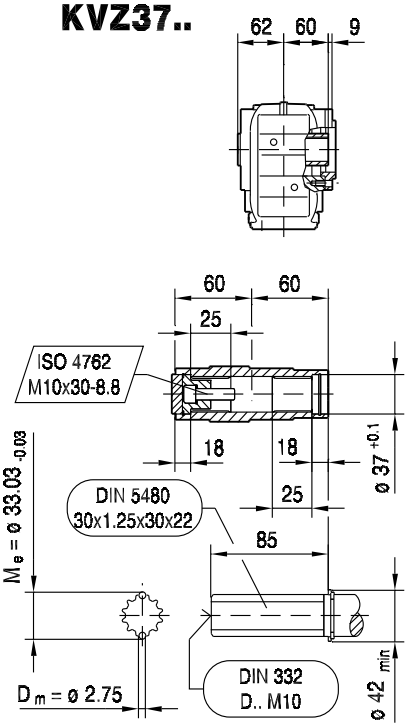
KAZ37..



KHZ37..



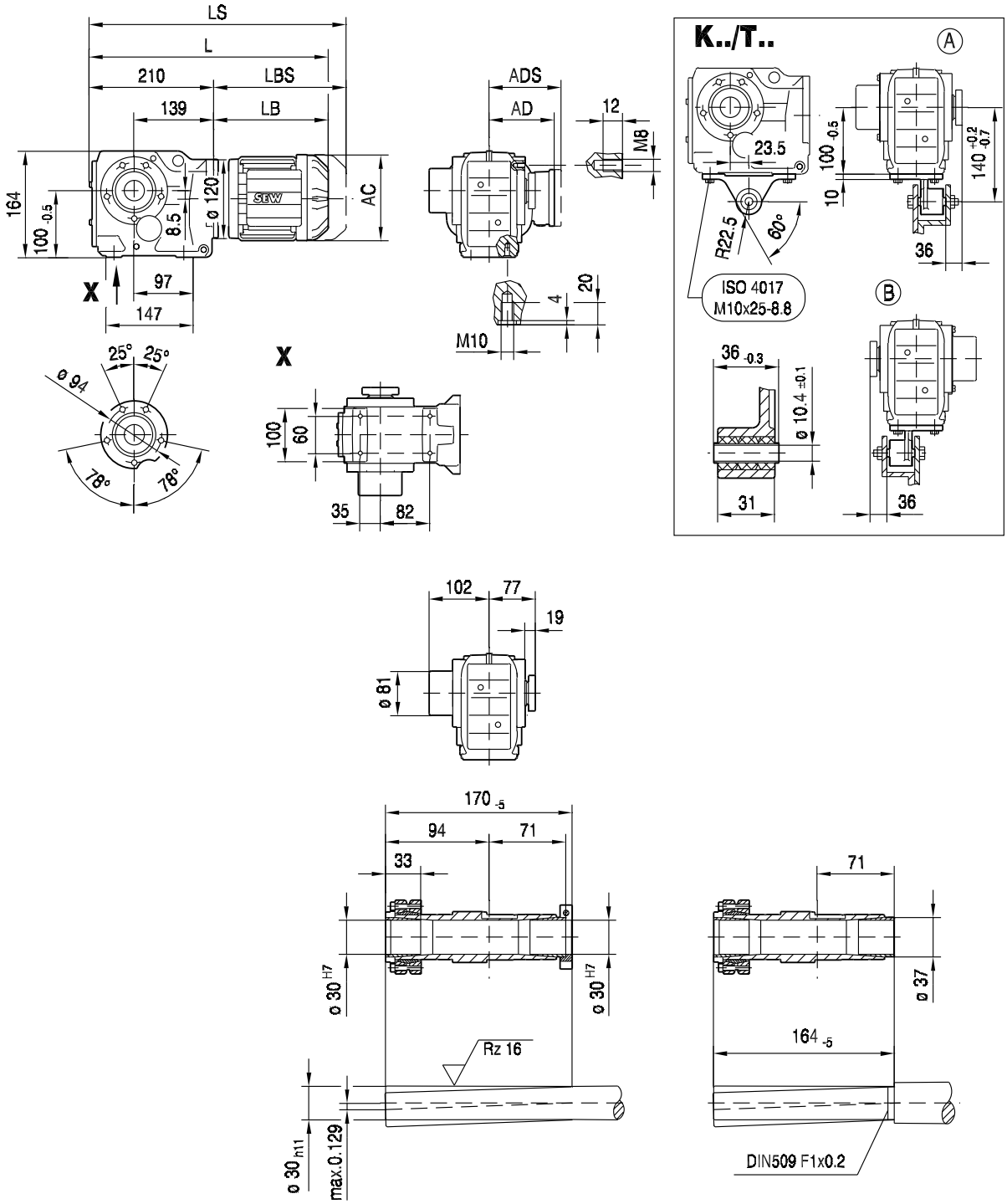
KVZ37..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	401	413	438	447	478	482	502	532
LS	456	481	506	528	559	575	595	625
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

33 082 00 06

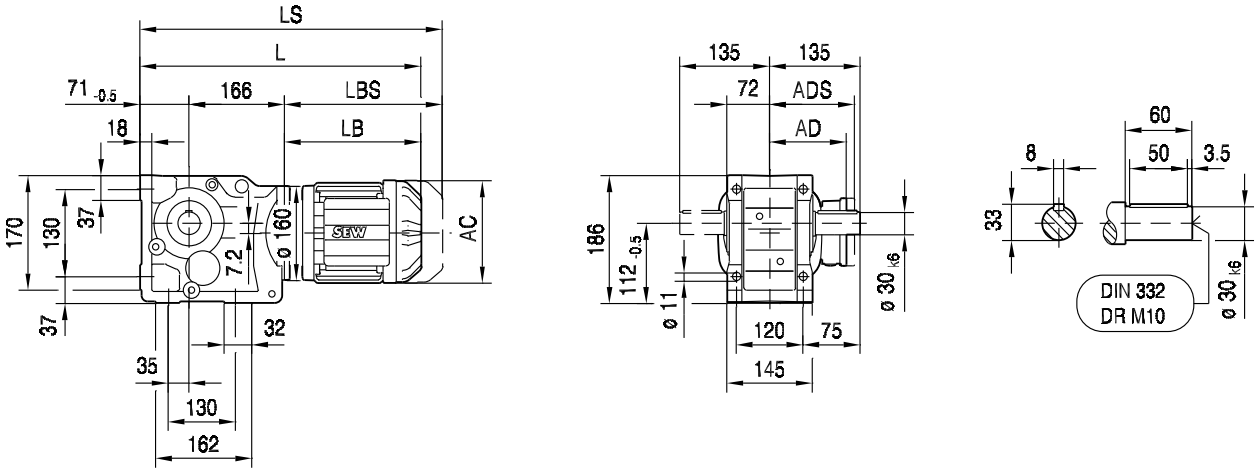
KT37..



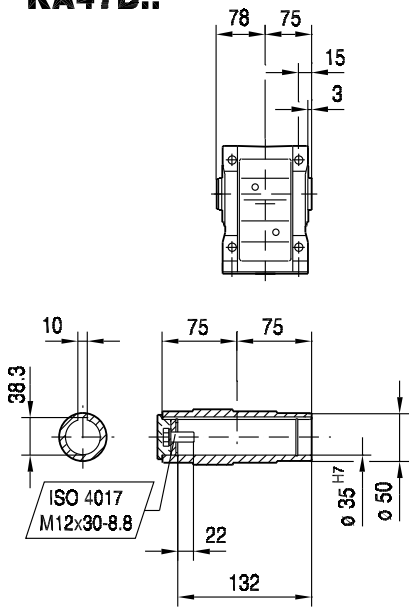
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	401	413	438	447	478	482	502	532
LS	456	481	506	528	559	575	595	625
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

33 083 00 06

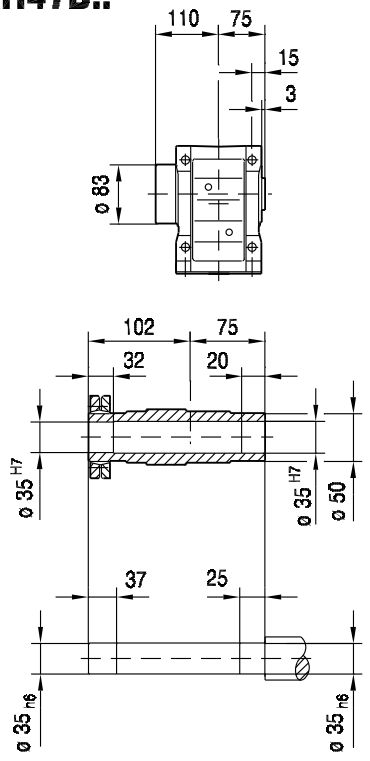
K47..



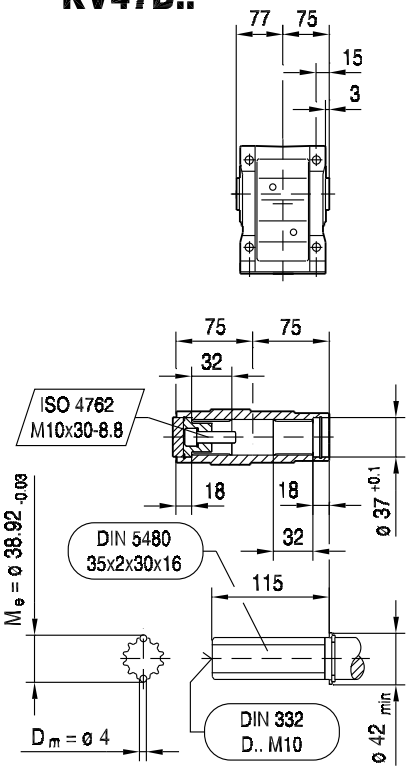
KA47B..



KH47B..



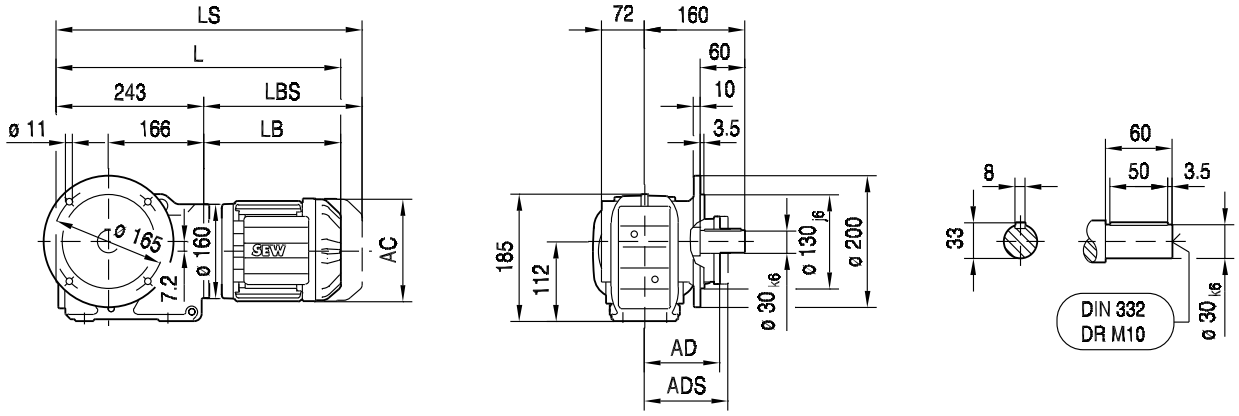
KV47B..



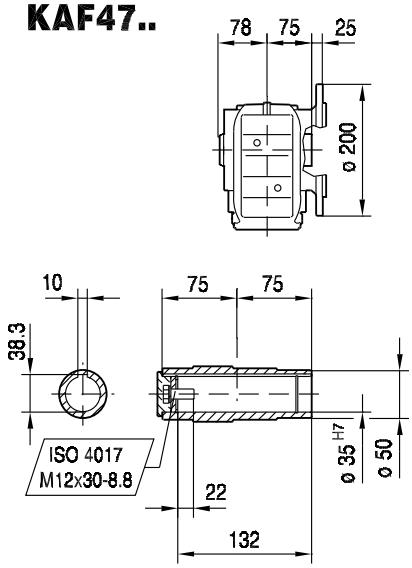
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	422	433	458	467	498	500	520	550
LS	477	501	526	548	579	593	613	643
LB	185	196	221	230	261	263	283	313
LBS	240	264	289	311	342	356	376	406

33 084 00 06

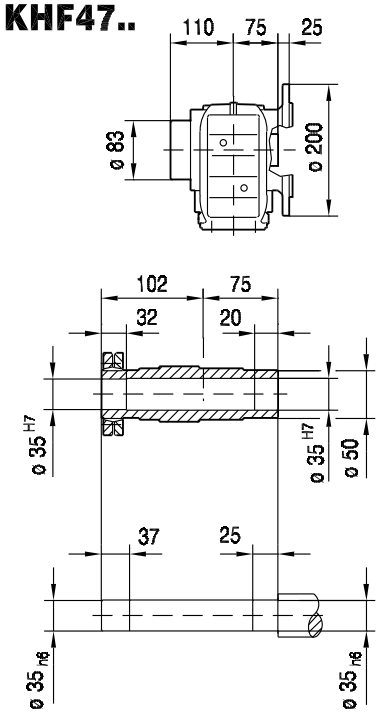
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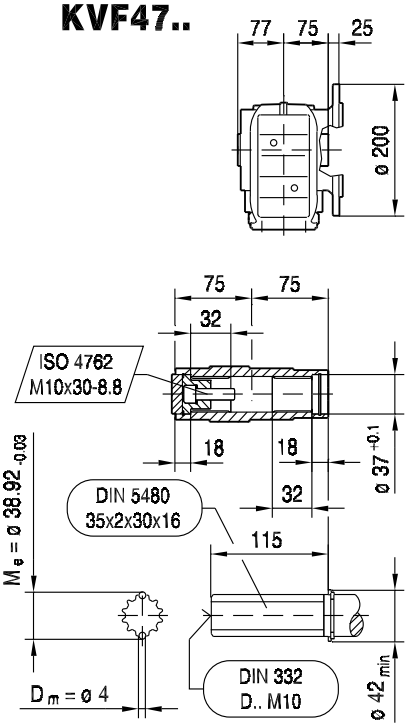
KAF47..



KHF47..



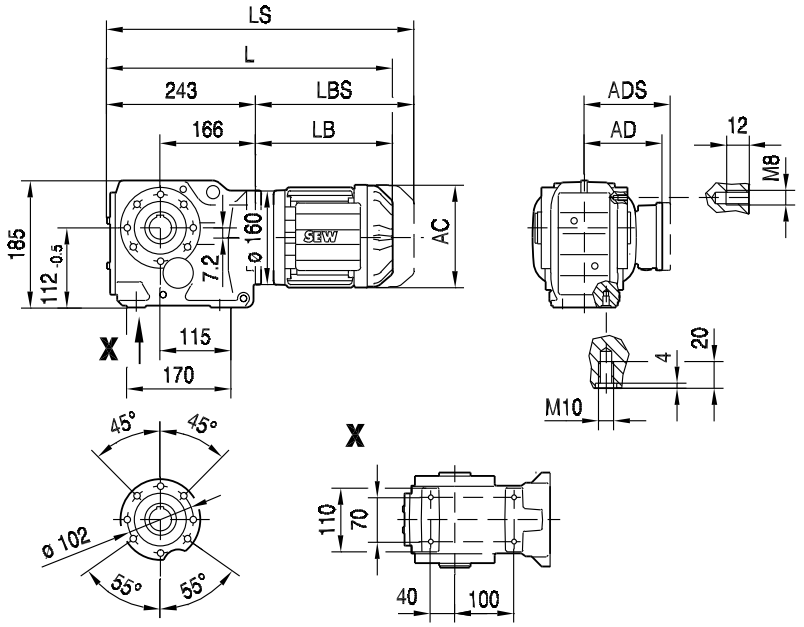
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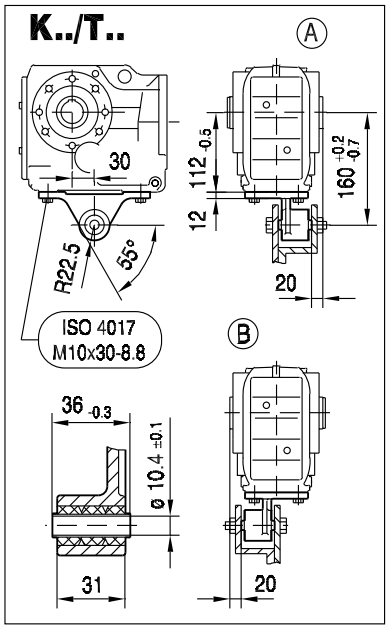


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	428	439	464	473	504	506	526	556
LS	483	507	532	554	585	599	619	649
LB	185	196	221	230	261	263	283	313
LBS	240	264	289	311	342	356	376	406

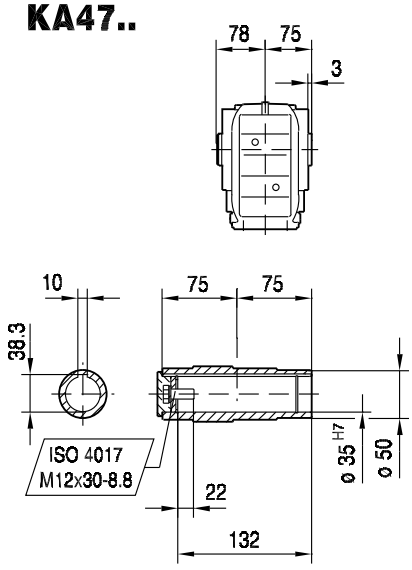
33 085 00 06

KA47..

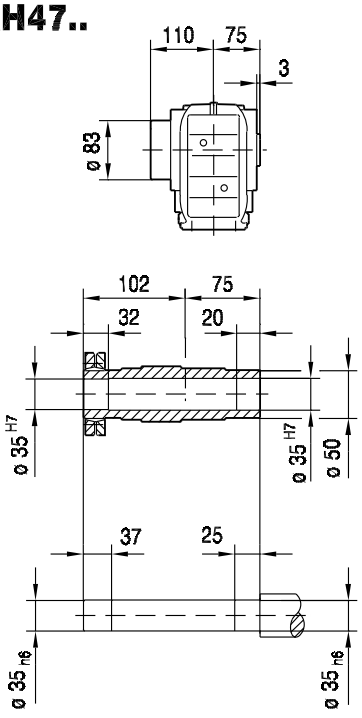




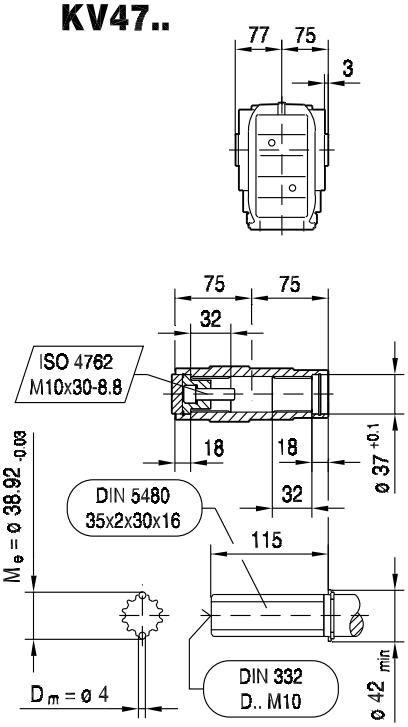
KA47..



KH47..



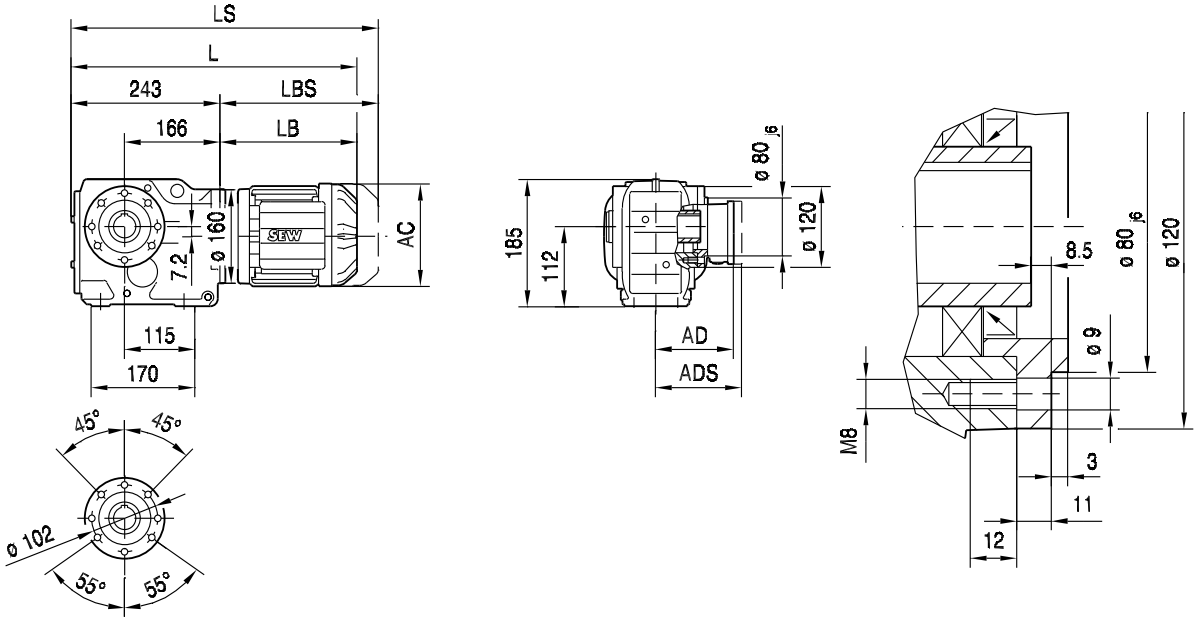
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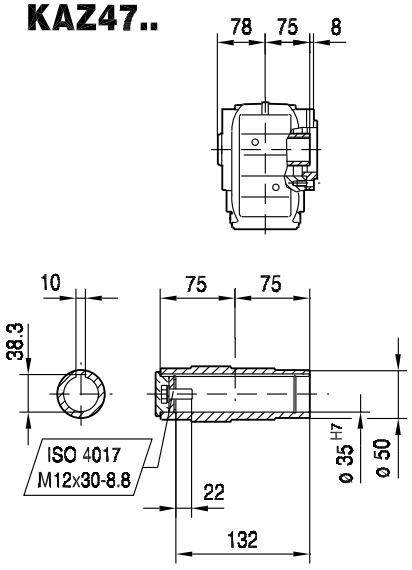
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	428	439	464	473	504	506	526	556
LS	483	507	532	554	585	599	619	649
LB	185	196	221	230	261	263	283	313
LBS	240	264	289	311	342	356	376	406

33 086 00 06

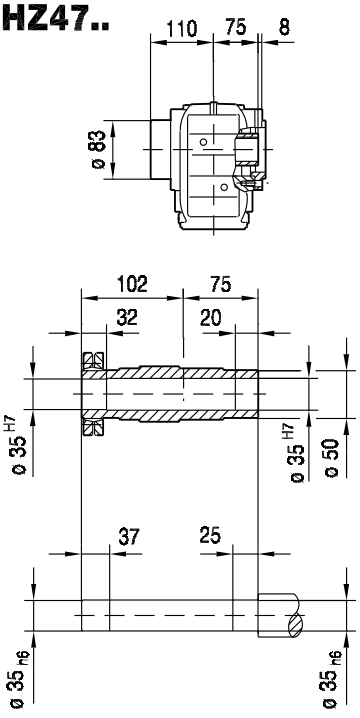
KAZ47..



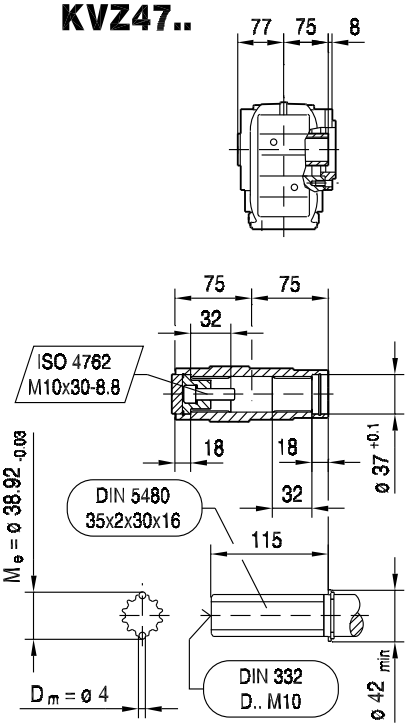
KAZ47..



KHZ47..



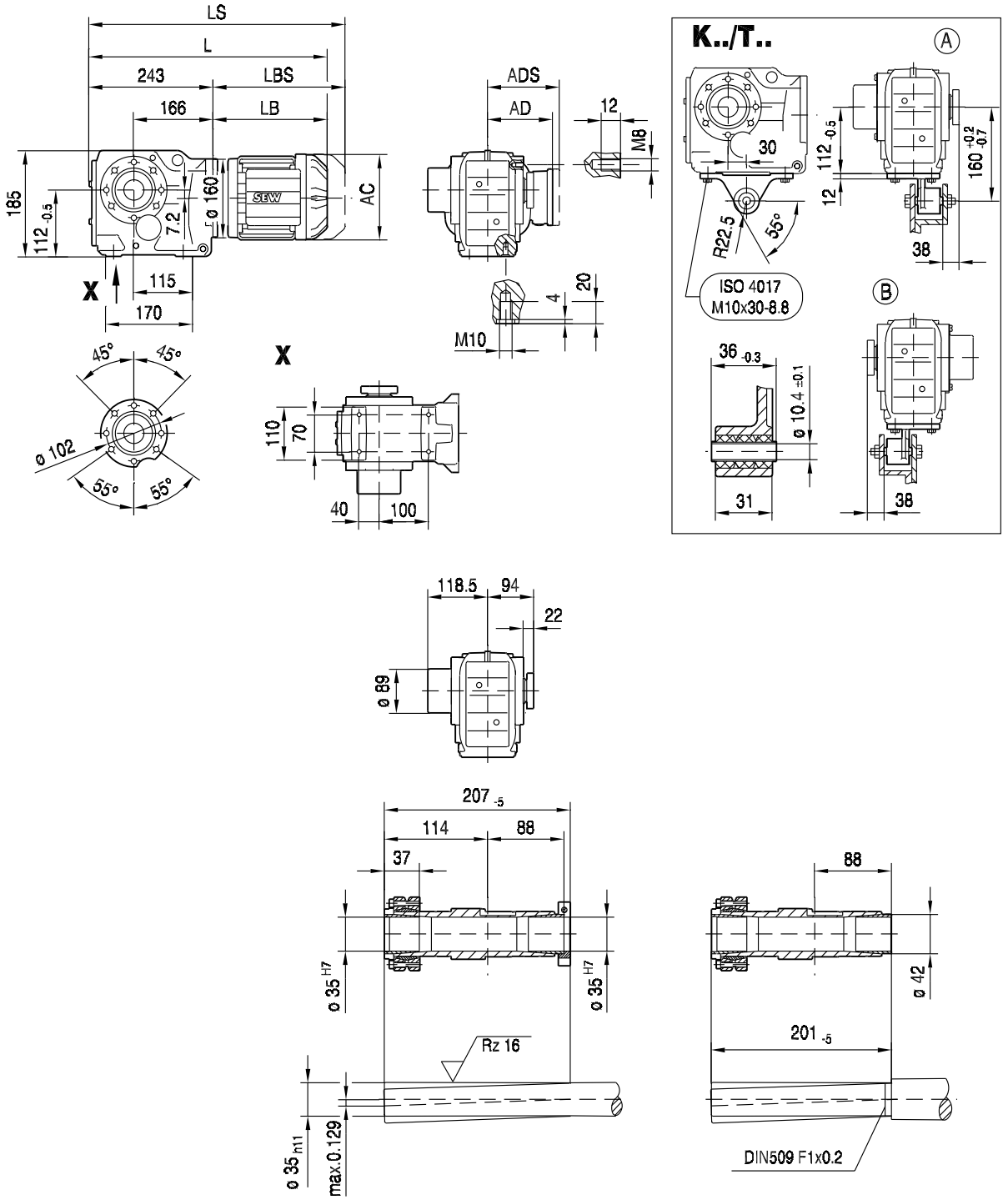
KVZ47..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	428	439	464	473	504	506	526	556
LS	483	507	532	554	585	599	619	649
LB	185	196	221	230	261	263	283	313
LBS	240	264	289	311	342	356	376	406

33 087 00 06

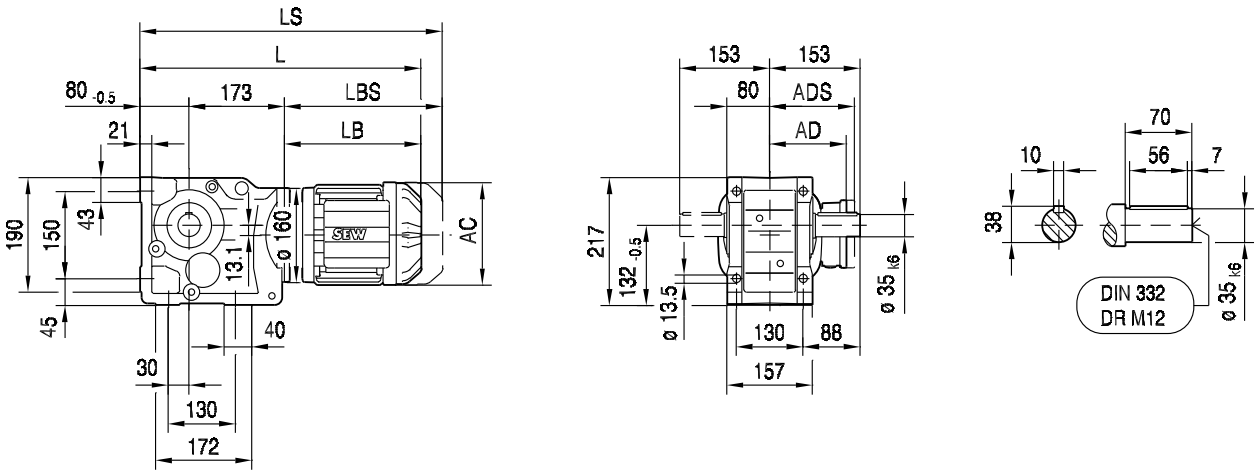
KT47..



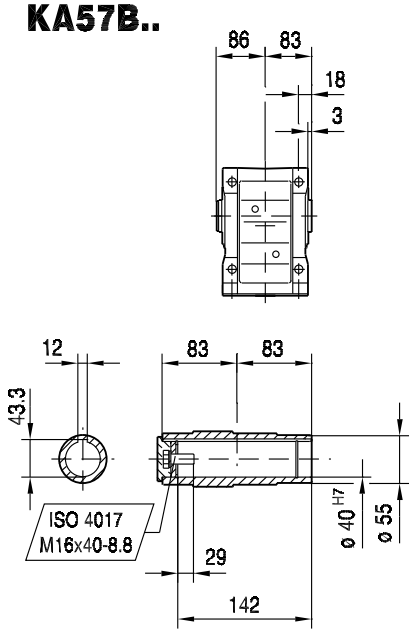
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	428	439	464	473	504	506	526	556
LS	483	507	532	554	585	599	619	649
LB	185	196	221	230	261	263	283	313
LBS	240	264	289	311	342	356	376	406

33 088 00 06

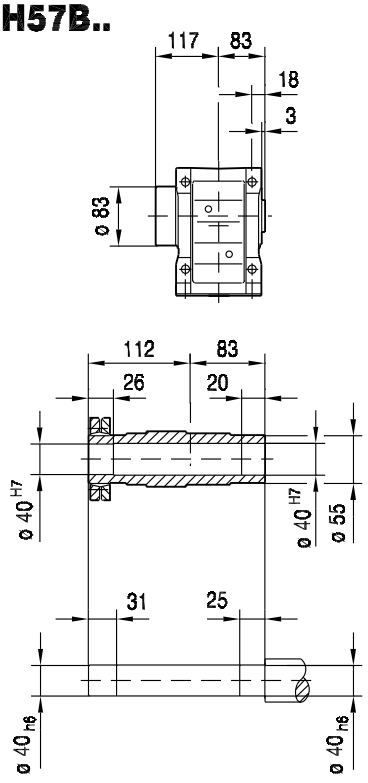
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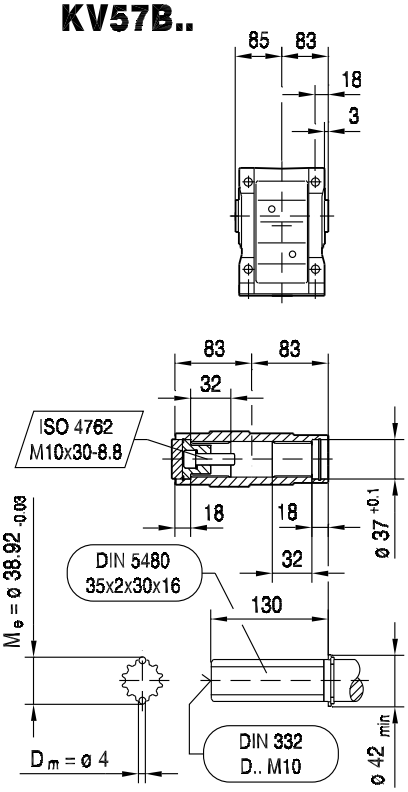
KA57B..



KH57B..



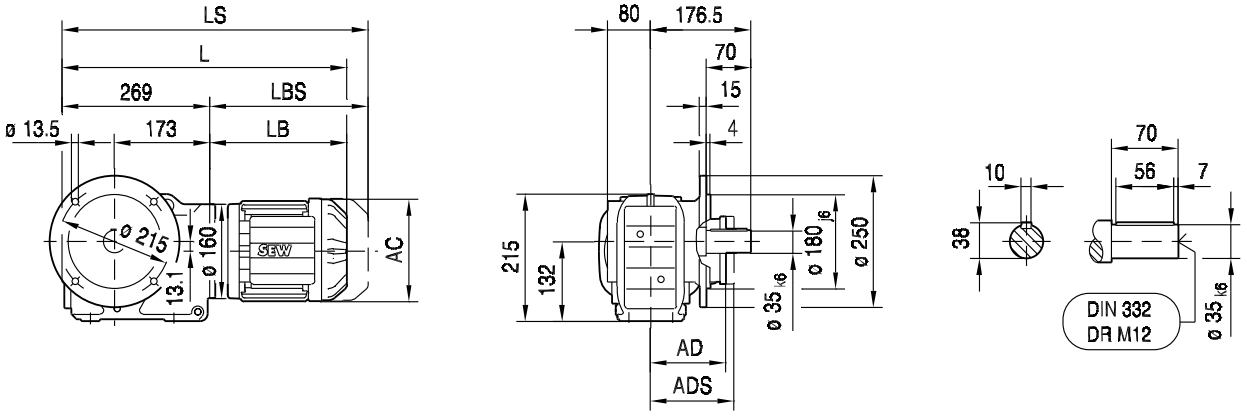
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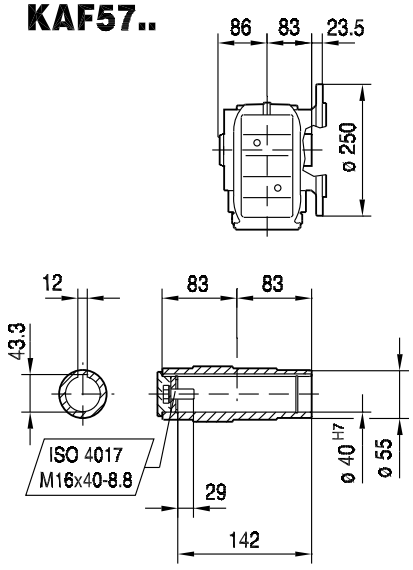
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC
AC	132	139	139	156	156	179	179	197	197
AD	105	119	119	128	128	140	140	157	157
ADS	105	129	129	139	139	150	150	158	158
L	438	449	474	483	514	516	536	566	596
LS	493	517	542	564	595	609	629	659	689
LB	185	196	221	230	261	263	283	313	343
LBS	240	264	289	311	342	356	376	406	436

33 089 00 06

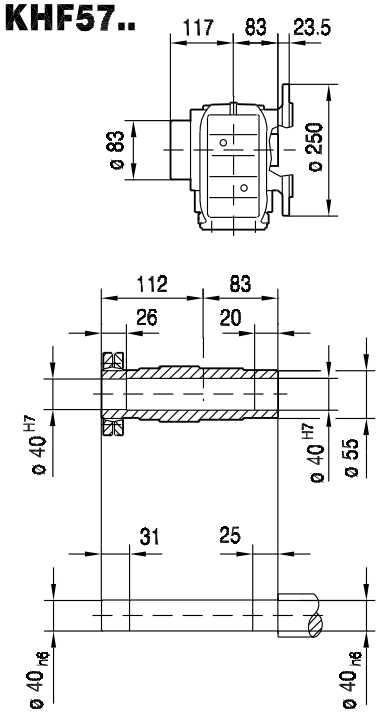
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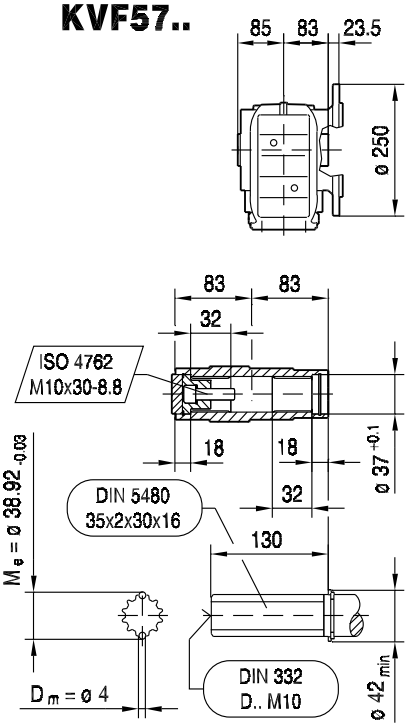
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KHF57..



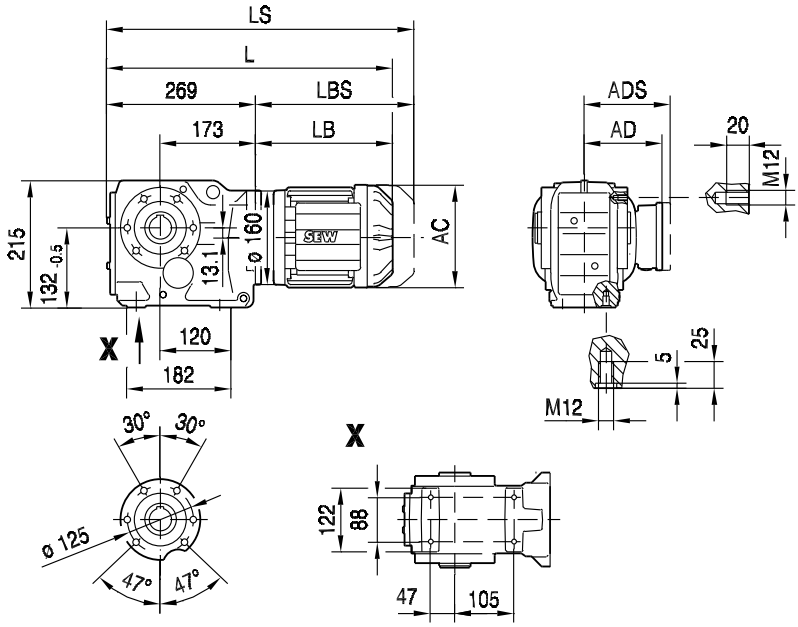
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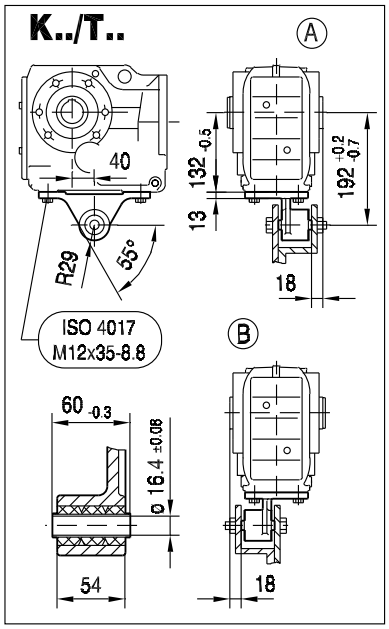
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC
AC	132	139	139	156	156	179	179	197	197
AD	105	119	119	128	128	140	140	157	157
ADS	105	129	129	139	139	150	150	158	158
L	454	465	490	499	530	532	552	582	612
LS	509	533	558	580	611	625	645	675	705
LB	185	196	221	230	261	263	283	313	343
LBS	240	264	289	311	342	356	376	406	436

33 090 00 06

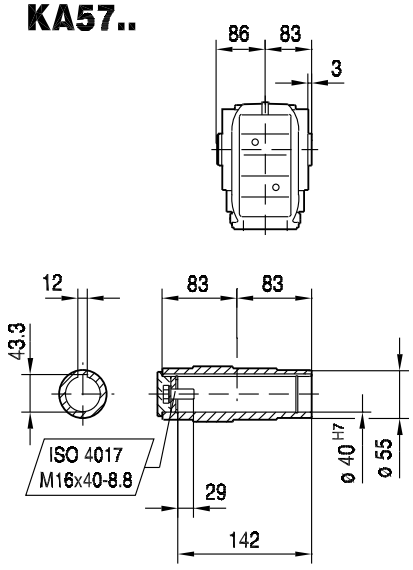
KA57..



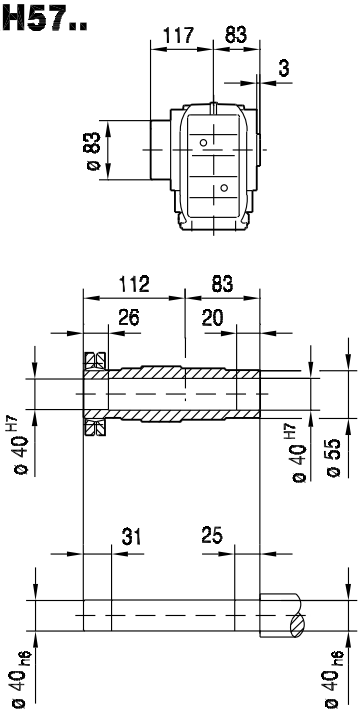
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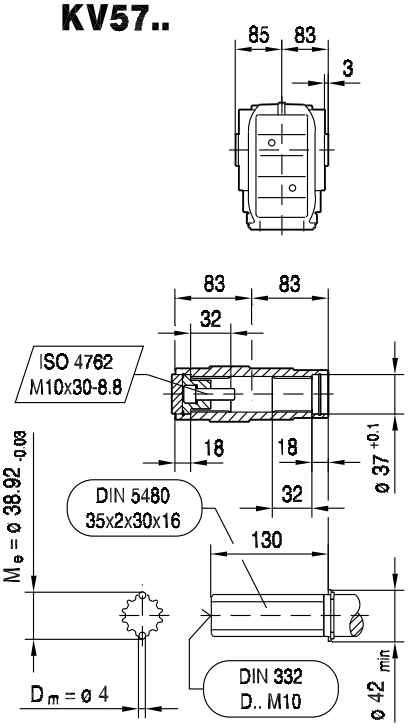
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KH57..



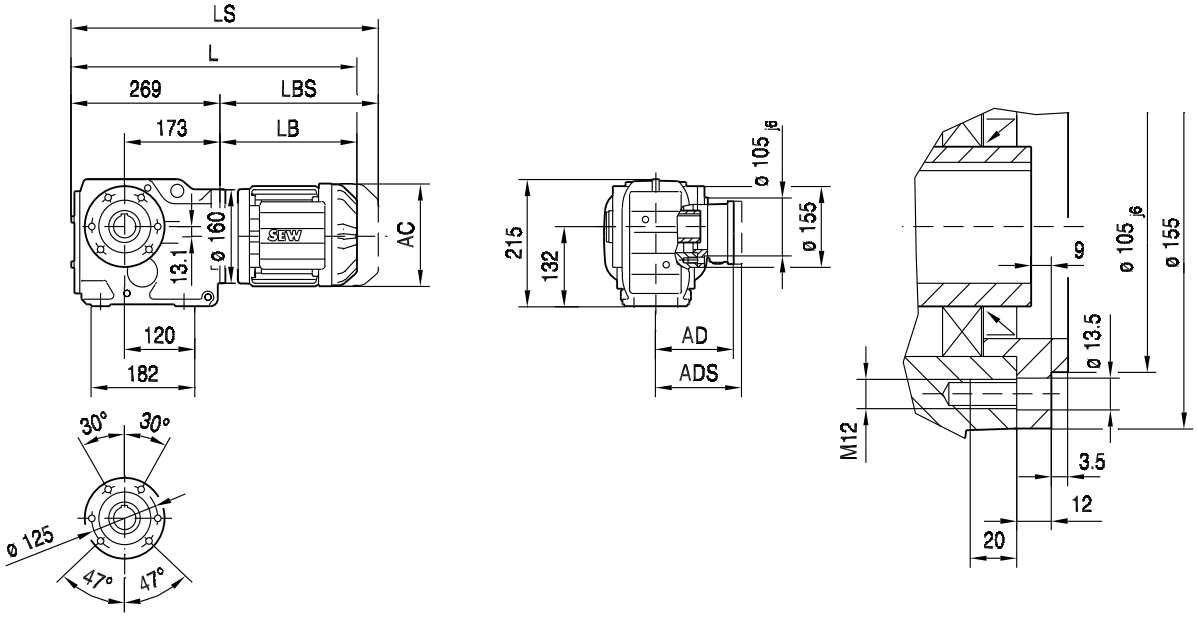
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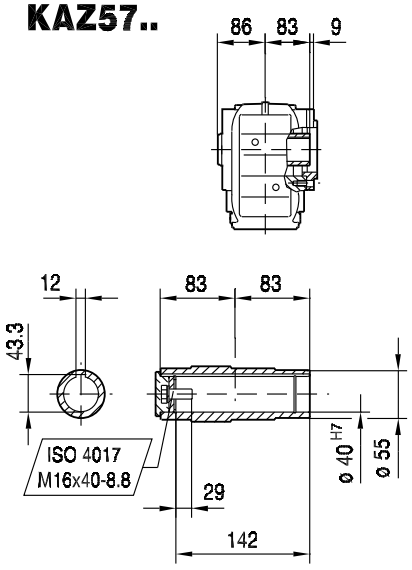
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC
AC	132	139	139	156	156	179	179	197	197
AD	105	119	119	128	128	140	140	157	157
ADS	105	129	129	139	139	150	150	158	158
L	454	465	490	499	530	532	552	582	612
LS	509	533	558	580	611	625	645	675	705
LB	185	196	221	230	261	263	283	313	343
LBS	240	264	289	311	342	356	376	406	436

33 091 00 06

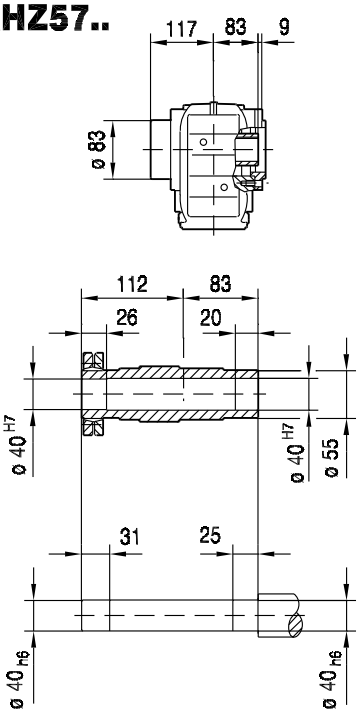
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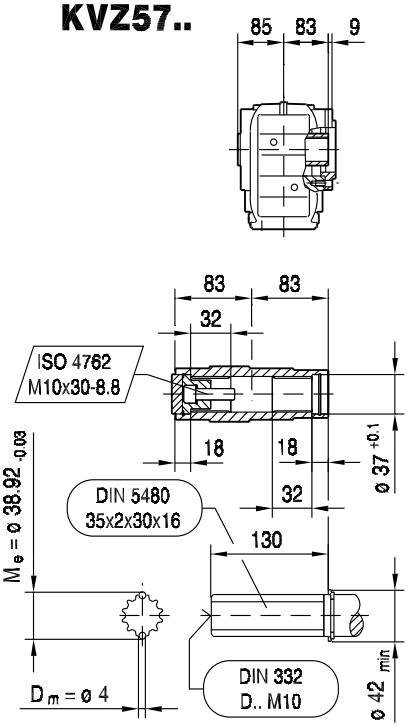
KAZ57..



KHZ57..



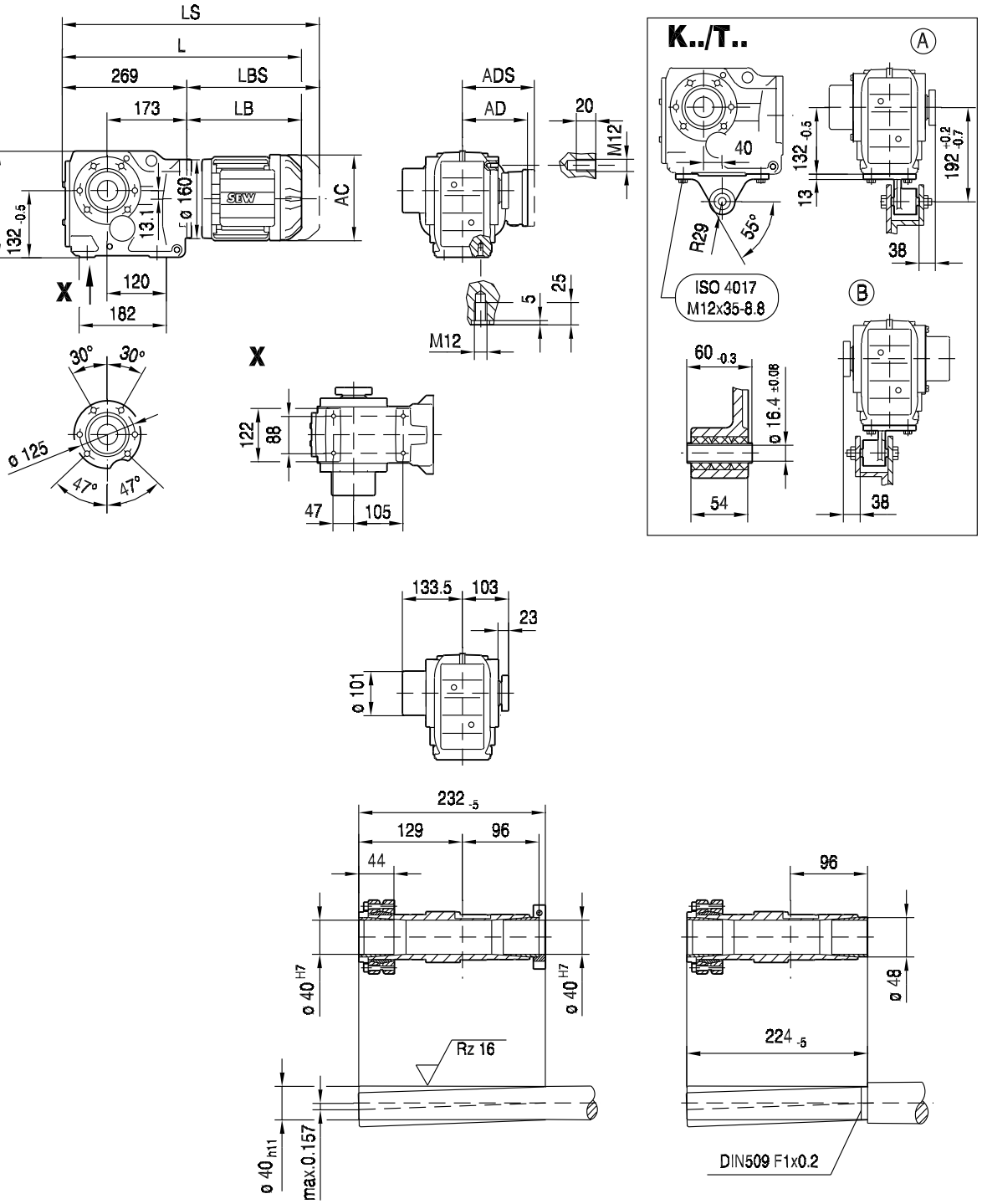
KVZ57..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC
AC	132	139	139	156	156	179	179	197	197
AD	105	119	119	128	128	140	140	157	157
ADS	105	129	129	139	139	150	150	158	158
L	454	465	490	499	530	532	552	582	612
LS	509	533	558	580	611	625	645	675	705
LB	185	196	221	230	261	263	283	313	343
LBS	240	264	289	311	342	356	376	406	436

33 092 00 06

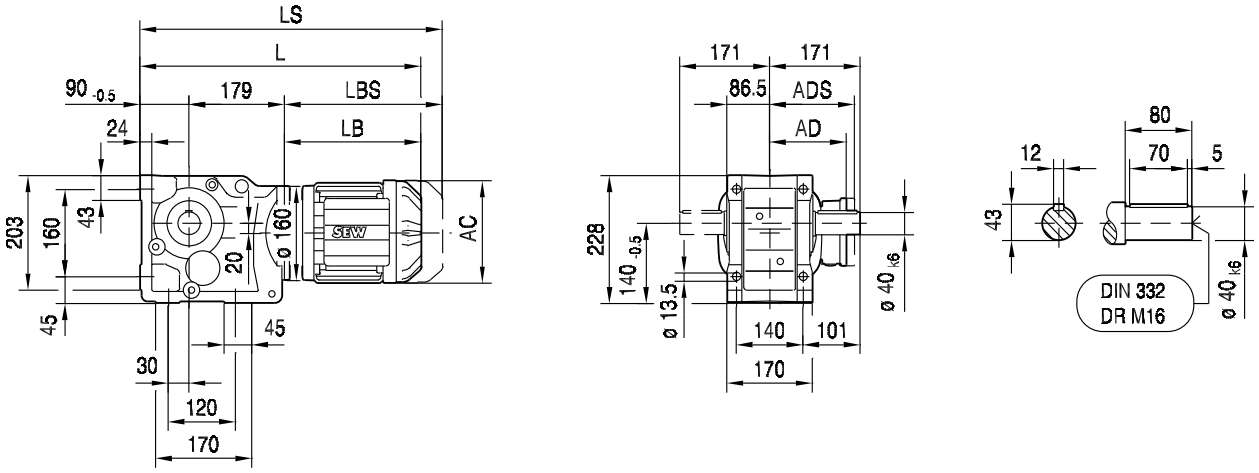
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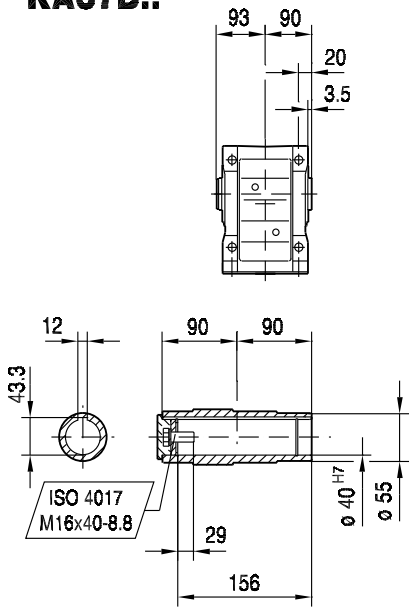
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC
AC	132	139	139	156	156	179	179	197	197
AD	105	119	119	128	128	140	140	157	157
ADS	105	129	129	139	139	150	150	158	158
L	454	465	490	499	530	532	552	582	612
LS	509	533	558	580	611	625	645	675	705
LB	185	196	221	230	261	263	283	313	343
LBS	240	264	289	311	342	356	376	406	436

33 093 00 06

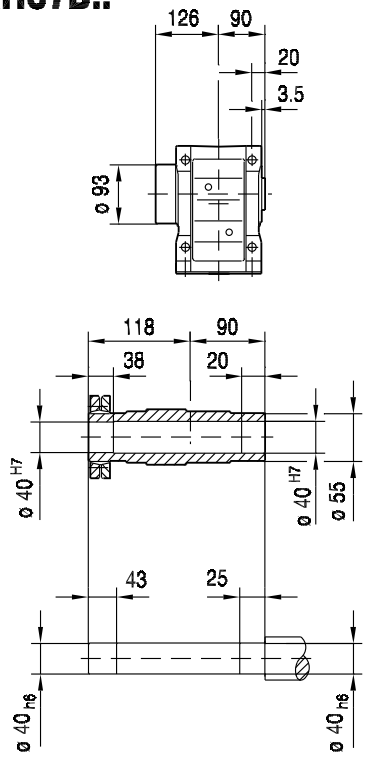
K67..



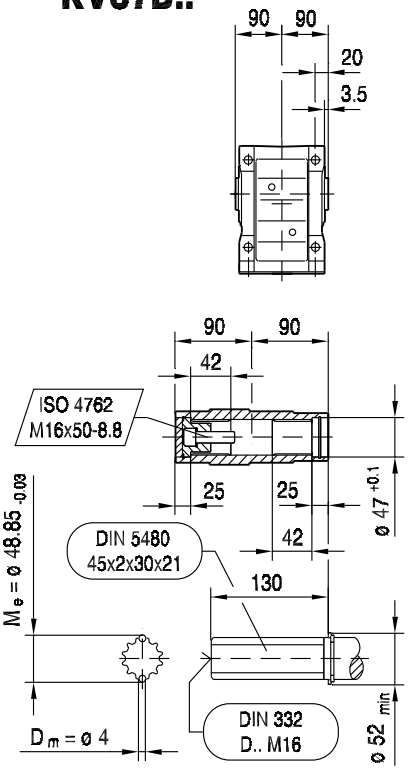
KA67B..



KH67B..



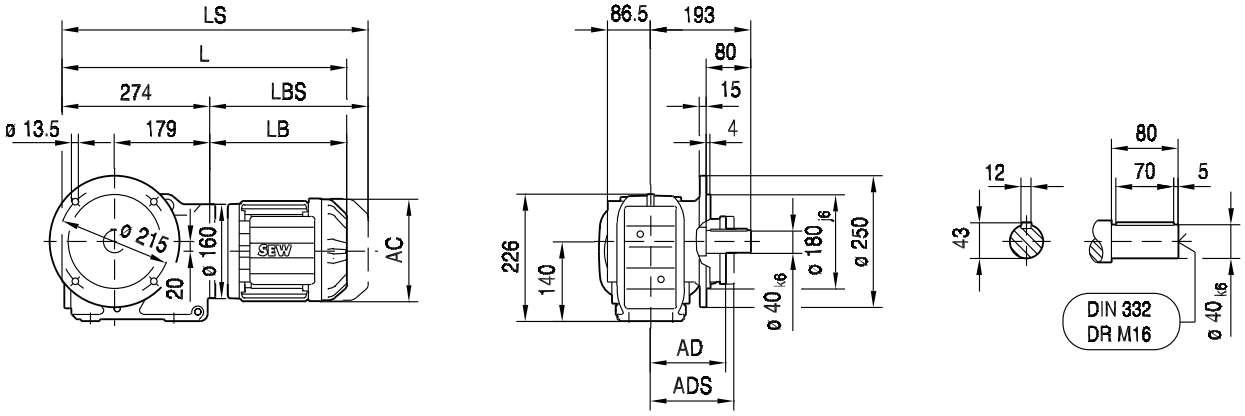
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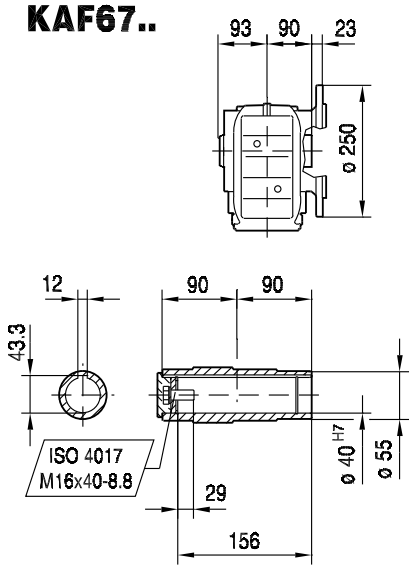
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	454	465	490	499	530	532	552	582	612	659
LS	509	533	558	580	611	625	645	675	705	771
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

33 094 00 06

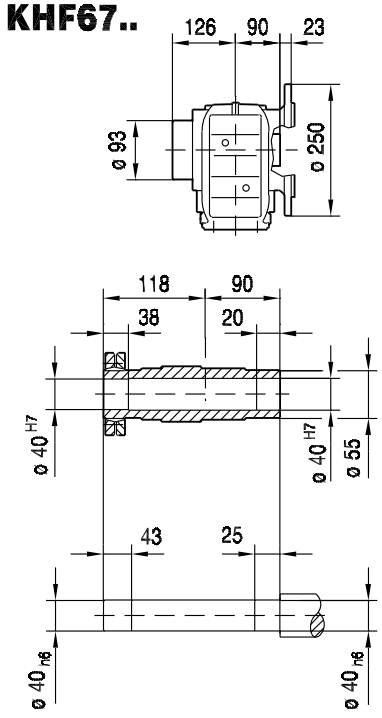
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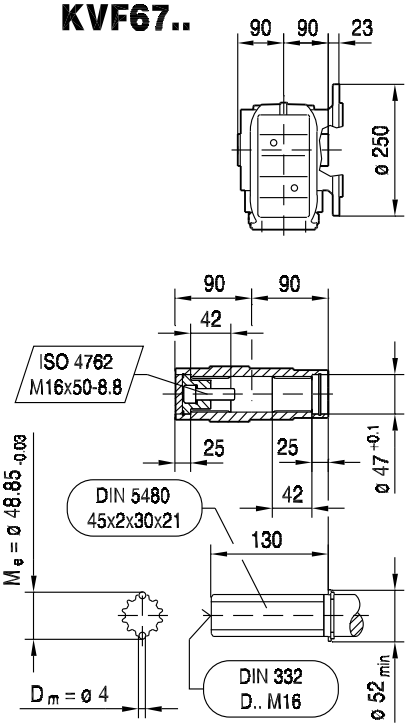
KAF67..



KHF67..



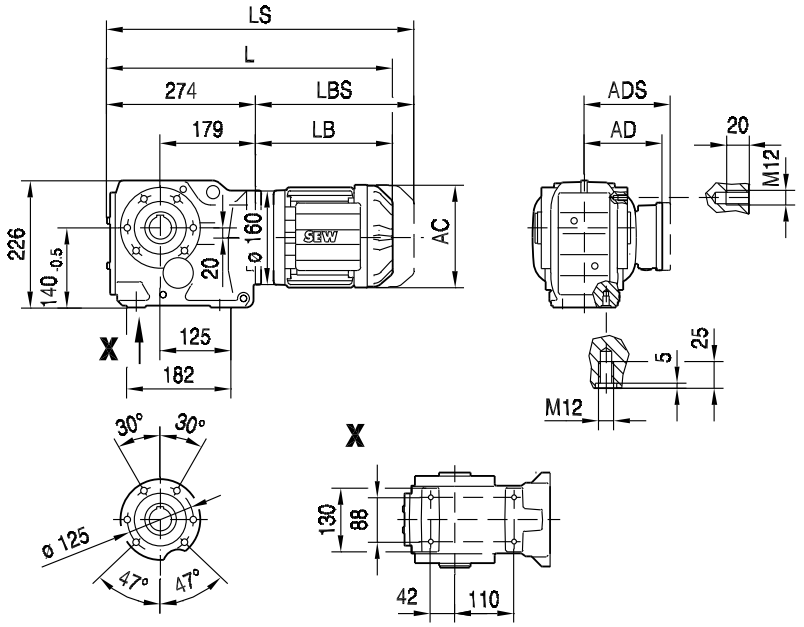
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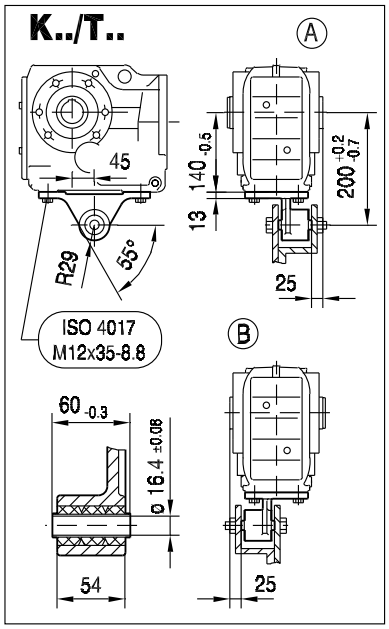


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	459	470	495	504	535	537	557	587	617	664
LS	514	538	563	585	616	630	650	680	710	776
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

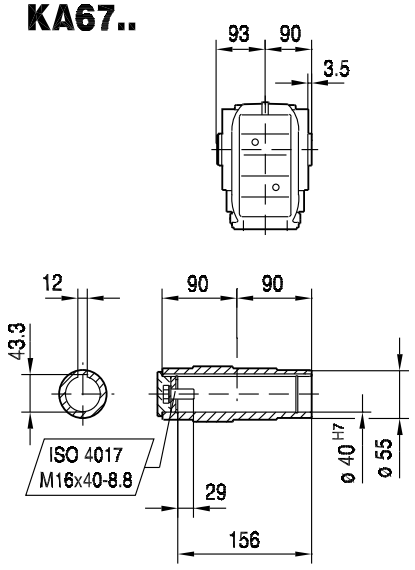
33 095 00 06

KA67..

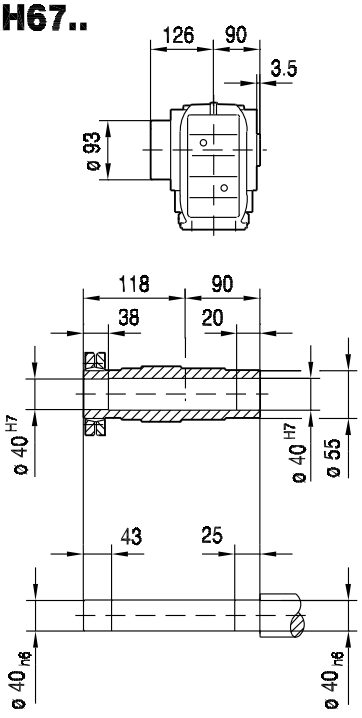




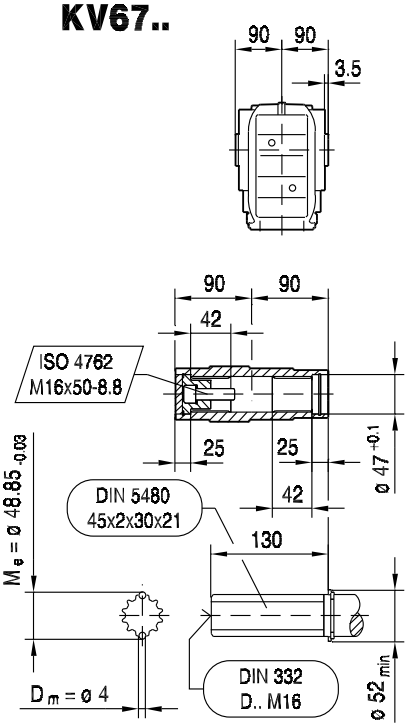
KA67..



KH67..



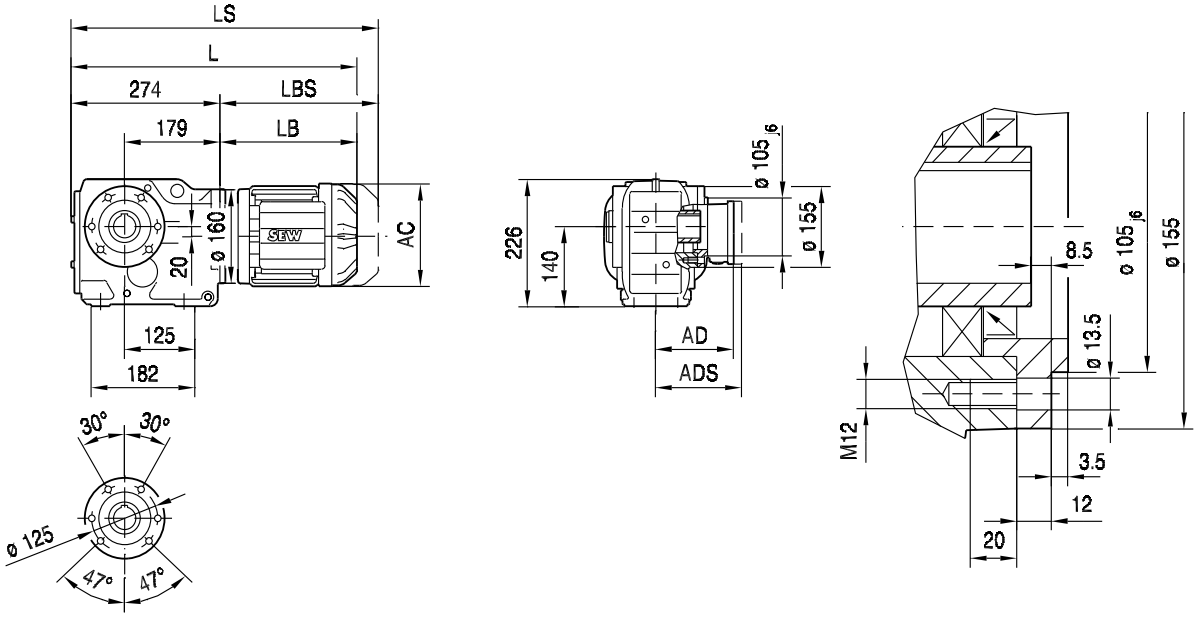
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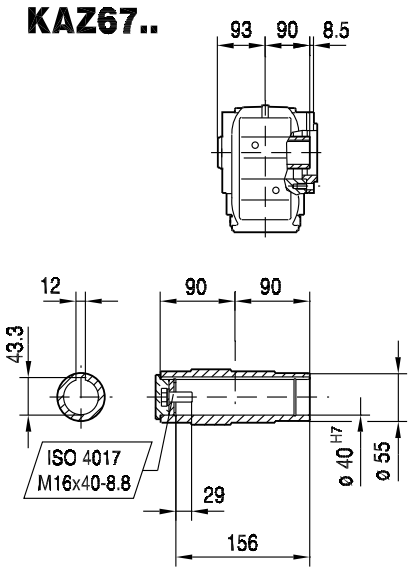
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	459	470	495	504	535	537	557	587	617	664
LS	514	538	563	585	616	630	650	680	710	776
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

33 096 00 06

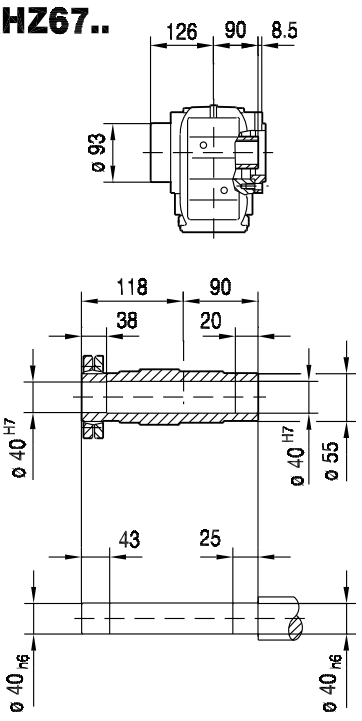
KAZ67..



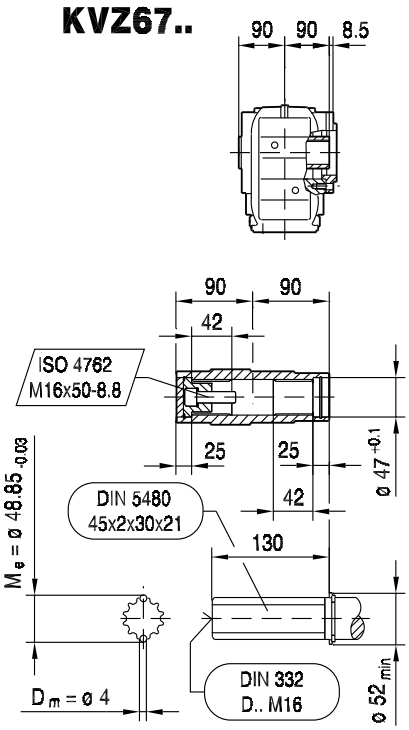
KAZ67..



KHZ67..



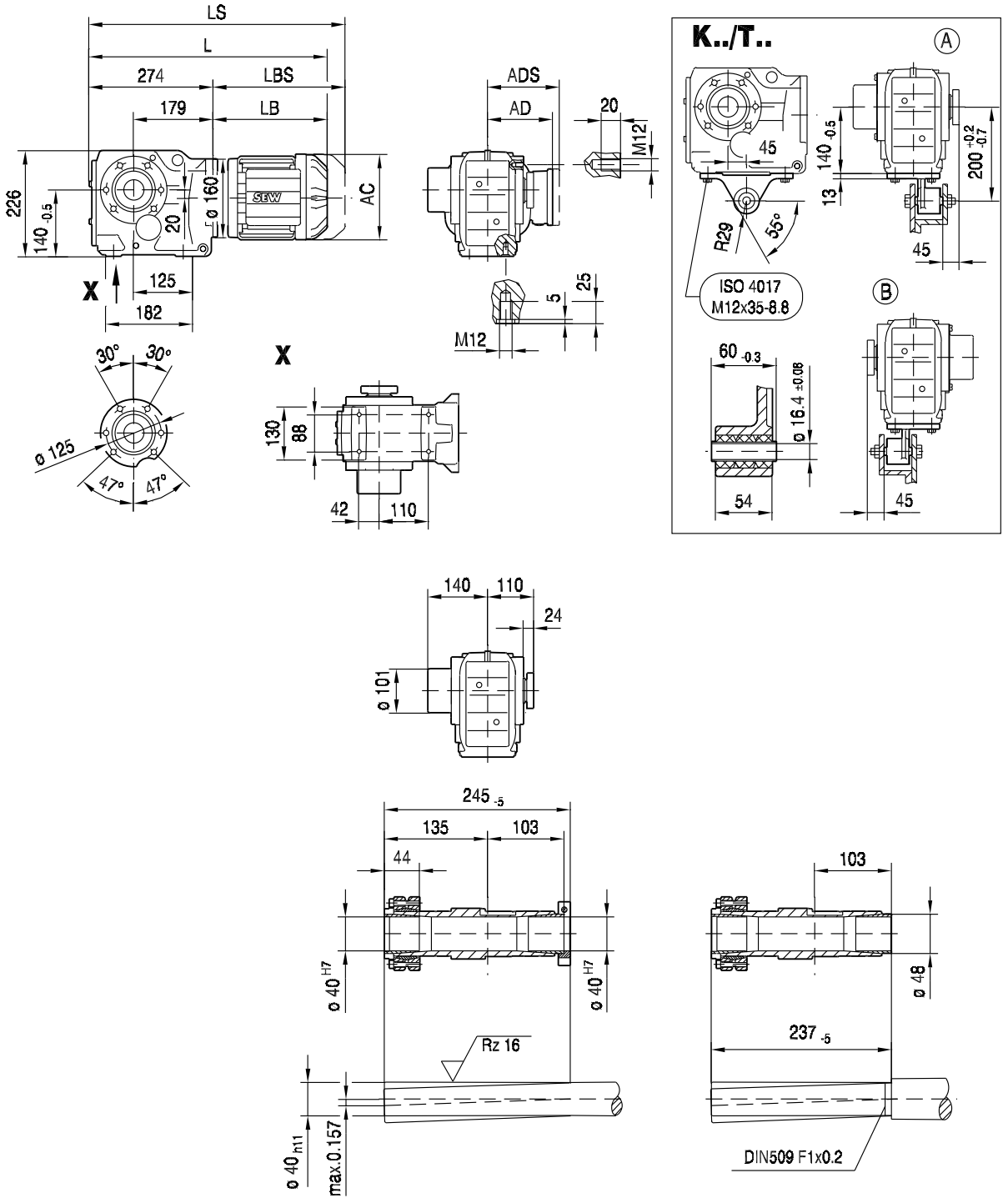
KVZ67..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	459	470	495	504	535	537	557	587	617	664
LS	514	538	563	585	616	630	650	680	710	776
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

33 097 00 06

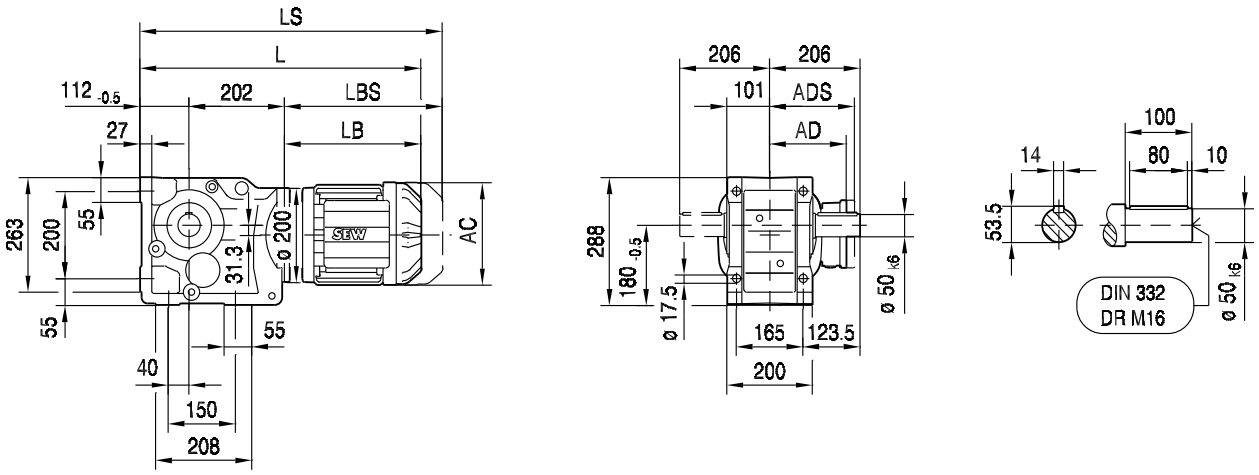
KT67..



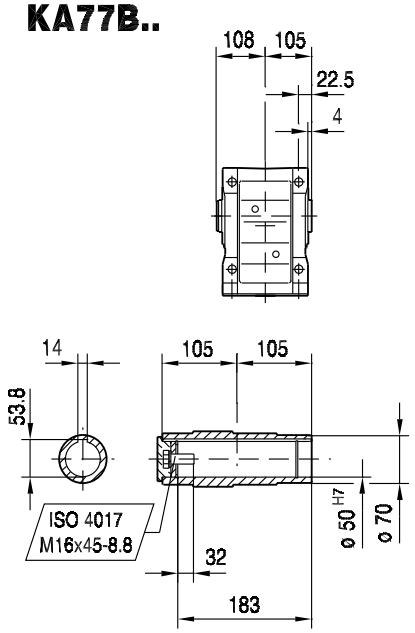
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	459	470	495	504	535	537	557	587	617	664
LS	514	538	563	585	616	630	650	680	710	776
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

33 098 00 06

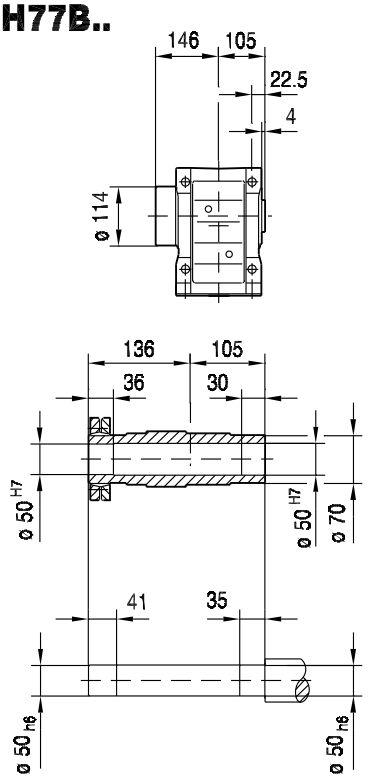
K77..



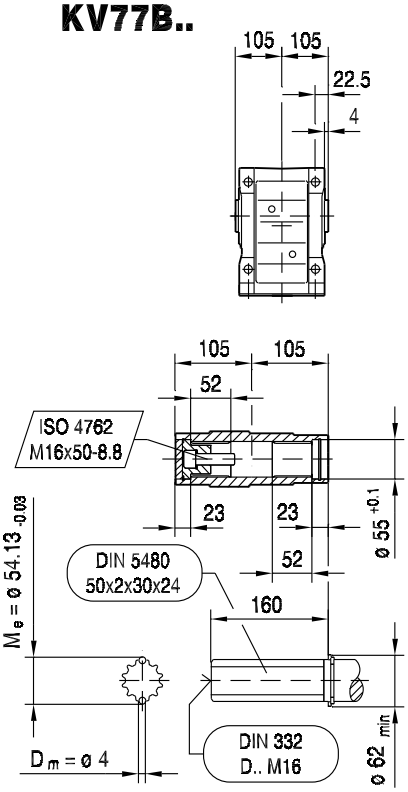
KA77B..



KH77B..



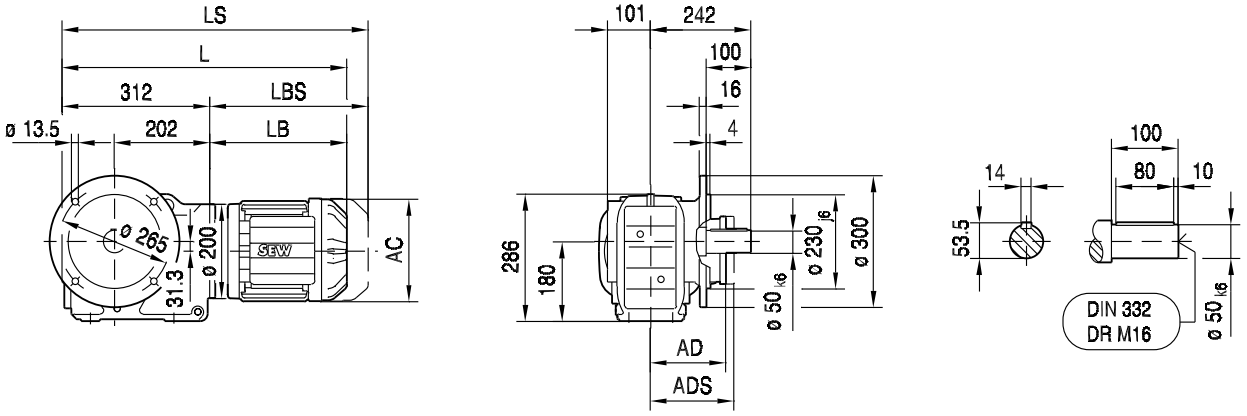
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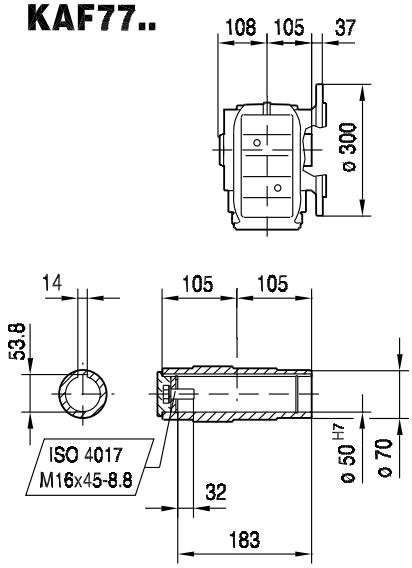
(→ 131)	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	139	139	156	156	179	179	197	197	221	221	270
AD	119	119	128	128	140	140	157	157	170	170	228
ADS	129	129	139	139	150	150	158	158	172	172	228
L	503	528	537	568	570	590	620	650	693	743	784
LS	571	596	618	649	663	683	713	743	805	855	921
LB	189	214	223	254	256	276	306	336	379	429	470
LBS	257	282	304	335	349	369	399	429	491	541	607

33 099 00 06

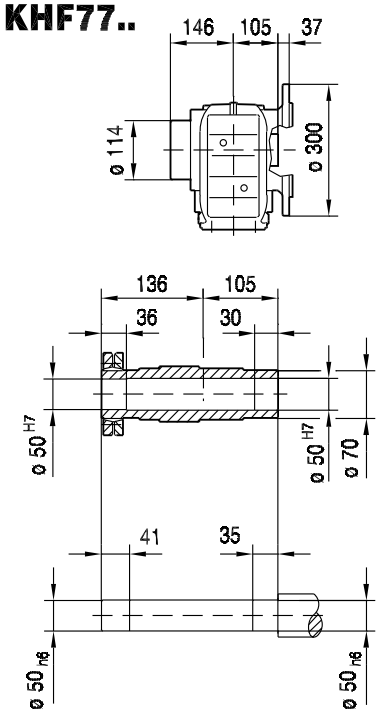
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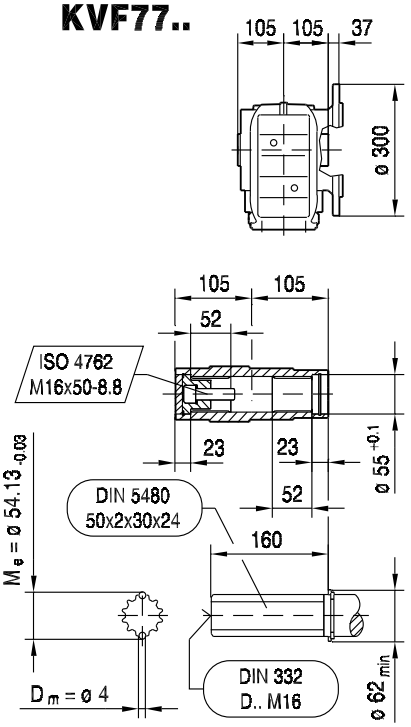
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KHF77..



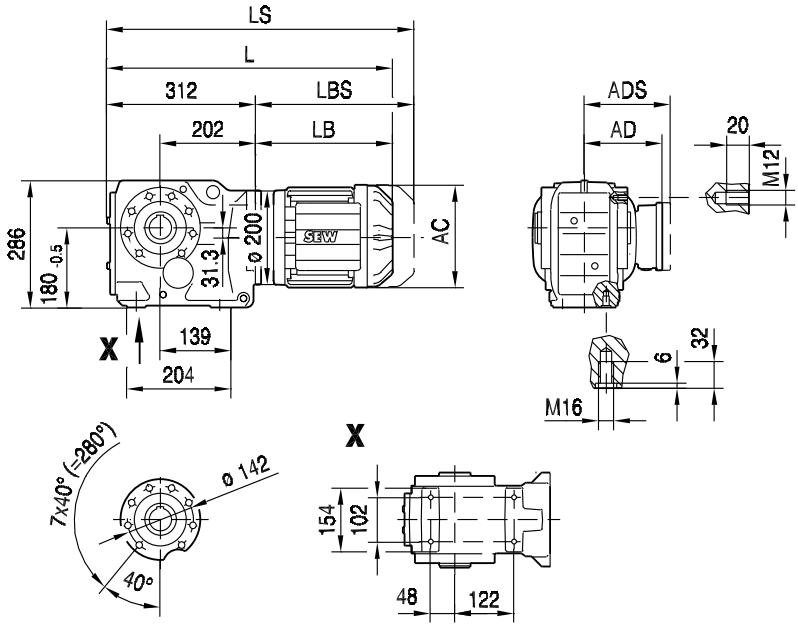
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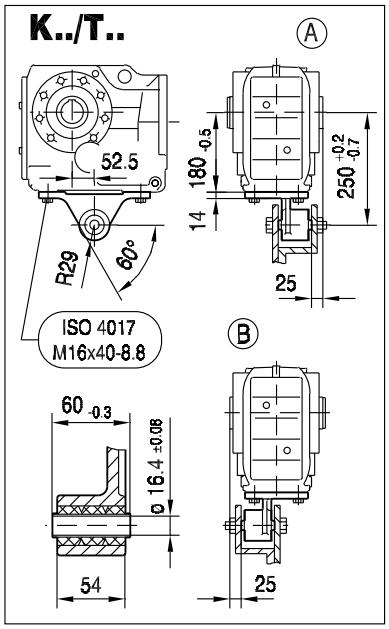


(→ 131)	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	139	139	156	156	179	179	197	197	221	221	270
AD	119	119	128	128	140	140	157	157	170	170	228
ADS	129	129	139	139	150	150	158	158	172	172	228
L	501	526	535	566	568	588	618	648	691	741	782
LS	569	594	616	647	661	681	711	741	803	853	919
LB	189	214	223	254	256	276	306	336	379	429	470
LBS	257	282	304	335	349	369	399	429	491	541	607

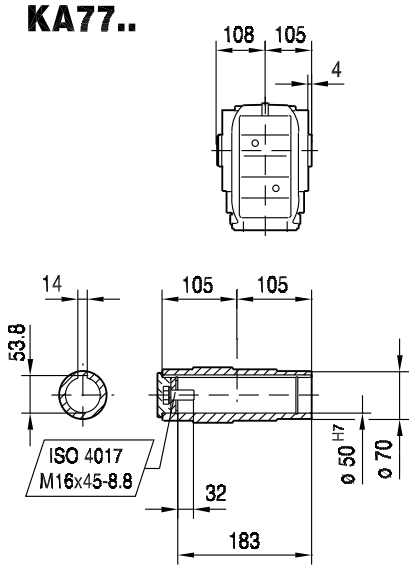
33 100 00 06

KA77..

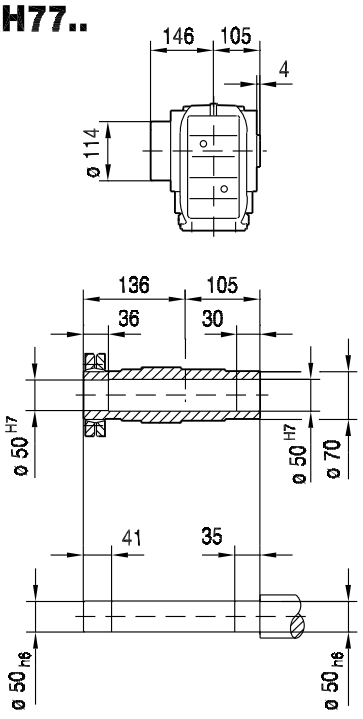




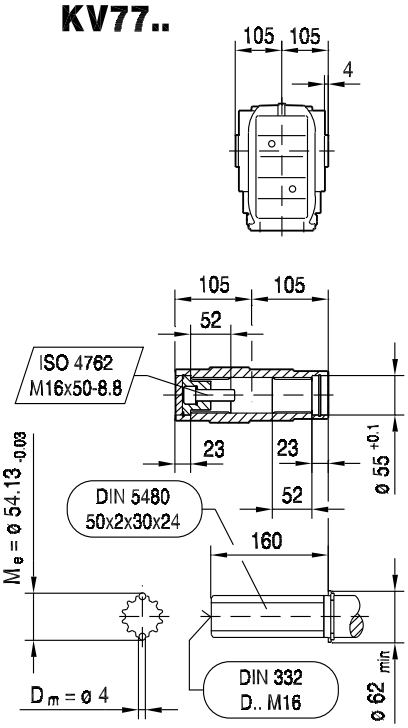
KA77..



KH77..



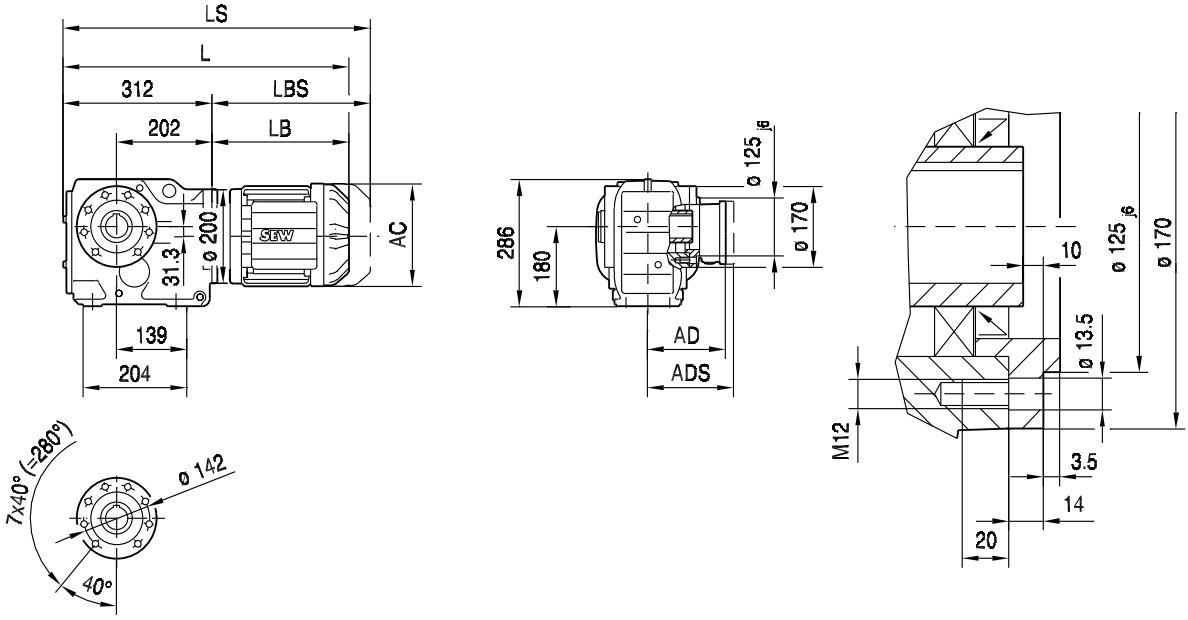
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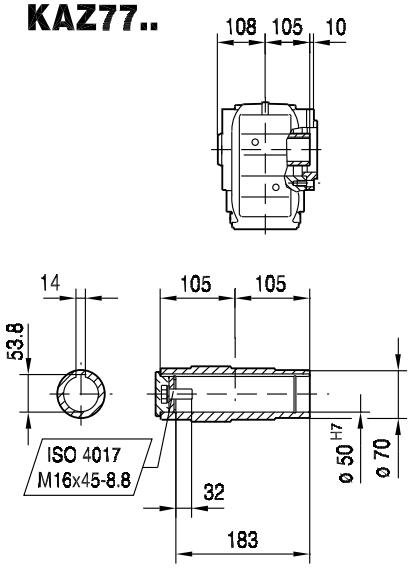
(→ 131)	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	139	139	156	156	179	179	197	197	221	221	270
AD	119	119	128	128	140	140	157	157	170	170	228
ADS	129	129	139	139	150	150	158	158	172	172	228
L	501	526	535	566	568	588	618	648	691	741	782
LS	569	594	616	647	661	681	711	741	803	853	919
LB	189	214	223	254	256	276	306	336	379	429	470
LBS	257	282	304	335	349	369	399	429	491	541	607

33 101 00 06

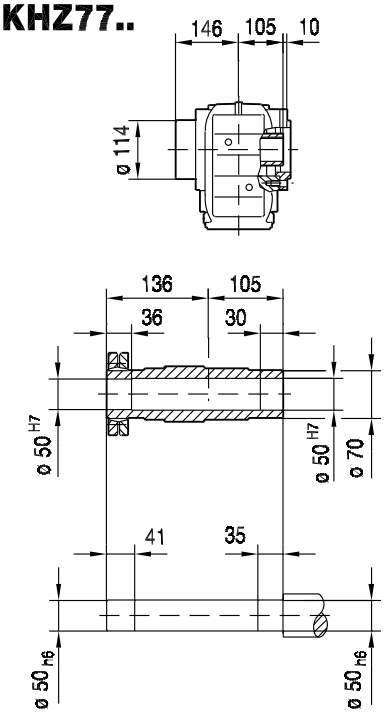
KAZ77..



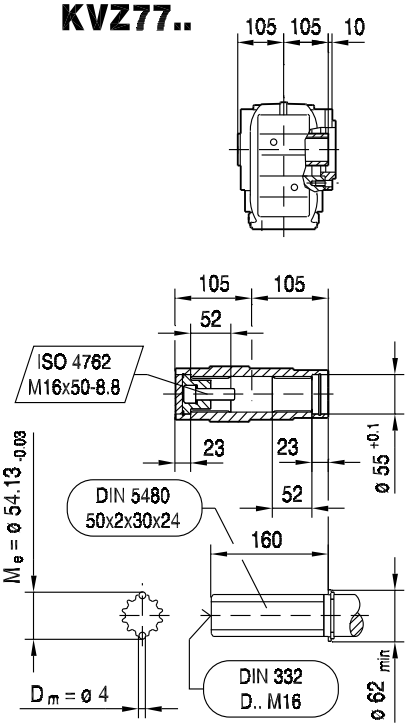
KAZ77..



KHZ77..



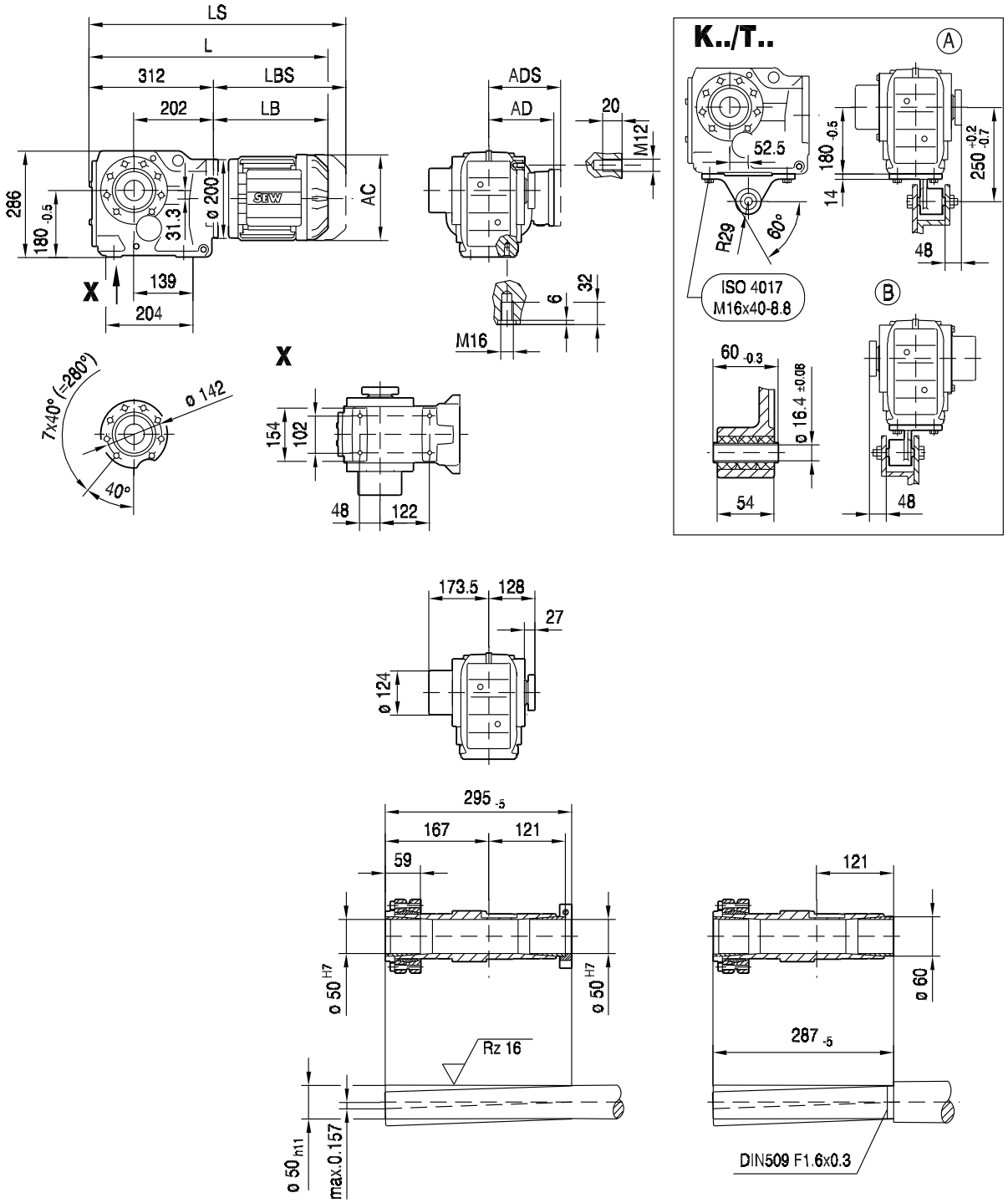
KVZ77..



(→ 131)	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	139	139	156	156	179	179	197	197	221	221	270
AD	119	119	128	128	140	140	157	157	170	170	228
ADS	129	129	139	139	150	150	158	158	172	172	228
L	501	526	535	566	568	588	618	648	691	741	782
LS	569	594	616	647	661	681	711	741	803	853	919
LB	189	214	223	254	256	276	306	336	379	429	470
LBS	257	282	304	335	349	369	399	429	491	541	607

33 102 00 06

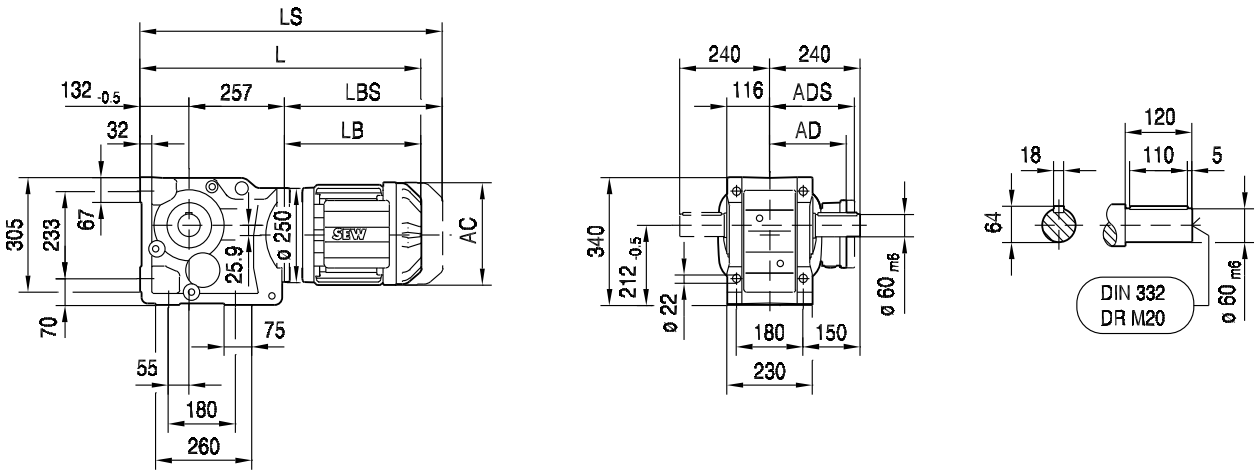
KT77..



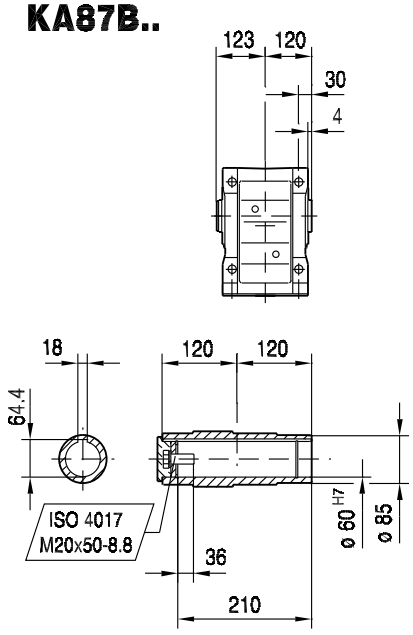
(→ 131)	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	139	139	156	156	179	179	197	197	221	221	270
AD	119	119	128	128	140	140	157	157	170	170	228
ADS	129	129	139	139	150	150	158	158	172	172	228
L	501	526	535	566	568	588	618	648	691	741	782
LS	569	594	616	647	661	681	711	741	803	853	919
LB	189	214	223	254	256	276	306	336	379	429	470
LBS	257	282	304	335	349	369	399	429	491	541	607

33 103 00 06

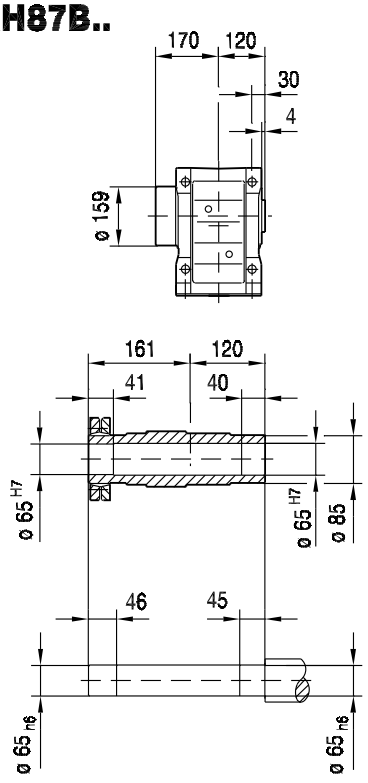
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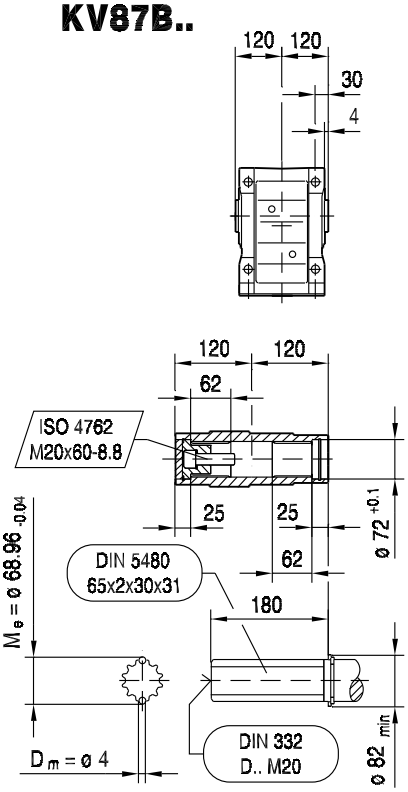
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KH87B..



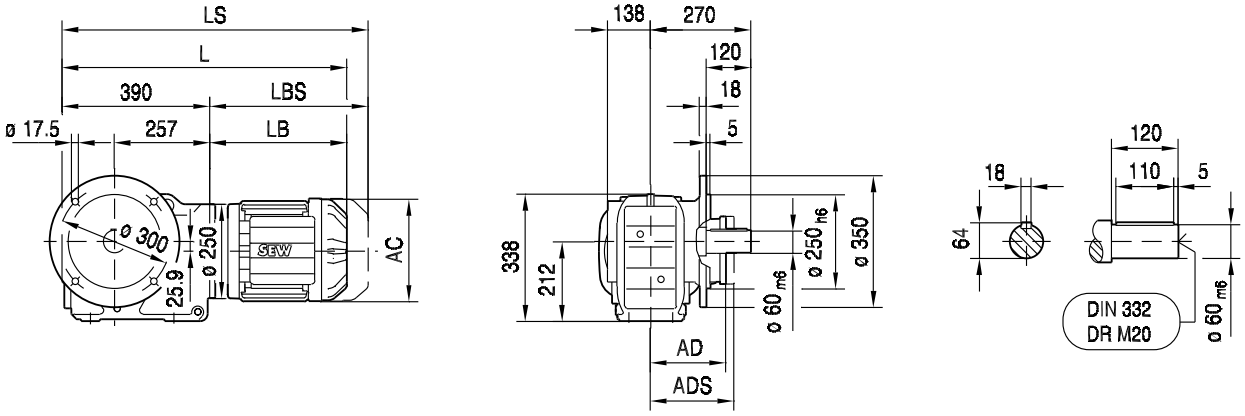
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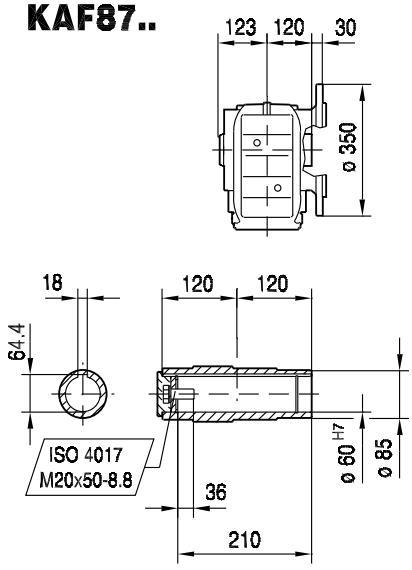
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	607	638	640	660	690	720	763	813	854	923	983
LS	688	719	733	753	783	813	875	925	991	1112	1172
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

33 104 00 06

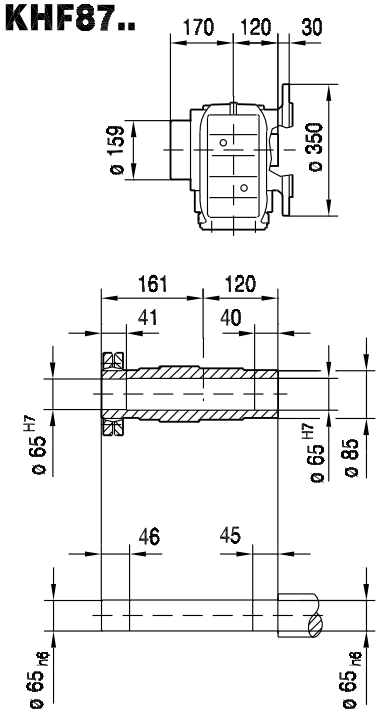
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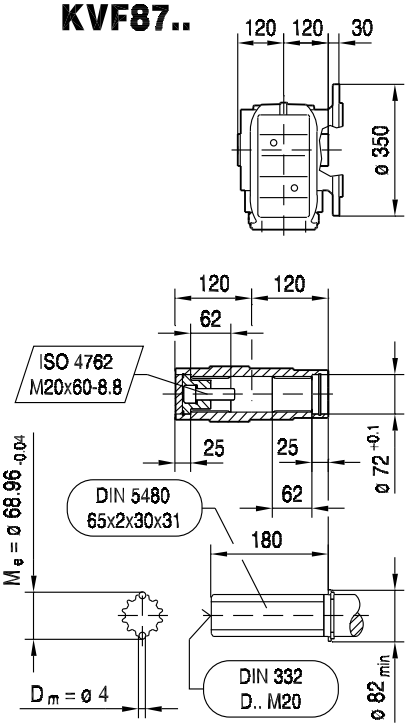
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KHF87..



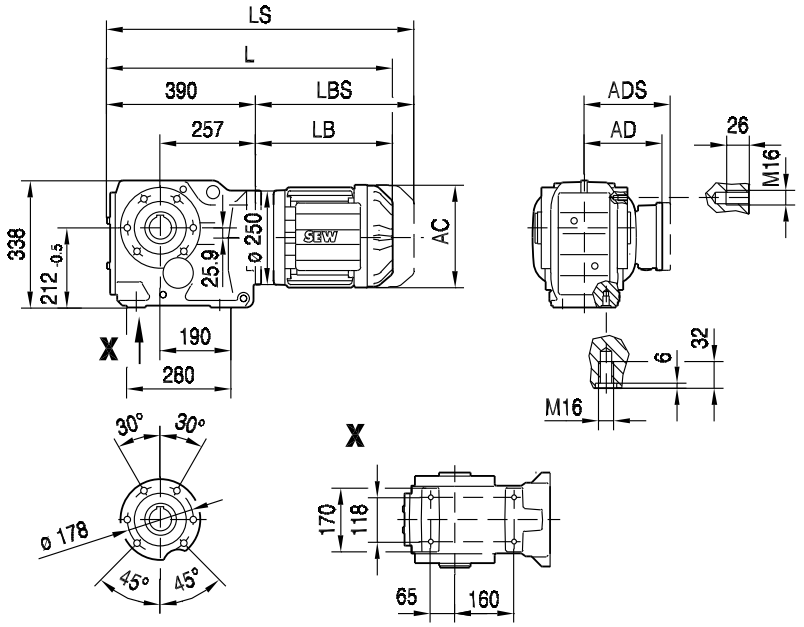
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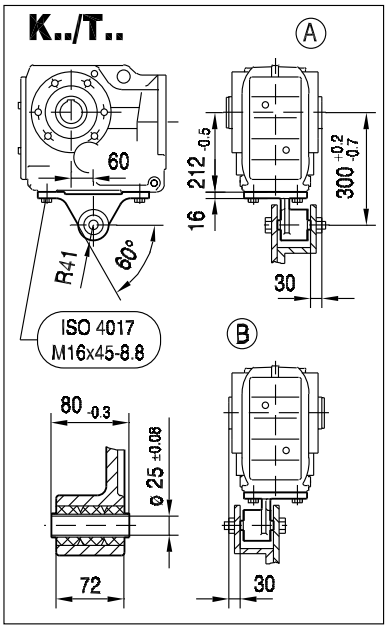


(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	608	639	641	661	691	721	764	814	855	924	984
LS	689	720	734	754	784	814	876	926	992	1113	1173
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

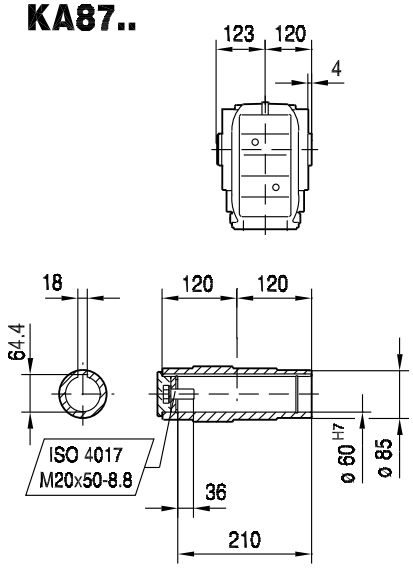
33 105 00 06

KA87..

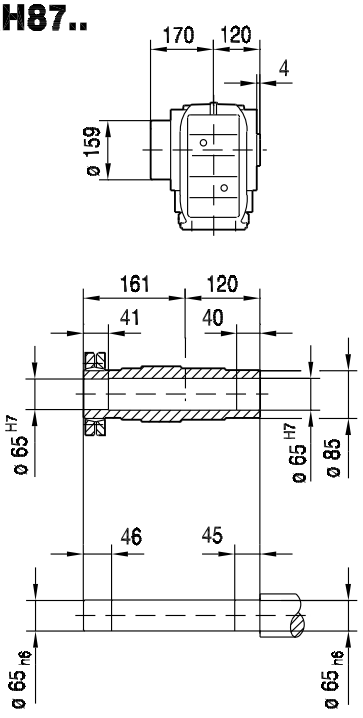




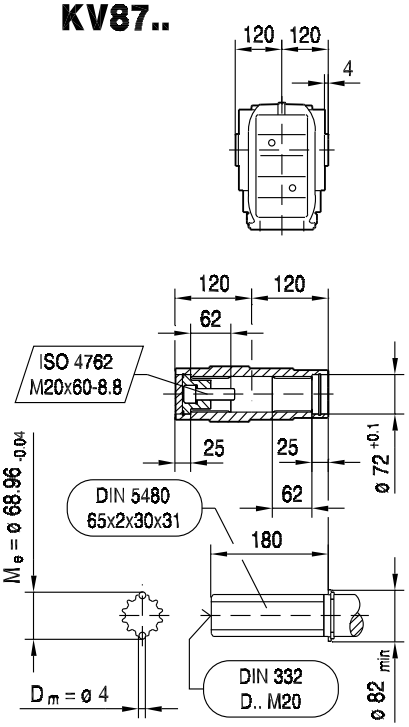
KA87..



KH87..



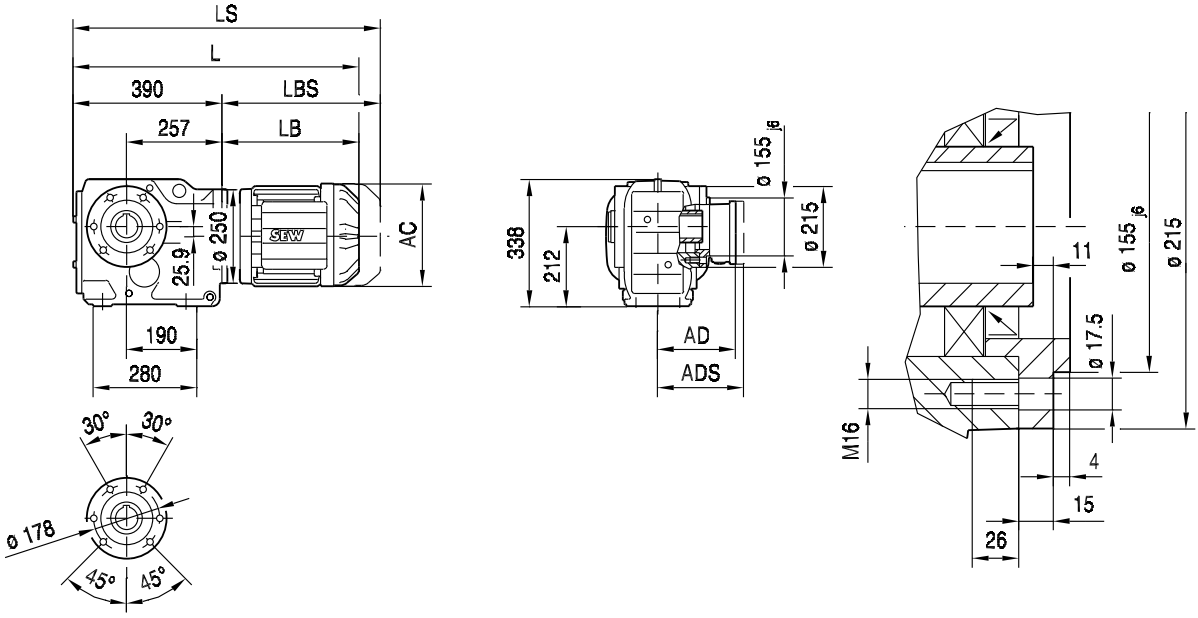
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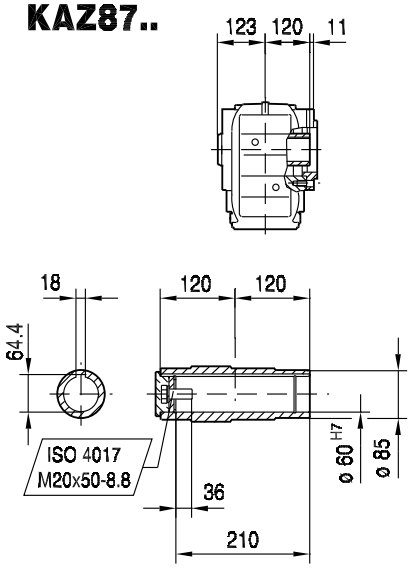
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	608	639	641	661	691	721	764	814	855	924	984
LS	689	720	734	754	784	814	876	926	992	1113	1173
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

33 106 00 06

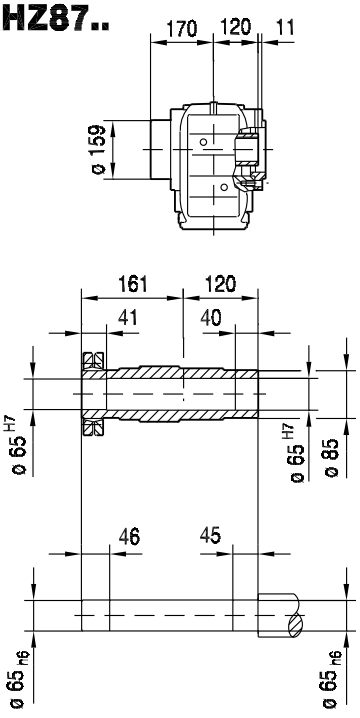
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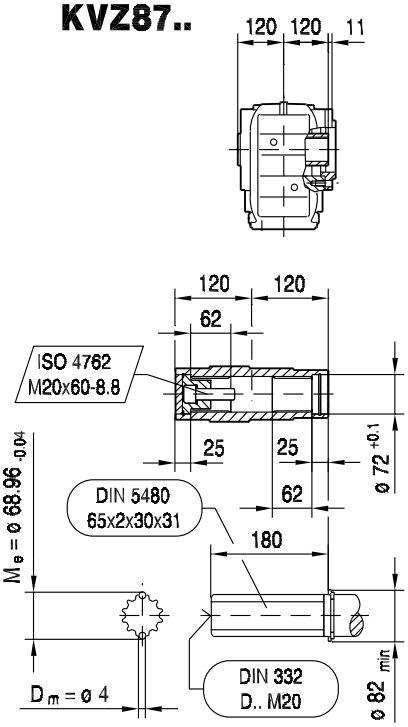
KAZ87..



KHZ87..



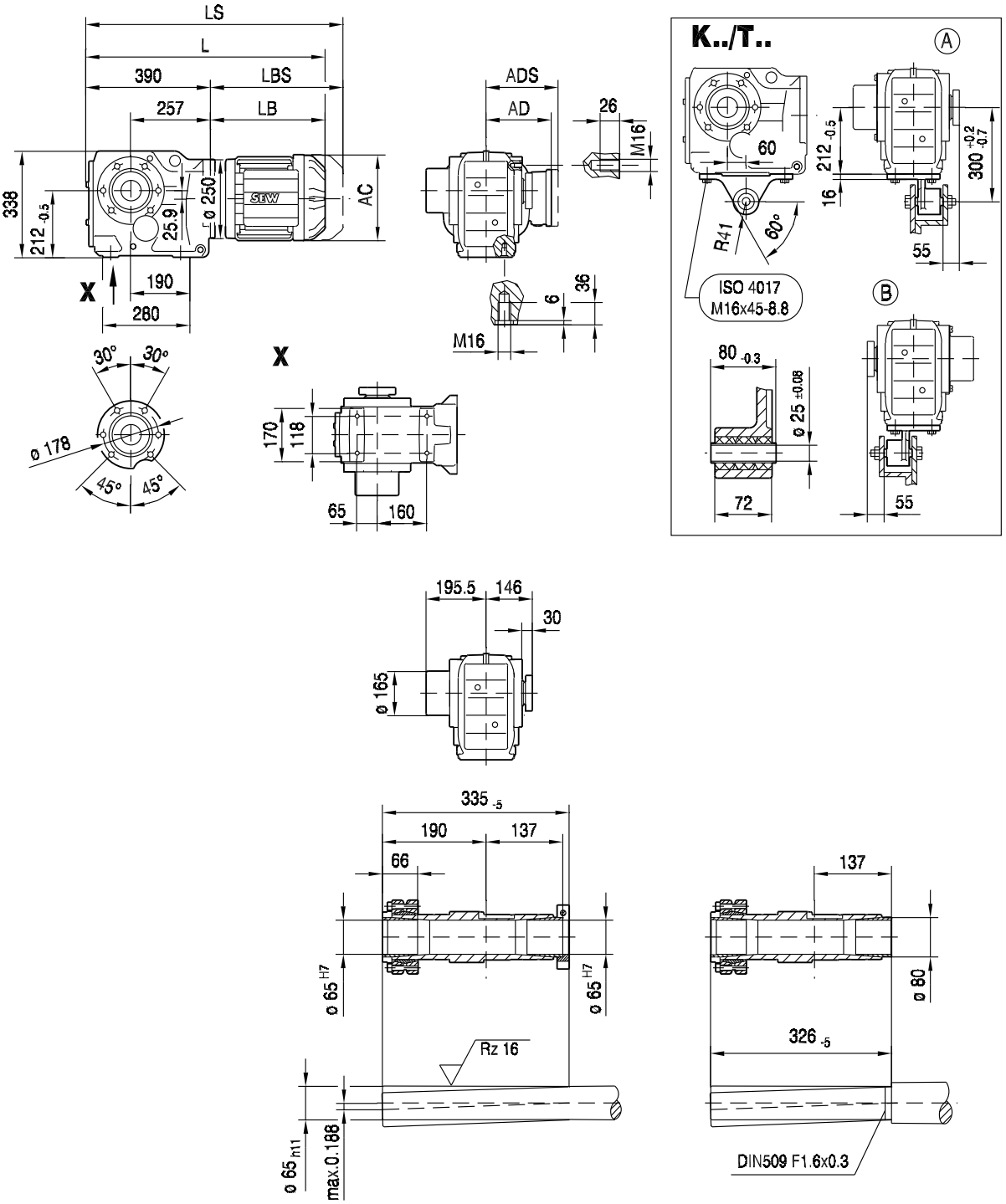
KVZ87..



(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	608	639	641	661	691	721	764	814	855	924	984
LS	689	720	734	754	784	814	876	926	992	1113	1173
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

33 107 00 06

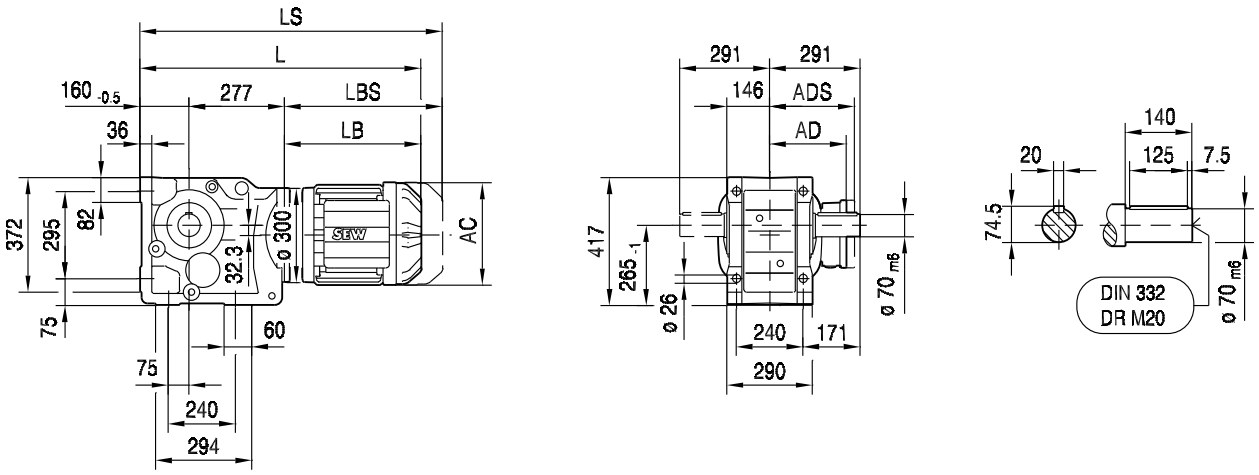
KT87..



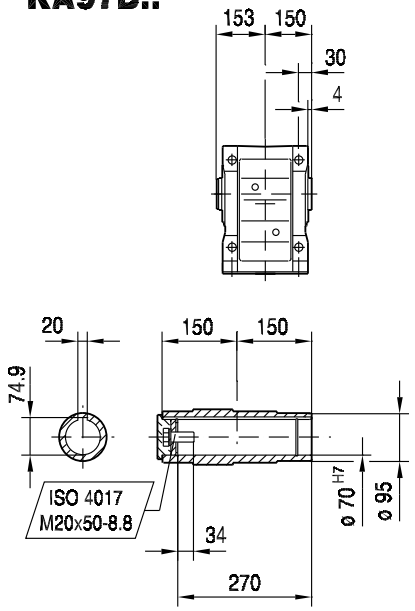
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	156	179	179	197	197	221	221	270	316	316
AD	128	128	140	140	157	157	170	170	228	253	253
ADS	139	139	150	150	158	158	172	172	228	253	253
L	608	639	641	661	691	721	764	814	855	924	984
LS	689	720	734	754	784	814	876	926	992	1113	1173
LB	218	249	251	271	301	331	374	424	465	534	594
LBS	299	330	344	364	394	424	486	536	602	723	783

33 108 00 06

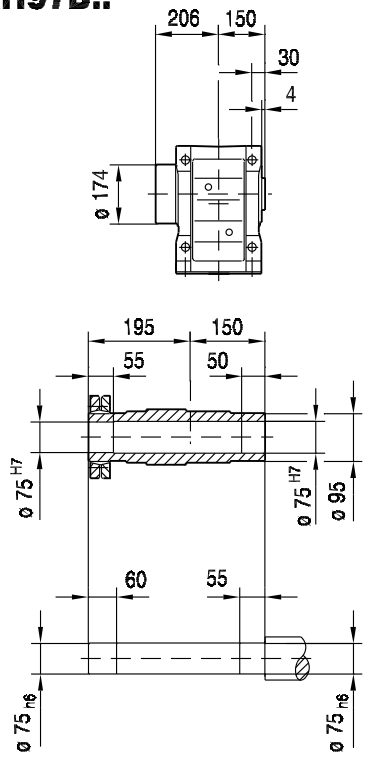
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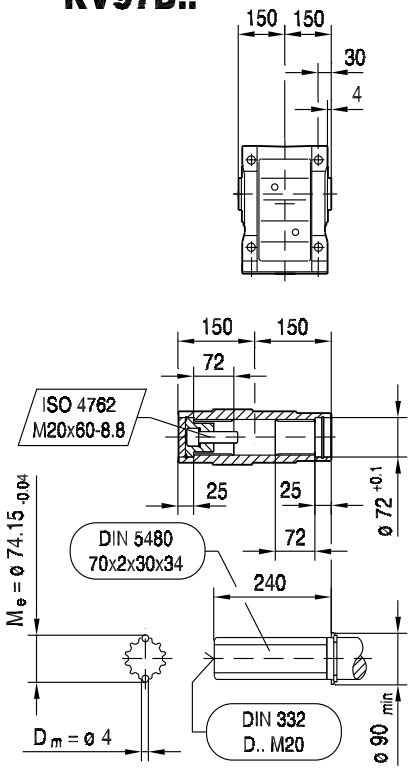
KA97B..



KH97B..



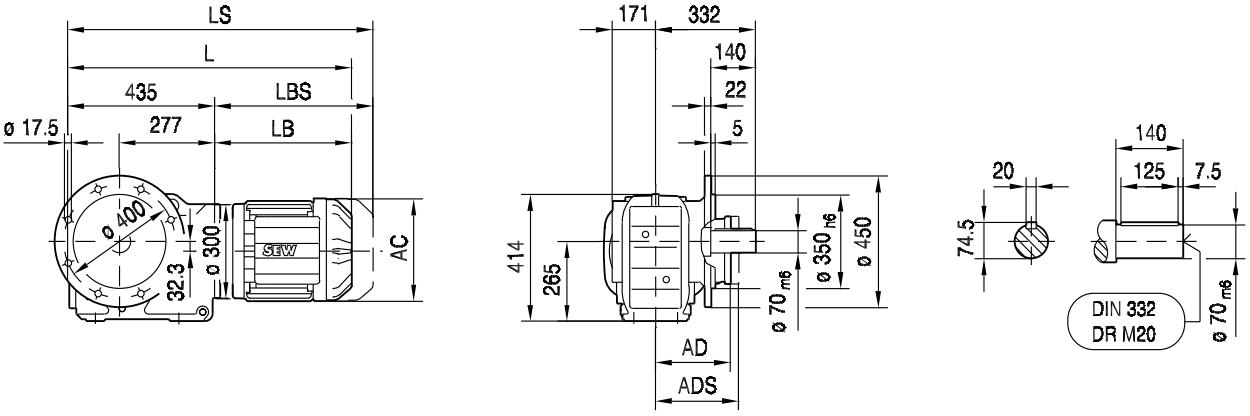
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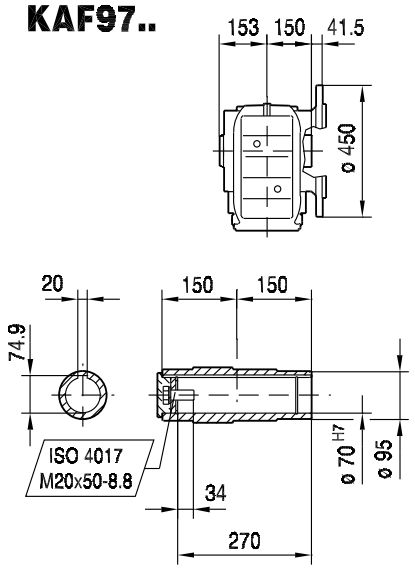
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	681	683	703	733	763	806	856	897	966	1026
LS	762	776	796	826	856	918	968	1034	1155	1215
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

KF97..

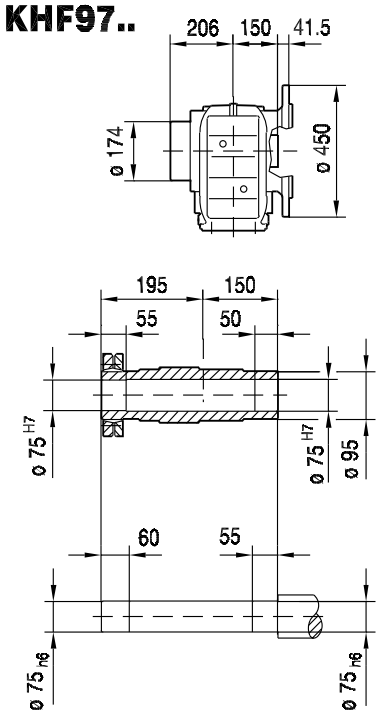
33 109 00 06



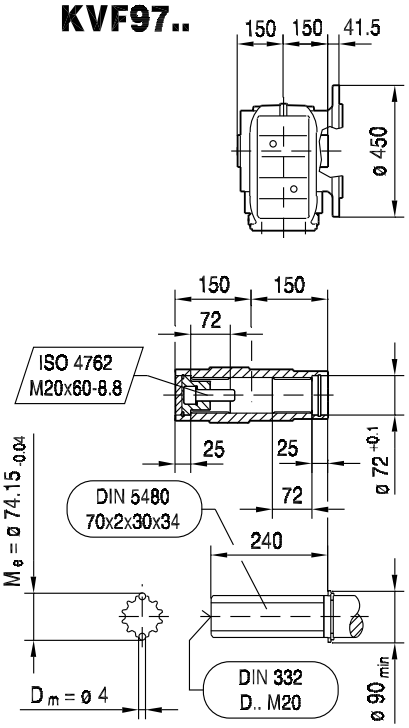
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KHF97..



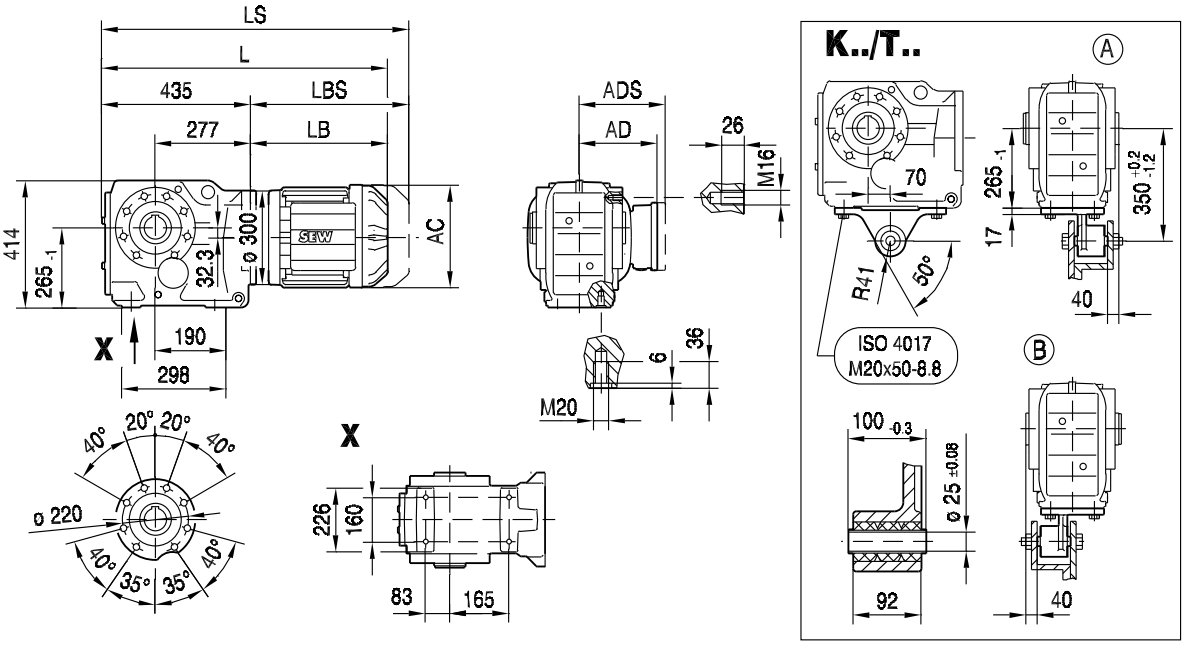
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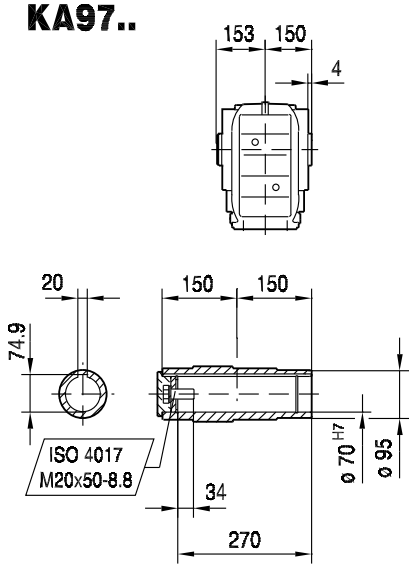
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	679	681	701	731	761	804	854	895	964	1024
LS	760	774	794	824	854	916	966	1032	1153	1213
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

33 110 00 06

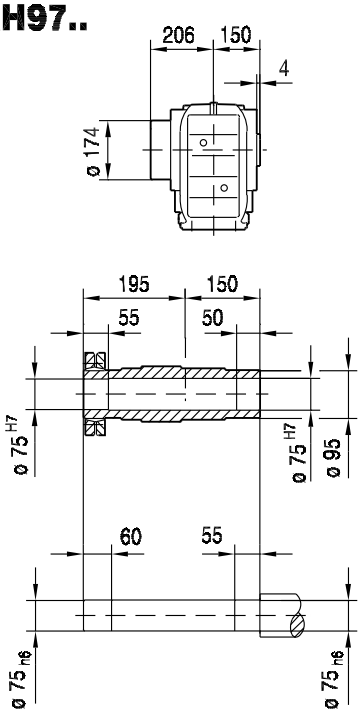
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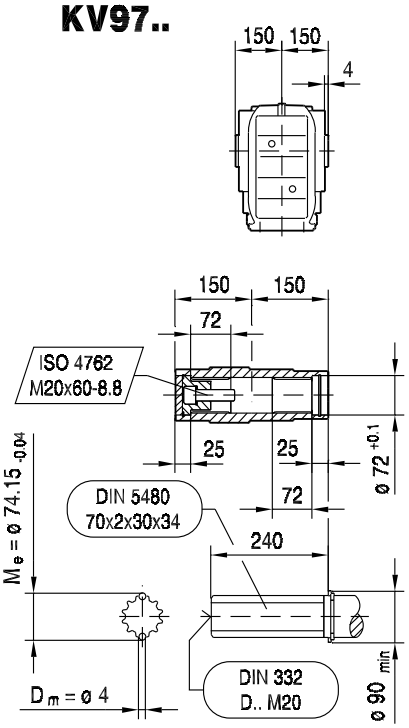
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KH97..



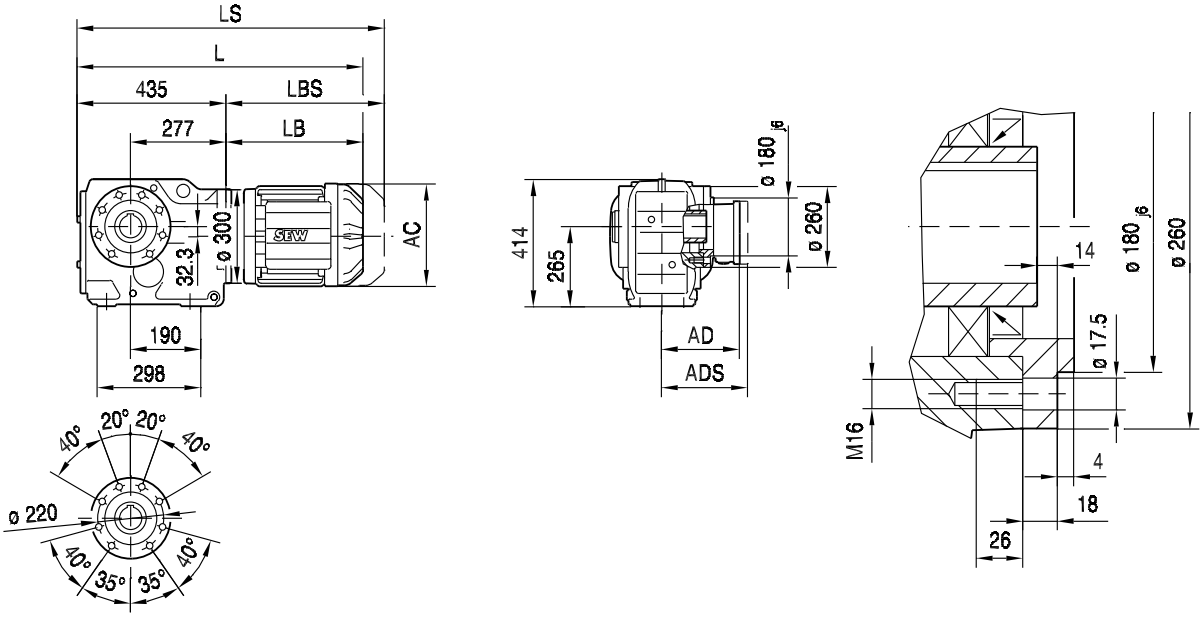
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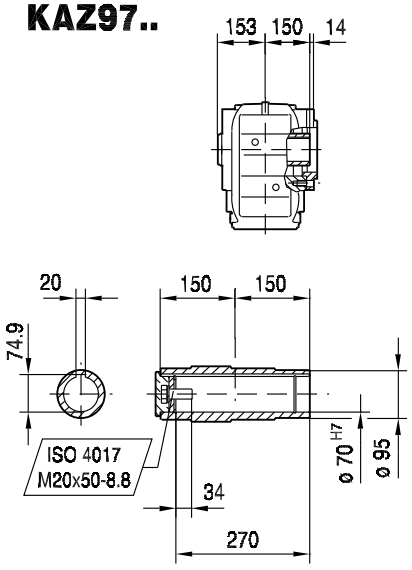
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	679	681	701	731	761	804	854	895	964	1024
LS	760	774	794	824	854	916	966	1032	1153	1213
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

33 111 00 06

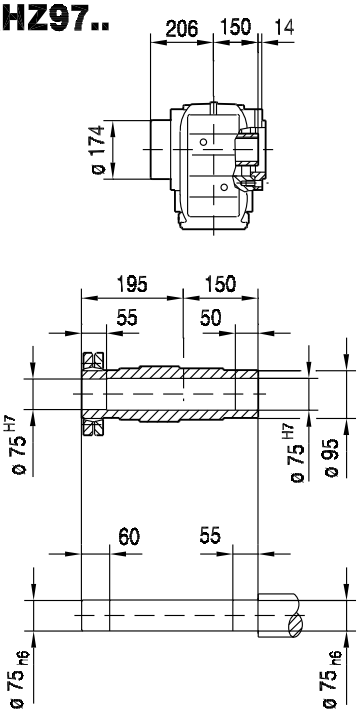
KAZ97..



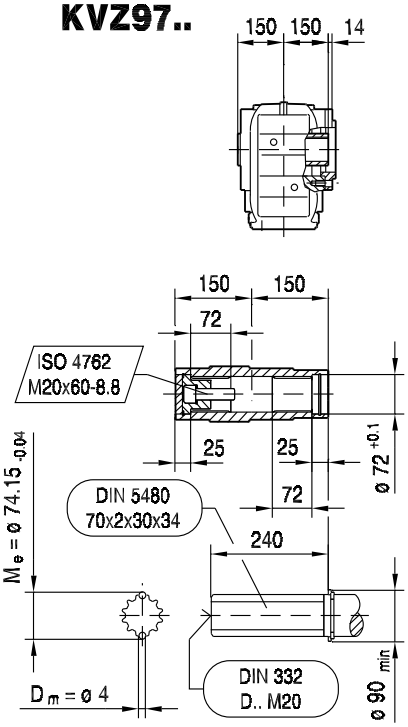
KAZ97..



KHZ97..



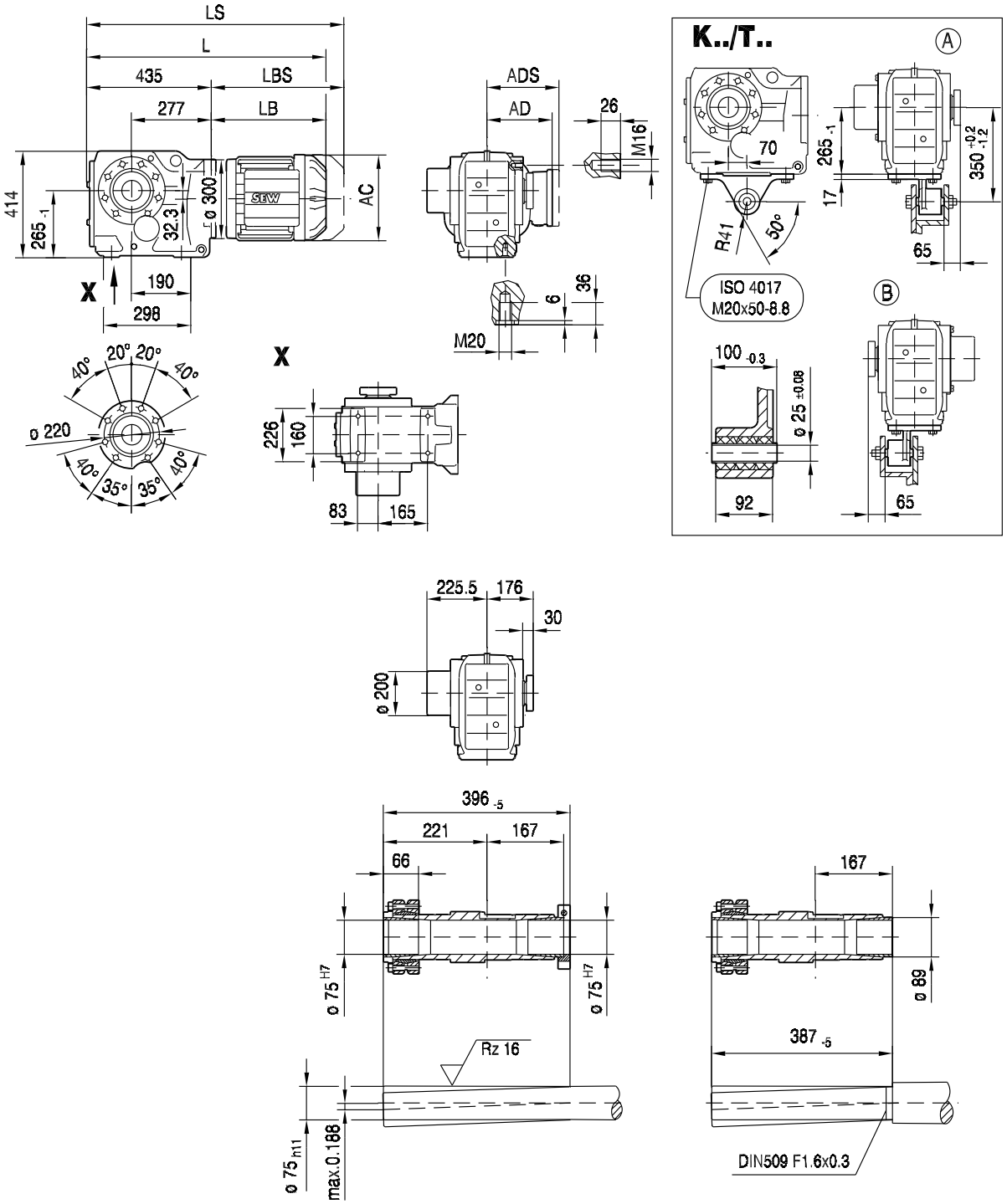
KVZ97..



(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	679	681	701	731	761	804	854	895	964	1024
LS	760	774	794	824	854	916	966	1032	1153	1213
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

33 112 00 06

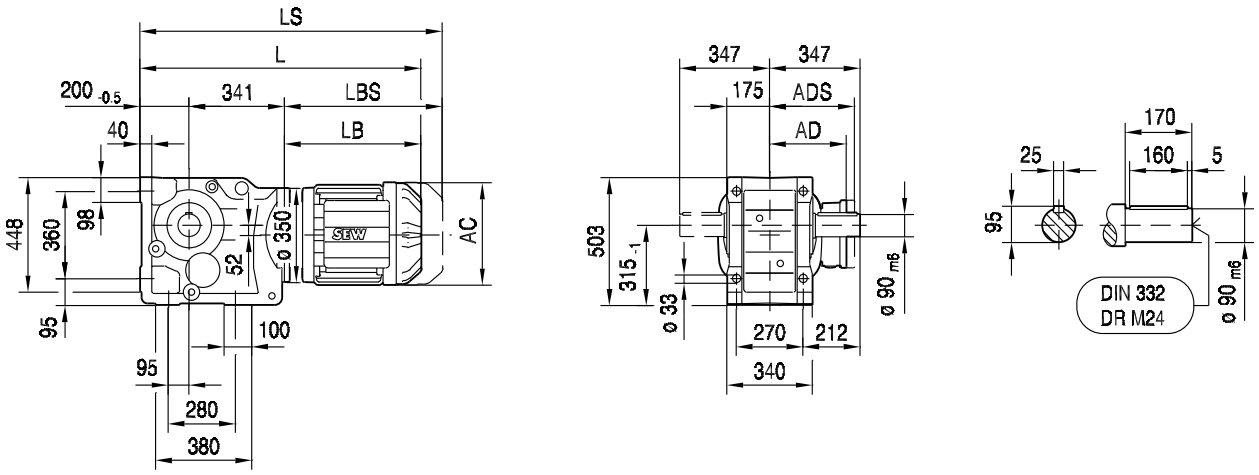
KT97..



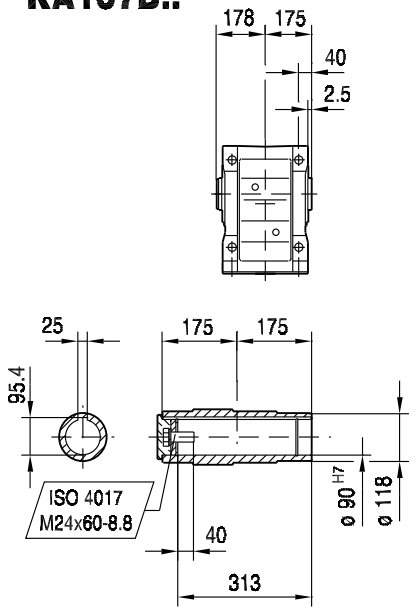
(→ 131)	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	156	179	179	197	197	221	221	270	316	316
AD	128	140	140	157	157	170	170	228	253	253
ADS	139	150	150	158	158	172	172	228	253	253
L	679	681	701	731	761	804	854	895	964	1024
LS	760	774	794	824	854	916	966	1032	1153	1213
LB	244	246	266	296	326	369	419	460	529	589
LBS	325	339	359	389	419	481	531	597	718	778

33 113 00 06

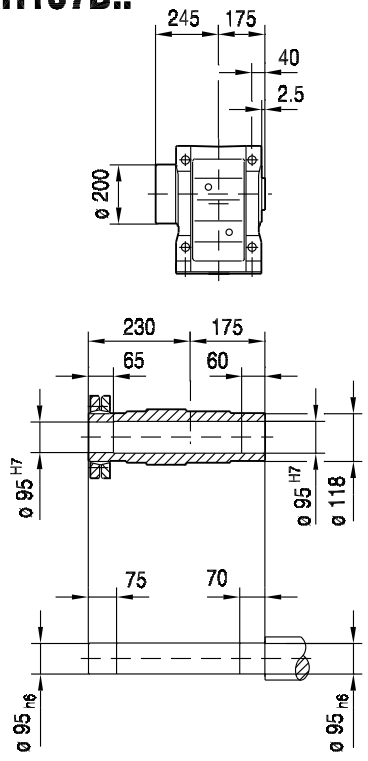
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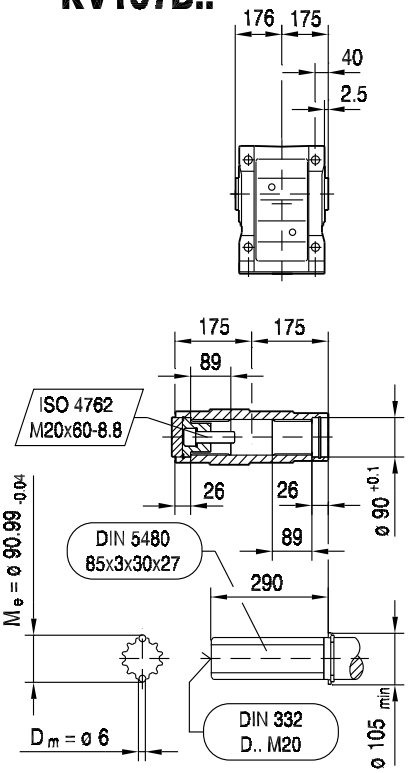
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KH107B..



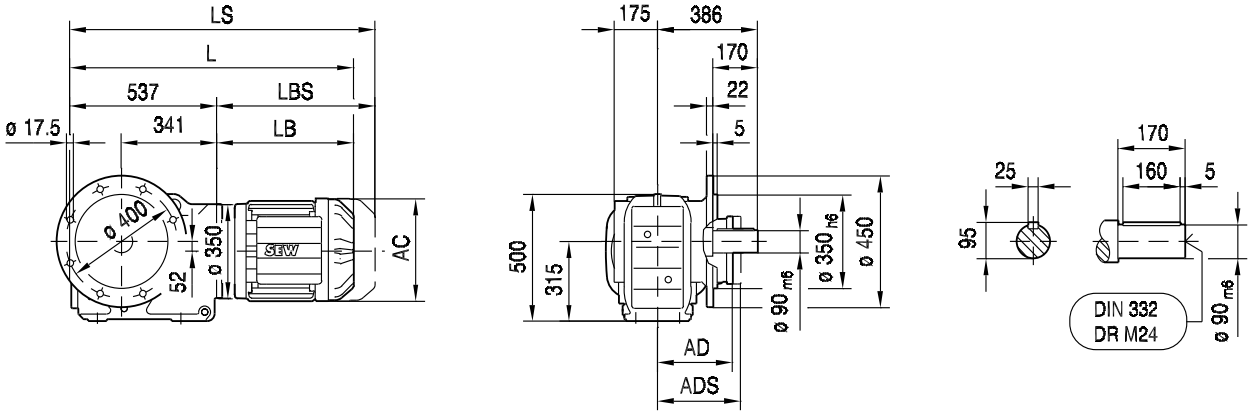
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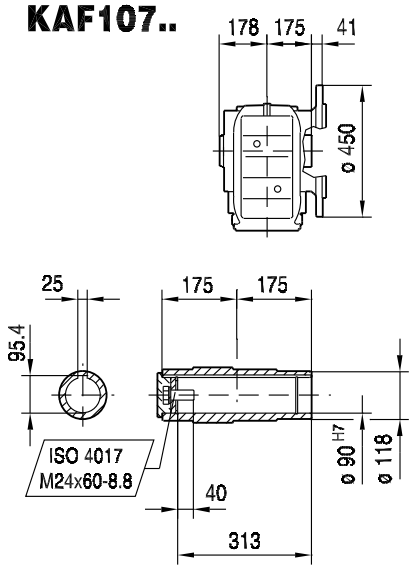
(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	197	197	221	221	270	316	316	394	394
AD	157	157	170	170	228	253	253	283	283
ADS	158	158	172	172	228	253	253	283	283
L	831	861	904	954	995	1064	1124	1197	1247
LS	924	954	1016	1066	1132	1253	1313	1402	1452
LB	290	320	363	413	454	523	583	656	706
LBS	383	413	475	525	591	712	772	861	911

33 114 00 06

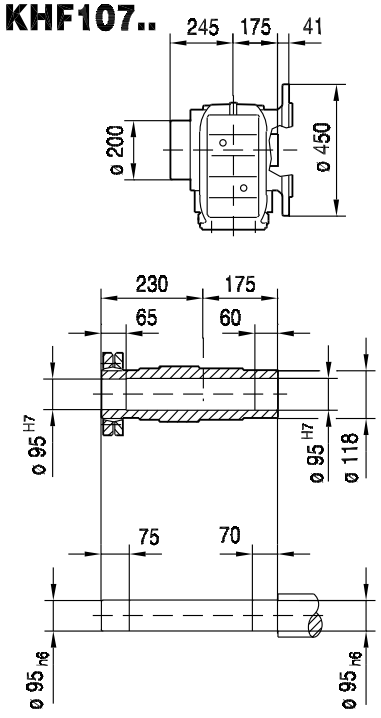
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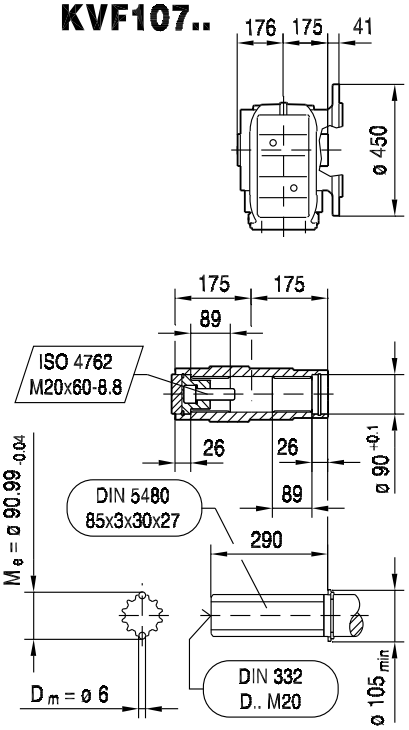
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KHF107..



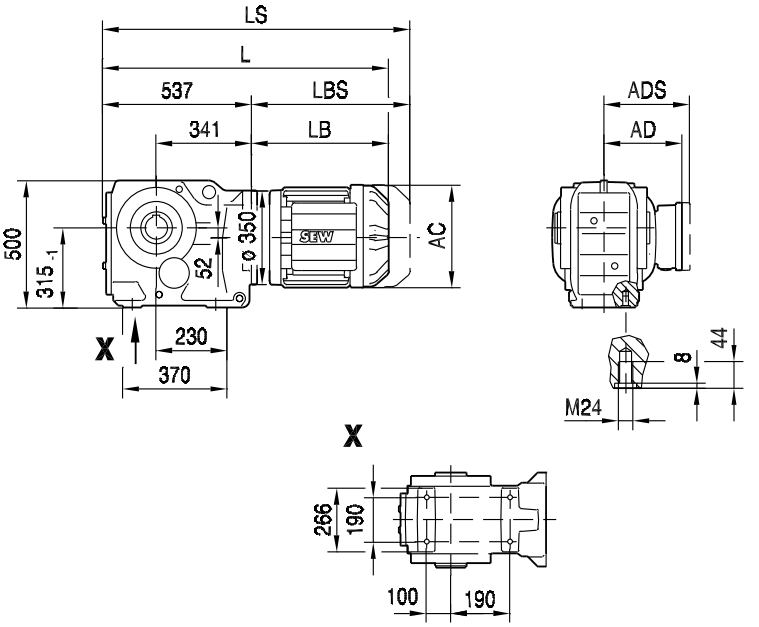
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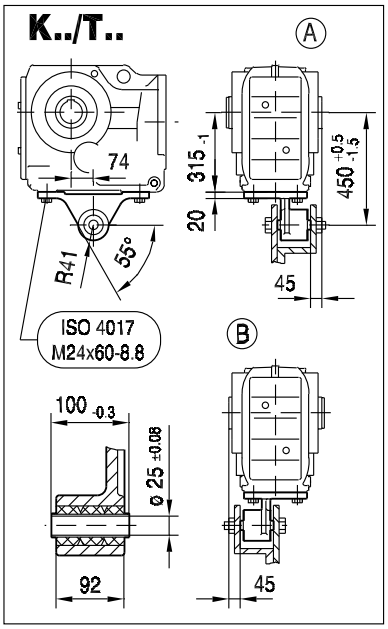


(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	197	197	221	221	270	316	316	394	394
AD	157	157	170	170	228	253	253	283	283
ADS	158	158	172	172	228	253	253	283	283
L	827	857	900	950	991	1060	1120	1193	1243
LS	920	950	1012	1062	1128	1249	1309	1398	1448
LB	290	320	363	413	454	523	583	656	706
LBS	383	413	475	525	591	712	772	861	911

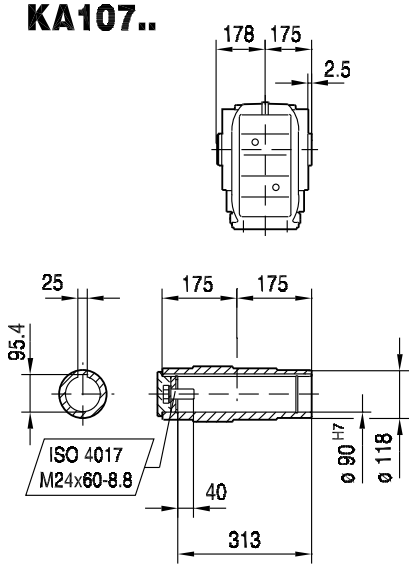
33 115 00 06

KA107..

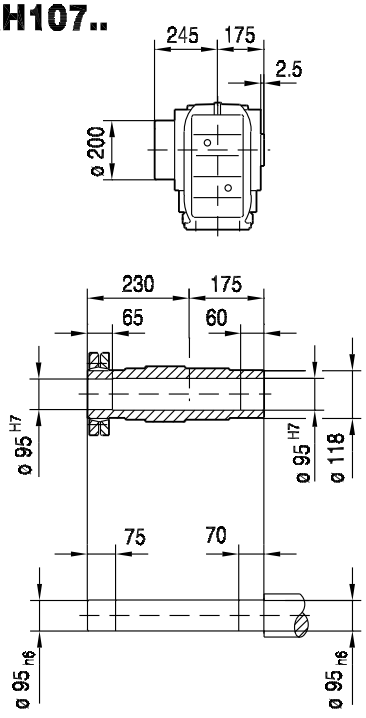




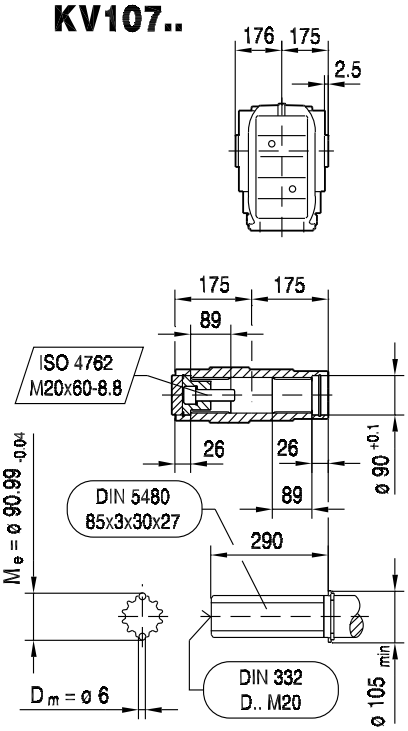
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KH107..



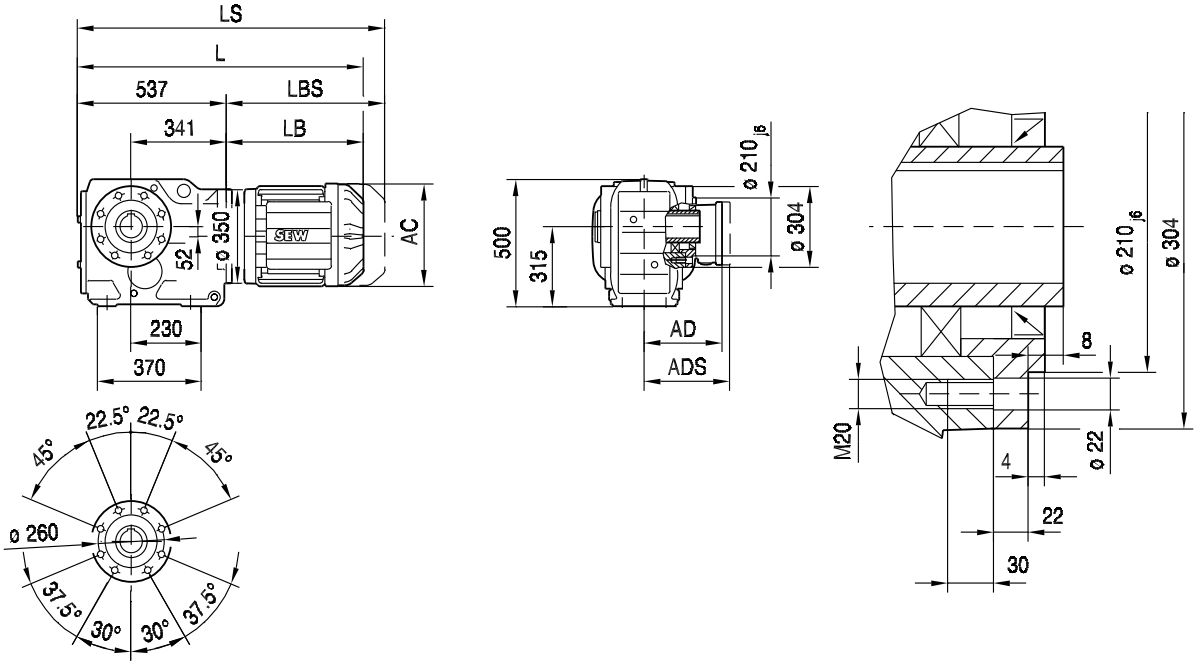
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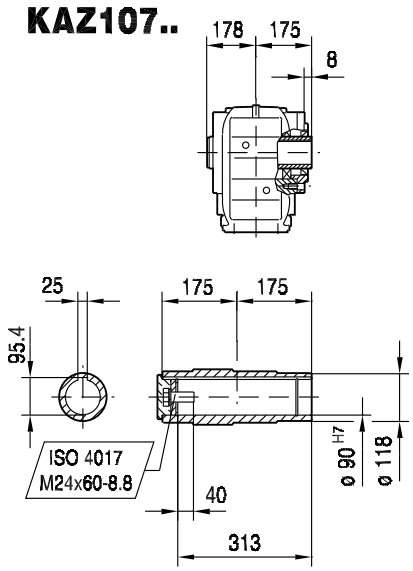
(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	197	197	221	221	270	316	316	394	394
AD	157	157	170	170	228	253	253	283	283
ADS	158	158	172	172	228	253	253	283	283
L	827	857	900	950	991	1060	1120	1193	1243
LS	920	950	1012	1062	1128	1249	1309	1398	1448
LB	290	320	363	413	454	523	583	656	706
LBS	383	413	475	525	591	712	772	861	911

33 116 00 06

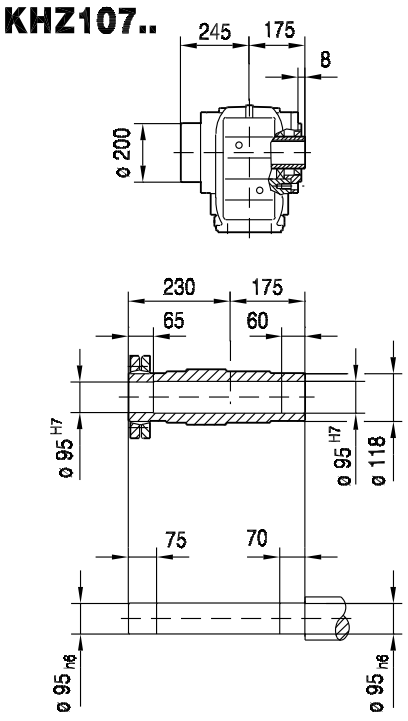
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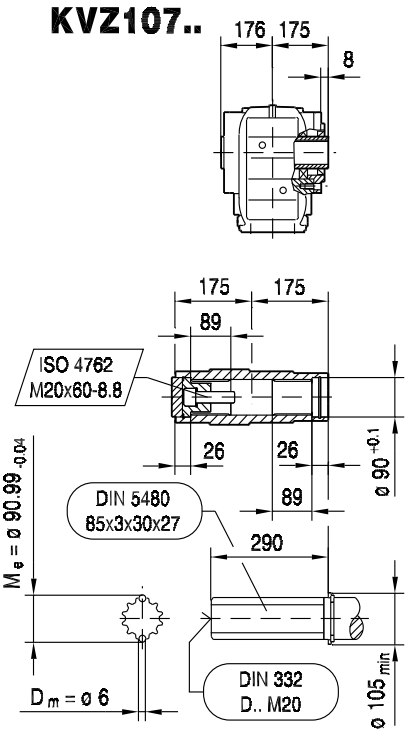
KAZ107..



KHZ107..



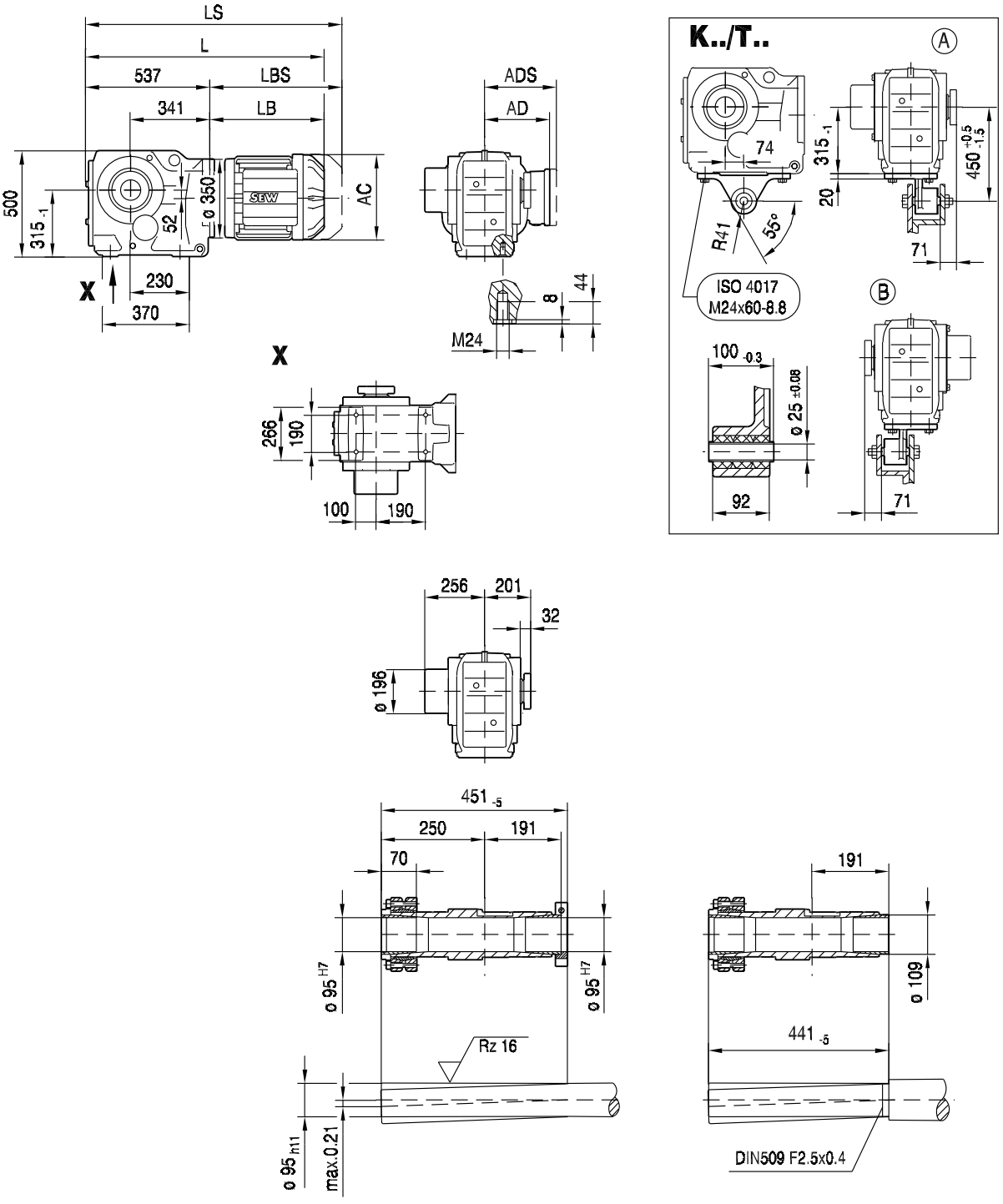
KVZ107..



(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	197	197	221	221	270	316	316	394	394
AD	157	157	170	170	228	253	253	283	283
ADS	158	158	172	172	228	253	253	283	283
L	827	857	900	950	991	1060	1120	1193	1243
LS	920	950	1012	1062	1128	1249	1309	1398	1448
LB	290	320	363	413	454	523	583	656	706
LBS	383	413	475	525	591	712	772	861	911

33 117 00 06

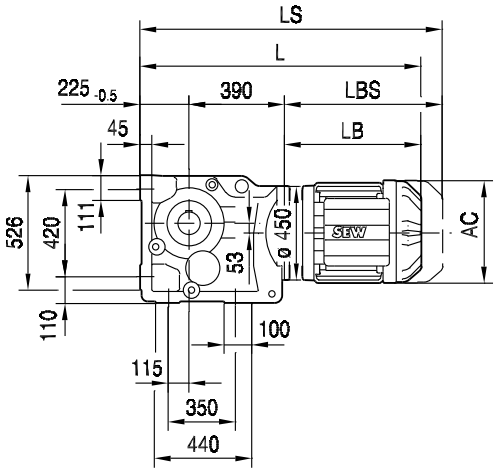
KT107..

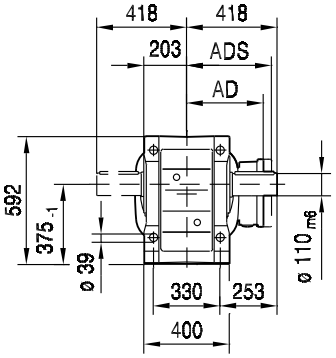


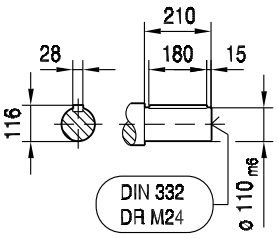
(→ 131)	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC
AC	197	197	221	221	270	316	316	394	394
AD	157	157	170	170	228	253	253	283	283
ADS	158	158	172	172	228	253	253	283	283
L	827	857	900	950	991	1060	1120	1193	1243
LS	920	950	1012	1062	1128	1249	1309	1398	1448
LB	290	320	363	413	454	523	583	656	706
LBS	383	413	475	525	591	712	772	861	911

33 118 00 06

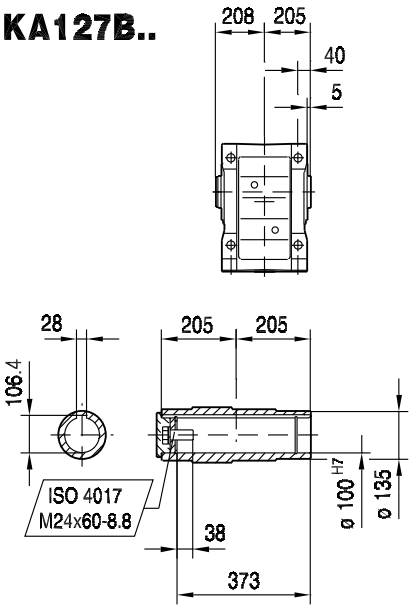
K127..



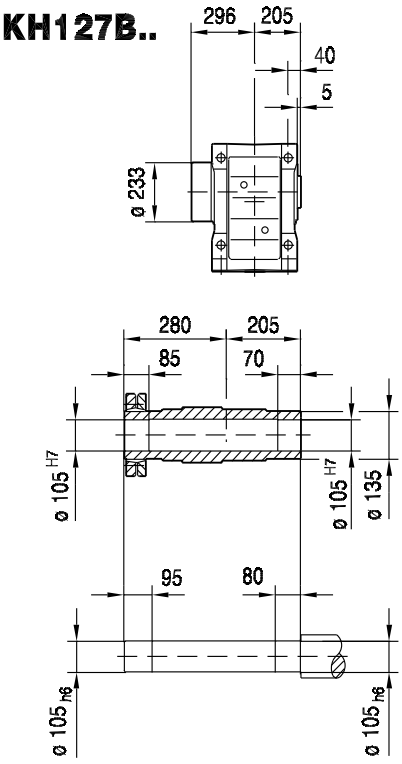




KA127B..



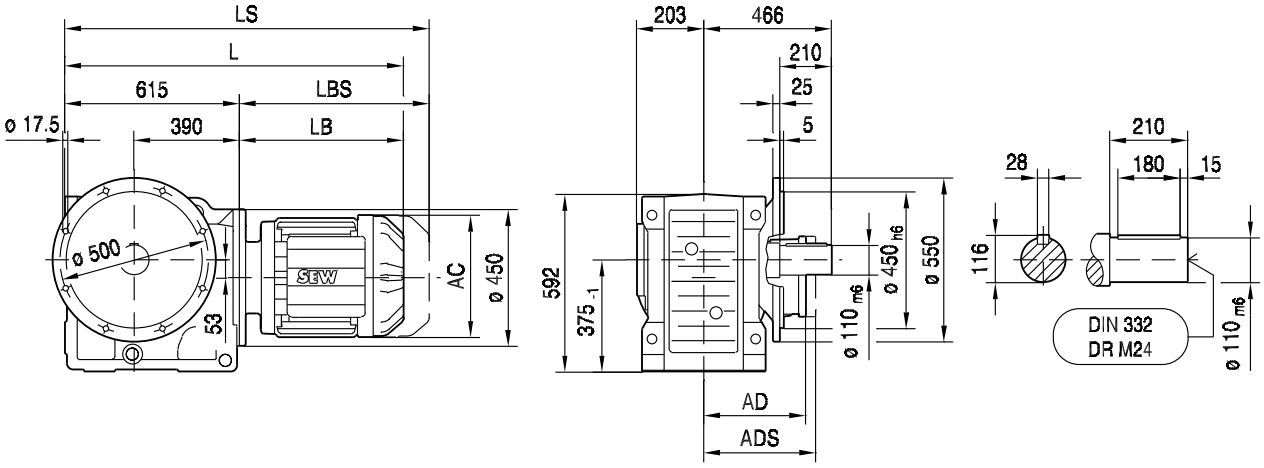
KH127B..



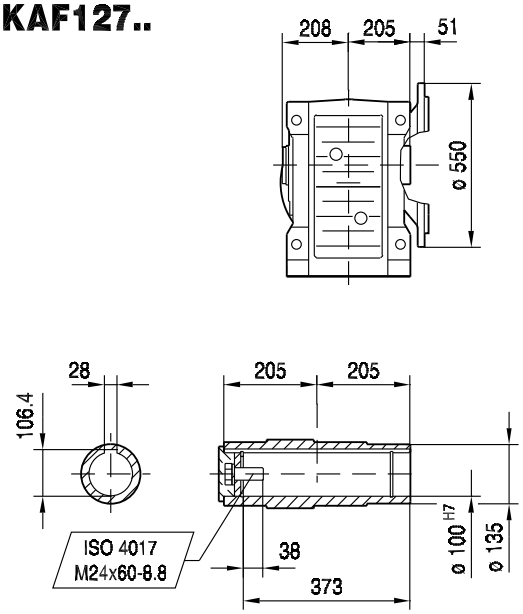
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1013	1054	1123	1183	1256	1306	1395	
LS	1125	1191	1312	1372	1461	1511	1580	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

33 119 00 06

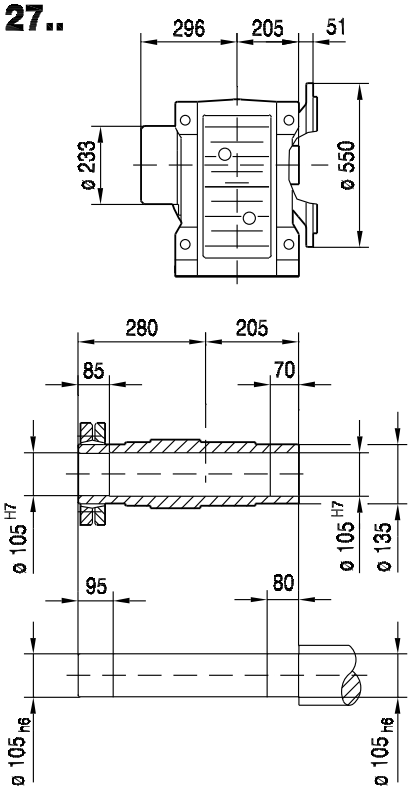
KF127..



KAF127..



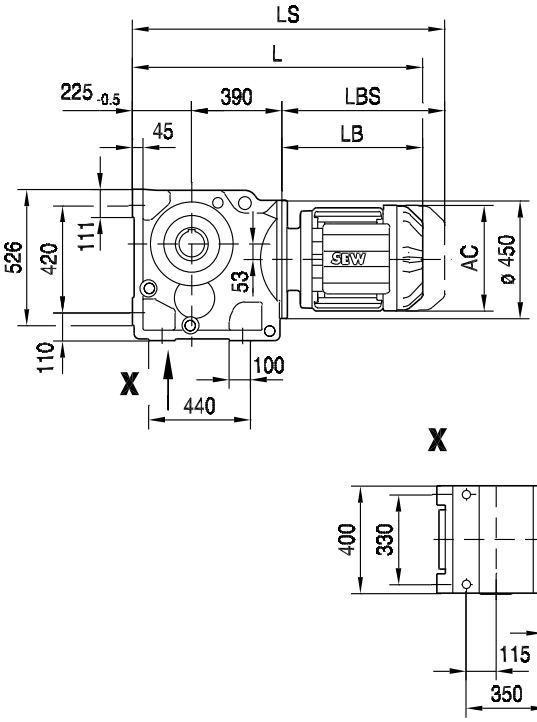
KHF127..



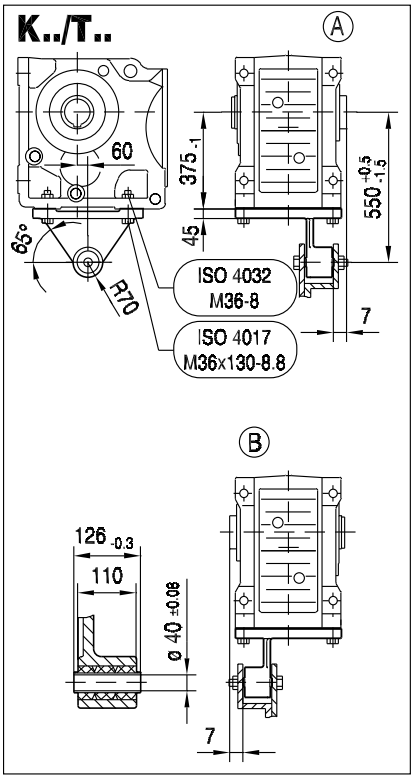
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1013	1054	1123	1183	1256	1306	1395	
LS	1125	1191	1312	1372	1461	1511	1580	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

33 120 00 06

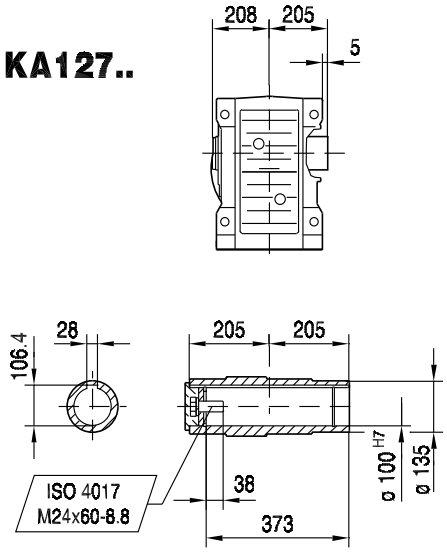
KA127..



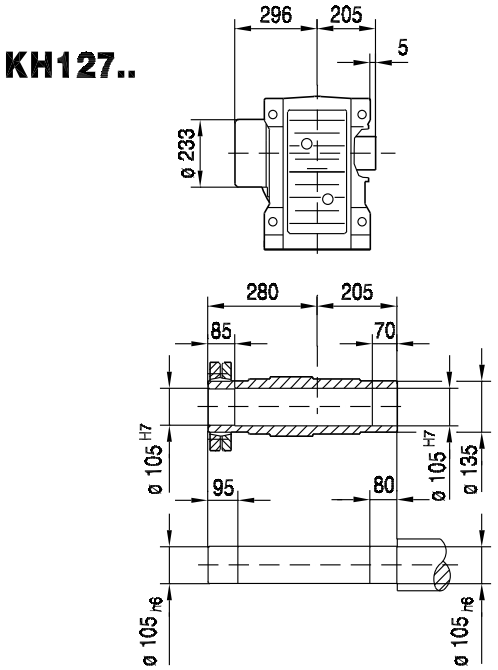
K../T..



KA127..



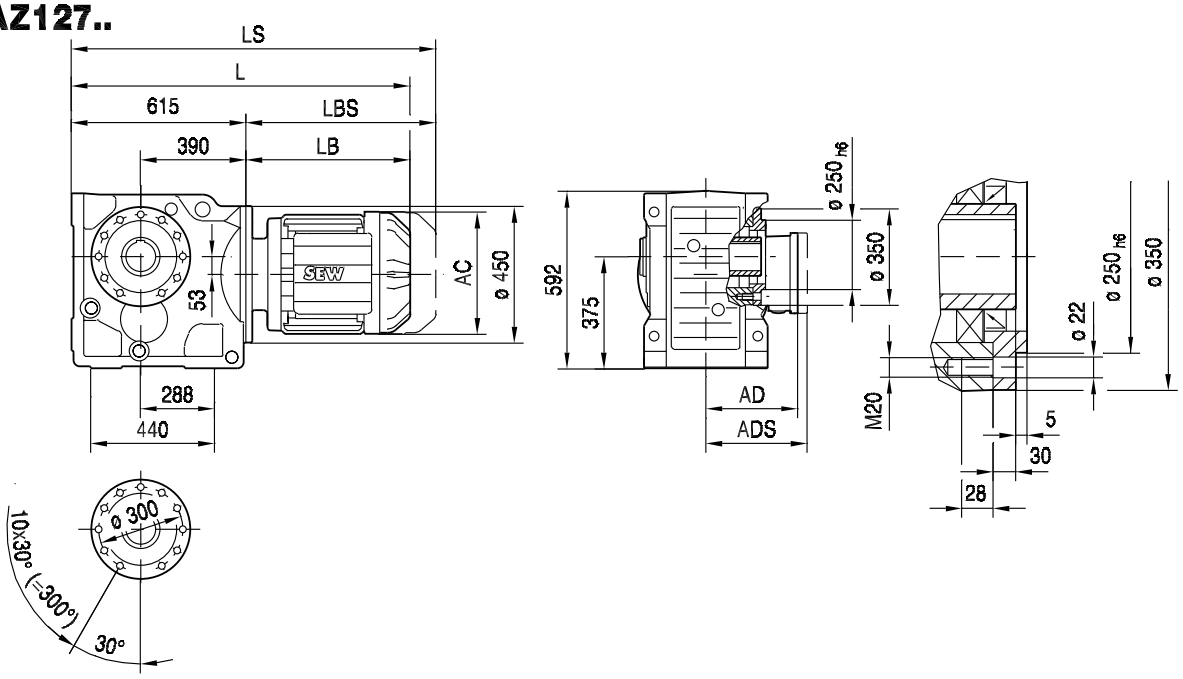
KH127..



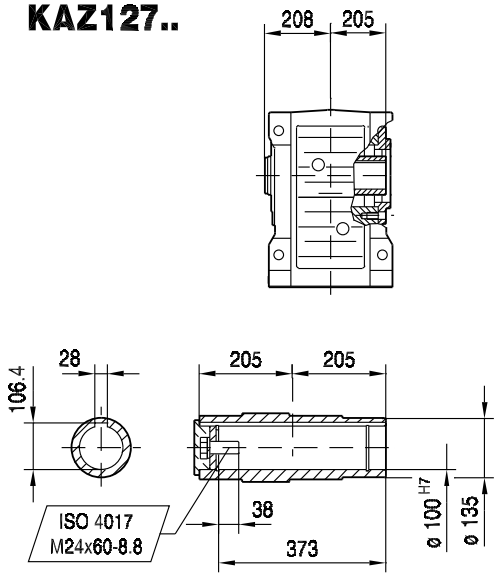
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1013	1054	1123	1183	1256	1306	1395	
LS	1125	1191	1312	1372	1461	1511	1580	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

33 121 00 06

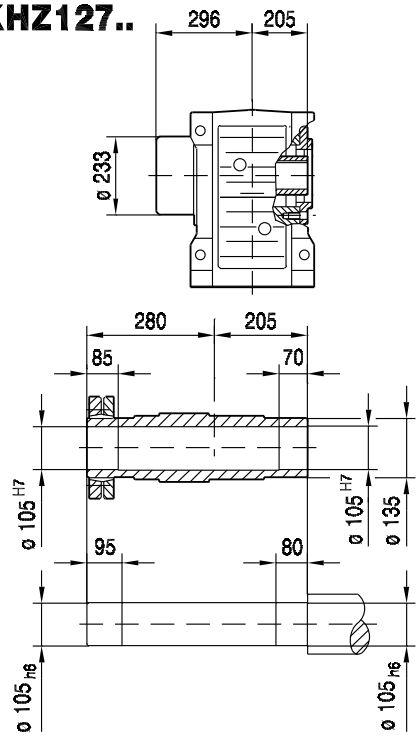
KAZ127..



KAZ127..

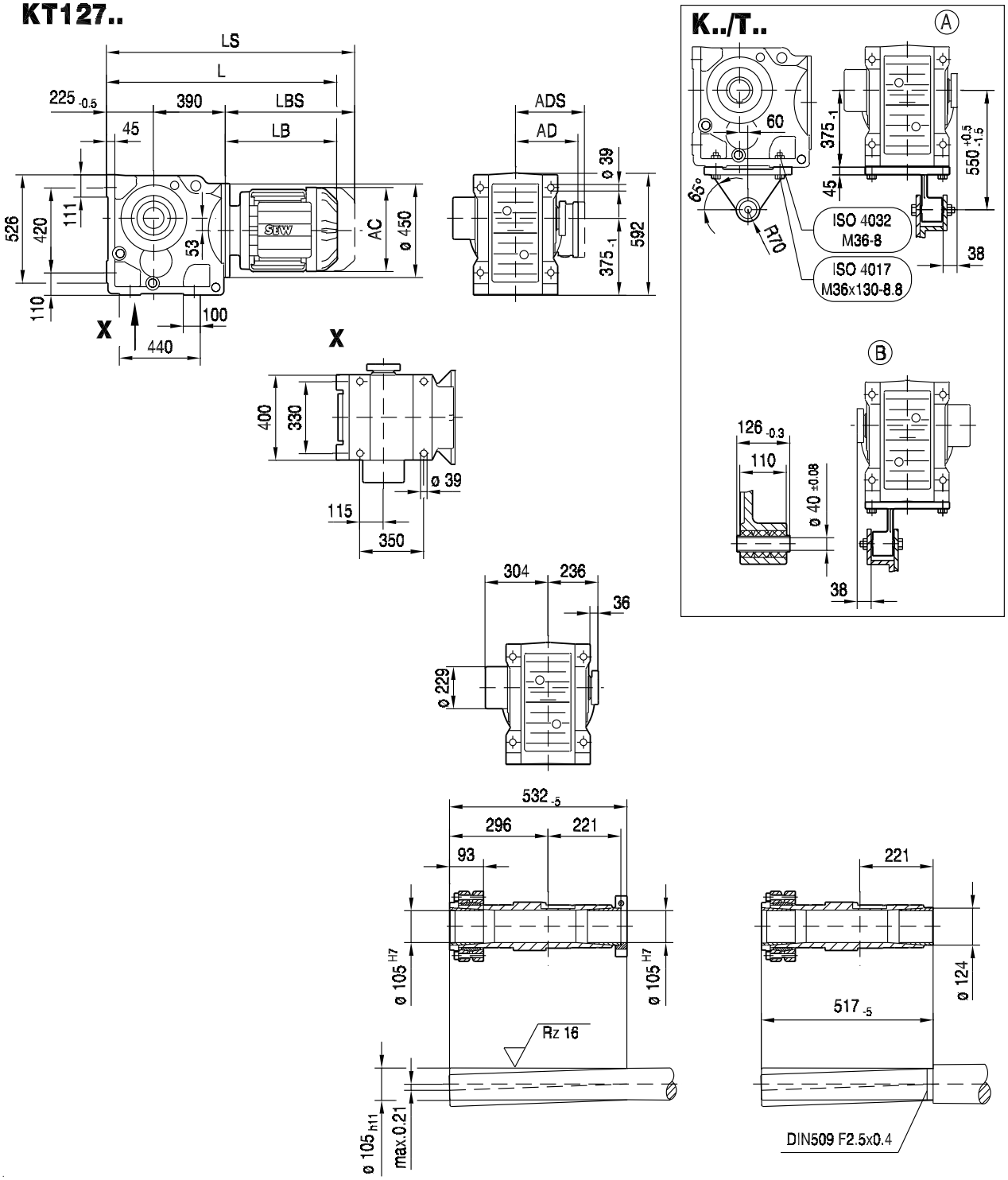


KHZ127..



(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1013	1054	1123	1183	1256	1306	1395	
LS	1125	1191	1312	1372	1461	1511	1580	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

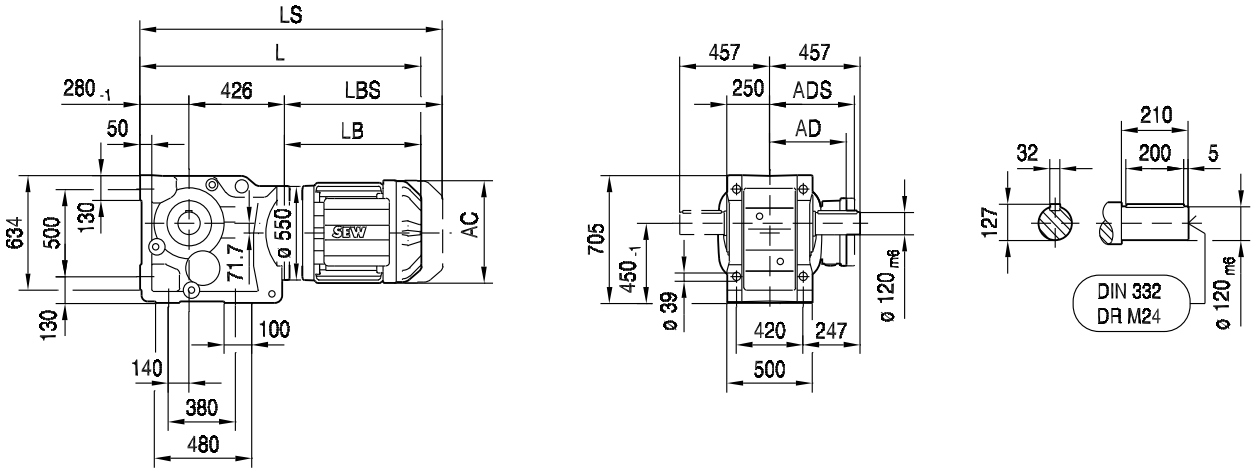
33 122 00 06



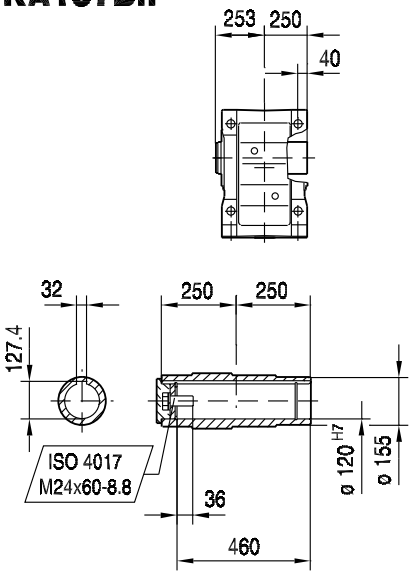
(→ 131)	DR132M/MC	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	
AC	221	270	316	316	394	394	510	
AD	170	228	253	253	283	283	397	
ADS	172	228	253	253	283	283	397	
L	1013	1054	1123	1183	1256	1306	1395	
LS	1125	1191	1312	1372	1461	1511	1580	
LB	398	439	508	568	641	691	780	
LBS	510	576	697	757	846	896	965	

33 123 00 06

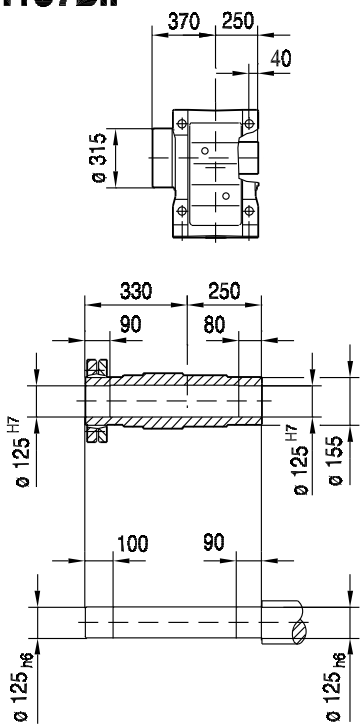
K157..



KA157B..



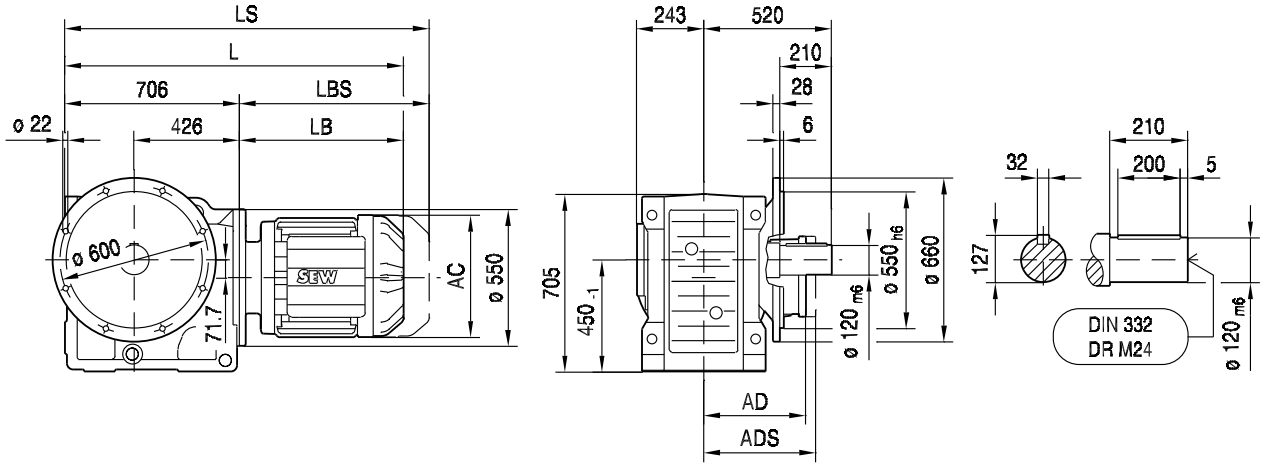
KH157B..



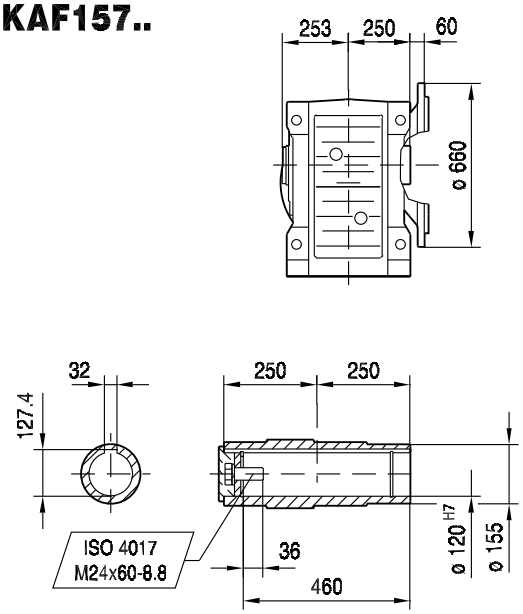
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1137	1206	1266	1339	1389	1477	1647	1777
LS	1274	1395	1455	1544	1594	1662	1898	2028
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

33 124 00 06

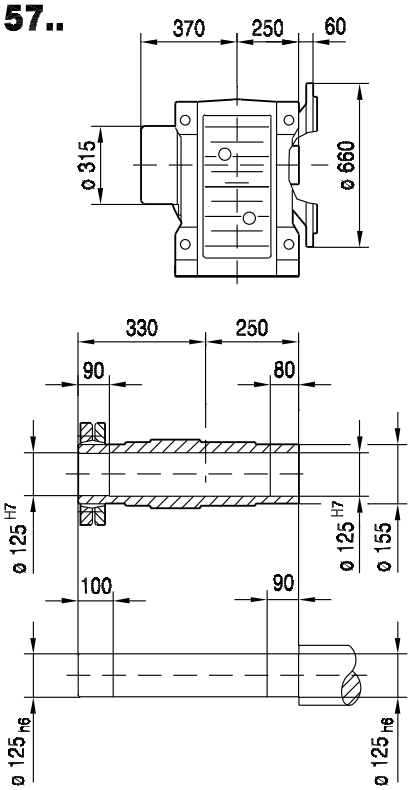
KF157..



KAF157..



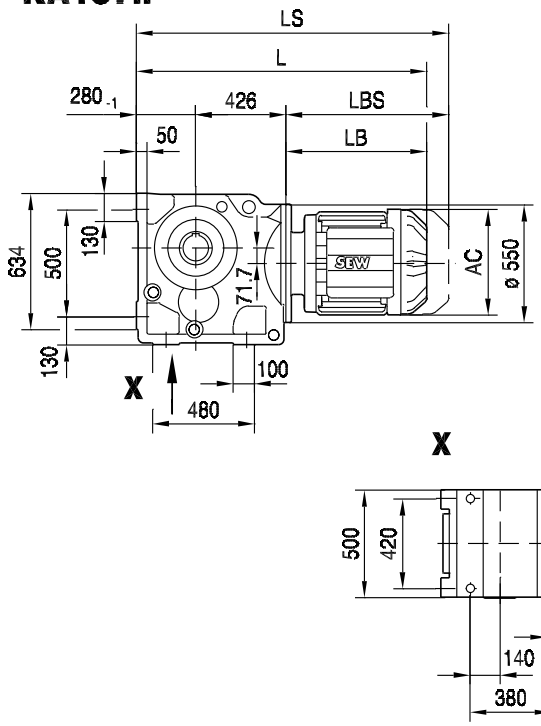
KHF157..



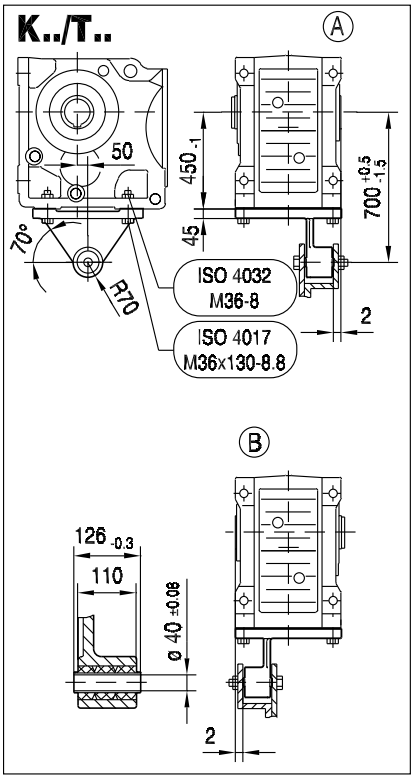
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1137	1206	1266	1339	1389	1477	1647	1777
LS	1274	1395	1455	1544	1594	1662	1898	2028
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

33 125 00 06

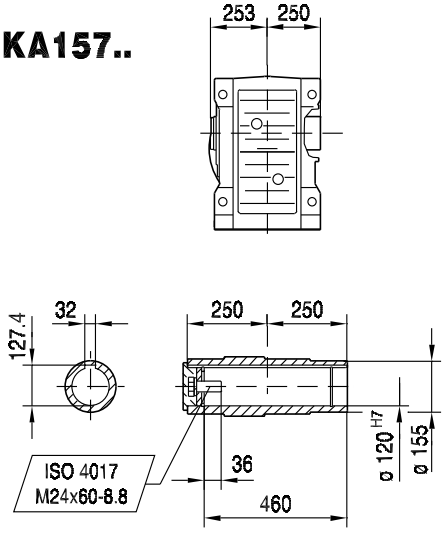
KA157..



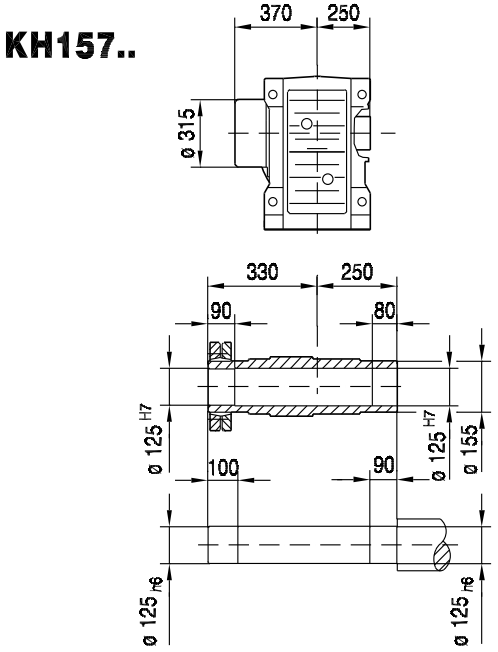
K../T..



KA157..



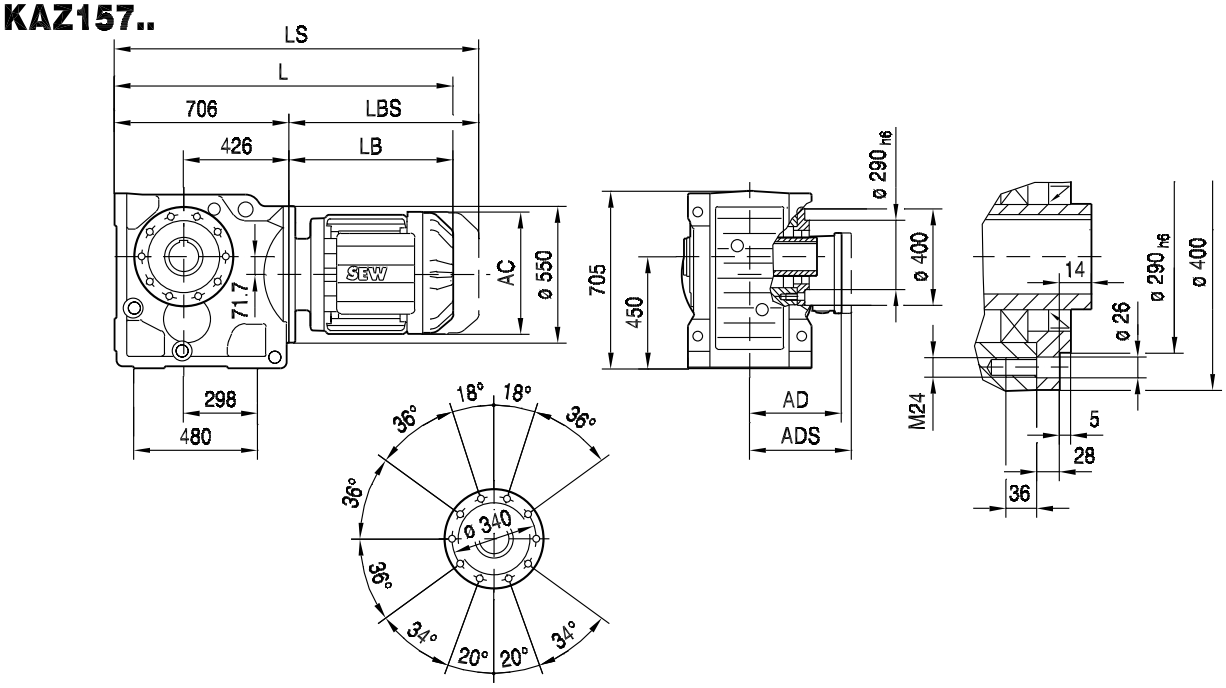
KH157..



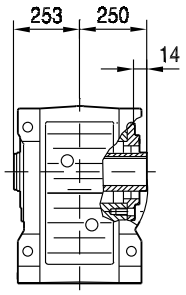
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1137	1206	1266	1339	1389	1477	1647	1777
LS	1274	1395	1455	1544	1594	1662	1898	2028
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

33 126 00 06

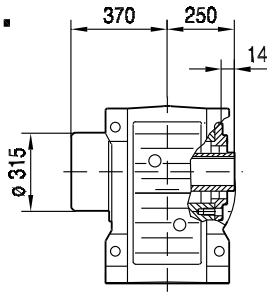
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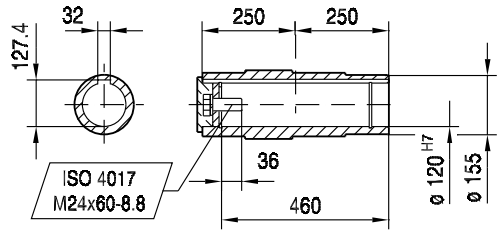


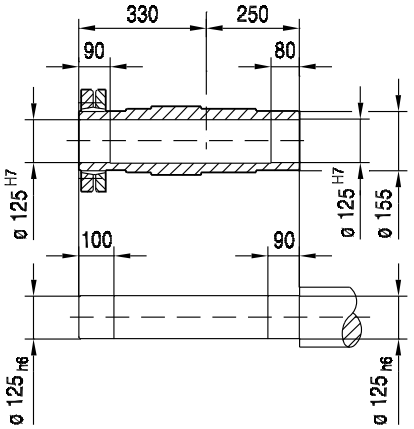
KAZ157..



KHZ157..

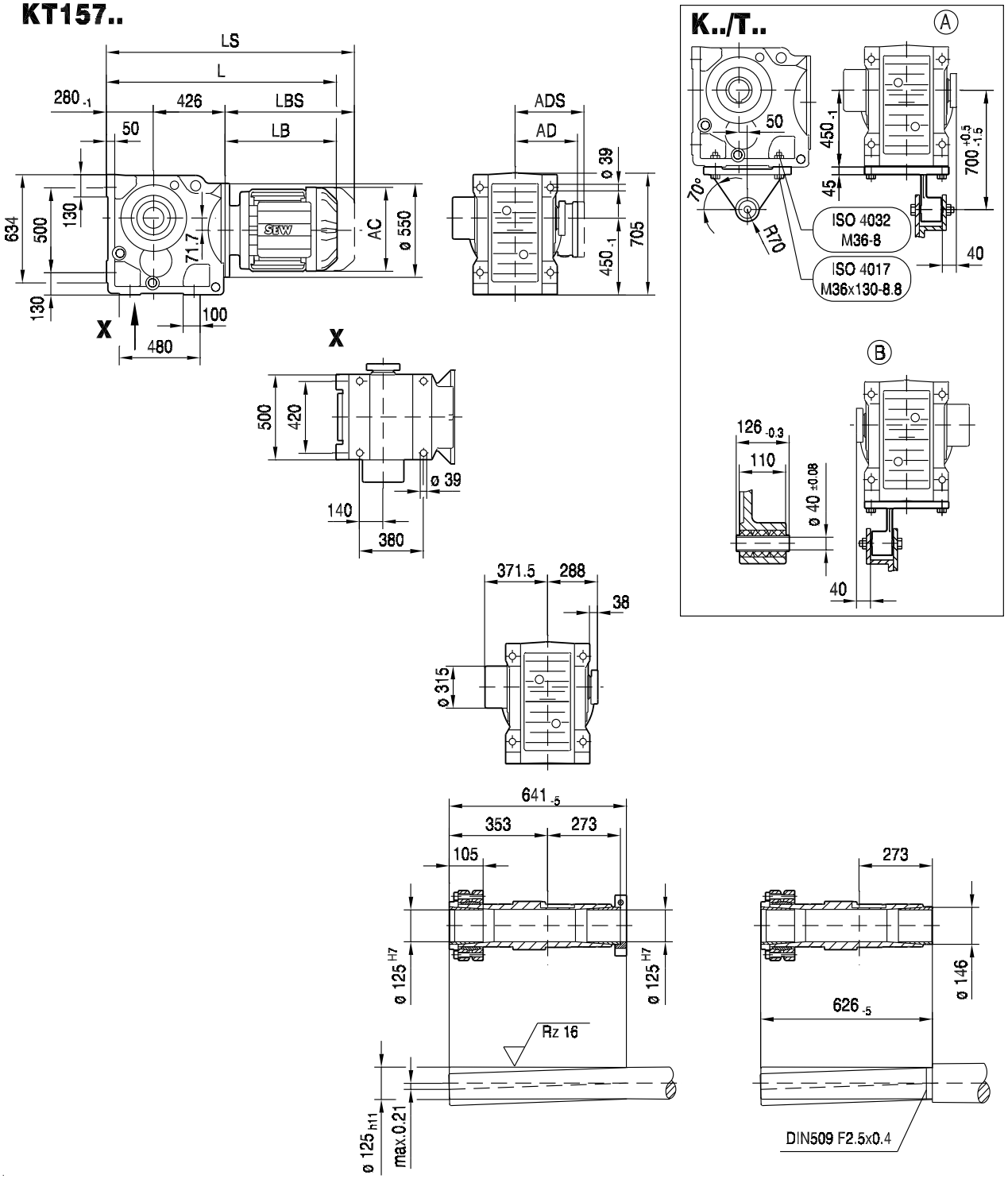






(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1137	1206	1266	1339	1389	1477	1647	1777
LS	1274	1395	1455	1544	1594	1662	1898	2028
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

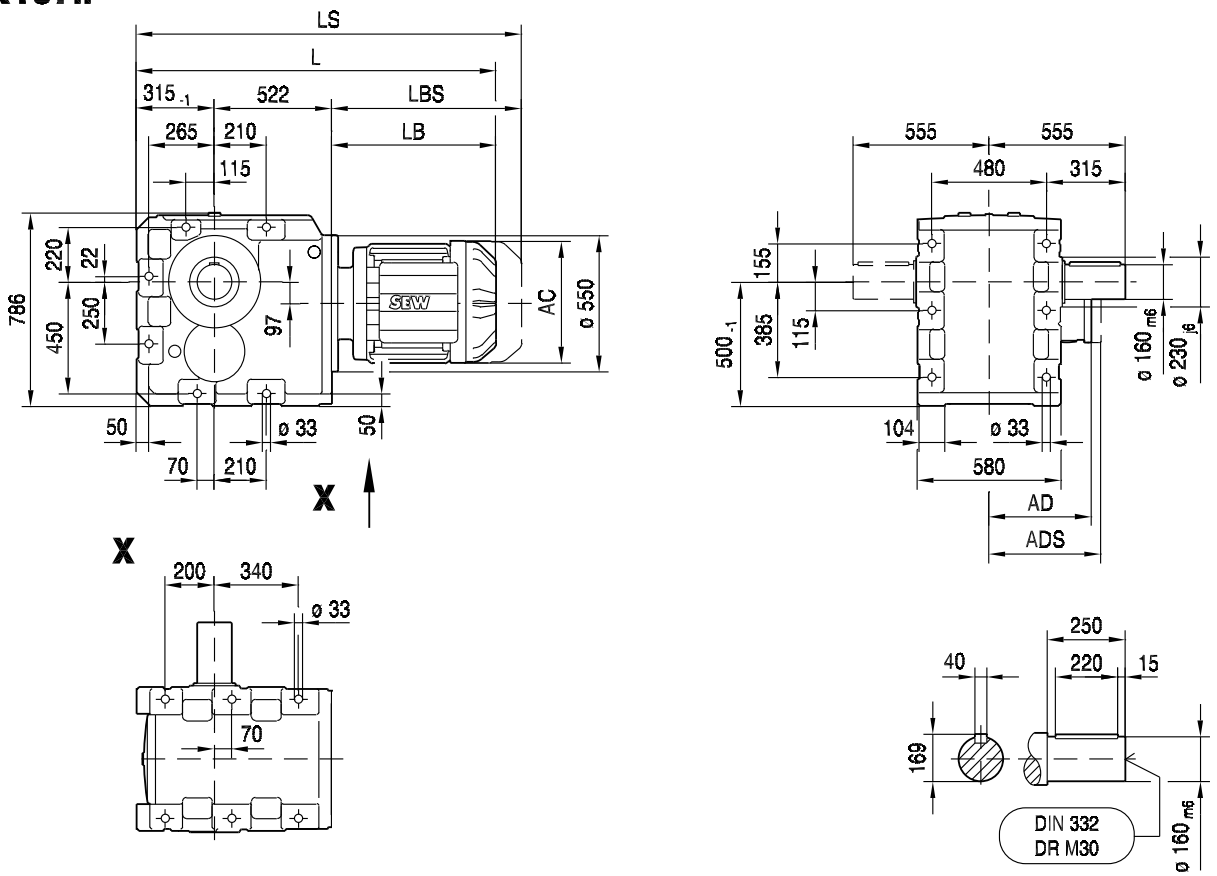
33 127 00 06



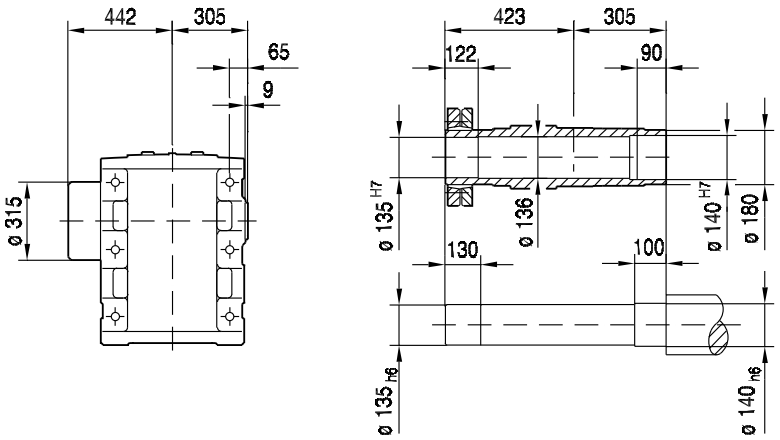
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1137	1206	1266	1339	1389	1477	1647	1777
LS	1274	1395	1455	1544	1594	1662	1898	2028
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

33 128 00 06

K167..



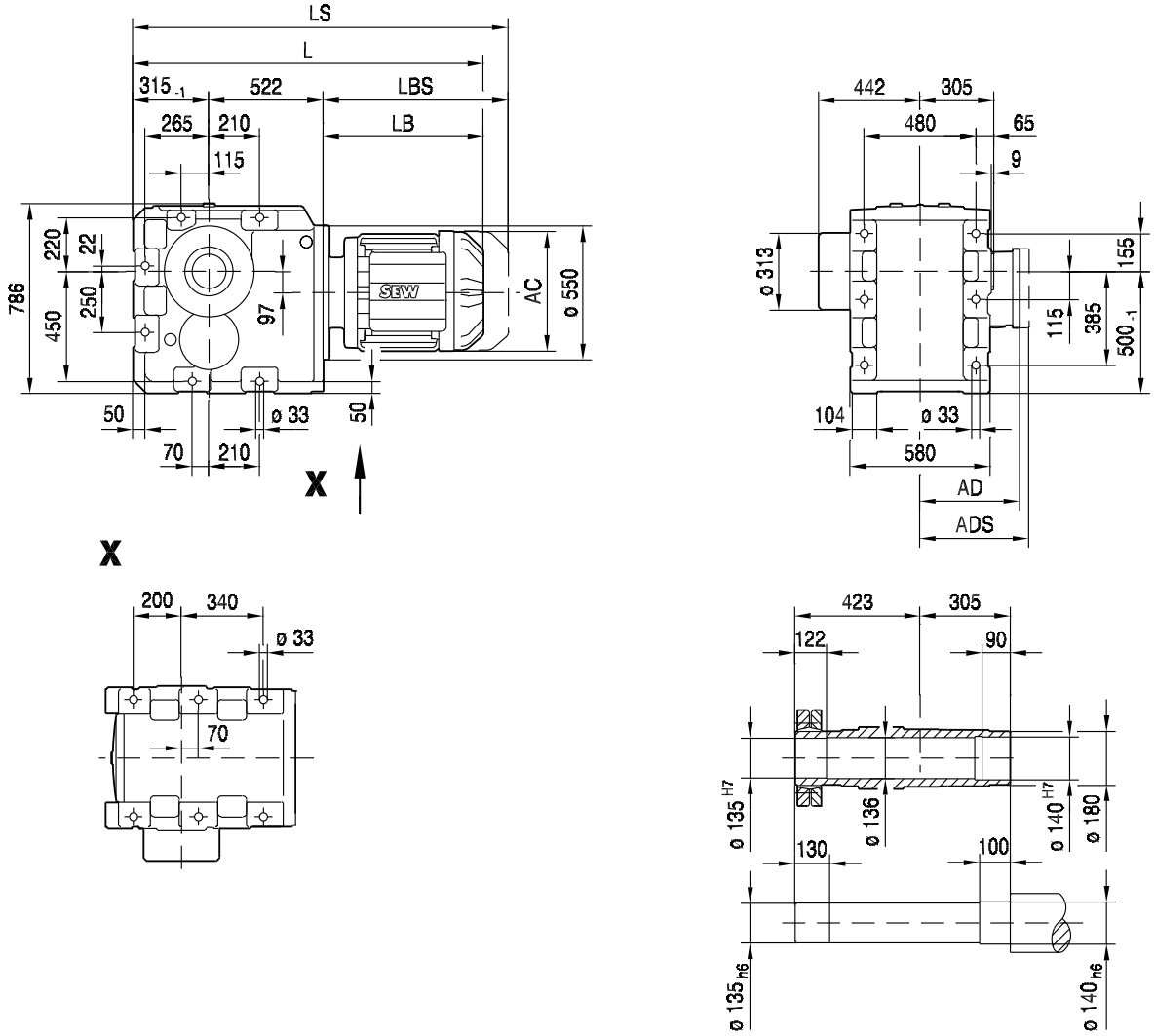
KH167B..



(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1268	1337	1397	1470	1520	1608	1778	1908
LS	1405	1526	1586	1675	1725	1793	2029	2159
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

33 129 00 06

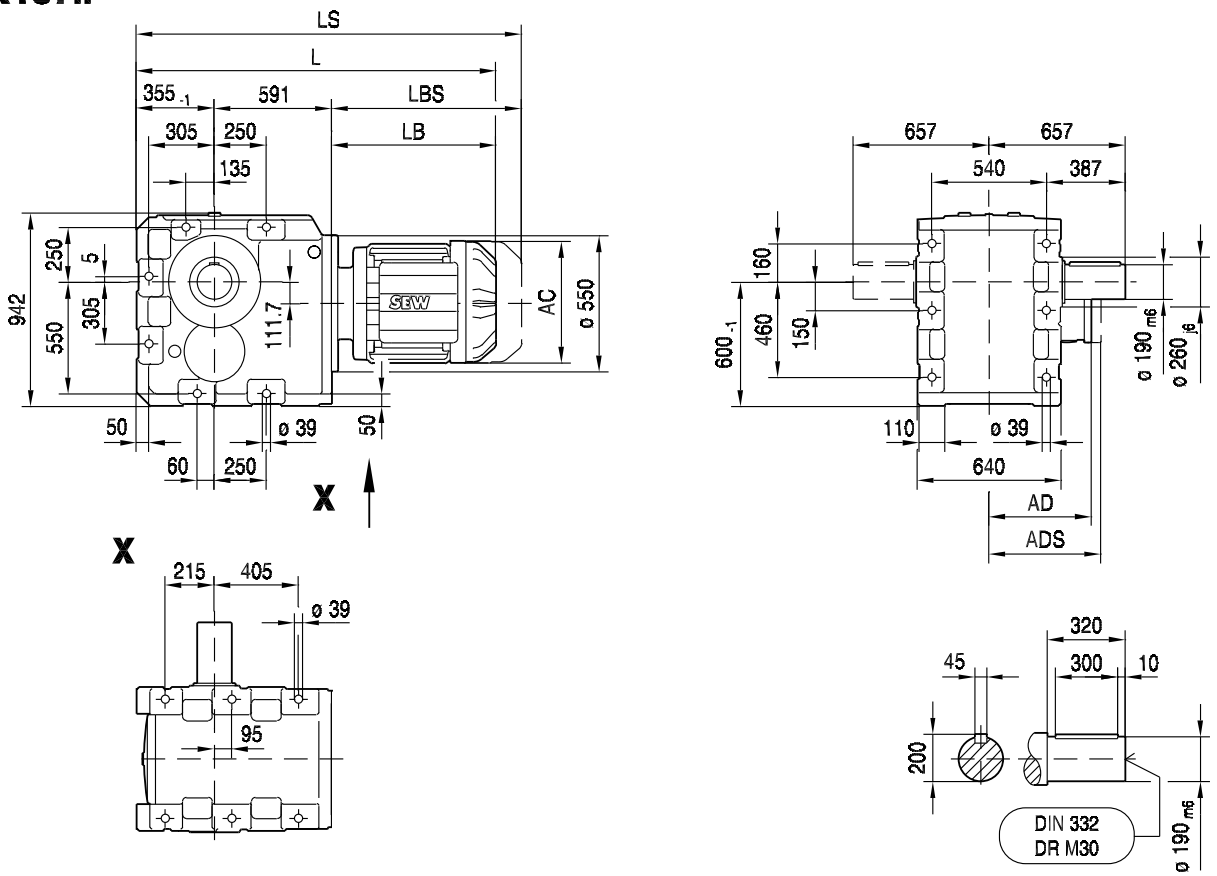
KH167..



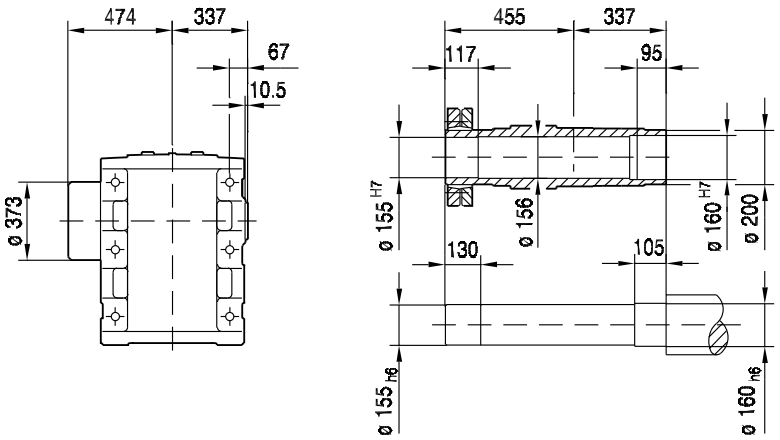
(→ 131)	DR160..	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L
AC	270	316	316	394	394	510	624	624
AD	228	253	253	283	283	397	506	521
ADS	228	253	253	283	283	397	506	521
L	1268	1337	1397	1470	1520	1608	1778	1908
LS	1405	1526	1586	1675	1725	1793	2029	2159
LB	431	500	560	633	683	771	941	1071
LBS	568	689	749	838	888	956	1192	1322

33 130 00 06

K187..



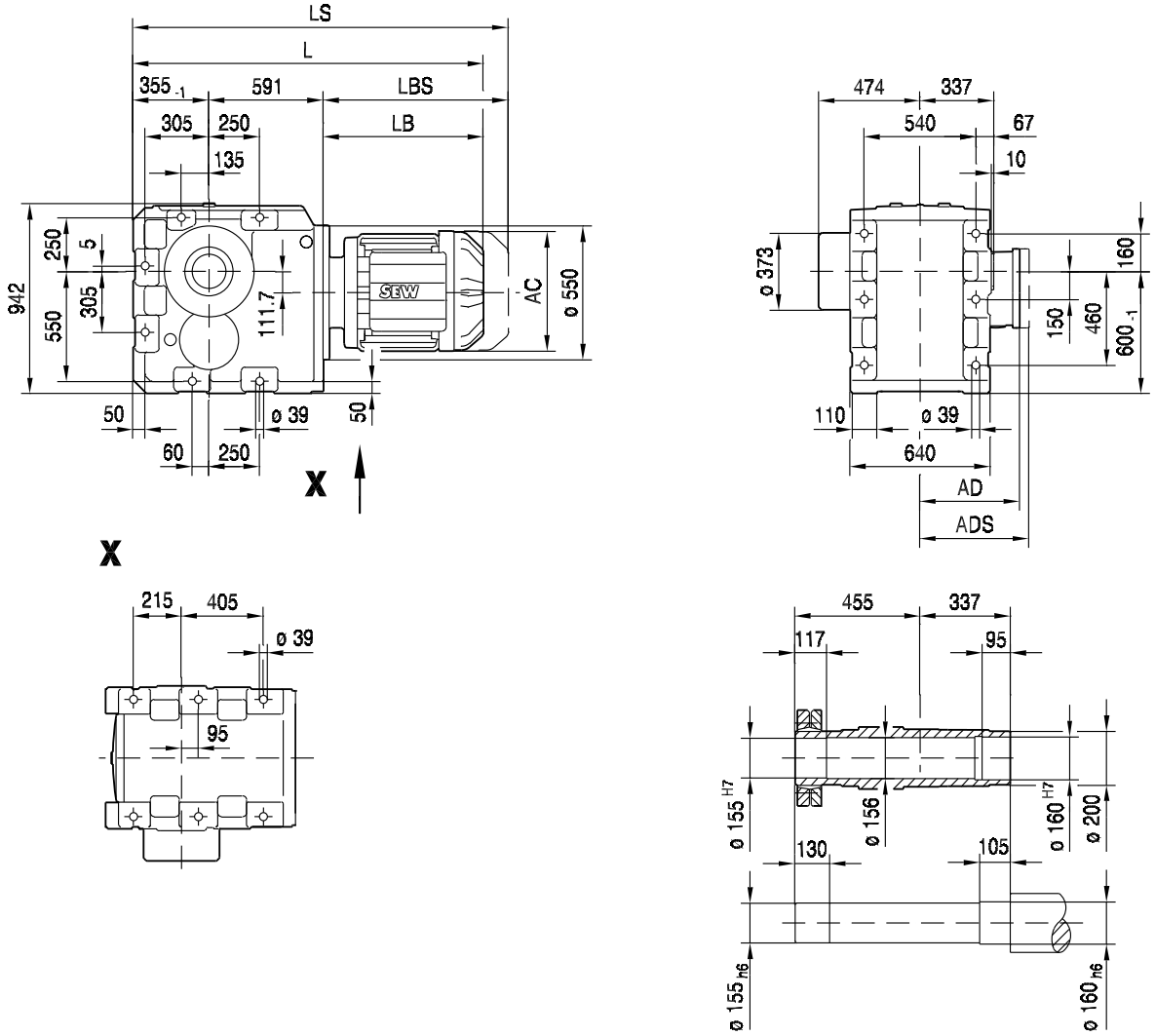
KH187B..



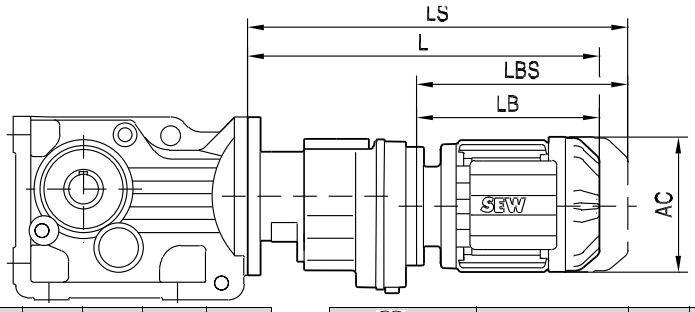
(→ 131)	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L	
AC	316	316	394	394	510	624	624	
AD	253	253	283	283	397	506	521	
ADS	253	253	283	283	397	506	521	
L	1446	1506	1579	1629	1717	1887	2017	
LS	1635	1695	1784	1834	1902	2138	2268	
LB	500	560	633	683	771	941	1071	
LBS	689	749	838	888	956	1192	1322	

33 131 00 06

KH187..



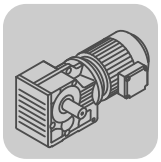
(→ 131)	DR180S/M	DR180L/LC	DR225S	DR225M/MC	DV280..	DR315K/S	DR315M/L	
AC	316	316	394	394	510	624	624	
AD	253	253	283	283	397	506	521	
ADS	253	253	283	283	397	506	521	
L	1446	1506	1579	1629	1717	1887	2017	
LS	1635	1695	1784	1834	1902	2138	2268	
LB	500	560	633	683	771	941	1071	
LBS	689	749	838	888	956	1192	1322	



33 133 00 06

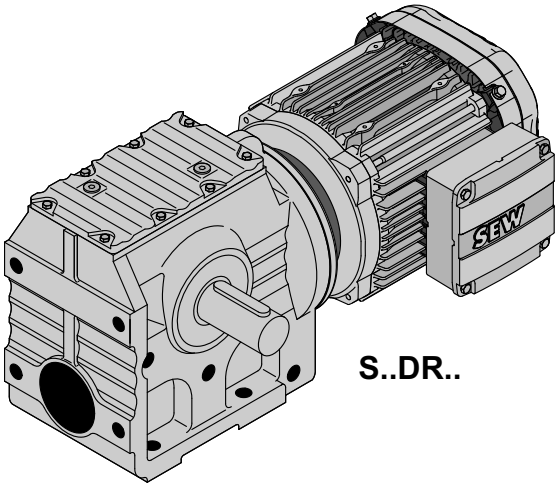
(→ 131)		AC	L	LS	LB	LBS
K..37R17	DR63S..	132	324	379	149	204
	DR71S..	139	335	403	160	228
K..47R17	DR63S..	132	356	411	191	246
	DR71S..	139	367	435	202	270
	DR71M..	139	392	460	227	295
	DR80S..	156	401	482	236	317
K..57R37	DR63..	132	356	411	191	246
K..67R37	DR71S..	139	367	435	202	270
	DR71M..	139	392	460	227	295
	DR80S..	156	401	482	236	317
	DR80M..	156	432	513	267	348
K..77R37	DR63..	132	348	403	191	246
	DR71S..	139	359	427	202	270
	DR71M..	139	384	452	227	295
	DR80S..	156	393	474	236	317
	DR80M..	156	424	505	267	348
	DR90M..	179	426	519	269	362
	DR90L..	179	446	539	289	382
K..87R57	DR63..	132	401	456	185	240
	DR71S..	139	412	479	196	263
	DR71M..	139	437	504	221	288
	DR80S..	156	446	527	230	311
	DR80M..	156	477	558	261	342
	DR90M..	179	478	572	262	356
	DR90L..	179	498	592	282	376
	DR100M..	197	528	622	312	406
K..97R57	DR63..	132	396	451	185	240
	DR71S..	139	407	474	196	263
	DR71M..	139	432	499	221	288
	DR80S..	156	441	522	230	311
	DR80M..	156	472	553	261	342
	DR90M..	179	473	567	262	356
	DR90L..	179	493	587	282	376
	DR100M..	197	523	617	312	406
	DR100LC..	197	553	647	342	436
K..107R77	DR63..	132	426	481	179	234
	DR71S..	139	437	504	190	257
	DR71M..	139	462	529	215	282
	DR80S..	156	470	551	223	304
	DR80M..	156	501	582	254	335
	DR90M..	179	501	595	254	348
	DR90L..	179	521	615	274	368
	DR100M..	197	551	645	304	398
	DR100LC..	197	581	675	334	428
	DR132S..	221	626	738	379	491
	DR132M/MC..	221	676	788	429	541
K..127R77	DR63..	132	411	466	179	234

(→ 131)		AC	L	LS	LB	LBS
K..127R77	DR71S..	139	422	489	190	257
	DR71M..	139	447	514	215	282
	DR80S..	156	455	536	223	304
	DR80M..	156	486	567	254	335
	DR90M..	179	486	580	254	348
	DR90L..	179	506	600	274	368
	DR100M..	197	536	630	304	398
	DR100LC..	197	566	660	334	428
	DR132S..	221	611	723	379	491
K..127R87	DR90M..	179	530	624	250	344
	DR90L..	179	550	644	270	364
	DR100M..	197	580	674	300	394
	DR100LC..	197	610	704	330	424
	DR132S..	221	654	766	374	486
	DR132M/MC..	221	704	816	424	536
	DR160..	272	745	882	465	602
K..157R97	DR71M..	139	529	596	204	271
K..167R97	DR80S..	156	538	619	213	294
	DR80M..	156	569	650	244	325
	DR90M..	179	569	663	244	338
	DR90L..	179	589	683	264	358
	DR100M..	197	619	713	294	388
	DR100LC..	197	649	743	324	418
	DR132S..	221	694	806	369	481
	DR132M/MC..	221	744	856	419	531
	DR160..	272	785	922	460	597
K..187R97	DR71M..	139	529	596	204	271
	DR80S..	156	538	619	213	294
	DR80M..	156	569	650	244	325
	DR90M..	179	569	663	244	338
	DR90L..	179	589	683	264	358
	DR100M..	197	619	713	294	388
	DR100LC..	197	649	743	324	418
	DR132S..	221	694	806	369	481
	DR132M/MC..	221	744	856	419	531
	DR160..	272	785	922	460	597
	DR180M..	317	871	1070	546	745
K..157R107	DR132MC..	221	795	907	413	525
	DR160..	272	836	973	454	591
	DR180M	317	922	1121	540	739
	DR180L/HC	317	982	1181	600	799
K..167R107	DR132M/MC..	221	795	907	413	525
K..187R107	DR160..	272	836	973	454	591
	DR180M..	317	922	1121	540	739
	DR180L/HC	317	982	1181	600	799
	DR225S..	394	1023	1243	641	861
	DR225M/MC..	394	1088	1308	706	926

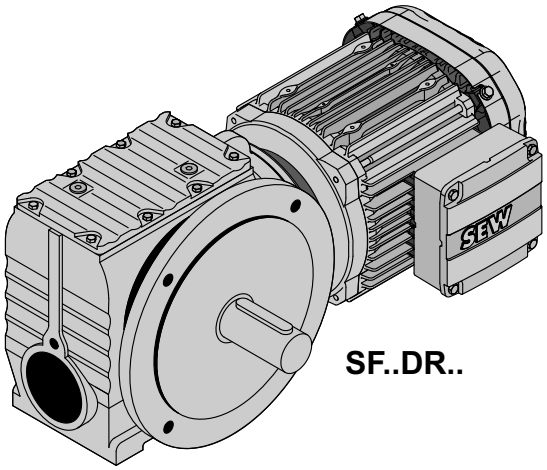


12 S..DRS

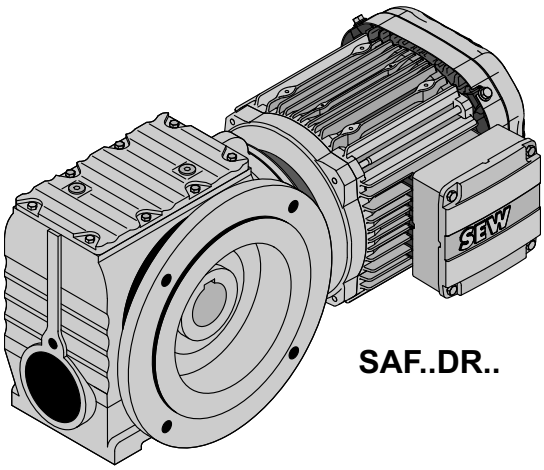
12.1 S, SF, SAF, SHF, SA, SH, ST, SAZ, SHZ..DRS



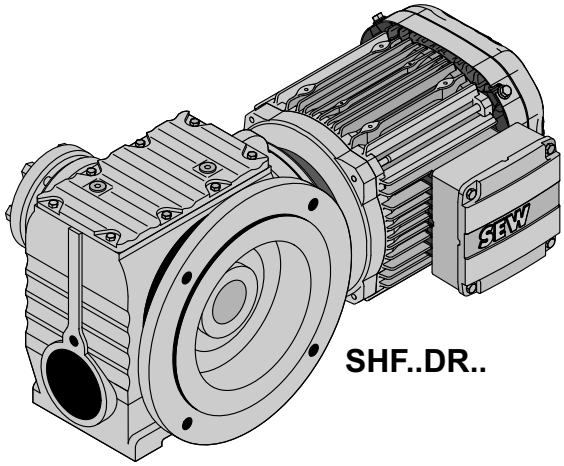
S..DR..



SF..DR..

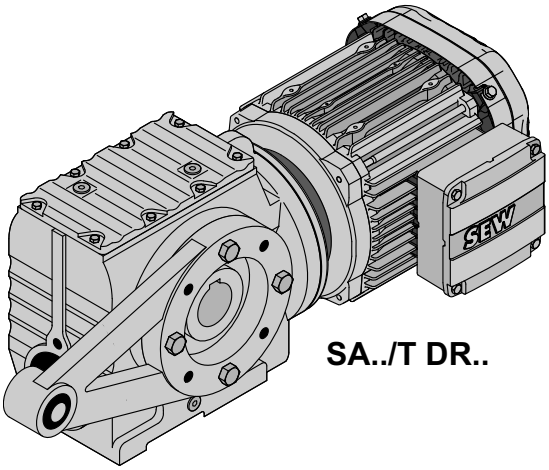


SAF..DR..

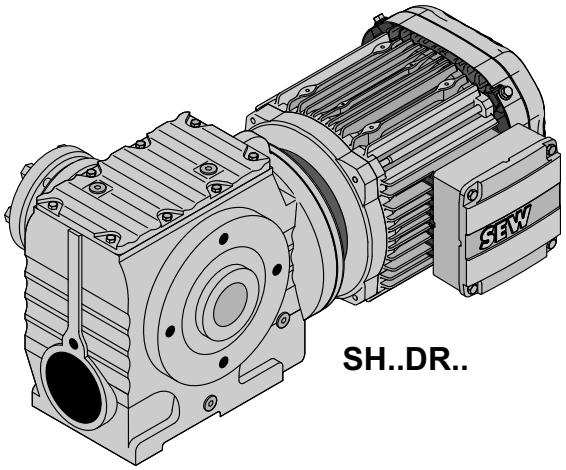


SHF..DR..

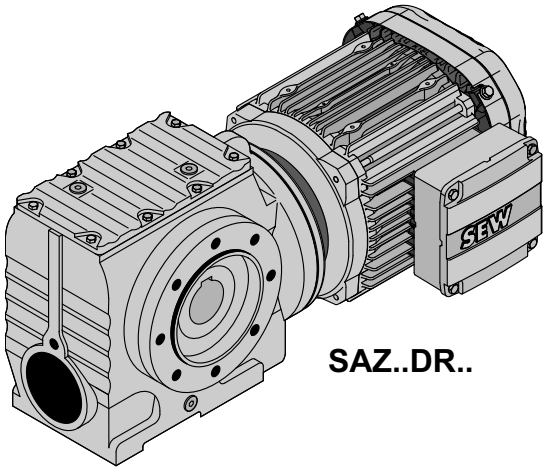
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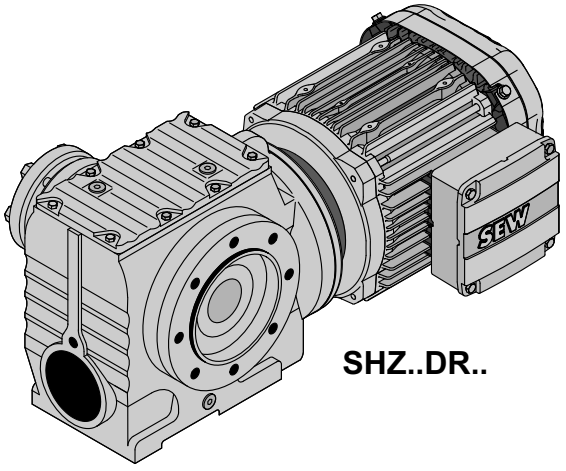
SA../T DR..



SH..DR..



SAZ..DR..



SHZ..DR..

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12.2 S.. → DRS

S37, n_e = 1400 1/min							92 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M
8.9	92	3000	-	157.43			
9.7	92	3000	-	144.40*			
11	91	3000	-	122.94			
13	88	3000	-	106.00*			
14	87	3000	-	98.80*			
16	86	3000	-	86.36			
17	85	3000	-	80.96			
20	84	3000	-	71.44*			
22	82	3000	-	63.33			
25	81	3000	-	55.93			
26	80	3000	-	53.83			
27	81	3000	-	51.30*			
32	81	3000	-	43.68			
37	79	3000	-	37.66			
40	78	3000	-	35.10*			
46	76	2870	-	30.68			
49	75	2800	-	28.76			
55	74	2660	-	25.38*			
62	73	2530	-	22.50*			
70	52	2470	-	19.89			
73	71	2380	-	19.13*			
77	52	2380	-	18.24*			
90	50	2240	-	15.53			
105	49	2110	-	13.39			
112	48	2060	-	12.48*			
128	48	1940	-	10.91			
137	47	1900	-	10.23			
155	46	1810	-	9.02*			
175	45	1730	-	8.00*			
206	43	1630	-	6.80*			
221	35	1670	-	6.33			
260	34	1570	-	5.38			
288	33	1520	-	4.86*			
353	32	1400	-	3.97			

S37R17, n_e = 1400 1/min						92 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
			2	3		
0.14	92	3000	-	10037		
0.16	92	3000	-	8654		
0.17	92	3000	-	8066		
0.20	92	3000	-	7051		
0.23	92	3000	-	6079		
0.26	92	3000	-	5431		
0.29	92	3000	-	4747		
0.34	92	3000	-	4155		
0.39	92	3000	-	3632		
0.49	92	3000	-	2866		
0.57	92	3000	-	2471		
0.65	92	3000	-	2160		
0.74	92	3000	-	1887		
0.84	92	3000	-	1665		
0.96	92	3000	-	1456		
1.1	92	3000	-	1271		

S37R17, n_e = 1400 1/min						92 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
1.2	92	3000	-	1121		
1.4	92	3000	-	994		
1.6	92	3000	-	869		
			2	2		
1.8	92	3000	-	774		
2.1	92	3000	-	666		
2.3	92	3000	-	596		
2.7	92	3000	-	521		
3.1	92	3000	-	456		
3.5	92	3000	-	398		
4.0	92	3000	-	351		
4.6	92	3000	-	303		
5.3	92	3000	-	265		
6.0	92	3000	-	232		
6.9	92	3000	-	202		
7.8	92	3000	-	179		
8.9	92	3000	-	158		
9.7	92	3000	-	144		
12	92	3000	-	118		
13	92	3000	-	110		

S47, n_e = 1400 1/min								170 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
7.0	170	5340	-	201.00*				
7.6	170	5340	-	184.80*				
8.9	170	5340	-	158.12				
10	168	5350	-	137.05				
11	168	5350	-	128.10*				
13	168	5350	-	110.73				
15	168	5350	-	94.08*				
17	167	5360	-	84.00*				
20	167	5360	-	71.75*				
20	155	5370	-	69.39				
21	167	5360	-	67.20*				
22	155	5370	-	63.80*				
25	165	5320	-	56.61				
26	155	5150	-	54.59				
30	155	4850	-	47.32				
32	155	4710	-	44.22*				
37	155	4430	-	38.23				
43	155	4120	-	32.48*				
48	155	3920	-	29.00*				
57	155	3650	-	24.77				
60	152	3570	-	23.20*				
69	110	3370	-	20.33				
72	144	3370	-	19.54				
79	110	3160	-	17.62				
85	110	3060	-	16.47*				
98	110	2850	-	14.24				
116	109	2650	-	12.10*				
130	109	2500	-	10.80*				
152	109	2310	-	9.23*				
162	109	2230	-	8.64*				
192	103	2110	-	7.28				
205	78	2300	-	6.83				
219	76	2260	-	6.40*				

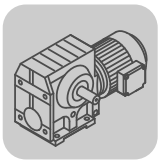
S47, n_e = 1400 1/min								170 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
260	74	2110	-	5.39				
294	72	2010	-	4.76				
350	70	1870	-	4.00*				

S47R17, n_e = 1400 1/min						185 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				2 3		
0.11	185	5250	-	12909		
0.13	185	5250	-	11189		
0.13	185	5250	-	10374		
0.16	185	5250	-	8992		
0.18	185	5250	-	7860		
0.20	185	5250	-	6887		
0.23	185	5250	-	6055		
0.26	185	5250	-	5292		
0.30	185	5250	-	4637		
0.34	185	5250	-	4092		
0.39	185	5200	-	3582		
0.45	185	5200	-	3131		
0.52	185	5200	-	2714		
0.58	185	5200	-	2412		
0.66	185	5200	-	2131		
0.75	185	5200	-	1863		
0.84	185	5200	-	1663		
0.98	185	5200	-	1435		
1.1	185	5200	-	1254		
1.2	185	5200	-	1120		
1.3	185	5200	-	1083		
1.5	183	5210	-	956		
				2 2		
1.5	185	5200	-	965		
1.6	185	5200	-	865		
1.9	185	5200	-	750		
2.1	185	5200	-	655		
2.4	185	5200	-	574		
2.8	185	5200	-	506		
3.2	185	5200	-	438		
3.6	185	5200	-	388		
4.2	185	5200	-	336		
4.8	185	5200	-	294		
5.4	185	5260	-	257		
6.1	185	5200	-	229		
7.0	185	5200	-	200		
7.5	185	5200	-	187		
8.5	185	5200	-	165		
9.5	185	5200	-	148		
11	185	5200	-	131		

S57, n_e = 1400 1/min								295 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
7.0	295	7130	-	201.00*				
7.6	295	7130	-	184.80*				
8.9	295	7130	-	158.12				

S57, n_e = 1400 1/min								295 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
10	295	7130	-	137.05				
11	295	7130	-	128.10*				
13	295	7130	-	110.73				
15	295	7130	-	94.08*				
17	295	7130	-	84.00*				
20	290	7170	-	71.75*				
20	245	7520	-	69.39				
21	285	7220	-	67.20*				
22	245	7520	-	63.80*				
25	265	7370	-	56.61				
26	245	7520	-	54.59				
30	245	7520	-	47.32				
32	245	7520	-	44.22*				
37	245	7320	-	38.23				
43	245	6840	-	32.48*				
48	245	6520	-	29.00*				
57	245	6100	-	24.77				
60	245	5930	-	23.20*				
69	168	5690	-	20.33				
72	215	5720	-	19.54				
79	168	5350	-	17.62				
85	168	5200	-	16.47*				
98	169	4860	-	14.24				
116	169	4520	-	12.10*				
130	169	4290	-	10.80*				
152	169	3990	-	9.23*				
162	166	3900	-	8.64*				
192	146	3790	-	7.28				
205	100	4100	-	6.83				
219	98	4010	-	6.40*				
260	95	3760	-	5.39				
294	93	3590	-	4.76				
350	90	3360	-	4.00*				

S57R17, n_e = 1400 1/min						330 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
				2 3		
0.11	330	6800	-	12909		
0.13	330	6800	-	11189		
0.13	330	6800	-	10374		
0.16	330	6800	-	8992		
0.18	330	6800	-	7860		
0.20	330	6800	-	6887		
0.23	330	6800	-	6055		
0.26	330	6800	-	5292		
0.30	330	6800	-	4637		
0.34	330	6800	-	4092		
0.39	330	6800	-	3628		
0.45	300	7090	-	3131		
0.52	300	7090	-	2714		
0.58	300	7090	-	2412		
0.66	300	7090	-	2131		
0.75	300	7090	-	1863		
0.84	300	7090	-	1663		
0.98	300	7090	-	1435		
1.1	300	7090	-	1254		



S57R17, n_e = 1400 1/min						330 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
1.3	300	7090	-	1083		
			2	2		
1.5	300	7090	-	965		
1.6	300	7090	-	865		
1.9	300	7090	-	750		
2.1	300	7090	-	655		
2.4	300	7090	-	574		
2.8	300	7090	-	506		
3.2	300	7090	-	438		
3.6	300	7090	-	388		
4.2	300	7090	-	336		
4.8	300	7090	-	294		
5.2	300	7090	-	269		
6.1	300	7090	-	229		
6.9	300	7090	-	204		
7.5	300	7090	-	187		
8.5	300	7090	-	165		
11	300	7090	-	131		

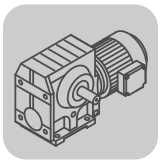
S67, n_e = 1400 1/min										520 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
6.4	520	8680	-	217.41						
7.4	520	8680	-	190.11						
7.8	520	8680	-	180.60*						
8.8	520	8680	-	158.45						
10	520	8680	-	134.40*						
12	520	8680	-	121.33						
13	520	8680	-	106.75*						
14	520	8680	-	100.80*						
16	520	8680	-	85.83						
18	520	8680	-	78.00*						
19	480	9020	-	75.06						
21	520	8680	-	67.57						
21	480	9020	-	65.63						
22	480	9020	-	62.35*						
24	500	8850	-	58.80*						
26	480	8670	-	54.70						
30	480	8060	-	46.40*						
33	480	7690	-	41.89						
38	480	7250	-	36.85						
40	480	7060	-	34.80*						
47	480	6540	-	29.63						
52	480	6240	-	26.93						
57	340	6040	-	24.44						
60	480	5810	-	23.33						
60	340	5890	-	23.22*						
69	340	5520	-	20.37						
69	425	5760	-	20.30*						
81	340	5080	-	17.28*						
90	340	4820	-	15.60*						
102	340	4510	-	13.73*						
108	340	4310	-	12.96*						
127	340	3660	-	11.03						
140	340	3290	-	10.03						
161	335	2860	-	8.69						
185	295	3220	-	7.56*						

S67R37, n_e = 1400 1/min								570 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				2 3				
0.07	570	8190	-	21362				
0.07	570	8190	-	19594				
0.08	570	8190	-	18120				
0.08	570	8190	-	16682				
0.10	570	8190	-	14383				
0.11	570	8190	-	12774				
0.13	570	8190	-	11013				
0.14	570	8190	-	9694				
0.16	570	8190	-	8529				
0.19	570	8190	-	7455				
0.21	570	8190	-	6531				
0.24	570	8190	-	5759				
0.28	570	8190	-	4965				
0.32	570	8190	-	4410				
0.36	570	8190	-	3880				
0.41	570	8190	-	3432				
0.48	570	8190	-	2944				
0.53	570	8190	-	2630				
0.61	570	8190	-	2279				
0.70	570	8190	-	2014				
0.79	570	8190	-	1772				
0.90	570	8190	-	1559				
1.0	570	8190	-	1363				
1.2	570	8190	-	1194				
1.3	570	8190	-	1045				
1.5	570	8190	-	914				
				2 2				
1.7	570	8190	-	809				
2.0	570	8190	-	712				
2.3	570	8190	-	615				
2.6	570	8190	-	543				
3.0	570	8190	-	469				
3.3	570	8190	-	424				
3.8	570	8190	-	365				
4.4	570	8190	-	319				
5.0	570	8190	-	281				
5.7	570	8190	-	246				
6.3	570	8190	-	221				
7.1	570	8190	-	198				
8.3	570	8190	-	168				
9.0	570	8190	-	156				

S77, n_e = 1400 1/min											1270 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
5.5	1270	11700	-	256.47							
6.2	1270	11700	-	225.26							
6.5	1270	11700	-	214.00*							
7.4	1270	11700	-	189.09							
8.7	1260	11800	-	161.60*							
9.4	1240	12000	-	148.15							
11	1210	12200	-	130.00*							
11	1200	12300	-	123.20*							
13	1170	12600	-	107.83							
14	1140	12800	-	97.14							

S77, n_e = 1400 1/min											1270 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160
16	1100	13100	-	85.22							
19	1070	12800	-	75.20*							
19	1100	11900	-	75.09							
20	1100	11600	-	71.33							
21	1040	12300	-	66.67							
22	1100	10900	-	63.03							
25	990	11600	-	56.92							
26	1100	10100	-	53.87							
28	1100	9650	-	49.38							
32	1100	9010	-	43.33							
34	1100	8750	-	41.07							
39	1100	8140	-	35.94							
43	1090	7730	-	32.38							
49	1050	7370	-	28.41							
56	1020	7010	-	25.07							
61	705	5960	-	22.89							
63	980	6740	-	22.22							
67	705	5390	-	20.99							
74	930	6390	-	18.97							
76	705	4550	-	18.42							
80	710	4120	-	17.45							
92	710	3320	-	15.28							
102	710	2710	-	13.76							
116	720	1800	-	12.07							
131	720	1130	-	10.65							
148	725	415	-	9.44							
174	680	440	-	8.06							

S77R37, n_e = 1400 1/min								1270 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
			 2  3					
0.05	1270	11700	-	25493				
0.06	1270	11700	-	21787				
0.07	1270	11700	-	19907				
0.08	1270	11700	-	17013				
0.10	1270	11700	-	14668				
0.11	1270	11700	-	13110				
0.12	1270	11700	-	11569				
0.14	1270	11700	-	9887				
0.16	1270	11700	-	8817				
0.18	1270	11700	-	7735				
0.21	1270	11700	-	6735				
0.24	1270	11700	-	5943				
0.27	1270	11700	-	5214				
0.30	1270	11700	-	4618				
0.35	1270	11700	-	3992				
0.40	1270	11700	-	3540				
0.45	1270	11700	-	3098				
0.51	1240	12000	-	2753				
0.59	1240	12000	-	2374				
0.67	1240	12000	-	2083				
0.77	1240	12000	-	1813				
0.80	1240	12000	-	1745				
0.88	1240	12000	-	1600				
1.0	1240	12000	-	1404				
1.1	1240	12000	-	1245				



S77R37, n_e = 1400 1/min								1270 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
				2 2				
1.3	1240	12000	-	1100				
1.5	1240	12000	-	954				
1.7	1240	12000	-	837				
2.0	1240	12000	-	714				
2.2	1240	12000	-	637				
2.4	1240	12000	-	574				
2.8	1240	12000	-	499				
3.2	1240	12000	-	438				
3.6	1240	12000	-	389				
4.3	1240	12000	-	327				
4.8	1240	12000	-	289				
5.6	1240	12000	-	250				
6.4	1240	12000	-	219				

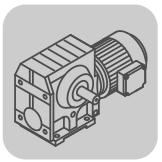
S87, n_e = 1400 1/min												2280 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L
4.9	2280	27900	-	288.00*								
5.4	2280	27900	-	258.18								
6.3	2280	27900	-	222.40*								
6.9	2260	28000	-	202.96								
7.8	2210	28100	-	180.00*								
9.3	2150	28200	-	151.30								
10	2100	28300	-	139.05								
11	2060	28300	-	123.48								
13	2000	28400	-	110.40*								
14	1960	28500	-	99.26								
15	1510	29100	-	91.20*								
16	1880	28600	-	86.15								
17	1600	29000	-	81.76								
18	1820	28700	-	77.14								
20	1600	29000	-	70.43								
22	1600	29000	-	64.27								
22	1700	28900	-	64.00*								
25	1600	29000	-	57.00*								
29	1600	29000	-	47.91								
32	1600	29000	-	44.03								
36	1600	28200	-	39.10								
40	1600	27100	-	34.96*								
45	1600	26000	-	31.43								
51	1600	24700	-	27.28								
55	1240	23400	-	25.50*								
57	1600	23700	-	24.43								
65	1240	21800	-	21.43								
69	1600	22100	-	20.27								
71	1240	21100	-	19.70								
80	1240	20200	-	17.49								
90	1240	19300	-	15.64*								
100	1240	18500	-	14.06								
115	1240	17400	-	12.21								
128	1240	16400	-	10.93								
154	1140	15900	-	9.07								
178	1010	15700	-	7.88								

S87R57, n_e = 1400 1/min											2500 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
				2 3							
0.05	2500	27500	-	25987							
0.06	2500	27500	-	23940							
0.07	2500	27500	-	20568							
0.08	2500	27500	-	18265							
0.08	2500	27500	-	16774							
0.09	2500	27500	-	14820							
0.11	2500	27500	-	13160							
0.12	2500	27500	-	11200							
0.14	2500	27500	-	9904							
0.16	2500	27500	-	8549							
0.18	2500	27500	-	7643							
0.21	2500	27500	-	6706							
0.24	2500	27500	-	5875							
0.27	2500	27500	-	5187							
0.30	2500	27500	-	4606							
0.36	2500	27500	-	3872							
				2 2							
0.40	2500	27500	-	3475							
0.48	2500	27500	-	2905							
0.54	2500	27500	-	2586							
0.60	2500	27500	-	2335							
0.68	2500	27500	-	2054							
0.77	2500	27500	-	1824							
0.86	2500	27500	-	1631							
1.1	2500	27500	-	1332							
1.2	2500	27500	-	1191							
1.4	2500	27500	-	1032							
1.5	2500	27500	-	930							
1.7	2500	27500	-	831							
1.9	2500	27500	-	719							
2.2	2500	27500	-	624							
2.5	2500	27500	-	558							
2.9	2500	27500	-	485							
3.2	2450	27600	-	435							
3.7	2450	27600	-	378							
4.3	2400	27700	-	323							
5.0	2400	27700	-	281							
5.5	1980	28400	-	255							
6.3	1980	28400	-	222							
6.8	1980	28400	-	205							

S97, n_e = 1400 1/min													4000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
4.9	4000	33200	-	286.40*									
5.3	4000	33200	-	262.22									
6.0	4000	33200	-	231.67									
7.1	4000	33200	-	196.52									
7.7	3920	33400	-	180.95									
8.7	3840	33500	-	161.74									
9.6	3730	33700	-	145.60*									
11	3650	33900	-	131.85									
12	3510	34100	-	116.92									
13	3440	34300	-	105.71									
16	3240	34600	-	89.60*									

S97, n_e = 1400 1/min														4000 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC DRS160	DRS180M DRS180L	DRS180HC DRS225S DRS225M
17	3230	34600	-	80.85									
18	3080	34800	-	78.26									
20	3300	34500	-	71.43									
21	2900	35100	-	65.45									
23	3300	34500	-	60.59									
25	3300	34500	-	55.79									
28	3300	34500	-	49.87									
31	3300	34100	-	44.89									
34	3300	32800	-	40.65									
39	3300	31300	-	36.05									
43	3200	30400	-	32.60									
51	3010	29000	-	27.63									
53	2600	26100	-	26.39									
58	2870	28000	-	24.13									
59	2600	24500	-	23.59									
66	2600	22800	-	21.23									
73	2600	21200	-	19.23									
82	2570	19700	-	17.05									
91	2470	19400	-	15.42									
107	2330	18800	-	13.07									
123	2210	18400	-	11.41									
147	2040	18200	-	9.55									
169	1770	18800	-	8.26									

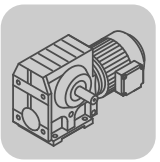
S97R57, n_e = 1400 1/min											4200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
			2	3							
0.04	4200	32800	-	33818							
0.04	4200	32800	-	31154							
0.05	4200	32800	-	27847							
0.06	4200	32800	-	24641							
0.07	4200	32800	-	21537							
0.07	4200	32800	-	18749							
0.09	4200	32800	-	16233							
0.10	4200	32800	-	14576							
0.11	4200	32800	-	12752							
0.12	4200	32800	-	11267							
0.14	4200	32800	-	10078							
0.16	4200	32800	-	8608							
0.19	4200	32800	-	7554							
0.21	4200	31300	-	6640							
0.24	4200	31300	-	5780							
0.28	4200	31300	-	4937							
0.32	4200	31300	-	4444							
0.35	4200	31300	-	4017							
0.41	4200	31300	-	3453							
0.45	4200	31300	-	3108							
0.53	4200	31300	-	2654							
0.60	4200	31300	-	2329							
0.67	4200	31300	-	2081							
0.75	4200	31300	-	1860							
0.89	4200	31300	-	1574							
			2	2							
1.0	4200	31300	-	1394							
1.1	4200	31300	-	1223							



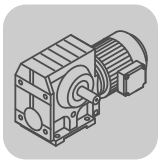
S97R57, n_e = 1400 1/min											4200 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC
1.3	4200	31300	-	1070							
1.5	4200	31300	-	928							
1.7	4200	31300	-	824							
2.0	4200	32800	-	714							
2.2	4200	31300	-	626							
2.6	4200	31300	-	538							
2.9	4200	31400	-	484							
3.3	4200	31400	-	420							
3.7	4200	31400	-	376							
4.3	4200	31500	-	327							
4.9	4200	31500	-	287							
5.6	4200	31500	-	252							
6.4	4200	31600	-	219							
6.8	4200	31600	-	205							

12.3 S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [N]	SEW f_B					m [kg]	
0.12	**0.12**	4740	11267	25100	0.90	**S**	**97R57**	**DR**	**63S4**	170	597
	0.14	4330	10078	32500	0.95	**SF**	**97R57**	**DR**	**63S4**	200	597
	0.16	3590	8608	34000	1.15	**SA**	**97R57**	**DR**	**63S4**	160	597
	0.18	3180	7554	34700	1.30	**SAF**	**97R57**	**DR**	**63S4**	190	597
	0.21	2690	6706	27100	0.95						
	0.23	2400	5875	27700	1.05	**S**	**87R57**	**DR**	**63S4**	110	597
	0.27	1980	5187	28500	1.25	**SF**	**87R57**	**DR**	**63S4**	130	597
	0.30	1760	4606	28800	1.40	**SA**	**87R57**	**DR**	**63S4**	105	597
	0.36	1460	3872	29200	1.70	**SAF**	**87R57**	**DR**	**63S4**	120	597
	0.39	1370	3540	7240	0.90						
	0.45	1200	3098	12300	1.05						
	0.58	1320	2374	10600	0.95						
	0.66	1160	2083	12600	1.05	**S**	**77R37**	**DR**	**63S4**	59	597
	0.76	980	1813	13900	1.25	**SF**	**77R37**	**DR**	**63S4**	68	597
	0.79	930	1745	14200	1.30	**SA**	**77R37**	**DR**	**63S4**	58	597
	0.86	860	1600	14600	1.45	**SAF**	**77R37**	**DR**	**63S4**	65	597
	0.98	755	1404	15100	1.65						
	1.1	660	1245	15500	1.90						
	1.2	585	1194	7990	0.95	**S**	**67R37**	**DR**	**63S4**	39	597
	1.3	530	1045	8560	1.05	**SF**	**67R37**	**DR**	**63S4**	46	597
	1.5	455	914	9180	1.25	**SA**	**67R37**	**DR**	**63S4**	40	597
						SAF	**67R37**	**DR**	**63S4**	45	597
	1.7	415	809	9460	1.35						
	1.9	365	712	9780	1.55						
	2.2	305	615	10100	1.85	**S**	**67R37**	**DR**	**63S4**	39	597
	2.5	275	543	10200	2.1	**SF**	**67R37**	**DR**	**63S4**	46	597
	2.9	225	469	10400	2.5	**SA**	**67R37**	**DR**	**63S4**	40	597
	3.3	200	424	10500	2.8	**SAF**	**67R37**	**DR**	**63S4**	45	597
	3.8	187	365	10500	3.0						
	2.1	325	655	6800	0.90						
	2.4	285	574	7200	1.05						
	2.7	250	506	7480	1.20	**S**	**57R17**	**DR**	**63S4**	20	597
	3.2	215	438	7700	1.40	**SF**	**57R17**	**DR**	**63S4**	24	597
	3.6	189	388	7850	1.60	**SA**	**57R17**	**DR**	**63S4**	20	597
	4.1	169	336	7950	1.80	**SAF**	**57R17**	**DR**	**63S4**	23	597
	4.7	145	294	8050	2.1						
	5.1	139	269	8070	2.2						
	3.2	215	438	5010	0.85						
	3.6	189	388	5170	1.00						
	4.1	168	336	5290	1.10	**S**	**47R17**	**DR**	**63S4**	17	597
	4.7	143	294	5420	1.30	**SF**	**47R17**	**DR**	**63S4**	20	597
	5.4	98	257	5660	1.90	**SA**	**47R17**	**DR**	**63S4**	18	597
	6.0	118	229	5550	1.55	**SAF**	**47R17**	**DR**	**63S4**	19	597
	6.9	102	200	5610	1.80						
	7.4	96	187	5640	1.95						
	6.8	103	202	3000	0.90						
	7.7	91	179	3000	1.00	**S**	**37R17**	**DR**	**63S4**	14	597
	8.7	82	158	3000	1.15	**SF**	**37R17**	**DR**	**63S4**	15	597
	9.6	75	144	3000	1.20	**SA**	**37R17**	**DR**	**63S4**	13	597
	12	61	118	3000	1.50	**SAF**	**37R17**	**DR**	**63S4**	15	597
	13	57	110	3000	1.60						
	4.5	143	201.00*	8050	2.1	**S**	**57**	**DR**	**63M6**	17	572
	4.9	133	184.80*	8090	2.2	**SF**	**57**	**DR**	**63M6**	21	573
	5.7	116	158.12	8140	2.5	**SA**	**57**	**DR**	**63M6**	17	574
	6.6	103	137.05	8180	2.9	**SAF**	**57**	**DR**	**63M6**	20	573
	4.5	138	201.00*	5490	1.30						
	4.9	129	184.80*	5540	1.40	**S**	**47**	**DR**	**63M6**	14	567
	5.7	112	158.12	5610	1.55	**SF**	**47**	**DR**	**63M6**	17	568
	6.6	99	137.05	5660	1.75	**SA**	**47**	**DR**	**63M6**	15	569
	7.0	93	128.10*	5680	1.85	**SAF**	**47**	**DR**	**63M6**	16	568
	6.9	95	201.00*	5680	1.80						
	7.5	89	184.80*	5700	1.90	**S**	**47**	**DR**	**63S4**	14	567
	8.7	77	158.12	5740	2.2	**SF**	**47**	**DR**	**63S4**	17	568
	10	68	137.05	5780	2.5	**SA**	**47**	**DR**	**63S4**	15	569
	11	64	128.10*	5790	2.6	**SAF**	**47**	**DR**	**63S4**	16	568
	12	57	110.73	5810	3.0						



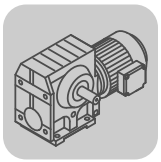
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**5.7**	107	157.43	3000	0.85						
	6.2	99	144.40*	3000	0.95	**S**	**37**	**DR**	**63M6**	10	563
	7.3	86	122.94	3000	1.05	**SF**	**37**	**DR**	**63M6**	12	564
	8.5	76	106.00*	3000	1.20	**SA**	**37**	**DR**	**63M6**	10	565
	9.1	71	98.80*	3000	1.30	**SAF**	**37**	**DR**	**63M6**	12	564
	10	64	86.36	3000	1.45						
	8.8	74	157.43	3000	1.25						
	9.6	68	144.40*	3000	1.35						
	11	60	122.94	3000	1.55	**S**	**37**	**DR**	**63S4**	10	563
	13	52	106.00*	3000	1.70	**SF**	**37**	**DR**	**63S4**	12	564
	14	49	98.80*	3000	1.75	**SA**	**37**	**DR**	**63S4**	10	565
	16	44	86.36	3000	1.95	**SAF**	**37**	**DR**	**63S4**	12	564
	17	41	80.96	3000	2.1						
	19	37	71.44*	3000	2.3						
	22	33	63.33	3000	2.5						
	25	35	55.93	3000	2.3						
	27	33	51.30*	3000	2.5						
	32	28	43.68	3000	2.9						
	37	24	37.66	3000	3.2	**S**	**37**	**DR**	**63S4**	10	563
	39	23	35.10*	3000	3.4	**SF**	**37**	**DR**	**63S4**	12	564
	45	20	30.68	3000	3.7	**SA**	**37**	**DR**	**63S4**	10	565
	48	19	28.76	3000	3.9	**SAF**	**37**	**DR**	**63S4**	12	564
	54	17	25.38*	3000	4.4						
	61	15	22.50*	3000	4.8						
	69	14	19.89	3000	3.6						
	76	13	18.24*	3000	3.9						
	89	11	15.53	2870	4.4						
0.18						**S**	**87R57**	**DR**	**63M4**	110	597
	0.29	3010	4606	19200	0.85	**SF**	**87R57**	**DR**	**63M4**	130	597
	0.34	2510	3872	27500	1.00	**SA**	**87R57**	**DR**	**63M4**	105	597
						SAF	**87R57**	**DR**	**63M4**	120	597
	0.38	2420	3475	27700	1.05						
	0.45	2030	2905	28400	1.25						
	0.51	1760	2586	28800	1.40	**S**	**87R57**	**DR**	**63M4**	105	597
	0.57	1570	2335	29100	1.60	**SF**	**87R57**	**DR**	**63M4**	130	597
	0.64	1360	2054	29300	1.85	**SA**	**87R57**	**DR**	**63M4**	105	597
	0.72	1200	1824	29500	2.1	**SAF**	**87R57**	**DR**	**63M4**	120	597
	0.81	1080	1631	29600	2.3						
						S	**77R37**	**DR**	**63M4**	59	597
	0.94	1240	1404	11900	1.00	**SF**	**77R37**	**DR**	**63M4**	68	597
	1.1	1090	1245	13200	1.15	**SA**	**77R37**	**DR**	**63M4**	58	597
						SAF	**77R37**	**DR**	**63M4**	65	597
	1.2	1020	1100	13700	1.20						
	1.4	870	954	14500	1.40	**S**	**77R37**	**DR**	**63M4**	58	597
	1.6	770	837	15000	1.60	**SF**	**77R37**	**DR**	**63M4**	68	597
	1.8	640	714	15600	1.95	**SA**	**77R37**	**DR**	**63M4**	58	597
	2.1	565	637	15800	2.2	**SAF**	**77R37**	**DR**	**63M4**	65	597
	2.3	515	574	16000	2.4						
	1.9	600	712	7860	0.95						
	2.2	505	615	8800	1.15	**S**	**67R37**	**DR**	**63M4**	39	597
	2.4	450	543	9230	1.25	**SF**	**67R37**	**DR**	**63M4**	46	597
	2.8	375	469	9720	1.50	**SA**	**67R37**	**DR**	**63M4**	40	597
	3.1	340	424	9930	1.65	**SAF**	**67R37**	**DR**	**63M4**	45	597
	3.6	305	365	10100	1.85						
	3.0	355	438	6520	0.85						
	3.4	310	388	6970	0.95						
	3.9	275	336	7290	1.10	**S**	**57R17**	**DR**	**63M4**	20	597
	4.5	235	294	7560	1.25	**SF**	**57R17**	**DR**	**63M4**	24	597
	4.9	225	269	7650	1.35	**SA**	**57R17**	**DR**	**63M4**	20	597
	5.8	193	229	7830	1.55	**SAF**	**57R17**	**DR**	**63M4**	23	597
	6.5	174	204	7920	1.75						
	7.0	159	187	7990	1.90						



S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**4.5**	235	294	4480	0.80						
	5.1	162	257	5380	1.15						
	5.8	190	229	5170	0.95	**S**	**47R17**	**DR**	**63M4**	17	597
	6.6	167	200	5300	1.10	**SF**	**47R17**	**DR**	**63M4**	20	597
	7.0	156	187	5360	1.20	**SA**	**47R17**	**DR**	**63M4**	18	597
	8.0	138	165	5450	1.35	**SAF**	**47R17**	**DR**	**63M4**	19	597
	9.0	124	148	5520	1.50						
	10	110	131	5580	1.70						
	4.0	250	217.41	10300	2.2	**S**	**67**	**DR**	**63L6**	29	577
	4.6	220	190.11	10400	2.5	**SF**	**67**	**DR**	**63L6**	35	578
	4.8	210	180.60*	10400	2.6	**SA**	**67**	**DR**	**63L6**	30	579
						SAF	**67**	**DR**	**63L6**	34	578
	4.3	220	201.00*	7670	1.35	**S**	**57**	**DR**	**63L6**	18	572
	4.7	205	184.80*	7760	1.45	**SF**	**57**	**DR**	**63L6**	22	573
	5.5	180	158.12	7900	1.65	**SA**	**57**	**DR**	**63L6**	18	574
	6.4	158	137.05	7990	1.85	**SAF**	**57**	**DR**	**63L6**	21	573
	6.6	154	201.00*	8010	1.90	**S**	**57**	**DR**	**63M4**	17	572
	7.1	143	184.80*	8050	2.1	**SF**	**57**	**DR**	**63M4**	21	573
	8.4	125	158.12	8120	2.4	**SA**	**57**	**DR**	**63M4**	17	574
	9.6	110	137.05	8160	2.7	**SAF**	**57**	**DR**	**63M4**	20	573
	4.3	210	201.00*	5090	0.85						
	4.7	199	184.80*	5180	0.90	**S**	**47**	**DR**	**63L6**	14	567
	5.5	173	158.12	5320	1.00	**SF**	**47**	**DR**	**63L6**	18	568
	6.4	153	137.05	5420	1.10	**SA**	**47**	**DR**	**63L6**	15	569
	6.8	144	128.10*	5460	1.20	**SAF**	**47**	**DR**	**63L6**	17	568
	6.6	149	201.00*	5440	1.15						
	7.1	138	184.80*	5490	1.25						
	8.4	121	158.12	5570	1.40						
	9.6	106	137.05	5630	1.60	**S**	**47**	**DR**	**63M4**	14	567
	10	100	128.10*	5660	1.65	**SF**	**47**	**DR**	**63M4**	17	568
	12	88	110.73	5700	1.90	**SA**	**47**	**DR**	**63M4**	15	569
	14	77	94.08*	5750	2.2	**SAF**	**47**	**DR**	**63M4**	16	568
	16	69	84.00*	5770	2.4						
	18	60	71.75*	5800	2.8						
	19	69	69.39	5750	2.2						
	8.4	115	157.43	3000	0.80						
	9.1	107	144.40*	3000	0.85						
	11	93	122.94	3000	1.00	**S**	**37**	**DR**	**63M4**	10	563
	12	82	106.00*	3000	1.10	**SF**	**37**	**DR**	**63M4**	12	564
	13	77	98.80*	3000	1.15	**SA**	**37**	**DR**	**63M4**	10	565
	15	68	86.36	3000	1.25	**SAF**	**37**	**DR**	**63M4**	12	564
	16	64	80.96	3000	1.30						
	18	58	71.44*	3000	1.45						
	21	52	63.33	3000	1.60						
	24	55	55.93	3000	1.45						
	26	51	51.30*	3000	1.60						
	30	44	43.68	3000	1.85						
	35	38	37.66	3000	2.1						
	38	36	35.10*	3000	2.2						
	43	32	30.68	3000	2.4	**S**	**37**	**DR**	**63M4**	10	563
	46	30	28.76	3000	2.5	**SF**	**37**	**DR**	**63M4**	12	564
	52	26	25.38*	3000	2.8	**SA**	**37**	**DR**	**63M4**	10	565
	59	24	22.50*	3000	3.1	**SAF**	**37**	**DR**	**63M4**	12	564
	66	22	19.89	3000	2.3						
	72	21	18.24*	2940	2.5						
	85	18	15.53	2810	2.8						
	99	15	13.39	2700	3.2						
	106	14	12.48*	2650	3.4						
	121	13	10.91	2550	3.8						
	129	12	10.23	2500	4.0						
0.25	**0.45**	2930	2905	22200	0.85						
	0.50	2560	2586	27400	1.00	**S**	**87R57**	**DR**	**63L4**	110	597
	0.56	2290	2335	27900	1.10	**SF**	**87R57**	**DR**	**63L4**	130	597
	0.63	1990	2054	28400	1.25	**SA**	**87R57**	**DR**	**63L4**	105	597
	0.71	1770	1824	28800	1.40	**SAF**	**87R57**	**DR**	**63L4**	120	597
	0.80	1580	1631	29100	1.60						
	1.4	930	930	29700	2.7						

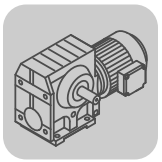
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**1.4**	1250	954	11800	1.00						
	1.6	1100	837	13100	1.10	**S**	**77R37**	**DR**	**63L4**	59	597
	1.8	920	714	14200	1.35	**SF**	**77R37**	**DR**	**63L4**	69	597
	2.0	820	637	14800	1.50	**SA**	**77R37**	**DR**	**63L4**	59	597
	2.3	745	574	15200	1.65	**SAF**	**77R37**	**DR**	**63L4**	65	597
	2.6	635	499	15600	1.95						
	2.4	650	543	6280	0.85						
	2.8	550	469	8390	1.05	**S**	**67R37**	**DR**	**63L4**	40	597
	3.1	495	424	8880	1.15	**SF**	**67R37**	**DR**	**63L4**	46	597
	3.6	440	365	9320	1.30	**SA**	**67R37**	**DR**	**63L4**	41	597
	4.1	380	319	9700	1.50	**SAF**	**67R37**	**DR**	**63L4**	45	597
	4.6	335	281	9960	1.70						
	4.4	340	294	6640	0.85						
	4.8	320	269	6870	0.95						
	5.7	275	229	7280	1.10	**S**	**57R17**	**DR**	**63L4**	21	597
	6.4	245	204	7490	1.20	**SF**	**57R17**	**DR**	**63L4**	25	597
	6.9	225	187	7630	1.30	**SA**	**57R17**	**DR**	**63L4**	21	597
	7.9	200	165	7780	1.50	**SAF**	**57R17**	**DR**	**63L4**	24	597
	9.9	162	131	7980	1.85						
	4.1	340	217.41	9920	1.65	**S**	**67**	**DRS**	**71S6**	31	577
	4.7	300	190.11	10100	1.85	**SF**	**67**	**DRS**	**71S6**	37	578
	5.0	290	180.60*	10200	1.90	**SA**	**67**	**DRS**	**71S6**	32	579
	5.6	255	158.45	10300	2.1	**SAF**	**67**	**DRS**	**71S6**	36	578
	6.0	245	217.41	10300	2.1						
	6.8	215	190.11	10400	2.4						
	7.2	205	180.60*	10500	2.5	**S**	**67**	**DR**	**63L4**	29	577
	8.2	187	158.45	10500	2.8	**SF**	**67**	**DR**	**63L4**	35	578
	9.7	161	134.40*	10600	3.2	**SA**	**67**	**DR**	**63L4**	30	579
	11	147	121.33	10600	3.5	**SAF**	**67**	**DR**	**63L4**	34	578
	12	131	106.75*	10700	4.0						
	4.4	300	201.00*	7080	1.00						
	4.8	275	184.80*	7270	1.10	**S**	**57**	**DRS**	**71S6**	20	572
	5.7	240	158.12	7530	1.20	**SF**	**57**	**DRS**	**71S6**	24	573
	6.5	210	137.05	7710	1.35	**SA**	**57**	**DRS**	**71S6**	20	574
	7.0	200	128.10*	7780	1.45	**SAF**	**57**	**DRS**	**71S6**	23	573
	6.5	215	201.00*	7700	1.35						
	7.0	200	184.80*	7790	1.45						
	8.2	176	158.12	7920	1.70	**S**	**57**	**DR**	**63L4**	18	572
	9.5	155	137.05	8010	1.90	**SF**	**57**	**DR**	**63L4**	22	573
	10	146	128.10*	8040	2.0	**SA**	**57**	**DR**	**63L4**	18	574
	12	128	110.73	8110	2.3	**SAF**	**57**	**DR**	**63L4**	21	573
	14	111	94.08*	8160	2.6						
	15	100	84.00*	8190	2.9						
	6.5	205	201.00*	5120	0.80						
	7.0	194	184.80*	5210	0.85						
	8.2	170	158.12	5340	1.00						
	9.5	150	137.05	5440	1.10						
	10	141	128.10*	5480	1.20						
	12	124	110.73	5560	1.35	**S**	**47**	**DR**	**63L4**	14	567
	14	108	94.08*	5630	1.55	**SF**	**47**	**DR**	**63L4**	18	568
	15	98	84.00*	5670	1.70	**SA**	**47**	**DR**	**63L4**	15	569
	18	85	71.75*	5720	1.95	**SAF**	**47**	**DR**	**63L4**	17	568
	19	97	69.39	5640	1.60						
	19	80	67.20*	5740	2.1						
	20	90	63.80*	5670	1.70						
	24	78	54.59	5720	2.00						
	27	68	47.32	5760	2.3						



S..DRS
S..DRS [kW]

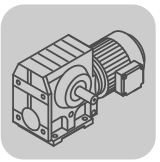
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**13**	108	98.80*	3000	0.80						
	15	96	86.36	3000	0.90						
	16	91	80.96	3000	0.95						
	18	81	71.44*	3000	1.05						
	21	73	63.33	3000	1.10						
	23	78	55.93	3000	1.05						
	25	72	51.30*	3000	1.15						
	30	62	43.68	3000	1.30						
	35	54	37.66	3000	1.45						
	37	51	35.10*	3000	1.55						
	42	45	30.68	3000	1.70						
	45	42	28.76	3000	1.80						
	51	37	25.38*	3000	2.00	**S**	**37**	**DR**	**63L4**	11	563
	58	33	22.50*	3000	2.2	**SF**	**37**	**DR**	**63L4**	13	564
	65	32	19.89	2870	1.65	**SA**	**37**	**DR**	**63L4**	11	565
	71	29	18.24*	2820	1.80	**SAF**	**37**	**DR**	**63L4**	12	564
	84	25	15.53	2710	2.0						
	97	22	13.39	2620	2.3						
	104	20	12.48*	2570	2.4						
	119	18	10.91	2480	2.7						
	127	17	10.23	2440	2.8						
	144	15	9.02*	2360	3.1						
	162	13	8.00*	2280	3.4						
	191	11	6.80*	2180	3.8						
	205	11	6.33	2130	3.3						
	241	9.0	5.38	2030	3.8						
	267	8.2	4.86*	1980	4.0						
	328	6.7	3.97	1860	4.8						
	92	21	28.76	2740	3.0						
	105	19	25.38*	2650	3.3						
	118	17	22.50*	2560	3.4	**S**	**37**	**DR**	**63M2**	10	563
	134	16	19.89	2410	2.8	**SF**	**37**	**DR**	**63M2**	12	564
	146	15	18.24*	2350	3.0	**SA**	**37**	**DR**	**63M2**	10	565
	171	12	15.53	2250	3.4	**SAF**	**37**	**DR**	**63M2**	12	564
	199	11	13.39	2160	3.8						
	213	10	12.48*	2120	4.0						
0.37	**0.67**	2850	2054	24500	0.90	**S**	**87R57**	**DRS**	**71S4**	110	597
	0.76	2530	1824	27400	1.00	**SF**	**87R57**	**DRS**	**71S4**	130	597
	0.85	2260	1631	28000	1.10	**SA**	**87R57**	**DRS**	**71S4**	105	597
	1.5	1340	930	29400	1.85	**SAF**	**87R57**	**DRS**	**71S4**	125	597
	1.7	1210	831	29500	2.1						
	1.9	1310	714	11300	0.95						
	2.2	1160	637	12600	1.05	**S**	**77R37**	**DRS**	**71S4**	61	597
	2.4	1050	574	13400	1.15	**SF**	**77R37**	**DRS**	**71S4**	71	597
	2.8	900	499	14300	1.35	**SA**	**77R37**	**DRS**	**71S4**	61	597
	3.2	795	438	14900	1.55	**SAF**	**77R37**	**DRS**	**71S4**	67	597
	3.6	705	389	15300	1.75						
	3.8	620	365	7560	0.90	**S**	**67R37**	**DRS**	**71S4**	42	597
	4.3	540	319	8450	1.05	**SF**	**67R37**	**DRS**	**71S4**	48	597
	4.9	475	281	9030	1.20	**SA**	**67R37**	**DRS**	**71S4**	43	597
	5.6	430	246	9380	1.30	**SAF**	**67R37**	**DRS**	**71S4**	47	597
	3.5	635	256.47	15600	2.00	**S**	**77**	**DRS**	**71M6**	53	582
	4.0	565	225.26	15800	2.2	**SF**	**77**	**DRS**	**71M6**	63	583
	4.2	540	214.00*	15900	2.3	**SA**	**77**	**DRS**	**71M6**	52	584
						SAF	**77**	**DRS**	**71M6**	59	583
	4.2	500	217.41	8830	1.10	**S**	**67**	**DRS**	**71M6**	32	577
	4.8	445	190.11	9280	1.25	**SF**	**67**	**DRS**	**71M6**	38	578
	5.0	425	180.60*	9410	1.30	**SA**	**67**	**DRS**	**71M6**	33	579
	5.7	380	158.45	9710	1.45	**SAF**	**67**	**DRS**	**71M6**	37	578
	6.4	345	217.41	9900	1.50						
	7.3	305	190.11	10100	1.70	**S**	**67**	**DRS**	**71S4**	31	577
	7.6	290	180.60*	10200	1.75	**SF**	**67**	**DRS**	**71S4**	37	578
	8.7	260	158.45	10300	2.00	**SA**	**67**	**DRS**	**71S4**	32	579
	10	225	134.40*	10400	2.3	**SAF**	**67**	**DRS**	**71S4**	36	578
	11	205	121.33	10500	2.5						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**5.7**	355	158.12	6510	0.85						
	6.6	310	137.05	6950	0.95	**S**	**57**	**DRS**	**71M6**	21	572
	7.1	295	128.10*	7110	1.00	**SF**	**57**	**DRS**	**71M6**	25	573
	8.2	260	110.73	7400	1.15	**SA**	**57**	**DRS**	**71M6**	21	574
	9.6	225	94.08*	7640	1.30	**SAF**	**57**	**DRS**	**71M6**	24	573
	11	205	84.00*	7770	1.45						
	6.9	300	201.00*	7050	0.95						
	7.5	280	184.80*	7230	1.05						
	8.7	245	158.12	7510	1.20						
	10	215	137.05	7690	1.35						
	11	205	128.10*	7770	1.45	**S**	**57**	**DRS**	**71S4**	20	572
	12	180	110.73	7900	1.65	**SF**	**57**	**DRS**	**71S4**	24	573
	15	156	94.08*	8000	1.90	**SA**	**57**	**DRS**	**71S4**	20	574
	16	141	84.00*	8060	2.1	**SAF**	**57**	**DRS**	**71S4**	23	573
	19	122	71.75*	8130	2.4						
	20	139	69.39	8070	1.75						
	21	115	67.20*	8150	2.5						
	22	128	63.80*	8110	1.90						
	10	210	137.05	5110	0.80						
	11	198	128.10*	5180	0.85						
	12	175	110.73	5320	0.95						
	15	151	94.08*	5430	1.10						
	16	137	84.00*	5500	1.20						
	19	119	71.75*	5580	1.40						
	20	136	69.39	5460	1.15						
	21	112	67.20*	5610	1.50						
	22	126	63.80*	5510	1.25	**S**	**47**	**DRS**	**71S4**	16	567
	25	109	54.59	5590	1.40	**SF**	**47**	**DRS**	**71S4**	20	568
	29	96	47.32	5410	1.60	**SA**	**47**	**DRS**	**71S4**	17	569
	31	90	44.22*	5330	1.75	**SAF**	**47**	**DRS**	**71S4**	19	568
	36	78	38.23	5140	2.00						
	42	67	32.48*	4930	2.3						
	48	60	29.00*	4790	2.6						
	56	52	24.77	4590	3.0						
	59	49	23.20*	4510	3.1						
	68	46	20.33	4180	2.4						
	78	40	17.62	4030	2.8						
	84	37	16.47*	3960	3.0						
	22	103	63.33	3000	0.80						
	27	101	51.30*	3000	0.80						
	32	87	43.68	3000	0.95						
	37	76	37.66	3000	1.05						
	39	71	35.10*	3000	1.10						
	45	62	30.68	3000	1.20						
	48	59	28.76	3000	1.30						
	54	52	25.38*	2940	1.40						
	61	47	22.50*	2870	1.55						
	69	44	19.89	2610	1.20						
	76	41	18.24*	2570	1.30	**S**	**37**	**DRS**	**71S4**	13	563
	89	35	15.53	2500	1.45	**SF**	**37**	**DRS**	**71S4**	15	564
	103	30	13.39	2420	1.60	**SA**	**37**	**DRS**	**71S4**	13	565
	111	28	12.48*	2390	1.70	**SAF**	**37**	**DRS**	**71S4**	15	564
	126	25	10.91	2320	1.95						
	135	23	10.23	2280	2.0						
	153	21	9.02*	2220	2.2						
	172	18	8.00*	2150	2.4						
	203	16	6.80*	2070	2.7						
	218	15	6.33	2020	2.4						
	256	13	5.38	1930	2.7						
	284	11	4.86*	1880	2.9						
	348	9.3	3.97	1780	3.4						

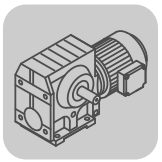


S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**104**	28	25.38*	2540	2.2						
	118	25	22.50*	2460	2.3						
	133	24	19.89	2290	1.85						
	145	22	18.24*	2240	2.0	**S**	**37**	**DR**	**63L2**	11	563
	171	19	15.53	2160	2.3	**SF**	**37**	**DR**	**63L2**	13	564
	198	16	13.39	2080	2.6	**SA**	**37**	**DR**	**63L2**	11	565
	212	15	12.48*	2040	2.7	**SAF**	**37**	**DR**	**63L2**	12	564
	243	13	10.91	1970	3.0						
	259	12	10.23	1940	3.1						
	294	11	9.02*	1870	3.3						
0.55	**1.0**	2800	1332	25400	0.90						
	1.2	2530	1191	27400	1.00						
	1.3	2200	1032	28100	1.15						
	1.5	2030	930	28400	1.25	**S**	**87R57**	**DRS**	**71M4**	110	597
	1.7	1840	831	28700	1.35	**SF**	**87R57**	**DRS**	**71M4**	130	597
	1.9	1600	719	29000	1.55	**SA**	**87R57**	**DRS**	**71M4**	110	597
	2.2	1390	624	29300	1.80	**SAF**	**87R57**	**DRS**	**71M4**	125	597
	2.5	1260	558	29400	2.00						
	3.2	1010	435	29700	2.4						
	3.2	1200	438	12300	1.05						
	3.6	1070	389	13300	1.15	**S**	**77R37**	**DRS**	**71M4**	62	597
	4.2	900	327	14400	1.35	**SF**	**77R37**	**DRS**	**71M4**	72	597
	4.8	810	289	14800	1.50	**SA**	**77R37**	**DRS**	**71M4**	62	597
	5.5	705	250	15300	1.75	**SAF**	**77R37**	**DRS**	**71M4**	68	597
	5.6	645	246	6520	0.90	**S**	**67R37**	**DRS**	**71M4**	43	597
	6.2	580	221	8080	1.00	**SF**	**67R37**	**DRS**	**71M4**	49	597
	7.0	525	198	8590	1.10	**SA**	**67R37**	**DRS**	**71M4**	44	597
	8.2	450	168	9220	1.25	**SAF**	**67R37**	**DRS**	**71M4**	48	597
	3.2	1110	288.00*	29600	2.2	**S**	**87**	**DRS**	**80S6**	91	587
	3.5	1000	258.18	29700	2.4	**SF**	**87**	**DRS**	**80S6**	115	588
	4.1	880	222.40*	29800	2.7	**SA**	**87**	**DRS**	**80S6**	89	589
	4.5	810	202.96	29800	2.9	**SAF**	**87**	**DRS**	**80S6**	105	588
	3.6	940	256.47	14200	1.35						
	4.1	830	225.26	14700	1.50	**S**	**77**	**DRS**	**80S6**	55	582
	4.3	800	214.00*	14900	1.60	**SF**	**77**	**DRS**	**80S6**	65	583
	4.8	715	189.09	15300	1.75	**SA**	**77**	**DRS**	**80S6**	55	584
	5.7	620	161.60*	15600	2.0	**SAF**	**77**	**DRS**	**80S6**	61	583
	5.4	650	256.47	15500	1.95	**S**	**77**	**DRS**	**71M4**	53	582
	6.1	580	225.26	15800	2.2	**SF**	**77**	**DRS**	**71M4**	63	583
	6.4	550	214.00*	15900	2.3	**SA**	**77**	**DRS**	**71M4**	52	584
	7.3	495	189.09	16000	2.6	**SAF**	**77**	**DRS**	**71M4**	59	583
	6.4	515	217.41	8720	1.00						
	7.3	455	190.11	9190	1.15						
	7.6	435	180.60*	9340	1.20						
	8.7	385	158.45	9650	1.35						
	10	335	134.40*	9950	1.55	**S**	**67**	**DRS**	**71M4**	32	577
	11	305	121.33	10100	1.70	**SF**	**67**	**DRS**	**71M4**	38	578
	13	270	106.75*	10200	1.90	**SA**	**67**	**DRS**	**71M4**	33	579
	14	255	100.80*	10300	2.0	**SAF**	**67**	**DRS**	**71M4**	37	578
	16	220	85.83	10400	2.3						
	18	225	75.06	10400	2.1						
	21	200	65.63	10500	2.4						
	9.7	330	94.08*	6760	0.90						
	11	300	84.00*	7070	1.00						
	13	260	71.75*	7390	1.10	**S**	**57**	**DRS**	**80S6**	23	572
	14	245	67.20*	7500	1.20	**SF**	**57**	**DRS**	**80S6**	27	573
	17	240	54.59	7540	1.10	**SA**	**57**	**DRS**	**80S6**	23	574
	19	210	47.32	7730	1.30	**SAF**	**57**	**DRS**	**80S6**	26	573
	21	199	44.22*	7800	1.35						
	24	173	38.23	7930	1.55						



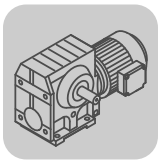
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**8.7**	365	158.12	6390	0.80						
	10	320	137.05	6860	0.90						
	11	300	128.10*	7040	0.95						
	12	265	110.73	7350	1.10						
	15	230	94.08*	7600	1.25						
	16	205	84.00*	7740	1.40						
	19	182	71.75*	7890	1.60	**S**	**57**	**DRS**	**71M4**	21	572
	21	172	67.20*	7940	1.65	**SF**	**57**	**DRS**	**71M4**	25	573
	25	165	54.59	7970	1.50	**SA**	**57**	**DRS**	**71M4**	21	574
	29	144	47.32	8050	1.70	**SAF**	**57**	**DRS**	**71M4**	24	573
	31	135	44.22*	8080	1.80						
	36	118	38.23	8140	2.1						
	42	101	32.48*	7940	2.4						
	48	91	29.00*	7690	2.7						
	56	78	24.77	7360	3.1						
	59	74	23.20*	7220	3.3						
	68	68	20.33	6740	2.5						
	16	200	84.00*	5160	0.80						
	19	177	71.75*	5310	0.95						
	21	167	67.20*	5360	1.00						
	25	162	54.59	5120	0.95						
	29	142	47.32	5000	1.10						
	31	133	44.22*	4940	1.15						
	36	116	38.23	4800	1.35						
	42	100	32.48*	4640	1.55	**S**	**47**	**DRS**	**71M4**	17	567
	48	90	29.00*	4530	1.75	**SF**	**47**	**DRS**	**71M4**	21	568
	56	77	24.77	4360	2.0	**SA**	**47**	**DRS**	**71M4**	18	569
	59	73	23.20*	4300	2.1	**SAF**	**47**	**DRS**	**71M4**	20	568
	68	68	20.33	3910	1.60						
	78	59	17.62	3790	1.85						
	84	56	16.47*	3740	2.00						
	97	48	14.24	3620	2.3						
	114	41	12.10*	3480	2.6						
	128	37	10.80*	3390	3.0						
	150	32	9.23*	3260	3.4						
	45	93	30.68	2680	0.80						
	48	87	28.76	2660	0.85						
	54	78	25.38*	2630	0.95						
	61	69	22.50*	2590	1.05						
	72	60	19.13*	2530	1.20						
	89	52	15.53	2230	0.95						
	103	45	13.39	2190	1.10						
	111	42	12.48*	2170	1.15	**S**	**37**	**DRS**	**71M4**	14	563
	126	37	10.91	2130	1.30	**SF**	**37**	**DRS**	**71M4**	16	564
	135	35	10.23	2110	1.35	**SA**	**37**	**DRS**	**71M4**	14	565
	153	31	9.02*	2060	1.50	**SAF**	**37**	**DRS**	**71M4**	16	564
	172	27	8.00*	2010	1.65						
	203	23	6.80*	1950	1.85						
	218	22	6.33	1900	1.60						
	256	19	5.38	1830	1.80						
	284	17	4.86*	1790	1.95						
	348	14	3.97	1700	2.3						
	98	45	28.76	2400	1.45						
	111	40	25.38*	2340	1.55						
	125	35	22.50*	2290	1.60						
	141	33	19.89	2090	1.35						
	154	30	18.24*	2060	1.45						
	181	26	15.53	2000	1.60	**S**	**37**	**DRS**	**71M2**	14	563
	210	23	13.39	1930	1.80	**SF**	**37**	**DRS**	**71M2**	16	564
	225	21	12.48*	1900	1.90	**SA**	**37**	**DRS**	**71M2**	14	565
	258	18	10.91	1850	2.1	**SAF**	**37**	**DRS**	**71M2**	16	564
	275	17	10.23	1820	2.2						
	311	15	9.02*	1770	2.3						
	351	14	8.00*	1710	2.6						
	413	12	6.80*	1640	2.5						



S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**1.2**	4790	1223	22000	0.90						
	1.3	4200	1070	31200	1.00						
	1.5	3620	928	33900	1.15	**S**	**97R57**	**DRS**	**80S4**	175	597
	1.7	3200	824	34600	1.30	**SF**	**97R57**	**DRS**	**80S4**	205	597
	2.0	2280	714	35900	1.85	**SA**	**97R57**	**DRS**	**80S4**	165	597
	2.2	2430	626	35700	1.75	**SAF**	**97R57**	**DRS**	**80S4**	195	597
	2.6	2080	538	36100	2.0						
	2.9	1880	484	36300	2.2						
	1.4	2990	1032	19900	0.85						
	1.5	2750	930	26200	0.90						
	1.7	2490	831	27500	1.00	**S**	**87R57**	**DRS**	**80S4**	115	597
	2.0	2170	719	28100	1.15	**SF**	**87R57**	**DRS**	**80S4**	135	597
	2.3	1890	624	28600	1.30	**SA**	**87R57**	**DRS**	**80S4**	110	597
	2.5	1710	558	28900	1.45	**SAF**	**87R57**	**DRS**	**80S4**	125	597
	3.2	1370	435	29300	1.80						
	4.4	1050	323	29600	2.3						
	4.3	1220	327	12100	1.00	**S**	**77R37**	**DRS**	**80S4**	64	597
	4.9	1100	289	13100	1.15	**SF**	**77R37**	**DRS**	**80S4**	74	597
	5.6	950	250	14100	1.30	**SA**	**77R37**	**DRS**	**80S4**	64	597
	6.4	840	219	14700	1.45	**SAF**	**77R37**	**DRS**	**80S4**	71	597
	3.2	1510	288.00*	29100	1.60	**S**	**87**	**DRS**	**80M6**	94	587
	3.5	1370	258.18	29300	1.75	**SF**	**87**	**DRS**	**80M6**	115	588
	4.1	1200	222.40*	29500	2.00	**SA**	**87**	**DRS**	**80M6**	91	589
	4.5	1100	202.96	29600	2.2	**SAF**	**87**	**DRS**	**80M6**	110	588
	4.9	1020	288.00*	29700	2.2	**S**	**87**	**DRS**	**80S4**	91	587
	5.5	930	258.18	29700	2.4	**SF**	**87**	**DRS**	**80S4**	115	588
	6.3	810	222.40*	29800	2.8	**SA**	**87**	**DRS**	**80S4**	89	589
	7.0	745	202.96	29900	3.0	**SAF**	**87**	**DRS**	**80S4**	105	588
	4.1	1140	225.26	12800	1.10	**S**	**77**	**DRS**	**80M6**	58	582
	4.3	1090	214.00*	13200	1.15	**SF**	**77**	**DRS**	**80M6**	68	583
	4.8	970	189.09	13900	1.30	**SA**	**77**	**DRS**	**80M6**	57	584
	5.7	840	161.60*	14700	1.50	**SAF**	**77**	**DRS**	**80M6**	64	583
	5.5	870	256.47	14500	1.45						
	6.3	775	225.26	15000	1.65						
	6.6	740	214.00*	15200	1.70						
	7.5	660	189.09	15500	1.90	**S**	**77**	**DRS**	**80S4**	55	582
	8.7	575	161.60*	15800	2.2	**SF**	**77**	**DRS**	**80S4**	65	583
	9.5	530	148.15	15900	2.3	**SA**	**77**	**DRS**	**80S4**	55	584
	11	470	130.00*	16000	2.6	**SAF**	**77**	**DRS**	**80S4**	61	583
	11	445	123.20*	16000	2.7						
	13	395	107.83	16000	2.9						
	7.4	610	190.11	7710	0.85						
	7.8	585	180.60*	8020	0.90						
	8.9	520	158.45	8670	1.00						
	10	450	134.40*	9250	1.15						
	12	410	121.33	9520	1.25						
	13	365	106.75*	9790	1.40	**S**	**67**	**DRS**	**80S4**	34	577
	14	345	100.80*	9890	1.50	**SF**	**67**	**DRS**	**80S4**	41	578
	16	300	85.83	10100	1.75	**SA**	**67**	**DRS**	**80S4**	35	579
	19	305	75.06	10100	1.55	**SAF**	**67**	**DRS**	**80S4**	40	578
	21	265	65.63	10300	1.80						
	23	255	62.35*	10300	1.85						
	26	225	54.70	10200	2.1						
	30	194	46.40*	9780	2.5						
	13	355	71.75*	6490	0.80	**S**	**57**	**DRS**	**80M6**	26	572
	14	335	67.20*	6720	0.85	**SF**	**57**	**DRS**	**80M6**	30	573
	16	290	56.61	7170	1.05	**SA**	**57**	**DRS**	**80M6**	26	574
	19	285	47.32	7190	0.95	**SAF**	**57**	**DRS**	**80M6**	29	573
						S	**57**	**DRS**	**80M6**	26	572
	21	270	44.22*	7330	1.00	**SF**	**57**	**DRS**	**80M6**	30	573
						SA	**57**	**DRS**	**80M6**	26	574
						SAF	**57**	**DRS**	**80M6**	29	573

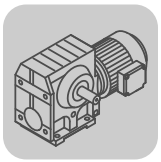
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.75	**13**	355	110.73	6480	0.80						
	15	310	94.08*	6990	0.95						
	17	280	84.00*	7250	1.05						
	20	240	71.75*	7530	1.20						
	21	225	67.20*	7620	1.25						
	26	220	54.59	7680	1.10						
	30	193	47.32	7830	1.25						
	32	181	44.22*	7890	1.35	**S**	**57**	**DRS**	**80S4**	23	572
	37	158	38.23	7940	1.55	**SF**	**57**	**DRS**	**80S4**	27	573
	43	135	32.48*	7630	1.80	**SA**	**57**	**DRS**	**80S4**	23	574
	49	121	29.00*	7410	2.0	**SAF**	**57**	**DRS**	**80S4**	26	573
	57	104	24.77	7110	2.3						
	61	98	23.20*	6990	2.5						
	69	91	20.33	6450	1.85						
	80	79	17.62	6230	2.1						
	86	74	16.47*	6120	2.3						
	99	65	14.24	5900	2.6						
	30	190	47.32	4520	0.80						
	32	178	44.22*	4490	0.85	**S**	**47**	**DRS**	**80S4**	20	567
	37	156	38.23	4410	1.00	**SF**	**47**	**DRS**	**80S4**	23	568
	43	134	32.48*	4300	1.15	**SA**	**47**	**DRS**	**80S4**	21	569
	49	120	29.00*	4220	1.30	**SAF**	**47**	**DRS**	**80S4**	22	568
	57	103	24.77	4100	1.50						
	61	97	23.20*	4040	1.55						
	69	91	20.33	3590	1.20						
	80	79	17.62	3520	1.40						
	86	74	16.47*	3480	1.50						
	99	64	14.24	3390	1.70						
	117	55	12.10*	3290	2.00	**S**	**47**	**DRS**	**80S4**	20	567
	131	49	10.80*	3210	2.2	**SF**	**47**	**DRS**	**80S4**	23	568
	153	42	9.23*	3100	2.6	**SA**	**47**	**DRS**	**80S4**	21	569
	163	40	8.64*	3060	2.8	**SAF**	**47**	**DRS**	**80S4**	22	568
	194	34	7.28	2930	3.1						
	219	30	6.40*	2830	2.5						
	260	25	5.39	2710	2.9						
	294	22	4.76	2620	3.2						
	350	19	4.00*	2500	3.7						
	74	80	19.13*	2260	0.90						
	113	56	12.48*	1930	0.85						
	129	49	10.91	1920	1.00						
	138	46	10.23	1900	1.00						
	156	41	9.02*	1880	1.10	**S**	**37**	**DRS**	**80S4**	17	563
	176	36	8.00*	1850	1.25	**SF**	**37**	**DRS**	**80S4**	18	564
	207	31	6.80*	1810	1.40	**SA**	**37**	**DRS**	**80S4**	16	565
	221	30	6.33	1760	1.20	**SAF**	**37**	**DRS**	**80S4**	18	564
	260	25	5.38	1720	1.35						
	288	23	4.86*	1680	1.45						
	353	19	3.97	1620	1.70						
	146	41	19.13*	2070	1.05						
	180	36	15.53	1850	1.20						
	209	31	13.39	1810	1.35						
	224	29	12.48*	1790	1.40	**S**	**37**	**DRS**	**80S2**	17	563
	257	25	10.91	1740	1.55	**SF**	**37**	**DRS**	**80S2**	18	564
	274	24	10.23	1720	1.60	**SA**	**37**	**DRS**	**80S2**	16	565
	310	21	9.02*	1680	1.70	**SAF**	**37**	**DRS**	**80S2**	18	564
	350	19	8.00*	1640	1.85						
	412	16	6.80*	1580	1.80						
1.1	**1.7**	4740	824	22900	0.90						
	2.0	3380	714	34400	1.25	**S**	**97R57**	**DRS**	**80M4**	175	597
	2.2	3600	626	34000	1.15	**SF**	**97R57**	**DRS**	**80M4**	210	597
	2.6	3100	538	34800	1.35	**SA**	**97R57**	**DRS**	**80M4**	170	597
	2.9	2800	484	35200	1.50	**SAF**	**97R57**	**DRS**	**80M4**	195	597
	3.4	2430	420	35700	1.75						



S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**2.3**	2820	624	25200	0.90						
	2.5	2550	558	27400	1.00						
	2.9	2240	485	28000	1.10						
	3.2	2040	435	28400	1.20	**S**	**87R57**	**DRS**	**80M4**	115	597
	3.7	1790	378	28800	1.35	**SF**	**87R57**	**DRS**	**80M4**	135	597
	4.4	1560	323	29100	1.55	**SA**	**87R57**	**DRS**	**80M4**	115	597
	5.0	1370	281	29300	1.75	**SAF**	**87R57**	**DRS**	**80M4**	130	597
	5.5	1460	255	29200	1.35						
	6.4	1280	222	29400	1.55						
	6.9	1200	205	29500	1.65						
	6.4	1240	219	11900	1.00	**S**	**77R37**	**DRS**	**80M4**	67	597
						SF	**77R37**	**DRS**	**80M4**	77	597
						SA	**77R37**	**DRS**	**80M4**	67	597
						SAF	**77R37**	**DRS**	**80M4**	73	597
	3.2	2280	286.40*	35900	1.85	**S**	**97**	**DRS**	**90L6**	160	592
	3.6	2100	262.22	36100	2.00	**SF**	**97**	**DRS**	**90L6**	190	593
	4.0	1880	231.67	36300	2.2	**SA**	**97**	**DRS**	**90L6**	155	594
						SAF	**97**	**DRS**	**90L6**	180	593
	3.6	1980	258.18	28500	1.20	**S**	**87**	**DRS**	**90L6**	100	587
	4.2	1730	222.40*	28800	1.40	**SF**	**87**	**DRS**	**90L6**	120	588
	4.6	1600	202.96	29000	1.50	**SA**	**87**	**DRS**	**90L6**	98	589
						SAF	**87**	**DRS**	**90L6**	115	588
	4.9	1500	288.00*	29200	1.50						
	5.5	1360	258.18	29300	1.65	**S**	**87**	**DRS**	**80M4**	94	587
	6.3	1190	222.40*	29500	1.90	**SF**	**87**	**DRS**	**80M4**	115	588
	7.0	1090	202.96	29600	2.1	**SA**	**87**	**DRS**	**80M4**	91	589
	7.8	980	180.00*	29700	2.2	**SAF**	**87**	**DRS**	**80M4**	110	588
	9.3	830	151.30	29800	2.6						
	6.3	1130	225.26	12800	1.10						
	6.6	1080	214.00*	13200	1.15						
	7.5	970	189.09	14000	1.30						
	8.7	840	161.60*	14700	1.50	**S**	**77**	**DRS**	**80M4**	58	582
	9.5	780	148.15	15000	1.60	**SF**	**77**	**DRS**	**80M4**	68	583
	11	690	130.00*	15400	1.75	**SA**	**77**	**DRS**	**80M4**	57	584
	11	655	123.20*	15500	1.80	**SAF**	**77**	**DRS**	**80M4**	64	583
	13	580	107.83	15800	2.0						
	15	525	97.14	15900	2.2						
	17	465	85.22	16000	2.3						
	12	600	121.33	7830	0.85						
	13	535	106.75*	8520	0.95						
	14	505	100.80*	8770	1.00						
	16	440	85.83	9320	1.20						
	18	400	78.00*	9560	1.30						
	21	395	65.63	9620	1.20	**S**	**67**	**DRS**	**80M4**	37	577
	23	375	62.35*	9730	1.30	**SF**	**67**	**DRS**	**80M4**	43	578
	26	330	54.70	9550	1.45	**SA**	**67**	**DRS**	**80M4**	38	579
	30	280	46.40*	9230	1.70	**SAF**	**67**	**DRS**	**80M4**	42	578
	34	255	41.89	9020	1.85						
	38	225	36.85	8760	2.1						
	41	215	34.80*	8640	2.2						
	48	186	29.63	8320	2.6						
	20	355	71.75*	6500	0.80	**S**	**57**	**DRS**	**80M4**	26	572
	21	335	67.20*	6730	0.85	**SF**	**57**	**DRS**	**80M4**	30	573
	25	285	56.61	7190	0.90	**SA**	**57**	**DRS**	**80M4**	26	574
	30	280	47.32	7240	0.85	**SAF**	**57**	**DRS**	**80M4**	29	573
	32	265	44.22*	7370	0.90						
	37	230	38.23	7400	1.05						
	43	198	32.48*	7160	1.25						
	49	178	29.00*	6990	1.40						
	57	153	24.77	6750	1.60						
	61	144	23.20*	6650	1.70	**S**	**57**	**DRS**	**80M4**	26	572
	72	122	19.54	6380	1.75	**SF**	**57**	**DRS**	**80M4**	30	573
	80	116	17.62	5860	1.45	**SA**	**57**	**DRS**	**80M4**	26	574
	86	109	16.47*	5780	1.55	**SAF**	**57**	**DRS**	**80M4**	29	573
	99	95	14.24	5600	1.80						
	117	81	12.10*	5390	2.1						
	131	72	10.80*	5250	2.3						
	153	62	9.23*	5040	2.7						

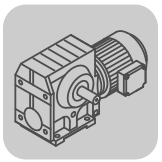
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**49**	176	29.00*	3720	0.90						
	57	152	24.77	3670	1.00	**S**	**47**	**DRS**	**80M4**	22	567
	61	142	23.20*	3640	1.05	**SF**	**47**	**DRS**	**80M4**	26	568
	72	121	19.54	3560	1.20	**SA**	**47**	**DRS**	**80M4**	23	569
	80	116	17.62	3070	0.95	**SAF**	**47**	**DRS**	**80M4**	25	568
	86	109	16.47*	3060	1.00						
	99	94	14.24	3030	1.15						
	117	81	12.10*	2980	1.35						
	131	72	10.80*	2940	1.50						
	153	62	9.23*	2860	1.75	**S**	**47**	**DRS**	**80M4**	22	567
	163	58	8.64*	2830	1.85	**SF**	**47**	**DRS**	**80M4**	26	568
	194	49	7.28	2750	2.1	**SA**	**47**	**DRS**	**80M4**	23	569
	220	44	6.40*	2650	1.75	**SAF**	**47**	**DRS**	**80M4**	25	568
	262	37	5.39	2560	2.0						
	296	33	4.76	2490	2.2						
	352	28	4.00*	2390	2.5						
	176	54	8.00*	1580	0.85						
	207	46	6.80*	1580	0.95	**S**	**37**	**DRS**	**80M4**	19	563
	223	43	6.33	1540	0.80	**SF**	**37**	**DRS**	**80M4**	21	564
	262	37	5.38	1520	0.95	**SA**	**37**	**DRS**	**80M4**	19	565
	290	33	4.86*	1510	1.00	**SAF**	**37**	**DRS**	**80M4**	21	564
	356	27	3.97	1470	1.20						
	212	45	13.39	1580	0.90						
	228	42	12.48*	1580	0.95	**S**	**37**	**DRS**	**80M2**	19	563
	260	37	10.91	1560	1.05	**SF**	**37**	**DRS**	**80M2**	21	564
	278	34	10.23	1550	1.10	**SA**	**37**	**DRS**	**80M2**	19	565
	315	30	9.02*	1520	1.20	**SAF**	**37**	**DRS**	**80M2**	21	564
	355	27	8.00*	1500	1.30						
	418	23	6.80*	1460	1.25						
1.5	**2.0**	4670	714	27700	0.90						
	2.2	4980	626	14100	0.85						
	2.6	4290	538	30000	1.00	**S**	**97R57**	**DRS**	**90M4**	180	597
	2.9	3870	484	33400	1.10	**SF**	**97R57**	**DRS**	**90M4**	215	597
	3.3	3370	420	34400	1.25	**SA**	**97R57**	**DRS**	**90M4**	175	597
	3.7	3040	376	34900	1.40	**SAF**	**97R57**	**DRS**	**90M4**	200	597
	4.3	2670	327	35400	1.55						
	2.9	3110	485	14900	0.80						
	3.2	2820	435	25200	0.85						
	3.7	2490	378	27500	1.00	**S**	**87R57**	**DRS**	**90M4**	120	597
	4.3	2160	323	28200	1.10	**SF**	**87R57**	**DRS**	**90M4**	140	597
	5.0	1900	281	28600	1.25	**SA**	**87R57**	**DRS**	**90M4**	120	597
	5.5	2030	255	28400	0.95	**SAF**	**87R57**	**DRS**	**90M4**	135	597
	6.3	1780	222	28800	1.10						
	6.8	1660	205	28900	1.20						
	3.2	3130	286.40*	34800	1.35	**S**	**97**	**DRS**	**100M6**	165	592
	3.5	2890	262.22	35100	1.45	**SF**	**97**	**DRS**	**100M6**	195	593
	4.0	2580	231.67	35500	1.65	**SA**	**97**	**DRS**	**100M6**	160	594
	4.7	2220	196.52	35900	1.90	**SAF**	**97**	**DRS**	**100M6**	185	593
	4.9	2140	286.40*	36000	1.85	**S**	**97**	**DRS**	**90M4**	155	592
	5.3	1980	262.22	36200	2.0	**SF**	**97**	**DRS**	**90M4**	190	593
	6.0	1760	231.67	36400	2.3	**SA**	**97**	**DRS**	**90M4**	150	594
	7.1	1510	196.52	36600	2.6	**SAF**	**97**	**DRS**	**90M4**	175	593
	3.6	2720	258.18	26800	0.90	**S**	**87**	**DRS**	**100M6**	105	587
	4.2	2380	222.40*	27700	1.00	**SF**	**87**	**DRS**	**100M6**	125	588
	4.6	2190	202.96	28100	1.10	**SA**	**87**	**DRS**	**100M6**	105	589
	5.1	1960	180.00*	28500	1.20	**SAF**	**87**	**DRS**	**100M6**	120	588
	4.9	2060	288.00*	28300	1.10						
	5.4	1870	258.18	28600	1.20						
	6.3	1630	222.40*	29000	1.40						
	6.9	1500	202.96	29200	1.50	**S**	**87**	**DRS**	**90M4**	98	587
	7.8	1340	180.00*	29300	1.65	**SF**	**87**	**DRS**	**90M4**	120	588
	9.2	1140	151.30	29600	1.85	**SA**	**87**	**DRS**	**90M4**	95	589
	10	1060	139.05	29600	2.00	**SAF**	**87**	**DRS**	**90M4**	110	588
	11	950	123.48	29700	2.2						
	13	850	110.40*	29800	2.3						
	14	775	99.26	29900	2.5						



S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.5	**7.4**	1330	189.09	10100	0.95						
	8.7	1150	161.60*	12700	1.10						
	9.4	1070	148.15	13300	1.15						
	11	950	130.00*	14100	1.25						
	11	900	123.20*	14400	1.35						
	13	800	107.83	14900	1.45						
	14	725	97.14	15200	1.55	**S**	**77**	**DRS**	**90M4**	62	582
	16	640	85.22	15400	1.70	**SF**	**77**	**DRS**	**90M4**	71	583
	19	650	75.09	14200	1.70	**SA**	**77**	**DRS**	**90M4**	61	584
	20	620	71.33	14000	1.75	**SAF**	**77**	**DRS**	**90M4**	68	583
	21	510	66.67	14600	2.0						
	22	550	63.03	13700	2.00						
	25	440	56.92	14000	2.2						
	26	475	53.87	13200	2.3						
	28	435	49.38	13000	2.5						
	32	385	43.33	12600	2.8						
	16	600	85.83	7800	0.85	**S**	**67**	**DRS**	**90M4**	42	577
	18	550	78.00*	8350	0.95	**SF**	**67**	**DRS**	**90M4**	48	578
	21	540	65.63	8470	0.90	**SA**	**67**	**DRS**	**90M4**	43	579
						SAF	**67**	**DRS**	**90M4**	47	578
	22	515	62.35*	8710	0.95						
	26	455	54.70	8810	1.05						
	30	390	46.40*	8600	1.25						
	33	355	41.89	8460	1.35						
	38	310	36.85	8260	1.55						
	40	295	34.80*	8170	1.60	**S**	**67**	**DRS**	**90M4**	42	577
	47	255	29.63	7910	1.90	**SF**	**67**	**DRS**	**90M4**	48	578
	52	230	26.93	7750	2.1	**SA**	**67**	**DRS**	**90M4**	43	579
	57	220	24.44	7010	1.50	**SAF**	**67**	**DRS**	**90M4**	47	578
	60	210	23.22*	6950	1.60						
	69	188	20.37	6800	1.80						
	81	160	17.28*	6580	2.1						
	90	145	15.60*	6450	2.4						
	102	128	13.73*	6270	2.7						
	43	270	32.48*	6640	0.90						
	48	240	29.00*	6520	1.00						
	57	210	24.77	6350	1.15						
	60	198	23.20*	6280	1.25						
	72	168	19.54	6070	1.30	**S**	**57**	**DRS**	**90M4**	30	572
	79	160	17.62	5430	1.05	**SF**	**57**	**DRS**	**90M4**	34	573
	85	150	16.47*	5380	1.10	**SA**	**57**	**DRS**	**90M4**	30	574
	98	130	14.24	5260	1.30	**SAF**	**57**	**DRS**	**90M4**	33	573
	116	111	12.10*	5100	1.50						
	130	100	10.80*	4990	1.70						
	152	85	9.23*	4830	2.00						
	98	130	14.24	2610	0.85	**S**	**47**	**DRS**	**90M4**	27	567
	116	111	12.10*	2620	1.00	**SF**	**47**	**DRS**	**90M4**	30	568
	130	99	10.80*	2620	1.10	**SA**	**47**	**DRS**	**90M4**	28	569
						SAF	**47**	**DRS**	**90M4**	29	568
	152	85	9.23*	2600	1.30						
	162	80	8.64*	2580	1.35						
	192	68	7.28	2530	1.50	**S**	**47**	**DRS**	**90M4**	27	567
	218	60	6.40*	2460	1.25	**SF**	**47**	**DRS**	**90M4**	30	568
	259	51	5.39	2400	1.45	**SA**	**47**	**DRS**	**90M4**	28	569
	293	45	4.76	2350	1.60	**SAF**	**47**	**DRS**	**90M4**	29	568
	349	38	4.00*	2270	1.85						
	314	42	9.02*	1350	0.85	**S**	**37**	**DRS**	**90M2**	24	563
	354	37	8.00*	1350	0.95	**SF**	**37**	**DRS**	**90M2**	25	564
	416	32	6.80*	1330	0.90	**SA**	**37**	**DRS**	**90M2**	23	565
						SAF	**37**	**DRS**	**90M2**	25	564
2.2	**3.3**	4970	420	14200	0.85	**S**	**97R57**	**DRS**	**90L4**	185	597
	3.7	4490	376	27100	0.95	**SF**	**97R57**	**DRS**	**90L4**	215	597
	4.3	3930	327	33300	1.05	**SA**	**97R57**	**DRS**	**90L4**	180	597
	4.9	3480	287	34200	1.20	**SAF**	**97R57**	**DRS**	**90L4**	205	597
	5.6	3050	252	34900	1.40						
	3.3	4460	286.40*	31100	0.95	**S**	**97**	**DRS**	**112M6**	180	592
	3.6	4110	262.22	32900	1.00	**SF**	**97**	**DRS**	**112M6**	210	593
	4.1	3670	231.67	33800	1.15	**SA**	**97**	**DRS**	**112M6**	175	594
	4.9	3160	196.52	34700	1.35	**SAF**	**97**	**DRS**	**112M6**	200	593

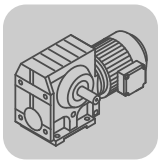
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
2.2	**4.9**	3140	286.40*	34700	1.25						
	5.3	2900	262.22	35100	1.40						
	6.0	2590	231.67	35500	1.55						
	7.1	2220	196.52	35900	1.80						
	7.7	2060	180.95	36100	1.90	**S**	**97**	**DRS**	**90L4**	160	592
	8.7	1850	161.74	36300	2.1	**SF**	**97**	**DRS**	**90L4**	190	593
	9.6	1680	145.60*	36400	2.2	**SA**	**97**	**DRS**	**90L4**	155	594
	11	1530	131.85	36600	2.4	**SAF**	**97**	**DRS**	**90L4**	180	593
	12	1360	116.92	36700	2.6						
	13	1240	105.71	36700	2.8						
	16	1060	89.60*	36800	3.0						
	5.4	2740	258.18	26500	0.85						
	6.3	2400	222.40*	27700	0.95						
	6.9	2200	202.96	28100	1.00						
	7.8	1970	180.00*	28500	1.10						
	9.2	1680	151.30	28900	1.30						
	10	1550	139.05	29100	1.35						
	11	1390	123.48	29300	1.45	**S**	**87**	**DRS**	**90L4**	100	587
	13	1250	110.40*	29400	1.60	**SF**	**87**	**DRS**	**90L4**	120	588
	14	1130	99.26	29600	1.70	**SA**	**87**	**DRS**	**90L4**	98	589
	16	990	86.15	29700	1.90	**SAF**	**87**	**DRS**	**90L4**	115	588
	17	1060	81.76	29600	1.50						
	18	890	77.14	29800	2.0						
	20	920	70.43	29700	1.75						
	22	840	64.27	29800	1.90						
	25	755	57.00*	29900	2.1						
	11	1390	130.00*	5060	0.85						
	11	1320	123.20*	10600	0.90						
	13	1170	107.83	12500	1.00						
	14	1060	97.14	13400	1.05						
	16	940	85.22	14100	1.15						
	19	840	75.20*	13800	1.25						
	21	750	66.67	13500	1.40						
	22	810	63.03	12400	1.35						
	25	645	56.92	13100	1.55	**S**	**77**	**DRS**	**90L4**	64	582
	26	695	53.87	12100	1.60	**SF**	**77**	**DRS**	**90L4**	74	583
	28	640	49.38	12000	1.70	**SA**	**77**	**DRS**	**90L4**	64	584
	32	565	43.33	11700	1.95	**SAF**	**77**	**DRS**	**90L4**	70	583
	34	535	41.07	11600	2.0						
	39	470	35.94	11300	2.3						
	43	425	32.38	11100	2.6						
	49	375	28.41	10800	2.8						
	56	330	25.07	10500	3.1						
	61	310	22.89	9500	2.2						
	67	285	20.99	9350	2.4						
	30	570	46.40*	7480	0.85						
	33	520	41.89	7440	0.90						
	38	460	36.85	7360	1.05						
	40	435	34.80*	7320	1.10						
	47	370	29.63	7180	1.30						
	52	340	26.93	7090	1.40						
	60	295	23.33	6930	1.60	**S**	**67**	**DRS**	**90L4**	44	577
	69	275	20.37	6060	1.25	**SF**	**67**	**DRS**	**90L4**	51	578
	81	230	17.28*	5960	1.45	**SA**	**67**	**DRS**	**90L4**	45	579
	90	210	15.60*	5880	1.60	**SAF**	**67**	**DRS**	**90L4**	50	578
	102	188	13.73*	5770	1.80						
	108	177	12.96*	5720	1.90						
	127	152	11.03	5560	2.2						
	140	138	10.03	5460	2.5						
	161	120	8.69	5300	2.8						
	98	191	14.24	4640	0.90						
	116	163	12.10*	4580	1.05						
	130	146	10.80*	4520	1.15						
	152	125	9.23*	4430	1.35	**S**	**57**	**DRS**	**90L4**	33	572
	162	118	8.64*	4380	1.40	**SF**	**57**	**DRS**	**90L4**	37	573
	192	99	7.28	4260	1.45	**SA**	**57**	**DRS**	**90L4**	33	574
	219	88	6.40*	4110	1.10	**SAF**	**57**	**DRS**	**90L4**	35	573
	260	75	5.39	3970	1.25						
	294	66	4.76	3870	1.40						
	350	56	4.00*	3720	1.60						



S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
3.0	**4.9**	4750	287	22900	0.90	**S**	**97R57**	**DRS**	**100M4**	190	597
	5.6	4170	252	31900	1.00	**SF**	**97R57**	**DRS**	**100M4**	220	597
	6.4	3650	219	33900	1.15	**SA**	**97R57**	**DRS**	**100M4**	180	597
	6.8	3430	205	34300	1.20	**SAF**	**97R57**	**DRS**	**100M4**	210	597
	4.9	4290	286.40*	32600	0.95						
	5.3	3960	262.22	33300	1.00						
	6.0	3530	231.67	34100	1.15						
	7.1	3030	196.52	34900	1.30						
	7.7	2810	180.95	35200	1.40	**S**	**97**	**DRS**	**100M4**	165	592
	8.7	2530	161.74	35600	1.50	**SF**	**97**	**DRS**	**100M4**	195	593
	9.6	2290	145.60*	35900	1.65	**SA**	**97**	**DRS**	**100M4**	160	594
	11	2090	131.85	36100	1.75	**SAF**	**97**	**DRS**	**100M4**	185	593
	12	1860	116.92	36300	1.90						
	13	1690	105.71	36400	2.0						
	16	1450	89.60*	36600	2.2						
	17	1470	80.85	36600	2.2						
	7.8	2690	180.00*	27100	0.80						
	9.2	2290	151.30	27900	0.95						
	10	2120	139.05	28200	1.00						
	11	1900	123.48	28600	1.10						
	13	1710	110.40*	28900	1.15						
	14	1550	99.26	29100	1.25						
	16	1360	86.15	29300	1.40	**S**	**87**	**DRS**	**100M4**	105	587
	17	1450	81.76	29200	1.10	**SF**	**87**	**DRS**	**100M4**	125	588
	18	1220	77.14	29500	1.50	**SA**	**87**	**DRS**	**100M4**	105	589
	20	1260	70.43	29400	1.25	**SAF**	**87**	**DRS**	**100M4**	120	588
	22	1150	64.27	29500	1.40						
	25	1020	57.00*	29600	1.55						
	29	870	47.91	29800	1.85						
	32	800	44.03	29800	2.00						
	36	715	39.10	29900	2.2						
	40	640	34.96*	29900	2.5						
	16	1280	85.22	11500	0.85	**S**	**77**	**DRS**	**100M4**	69	582
	19	1140	75.20*	12500	0.95	**SF**	**77**	**DRS**	**100M4**	79	583
	21	1020	66.67	12400	1.00	**SA**	**77**	**DRS**	**100M4**	69	584
	22	1100	63.03	10900	1.00	**SAF**	**77**	**DRS**	**100M4**	75	583
	25	880	56.92	12100	1.10						
	26	950	53.87	10800	1.15						
	28	870	49.38	10800	1.25						
	32	770	43.33	10700	1.40						
	34	730	41.07	10600	1.50						
	39	640	35.94	10400	1.70						
	43	580	32.38	10300	1.85						
	49	510	28.41	10100	2.0	**S**	**77**	**DRS**	**100M4**	69	582
	56	455	25.07	9840	2.2	**SF**	**77**	**DRS**	**100M4**	79	583
	61	425	22.89	8680	1.65	**SA**	**77**	**DRS**	**100M4**	69	584
	67	390	20.99	8590	1.80	**SAF**	**77**	**DRS**	**100M4**	75	583
	76	345	18.42	8450	2.0						
	80	325	17.45	8390	2.2						
	92	285	15.28	8210	2.5						
	102	260	13.76	8060	2.7						
	116	225	12.07	7870	3.1						
	131	200	10.65	7670	3.6						
	40	595	34.80*	6350	0.80	**S**	**67**	**DRS**	**100M4**	49	577
	47	510	29.63	6350	0.95	**SF**	**67**	**DRS**	**100M4**	56	578
	52	465	26.93	6330	1.05	**SA**	**67**	**DRS**	**100M4**	50	579
						SAF	**67**	**DRS**	**100M4**	55	578
	60	405	23.33	6270	1.20						
	69	375	20.37	5230	0.90						
	81	315	17.28*	5250	1.05						
	90	285	15.60*	5240	1.15	**S**	**67**	**DRS**	**100M4**	49	577
	102	255	13.73*	5210	1.35	**SF**	**67**	**DRS**	**100M4**	56	578
	108	240	12.96*	5180	1.40	**SA**	**67**	**DRS**	**100M4**	50	579
	127	205	11.03	5100	1.65	**SAF**	**67**	**DRS**	**100M4**	55	578
	140	188	10.03	5040	1.80						
	161	164	8.69	4940	2.0						
	185	143	7.56*	4830	2.1						

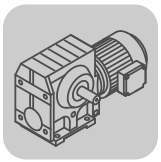
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
3.0	**130**	199	10.80*	3990	0.85						
	152	171	9.23*	3970	1.00						
	162	160	8.64*	3960	1.05	**S**	**57**	**DRS**	**100M4**	38	572
	192	136	7.28	3900	1.10	**SF**	**57**	**DRS**	**100M4**	42	573
	219	120	6.40*	3770	0.80	**SA**	**57**	**DRS**	**100M4**	38	574
	260	102	5.39	3690	0.95	**SAF**	**57**	**DRS**	**100M4**	41	573
	294	90	4.76	3620	1.05						
	350	76	4.00*	3510	1.20						
4.0						**S**	**97R57**	**DRS**	**100LC4**	195	597
	6.6	4730	219	23300	0.90	**SF**	**97R57**	**DRS**	**100LC4**	225	597
	7.0	4450	205	27800	0.95	**SA**	**97R57**	**DRS**	**100LC4**	185	597
						SAF	**97R57**	**DRS**	**100LC4**	215	597
	6.2	4570	231.67	29500	0.85						
	7.4	3920	196.52	33300	1.00						
	8.0	3630	180.95	33900	1.10						
	8.9	3270	161.74	34500	1.15						
	9.9	2970	145.60*	35000	1.25						
	11	2700	131.85	35400	1.35	**S**	**97**	**DRS**	**100LC4**	170	592
	12	2410	116.92	35700	1.45	**SF**	**97**	**DRS**	**100LC4**	200	593
	14	2190	105.71	36000	1.55	**SA**	**97**	**DRS**	**100LC4**	165	594
	16	1870	89.60*	36300	1.75	**SAF**	**97**	**DRS**	**100LC4**	190	593
	18	1900	80.85	36300	1.70						
	20	1690	71.43	36400	1.95						
	24	1440	60.59	36600	2.3						
	26	1330	55.79	36700	2.5						
	12	2460	123.48	27600	0.85						
	13	2220	110.40*	28100	0.90						
	15	2010	99.26	28400	0.95						
	17	1760	86.15	28800	1.05						
	19	1580	77.14	29100	1.15						
	21	1630	70.43	29000	1.00						
	22	1490	64.27	29200	1.05	**S**	**87**	**DRS**	**100LC4**	110	587
	25	1330	57.00*	29300	1.20	**SF**	**87**	**DRS**	**100LC4**	130	588
	30	1120	47.91	29600	1.40	**SA**	**87**	**DRS**	**100LC4**	110	589
	33	1030	44.03	29600	1.55	**SAF**	**87**	**DRS**	**100LC4**	125	588
	37	920	39.10	29700	1.75						
	41	820	34.96*	29700	1.95						
	46	745	31.43	29000	2.1						
	53	650	27.28	28100	2.5						
	57	620	25.50*	26500	2.00						
	25	1140	56.92	10800	0.85	**S**	**77**	**DRS**	**100LC4**	74	582
	27	1230	53.87	9270	0.90	**SF**	**77**	**DRS**	**100LC4**	84	583
	29	1130	49.38	9330	0.95	**SA**	**77**	**DRS**	**100LC4**	74	584
	33	990	43.33	9370	1.10	**SAF**	**77**	**DRS**	**100LC4**	80	583
	35	940	41.07	9370	1.15						
	40	830	35.94	9340	1.30						
	45	750	32.38	9280	1.45						
	51	660	28.41	9170	1.60						
	58	585	25.07	9050	1.75						
	63	550	22.89	7650	1.25						
	69	505	20.99	7640	1.40	**S**	**77**	**DRS**	**100LC4**	74	582
	78	445	18.42	7610	1.55	**SF**	**77**	**DRS**	**100LC4**	84	583
	83	425	17.45	7580	1.65	**SA**	**77**	**DRS**	**100LC4**	74	584
	95	370	15.28	7500	1.90	**SAF**	**77**	**DRS**	**100LC4**	80	583
	105	335	13.76	7410	2.1						
	120	295	12.07	7290	2.4						
	136	260	10.65	7150	2.8						
	153	230	9.44	7010	3.1						
	179	199	8.06	6800	3.4						
	84	410	17.28*	3870	0.80						
	93	370	15.60*	4240	0.90						
	105	330	13.73*	4510	1.05	**S**	**67**	**DRS**	**100LC4**	54	577
	112	310	12.96*	4520	1.10	**SF**	**67**	**DRS**	**100LC4**	61	578
	131	265	11.03	4530	1.25	**SA**	**67**	**DRS**	**100LC4**	55	579
	144	240	10.03	4520	1.40	**SAF**	**67**	**DRS**	**100LC4**	60	578
	166	210	8.69	4480	1.60						
	191	184	7.56*	4420	1.60						



S..DRS
S..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
5.5	**8.9**	4500	161.74	30600	0.85						
	9.9	4080	145.60*	33000	0.90						
	11	3720	131.85	33700	1.00						
	12	3320	116.92	34500	1.05						
	14	3020	105.71	34900	1.15						
	16	2580	89.60*	35500	1.25	**S**	**97**	**DRS**	**132S4**	185	592
	18	2260	78.26	35900	1.35	**SF**	**97**	**DRS**	**132S4**	215	593
	20	2320	71.43	35800	1.40	**SA**	**97**	**DRS**	**132S4**	180	594
	22	1910	65.45	36200	1.50	**SAF**	**97**	**DRS**	**132S4**	205	593
	24	1980	60.59	36200	1.65						
	26	1820	55.79	36300	1.80						
	29	1630	49.87	36500	2.0						
	32	1480	44.89	36600	2.2						
	36	1340	40.65	36700	2.5						
	19	2180	77.14	28100	0.85	**S**	**87**	**DRS**	**132S4**	125	587
	23	1820	64.00*	28700	0.95	**SF**	**87**	**DRS**	**132S4**	145	588
	25	1830	57.00*	28700	0.85	**SA**	**87**	**DRS**	**132S4**	125	589
	30	1540	47.91	29100	1.05	**SAF**	**87**	**DRS**	**132S4**	140	588
	33	1420	44.03	29200	1.10						
	37	1270	39.10	29100	1.25						
	41	1140	34.96*	28500	1.40						
	46	1020	31.43	27900	1.55						
	53	890	27.28	27100	1.80						
	57	850	25.50*	25200	1.45	**S**	**87**	**DRS**	**132S4**	125	587
	67	720	21.43	24400	1.70	**SF**	**87**	**DRS**	**132S4**	145	588
	73	665	19.70	24000	1.85	**SA**	**87**	**DRS**	**132S4**	125	589
	83	590	17.49	23500	2.1	**SAF**	**87**	**DRS**	**132S4**	140	588
	92	530	15.64*	22900	2.3						
	103	475	14.06	22400	2.6						
	118	415	12.21	21700	3.0						
	132	370	10.93	21200	3.3						
	35	1300	41.07	7580	0.85	**S**	**77**	**DRS**	**132S4**	89	582
	40	1140	35.94	7760	0.95	**SF**	**77**	**DRS**	**132S4**	99	583
	45	1030	32.38	7860	1.05	**SA**	**77**	**DRS**	**132S4**	89	584
						SAF	**77**	**DRS**	**132S4**	95	583
	51	910	28.41	7920	1.15						
	58	800	25.07	7940	1.25						
	65	715	22.22	7920	1.35						
	78	615	18.42	5960	1.15						
	83	580	17.45	6210	1.20	**S**	**77**	**DRS**	**132S4**	89	582
	95	510	15.28	6490	1.40	**SF**	**77**	**DRS**	**132S4**	99	583
	105	460	13.76	6510	1.55	**SA**	**77**	**DRS**	**132S4**	89	584
	120	405	12.07	6490	1.75	**SAF**	**77**	**DRS**	**132S4**	95	583
	136	360	10.65	6450	2.0						
	153	320	9.44	6380	2.3						
	179	270	8.06	6270	2.5						
	131	365	11.03	2960	0.95	**S**	**67**	**DRS**	**132S4**	69	577
	144	330	10.03	3290	1.00	**SF**	**67**	**DRS**	**132S4**	76	578
	166	290	8.69	3700	1.15	**SA**	**67**	**DRS**	**132S4**	70	579
	191	250	7.56*	3850	1.15	**SAF**	**67**	**DRS**	**132S4**	75	578
7.5	**14**	4120	105.71	32900	0.85						
	16	3520	89.60*	34100	0.90						
	18	3090	78.26	34800	1.00						
	20	3160	71.43	34700	1.05						
	22	2600	65.45	35500	1.10						
	24	2700	60.59	35400	1.20						
	26	2490	55.79	35600	1.30	**S**	**97**	**DRS**	**132M4**	195	592
	29	2230	49.87	35900	1.50	**SF**	**97**	**DRS**	**132M4**	230	593
	32	2010	44.89	36100	1.65	**SA**	**97**	**DRS**	**132M4**	190	594
	36	1830	40.65	36300	1.80	**SAF**	**97**	**DRS**	**132M4**	215	593
	40	1620	36.05	36100	2.0						
	44	1470	32.60	35400	2.2						
	55	1220	26.39	32000	2.1						
	61	1100	23.59	31300	2.4						
	68	990	21.23	30700	2.6						
	75	900	19.23	30100	2.9						
	33	1940	44.03	27800	0.80	**S**	**87**	**DRS**	**132M4**	135	587
	37	1730	39.10	27400	0.90	**SF**	**87**	**DRS**	**132M4**	160	588
	41	1550	34.96*	26900	1.05	**SA**	**87**	**DRS**	**132M4**	135	589
						SAF	**87**	**DRS**	**132M4**	150	588

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
7.5	**46**	1400	31.43	26500	1.15						
	53	1220	27.28	25900	1.30						
	57	1170	25.50*	23500	1.05						
	67	980	21.43	23000	1.25						
	73	900	19.70	22700	1.35	**S**	**87**	**DRS**	**132M4**	135	587
	83	800	17.49	22300	1.55	**SF**	**87**	**DRS**	**132M4**	160	588
	92	720	15.64*	21900	1.70	**SA**	**87**	**DRS**	**132M4**	135	589
	103	650	14.06	21500	1.90	**SAF**	**87**	**DRS**	**132M4**	150	588
	118	565	12.21	20900	2.2						
	132	505	10.93	20400	2.4						
	159	420	9.07	19600	2.7						
	183	365	7.88	19000	2.7						
	51	1240	28.41	6260	0.85	**S**	**77**	**DRS**	**132M4**	100	582
	58	1100	25.07	6460	0.90	**SF**	**77**	**DRS**	**132M4**	110	583
	65	980	22.22	6610	1.00	**SA**	**77**	**DRS**	**132M4**	100	584
	78	840	18.42	1940	0.85	**SAF**	**77**	**DRS**	**132M4**	105	583
	83	795	17.45	2370	0.90						
	95	695	15.28	3310	1.00						
	105	630	13.76	3940	1.10	**S**	**77**	**DRS**	**132M4**	100	582
	120	555	12.07	4610	1.30	**SF**	**77**	**DRS**	**132M4**	110	583
	136	490	10.65	5140	1.45	**SA**	**77**	**DRS**	**132M4**	100	584
	153	435	9.44	5550	1.65	**SAF**	**77**	**DRS**	**132M4**	105	583
	179	370	8.06	5560	1.80						
9.2	**19**	3740	78.26	33700	0.80	**S**	**97**	**DRS**	**132MC4**	200	592
	22	3150	65.45	34700	0.90	**SF**	**97**	**DRS**	**132MC4**	230	593
	26	3010	55.79	34900	1.10	**SA**	**97**	**DRS**	**132MC4**	190	594
						SAF	**97**	**DRS**	**132MC4**	220	593
	29	2700	49.87	35400	1.20						
	33	2440	44.89	35700	1.35						
	36	2210	40.65	35600	1.50						
	41	1970	36.05	34900	1.65						
	45	1780	32.60	34300	1.80						
	56	1480	26.39	30600	1.75	**S**	**97**	**DRS**	**132MC4**	200	592
	62	1330	23.59	30100	1.95	**SF**	**97**	**DRS**	**132MC4**	230	593
	69	1200	21.23	29600	2.2	**SA**	**97**	**DRS**	**132MC4**	190	594
	76	1080	19.23	29100	2.4	**SAF**	**97**	**DRS**	**132MC4**	220	593
	86	960	17.05	28400	2.7						
	95	870	15.42	27900	2.8						
	112	740	13.07	26900	3.1						
	128	650	11.41	26100	3.4						
	42	1880	34.96*	25500	0.85	**S**	**87**	**DRS**	**132MC4**	140	587
	47	1690	31.43	25200	0.95	**SF**	**87**	**DRS**	**132MC4**	160	588
	54	1470	27.28	24700	1.10	**SA**	**87**	**DRS**	**132MC4**	135	589
	60	1320	24.43	24300	1.20	**SAF**	**87**	**DRS**	**132MC4**	155	588
	72	1100	20.27	23600	1.45						
	74	1100	19.70	21500	1.15						
	84	970	17.49	21200	1.25						
	94	870	15.64*	20900	1.40	**S**	**87**	**DRS**	**132MC4**	140	587
	104	790	14.06	20600	1.55	**SF**	**87**	**DRS**	**132MC4**	160	588
	120	685	12.21	20100	1.80	**SA**	**87**	**DRS**	**132MC4**	135	589
	134	615	10.93	19700	2.0	**SAF**	**87**	**DRS**	**132MC4**	155	588
	162	510	9.07	19100	2.2						
	186	445	7.88	18500	2.3						
	77	1010	18.97	5790	0.90						
	106	760	13.76	1480	0.95	**S**	**77**	**DRS**	**132MC4**	105	582
	121	670	12.07	2400	1.05	**SF**	**77**	**DRS**	**132MC4**	115	583
	138	590	10.65	3150	1.20	**SA**	**77**	**DRS**	**132MC4**	105	584
	155	525	9.44	3760	1.35	**SAF**	**77**	**DRS**	**132MC4**	110	583
	182	450	8.06	4420	1.50						



S..DRS
S..DRS [kW]

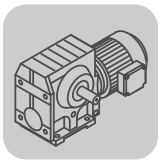
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
11.0	**26**	3620	55.79	33900	0.90						
	29	3240	49.87	34600	1.00						
	33	2930	44.89	34700	1.15						
	36	2660	40.65	34300	1.25						
	40	2360	36.05	33700	1.40						
	45	2140	32.60	33200	1.50	**S**	**97**	**DRS**	**160M4**	220	592
	55	1780	26.39	29300	1.45	**SF**	**97**	**DRS**	**160M4**	250	593
	62	1590	23.59	28900	1.65	**SA**	**97**	**DRS**	**160M4**	215	594
	69	1440	21.23	28500	1.80	**SAF**	**97**	**DRS**	**160M4**	240	593
	76	1300	19.23	28100	2.00						
	86	1160	17.05	27600	2.2						
	95	1050	15.42	27100	2.4						
	112	890	13.07	26300	2.6						
	128	780	11.41	25600	2.8						
	54	1770	27.28	23600	0.90	**S**	**87**	**DRS**	**160M4**	160	587
	60	1590	24.43	23400	1.00	**SF**	**87**	**DRS**	**160M4**	180	588
	72	1320	20.27	22800	1.20	**SA**	**87**	**DRS**	**160M4**	160	589
						SAF	**87**	**DRS**	**160M4**	175	588
	74	1310	19.70	20400	0.95						
	83	1170	17.49	20200	1.05						
	93	1050	15.64*	20000	1.20	**S**	**87**	**DRS**	**160M4**	160	587
	104	940	14.06	19800	1.30	**SF**	**87**	**DRS**	**160M4**	180	588
	120	820	12.21	19400	1.50	**SA**	**87**	**DRS**	**160M4**	160	589
	134	735	10.93	19100	1.70	**SAF**	**87**	**DRS**	**160M4**	175	588
	161	610	9.07	18500	1.85						
	185	535	7.88	18100	1.90						
15.0	**33**	3980	44.89	31400	0.85	**S**	**97**	**DRS**	**160MC4**	225	592
	36	3610	40.65	31300	0.90	**SF**	**97**	**DRS**	**160MC4**	255	593
	41	3210	36.05	31000	1.05	**SA**	**97**	**DRS**	**160MC4**	220	594
						SAF	**97**	**DRS**	**160MC4**	245	593
	45	2910	32.60	30700	1.10						
	56	2420	26.39	26400	1.05						
	62	2170	23.59	26300	1.20						
	69	1950	21.23	26200	1.35						
	76	1770	19.23	26000	1.45	**S**	**97**	**DRS**	**160MC4**	225	592
	86	1570	17.05	25700	1.65	**SF**	**97**	**DRS**	**160MC4**	255	593
	95	1420	15.42	25400	1.75	**SA**	**97**	**DRS**	**160MC4**	220	594
	112	1210	13.07	24800	1.90	**SAF**	**97**	**DRS**	**160MC4**	245	593
	128	1060	11.41	24300	2.1						
	153	880	9.55	23600	2.3						
	177	770	8.26	22900	2.3						
	94	1430	15.64*	16800	0.85	**S**	**87**	**DRS**	**160MC4**	165	587
	104	1280	14.06	17900	0.95	**SF**	**87**	**DRS**	**160MC4**	185	588
	120	1120	12.21	17800	1.10	**SA**	**87**	**DRS**	**160MC4**	165	589
						SAF	**87**	**DRS**	**160MC4**	180	588
	134	1000	10.93	17600	1.25	**S**	**87**	**DRS**	**160MC4**	165	587
	162	830	9.07	17300	1.35	**SF**	**87**	**DRS**	**160MC4**	185	588
	186	725	7.88	17000	1.40	**SA**	**87**	**DRS**	**160MC4**	165	589
						SAF	**87**	**DRS**	**160MC4**	180	588
18.5	**40**	3970	36.05	28700	0.85						
	45	3600	32.60	28600	0.90						
	53	3060	27.63	28400	1.00						
	60	2680	24.13	28100	1.05						
	69	2420	21.23	24100	1.05	**S**	**97**	**DRS**	**180M4**	270	592
	76	2190	19.23	24100	1.20	**SF**	**97**	**DRS**	**180M4**	300	593
	86	1950	17.05	24000	1.30	**SA**	**97**	**DRS**	**180M4**	265	594
	95	1760	15.42	23900	1.40	**SAF**	**97**	**DRS**	**180M4**	290	593
	112	1500	13.07	23500	1.55						
	128	1310	11.41	23200	1.70						
	153	1090	9.55	22600	1.85						
	177	950	8.26	22100	1.85						
22	**53**	3640	27.63	26600	0.85	**S**	**97**	**DRS**	**180L4**	290	592
	60	3190	24.13	26500	0.90	**SF**	**97**	**DRS**	**180L4**	320	593
	69	2880	21.23	18400	0.90	**SA**	**97**	**DRS**	**180L4**	285	594
	76	2610	19.23	20300	1.00	**SAF**	**97**	**DRS**	**180L4**	310	593
	86	2320	17.05	22200	1.10						

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
22	**95**	2100	15.42	22400	1.20	**S**	**97**	**DRS**	**180L4**	290	592
	112	1780	13.07	22300	1.30	**SF**	**97**	**DRS**	**180L4**	320	593
	128	1560	11.41	22100	1.40	**SA**	**97**	**DRS**	**180L4**	285	594
	153	1300	9.55	21700	1.55	**SAF**	**97**	**DRS**	**180L4**	310	593
	177	1130	8.26	21300	1.55						

12.4 S..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]						m [kg]	
92	**0.14**	10037	3000							
	0.16	8654	3000							
	0.17	8066	3000							
	0.20	7051	3000							
	0.23	6079	3000							
	0.25	5431	3000							
	0.29	4747	3000							
	0.33	4155	3000	**S**	**37R17**	**DR**	**63S4**		14	597
	0.38	3632	3000	**SF**	**37R17**	**DR**	**63S4**		15	597
	0.48	2866	3000	**SA**	**37R17**	**DR**	**63S4**		14	597
	0.56	2471	3000	**SAF**	**37R17**	**DR**	**63S4**		15	597
	0.64	2160	3000							
	0.73	1887	3000							
	0.83	1665	3000							
	0.95	1456	3000							
	1.1	1271	3000							
	1.2	1121	3000							
	1.4	994	3000							
	1.6	869	3000							
	1.8	774	3000							
	2.1	666	3000							
	2.3	596	3000							
	2.6	521	3000							
	3.0	456	3000	**S**	**37R17**	**DR**	**63S4**		14	597
	3.5	398	3000	**SF**	**37R17**	**DR**	**63S4**		15	597
	3.9	351	3000	**SA**	**37R17**	**DR**	**63S4**		13	597
	4.6	303	3000	**SAF**	**37R17**	**DR**	**63S4**		15	597
	5.2	265	3000							
	6.0	232	3000							
	6.8	202	3000							
	7.4	179	3000							
	8.3	158	3000	**S**	**37R17**	**DR**	**63M4**		14	597
	9.1	144	3000	**SF**	**37R17**	**DR**	**63M4**		15	597
	11	118	3000	**SA**	**37R17**	**DR**	**63M4**		13	597
	12	110	3000	**SAF**	**37R17**	**DR**	**63M4**		15	597
185	**0.11**	12909	5250							
	0.12	11189	5250							
	0.13	10374	5250							
	0.15	8992	5250							
	0.18	7860	5250							
	0.20	6887	5250							
	0.23	6055	5250							
	0.26	5292	5250							
	0.30	4637	5250							
	0.34	4092	5250	**S**	**47R17**	**DR**	**63S4**		17	597
	0.39	3582	5200	**SF**	**47R17**	**DR**	**63S4**		20	597
	0.44	3131	5200	**SA**	**47R17**	**DR**	**63S4**		18	597
	0.51	2714	5200	**SAF**	**47R17**	**DR**	**63S4**		20	597
	0.57	2412	5200							
	0.65	2131	5200							
	0.74	1863	5200							
	0.83	1663	5200							
	0.96	1435	5200							
	1.1	1254	5200							
	1.2	1120	5200							
	1.3	1083	5200							
	1.4	965	5200							
	1.6	865	5200							
	1.8	750	5200	**S**	**47R17**	**DR**	**63S4**		17	597
	2.1	655	5200	**SF**	**47R17**	**DR**	**63S4**		20	597
	2.4	574	5200	**SA**	**47R17**	**DR**	**63S4**		18	597
	2.7	506	5200	**SAF**	**47R17**	**DR**	**63S4**		19	597
	3.2	438	5200							
	3.6	388	5200							
				S	**47R17**	**DR**	**63M4**		17	597
	3.9	336	5200	**SF**	**47R17**	**DR**	**63M4**		20	597
	4.5	294	5200	**SA**	**47R17**	**DR**	**63M4**		18	597
				SAF	**47R17**	**DR**	**63M4**		19	597

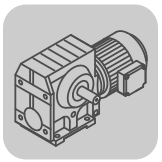
$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
185				**S**	**47R17**	**DR**	**63L4**	17	597
	5.0	257	5260	**SF**	**47R17**	**DR**	**63L4**	21	597
				SA	**47R17**	**DR**	**63L4**	18	597
				SAF	**47R17**	**DR**	**63L4**	20	597
				S	**47R17**	**DR**	**63M4**	17	597
	5.8	229	5200	**SF**	**47R17**	**DR**	**63M4**	20	597
				SA	**47R17**	**DR**	**63M4**	18	597
				SAF	**47R17**	**DR**	**63M4**	19	597
				S	**47R17**	**DR**	**63L4**	17	597
	6.5	200	5200	**SF**	**47R17**	**DR**	**63L4**	21	597
	6.9	187	5200	**SA**	**47R17**	**DR**	**63L4**	18	597
	7.9	165	5200	**SAF**	**47R17**	**DR**	**63L4**	20	597
				S	**47R17**	**DRS**	**71S4**	19	597
	9.4	148	5200	**SF**	**47R17**	**DRS**	**71S4**	23	597
	11	131	5200	**SA**	**47R17**	**DRS**	**71S4**	20	597
				SAF	**47R17**	**DRS**	**71S4**	22	597
330	**0.11**	12909	6800						
	0.12	11189	6800						
	0.13	10374	6800						
	0.15	8992	6800	**S**	**57R17**	**DR**	**63S4**	21	597
	0.18	7860	6800	**SF**	**57R17**	**DR**	**63S4**	24	597
	0.20	6887	6800	**SA**	**57R17**	**DR**	**63S4**	20	597
	0.23	6055	6800	**SAF**	**57R17**	**DR**	**63S4**	23	597
	0.26	5292	6800						
	0.30	4637	6800						
	0.34	4092	6800						
	0.38	3628	6800						
300	**0.44**	3131	7080						
	0.51	2714	7080						
	0.57	2412	7080	**S**	**57R17**	**DR**	**63S4**	21	597
	0.65	2131	7080	**SF**	**57R17**	**DR**	**63S4**	24	597
	0.74	1863	7080	**SA**	**57R17**	**DR**	**63S4**	20	597
	0.83	1663	7080	**SAF**	**57R17**	**DR**	**63S4**	23	597
	0.96	1435	7080						
	1.1	1254	7080						
	1.3	1083	7080						
	1.4	965	7080	**S**	**57R17**	**DR**	**63S4**	20	597
	1.6	865	7080	**SF**	**57R17**	**DR**	**63S4**	24	597
	1.8	750	7080	**SA**	**57R17**	**DR**	**63S4**	20	597
	2.1	655	7080	**SAF**	**57R17**	**DR**	**63S4**	23	597
	2.3	574	7080	**S**	**57R17**	**DR**	**63M4**	20	597
	2.6	506	7080	**SF**	**57R17**	**DR**	**63M4**	24	597
	3.0	438	7080	**SA**	**57R17**	**DR**	**63M4**	20	597
	3.4	388	7080	**SAF**	**57R17**	**DR**	**63M4**	23	597
				S	**57R17**	**DR**	**63L4**	21	597
	3.9	336	7080	**SF**	**57R17**	**DR**	**63L4**	25	597
	4.4	294	7080	**SA**	**57R17**	**DR**	**63L4**	21	597
	4.8	269	7080	**SAF**	**57R17**	**DR**	**63L4**	24	597
				S	**57R17**	**DRS**	**71S4**	23	597
	6.0	229	7080	**SF**	**57R17**	**DRS**	**71S4**	27	597
	6.8	204	7080	**SA**	**57R17**	**DRS**	**71S4**	23	597
	7.4	187	7080	**SAF**	**57R17**	**DRS**	**71S4**	25	597
				S	**57R17**	**DRS**	**71M4**	24	597
	8.4	165	7080	**SF**	**57R17**	**DRS**	**71M4**	28	597
	11	131	7080	**SA**	**57R17**	**DRS**	**71M4**	24	597
				SAF	**57R17**	**DRS**	**71M4**	27	597



S..DRS
S..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
570	**0.06**	21362	8190						
	0.07	19594	8190						
	0.08	18120	8190						
	0.08	16682	8190						
	0.10	14383	8190						
	0.11	12774	8190						
	0.13	11013	8190						
	0.14	9694	8190						
	0.16	8529	8190						
	0.19	7455	8190						
	0.21	6531	8190	**S**	**67R37**	**DR**	**63S4**	39	597
	0.24	5759	8190	**SF**	**67R37**	**DR**	**63S4**	46	597
	0.28	4965	8190	**SA**	**67R37**	**DR**	**63S4**	40	597
	0.31	4410	8190	**SAF**	**67R37**	**DR**	**63S4**	45	597
	0.36	3880	8190						
	0.40	3432	8190						
	0.47	2944	8190						
	0.52	2630	8190						
	0.61	2279	8190						
	0.69	2014	8190						
	0.78	1772	8190						
	0.88	1559	8190						
	1.0	1363	8190						
	1.2	1194	8190						
				S	**67R37**	**DR**	**63M4**	39	597
	1.3	1045	8190	**SF**	**67R37**	**DR**	**63M4**	46	597
	1.4	914	8190	**SA**	**67R37**	**DR**	**63M4**	40	597
				SAF	**67R37**	**DR**	**63M4**	45	597
				S	**67R37**	**DR**	**63M4**	39	597
	1.6	809	8190	**SF**	**67R37**	**DR**	**63M4**	46	597
	1.9	712	8190	**SA**	**67R37**	**DR**	**63M4**	40	597
				SAF	**67R37**	**DR**	**63M4**	45	597
				S	**67R37**	**DR**	**63L4**	40	597
	2.1	615	8190	**SF**	**67R37**	**DR**	**63L4**	46	597
	2.4	543	8190	**SA**	**67R37**	**DR**	**63L4**	41	597
				SAF	**67R37**	**DR**	**63L4**	45	597
				S	**67R37**	**DRS**	**71S4**	42	597
	2.9	469	8190	**SF**	**67R37**	**DRS**	**71S4**	48	597
	3.3	424	8190	**SA**	**67R37**	**DRS**	**71S4**	43	597
	3.8	365	8190	**SAF**	**67R37**	**DRS**	**71S4**	47	597
	4.3	319	8190	**S**	**67R37**	**DRS**	**71M4**	43	597
	4.9	281	8190	**SF**	**67R37**	**DRS**	**71M4**	49	597
	5.6	246	8190	**SA**	**67R37**	**DRS**	**71M4**	44	597
	6.2	221	8190	**SAF**	**67R37**	**DRS**	**71M4**	48	597
				S	**67R37**	**DRS**	**80S4**	45	597
	7.1	198	8190	**SF**	**67R37**	**DRS**	**80S4**	52	597
				SA	**67R37**	**DRS**	**80S4**	46	597
				SAF	**67R37**	**DRS**	**80S4**	51	597
1270	**0.05**	25493	11700						
	0.06	21787	11700						
	0.07	19907	11700						
	0.08	17013	11700						
	0.09	14668	11700						
	0.11	13110	11700						
	0.12	11569	11700	**S**	**77R37**	**DR**	**63S4**	59	597
	0.14	9887	11700	**SF**	**77R37**	**DR**	**63S4**	68	597
	0.16	8817	11700	**SA**	**77R37**	**DR**	**63S4**	58	597
	0.18	7735	11700	**SAF**	**77R37**	**DR**	**63S4**	65	597
	0.20	6735	11700						
	0.23	5943	11700						
	0.26	5214	11700						
	0.30	4618	11700						
	0.35	3992	11700						
	0.39	3540	11700						
				S	**77R37**	**DR**	**63M4**	59	597
	0.43	3098	11700	**SF**	**77R37**	**DR**	**63M4**	68	597
				SA	**77R37**	**DR**	**63M4**	58	597
				SAF	**77R37**	**DR**	**63M4**	65	597

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
1240				**S**	**77R37**	**DR**	**63S4**	59	597
	0.50	2753	12000	**SF**	**77R37**	**DR**	**63S4**	68	597
	0.58	2374	12000	**SA**	**77R37**	**DR**	**63S4**	58	597
				SAF	**77R37**	**DR**	**63S4**	65	597
	0.63	2083	12000						
	0.73	1813	12000	**S**	**77R37**	**DR**	**63M4**	59	597
	0.76	1745	12000	**SF**	**77R37**	**DR**	**63M4**	68	597
	0.82	1600	12000	**SA**	**77R37**	**DR**	**63M4**	58	597
	0.94	1404	12000	**SAF**	**77R37**	**DR**	**63M4**	65	597
				S	**77R37**	**DR**	**63L4**	59	597
	1.0	1245	12000	**SF**	**77R37**	**DR**	**63L4**	69	597
				SA	**77R37**	**DR**	**63L4**	59	597
				SAF	**77R37**	**DR**	**63L4**	65	597
				S	**77R37**	**DR**	**63L4**	59	597
	1.2	1100	12000	**SF**	**77R37**	**DR**	**63L4**	69	597
	1.4	954	12000	**SA**	**77R37**	**DR**	**63L4**	59	597
				SAF	**77R37**	**DR**	**63L4**	65	597
				S	**77R37**	**DRS**	**71S4**	61	597
	1.6	837	12000	**SF**	**77R37**	**DRS**	**71S4**	71	597
	1.9	714	12000	**SA**	**77R37**	**DRS**	**71S4**	61	597
				SAF	**77R37**	**DRS**	**71S4**	67	597
				S	**77R37**	**DRS**	**71M4**	62	597
	2.2	637	12000	**SF**	**77R37**	**DRS**	**71M4**	72	597
	2.4	574	12000	**SA**	**77R37**	**DRS**	**71M4**	62	597
	2.8	499	12000	**SAF**	**77R37**	**DRS**	**71M4**	68	597
				S	**77R37**	**DRS**	**80S4**	64	597
	3.2	438	12000	**SF**	**77R37**	**DRS**	**80S4**	74	597
	3.6	389	12000	**SA**	**77R37**	**DRS**	**80S4**	64	597
				SAF	**77R37**	**DRS**	**80S4**	71	597
	4.3	327	12000	**S**	**77R37**	**DRS**	**80M4**	67	597
	4.9	289	12000	**SF**	**77R37**	**DRS**	**80M4**	77	597
	5.6	250	12000	**SA**	**77R37**	**DRS**	**80M4**	67	597
	6.4	219	12000	**SAF**	**77R37**	**DRS**	**80M4**	73	597
2500	**0.05**	25987	27500						
	0.06	23940	27500						
	0.07	20568	27500						
	0.08	18265	27500						
	0.08	16774	27500	**S**	**87R57**	**DR**	**63S4**	110	597
	0.09	14820	27500	**SF**	**87R57**	**DR**	**63S4**	130	597
	0.10	13160	27500	**SA**	**87R57**	**DR**	**63S4**	105	597
	0.12	11200	27500	**SAF**	**87R57**	**DR**	**63S4**	120	597
	0.14	9904	27500						
	0.16	8549	27500						
	0.18	7643	27500						
	0.21	6706	27500						
	0.22	5875	27500	**S**	**87R57**	**DR**	**63M4**	110	597
	0.25	5187	27500	**SF**	**87R57**	**DR**	**63M4**	130	597
	0.29	4606	27500	**SA**	**87R57**	**DR**	**63M4**	105	597
	0.34	3872	27500	**SAF**	**87R57**	**DR**	**63M4**	120	597
				S	**87R57**	**DR**	**63L4**	110	597
	0.37	3475	27500	**SF**	**87R57**	**DR**	**63L4**	130	597
	0.45	2905	27500	**SA**	**87R57**	**DR**	**63L4**	105	597
	0.50	2586	27500	**SAF**	**87R57**	**DR**	**63L4**	120	597
				S	**87R57**	**DRS**	**71S4**	110	597
	0.59	2335	27500	**SF**	**87R57**	**DRS**	**71S4**	130	597
	0.67	2054	27500	**SA**	**87R57**	**DRS**	**71S4**	105	597
	0.76	1824	27500	**SAF**	**87R57**	**DRS**	**71S4**	125	597
				S	**87R57**	**DRS**	**71M4**	110	597
	0.85	1631	27500	**SF**	**87R57**	**DRS**	**71M4**	130	597
	1.0	1332	27500	**SA**	**87R57**	**DRS**	**71M4**	110	597
	1.2	1191	27500	**SAF**	**87R57**	**DRS**	**71M4**	125	597
				S	**87R57**	**DRS**	**80S4**	115	597
	1.4	1032	27500	**SF**	**87R57**	**DRS**	**80S4**	135	597
	1.5	930	27500	**SA**	**87R57**	**DRS**	**80S4**	110	597
	1.7	831	27500	**SAF**	**87R57**	**DRS**	**80S4**	125	597



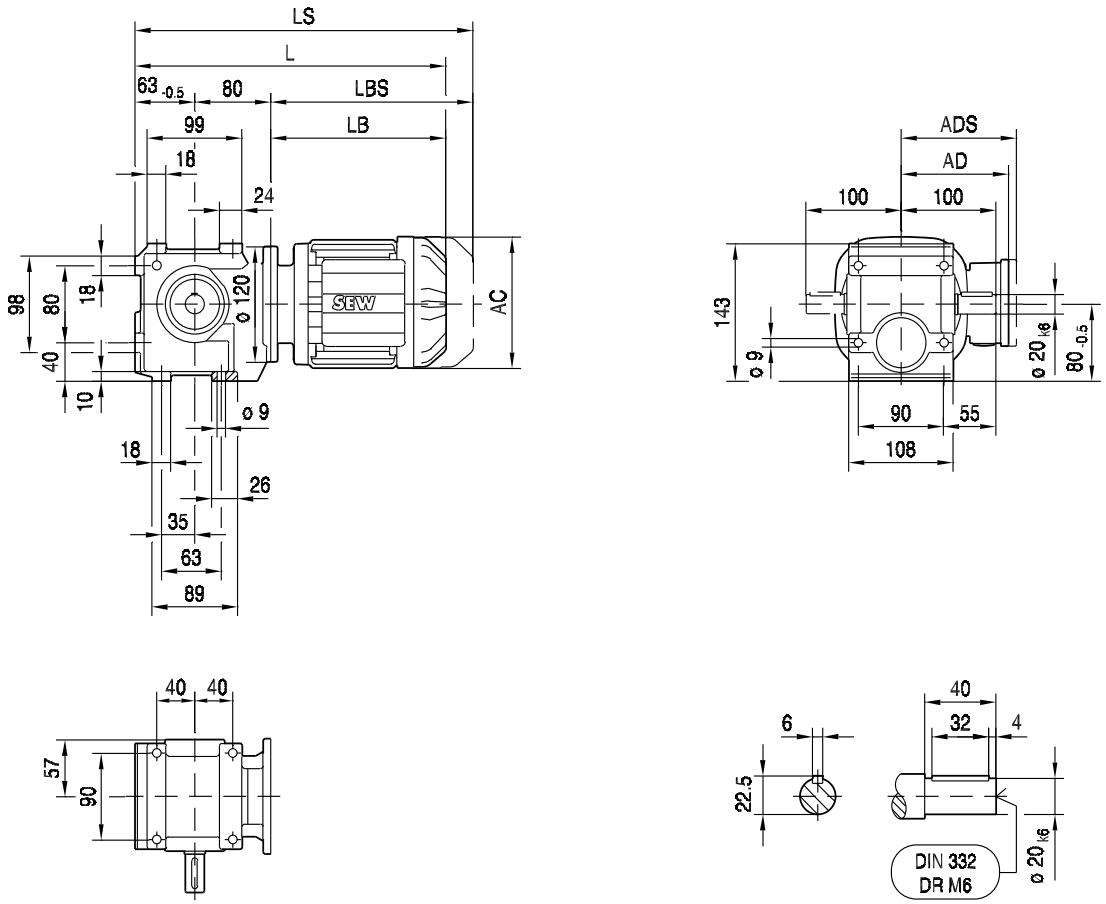
S..DRS
S..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
2500	**2.0**	719	27500	**S**	**87R57**	**DRS**	**80M4**	115	597
	2.3	624	27500	**SF**	**87R57**	**DRS**	**80M4**	135	597
	2.5	558	27500	**SA**	**87R57**	**DRS**	**80M4**	115	597
				SAF	**87R57**	**DRS**	**80M4**	130	597
	2.9	485	27500	**S**	**87R57**	**DRS**	**90M4**	120	597
				SF	**87R57**	**DRS**	**90M4**	140	597
				SA	**87R57**	**DRS**	**90M4**	120	597
				SAF	**87R57**	**DRS**	**90M4**	135	597
2450				**S**	**87R57**	**DRS**	**90M4**	120	597
	3.2	435	27600	**SF**	**87R57**	**DRS**	**90M4**	140	597
	3.7	378	27600	**SA**	**87R57**	**DRS**	**90M4**	120	597
				SAF	**87R57**	**DRS**	**90M4**	135	597
2400				**S**	**87R57**	**DRS**	**90L4**	125	597
	4.3	323	27700	**SF**	**87R57**	**DRS**	**90L4**	145	597
	5.0	281	27700	**SA**	**87R57**	**DRS**	**90L4**	120	597
				SAF	**87R57**	**DRS**	**90L4**	135	597
4200	**0.04**	33818	32800						
	0.04	31154	32800						
	0.05	27847	32800						
	0.06	24641	32800						
	0.06	21537	32800	**S**	**97R57**	**DR**	**63S4**	170	597
	0.07	18749	32800	**SF**	**97R57**	**DR**	**63S4**	200	597
	0.09	16233	32800	**SA**	**97R57**	**DR**	**63S4**	160	597
	0.09	14576	32800	**SAF**	**97R57**	**DR**	**63S4**	190	597
	0.11	12752	32800						
	0.12	11267	32800						
	0.14	10078	32800						
	0.15	8608	32800						
	0.17	7554	32800	**S**	**97R57**	**DR**	**63M4**	170	597
	0.20	6640	31300	**SF**	**97R57**	**DR**	**63M4**	200	597
	0.23	5780	31300	**SA**	**97R57**	**DR**	**63M4**	160	597
	0.27	4937	31300	**SAF**	**97R57**	**DR**	**63M4**	190	597
	0.29	4444	31300	**S**	**97R57**	**DR**	**63L4**	170	597
	0.32	4017	31300	**SF**	**97R57**	**DR**	**63L4**	200	597
	0.38	3453	31300	**SA**	**97R57**	**DR**	**63L4**	165	597
	0.42	3108	31300	**SAF**	**97R57**	**DR**	**63L4**	190	597
	0.52	2654	31300	**S**	**97R57**	**DRS**	**71S4**	170	597
	0.59	2329	31300	**SF**	**97R57**	**DRS**	**71S4**	205	597
				SA	**97R57**	**DRS**	**71S4**	165	597
				SAF	**97R57**	**DRS**	**71S4**	190	597
	0.66	2081	31300	**S**	**97R57**	**DRS**	**71M4**	170	597
	0.74	1860	31300	**SF**	**97R57**	**DRS**	**71M4**	205	597
	0.88	1574	31300	**SA**	**97R57**	**DRS**	**71M4**	165	597
				SAF	**97R57**	**DRS**	**71M4**	190	597
	1.0	1394	31300	**S**	**97R57**	**DRS**	**80S4**	175	597
	1.1	1223	31300	**SF**	**97R57**	**DRS**	**80S4**	205	597
	1.3	1070	31300	**SA**	**97R57**	**DRS**	**80S4**	165	597
				SAF	**97R57**	**DRS**	**80S4**	195	597
	1.5	928	31300	**S**	**97R57**	**DRS**	**80M4**	175	597
	1.7	824	31300	**SF**	**97R57**	**DRS**	**80M4**	210	597
				SA	**97R57**	**DRS**	**80M4**	170	597
				SAF	**97R57**	**DRS**	**80M4**	195	597
	2.0	714	32800	**S**	**97R57**	**DRS**	**90M4**	180	597
	2.2	626	31300	**SF**	**97R57**	**DRS**	**90M4**	215	597
	2.6	538	31300	**SA**	**97R57**	**DRS**	**90M4**	175	597
				SAF	**97R57**	**DRS**	**90M4**	200	597
	2.9	484	31400	**S**	**97R57**	**DRS**	**90L4**	185	597
	3.3	420	31400	**SF**	**97R57**	**DRS**	**90L4**	215	597
	3.7	376	31400	**SA**	**97R57**	**DRS**	**90L4**	180	597
				SAF	**97R57**	**DRS**	**90L4**	205	597
	4.3	327	31500	**S**	**97R57**	**DRS**	**100M4**	190	597
	4.9	287	31500	**SF**	**97R57**	**DRS**	**100M4**	220	597
				SA	**97R57**	**DRS**	**100M4**	180	597
				SAF	**97R57**	**DRS**	**100M4**	210	597
	5.7	252	31500	**S**	**97R57**	**DRS**	**100LC4**	195	597
	6.6	219	31600	**SF**	**97R57**	**DRS**	**100LC4**	225	597
				SA	**97R57**	**DRS**	**100LC4**	185	597
				SAF	**97R57**	**DRS**	**100LC4**	215	597

12.5 S..DRS [mm]

02 046 00 06

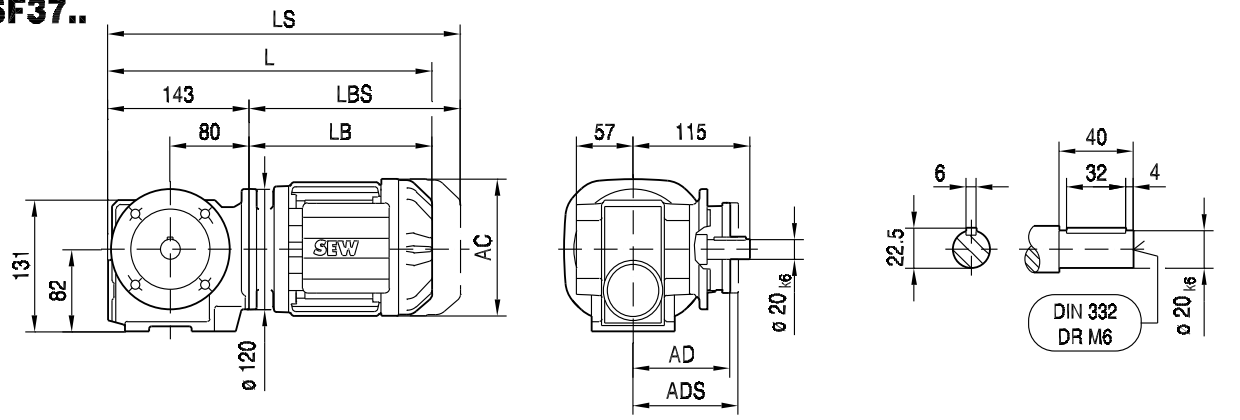
S37..



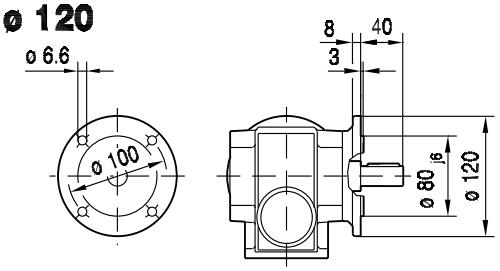
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M			
AC	132	139	139	156	156			
AD	105	119	119	128	128			
ADS	105	129	129	139	139			
L	334	346	371	380	411			
LS	389	414	439	461	492			
LB	191	203	228	237	268			
LBS	246	271	296	318	349			

02 047 00 06

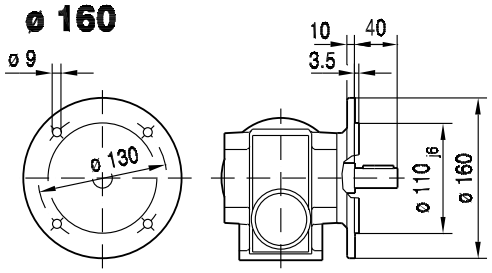
SF37..



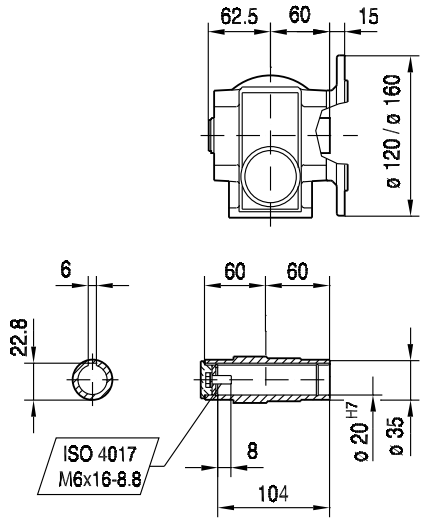
ø 120



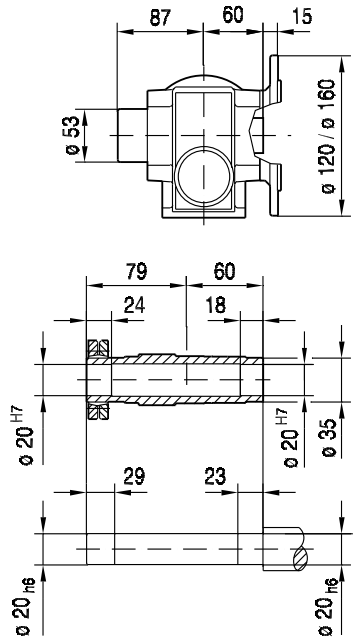
ø 160



SAF37..



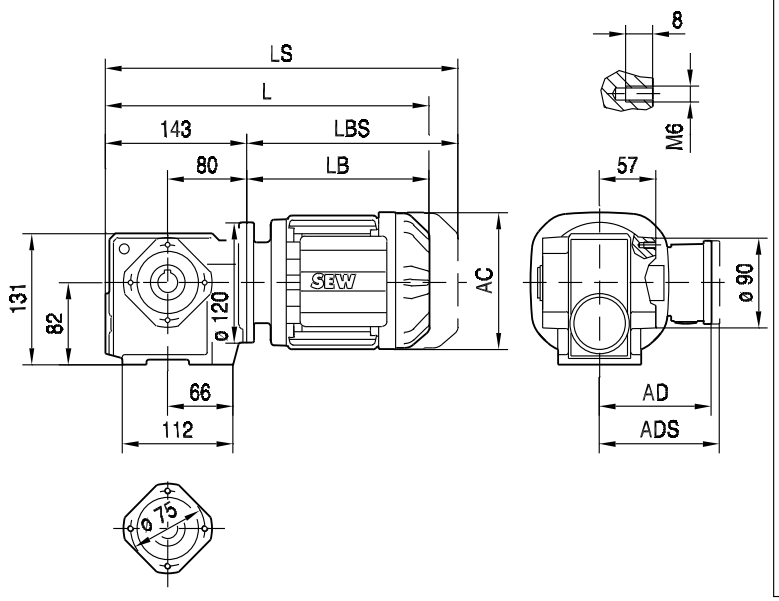
SHF37..

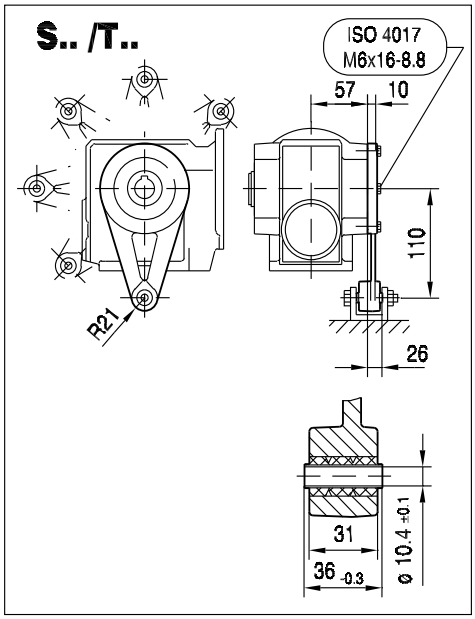


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M			
AC	132	139	139	156	156			
AD	105	119	119	128	128			
ADS	105	129	129	139	139			
L	334	346	371	380	411			
LS	389	414	439	461	492			
LB	191	203	228	237	268			
LBS	246	271	296	318	349			

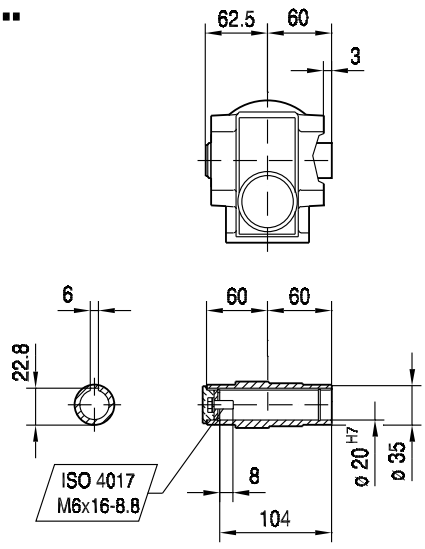
02 048 00 06

SA37..

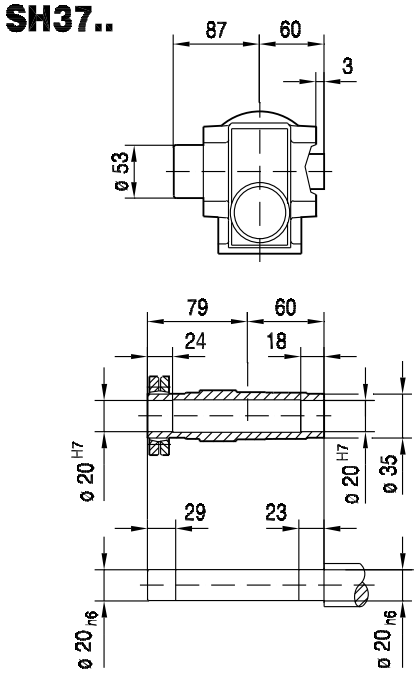




SA37..

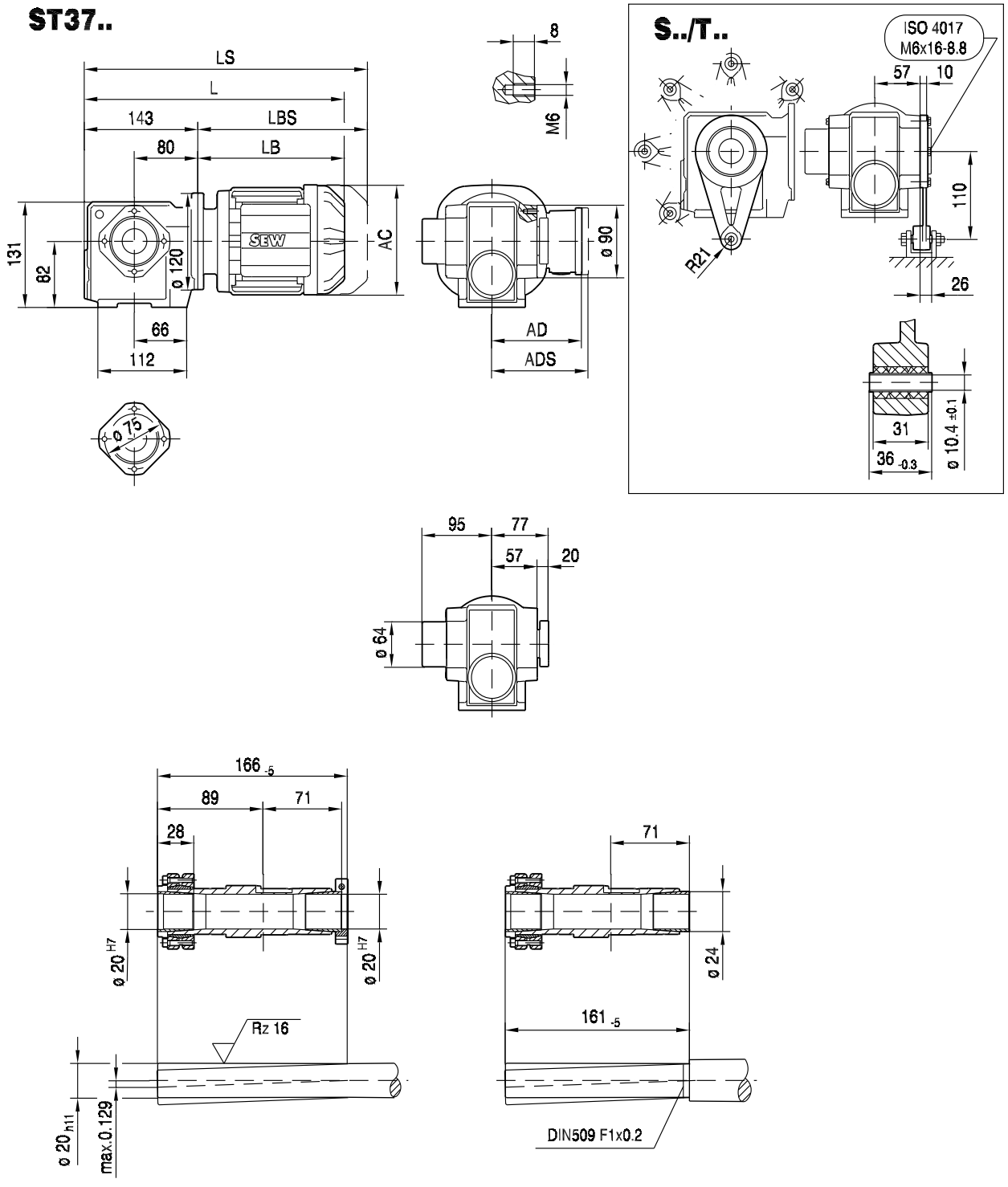


SH37..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M			
AC	132	139	139	156	156			
AD	105	119	119	128	128			
ADS	105	129	129	139	139			
L	334	346	371	380	411			
LS	389	414	439	461	492			
LB	191	203	228	237	268			
LBS	246	271	296	318	349			

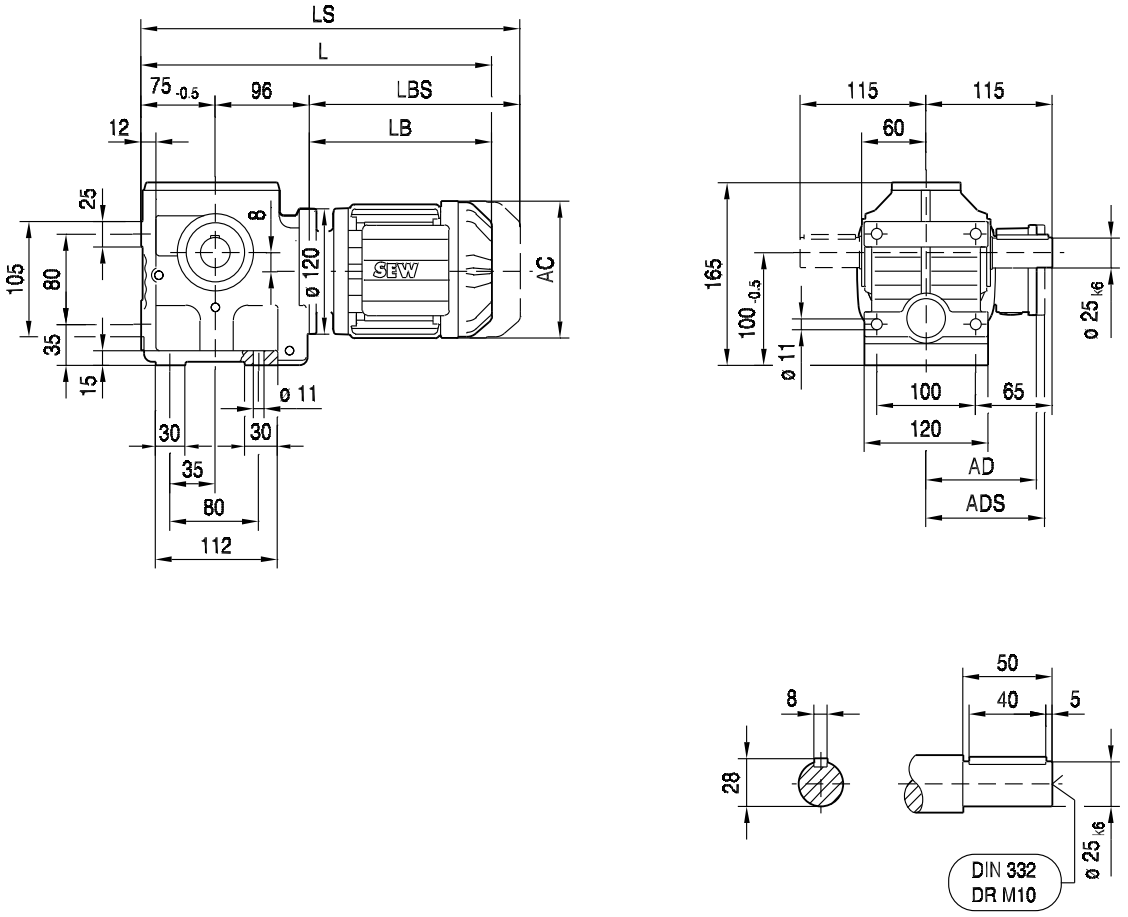
02 049 00 06



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M			
AC	132	139	139	156	156			
AD	105	119	119	128	128			
ADS	105	129	129	139	139			
L	334	346	371	380	411			
LS	389	414	439	461	492			
LB	191	203	228	237	268			
LBS	246	271	296	318	349			

02 050 00 06

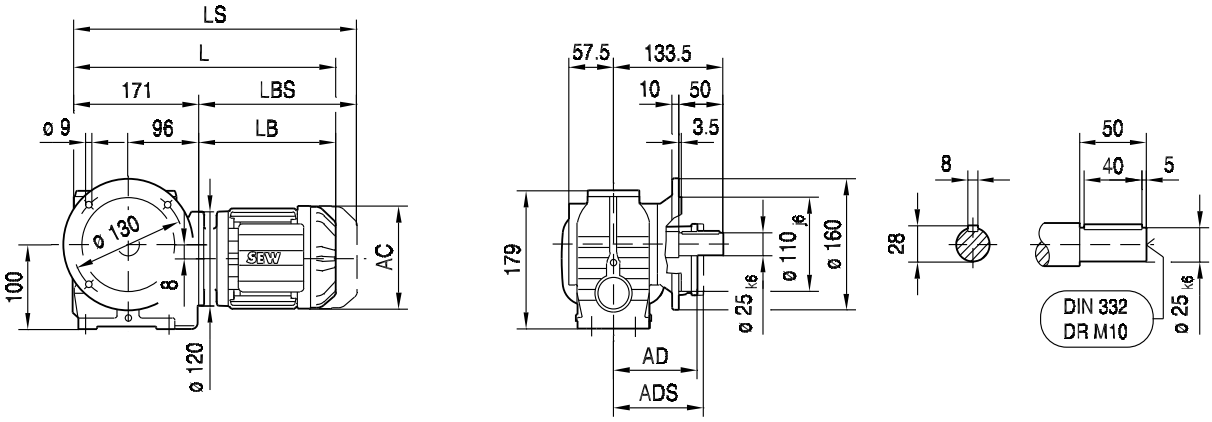
S47..



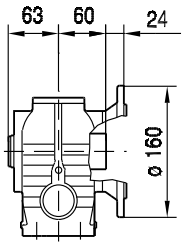
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	362	374	399	408	439	443		
LS	417	442	467	489	520	536		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

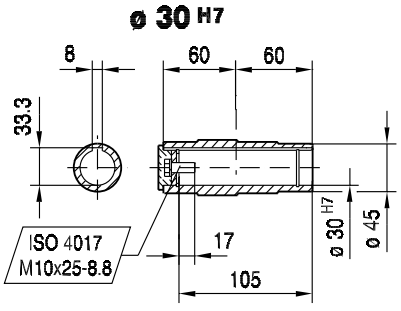
02 051 00 06

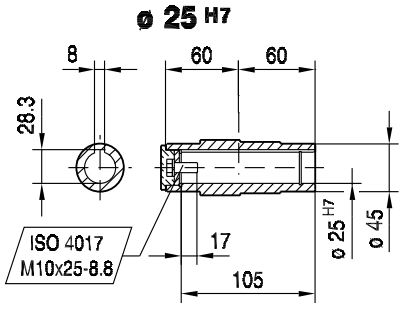
SF47..



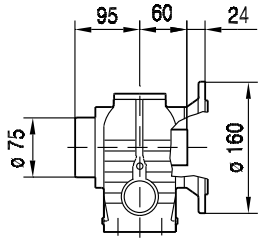
SAF47..

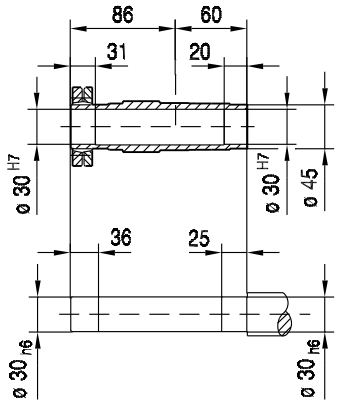






SHF47..

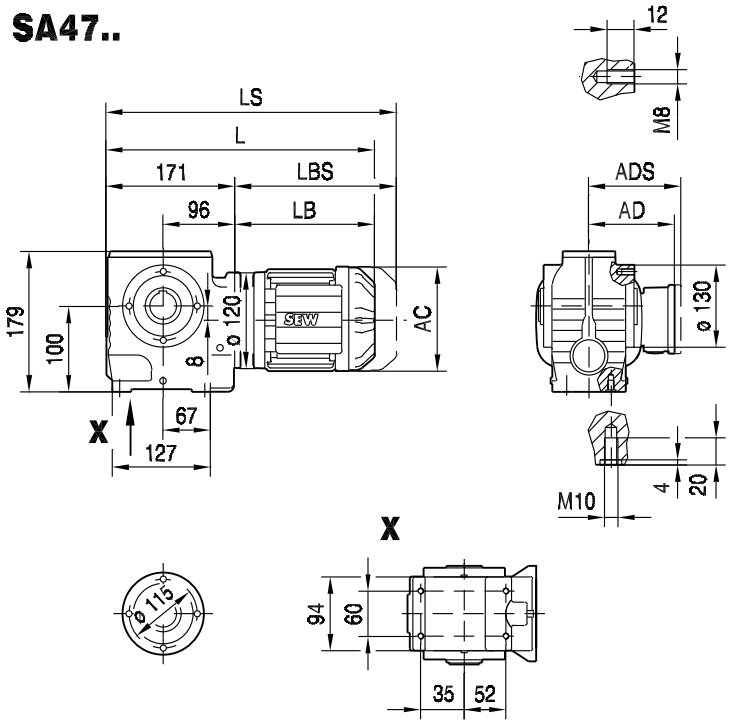




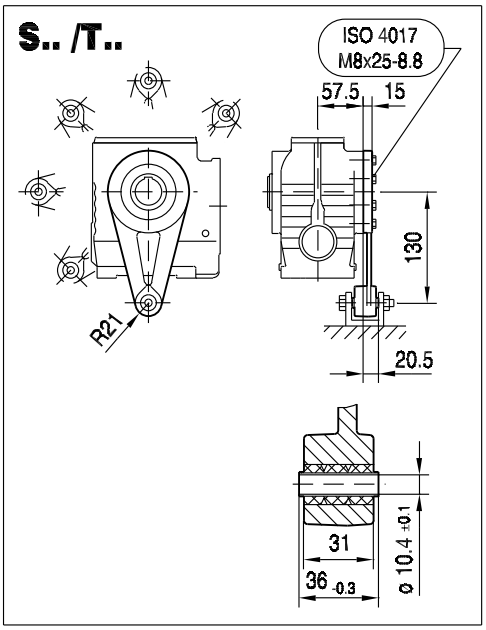
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	362	374	399	408	439	443		
LS	417	442	467	489	520	536		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

02 052 00 06

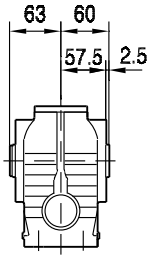
SA47..



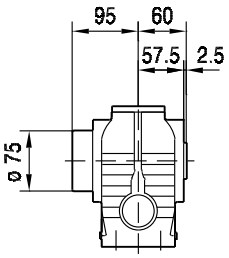
S.. /T..

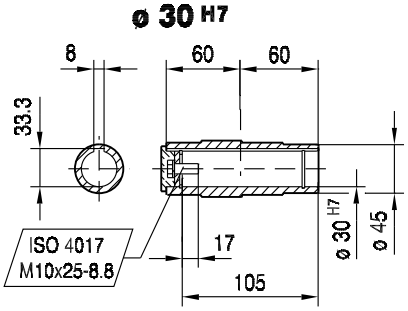


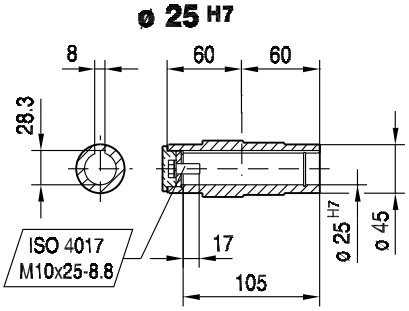
SA47..

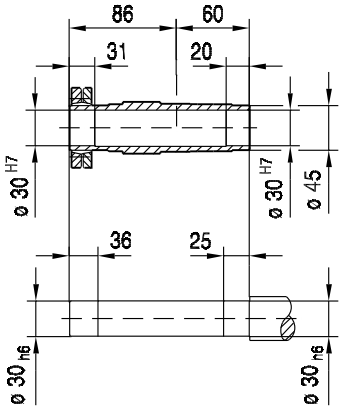


SH47..





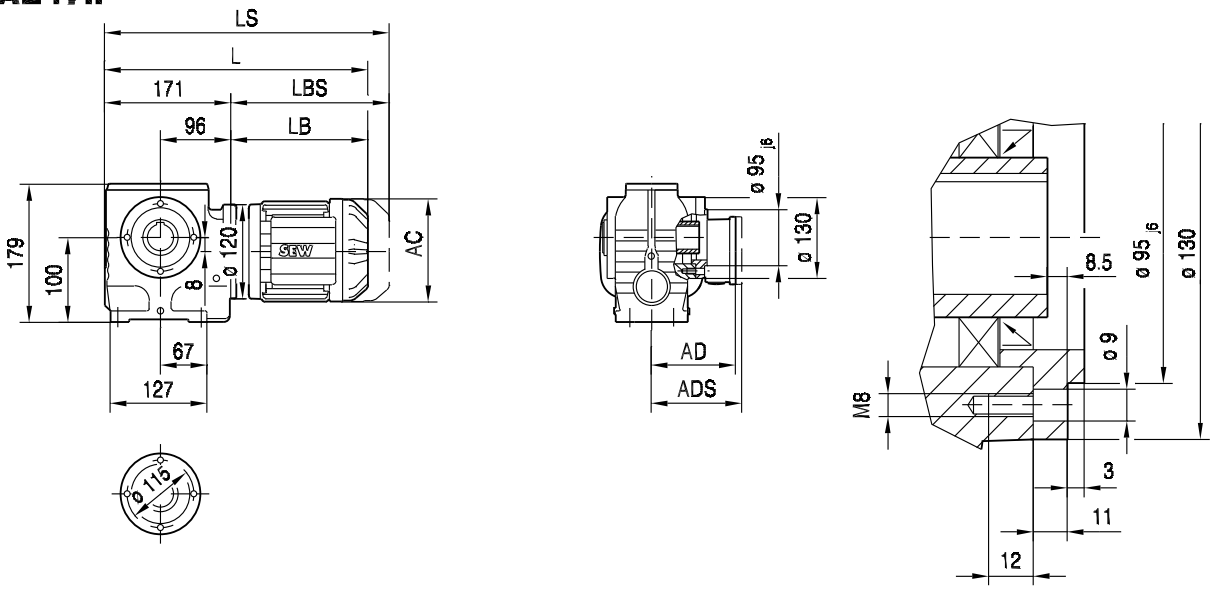




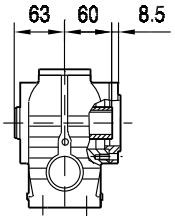
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	362	374	399	408	439	443		
LS	417	442	467	489	520	536		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

02 053 00 06

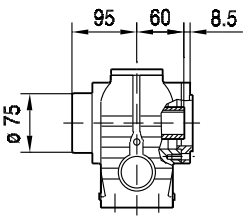
SAZ47..

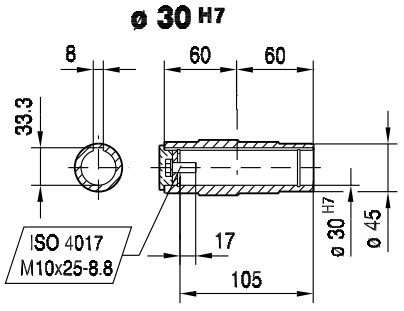


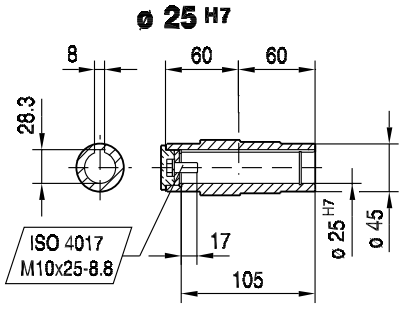
SAZ47..

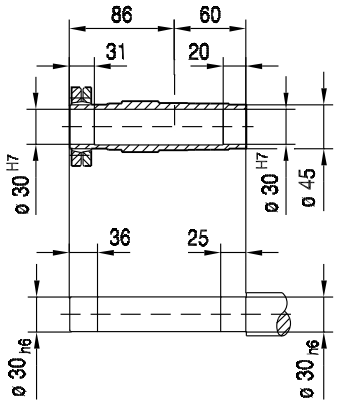


SHZ47..





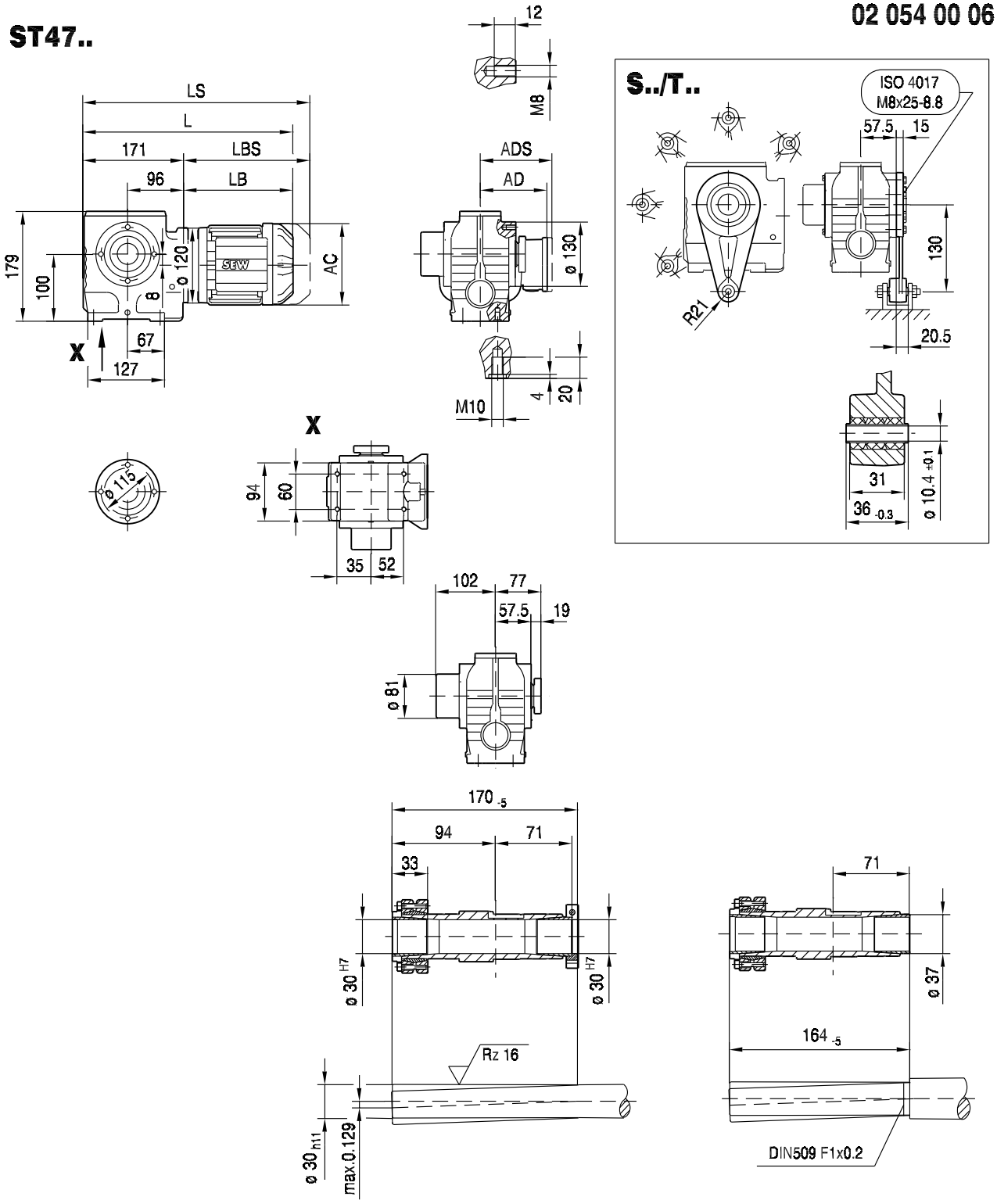




(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	362	374	399	408	439	443		
LS	417	442	467	489	520	536		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

02 054 00 06

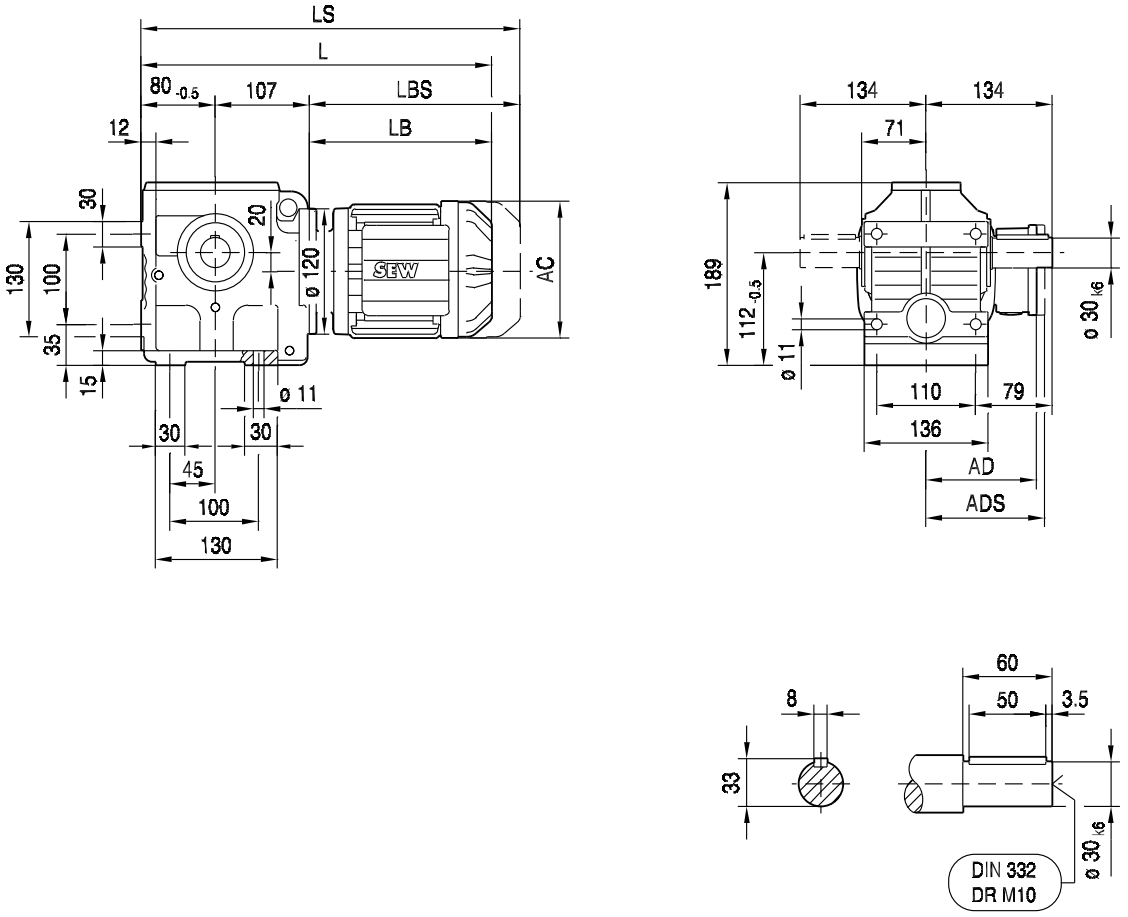
ST47..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M		
AC	132	139	139	156	156	179		
AD	105	119	119	128	128	140		
ADS	105	129	129	139	139	150		
L	362	374	399	408	439	443		
LS	417	442	467	489	520	536		
LB	191	203	228	237	268	272		
LBS	246	271	296	318	349	365		

02 055 00 06

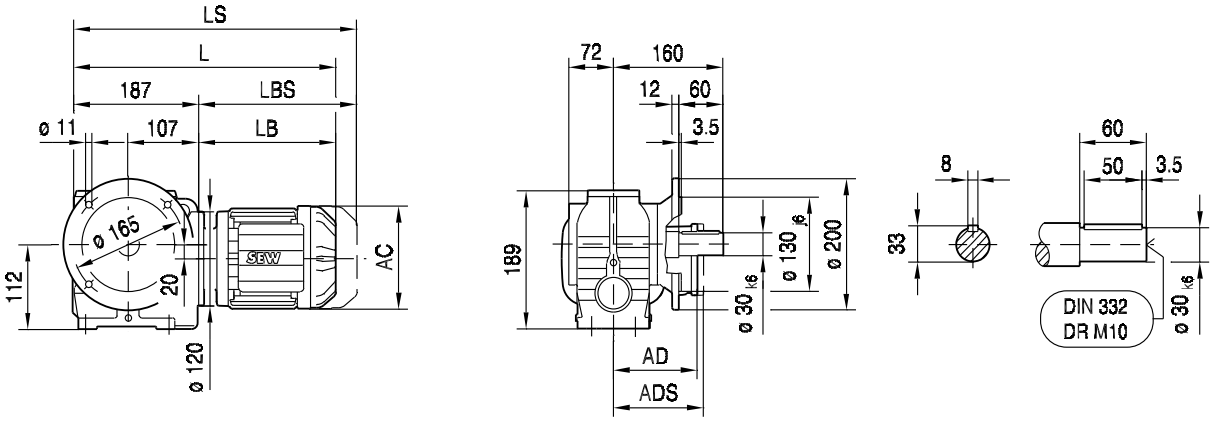
S57..



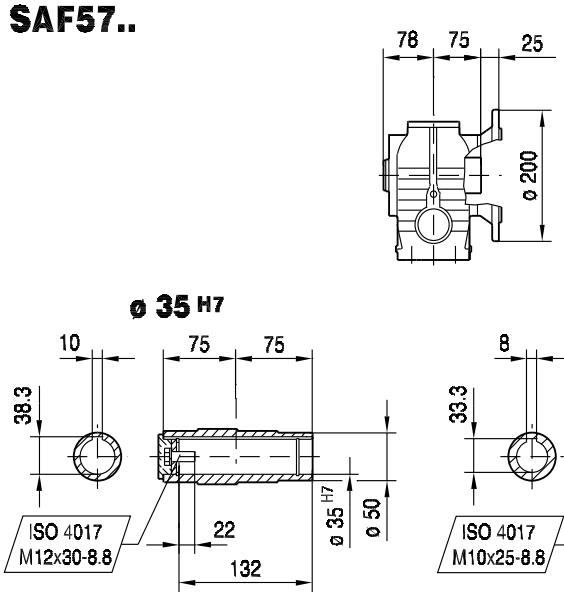
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	378	390	415	424	455	459	479	509
LS	433	458	483	505	536	552	572	602
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

02 056 00 06

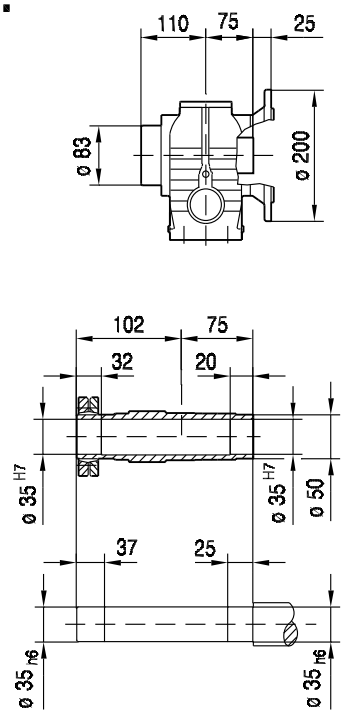
SF57..



SAF57..



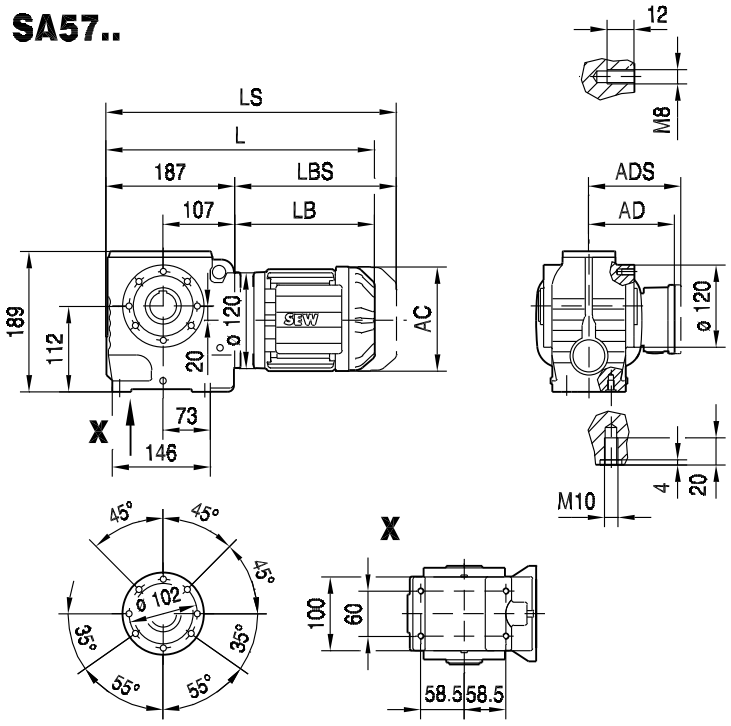
SHF57..

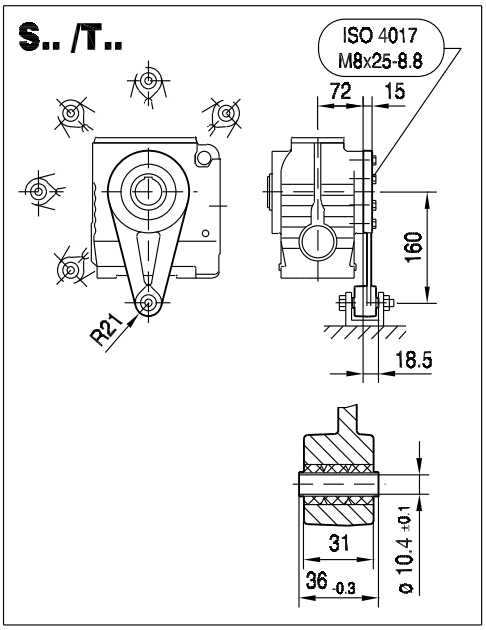


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	378	390	415	424	455	459	479	509
LS	433	458	483	505	536	552	572	602
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

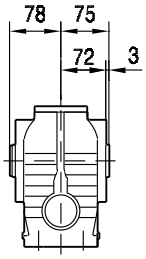
02 057 00 06

SA57..

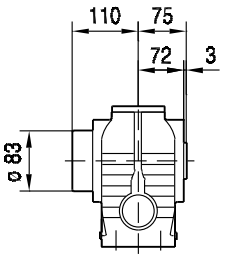


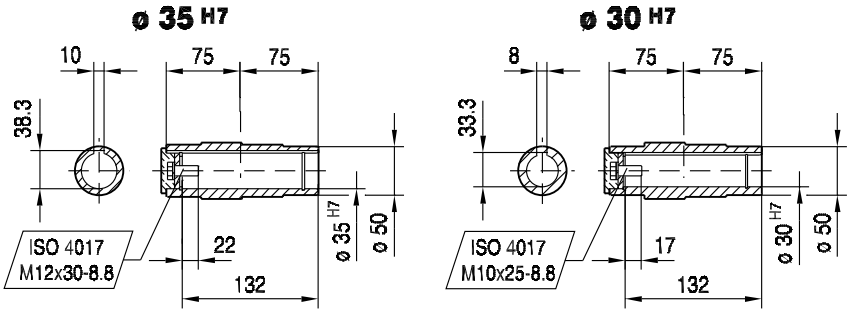


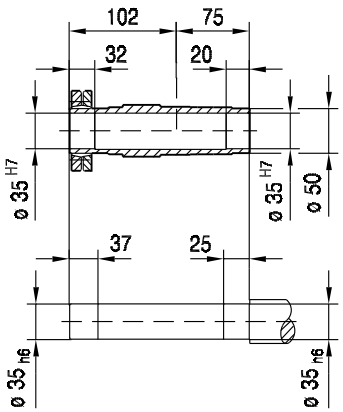
SA57..



SH57..



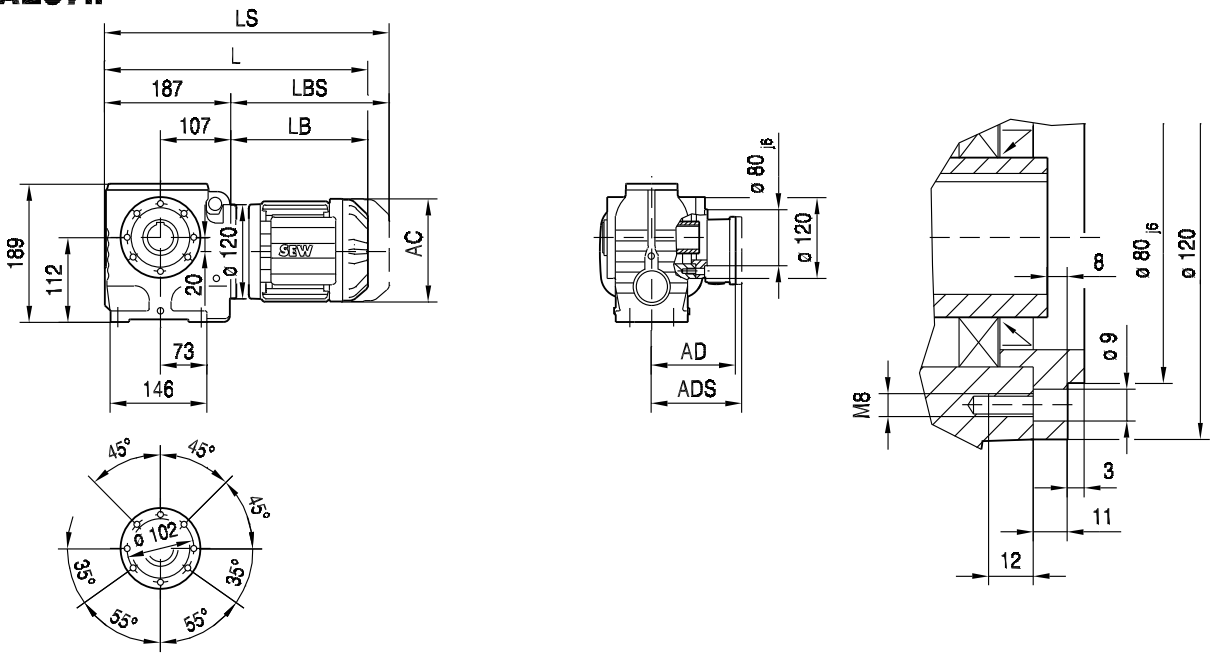




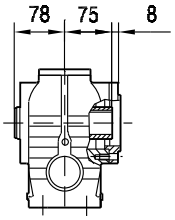
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	378	390	415	424	455	459	479	509
LS	433	458	483	505	536	552	572	602
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

02 058 00 06

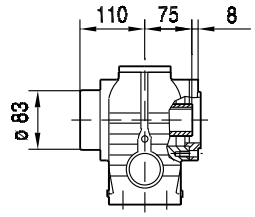
SAZ57..

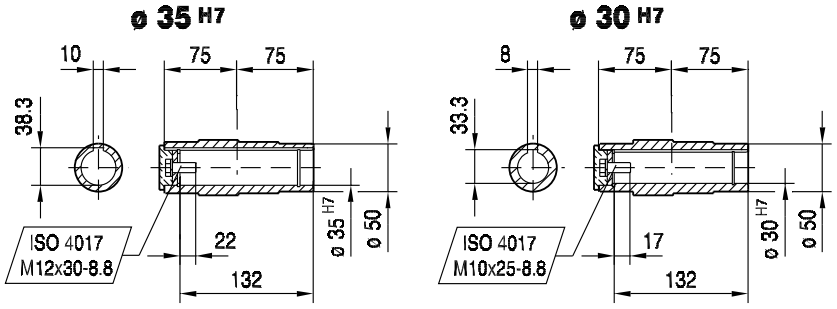


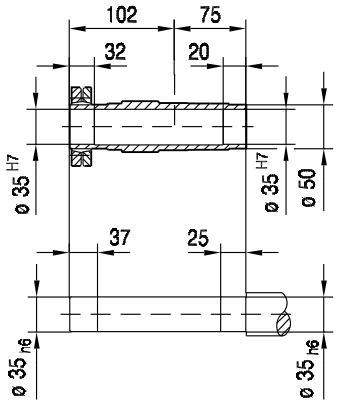
SAZ57..



SHZ57..



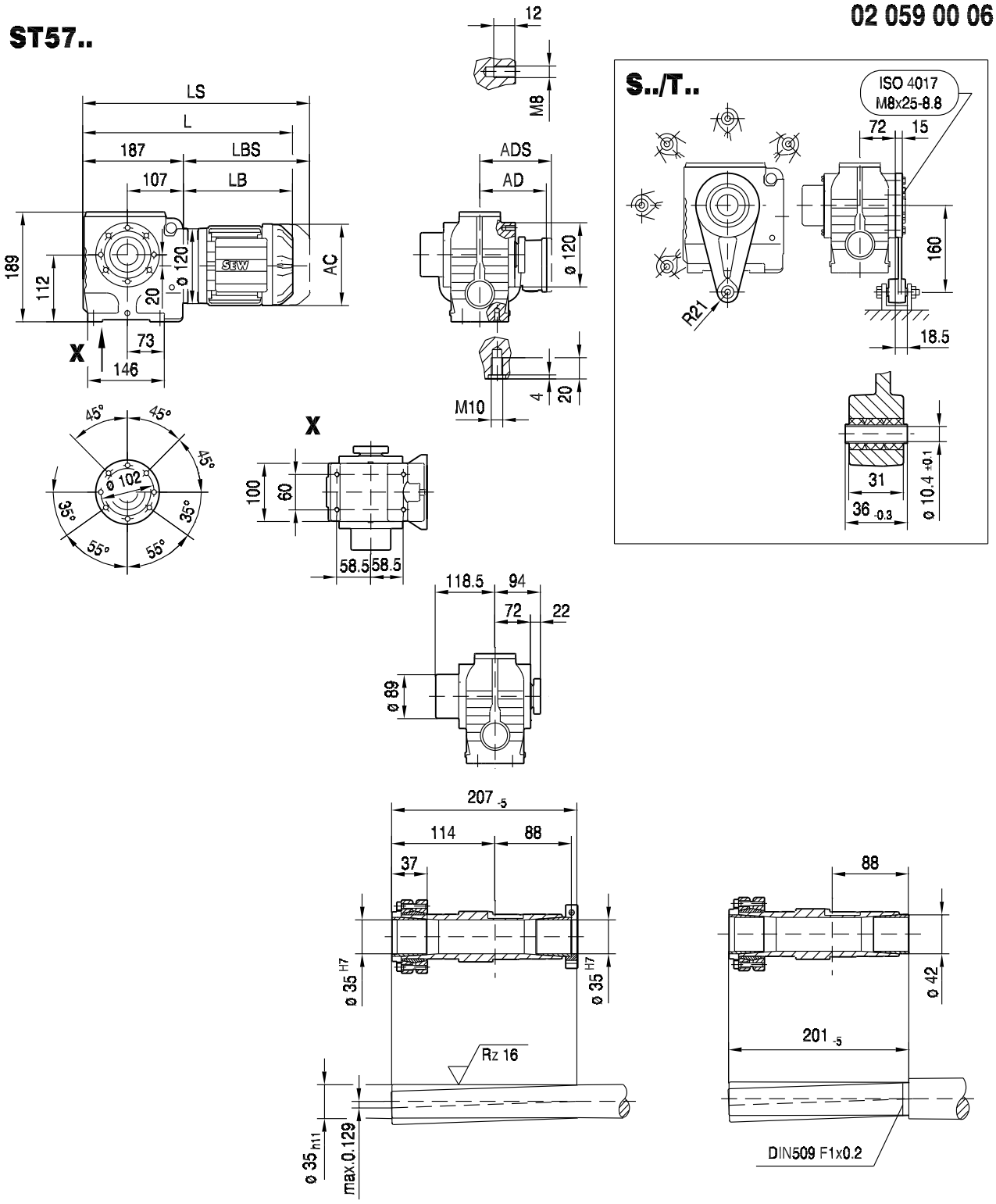




(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	378	390	415	424	455	459	479	509
LS	433	458	483	505	536	552	572	602
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

ST57..

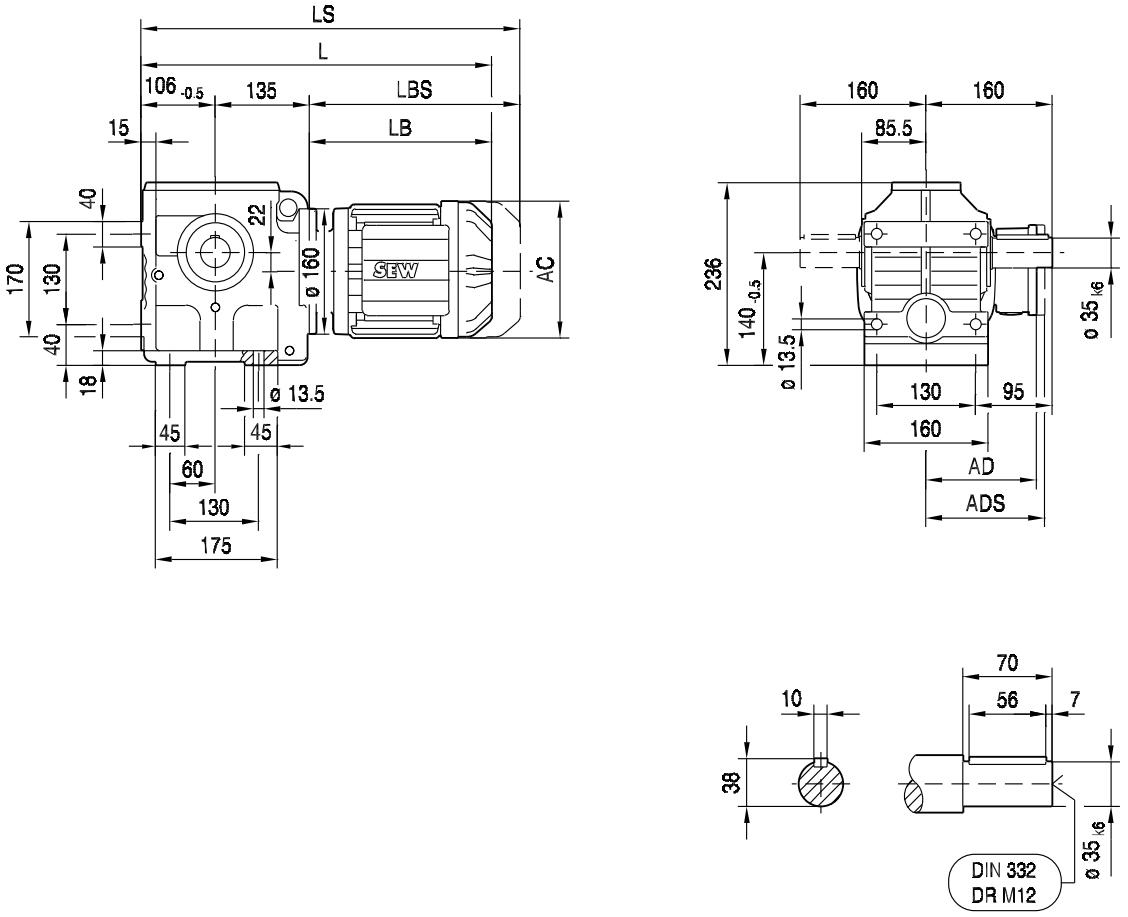
02 059 00 06



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M
AC	132	139	139	156	156	179	179	197
AD	105	119	119	128	128	140	140	157
ADS	105	129	129	139	139	150	150	158
L	378	390	415	424	455	459	479	509
LS	433	458	483	505	536	552	572	602
LB	191	203	228	237	268	272	292	322
LBS	246	271	296	318	349	365	385	415

02 060 00 06

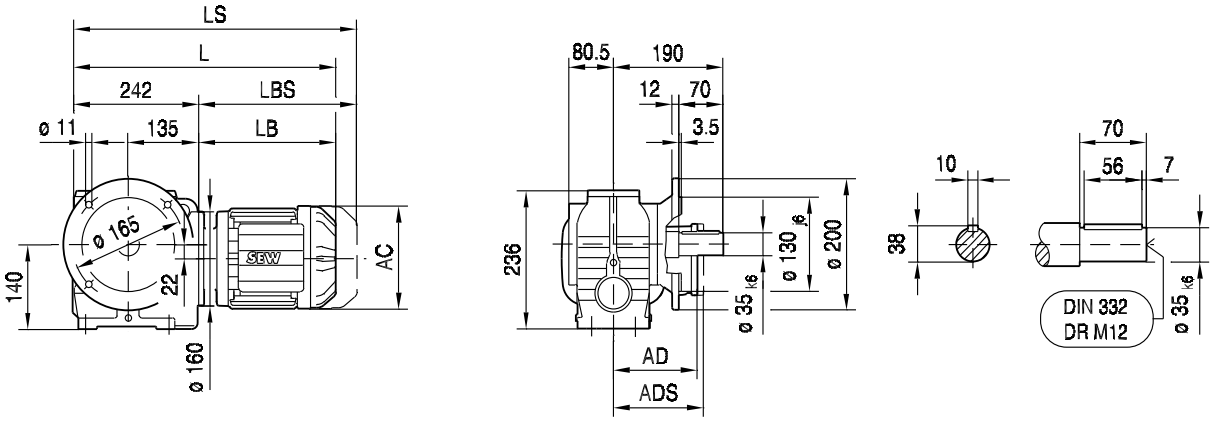
S67..



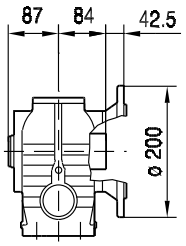
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	426	437	462	471	502	504	524	554	584	631
LS	481	505	530	552	583	597	617	647	677	743
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

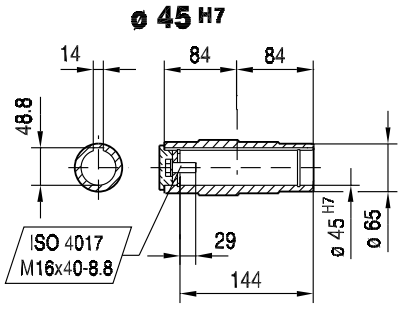
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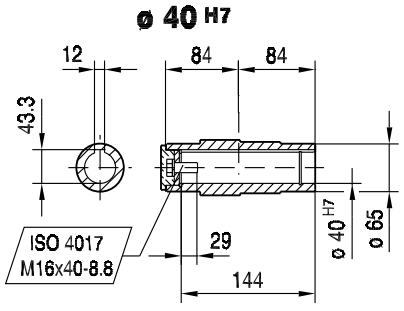
SF67..



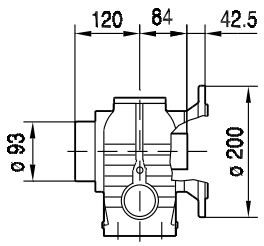
SAF67..

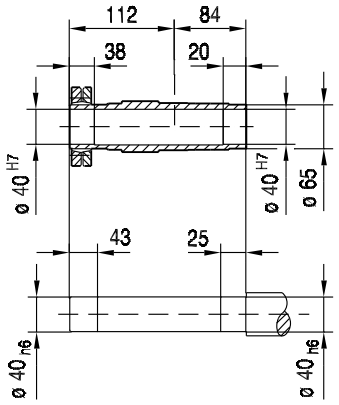






SHF67..

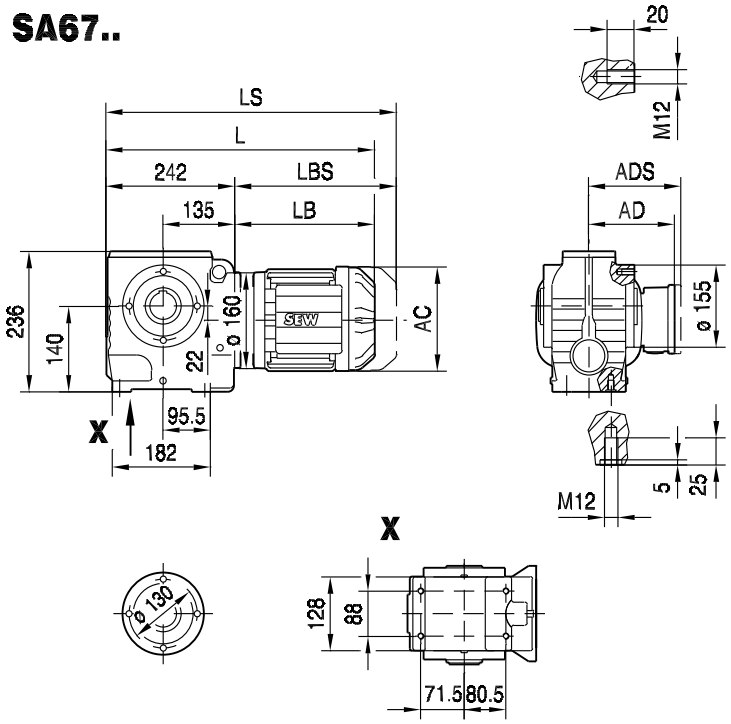




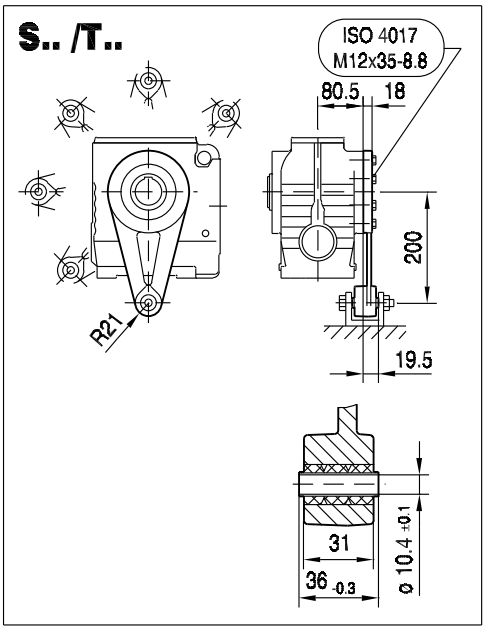
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	427	438	463	472	503	505	525	555	585	632
LS	482	506	531	553	584	598	618	648	678	744
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

02 062 00 06

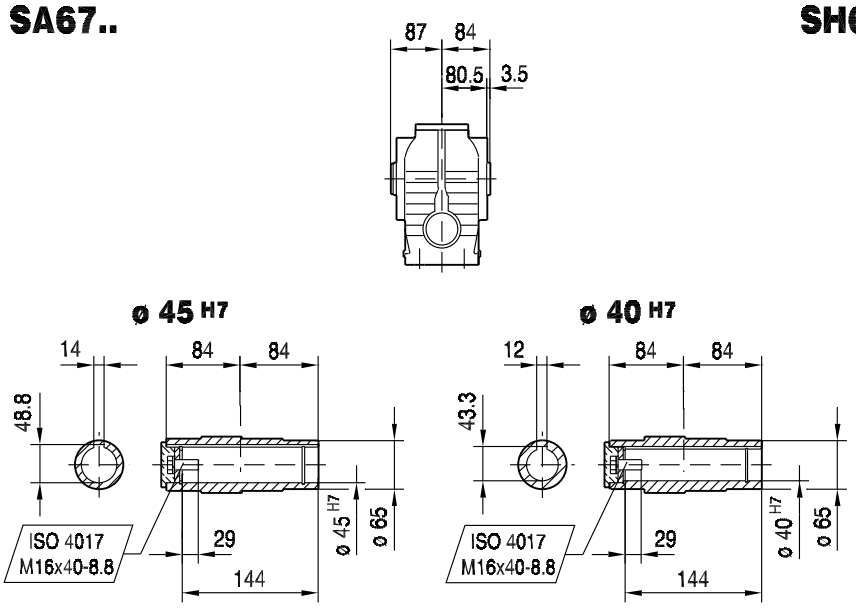
SA67..



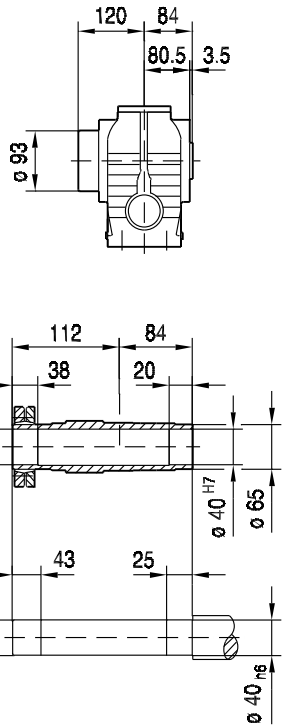
S.. /T..



SA67..



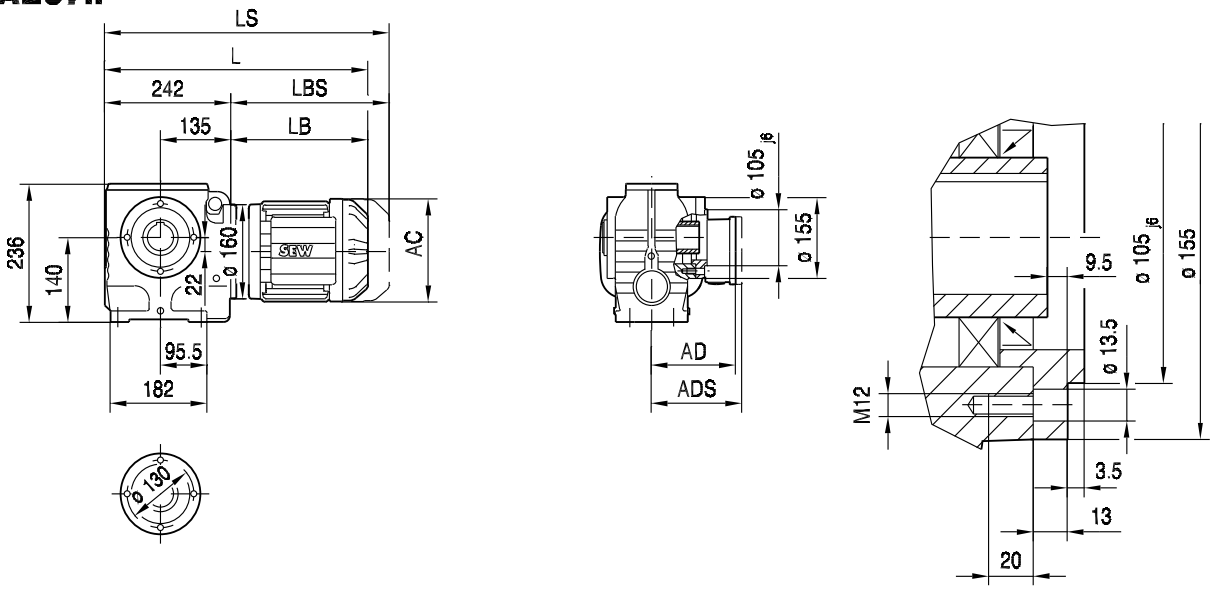
SH67..



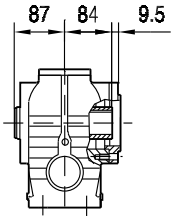
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	427	438	463	472	503	505	525	555	585	632
LS	482	506	531	553	584	598	618	648	678	744
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

02 063 00 06

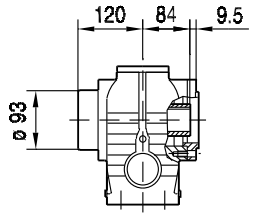
SAZ67..

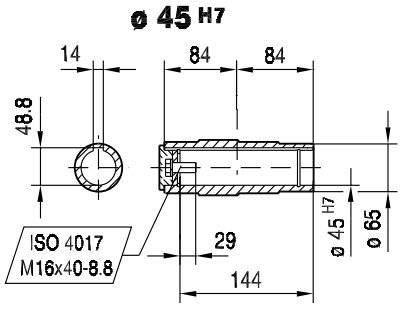


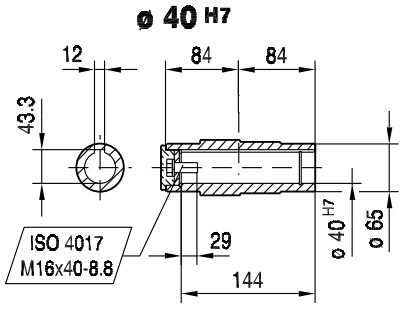
SAZ67..

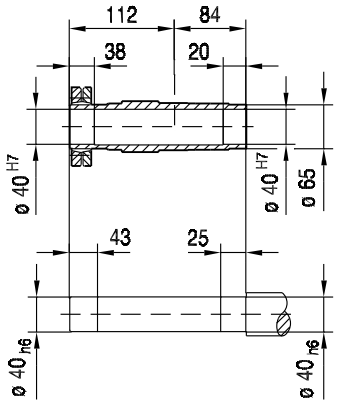


SHZ67..





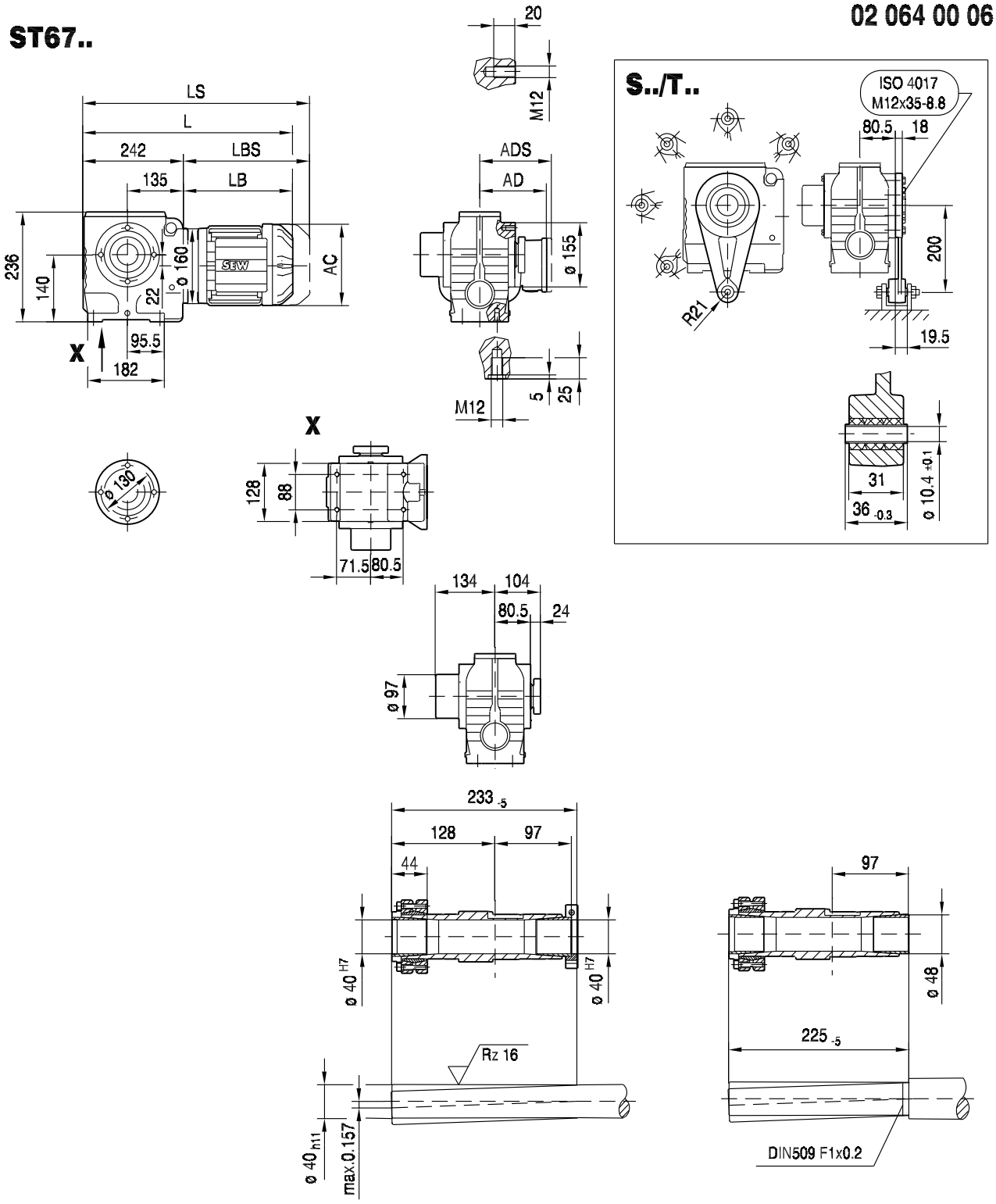




(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	427	438	463	472	503	505	525	555	585	632
LS	482	506	531	553	584	598	618	648	678	744
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

02 064 00 06

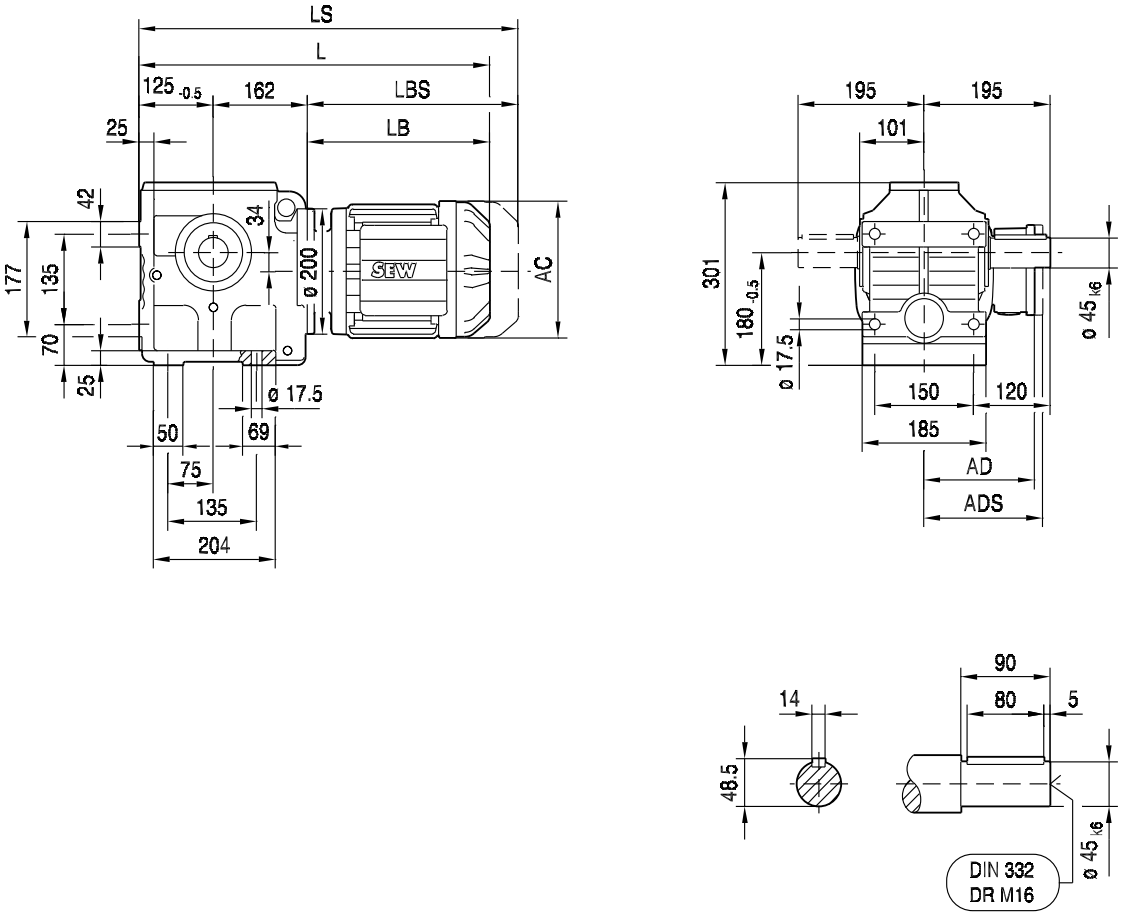
ST67..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S
AC	132	139	139	156	156	179	179	197	197	221
AD	105	119	119	128	128	140	140	157	157	170
ADS	105	129	129	139	139	150	150	158	158	172
L	427	438	463	472	503	505	525	555	585	632
LS	482	506	531	553	584	598	618	648	678	744
LB	185	196	221	230	261	263	283	313	343	390
LBS	240	264	289	311	342	356	376	406	436	502

02 065 00 06

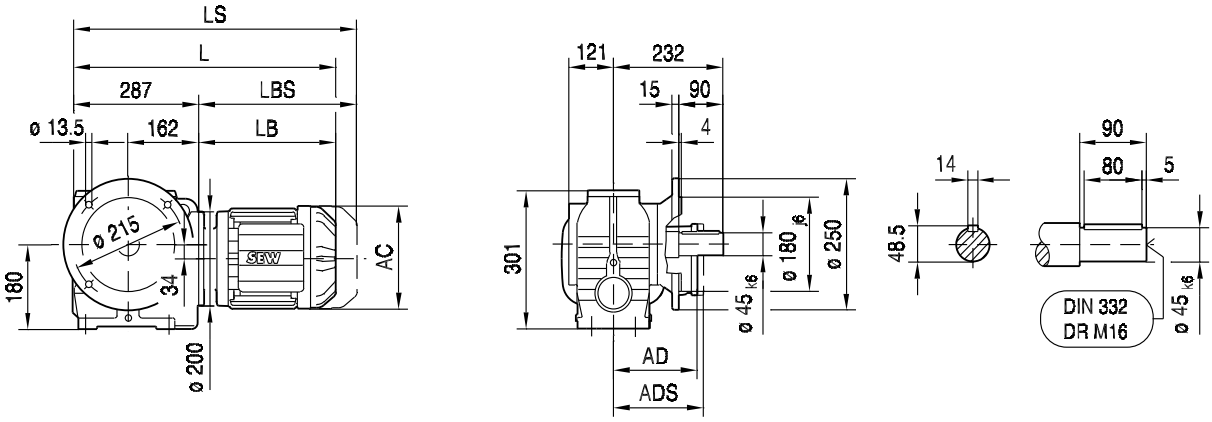
S77..



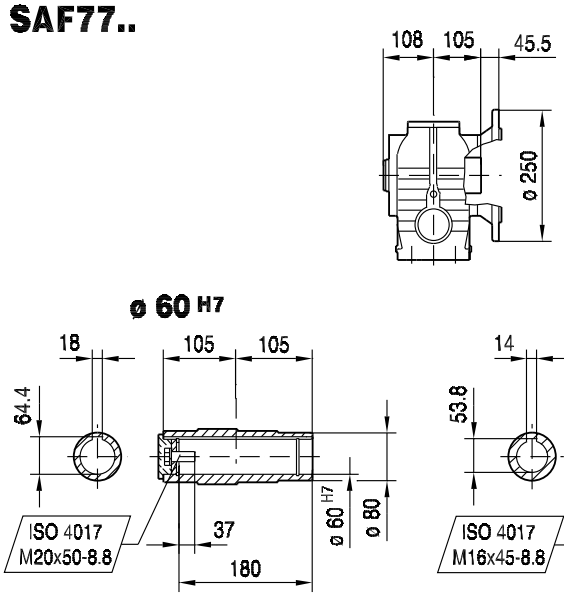
(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	139	156	156	179	179	197	197	221	221
AD	119	128	128	140	140	157	157	170	170
ADS	129	139	139	150	150	158	158	172	172
L	501	510	541	543	563	593	623	666	716
LS	569	591	622	636	656	686	716	778	828
LB	214	223	254	256	276	306	336	379	429
LBS	282	304	335	349	369	399	429	491	541

02 066 00 06

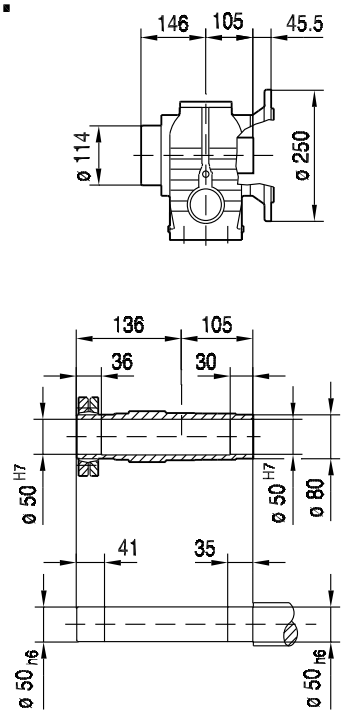
SF77..



SAF77..



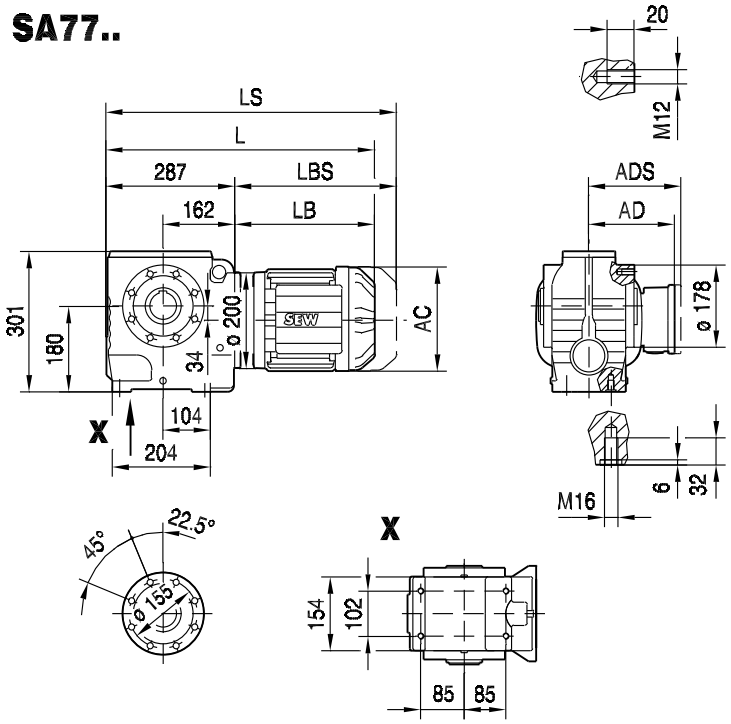
SHF77..



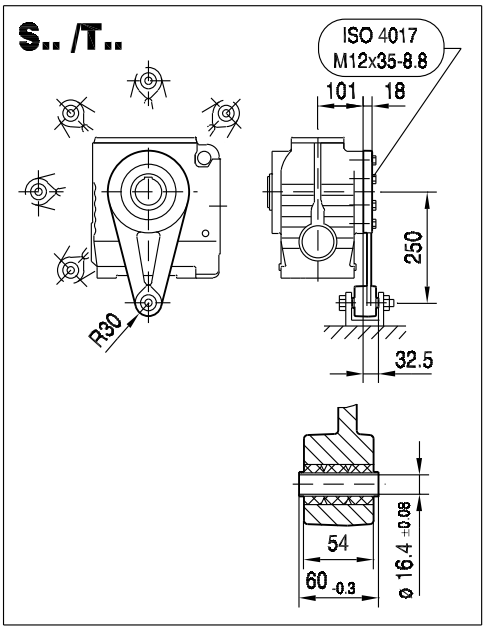
(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	139	156	156	179	179	197	197	221	221
AD	119	128	128	140	140	157	157	170	170
ADS	129	139	139	150	150	158	158	172	172
L	501	510	541	543	563	593	623	666	716
LS	569	591	622	636	656	686	716	778	828
LB	214	223	254	256	276	306	336	379	429
LBS	282	304	335	349	369	399	429	491	541

02 067 00 06

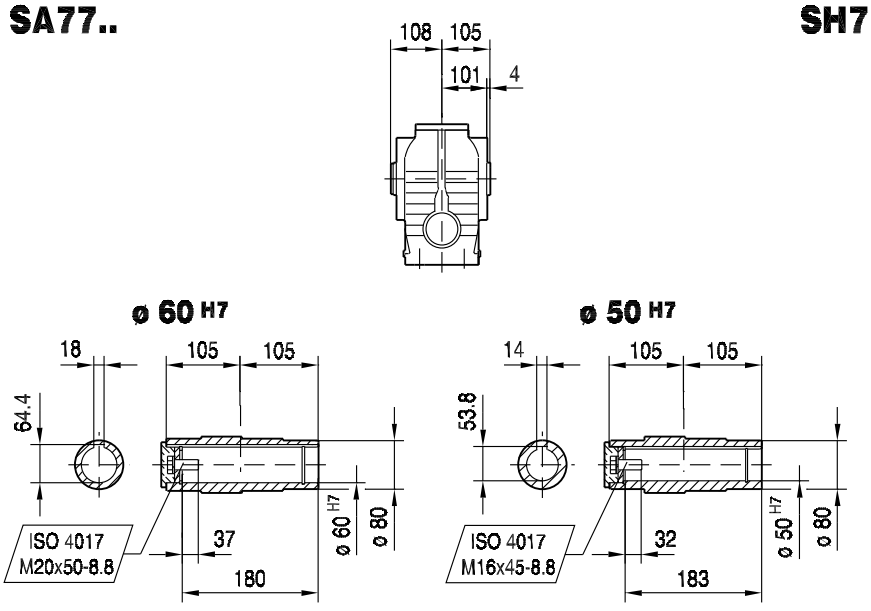
SA77..



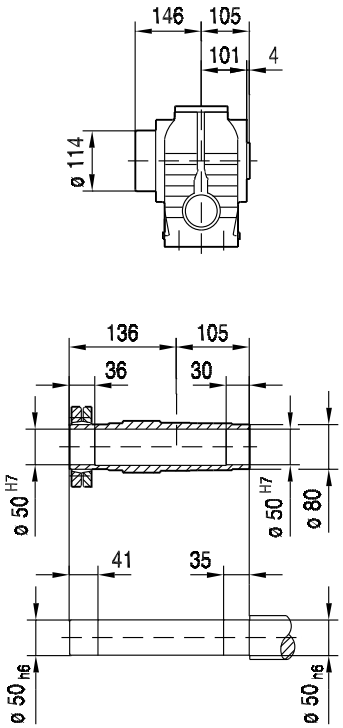
S.. /T..



SA77..



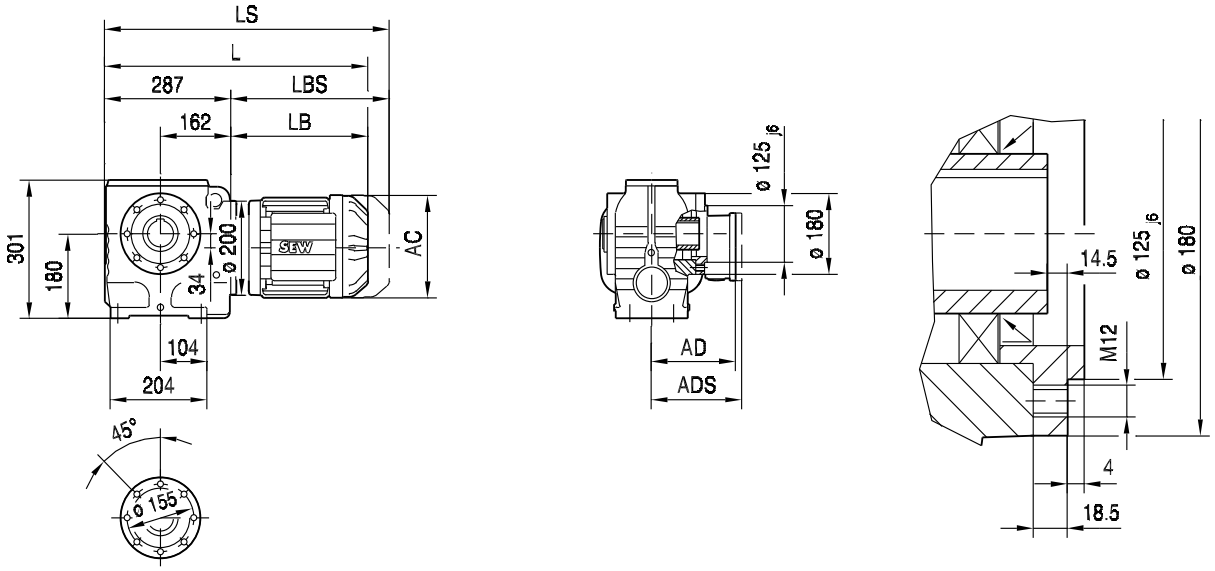
SH77..



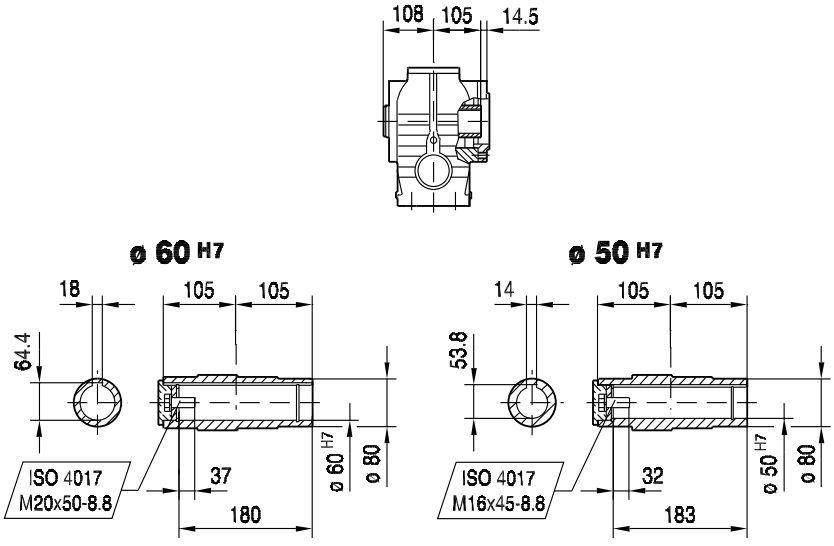
(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	139	156	156	179	179	197	197	221	221
AD	119	128	128	140	140	157	157	170	170
ADS	129	139	139	150	150	158	158	172	172
L	501	510	541	543	563	593	623	666	716
LS	569	591	622	636	656	686	716	778	828
LB	214	223	254	256	276	306	336	379	429
LBS	282	304	335	349	369	399	429	491	541

02 068 00 06

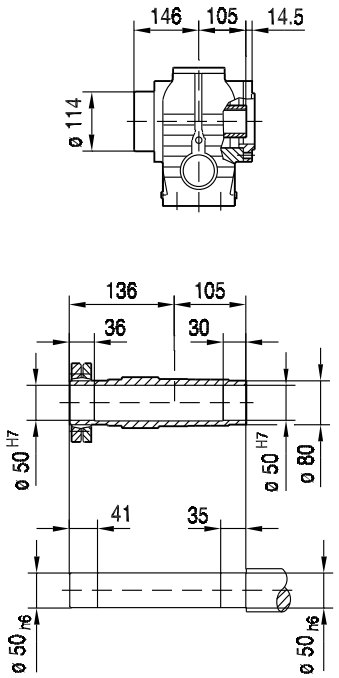
SAZ77..



SAZ77..



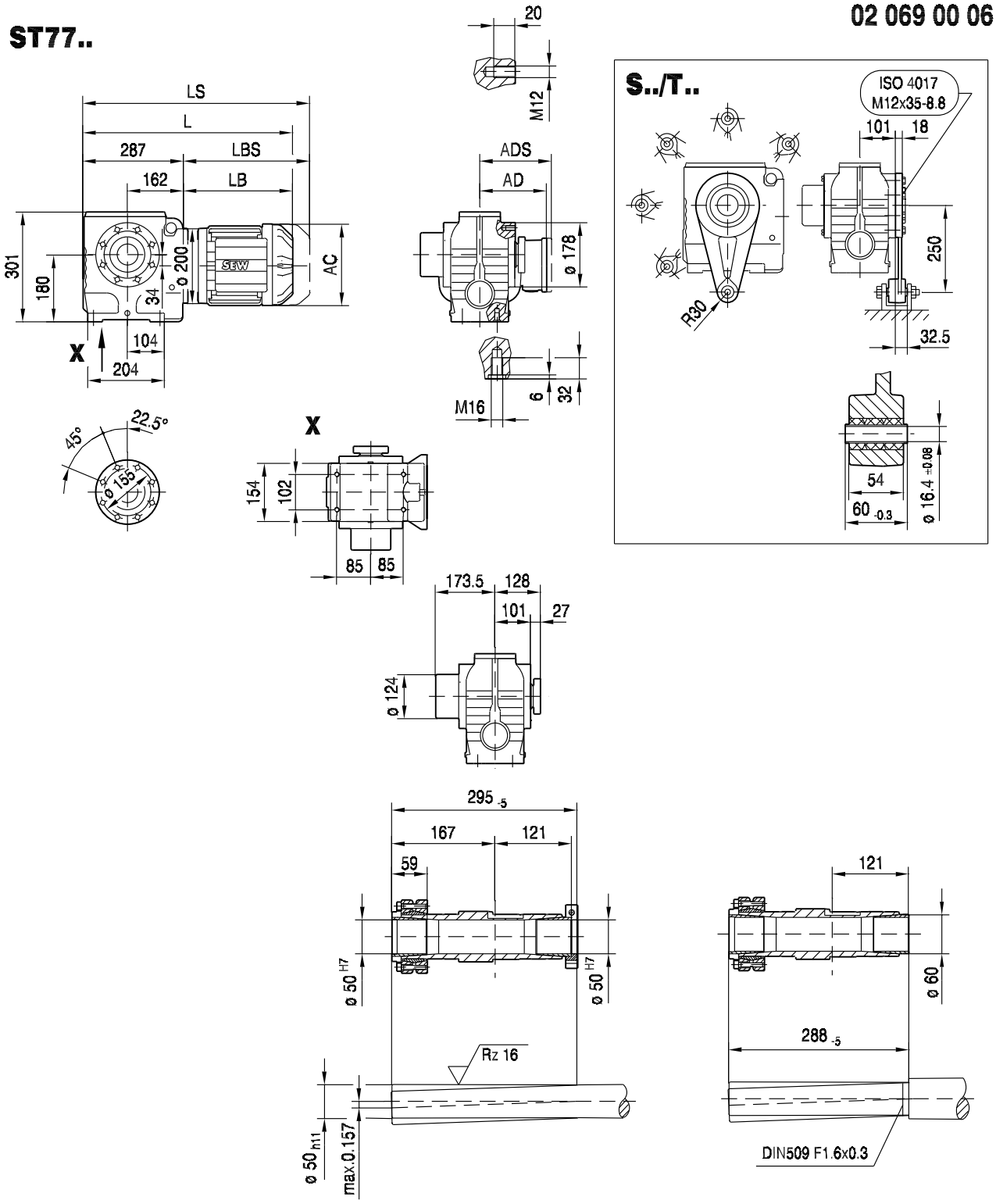
SHZ77..



(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	139	156	156	179	179	197	197	221	221
AD	119	128	128	140	140	157	157	170	170
ADS	129	139	139	150	150	158	158	172	172
L	501	510	541	543	563	593	623	666	716
LS	569	591	622	636	656	686	716	778	828
LB	214	223	254	256	276	306	336	379	429
LBS	282	304	335	349	369	399	429	491	541

02 069 00 06

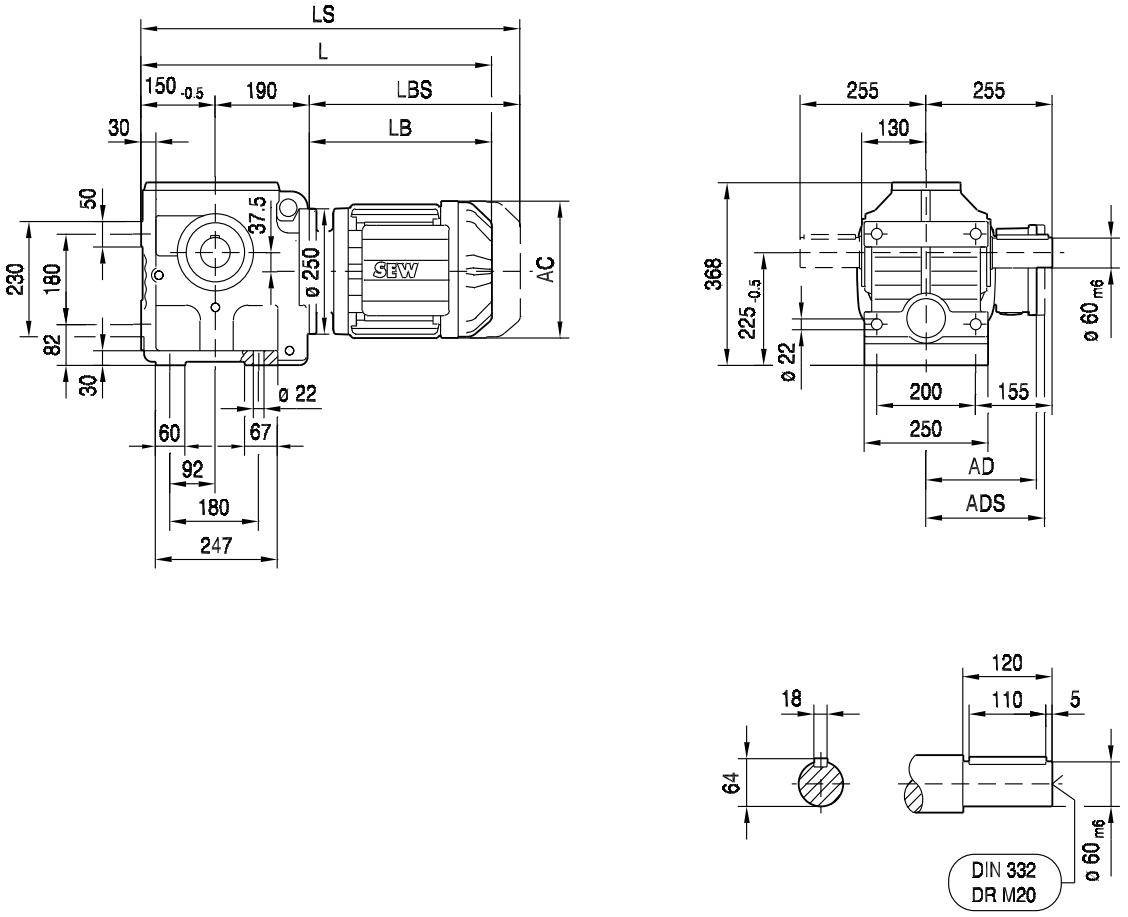
ST77..



(→ 131)	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC
AC	139	156	156	179	179	197	197	221	221
AD	119	128	128	140	140	157	157	170	170
ADS	129	139	139	150	150	158	158	172	172
L	501	510	541	543	563	593	623	666	716
LS	569	591	622	636	656	686	716	778	828
LB	214	223	254	256	276	306	336	379	429
LBS	282	304	335	349	369	399	429	491	541

02 070 00 06

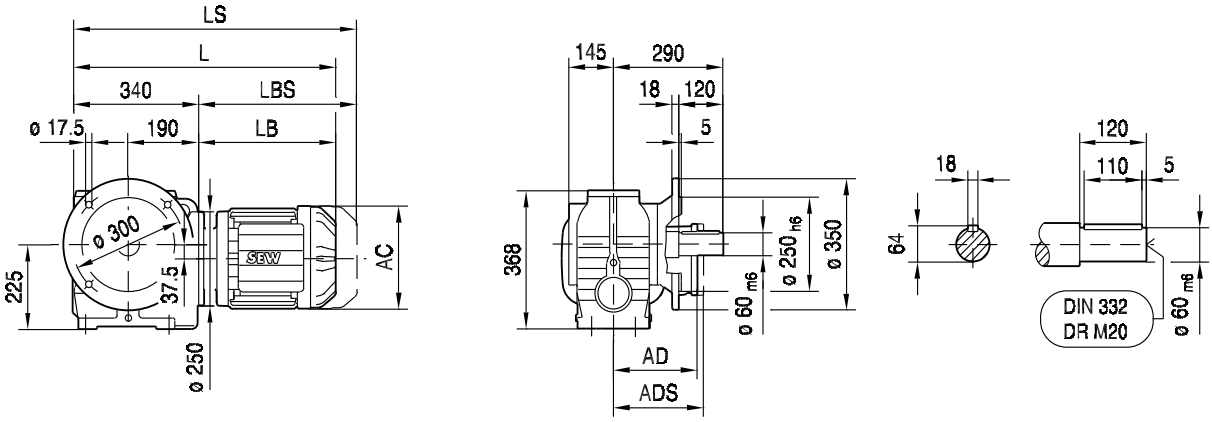
S87..



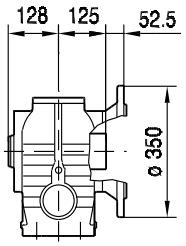
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	156	179	179	197	197	221	221	270
AD	128	128	140	140	157	157	170	170	228
ADS	139	139	150	150	158	158	172	172	228
L	558	589	591	611	641	671	714	764	805
LS	639	670	684	704	734	764	826	876	942
LB	218	249	251	271	301	331	374	424	465
LBS	299	330	344	364	394	424	486	536	602

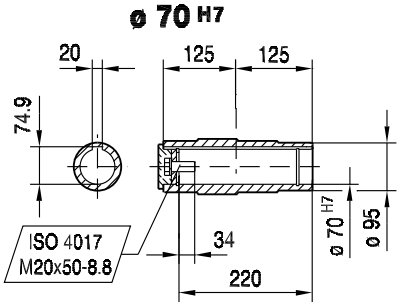
02 071 00 06

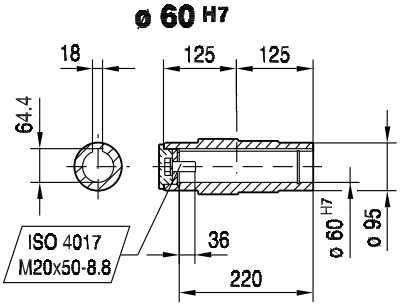
SF87..



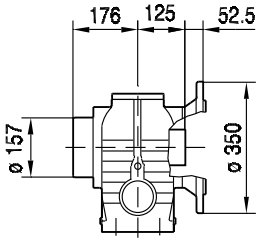
SAF87..

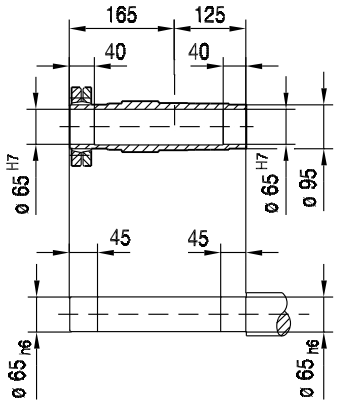






SHF87..

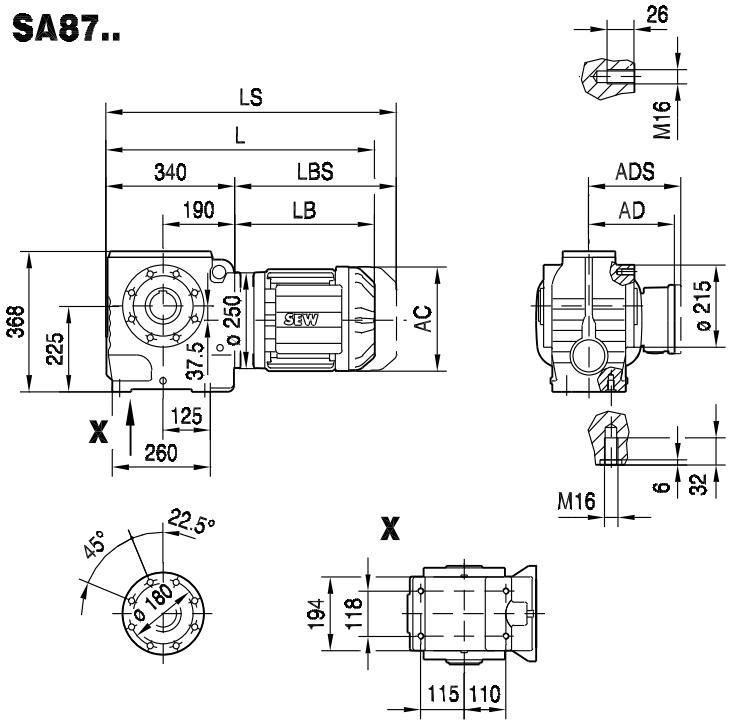




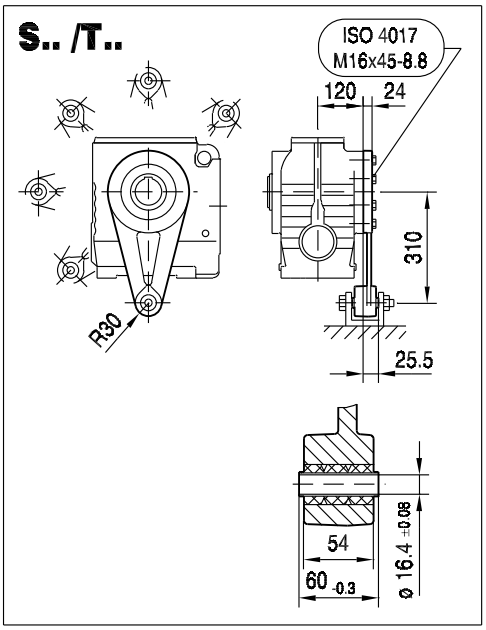
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	156	179	179	197	197	221	221	270
AD	128	128	140	140	157	157	170	170	228
ADS	139	139	150	150	158	158	172	172	228
L	558	589	591	611	641	671	714	764	805
LS	639	670	684	704	734	764	826	876	942
LB	218	249	251	271	301	331	374	424	465
LBS	299	330	344	364	394	424	486	536	602

02 072 00 06

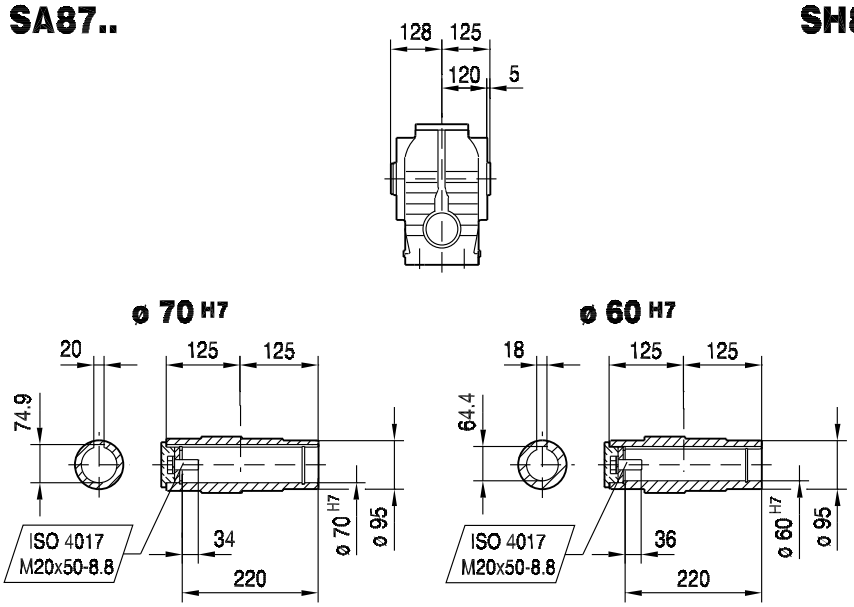
SA87..



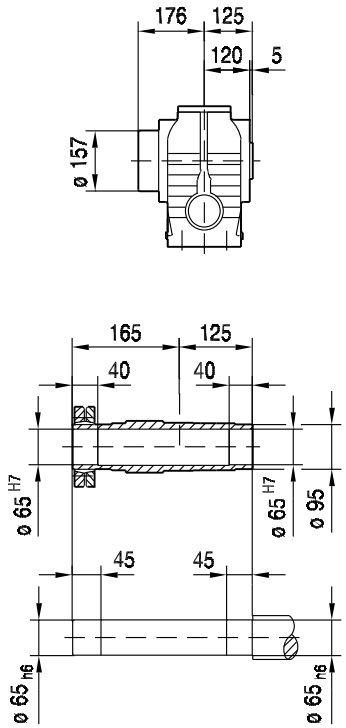
S.. /T..



SA87..



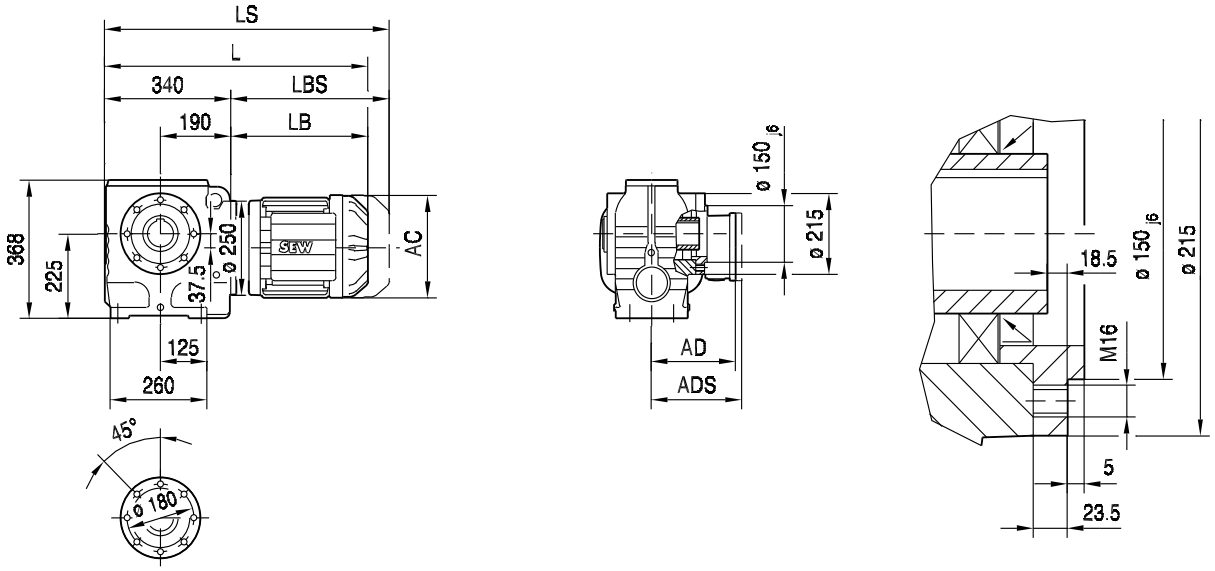
SH87..



(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	156	179	179	197	197	221	221	270
AD	128	128	140	140	157	157	170	170	228
ADS	139	139	150	150	158	158	172	172	228
L	558	589	591	611	641	671	714	764	805
LS	639	670	684	704	734	764	826	876	942
LB	218	249	251	271	301	331	374	424	465
LBS	299	330	344	364	394	424	486	536	602

02 073 00 06

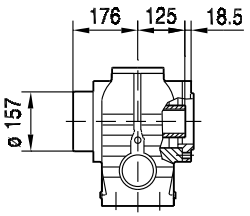
SAZ87..

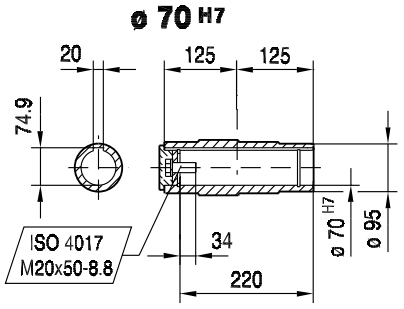


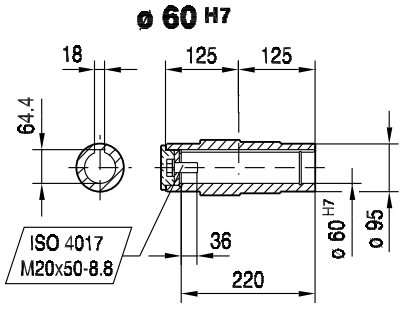
SAZ87..

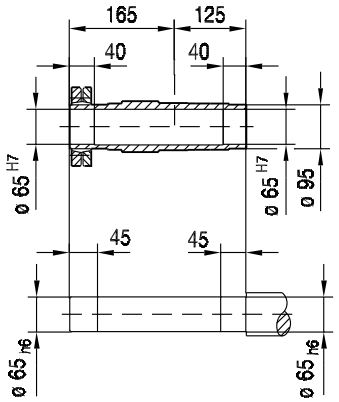


SHZ87..





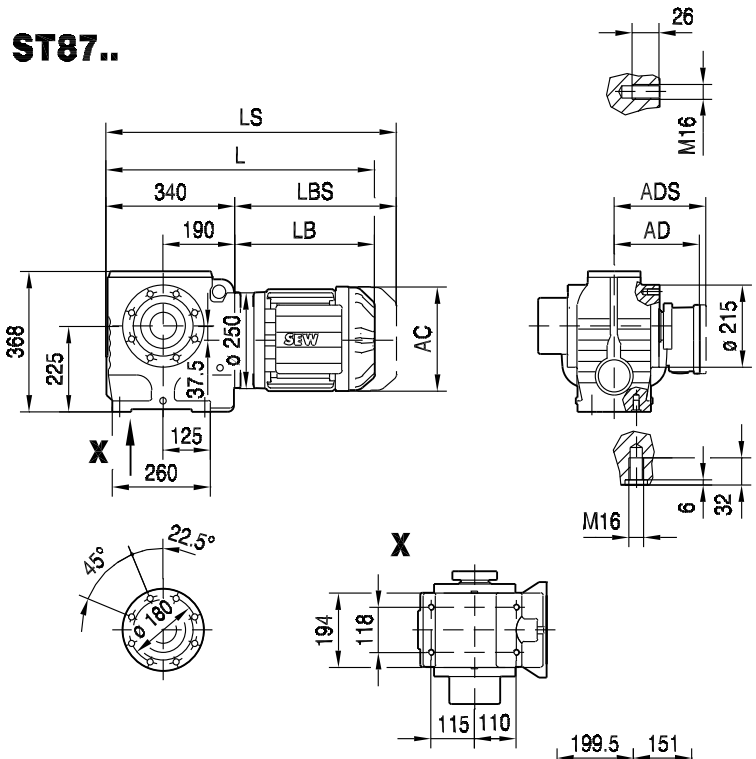


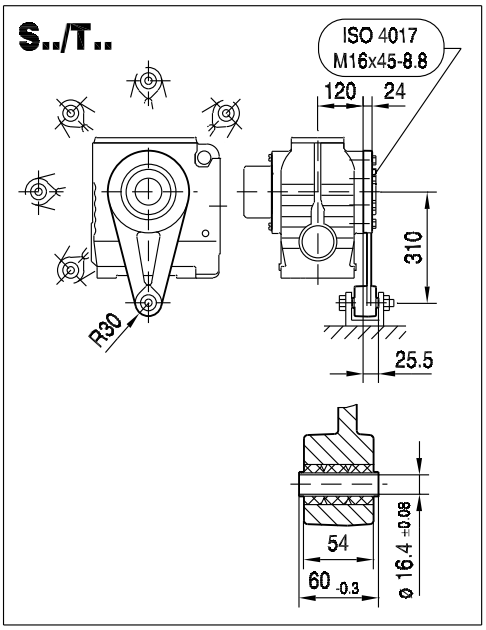


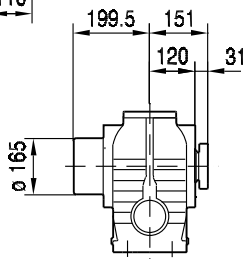
(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	156	179	179	197	197	221	221	270
AD	128	128	140	140	157	157	170	170	228
ADS	139	139	150	150	158	158	172	172	228
L	558	589	591	611	641	671	714	764	805
LS	639	670	684	704	734	764	826	876	942
LB	218	249	251	271	301	331	374	424	465
LBS	299	330	344	364	394	424	486	536	602

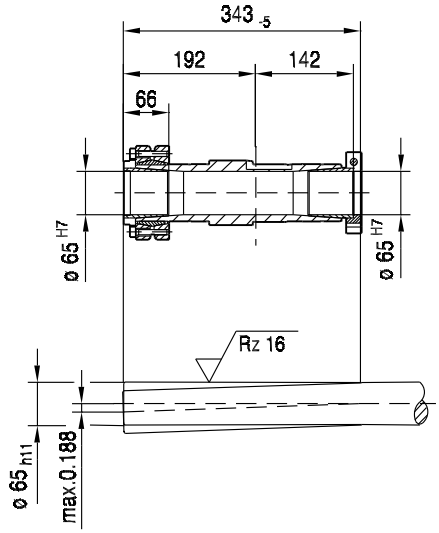
02 074 00 06

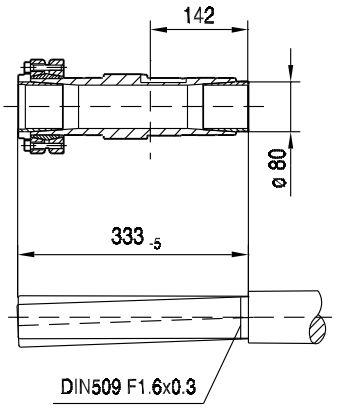
ST87..







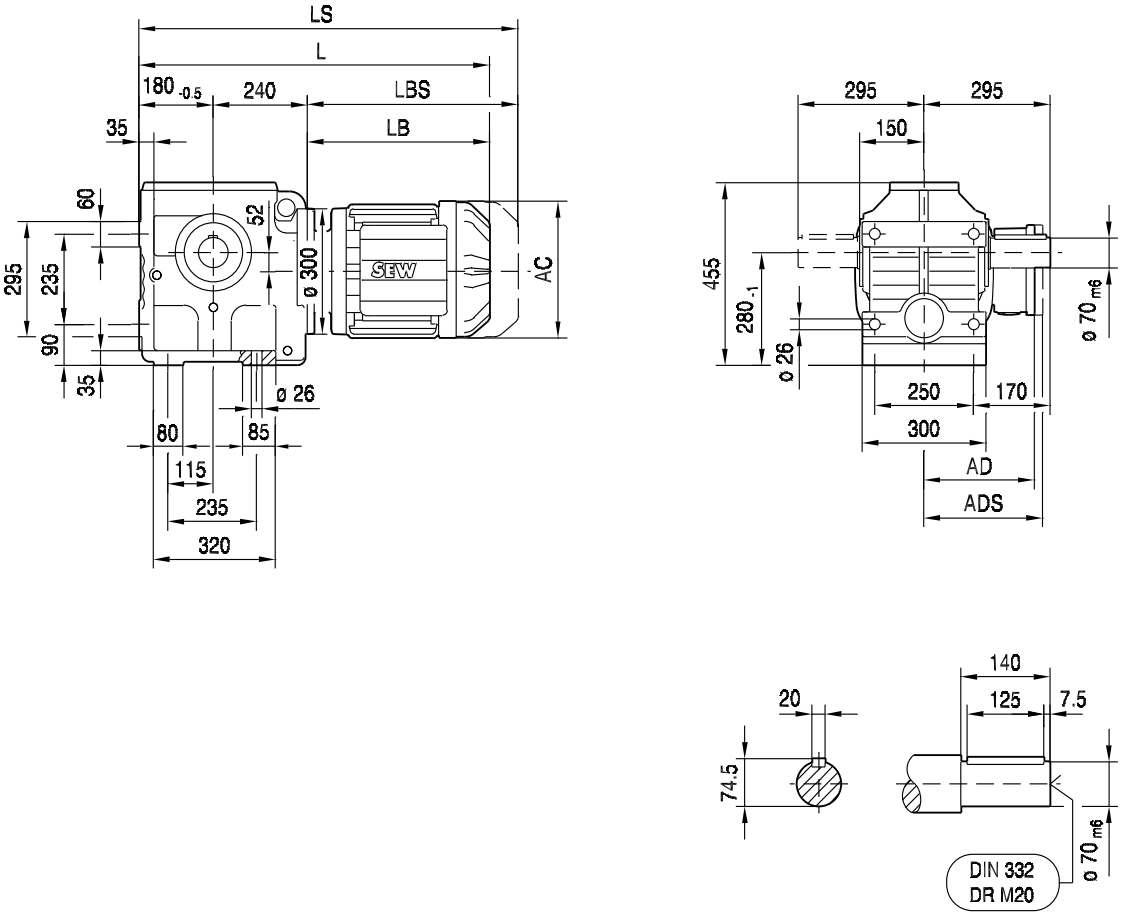




(→ 131)	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..
AC	156	156	179	179	197	197	221	221	270
AD	128	128	140	140	157	157	170	170	228
ADS	139	139	150	150	158	158	172	172	228
L	558	589	591	611	641	671	714	764	805
LS	639	670	684	704	734	764	826	876	942
LB	218	249	251	271	301	331	374	424	465
LBS	299	330	344	364	394	424	486	536	602

02 075 00 06

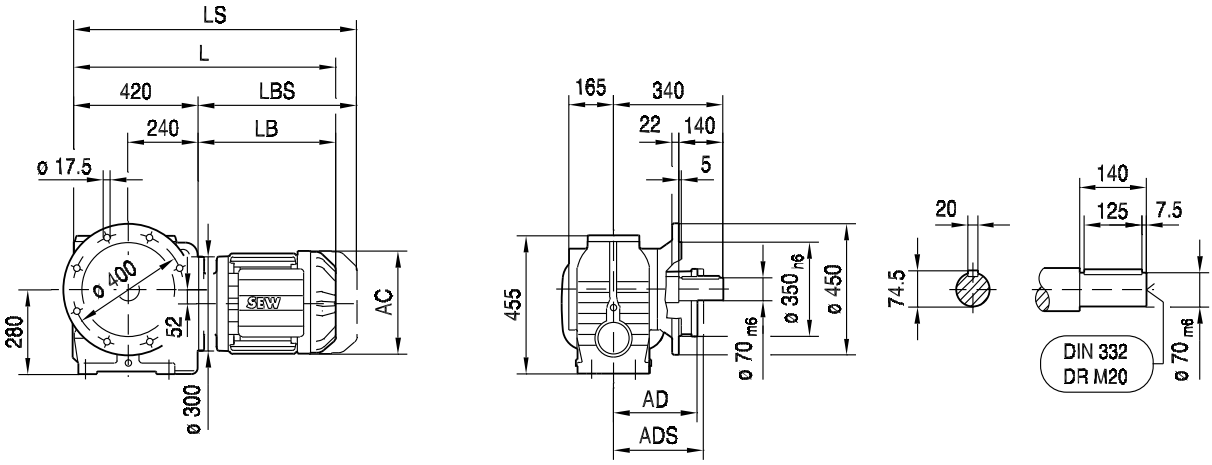
S97..



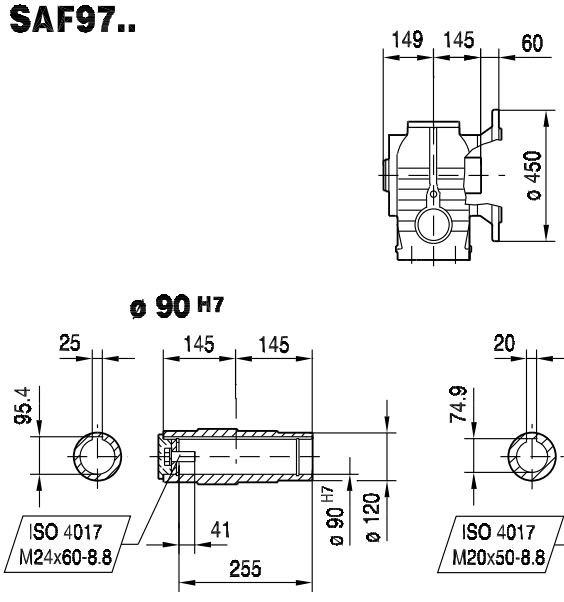
(→ 131)	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	179	179	197	197	221	221	270	316	316
AD	140	140	157	157	170	170	228	253	253
ADS	150	150	158	158	172	172	228	253	253
L	666	686	716	746	789	839	880	949	1009
LS	759	779	809	839	901	951	1017	1138	1198
LB	246	266	296	326	369	419	460	529	589
LBS	339	359	389	419	481	531	597	718	778

SF97..

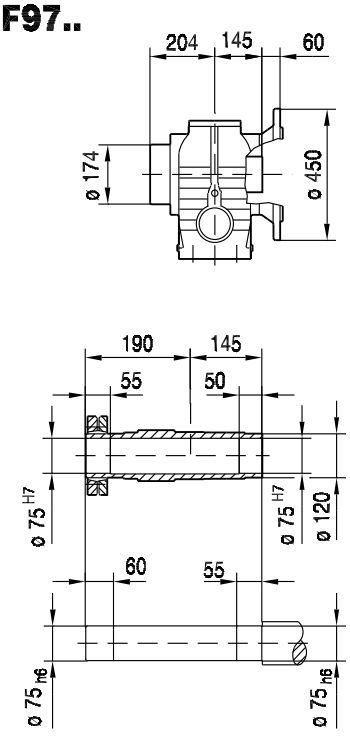
02 076 00 06



SAF97..



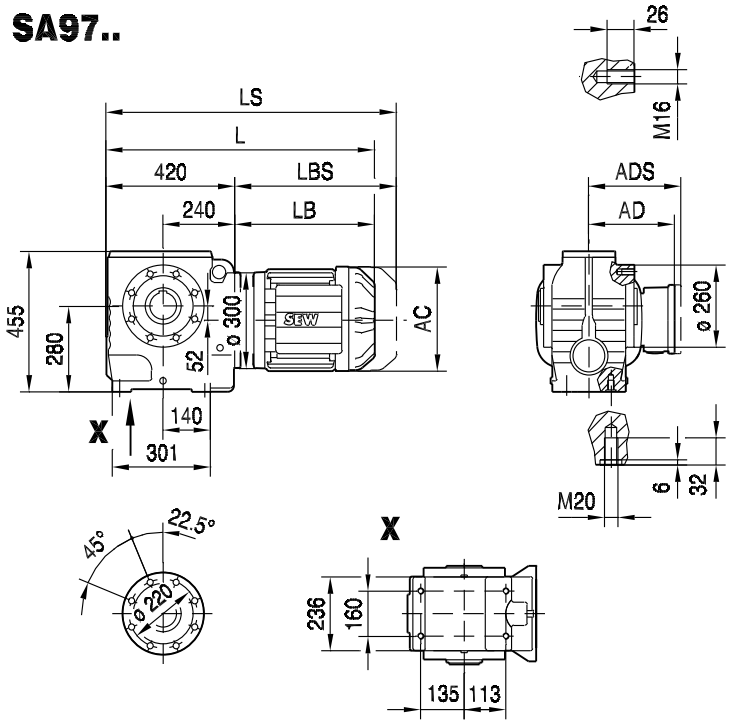
SHF97..



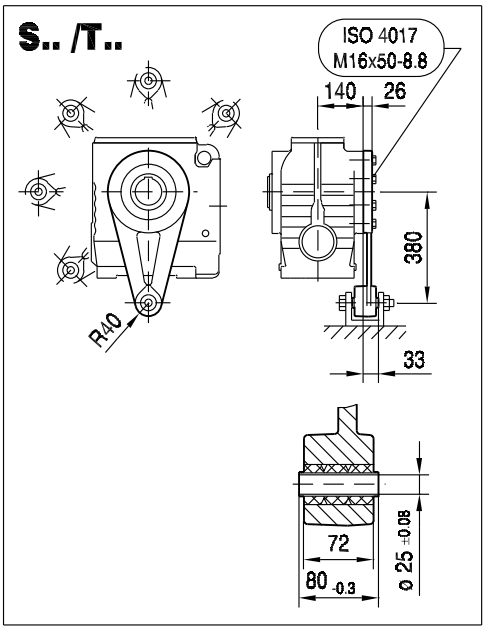
(→ 131)	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	179	179	197	197	221	221	270	316	316
AD	140	140	157	157	170	170	228	253	253
ADS	150	150	158	158	172	172	228	253	253
L	666	686	716	746	789	839	880	949	1009
LS	759	779	809	839	901	951	1017	1138	1198
LB	246	266	296	326	369	419	460	529	589
LBS	339	359	389	419	481	531	597	718	778

02 077 00 06

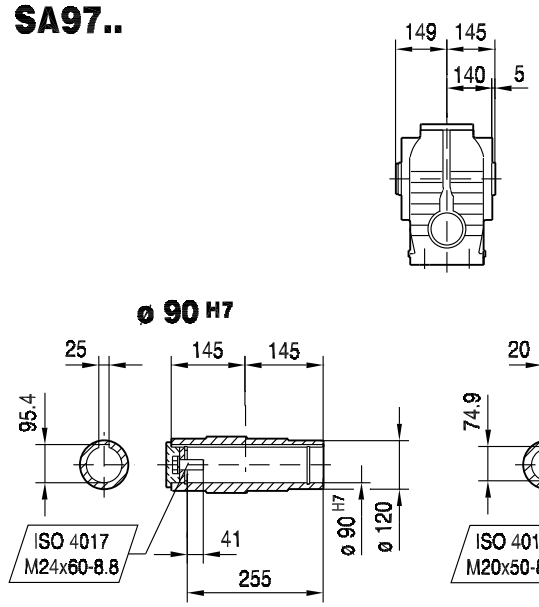
SA97..



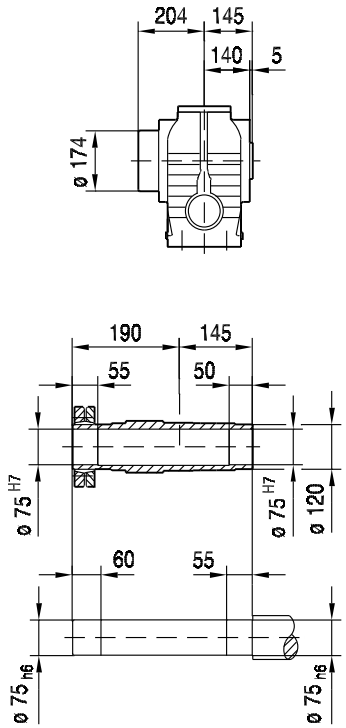
S.. /T..



SA97..



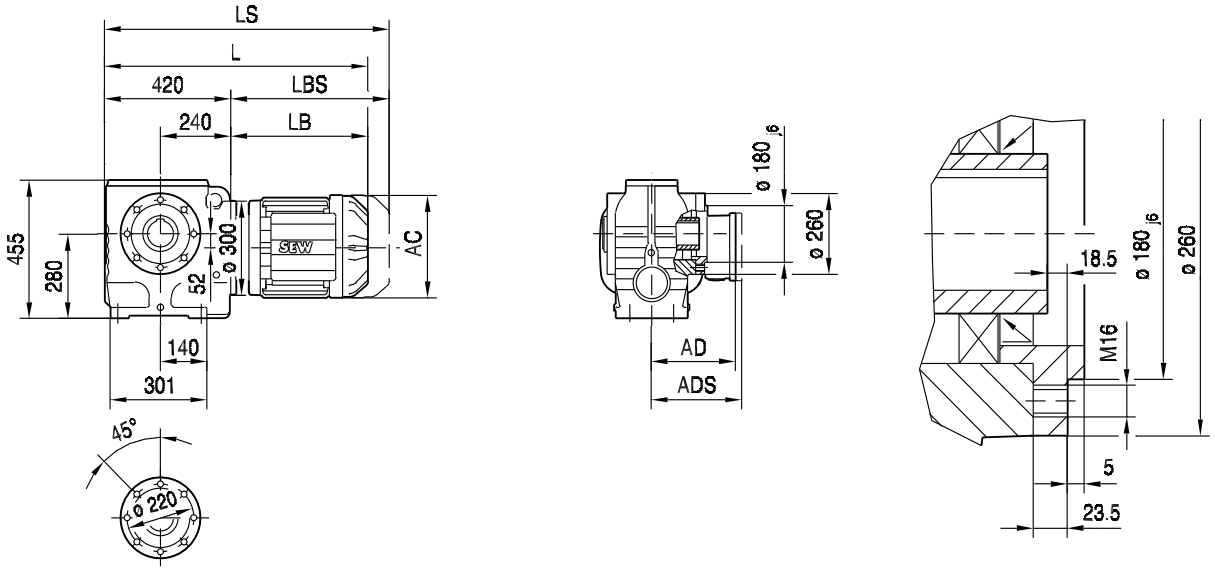
SH97..



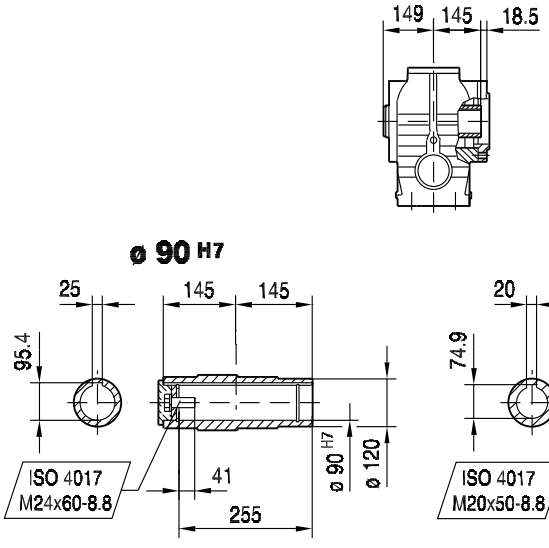
(→ 131)	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	179	179	197	197	221	221	270	316	316
AD	140	140	157	157	170	170	228	253	253
ADS	150	150	158	158	172	172	228	253	253
L	666	686	716	746	789	839	880	949	1009
LS	759	779	809	839	901	951	1017	1138	1198
LB	246	266	296	326	369	419	460	529	589
LBS	339	359	389	419	481	531	597	718	778

02 078 00 06

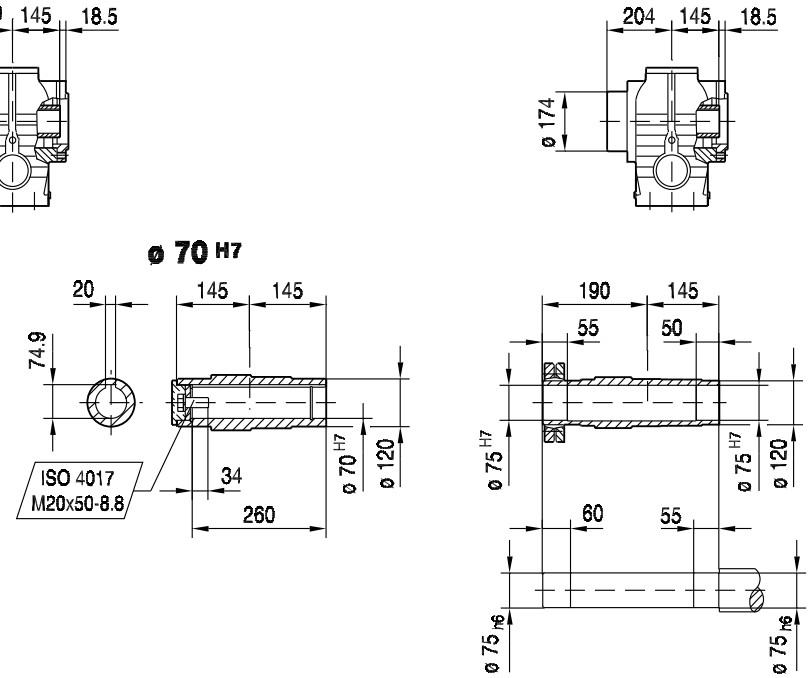
SAZ97..



SAZ97..



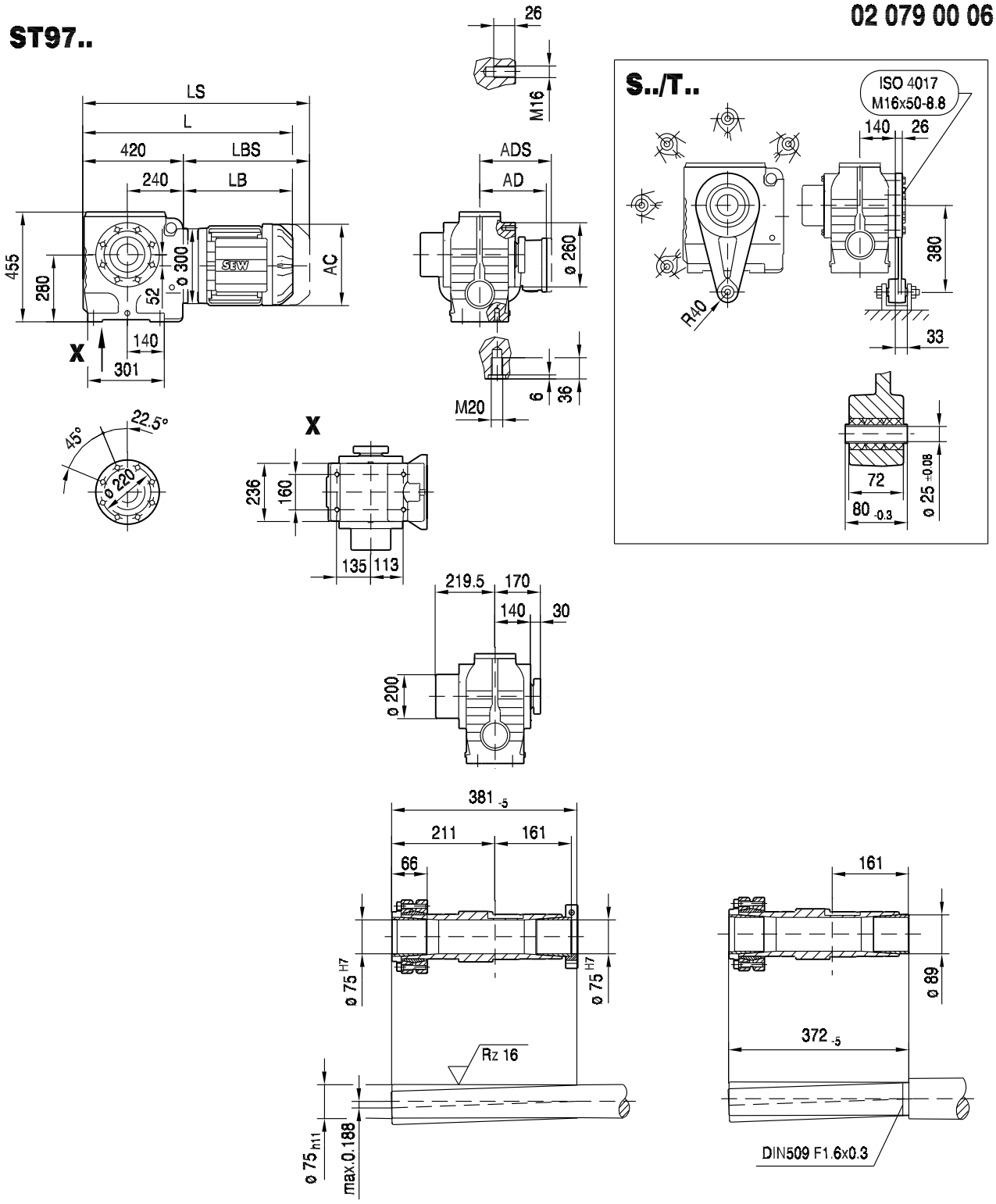
SHZ97..



(→ 131)	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	179	179	197	197	221	221	270	316	316
AD	140	140	157	157	170	170	228	253	253
ADS	150	150	158	158	172	172	228	253	253
L	666	686	716	746	789	839	880	949	1009
LS	759	779	809	839	901	951	1017	1138	1198
LB	246	266	296	326	369	419	460	529	589
LBS	339	359	389	419	481	531	597	718	778

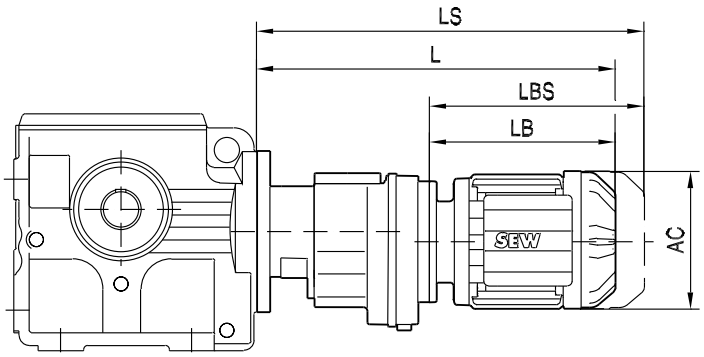
ST97..

02 079 00 06



(→ 131)	DR90M	DR90L	DR100M	DR100L/LC	DR132S	DR132M/MC	DR160..	DR180S/M	DR180L/LC
AC	179	179	197	197	221	221	270	316	316
AD	140	140	157	157	170	170	228	253	253
ADS	150	150	158	158	172	172	228	253	253
L	666	686	716	746	789	839	880	949	1009
LS	759	779	809	839	901	951	1017	1138	1198
LB	246	266	296	326	369	419	460	529	589
LBS	339	359	389	419	481	531	597	718	778

02 080 00 06



(→ 131)		AC	L	LS	LB	LBS
S..37R17	DR63..	132	324	379	149	204
S..47R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
S..57R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
	DR71M..	139	360	428	185	253
S..67R37	DR63..	132	356	411	191	246
	DR71S..	139	367	435	202	270
	DR71M..	139	392	460	227	295
	DR80S..	156	401	482	236	317
S..77R37	DR63..	132	348	403	191	246
	DR71S..	139	359	427	202	270
	DR71M..	139	384	452	227	295
	DR80S..	156	393	474	236	317
	DR80M..	156	424	505	267	348
S..87R57	DR63	132	401	456	185	240
	DR71S..	139	412	479	196	263
	DR71M..	139	437	504	221	288
	DR80S..	156	446	527	230	311
	DR80M..	156	477	558	261	342
	DR90M..	179	478	572	262	356
	DR90L..	179	498	592	282	376
S..97R57	DR63	132	396	451	185	240
	DR71S..	139	407	474	196	263
	DR71M..	139	432	499	221	288
	DR80S..	156	441	522	230	311
	DR80M..	156	472	553	261	342
	DR90M..	179	473	567	262	356
	DR90L..	179	493	587	282	376
	DR100M..	197	523	617	312	406
	DR100LC..	197	553	647	342	436

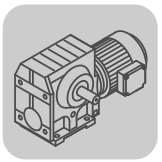
12.6 S, SF, SA, SAF 37

3400 - 2800 1/min

02 955 097

		n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
157.43		**22**	78	0.31	57	**20**	80	0.30	57	**18**	82	0.27	57
144.40		**24**	76	0.33	58	**22**	78	0.31	58	**19**	80	0.28	57
122.94		**28**	74	0.37	58	**26**	75	0.35	58	**23**	78	0.32	58
106.00		**32**	71	0.41	59	**30**	72	0.39	59	**26**	76	0.36	59
98.80	38/1	**34**	70	0.43	59	**32**	72	0.41	59	**28**	75	0.38	59
86.36		**39**	68	0.47	60	**37**	69	0.45	60	**32**	72	0.41	60
80.96		**42**	66	0.49	60	**40**	68	0.47	60	**35**	72	0.43	60
71.44		**48**	55	0.47	58	**45**	64	0.50	60	**39**	70	0.47	61
63.33		**54**	37	0.41	51	**51**	51	0.47	57	**44**	67	0.51	61
53.83		**63**	29	0.39	49	**59**	32	0.40	50	**52**	53	0.49	59
55.93		**61**	70	0.58	77	**57**	71	0.56	76	**50**	72	0.50	76
51.30		**66**	68	0.61	77	**62**	70	0.60	77	**55**	72	0.54	76
43.68		**78**	66	0.70	77	**73**	67	0.67	77	**64**	70	0.61	77
37.66		**90**	64	0.78	78	**85**	65	0.74	78	**74**	68	0.68	78
35.10	27/2	**97**	62	0.81	78	**91**	64	0.78	78	**80**	66	0.71	78
30.68		**111**	61	0.90	78	**104**	62	0.87	78	**91**	64	0.78	78
28.76		**118**	58	0.92	78	**111**	61	0.91	78	**97**	64	0.83	78
25.38		**134**	47	0.86	77	**126**	53	0.90	78	**110**	62	0.91	79
22.50		**151**	31	0.69	71	**142**	43	0.84	76	**124**	57	0.94	79
19.13		**178**	24	0.65	69	**167**	27	0.67	70	**146**	44	0.87	77
19.89		**171**	42	0.88	86	**161**	43	0.85	86	**141**	44	0.76	86
18.24		**186**	41	0.93	86	**175**	42	0.90	86	**154**	44	0.83	86
15.53		**219**	39	1.0	86	**206**	40	1.0	86	**180**	42	0.92	86
13.39		**254**	37	1.1	86	**239**	39	1.1	86	**209**	41	1.0	86
12.48	24/5	**272**	37	1.2 *	86	**256**	38	1.2 *	86	**224**	40	1.1	86
10.91		**312**	35	1.3 *	86	**293**	36	1.3 *	86	**257**	39	1.2 *	87
10.23		**332**	35	1.4 *	87	**313**	36	1.4 *	87	**274**	38	1.3 *	87
9.02		**377**	31	1.4 *	86	**355**	34	1.5 *	87	**310**	36	1.3 *	87
8.00		**425**	20	1.1	82	**400**	29	1.4 *	86	**350**	35	1.5 *	87
6.80		**500**	16	1.0	81	**471**	18	1.1	82	**412**	29	1.4 *	86

* P_{emax} = 1.1 kW

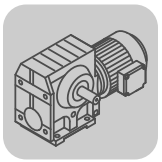


2200 - 1400 1/min

02 955 097

		n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
157.43		**14**	87	0.23	56	**11**	91	0.19	54	**8.9**	92	0.16	53
144.40		**15**	86	0.24	56	**12**	90	0.20	55	**9.7**	92	0.17	54
122.94		**18**	83	0.27	57	**14**	87	0.22	56	**11**	91	0.20	55
106.00		**21**	81	0.30	58	**16**	86	0.25	57	**13**	88	0.22	56
98.80		**22**	80	0.32	58	**17**	85	0.27	57	**14**	87	0.23	56
86.36	38/1	**25**	78	0.35	59	**20**	82	0.29	58	**16**	86	0.25	57
80.96		**27**	77	0.37	60	**21**	82	0.31	59	**17**	85	0.27	58
71.44		**31**	75	0.40	60	**24**	80	0.33	60	**20**	84	0.29	59
63.33		**35**	73	0.44	61	**27**	79	0.37	60	**22**	82	0.32	60
53.83		**41**	69	0.48	62	**32**	76	0.41	61	**26**	80	0.36	61
55.93		**39**	77	0.42	75	**30**	81	0.35	74	**25**	81	0.29	73
51.30		**43**	76	0.45	76	**33**	80	0.37	75	**27**	81	0.31	74
43.68		**50**	74	0.51	76	**39**	78	0.42	76	**32**	81	0.36	75
37.66		**58**	72	0.57	77	**45**	76	0.47	76	**37**	79	0.41	76
35.10	27/2	**63**	71	0.60	77	**48**	75	0.50	77	**40**	78	0.43	76
30.68		**72**	70	0.67	78	**55**	73	0.55	77	**46**	76	0.47	76
28.76		**76**	68	0.70	78	**59**	73	0.58	77	**49**	75	0.50	77
25.38		**87**	67	0.77	79	**67**	71	0.64	78	**55**	74	0.55	77
22.50		**98**	66	0.85	79	**76**	70	0.70	79	**62**	73	0.61	78
19.13		**115**	63	0.95	80	**89**	68	0.80	79	**73**	71	0.69	79
19.89		**111**	48	0.65	85	**85**	50	0.53	85	**70**	52	0.46	84
18.24		**121**	47	0.70	85	**93**	49	0.56	85	**77**	52	0.50	84
15.53		**142**	45	0.78	86	**109**	48	0.64	85	**90**	50	0.56	85
13.39		**164**	44	0.88	86	**127**	47	0.73	86	**105**	49	0.63	85
12.48		**176**	43	0.92	86	**136**	46	0.76	86	**112**	48	0.66	86
10.91	24/5	**202**	42	1.0	87	**156**	45	0.85	86	**128**	48	0.75	86
10.23		**215**	41	1.1	87	**166**	45	0.90	87	**137**	47	0.78	86
9.02		**244**	40	1.2 *	87	**188**	43	0.98	87	**155**	46	0.86	87
8.00		**275**	39	1.3 *	87	**213**	43	1.1	87	**175**	45	0.95	87
6.80		**324**	37	1.4 *	88	**250**	41	1.2 *	88	**206**	43	1.1	87

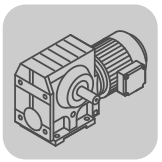
* P_{emax} = 1.1 kW



1100 - 700 1/min

02 956 097

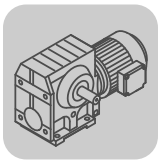
		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
157.43	38/1	**7.0**	92	0.13	52	**5.7**	92	0.11	50	**4.4**	92	0.09	49
144.40		**7.6**	92	0.14	52	**6.2**	92	0.12	51	**4.8**	92	0.09	50
122.94		**8.9**	92	0.16	54	**7.3**	92	0.14	52	**5.7**	92	0.11	51
106.00		**10**	92	0.18	55	**8.5**	92	0.15	53	**6.6**	92	0.12	52
98.80		**11**	92	0.19	55	**9.1**	92	0.16	54	**7.1**	92	0.13	52
86.36		**13**	90	0.21	56	**10**	92	0.18	55	**8.1**	92	0.15	53
80.96		**14**	89	0.22	57	**11**	92	0.19	55	**8.6**	92	0.16	54
71.44		**15**	87	0.24	57	**13**	91	0.21	56	**9.8**	92	0.17	55
63.33		**17**	86	0.27	58	**14**	89	0.23	57	**11**	92	0.19	56
53.83		**20**	84	0.30	60	**17**	87	0.26	58	**13**	91	0.22	57
55.93	27/2	**20**	87	0.25	72	**16**	91	0.21	71	**13**	92	0.17	70
51.30		**21**	87	0.27	73	**18**	90	0.23	72	**14**	92	0.19	71
43.68		**25**	84	0.30	74	**21**	87	0.26	73	**16**	92	0.22	71
37.66		**29**	82	0.34	75	**24**	86	0.29	74	**19**	89	0.24	72
35.10		**31**	82	0.36	75	**26**	84	0.31	74	**20**	88	0.25	73
30.68		**36**	80	0.40	76	**29**	82	0.34	75	**23**	87	0.28	74
28.76		**38**	79	0.42	76	**31**	82	0.36	75	**24**	86	0.30	74
25.38		**43**	78	0.46	77	**35**	81	0.40	76	**28**	84	0.33	75
22.50		**49**	77	0.51	77	**40**	79	0.43	76	**31**	82	0.36	75
19.13		**58**	75	0.58	78	**47**	78	0.50	77	**37**	81	0.41	76
19.89	24/5	**55**	55	0.38	83	**45**	58	0.33	83	**35**	60	0.27	82
18.24		**60**	54	0.41	84	**49**	56	0.35	83	**38**	60	0.29	82
15.53		**71**	53	0.47	84	**58**	55	0.40	84	**45**	58	0.33	83
13.39		**82**	52	0.53	85	**67**	54	0.45	84	**52**	56	0.37	83
12.48		**88**	51	0.55	85	**72**	53	0.47	84	**56**	55	0.39	84
10.91		**101**	50	0.62	86	**82**	52	0.53	85	**64**	54	0.43	84
10.23		**108**	49	0.64	86	**88**	51	0.55	85	**68**	54	0.46	84
9.02		**122**	48	0.71	86	**100**	50	0.61	86	**78**	53	0.51	85
8.00		**138**	47	0.78	87	**113**	49	0.67	86	**88**	52	0.56	85
6.80		**162**	46	0.90	87	**132**	48	0.77	87	**103**	51	0.64	86



500 - 10 1/min

02 956 097

i_{ges}	i_{sch}	n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
		n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
157.43	38/1	**3.2**	92	0.06	47	**1.6**	92	0.033	46	**0.06**	92	< 0.05	26
144.40		**3.5**	92	0.07	48	**1.7**	92	0.036	46	**0.07**	92	< 0.05	27
122.94		**4.1**	92	0.08	49	**2.0**	92	0.042	46	**0.08**	92	< 0.05	29
106.00		**4.7**	92	0.09	50	**2.4**	92	0.049	47	**0.09**	92	< 0.05	30
98.80		**5.1**	92	0.10	50	**2.5**	92	0.05	47	**0.10**	92	< 0.05	31
86.36		**5.8**	92	0.11	51	**2.9**	92	0.06	47	**0.12**	92	< 0.05	32
80.96		**6.2**	92	0.12	51	**3.1**	92	0.06	47	**0.12**	92	< 0.05	33
71.44		**7.0**	92	0.13	52	**3.5**	92	0.07	48	**0.14**	92	< 0.05	35
63.33		**7.9**	92	0.14	53	**3.9**	92	0.08	49	**0.16**	92	< 0.05	37
53.83		**9.3**	92	0.16	55	**4.6**	92	0.09	50	**0.19**	92	< 0.05	39
55.93	27/2	**8.9**	92	0.13	69	**4.5**	92	0.06	67	**0.18**	92	< 0.05	48
51.30		**9.7**	92	0.14	69	**4.9**	92	0.07	67	**0.19**	92	< 0.05	49
43.68		**11**	92	0.16	70	**5.7**	92	0.08	67	**0.23**	92	< 0.05	51
37.66		**13**	92	0.18	71	**6.6**	92	0.10	67	**0.27**	92	< 0.05	53
35.10		**14**	92	0.19	71	**7.1**	92	0.10	68	**0.28**	92	< 0.05	54
30.68		**16**	92	0.22	72	**8.1**	92	0.11	68	**0.33**	92	< 0.05	56
28.76		**17**	91	0.23	72	**8.7**	92	0.12	69	**0.35**	92	< 0.05	57
25.38		**20**	89	0.25	73	**9.9**	92	0.14	69	**0.39**	92	< 0.05	59
22.50		**22**	87	0.28	74	**11**	92	0.15	70	**0.44**	92	< 0.05	61
19.13		**26**	85	0.31	75	**13**	92	0.18	71	**0.52**	92	< 0.05	62
19.89	24/5	**25**	68	0.22	81	**13**	72	0.12	79	**0.50**	72	< 0.05	65
18.24		**27**	66	0.23	81	**14**	72	0.13	79	**0.55**	72	< 0.05	66
15.53		**32**	63	0.26	82	**16**	72	0.15	79	**0.64**	72	< 0.05	68
13.39		**37**	61	0.29	82	**19**	72	0.18	80	**0.75**	72	< 0.05	71
12.48		**40**	59	0.30	82	**20**	72	0.19	80	**0.80**	72	< 0.05	72
10.91		**46**	58	0.34	83	**23**	71	0.21	81	**0.92**	71	< 0.05	73
10.23		**49**	57	0.35	83	**24**	70	0.22	81	**0.98**	70	< 0.05	73
9.02		**55**	56	0.39	84	**28**	66	0.24	81	**1.1**	66	< 0.05	74
8.00		**63**	55	0.43	84	**31**	63	0.25	82	**1.2**	63	< 0.05	74
6.80		**74**	54	0.49	85	**37**	61	0.29	82	**1.5**	61	< 0.05	75



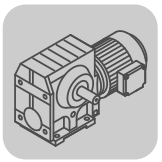
12.7 S, SF, SA, SAF 47

3400 - 2800 1/min

02 957 097

		n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**17**	150	0.44	60	**16**	150	0.42	60	**14**	150	0.37	59
184.80		**18**	150	0.48	60	**17**	150	0.45	60	**15**	150	0.40	59
158.12		**22**	150	0.55	61	**20**	150	0.52	61	**18**	150	0.46	60
137.05		**25**	150	0.63	62	**23**	150	0.59	62	**20**	150	0.52	61
128.10		**27**	150	0.67	63	**25**	150	0.63	62	**22**	150	0.56	62
110.73	42/1	**31**	138	0.70	63	**29**	148	0.71	63	**25**	150	0.63	63
94.08		**36**	113	0.69	62	**34**	123	0.70	63	**30**	146	0.72	63
84.00		**40**	95	0.66	61	**38**	107	0.69	62	**33**	130	0.71	63
71.75		**47**	58	0.55	53	**45**	82	0.64	60	**39**	107	0.70	63
67.20		**51**	53	0.54	52	**48**	68	0.60	57	**42**	99	0.69	62
56.61		**60**	40	0.51	49	**57**	46	0.53	51	**49**	75	0.65	60
69.39		**49**	140	0.91	79	**46**	140	0.86	78	**40**	140	0.76	78
63.80		**53**	140	0.99	79	**50**	140	0.93	79	**44**	140	0.82	78
54.59		**62**	140	1.1	80	**59**	140	1.1	79	**51**	140	0.95	79
47.32		**72**	139	1.3	80	**68**	140	1.2	80	**59**	140	1.1	80
44.22		**77**	129	1.3	80	**72**	139	1.3	80	**63**	140	1.2	80
38.23	29/2	**89**	112	1.3	80	**84**	120	1.3	80	**73**	139	1.3	80
32.48		**105**	91	1.3	79	**99**	100	1.3	80	**86**	117	1.3	80
29.00		**117**	76	1.2	78	**110**	86	1.3	79	**97**	104	1.3	80
24.77		**137**	47	0.94	72	**129**	66	1.2	77	**113**	87	1.3	80
23.20		**147**	42	0.90	71	**138**	54	1.0	75	**121**	79	1.3	79
19.54		**174**	32	0.84	69	**164**	37	0.89	71	**143**	59	1.1	77
20.33		**167**	100	2.0 *	88	**157**	100	1.9 *	88	**138**	100	1.6 *	88
17.62		**193**	97	2.2 *	88	**182**	100	2.2 *	88	**159**	100	1.9 *	88
16.47		**206**	90	2.2 *	88	**194**	97	2.2 *	88	**170**	100	2.0 *	88
14.24		**239**	78	2.2 *	88	**225**	83	2.2 *	88	**197**	97	2.3 *	88
12.10	27/5	**281**	63	2.1 *	88	**264**	69	2.2 *	88	**231**	82	2.2 *	88
10.80		**315**	53	2.0 *	87	**296**	60	2.1 *	88	**259**	72	2.2 *	88
9.23		**368**	32	1.5	83	**347**	45	1.9 *	86	**303**	60	2.2 *	88
8.64		**394**	29	1.5	82	**370**	37	1.7 *	85	**324**	55	2.1 *	88
7.28		**467**	22	1.3	81	**440**	25	1.4	82	**385**	41	1.9 *	86

* P_{emax} = 1.5 kW

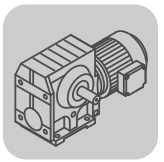


2200 - 1400 1/min

02 957 097

		n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**11**	167	0.33	58	**8.5**	170	0.27	56	**7.0**	170	0.23	55
184.80		**12**	167	0.36	58	**9.2**	168	0.29	57	**7.6**	170	0.24	56
158.12		**14**	167	0.41	60	**11**	168	0.33	58	**8.9**	170	0.28	57
137.05		**16**	165	0.46	60	**12**	167	0.37	59	**10**	168	0.31	58
128.10		**17**	165	0.49	61	**13**	167	0.39	59	**11**	168	0.33	58
110.73	42/1	**20**	165	0.55	62	**15**	167	0.44	61	**13**	168	0.38	59
94.08		**23**	165	0.64	63	**18**	167	0.51	62	**15**	168	0.43	60
84.00		**26**	162	0.70	64	**20**	167	0.57	62	**17**	167	0.48	61
71.75		**31**	145	0.73	64	**24**	167	0.65	63	**20**	167	0.55	62
67.20		**33**	137	0.73	64	**25**	164	0.68	64	**21**	167	0.58	63
56.61		**39**	115	0.73	64	**30**	152	0.74	65	**25**	165	0.67	64
69.39		**32**	155	0.67	77	**24**	155	0.52	76	**20**	155	0.44	75
63.80		**34**	155	0.72	77	**27**	155	0.57	76	**22**	155	0.47	75
54.59		**40**	155	0.84	78	**31**	155	0.66	77	**26**	155	0.55	76
47.32		**46**	155	0.96	79	**36**	155	0.75	78	**30**	155	0.63	77
44.22		**50**	155	1.0	79	**38**	155	0.80	78	**32**	155	0.67	77
38.23	29/2	**58**	154	1.2	80	**44**	155	0.92	79	**37**	155	0.76	78
32.48		**68**	146	1.3	80	**52**	155	1.1	80	**43**	155	0.89	79
29.00		**76**	137	1.3	81	**59**	154	1.2	80	**48**	155	0.99	79
24.77		**89**	117	1.3	81	**69**	145	1.3	81	**57**	155	1.1	80
23.20		**95**	111	1.4	81	**73**	142	1.3	81	**60**	152	1.2	80
19.54		**113**	92	1.3	81	**87**	123	1.4	81	**72**	144	1.3	81
20.33		**108**	109	1.4	87	**84**	110	1.1	87	**69**	110	0.92	86
17.62		**125**	108	1.6 *	88	**96**	109	1.3	87	**79**	110	1.1	86
16.47		**134**	108	1.7 *	88	**103**	109	1.4	87	**85**	110	1.1	87
14.24		**154**	108	2.0 *	88	**119**	109	1.6 *	88	**98**	110	1.3	87
12.10	27/5	**182**	105	2.3 *	89	**140**	109	1.8 *	88	**116**	109	1.5	88
10.80		**204**	95	2.3 *	89	**157**	108	2.0 *	88	**130**	109	1.7 *	88
9.23		**238**	82	2.3 *	89	**184**	105	2.3 *	89	**152**	109	2.0 *	88
8.64		**255**	77	2.3 *	89	**197**	100	2.3 *	89	**162**	109	2.1 *	88
7.28		**302**	64	2.3 *	89	**234**	86	2.4 *	89	**192**	103	2.3 *	89

* P_{emax} = 1.5 kW

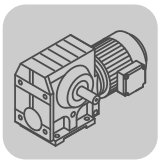


1100 - 700 1/min

02 958 097

		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**5.5**	176	0.19	53	**4.5**	180	0.16	52	**3.5**	185	0.13	51
184.80		**6.0**	174	0.20	54	**4.9**	178	0.17	53	**3.8**	183	0.14	51
158.12		**7.0**	172	0.23	55	**5.7**	176	0.20	54	**4.4**	180	0.16	52
137.05		**8.0**	171	0.26	56	**6.6**	172	0.22	55	**5.1**	178	0.18	53
128.10		**8.6**	171	0.27	57	**7.0**	172	0.23	55	**5.5**	176	0.19	54
110.73	42/1	**9.9**	169	0.30	58	**8.1**	171	0.26	56	**6.3**	174	0.21	55
94.08		**12**	169	0.35	59	**9.6**	171	0.30	57	**7.4**	172	0.24	56
84.00		**13**	169	0.39	60	**11**	169	0.32	58	**8.3**	171	0.26	57
71.75		**15**	169	0.45	61	**13**	169	0.37	60	**9.8**	171	0.30	58
67.20		**16**	169	0.47	61	**13**	169	0.40	60	**10**	171	0.32	58
56.61		**19**	169	0.55	63	**16**	169	0.46	61	**12**	171	0.37	60
69.39		**16**	173	0.39	74	**13**	176	0.33	73	**10**	180	0.27	71
63.80		**17**	173	0.42	74	**14**	175	0.35	73	**11**	180	0.29	72
54.59		**20**	171	0.48	75	**16**	173	0.40	74	**13**	176	0.33	73
47.32		**23**	171	0.55	76	**19**	173	0.46	75	**15**	175	0.37	73
44.22		**25**	171	0.58	76	**20**	171	0.49	75	**16**	175	0.39	74
38.23	29/2	**29**	169	0.66	77	**24**	171	0.56	76	**18**	173	0.44	75
32.48		**34**	169	0.77	78	**28**	171	0.65	77	**22**	171	0.51	75
29.00		**38**	170	0.86	78	**31**	171	0.72	77	**24**	171	0.57	76
24.77		**44**	169	0.99	79	**36**	170	0.83	78	**28**	171	0.66	77
23.20		**47**	164	1.0	79	**39**	170	0.88	79	**30**	171	0.70	77
19.54		**56**	154	1.1	80	**46**	165	1.0	79	**36**	170	0.81	78
20.33		**54**	112	0.75	85	**44**	114	0.63	84	**34**	116	0.50	83
17.62		**62**	112	0.86	86	**51**	113	0.71	85	**40**	115	0.57	84
16.47		**67**	112	0.91	86	**55**	113	0.76	85	**43**	114	0.60	84
14.24		**77**	111	1.0	86	**63**	112	0.86	86	**49**	113	0.69	85
12.10	27/5	**91**	111	1.2	87	**74**	111	1.0	86	**58**	113	0.80	85
10.80		**102**	111	1.4	87	**83**	111	1.1	87	**65**	112	0.88	86
9.23		**119**	110	1.6 *	88	**98**	111	1.3	87	**76**	112	1.0	86
8.64		**127**	109	1.7 *	88	**104**	111	1.4	87	**81**	112	1.1	87
7.28		**151**	109	2.0 *	88	**124**	111	1.6 *	88	**96**	111	1.3	87

* P_{emax} = 1.5 kW



500 - 10 1/min

02 958 097

		n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**2.5**	185	0.10	49	**1.2**	185	0.05	48	**0.05**	185	< 0.05	32
184.80		**2.7**	185	0.11	49	**1.4**	185	0.05	48	**0.05**	185	< 0.05	32
158.12		**3.2**	185	0.12	50	**1.6**	185	0.06	48	**0.06**	185	< 0.05	35
137.05		**3.6**	185	0.14	51	**1.8**	185	0.07	48	**0.07**	185	< 0.05	37
128.10		**3.9**	183	0.15	51	**2.0**	185	0.08	48	**0.08**	185	< 0.05	38
110.73	42/1	**4.5**	181	0.16	52	**2.3**	185	0.09	49	**0.09**	185	< 0.05	40
94.08		**5.3**	178	0.19	54	**2.7**	185	0.10	49	**0.11**	185	< 0.05	42
84.00		**6.0**	176	0.20	54	**3.0**	185	0.12	50	**0.12**	185	< 0.05	43
71.75		**7.0**	174	0.23	56	**3.5**	185	0.13	51	**0.14**	185	< 0.05	44
67.20		**7.4**	172	0.24	56	**3.7**	185	0.14	51	**0.15**	185	< 0.05	44
56.61		**8.8**	172	0.28	57	**4.4**	181	0.16	53	**0.18**	181	< 0.05	45
69.39		**7.2**	185	0.20	70	**3.6**	185	0.10	68	**0.14**	185	< 0.05	56
63.80		**7.8**	185	0.22	70	**3.9**	185	0.11	68	**0.16**	185	< 0.05	57
54.59		**9.2**	185	0.25	71	**4.6**	185	0.13	68	**0.18**	185	< 0.05	60
47.32		**11**	181	0.28	72	**5.3**	185	0.15	68	**0.21**	185	< 0.05	61
44.22		**11**	180	0.30	72	**5.7**	185	0.16	69	**0.23**	185	< 0.05	62
38.23	29/2	**13**	178	0.33	73	**6.5**	185	0.18	69	**0.26**	185	< 0.05	63
32.48		**15**	174	0.38	74	**7.7**	185	0.21	70	**0.31**	185	< 0.05	64
29.00		**17**	174	0.42	74	**8.6**	185	0.24	71	**0.34**	185	< 0.05	65
24.77		**20**	172	0.48	75	**10**	183	0.27	71	**0.40**	183	< 0.05	66
23.20		**22**	172	0.51	76	**11**	181	0.28	72	**0.43**	181	< 0.05	66
19.54		**26**	172	0.60	77	**13**	178	0.33	73	**0.51**	178	< 0.05	67
20.33		**25**	124	0.39	82	**12**	157	0.25	80	**0.49**	157	< 0.05	75
17.62		**28**	120	0.43	83	**14**	149	0.28	80	**0.57**	149	< 0.05	76
16.47		**30**	118	0.45	83	**15**	145	0.29	81	**0.61**	145	< 0.05	76
14.24		**35**	116	0.51	84	**18**	138	0.31	81	**0.70**	138	< 0.05	77
12.10	27/5	**41**	115	0.59	84	**21**	131	0.35	82	**0.83**	131	< 0.05	77
10.80		**46**	114	0.65	85	**23**	127	0.37	82	**0.93**	127	< 0.05	77
9.23		**54**	113	0.75	85	**27**	121	0.41	83	**1.1**	121	< 0.05	78
8.64		**58**	113	0.80	86	**29**	120	0.44	83	**1.2**	120	< 0.05	78
7.28		**69**	112	0.93	86	**34**	117	0.50	84	**1.4**	117	< 0.05	78

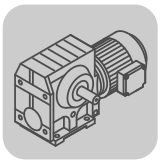
12.8 S, SF, SA, SAF 57

3400 - 2800 1/min

02 959 097

i_{ges}	i_{sch}	n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
		n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**17**	270	0.75	64	**16**	270	0.71	63	**14**	270	0.63	62
184.80		**18**	270	0.81	64	**17**	270	0.77	64	**15**	270	0.68	63
158.12		**22**	270	0.93	65	**20**	270	0.88	65	**18**	270	0.78	64
137.05		**25**	255	1.0	66	**23**	270	1.0	66	**20**	270	0.89	65
128.10		**27**	245	1.0	66	**25**	255	1.0	66	**22**	270	0.94	65
110.73	42/1	**31**	215	1.0	67	**29**	230	1.0	67	**25**	255	1.0	66
94.08		**36**	184	1.0	67	**34**	196	1.0	67	**30**	225	1.1	67
84.00		**40**	165	1.0	67	**38**	175	1.0	67	**33**	200	1.0	67
71.75		**47**	139	1.0	67	**45**	149	1.0	67	**39**	174	1.1	67
67.20		**51**	128	1.0	66	**48**	139	1.0	67	**42**	164	1.1	67
56.61		**60**	103	1.0	65	**57**	114	1.0	66	**49**	138	1.1	67
69.39		**49**	220	1.4	81	**46**	220	1.3	80	**40**	220	1.2	80
63.80		**53**	220	1.5	81	**50**	220	1.4	81	**44**	220	1.3	80
54.59		**62**	220	1.8	81	**59**	220	1.7	81	**51**	220	1.5	81
47.32		**72**	210	1.9	82	**68**	220	1.9	82	**59**	220	1.7	81
44.22		**77**	197	1.9	82	**72**	205	1.9	82	**63**	220	1.8	81
38.23	29/2	**89**	174	2.0	82	**84**	184	2.0	82	**73**	205	1.9	82
32.48		**105**	148	2.0	82	**99**	157	2.0	82	**86**	180	2.0	82
29.00		**117**	131	2.0	82	**110**	141	2.0	82	**97**	162	2.0	82
24.77		**137**	111	1.9	82	**129**	120	2.0	82	**113**	139	2.0	82
23.20		**147**	102	1.9	82	**138**	111	2.0	82	**121**	131	2.0	82
19.54		**174**	81	1.8	81	**164**	90	1.9	82	**143**	109	2.0	82
20.33		**167**	160	3.2 *	89	**157**	160	3.0	89	**138**	160	2.6	88
17.62		**193**	140	3.2 *	89	**182**	149	3.2 *	89	**159**	160	3.0	89
16.47		**206**	132	3.2 *	89	**194**	140	3.2 *	89	**170**	158	3.2 *	89
14.24		**239**	116	3.2 *	89	**225**	123	3.2 *	89	**197**	139	3.2 *	89
12.10	27/5	**281**	99	3.3 *	89	**264**	105	3.3 *	89	**231**	121	3.3 *	89
10.80		**315**	88	3.3 *	89	**296**	94	3.3 *	89	**259**	108	3.3 *	89
9.23		**368**	73	3.2 *	89	**347**	79	3.2 *	89	**303**	93	3.3 *	89
8.64		**394**	68	3.2 *	89	**370**	74	3.2 *	89	**324**	87	3.3 *	89
7.28		**467**	54	3.0	88	**440**	60	3.1 *	89	**385**	72	3.2 *	89

* P_{emax} = 3.0 kW

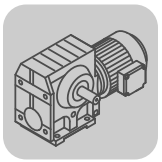


2200 - 1400 1/min

02 959 097

		n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**11**	295	0.55	61	**8.5**	295	0.44	59	**7.0**	295	0.37	58
184.80		**12**	295	0.60	62	**9.2**	295	0.48	60	**7.6**	295	0.40	58
158.12		**14**	295	0.69	63	**11**	295	0.55	61	**8.9**	295	0.46	60
137.05		**16**	295	0.78	64	**12**	295	0.62	62	**10**	295	0.52	61
128.10		**17**	295	0.83	64	**13**	295	0.66	62	**11**	295	0.55	61
110.73	42/1	**20**	290	0.93	65	**15**	295	0.75	63	**13**	295	0.63	62
94.08		**23**	275	1.0	66	**18**	300	0.88	65	**15**	295	0.73	63
84.00		**26**	250	1.0	67	**20**	285	0.93	65	**17**	295	0.80	64
71.75		**31**	220	1.1	67	**24**	275	1.0	66	**20**	290	0.91	65
67.20		**33**	210	1.1	67	**25**	260	1.0	67	**21**	285	0.95	65
56.61		**39**	179	1.1	68	**30**	225	1.1	67	**25**	265	1.0	67
69.39		**32**	245	1.0	79	**24**	245	0.81	77	**20**	245	0.68	76
63.80		**34**	245	1.1	79	**27**	245	0.88	78	**22**	245	0.73	77
54.59		**40**	245	1.3	80	**31**	245	1.0	79	**26**	245	0.85	78
47.32		**46**	245	1.5	81	**36**	245	1.2	79	**30**	245	0.97	79
44.22		**50**	245	1.6	81	**38**	245	1.2	80	**32**	245	1.0	79
38.23	29/2	**58**	245	1.8	81	**44**	245	1.4	80	**37**	245	1.2	80
32.48		**68**	225	1.9	82	**52**	245	1.7	81	**43**	245	1.4	80
29.00		**76**	200	1.9	82	**59**	245	1.8	81	**48**	245	1.5	81
24.77		**89**	177	2.0	82	**69**	220	1.9	82	**57**	245	1.8	81
23.20		**95**	167	2.0	83	**73**	210	2.0	82	**60**	245	1.9	82
19.54		**113**	143	2.0	83	**87**	183	2.0	83	**72**	215	2.0	82
20.33		**108**	168	2.2	88	**84**	168	1.7	87	**69**	168	1.4	87
17.62		**125**	168	2.5	88	**96**	168	1.9	88	**79**	168	1.6	87
16.47		**134**	169	2.7	88	**103**	168	2.1	88	**85**	168	1.7	87
14.24		**154**	169	3.1 *	89	**119**	169	2.4	88	**98**	169	2.0	88
12.10	27/5	**182**	150	3.2 *	89	**140**	169	2.8	89	**116**	169	2.3	88
10.80		**204**	136	3.2 *	89	**157**	169	3.1 *	89	**130**	169	2.6	88
9.23		**238**	119	3.3 *	89	**184**	149	3.2 *	89	**152**	169	3.0	89
8.64		**255**	112	3.3 *	89	**197**	141	3.3 *	89	**162**	166	3.2 *	89
7.28		**302**	96	3.4 *	90	**234**	122	3.3 *	90	**192**	146	3.3 *	89

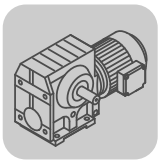
* P_{emax} = 3.0 kW



1100 - 700 1/min

02 960 097

		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**5.5**	295	0.30	56	**4.5**	300	0.26	55	**3.5**	310	0.21	53
184.80		**6.0**	295	0.32	57	**4.9**	300	0.28	55	**3.8**	305	0.23	54
158.12		**7.0**	295	0.37	58	**5.7**	295	0.31	56	**4.4**	300	0.25	55
137.05		**8.0**	295	0.42	59	**6.6**	295	0.35	57	**5.1**	300	0.29	56
128.10		**8.6**	295	0.45	59	**7.0**	295	0.37	58	**5.5**	295	0.30	56
110.73	42/1	**9.9**	295	0.51	61	**8.1**	295	0.43	59	**6.3**	295	0.34	57
94.08		**12**	295	0.59	62	**9.6**	295	0.49	60	**7.4**	295	0.39	58
84.00		**13**	295	0.65	63	**11**	295	0.54	61	**8.3**	295	0.43	59
71.75		**15**	295	0.74	64	**13**	295	0.62	62	**9.8**	295	0.50	61
67.20		**16**	300	0.80	64	**13**	295	0.66	63	**10**	295	0.53	61
56.61		**19**	290	0.91	65	**16**	300	0.78	64	**12**	295	0.61	62
69.39		**16**	270	0.60	75	**13**	270	0.49	74	**10**	270	0.39	73
63.80		**17**	270	0.64	76	**14**	270	0.53	75	**11**	270	0.42	73
54.59		**20**	270	0.74	77	**16**	270	0.62	75	**13**	270	0.49	74
47.32		**23**	270	0.85	77	**19**	270	0.70	76	**15**	270	0.56	75
44.22		**25**	270	0.91	78	**20**	270	0.75	77	**16**	270	0.59	75
38.23	29/2	**29**	270	1.0	79	**24**	270	0.86	77	**18**	270	0.68	76
32.48		**34**	270	1.2	79	**28**	270	1.0	78	**22**	270	0.79	77
29.00		**38**	270	1.3	80	**31**	270	1.1	79	**24**	270	0.88	78
24.77		**44**	270	1.6	81	**36**	270	1.3	80	**28**	270	1.0	78
23.20		**47**	270	1.7	81	**39**	270	1.4	80	**30**	270	1.1	79
19.54		**56**	250	1.8	81	**46**	270	1.6	81	**36**	270	1.3	80
20.33		**54**	168	1.1	86	**44**	170	0.93	85	**34**	172	0.74	84
17.62		**62**	169	1.3	86	**51**	169	1.1	86	**40**	170	0.83	85
16.47		**67**	168	1.4	87	**55**	168	1.1	86	**43**	170	0.89	85
14.24		**77**	168	1.6	87	**63**	168	1.3	86	**49**	170	1.0	86
12.10	27/5	**91**	169	1.8	88	**74**	169	1.5	87	**58**	169	1.2	86
10.80		**102**	169	2.1	88	**83**	169	1.7	87	**65**	169	1.3	87
9.23		**119**	170	2.4	88	**98**	168	2.0	88	**76**	168	1.5	87
8.64		**127**	170	2.6	88	**104**	169	2.1	88	**81**	168	1.6	87
7.28		**151**	170	3.0	89	**124**	170	2.5	88	**96**	170	1.9	88



500 - 10 1/min

02 960 097

		n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
201.00		**2.5**	330	0.17	51	**1.2**	330	0.09	49	**0.05**	330	< 0.05	42
184.80		**2.7**	330	0.18	51	**1.4**	330	0.10	49	**0.05**	330	< 0.05	43
158.12		**3.2**	315	0.20	52	**1.6**	330	0.11	49	**0.06**	330	< 0.05	44
137.05		**3.6**	310	0.22	53	**1.8**	330	0.13	50	**0.07**	330	< 0.05	45
128.10		**3.9**	305	0.23	54	**2.0**	330	0.14	50	**0.08**	330	< 0.05	46
110.73	42/1	**4.5**	300	0.26	55	**2.3**	330	0.15	51	**0.09**	330	< 0.05	46
94.08		**5.3**	300	0.30	56	**2.7**	330	0.18	51	**0.11**	330	< 0.05	47
84.00		**6.0**	295	0.32	57	**3.0**	325	0.19	52	**0.12**	325	< 0.05	47
71.75		**7.0**	295	0.37	58	**3.5**	310	0.21	53	**0.14**	310	< 0.05	48
67.20		**7.4**	295	0.39	58	**3.7**	310	0.23	54	**0.15**	310	< 0.05	48
56.61		**8.8**	295	0.46	60	**4.4**	300	0.25	55	**0.18**	300	< 0.05	48
69.39		**7.2**	300	0.32	71	**3.6**	300	0.17	68	**0.14**	300	< 0.05	63
63.80		**7.8**	300	0.34	71	**3.9**	300	0.18	68	**0.16**	300	< 0.05	64
54.59		**9.2**	300	0.40	72	**4.6**	300	0.21	69	**0.18**	300	< 0.05	65
47.32		**11**	300	0.45	73	**5.3**	300	0.24	70	**0.21**	300	< 0.05	66
44.22		**11**	300	0.48	74	**5.7**	300	0.25	70	**0.23**	300	< 0.05	66
38.23	29/2	**13**	295	0.54	74	**6.5**	300	0.29	71	**0.26**	300	< 0.05	67
32.48		**15**	295	0.63	75	**7.7**	300	0.34	71	**0.31**	300	< 0.05	67
29.00		**17**	295	0.70	76	**8.6**	300	0.38	72	**0.34**	300	< 0.05	67
24.77		**20**	295	0.81	77	**10**	300	0.43	73	**0.40**	300	< 0.05	68
23.20		**22**	295	0.86	77	**11**	300	0.46	73	**0.43**	300	< 0.05	68
19.54		**26**	295	1.0	78	**13**	295	0.53	74	**0.51**	295	< 0.05	68
20.33		**25**	181	0.56	83	**12**	215	0.35	80	**0.49**	215	< 0.05	77
17.62		**28**	175	0.62	83	**14**	210	0.39	81	**0.57**	210	< 0.05	77
16.47		**30**	174	0.66	84	**15**	205	0.40	81	**0.61**	205	< 0.05	78
14.24		**35**	172	0.75	84	**18**	198	0.45	81	**0.70**	198	< 0.05	78
12.10	27/5	**41**	170	0.87	85	**21**	188	0.49	82	**0.83**	188	< 0.05	78
10.80		**46**	170	0.97	85	**23**	184	0.54	83	**0.93**	184	< 0.05	78
9.23		**54**	170	1.1	86	**27**	177	0.60	83	**1.1**	177	< 0.05	79
8.64		**58**	170	1.2	86	**29**	175	0.64	83	**1.2**	175	< 0.05	79
7.28		**69**	170	1.4	87	**34**	172	0.73	84	**1.4**	172	< 0.05	79

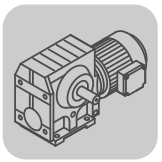
12.9 S, SF, SA, SAF 67

3400 - 2800 1/min

02 961 097

i_{ges}	i_{sch}	n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
		n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
217.41		**16**	465	1.2	66	**15**	465	1.1	66	**13**	465	0.96	65
190.11		**18**	465	1.3	67	**17**	465	1.2	67	**15**	465	1.1	66
180.60		**19**	465	1.4	67	**18**	465	1.3	67	**16**	465	1.1	66
158.45		**21**	465	1.5	68	**20**	465	1.5	68	**18**	465	1.3	67
134.40		**25**	465	1.8	69	**24**	465	1.7	68	**21**	465	1.5	68
121.33	42/1	**28**	455	1.9	69	**26**	465	1.9	69	**23**	465	1.6	68
106.75		**32**	405	2.0	69	**30**	430	2.0	69	**26**	465	1.9	69
100.80		**34**	380	1.9	69	**32**	410	2.0	69	**28**	465	2.0	69
85.83		**40**	320	1.9	69	**37**	345	1.9	69	**33**	400	2.0	70
78.00		**44**	285	1.9	69	**41**	310	1.9	69	**36**	365	2.0	70
67.57		**50**	235	1.8	67	**47**	260	1.9	68	**41**	315	2.0	69
58.80		**58**	184	1.7	65	**54**	215	1.8	67	**48**	270	1.9	69
75.06		**45**	435	2.5	82	**43**	435	2.4	82	**37**	435	2.1	81
65.63		**52**	435	2.9	82	**49**	435	2.7	82	**43**	435	2.4	82
62.35		**55**	435	3.0	83	**51**	435	2.8	82	**45**	435	2.5	82
54.70		**62**	435	3.4	83	**59**	435	3.2	83	**51**	435	2.8	83
46.40		**73**	395	3.6	83	**69**	415	3.6	83	**60**	435	3.3	83
41.89	29/2	**81**	355	3.6	83	**76**	380	3.6	83	**67**	430	3.6	83
36.85		**92**	310	3.6	83	**87**	335	3.6	84	**76**	380	3.6	84
34.80		**98**	295	3.6	83	**92**	315	3.6	84	**80**	365	3.7	84
29.63		**115**	250	3.6	83	**108**	270	3.7	83	**94**	310	3.7	84
26.93		**126**	220	3.5	83	**119**	240	3.6	83	**104**	280	3.6	84
23.33		**146**	182	3.4	82	**137**	200	3.5	83	**120**	245	3.7	84
20.30		**167**	141	3.1	81	**158**	164	3.3	82	**138**	205	3.6	83
24.44		**139**	315	5.1	90	**131**	315	4.8	90	**115**	315	4.2	89
23.22		**146**	315	5.4	90	**138**	315	5.1	90	**121**	315	4.4	90
20.37		**167**	315	6.1 *	90	**157**	315	5.8 *	90	**137**	315	5.0	90
17.28		**197**	270	6.2 *	90	**185**	290	6.2 *	90	**162**	315	5.9 *	90
15.60		**218**	245	6.2 *	90	**205**	260	6.2 *	90	**179**	295	6.1 *	90
13.73	27/5	**248**	215	6.2 *	90	**233**	230	6.2 *	90	**204**	265	6.3 *	90
12.96		**262**	200	6.1 *	90	**247**	215	6.1 *	90	**216**	250	6.3 *	90
11.03		**308**	169	6.1 *	90	**290**	183	6.2 *	90	**254**	215	6.3 *	90
10.03		**339**	151	6.0 *	90	**319**	164	6.1 *	90	**279**	194	6.3 *	90
8.69		**391**	124	5.7 *	89	**368**	137	5.9 *	90	**322**	166	6.2 *	90
7.56		**450**	95	5.1 *	88	**423**	112	5.6 *	89	**370**	141	6.1 *	90

* P_{emax} = 5.5 kW

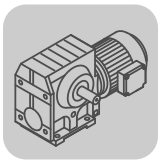


2200 - 1400 1/min

02 961 097

		n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
217.41		**10**	520	0.86	64	**7.8**	520	0.69	62	**6.4**	520	0.58	61
190.11		**12**	520	0.97	65	**8.9**	520	0.77	63	**7.4**	520	0.65	62
180.60		**12**	520	1.0	65	**9.4**	520	0.81	63	**7.8**	520	0.68	62
158.45		**14**	520	1.1	66	**11**	520	0.91	64	**8.8**	520	0.76	63
134.40		**16**	520	1.3	67	**13**	520	1.1	65	**10**	520	0.88	64
121.33		**18**	520	1.5	68	**14**	520	1.2	66	**12**	520	0.97	65
106.75	42/1	**21**	520	1.6	68	**16**	520	1.3	67	**13**	520	1.1	66
100.80		**22**	510	1.7	69	**17**	520	1.4	67	**14**	520	1.1	66
85.83		**26**	490	1.9	69	**20**	520	1.6	68	**16**	520	1.3	67
78.00		**28**	465	2.0	70	**22**	510	1.7	69	**18**	520	1.4	68
67.57		**33**	410	2.0	70	**25**	495	1.9	69	**21**	520	1.6	69
58.80		**37**	360	2.0	70	**29**	460	2.0	70	**24**	500	1.8	69
75.06		**29**	480	1.8	81	**23**	480	1.4	79	**19**	480	1.2	79
65.63		**34**	480	2.1	81	**26**	480	1.6	80	**21**	480	1.4	79
62.35		**35**	480	2.2	81	**27**	480	1.7	80	**22**	480	1.4	79
54.70		**40**	480	2.5	82	**31**	480	1.9	81	**26**	480	1.6	80
46.40		**47**	480	2.9	82	**37**	480	2.3	82	**30**	480	1.9	81
41.89		**53**	480	3.2	83	**41**	480	2.5	82	**33**	480	2.1	81
36.85	29/2	**60**	475	3.6	83	**46**	480	2.8	82	**38**	480	2.3	82
34.80		**63**	450	3.6	83	**49**	480	3.0	83	**40**	480	2.5	82
29.63		**74**	395	3.7	84	**57**	480	3.5	83	**47**	480	2.9	83
26.93		**82**	360	3.7	84	**63**	455	3.6	83	**52**	480	3.2	83
23.33		**94**	320	3.8	84	**73**	405	3.7	84	**60**	480	3.6	83
20.30		**108**	280	3.8	84	**84**	360	3.8	84	**69**	425	3.7	84
24.44		**90**	340	3.6	89	**70**	340	2.8	88	**57**	340	2.3	88
23.22		**95**	340	3.8	89	**73**	340	2.9	89	**60**	340	2.4	88
20.37		**108**	340	4.3	89	**83**	340	3.3	89	**69**	340	2.8	88
17.28		**127**	340	5.0	90	**98**	340	3.9	89	**81**	340	3.2	89
15.60		**141**	340	5.6 *	90	**109**	340	4.3	89	**90**	340	3.6	89
13.73	27/5	**160**	330	6.1 *	90	**124**	340	4.9	90	**102**	340	4.1	89
12.96		**170**	315	6.2 *	90	**131**	340	5.2	90	**108**	340	4.3	89
11.03		**199**	275	6.3 *	90	**154**	340	6.1 *	90	**127**	340	5.0	90
10.03		**219**	250	6.3 *	91	**169**	315	6.2 *	90	**140**	340	5.5	90
8.69		**253**	220	6.4 *	91	**196**	280	6.3 *	91	**161**	335	6.3 *	90
7.56		**291**	192	6.5 *	91	**225**	250	6.5 *	91	**185**	295	6.3 *	91

* P_{emax} = 5.5 kW

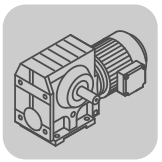


1100 - 700 1/min

02 962 097

		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
217.41		**5.1**	555	0.50	59	**4.1**	560	0.42	58	**3.2**	570	0.34	56
190.11		**5.8**	555	0.56	60	**4.7**	560	0.47	59	**3.7**	565	0.38	57
180.60		**6.1**	555	0.59	61	**5.0**	555	0.49	59	**3.9**	565	0.40	57
158.45		**6.9**	550	0.65	62	**5.7**	555	0.55	60	**4.4**	560	0.44	58
134.40		**8.2**	550	0.75	63	**6.7**	550	0.63	61	**5.2**	555	0.51	60
121.33		**9.1**	550	0.82	63	**7.4**	550	0.69	62	**5.8**	555	0.56	60
106.75	42/1	**10**	550	0.92	64	**8.4**	550	0.77	63	**6.6**	555	0.62	61
100.80		**11**	550	0.97	65	**8.9**	550	0.81	63	**6.9**	555	0.66	62
85.83		**13**	550	1.1	66	**10**	550	0.94	64	**8.2**	550	0.75	63
78.00		**14**	550	1.2	66	**12**	550	1.0	65	**9.0**	550	0.82	63
67.57		**16**	550	1.4	67	**13**	550	1.2	66	**10**	550	0.93	64
58.80		**19**	530	1.5	68	**15**	550	1.3	67	**12**	550	1.0	65
75.06		**15**	525	1.0	77	**12**	525	0.86	76	**9.3**	525	0.68	75
65.63		**17**	525	1.2	78	**14**	525	0.98	77	**11**	525	0.77	76
62.35		**18**	525	1.2	78	**14**	525	1.0	77	**11**	525	0.81	76
54.70		**20**	525	1.4	79	**16**	525	1.2	78	**13**	525	0.92	77
46.40		**24**	525	1.6	80	**19**	525	1.4	79	**15**	525	1.1	78
41.89		**26**	525	1.8	80	**21**	525	1.5	79	**17**	525	1.2	78
36.85	29/2	**30**	525	2.0	81	**24**	525	1.7	80	**19**	525	1.3	79
34.80		**32**	525	2.1	81	**26**	525	1.8	80	**20**	525	1.4	79
29.63		**37**	525	2.5	82	**30**	525	2.1	81	**24**	525	1.6	80
26.93		**41**	525	2.7	82	**33**	525	2.3	81	**26**	525	1.8	80
23.33		**47**	525	3.1	83	**39**	525	2.6	82	**30**	525	2.0	81
20.30		**54**	520	3.5	83	**44**	525	3.0	82	**34**	525	2.3	81
24.44		**45**	355	1.9	87	**37**	360	1.6	87	**29**	365	1.3	86
23.22		**47**	355	2.0	87	**39**	360	1.7	87	**30**	365	1.3	86
20.37		**54**	355	2.3	88	**44**	355	1.9	87	**34**	365	1.5	86
17.28		**64**	355	2.7	88	**52**	355	2.2	88	**41**	360	1.8	87
15.60		**71**	350	2.9	88	**58**	355	2.4	88	**45**	355	1.9	87
13.73	27/5	**80**	350	3.3	89	**66**	355	2.8	88	**51**	355	2.2	88
12.96		**85**	350	3.5	89	**69**	350	2.9	88	**54**	355	2.3	88
11.03		**100**	350	4.1	89	**82**	350	3.4	89	**63**	355	2.7	88
10.03		**110**	345	4.4	90	**90**	350	3.7	89	**70**	355	2.9	88
8.69		**127**	345	5.1	90	**104**	350	4.2	89	**81**	350	3.3	89
7.56		**146**	345	5.8 *	90	**119**	345	4.8	90	**93**	350	3.8	89

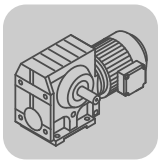
* P_{emax} = 5.5 kW



500 - 10 1/min

02 962 097

		n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
217.41		**2.3**	570	0.25	54	**1.1**	570	0.13	51	**0.05**	570	< 0.05	47
190.11		**2.6**	570	0.29	55	**1.3**	570	0.15	51	**0.05**	570	< 0.05	48
180.60		**2.8**	570	0.30	55	**1.4**	570	0.16	51	**0.06**	570	< 0.05	48
158.45		**3.2**	570	0.34	56	**1.6**	570	0.18	52	**0.06**	570	< 0.05	49
134.40		**3.7**	565	0.38	57	**1.9**	570	0.21	53	**0.07**	570	< 0.05	50
121.33		**4.1**	560	0.42	58	**2.1**	570	0.23	53	**0.08**	570	< 0.05	50
106.75	42/1	**4.7**	560	0.47	59	**2.3**	570	0.26	54	**0.09**	570	< 0.05	50
100.80		**5.0**	560	0.49	59	**2.5**	570	0.27	55	**0.10**	570	< 0.05	50
85.83		**5.8**	555	0.56	60	**2.9**	570	0.31	56	**0.12**	570	< 0.05	51
78.00		**6.4**	555	0.61	61	**3.2**	570	0.34	56	**0.13**	570	< 0.05	51
67.57		**7.4**	555	0.69	62	**3.7**	565	0.38	57	**0.15**	565	< 0.05	51
58.80		**8.5**	550	0.78	63	**4.3**	560	0.43	58	**0.17**	560	< 0.05	51
75.06		**6.7**	570	0.54	73	**3.3**	570	0.28	70	**0.13**	570	< 0.05	68
65.63		**7.6**	570	0.61	74	**3.8**	570	0.32	71	**0.15**	570	< 0.05	68
62.35		**8.0**	570	0.64	74	**4.0**	570	0.34	71	**0.16**	570	< 0.05	69
54.70		**9.1**	570	0.73	75	**4.6**	570	0.38	71	**0.18**	570	< 0.05	69
46.40		**11**	570	0.85	76	**5.4**	570	0.44	72	**0.22**	570	< 0.05	69
41.89		**12**	570	0.93	76	**6.0**	570	0.49	73	**0.24**	570	< 0.05	69
36.85	29/2	**14**	570	1.1	77	**6.8**	570	0.55	73	**0.27**	570	< 0.05	69
34.80		**14**	570	1.1	77	**7.2**	570	0.58	74	**0.29**	570	< 0.05	69
29.63		**17**	565	1.3	78	**8.4**	570	0.68	75	**0.34**	570	< 0.05	70
26.93		**19**	565	1.4	79	**9.3**	570	0.74	75	**0.37**	570	< 0.05	70
23.33		**21**	565	1.6	79	**11**	570	0.84	76	**0.43**	570	< 0.05	70
20.30		**25**	565	1.8	80	**12**	570	0.96	77	**0.49**	570	< 0.05	70
24.44		**20**	365	0.93	85	**10**	355	0.46	82	**0.41**	355	0.019	80
23.22		**22**	365	0.97	85	**11**	355	0.49	82	**0.43**	355	< 0.05	80
20.37		**25**	380	1.1	85	**12**	365	0.57	83	**0.49**	365	< 0.05	80
17.28		**29**	365	1.3	86	**14**	435	0.79	83	**0.58**	435	< 0.05	81
15.60		**32**	365	1.4	86	**16**	430	0.86	84	**0.64**	430	< 0.05	81
13.73	27/5	**36**	365	1.6	87	**18**	415	0.94	84	**0.73**	415	< 0.05	81
12.96		**39**	360	1.7	87	**19**	410	0.98	84	**0.77**	410	< 0.05	81
11.03		**45**	355	1.9	87	**23**	390	1.1	85	**0.91**	390	< 0.05	81
10.03		**50**	355	2.1	88	**25**	380	1.2	85	**1.0**	380	< 0.05	81
8.69		**58**	355	2.4	88	**29**	370	1.3	86	**1.2**	370	0.06	81
7.56		**66**	355	2.8	88	**33**	365	1.5	86	**1.3**	365	0.06	81



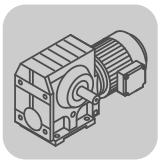
12.10 S, SF, SA, SAF 77

3400 - 2800 1/min

02 963 097

		n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
256.47		**13**	1160	2.3	71	**12**	1160	2.1	71	**11**	1160	1.9	70
225.26		**15**	1130	2.5	72	**14**	1150	2.4	71	**12**	1160	2.1	71
214.00		**16**	1110	2.6	72	**15**	1140	2.5	71	**13**	1160	2.2	71
189.09		**18**	1080	2.8	72	**17**	1100	2.7	72	**15**	1140	2.5	71
161.60		**21**	1040	3.1	73	**20**	1050	3.0	73	**17**	1090	2.7	72
148.15		**23**	1010	3.3	73	**22**	1030	3.2	73	**19**	1070	2.9	73
130.00		**26**	970	3.6	74	**25**	990	3.5	74	**22**	1030	3.2	73
123.20	40/1	**28**	950	3.7	74	**26**	970	3.6	74	**23**	1010	3.3	73
107.83		**32**	900	4.0	74	**30**	920	3.9	74	**26**	970	3.6	74
97.14		**35**	860	4.2	75	**33**	880	4.1	74	**29**	930	3.8	74
85.22		**40**	770	4.3	75	**38**	820	4.3	75	**33**	880	4.1	75
75.20		**45**	675	4.3	74	**43**	725	4.3	75	**37**	830	4.3	75
66.67		**51**	585	4.2	74	**48**	635	4.3	75	**42**	745	4.4	75
56.92		**60**	485	4.1	73	**56**	530	4.2	74	**49**	635	4.4	75
75.09		**45**	1020	5.6	86	**43**	1020	5.3	86	**37**	1020	4.6	86
71.33		**48**	1020	5.9	87	**45**	1020	5.5	86	**39**	1020	4.9	86
63.03		**54**	1020	6.6	87	**51**	1020	6.2	87	**44**	1020	5.5	86
53.87		**63**	980	7.4	87	**59**	1000	7.1	87	**52**	1020	6.4	87
49.38		**69**	950	7.8	87	**65**	970	7.5	87	**57**	1010	6.9	87
43.33		**78**	910	8.5	88	**74**	930	8.2	88	**65**	970	7.5	87
41.07	40/3	**83**	900	8.9	88	**78**	910	8.5	88	**68**	950	7.8	87
35.94		**95**	800	9.0	88	**89**	850	9.0	88	**78**	910	8.5	88
32.38		**105**	725	9.1	88	**99**	770	9.1	88	**86**	880	9.1	88
28.41		**120**	635	9.1	88	**113**	680	9.1	88	**99**	780	9.1	88
25.07		**136**	560	9.1	88	**128**	600	9.1	88	**112**	695	9.2	88
22.22		**153**	485	8.9	88	**144**	525	9.0	88	**126**	615	9.2	88
18.97		**179**	395	8.5	87	**169**	440	8.9	88	**148**	520	9.1	88
22.89		**149**	590	10.0 *	91	**140**	590	9.5	91	**122**	590	8.3	91
20.99		**162**	590	10.9 *	92	**152**	590	10.3 *	92	**133**	590	9.0	91
18.42		**185**	590	12.4 *	92	**174**	590	11.7 *	92	**152**	590	10.3 *	92
17.45		**195**	590	13.1 *	92	**183**	590	12.4 *	92	**160**	590	10.8 *	92
15.28		**223**	530	13.5 *	92	**209**	560	13.4 *	92	**183**	590	12.3 *	92
13.76	34/6	**247**	480	13.5 *	92	**233**	505	13.4 *	92	**203**	585	13.6 *	92
12.07		**282**	415	13.3 *	92	**265**	445	13.4 *	92	**232**	515	13.6 *	92
10.65		**319**	365	13.3 *	92	**300**	390	13.4 *	92	**263**	455	13.6 *	92
9.44		**360**	315	13.0 *	92	**339**	345	13.3 *	92	**297**	405	13.7 *	92
8.06		**422**	260	12.6 *	91	**397**	285	12.9 *	92	**347**	340	13.5 *	92

* P_{emax} = 9.2 kW

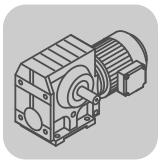


2200 - 1400 1/min

02 963 097

i_{ges}	i_{sch}	n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
		n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
256.47		**8.6**	1260	1.6	69	**6.6**	1270	1.3	67	**5.5**	1270	1.1	66
225.26		**9.8**	1230	1.8	69	**7.5**	1270	1.5	68	**6.2**	1270	1.2	67
214.00		**10**	1220	1.9	70	**7.9**	1270	1.6	68	**6.5**	1270	1.3	67
189.09		**12**	1200	2.1	70	**9.0**	1240	1.7	69	**7.4**	1270	1.5	68
161.60		**14**	1160	2.3	71	**11**	1220	1.9	70	**8.7**	1260	1.7	69
148.15		**15**	1140	2.5	72	**11**	1200	2.1	70	**9.4**	1240	1.8	69
130.00	40/1	**17**	1100	2.7	72	**13**	1170	2.3	71	**11**	1210	1.9	70
123.20		**18**	1080	2.8	73	**14**	1150	2.3	71	**11**	1200	2.0	70
107.83		**20**	1040	3.0	73	**16**	1110	2.5	72	**13**	1170	2.2	71
97.14		**23**	1010	3.3	74	**18**	1090	2.8	73	**14**	1140	2.4	72
85.22		**26**	970	3.5	74	**20**	1050	3.0	73	**16**	1100	2.6	72
75.20		**29**	920	3.8	74	**23**	1010	3.2	74	**19**	1070	2.9	73
66.67		**33**	880	4.1	75	**25**	970	3.5	74	**21**	1040	3.1	73
56.92		**39**	830	4.5	75	**30**	920	3.9	75	**25**	990	3.4	74
75.09		**29**	1100	4.0	85	**23**	1100	3.1	84	**19**	1100	2.6	83
71.33		**31**	1100	4.2	85	**24**	1100	3.2	85	**20**	1100	2.7	84
63.03		**35**	1100	4.7	86	**27**	1100	3.7	85	**22**	1100	3.0	84
53.87		**41**	1100	5.5	86	**32**	1100	4.3	86	**26**	1100	3.5	85
49.38		**45**	1080	5.8	87	**34**	1100	4.6	86	**28**	1100	3.8	85
43.33		**51**	1050	6.4	87	**39**	1100	5.2	86	**32**	1100	4.3	86
41.07	40/3	**54**	1030	6.6	87	**41**	1100	5.5	86	**34**	1100	4.6	86
35.94		**61**	980	7.2	87	**47**	1060	6.1	87	**39**	1100	5.2	86
32.38		**68**	960	7.8	88	**53**	1040	6.6	87	**43**	1090	5.7	87
28.41		**77**	920	8.5	88	**60**	990	7.1	87	**49**	1050	6.2	87
25.07		**88**	870	9.1	88	**68**	960	7.8	88	**56**	1020	6.8	87
22.22		**99**	790	9.3	88	**77**	920	8.4	88	**63**	980	7.4	87
18.97		**116**	680	9.4	88	**90**	860	9.2	88	**74**	930	8.2	88
22.89		**96**	710	7.9	91	**74**	705	6.1	90	**61**	705	5.0	90
20.99		**105**	710	8.6	91	**81**	705	6.6	91	**67**	705	5.5	90
18.42		**119**	720	9.9	91	**92**	710	7.6	91	**76**	705	6.2	90
17.45		**126**	720	10.4 *	91	**97**	710	8.0	91	**80**	710	6.6	91
15.28		**144**	720	11.9 *	92	**111**	720	9.2	91	**92**	710	7.5	91
13.76	34/6	**160**	725	13.2 *	92	**124**	720	10.2 *	91	**102**	710	8.3	91
12.07		**182**	650	13.5 *	92	**141**	725	11.7 *	92	**116**	720	9.6 *	91
10.65		**207**	580	13.6 *	92	**160**	725	13.2 *	92	**131**	720	10.8 *	92
9.44		**233**	520	13.8 *	92	**180**	655	13.4 *	92	**148**	725	12.3 *	92
8.06		**273**	445	13.8 *	92	**211**	575	13.8 *	92	**174**	680	13.5 *	92

* P_{emax} = 9.2 kW

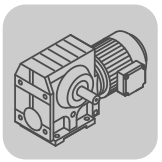


1100 - 700 1/min

02 964 097

		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
256.47		**4.3**	1270	0.89	64	**3.5**	1270	0.75	63	**2.7**	1270	0.60	61
225.26		**4.9**	1270	1.0	65	**4.0**	1270	0.84	63	**3.1**	1270	0.67	62
214.00		**5.1**	1270	1.0	65	**4.2**	1270	0.88	64	**3.3**	1270	0.70	62
189.09		**5.8**	1270	1.2	66	**4.8**	1270	0.98	65	**3.7**	1270	0.78	63
161.60		**6.8**	1270	1.3	67	**5.6**	1270	1.1	66	**4.3**	1270	0.90	64
148.15		**7.4**	1270	1.5	68	**6.1**	1270	1.2	66	**4.7**	1270	0.97	65
130.00	40/1	**8.5**	1260	1.6	69	**6.9**	1270	1.4	67	**5.4**	1270	1.1	66
123.20		**8.9**	1250	1.7	69	**7.3**	1270	1.4	68	**5.7**	1270	1.1	66
107.83		**10**	1220	1.9	70	**8.3**	1260	1.6	69	**6.5**	1270	1.3	67
97.14		**11**	1200	2.0	70	**9.3**	1250	1.8	69	**7.2**	1270	1.4	68
85.22		**13**	1170	2.2	71	**11**	1220	1.9	70	**8.2**	1270	1.6	69
75.20		**15**	1140	2.4	72	**12**	1190	2.1	71	**9.3**	1250	1.8	69
66.67		**16**	1110	2.6	72	**13**	1160	2.3	71	**10**	1220	1.9	70
56.92		**19**	1060	2.9	73	**16**	1120	2.6	72	**12**	1190	2.2	71
75.09		**15**	1120	2.1	83	**12**	1130	1.7	82	**9.3**	1170	1.4	81
71.33		**15**	1120	2.2	83	**13**	1130	1.8	82	**9.8**	1120	1.4	81
63.03		**17**	1120	2.5	83	**14**	1120	2.0	82	**11**	1130	1.6	81
53.87		**20**	1120	2.9	84	**17**	1120	2.4	83	**13**	1120	1.9	82
49.38		**22**	1120	3.1	84	**18**	1120	2.6	83	**14**	1120	2.0	82
43.33		**25**	1130	3.5	85	**21**	1120	2.9	84	**16**	1120	2.3	83
41.07	40/3	**27**	1130	3.7	85	**22**	1120	3.1	84	**17**	1120	2.4	83
35.94		**31**	1150	4.3	85	**25**	1130	3.5	85	**19**	1120	2.7	84
32.38		**34**	1130	4.7	86	**28**	1130	3.9	85	**22**	1120	3.0	84
28.41		**39**	1110	5.2	86	**32**	1150	4.5	86	**25**	1130	3.4	85
25.07		**44**	1080	5.7	87	**36**	1120	4.9	86	**28**	1130	3.9	85
22.22		**50**	1050	6.3	87	**41**	1100	5.4	86	**32**	1150	4.4	86
18.97		**58**	1010	7.0	87	**47**	1060	6.1	87	**37**	1120	5.0	86
22.89		**48**	695	3.9	89	**39**	695	3.2	89	**31**	705	2.6	88
20.99		**52**	705	4.3	90	**43**	695	3.5	89	**33**	705	2.8	88
18.42		**60**	700	4.9	90	**49**	700	4.0	89	**38**	700	3.1	89
17.45		**63**	700	5.1	90	**52**	700	4.2	90	**40**	700	3.3	89
15.28		**72**	710	5.9	90	**59**	700	4.8	90	**46**	700	3.8	89
13.76	34/6	**80**	710	6.6	91	**65**	700	5.3	90	**51**	700	4.2	90
12.07		**91**	710	7.5	91	**75**	710	6.1	90	**58**	700	4.7	90
10.65		**103**	715	8.5	91	**85**	710	6.9	91	**66**	710	5.4	90
9.44		**117**	720	9.6 *	91	**95**	715	7.8	91	**74**	710	6.1	90
8.06		**136**	725	11.3 *	92	**112**	720	9.2	91	**87**	710	7.1	91

* P_{emax} = 9.2 kW



500 - 10 1/min

02 964 097

		n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
256.47		**1.9**	1270	0.44	59	**0.97**	1270	0.23	56	**0.04**	1270	< 0.05	54
225.26		**2.2**	1270	0.49	60	**1.1**	1270	0.26	56	**0.04**	1270	< 0.05	55
214.00		**2.3**	1270	0.52	60	**1.2**	1270	0.28	56	**0.05**	1270	< 0.05	55
189.09		**2.6**	1270	0.58	61	**1.3**	1270	0.31	57	**0.05**	1270	< 0.05	55
161.60		**3.1**	1270	0.67	62	**1.5**	1270	0.36	58	**0.06**	1270	< 0.05	55
148.15		**3.4**	1270	0.72	62	**1.7**	1270	0.39	58	**0.07**	1270	< 0.05	55
130.00		**3.8**	1270	0.81	63	**1.9**	1270	0.43	59	**0.08**	1270	< 0.05	55
123.20	40/1	**4.1**	1270	0.85	64	**2.0**	1270	0.46	59	**0.08**	1270	< 0.05	55
107.83		**4.6**	1270	0.95	65	**2.3**	1270	0.51	60	**0.09**	1270	< 0.05	56
97.14		**5.1**	1270	1.0	65	**2.6**	1270	0.56	61	**0.10**	1270	< 0.05	56
85.22		**5.9**	1270	1.2	66	**2.9**	1270	0.63	62	**0.12**	1270	< 0.05	56
75.20		**6.6**	1270	1.3	67	**3.3**	1270	0.71	62	**0.13**	1270	< 0.05	56
66.67		**7.5**	1270	1.5	68	**3.7**	1270	0.79	63	**0.15**	1270	< 0.05	56
56.92		**8.8**	1260	1.7	69	**4.4**	1270	0.91	64	**0.18**	1270	< 0.05	56
75.09		**6.7**	1160	1.0	79	**3.3**	1120	0.51	76	**0.13**	1120	< 0.05	75
71.33		**7.0**	1110	1.0	79	**3.5**	1060	0.51	77	**0.14**	1060	< 0.05	75
63.03		**7.9**	1230	1.3	80	**4.0**	1200	0.65	77	**0.16**	1200	< 0.05	76
53.87		**9.3**	1180	1.4	81	**4.6**	1240	0.77	78	**0.19**	1240	< 0.05	76
49.38		**10**	1160	1.5	81	**5.1**	1240	0.84	78	**0.20**	1240	< 0.05	76
43.33		**12**	1120	1.7	82	**5.8**	1240	0.95	79	**0.23**	1240	< 0.05	76
41.07	40/3	**12**	1120	1.7	82	**6.1**	1240	1.0	79	**0.24**	1240	< 0.05	76
35.94		**14**	1120	2.0	82	**7.0**	1240	1.1	79	**0.28**	1240	< 0.05	76
32.38		**15**	1120	2.2	83	**7.7**	1240	1.3	80	**0.31**	1240	0.05	76
28.41		**18**	1120	2.5	83	**8.8**	1190	1.4	80	**0.35**	1190	0.06	76
25.07		**20**	1120	2.8	84	**10**	1170	1.5	81	**0.40**	1170	0.06	76
22.22		**23**	1130	3.2	84	**11**	1130	1.6	81	**0.45**	1130	0.07	76
18.97		**26**	1130	3.7	85	**13**	1120	1.9	82	**0.53**	1120	0.08	76
22.89		**22**	690	1.8	87	**11**	675	0.91	85	**0.44**	675	< 0.05	83
20.99		**24**	725	2.1	87	**12**	740	1.1	85	**0.48**	740	< 0.05	83
18.42		**27**	705	2.3	88	**14**	830	1.4	86	**0.54**	830	0.06	83
17.45		**29**	705	2.4	88	**14**	810	1.4	86	**0.57**	810	0.06	83
15.28		**33**	705	2.7	88	**16**	785	1.6	86	**0.65**	785	0.06	83
13.76	34/6	**36**	695	3.0	89	**18**	770	1.7	87	**0.73**	770	0.07	83
12.07		**41**	695	3.4	89	**21**	750	1.9	87	**0.83**	750	0.08	83
10.65		**47**	695	3.8	89	**23**	725	2.0	87	**0.94**	725	0.09	83
9.44		**53**	705	4.4	90	**26**	705	2.2	88	**1.1**	705	0.09	83
8.06		**62**	705	5.1	90	**31**	705	2.6	88	**1.2**	705	0.11	83

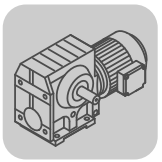
12.11 S, SF, SA, SAF 87

3400 - 2800 1/min

02 965 097

		n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
288.00		12	2030	3.4	74	11	2070	3.3	73	9.7	2070	2.9	73
258.18		13	1990	3.7	74	12	2010	3.5	74	11	2070	3.2	73
222.40		15	1910	4.1	75	14	1950	4.0	74	13	2010	3.6	74
202.96		17	1850	4.3	75	16	1890	4.2	75	14	1970	3.8	74
180.00		19	1800	4.7	75	18	1830	4.5	75	16	1910	4.2	75
151.30		22	1690	5.3	75	21	1730	5.1	75	19	1800	4.6	75
139.05	40/1	24	1630	5.5	76	23	1680	5.4	76	20	1760	4.9	75
123.48		28	1570	6.0	76	26	1600	5.7	76	23	1690	5.3	76
110.40		31	1430	6.1	76	29	1540	6.2	76	25	1620	5.7	76
99.26		34	1260	6.0	75	32	1380	6.2	76	28	1550	6.0	76
86.15		39	1030	5.8	74	37	1150	6.0	75	33	1390	6.2	76
77.14		44	830	5.3	72	41	970	5.7	74	36	1220	6.1	76
64.00		53	500	4.3	65	50	620	4.7	68	44	960	5.9	75
91.20		37	1470	6.6	88	35	1470	6.2	87	31	1470	5.4	87
81.76		42	1470	7.3	88	39	1470	6.9	88	34	1470	6.0	87
70.43		48	1470	8.4	88	45	1470	7.9	88	40	1470	7.0	88
64.27		53	1470	9.2	88	50	1470	8.7	88	44	1470	7.6	88
57.00		60	1470	10.4	88	56	1470	9.8	88	49	1470	8.6	88
47.91		71	1470	12.3	89	67	1470	11.6	89	58	1470	10.2	88
44.03	38/3	77	1470	13.4	89	73	1470	12.6	89	64	1470	11.0	89
39.10		87	1300	13.3	89	82	1400	13.5	89	72	1470	12.4	89
34.96		97	1140	13.1	89	92	1240	13.4	89	80	1440	13.6	89
31.43		108	1000	12.8	88	102	1090	13.1	89	89	1290	13.5	89
27.28		125	810	12.1	88	117	910	12.7	88	103	1110	13.4	89
24.43		139	660	11.1	87	131	775	12.1	88	115	960	13.0	89
20.27		168	395	8.4	82	158	490	9.6	84	138	755	12.4	88
25.50		133	990	15.0	92	125	990	14.1	92	110	990	12.4	92
21.43		159	990	17.8 *	92	149	990	16.8 *	92	131	990	14.7	92
19.70		173	990	19 *	92	162	990	18.3 *	92	142	990	16.0 *	92
17.49		194	870	19 *	92	183	930	19 *	92	160	990	18.0 *	92
15.64		217	760	19 *	92	205	830	19 *	92	179	960	19 *	92
14.06	34/6	242	660	18.2 *	92	228	725	19 *	92	199	860	19 *	92
12.21		278	540	17.2 *	91	262	605	18.1 *	92	229	730	19 *	92
10.93		311	440	15. *8	90	293	510	17.1 *	91	256	645	19 *	92
9.07		375	255	11.5	87	353	325	13.5	89	309	500	17.7 *	92
7.88		431	200	10.5	86	406	230	11.3	87	355	375	15.5 *	90

* P_{emax} = 15 kW

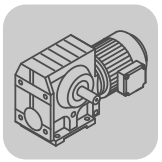


2200 - 1400 1/min

02 965 097

i_{ges}	i_{sch}	n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
		n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
288.00		**7.6**	2210	2.5	71	**5.9**	2280	2.0	70	**4.9**	2280	1.7	69
258.18		**8.5**	2170	2.7	72	**6.6**	2260	2.2	71	**5.4**	2280	1.9	69
222.40		**9.9**	2130	3.0	73	**7.6**	2210	2.5	71	**6.3**	2280	2.1	70
202.96		**11**	2080	3.2	73	**8.4**	2190	2.7	72	**6.9**	2260	2.3	71
180.00		**12**	2020	3.5	74	**9.4**	2130	2.9	73	**7.8**	2210	2.5	72
151.30		**15**	1940	4.0	75	**11**	2060	3.3	74	**9.3**	2150	2.9	73
139.05	40/1	**16**	1880	4.2	75	**12**	2020	3.5	74	**10**	2100	3.0	73
123.48		**18**	1820	4.5	75	**14**	1960	3.8	74	**11**	2060	3.3	74
110.40		**20**	1770	4.9	76	**15**	1900	4.1	75	**13**	2000	3.6	74
99.26		**22**	1700	5.2	76	**17**	1840	4.4	75	**14**	1960	3.9	75
86.15		**26**	1620	5.7	76	**20**	1770	4.8	76	**16**	1880	4.3	75
77.14		**29**	1540	6.0	76	**22**	1700	5.2	76	**18**	1820	4.6	76
64.00		**34**	1360	6.4	77	**27**	1580	5.7	77	**22**	1700	5.1	76
91.20		**24**	1540	4.5	87	**19**	1520	3.5	86	**15**	1510	2.9	85
81.76		**27**	1600	5.2	87	**21**	1600	4.0	86	**17**	1600	3.4	86
70.43		**31**	1600	6.0	87	**24**	1600	4.7	87	**20**	1600	3.9	86
64.27		**34**	1600	6.6	88	**26**	1600	5.1	87	**22**	1600	4.2	86
57.00		**39**	1600	7.4	88	**30**	1600	5.7	87	**25**	1600	4.8	87
47.91		**46**	1600	8.7	88	**35**	1600	6.8	88	**29**	1600	5.6	87
44.03	38/3	**50**	1600	9.5	88	**39**	1600	7.4	88	**32**	1600	6.1	87
39.10		**56**	1600	10.6	89	**43**	1600	8.3	88	**36**	1600	6.8	88
34.96		**63**	1600	11.9	89	**49**	1600	9.2	88	**40**	1600	7.6	88
31.43		**70**	1600	13.2	89	**54**	1600	10.2	89	**45**	1600	8.5	88
27.28		**81**	1450	13.7	89	**62**	1600	11.7	89	**51**	1600	9.7	89
24.43		**90**	1310	13.8	89	**70**	1600	13.1	89	**57**	1600	10.8	89
20.27		**109**	1080	13.8	89	**84**	1420	14.0	89	**69**	1600	13.0	89
25.50		**86**	1240	12.2	92	**67**	1240	9.5	91	**55**	1240	7.8	91
21.43		**103**	1240	14.5	92	**79**	1240	11.2	92	**65**	1240	9.3	91
19.70		**112**	1240	15.7 *	92	**86**	1240	12.2	92	**71**	1240	10.1	91
17.49		**126**	1240	17.7 *	92	**97**	1240	13.7	92	**80**	1240	11.3	92
15.64	34/6	**141**	1230	20 *	92	**109**	1240	15.3 *	92	**90**	1240	12.7	92
14.06		**156**	1110	20 *	92	**121**	1240	17.0 *	92	**100**	1240	14.1	92
12.21		**180**	970	20 *	93	**139**	1240	20 *	92	**115**	1240	16.1 *	92
10.93		**201**	870	20 *	93	**156**	1130	20 *	93	**128**	1240	18.0 *	92
9.07		**243**	720	20 *	92	**187**	950	20 *	93	**154**	1140	20 *	93
7.88		**279**	605	19 *	92	**216**	830	20 *	93	**178**	1010	20 *	93

* P_{emax} = 15 kW

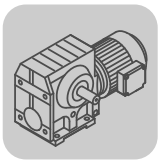


1100 - 700 1/min

02 966 097

		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
288.00		**3.8**	2400	1.4	67	**3.1**	2450	1.2	66	**2.4**	2480	0.98	64
258.18		**4.3**	2380	1.6	68	**3.5**	2430	1.3	67	**2.7**	2470	1.1	65
222.40		**4.9**	2350	1.8	69	**4.0**	2400	1.5	68	**3.1**	2450	1.2	66
202.96		**5.4**	2330	1.9	70	**4.4**	2380	1.6	68	**3.4**	2430	1.3	67
180.00		**6.1**	2280	2.1	70	**5.0**	2350	1.8	69	**3.9**	2400	1.4	68
151.30		**7.3**	2240	2.4	71	**5.9**	2310	2.0	70	**4.6**	2350	1.7	69
139.05	40/1	**7.9**	2190	2.5	72	**6.5**	2260	2.2	71	**5.0**	2330	1.8	69
123.48		**8.9**	2150	2.8	73	**7.3**	2240	2.4	71	**5.7**	2310	2.0	70
110.40		**10**	2110	3.0	73	**8.2**	2190	2.6	72	**6.3**	2280	2.1	71
99.26		**11**	2070	3.3	74	**9.1**	2150	2.8	73	**7.1**	2240	2.3	71
86.15		**13**	2000	3.6	74	**10**	2090	3.1	73	**8.1**	2190	2.6	72
77.14		**14**	1940	3.9	75	**12**	2040	3.4	74	**9.1**	2150	2.8	73
64.00		**17**	1840	4.4	76	**14**	1960	3.9	75	**11**	2070	3.2	74
91.20		**12**	1490	2.2	84	**9.9**	1480	1.8	83	**7.7**	1460	1.4	82
81.76		**13**	1760	2.9	85	**11**	1760	2.4	84	**8.6**	1760	1.9	83
70.43		**16**	1760	3.4	85	**13**	1760	2.8	85	**9.9**	1760	2.2	83
64.27		**17**	1760	3.7	86	**14**	1760	3.0	85	**11**	1760	2.4	84
57.00		**19**	1760	4.1	86	**16**	1760	3.4	85	**12**	1760	2.7	84
47.91		**23**	1760	4.9	87	**19**	1760	4.0	86	**15**	1760	3.2	85
44.03	38/3	**25**	1760	5.3	87	**20**	1760	4.4	86	**16**	1760	3.4	85
39.10		**28**	1760	6.0	87	**23**	1760	4.9	87	**18**	1760	3.9	86
34.96		**31**	1760	6.6	88	**26**	1760	5.5	87	**20**	1760	4.3	86
31.43		**35**	1760	7.4	88	**29**	1760	6.1	87	**22**	1760	4.7	87
27.28		**40**	1760	8.4	88	**33**	1760	6.9	88	**26**	1760	5.4	87
24.43		**45**	1760	9.4	88	**37**	1760	7.7	88	**29**	1760	6.0	87
20.27		**54**	1760	11.3	89	**44**	1760	9.3	88	**35**	1760	7.2	88
25.50		**43**	1340	6.7	90	**35**	1340	5.5	90	**27**	1340	4.3	89
21.43		**51**	1340	7.9	91	**42**	1340	6.5	90	**33**	1340	5.1	90
19.70		**56**	1340	8.6	91	**46**	1340	7.1	91	**36**	1340	5.5	90
17.49		**63**	1340	9.7	91	**51**	1340	7.9	91	**40**	1340	6.2	90
15.64		**70**	1340	10.8	92	**58**	1340	8.9	91	**45**	1340	6.9	91
14.06	34/6	**78**	1340	12.0	92	**64**	1340	9.8	91	**50**	1340	7.7	91
12.21		**90**	1340	13.8	92	**74**	1340	11.3	92	**57**	1340	8.8	91
10.93		**101**	1340	15.3 *	92	**82**	1340	12.6	92	**64**	1340	9.8	91
9.07		**121**	1340	18.4 *	92	**99**	1340	15.1 *	92	**77**	1340	11.8	92
7.88		**140**	1260	20 *	93	**114**	1340	17.4 *	92	**89**	1340	13.6	92

* P_{emax} = 15 kW



500 - 10 1/min

02 966 097

		n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
288.00		**1.7**	2500	0.73	62	**0.87**	2500	0.38	59	**0.03**	2500	< 0.05	58
258.18		**1.9**	2500	0.80	63	**0.97**	2500	0.43	59	**0.04**	2500	< 0.05	58
222.40		**2.2**	2500	0.92	64	**1.1**	2500	0.49	60	**0.04**	2500	< 0.05	59
202.96		**2.5**	2480	0.99	64	**1.2**	2500	0.53	61	**0.05**	2500	< 0.05	59
180.00		**2.8**	2480	1.1	65	**1.4**	2500	0.60	61	**0.06**	2500	< 0.05	59
151.30		**3.3**	2430	1.3	67	**1.7**	2500	0.70	62	**0.07**	2500	< 0.05	59
139.05	40/1	**3.6**	2430	1.4	67	**1.8**	2500	0.75	63	**0.07**	2500	< 0.05	59
123.48		**4.0**	2400	1.5	68	**2.0**	2500	0.84	63	**0.08**	2500	< 0.05	59
110.40		**4.5**	2380	1.6	69	**2.3**	2500	0.93	64	**0.09**	2500	< 0.05	59
99.26		**5.0**	2330	1.8	69	**2.5**	2470	1.0	65	**0.10**	2470	< 0.05	59
86.15		**5.8**	2310	2.0	70	**2.9**	2450	1.1	66	**0.12**	2450	0.05	59
77.14		**6.5**	2260	2.2	71	**3.2**	2430	1.2	66	**0.13**	2430	0.06	59
64.00		**7.8**	2220	2.5	72	**3.9**	2400	1.5	68	**0.16**	2400	0.07	59
91.20		**5.5**	1450	1.0	81	**2.7**	1390	0.51	79	**0.11**	1390	< 0.05	78
81.76		**6.1**	1960	1.5	82	**3.1**	1880	0.76	79	**0.12**	1880	< 0.05	78
70.43		**7.1**	1980	1.8	82	**3.5**	1980	0.92	80	**0.14**	1980	< 0.05	79
64.27		**7.8**	1980	2.0	83	**3.9**	1980	1.0	80	**0.16**	1980	< 0.05	79
57.00		**8.8**	1980	2.2	83	**4.4**	1980	1.1	80	**0.18**	1980	< 0.05	79
47.91		**10**	1980	2.6	84	**5.2**	1980	1.3	81	**0.21**	1980	0.06	79
44.03	38/3	**11**	1980	2.8	84	**5.7**	1980	1.4	81	**0.23**	1980	0.06	79
39.10		**13**	1980	3.1	85	**6.4**	1980	1.6	82	**0.26**	1980	0.07	79
34.96		**14**	1980	3.5	85	**7.2**	1980	1.8	82	**0.29**	1980	0.08	79
31.43		**16**	1980	3.9	85	**8.0**	1980	2.0	83	**0.32**	1980	0.08	79
27.28		**18**	1980	4.4	86	**9.2**	1980	2.3	83	**0.37**	1980	0.10	79
24.43		**20**	1980	4.9	86	**10**	1980	2.5	84	**0.41**	1980	0.11	79
20.27		**25**	1980	5.9	87	**12**	1980	3.0	85	**0.49**	1980	0.13	79
25.50		**20**	1430	3.3	88	**9.8**	1390	1.6	87	**0.39**	1390	0.07	85
21.43		**23**	1420	3.9	89	**12**	1510	2.1	87	**0.47**	1510	0.09	85
19.70		**25**	1410	4.2	89	**13**	1570	2.4	87	**0.51**	1570	0.10	85
17.49		**29**	1390	4.6	89	**14**	1570	2.7	88	**0.57**	1570	0.11	85
15.64	34/6	**32**	1390	5.2	90	**16**	1540	2.9	88	**0.64**	1540	0.12	85
14.06		**36**	1390	5.7	90	**18**	1510	3.2	88	**0.71**	1510	0.13	85
12.21		**41**	1390	6.6	90	**20**	1460	3.5	89	**0.82**	1460	0.15	85
10.93		**46**	1390	7.3	91	**23**	1430	3.9	89	**0.91**	1430	0.16	85
9.07		**55**	1410	8.9	91	**28**	1390	4.5	89	**1.1**	1390	0.19	85
7.88		**63**	1410	10.3	91	**32**	1390	5.1	90	**1.3**	1390	0.22	85

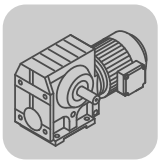
12.12 S, SF, SA, SAF 97

3400 - 2800 1/min

02 967 097

		n_e = 3400 1/min				n_e = 3200 1/min				n_e = 2800 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
286.40		**12**	3520	5.8	76	**11**	3590	5.6	76	**9.8**	3700	5.0	75
262.22		**13**	3450	6.2	76	**12**	3520	5.9	76	**11**	3630	5.4	75
231.67		**15**	3310	6.7	76	**14**	3380	6.4	76	**12**	3520	5.9	76
196.52		**17**	3120	7.4	77	**16**	3210	7.2	76	**14**	3350	6.6	76
180.95		**19**	3030	7.8	77	**18**	3120	7.5	77	**15**	3250	6.9	76
161.74		**21**	2910	8.3	77	**20**	2970	8.0	77	**17**	3120	7.4	77
145.60	40/1	**23**	2760	8.8	77	**22**	2850	8.5	77	**19**	3000	7.9	77
131.85		**26**	2660	9.4	77	**24**	2740	9.1	77	**21**	2880	8.3	77
116.92		**29**	2320	9.3	76	**27**	2550	9.5	77	**24**	2740	8.9	77
105.71		**32**	1980	8.9	75	**30**	2210	9.2	76	**26**	2630	9.5	77
89.60		**38**	1280	7.3	70	**36**	1670	8.5	74	**31**	2210	9.4	77
78.26		**43**	920	6.4	65	**41**	1040	6.7	67	**36**	1770	8.8	75
65.45		**52**	675	5.9	63	**49**	775	6.2	64	**43**	1030	6.8	68
80.85		**42**	3150	15.5	89	**40**	3150	14.6	89	**35**	3150	12.8	89
71.43		**48**	3090	17.2	90	**45**	3150	16.5	89	**39**	3150	14.5	89
60.59		**56**	2910	19	90	**53**	2970	18.3	90	**46**	3120	16.9	90
55.79		**61**	2820	20	90	**57**	2880	19	90	**50**	3030	17.8	90
49.87		**68**	2710	22	90	**64**	2760	21	90	**56**	2910	19	90
44.89	37/3	**76**	2430	21	90	**71**	2630	22	90	**62**	2790	20	90
40.65		**84**	2170	21	90	**79**	2350	22	90	**69**	2680	21	90
36.05		**94**	1830	20	89	**89**	2020	21	89	**78**	2400	22	90
32.60		**104**	1560	19	89	**98**	1760	20	89	**86**	2150	22	90
27.63		**123**	1010	15.2	86	**116**	1320	18.2	88	**101**	1740	21	89
24.13		**141**	725	12.9	83	**133**	820	13.6	84	**116**	1390	19	88
26.39		**129**	1750	25 *	93	**121**	1750	24 *	93	**106**	1750	21	93
23.59		**144**	1750	28 *	93	**136**	1750	27 *	93	**119**	1750	23 *	93
21.23		**160**	1750	32 *	93	**151**	1750	30 *	93	**132**	1750	26 *	93
19.23		**177**	1550	31 *	93	**166**	1680	31 *	93	**146**	1750	29 *	93
17.05	35/6	**199**	1320	30 *	93	**188**	1450	31 *	93	**164**	1730	32 *	93
15.42		**220**	1110	28 *	92	**208**	1260	30 *	93	**182**	1540	31 *	93
13.07		**260**	725	22	90	**245**	940	26 *	92	**214**	1240	30 *	93
11.41		**298**	515	18.3	88	**280**	585	19	89	**245**	1000	28 *	92
9.55		**356**	375	16.2	87	**335**	435	17.5	87	**293**	580	20	89
8.26		**412**	290	14.7	85	**387**	335	15.8	86	**339**	455	18.4	88

* P_{emax} = 22 kW

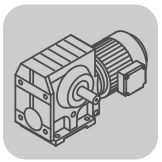


2200 - 1400 1/min

02 967 097

		n_e = 2200 1/min				n_e = 1700 1/min				n_e = 1400 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
286.40		**7.7**	3920	4.2	74	**5.9**	4000	3.4	73	**4.9**	4000	2.9	72
262.22		**8.4**	3840	4.5	75	**6.5**	4000	3.7	73	**5.3**	4000	3.1	72
231.67		**9.5**	3770	5.0	75	**7.3**	3960	4.1	74	**6.0**	4000	3.5	73
196.52		**11**	3580	5.5	76	**8.7**	3840	4.7	75	**7.1**	4000	4.0	74
180.95		**12**	3510	5.9	76	**9.4**	3770	4.9	75	**7.7**	3920	4.3	74
161.74		**14**	3410	6.4	76	**11**	3650	5.3	76	**8.7**	3840	4.7	75
145.60	40/1	**15**	3270	6.8	77	**12**	3550	5.7	76	**9.6**	3730	5.0	75
131.85		**17**	3170	7.2	77	**13**	3440	6.1	76	**11**	3650	5.4	76
116.92		**19**	3020	7.7	77	**15**	3340	6.6	77	**12**	3510	5.8	76
105.71		**21**	2930	8.3	77	**16**	3210	7.0	77	**13**	3440	6.2	76
89.60		**25**	2730	9.1	77	**19**	3020	7.8	77	**16**	3240	6.9	77
78.26		**28**	2540	9.6	78	**22**	2870	8.4	78	**18**	3080	7.5	77
65.45		**34**	2120	9.7	77	**26**	2650	9.2	78	**21**	2900	8.3	78
80.85		**27**	3300	10.6	89	**21**	3270	8.2	88	**17**	3230	6.7	88
71.43		**31**	3300	12.0	89	**24**	3300	9.3	88	**20**	3300	7.7	88
60.59		**36**	3300	14.1	89	**28**	3300	10.9	89	**23**	3300	9.0	88
55.79		**39**	3270	15.1	89	**30**	3300	11.8	89	**25**	3300	9.8	88
49.87		**44**	3170	16.3	90	**34**	3300	13.2	89	**28**	3300	10.9	89
44.89	37/3	**49**	3050	17.5	90	**38**	3300	14.6	89	**31**	3300	12.1	89
40.65		**54**	2950	19	90	**42**	3230	15.8	90	**34**	3300	13.3	89
36.05		**61**	2810	20	90	**47**	3110	17.1	90	**39**	3300	15.0	89
32.60		**67**	2700	21	90	**52**	2980	18.1	90	**43**	3200	16.0	90
27.63		**80**	2390	22	90	**62**	2810	20	90	**51**	3010	17.8	90
24.13		**91**	2060	22	90	**70**	2670	22	90	**58**	2870	19	90
26.39		**83**	2550	24 *	93	**64**	2600	19	93	**53**	2600	15.6	92
23.59		**93**	2450	26 *	93	**72**	2600	21	93	**59**	2600	17.5	93
21.23		**104**	2380	28 *	93	**80**	2570	23 *	93	**66**	2600	19	93
19.23		**114**	2280	29 *	93	**88**	2500	25 *	93	**73**	2600	21	93
17.05		**129**	2170	31 *	93	**100**	2400	27 *	93	**82**	2570	24 *	93
15.42	35/6	**143**	2040	33 *	93	**110**	2300	28 *	93	**91**	2470	25 *	93
13.07		**168**	1720	32 *	93	**130**	2170	32 *	93	**107**	2330	28 *	93
11.41		**193**	1480	32 *	93	**149**	2000	33 *	93	**123**	2210	30 *	93
9.55		**230**	1200	31 *	93	**178**	1670	33 *	93	**147**	2040	33 *	94
8.26		**266**	980	30 *	93	**206**	1440	33 *	93	**169**	1770	34 *	94

* P_{emax} = 22 kW

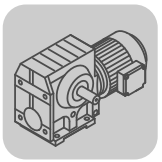


1100 - 700 1/min

02 968 097

		n_e = 1100 1/min				n_e = 900 1/min				n_e = 700 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
286.40		**3.8**	4200	2.4	70	**3.1**	4200	2.0	69	**2.4**	4200	1.6	68
262.22		**4.2**	4200	2.6	71	**3.4**	4200	2.2	70	**2.7**	4200	1.7	68
231.67		**4.7**	4200	2.9	72	**3.9**	4200	2.4	70	**3.0**	4200	1.9	69
196.52		**5.6**	4160	3.4	73	**4.6**	4200	2.8	71	**3.6**	4200	2.2	70
180.95		**6.1**	4120	3.6	73	**5.0**	4200	3.0	72	**3.9**	4200	2.4	70
161.74		**6.8**	4030	3.9	74	**5.6**	4160	3.3	73	**4.3**	4200	2.7	71
145.60	40/1	**7.6**	3950	4.2	74	**6.2**	4080	3.6	73	**4.8**	4200	2.9	72
131.85		**8.3**	3880	4.5	75	**6.8**	4030	3.9	74	**5.3**	4200	3.2	72
116.92		**9.4**	3760	4.9	75	**7.7**	3910	4.2	74	**6.0**	4120	3.5	73
105.71		**10**	3650	5.3	76	**8.5**	3840	4.6	75	**6.6**	4030	3.8	74
89.60		**12**	3500	5.9	76	**10**	3690	5.1	76	**7.8**	3910	4.3	75
78.26		**14**	3370	6.5	77	**12**	3580	5.7	76	**8.9**	3800	4.7	75
65.45		**17**	3170	7.2	77	**14**	3400	6.4	77	**11**	3650	5.4	76
80.85		**14**	3230	5.3	87	**11**	3200	4.3	86	**8.7**	3170	3.4	85
71.43		**15**	3600	6.7	87	**13**	3600	5.5	87	**9.8**	3600	4.3	86
60.59		**18**	3600	7.8	88	**15**	3600	6.4	87	**12**	3600	5.0	86
55.79		**20**	3600	8.5	88	**16**	3600	7.0	87	**13**	3600	5.5	87
49.87		**22**	3600	9.4	88	**18**	3600	7.8	88	**14**	3600	6.1	87
44.89	37/3	**25**	3600	10.4	88	**20**	3600	8.6	88	**16**	3600	6.7	87
40.65		**27**	3600	11.5	89	**22**	3600	9.5	88	**17**	3600	7.4	88
36.05		**31**	3530	12.7	89	**25**	3600	10.6	89	**19**	3600	8.3	88
32.60		**34**	3420	13.5	89	**28**	3600	11.7	89	**21**	3600	9.2	88
27.63		**40**	3260	15.2	90	**33**	3460	13.2	89	**25**	3600	10.8	89
24.13		**46**	3130	16.6	90	**37**	3320	14.5	89	**29**	3560	12.2	89
26.39		**42**	2650	12.6	92	**34**	2620	10.2	92	**27**	2620	8.0	91
23.59		**47**	2650	14.0	92	**38**	2650	11.5	92	**30**	2620	8.9	91
21.23		**52**	2650	15.6	92	**42**	2650	12.8	92	**33**	2620	9.9	92
19.23		**57**	2650	17.2	93	**47**	2650	14.1	92	**36**	2620	10.9	92
17.05	35/6	**65**	2670	19	93	**53**	2650	15.9	92	**41**	2650	12.4	92
15.42		**71**	2670	21	93	**58**	2650	17.5	93	**45**	2650	13.7	92
13.07		**84**	2540	24 *	93	**69**	2670	21	93	**54**	2650	16.1	92
11.41		**96**	2420	26 *	93	**79**	2590	23 *	93	**61**	2650	18.4	93
9.55		**115**	2280	29 *	93	**94**	2440	26 *	93	**73**	2650	22	93
8.26		**133**	2140	32 *	94	**109**	2320	28 *	93	**85**	2540	24 *	93

* P_{emax} = 22 kW



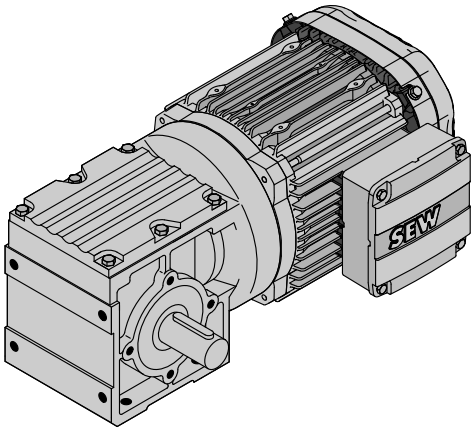
500 - 10 1/min

02 968 097

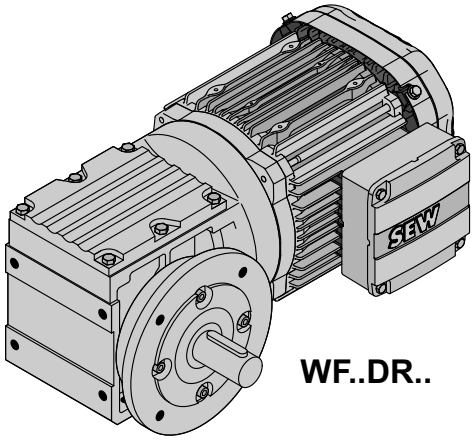
		n_e = 500 1/min				n_e = 250 1/min				n_e = 10 1/min			
i_{ges}	i_{sch}	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]	n_a [1/min]	M_{amax} [Nm]	P_e [kW]	η [%]
286.40		**1.7**	4200	1.2	65	**0.87**	4200	0.62	62	**0.03**	4200	< 0.05	60
262.22		**1.9**	4200	1.3	66	**0.95**	4200	0.68	62	**0.04**	4200	< 0.05	60
231.67		**2.2**	4200	1.4	67	**1.1**	4200	0.76	63	**0.04**	4200	< 0.05	60
196.52		**2.5**	4200	1.6	68	**1.3**	4200	0.88	64	**0.05**	4200	< 0.05	60
180.95		**2.8**	4200	1.8	68	**1.4**	4200	0.95	64	**0.06**	4200	< 0.05	60
161.74		**3.1**	4200	2.0	69	**1.5**	4200	1.1	65	**0.06**	4200	< 0.05	60
145.60	40/1	**3.4**	4200	2.2	70	**1.7**	4200	1.2	65	**0.07**	4200	0.05	60
131.85		**3.8**	4200	2.4	70	**1.9**	4200	1.3	66	**0.08**	4200	0.06	60
116.92		**4.3**	4200	2.6	71	**2.1**	4200	1.4	67	**0.09**	4200	0.06	60
105.71		**4.7**	4200	2.9	72	**2.4**	4200	1.5	67	**0.09**	4200	0.07	60
89.60		**5.6**	4160	3.3	73	**2.8**	4200	1.8	69	**0.11**	4200	0.08	60
78.26		**6.4**	4080	3.7	74	**3.2**	4200	2.0	69	**0.13**	4200	0.09	60
65.45		**7.6**	3910	4.2	75	**3.8**	4200	2.4	70	**0.15**	4200	0.11	60
80.85		**6.2**	3110	2.4	84	**3.1**	3010	1.2	82	**0.12**	3010	< 0.05	80
71.43		**7.0**	4200	3.6	85	**3.5**	4160	1.9	82	**0.14**	4160	0.08	81
60.59		**8.3**	4200	4.3	85	**4.1**	4080	2.1	83	**0.17**	4080	0.09	81
55.79		**9.0**	4200	4.6	86	**4.5**	4200	2.4	83	**0.18**	4200	0.10	81
49.87		**10**	4200	5.1	86	**5.0**	4200	2.6	83	**0.20**	4200	0.11	81
44.89	37/3	**11**	4160	5.6	86	**5.6**	4200	2.9	84	**0.22**	4200	0.12	81
40.65		**12**	4120	6.1	87	**6.2**	4200	3.2	84	**0.25**	4200	0.13	81
36.05		**14**	4080	6.8	87	**6.9**	4200	3.6	85	**0.28**	4200	0.15	81
32.60		**15**	3990	7.3	87	**7.7**	4200	4.0	85	**0.31**	4200	0.17	81
27.63		**18**	3910	8.4	88	**9.0**	4200	4.7	86	**0.36**	4200	0.20	81
24.13		**21**	3800	9.3	88	**10**	4200	5.3	86	**0.41**	4200	0.23	81
26.39		**19**	2590	5.7	90	**9.5**	2540	2.8	89	**0.38**	2540	0.12	87
23.59		**21**	2590	6.3	91	**11**	2540	3.2	89	**0.42**	2540	0.13	87
21.23		**24**	2590	7.0	91	**12**	2570	3.6	89	**0.47**	2570	0.15	87
19.23		**26**	2620	7.8	91	**13**	2570	3.9	89	**0.52**	2570	0.16	87
17.05	35/6	**29**	2620	8.8	91	**15**	2570	4.4	90	**0.59**	2570	0.18	87
15.42		**32**	2620	9.7	92	**16**	2570	4.8	90	**0.65**	2570	0.20	87
13.07		**38**	2650	11.6	92	**19**	2590	5.7	90	**0.77**	2590	0.24	87
11.41		**44**	2650	13.2	92	**22**	2590	6.6	91	**0.88**	2590	0.27	87
9.55		**52**	2650	15.7	92	**26**	2620	7.9	91	**1.0**	2620	0.33	87
8.26		**61**	2650	18.1	93	**30**	2620	9.1	91	**1.2**	2620	0.38	87

13 W..DRS

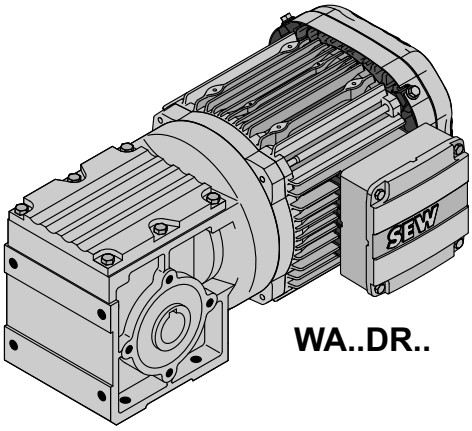
13.1 W, WF, WA, WAF, WA..B, WH..B, WHF, WH, WT..DRS



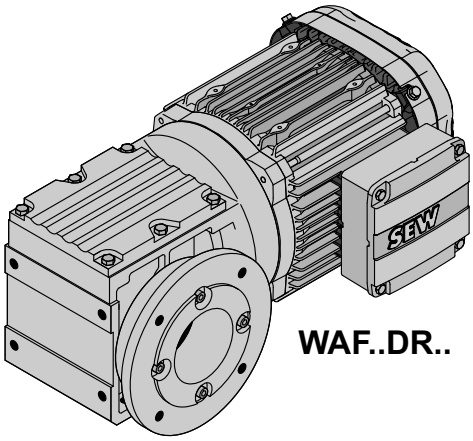
W..DR..



WF..DR..

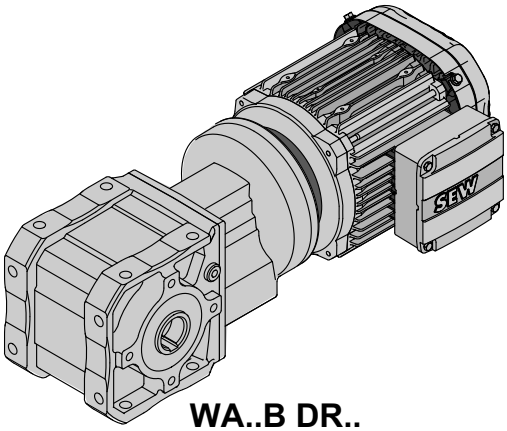


WA..DR..

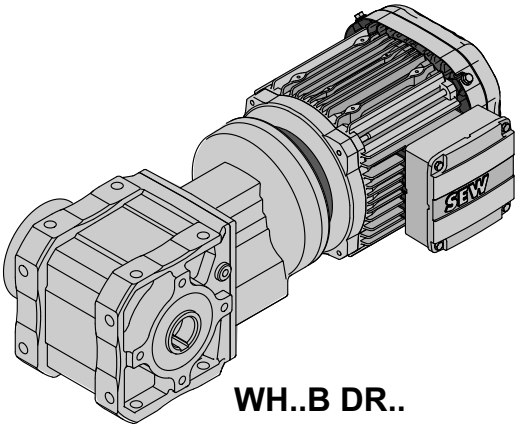


WAF..DR..

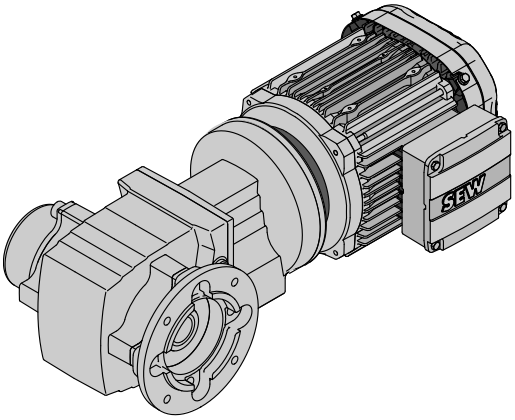
60407AXX



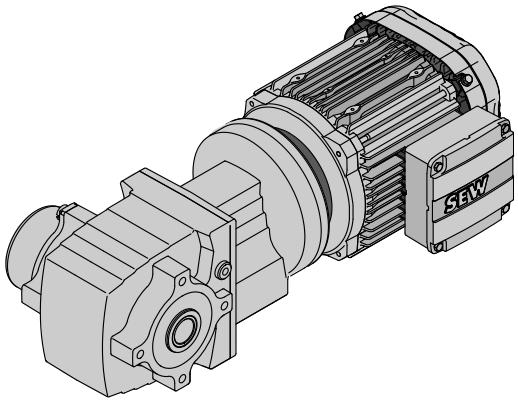
WA..B DR..



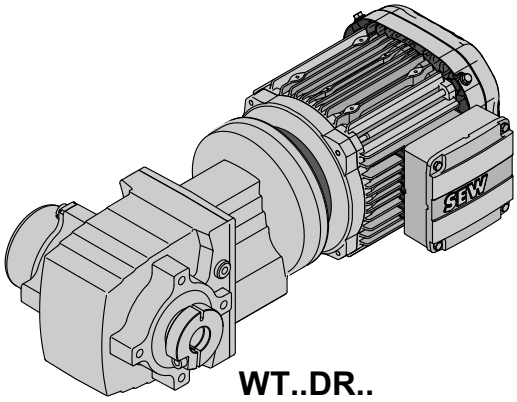
WH..B DR..



WHF..DR..

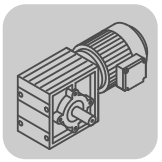


WH..DR..



WT..DR..

65701AXX



13.2 W.. → DRS

W10, n_e = 1400 1/min — 25 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DT56
19	25	1800	-	75.00*	
23	25	1800	-	60.00*	
29	25	1800	-	48.00*	
36	25	1800	-	39.00*	
43	25	1800	-	32.50*	
51	24	1800	-	27.50*	
57	25	1800	-	24.50*	
72	25	1800	-	19.50*	
85	20	1800	-	16.50*	
98	22	1800	-	14.33	
137	13	1800	-	10.25*	
171	12	1800	-	8.20*	
213	12	1720	-	6.57	

W20, n_e = 1400 1/min — 40 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S
19	40	2200	-	75.00*	
23	40	2200	-	60.00*	
29	40	2200	-	48.00*	
36	40	2200	-	39.00*	
43	40	2200	-	32.50*	
51	40	2200	-	27.50*	
57	40	2200	-	24.50*	
72	35	2200	-	19.50*	
85	30	2200	-	16.50*	
98	30	2110	-	14.33	
137	25	1920	-	10.25*	
171	20	1830	-	8.20*	
213	20	1720	-	6.57	

W30, n_e = 1400 1/min — 70 Nm

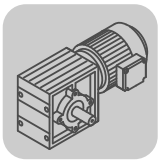
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S	DRS71M DRS80
19	70	3000	-	75.00*		
23	70	3000	-	60.00*		
29	70	3000	-	48.00*		
36	70	3000	-	39.00*		
43	70	3000	-	32.50*		
51	70	3000	-	27.50*		
57	70	3000	-	24.50*		
72	70	3000	-	19.50*		
86	60	3000	-	16.33		
98	60	3000	-	14.33		
137	50	2970	-	10.25*		
171	40	2810	-	8.20*		
213	40	2610	-	6.57		

W37, n_e = 1400 1/min — 110 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
20	110	3320	-	69.05				
22	110	3320	-	63.33				
26	110	3320	-	53.92				
30	110	3320	-	46.49				
37	110	3320	-	37.88				
41	90	3610	-	34.52				

W37, n_e = 1400 1/min								110 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M
44	90	3610	-	31.67				
45	110	3320	-	31.33				
50	110	3320	-	27.78				
52	90	3610	-	26.96				
60	90	3610	-	23.25				
66	110	3320	-	21.33				
74	90	3610	-	18.94				
89	90	3430	-	15.67				
101	90	3250	-	13.89				
110	70	3800	-	12.70				
120	70	3680	-	11.65				
131	90	2880	-	10.67				
141	70	3460	-	9.92				
164	70	3270	-	8.55				
201	70	3020	-	6.97				
243	70	2810	-	5.77				
274	70	2680	-	5.11				
356	70	2410	-	3.93				
438	70	2220	-	3.20*				

W37R17, n_e = 1400 1/min						110 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
			2	3		
0.32	110	3320	-	4402		
0.37	110	3320	-	3795		
0.43	110	3320	-	3272		
0.48	110	3320	-	2899		
0.55	110	3320	-	2558		
0.59	110	3320	-	2382		
0.64	110	3320	-	2172		
0.72	110	3320	-	1952		
0.78	110	3320	-	1795		
0.88	110	3320	-	1593		
0.96	110	3320	-	1463		
1.1	110	3320	-	1298		
1.9	110	3320	-	754		
2.1	110	3320	-	669		
			2	2		
1.2	110	3320	-	1173		
1.3	110	3320	-	1063		
1.5	110	3320	-	956		
1.6	110	3320	-	854		
2.3	110	3320	-	600		
2.6	110	3320	-	532		
3.0	110	3320	-	472		
3.2	110	3320	-	434		
3.6	110	3320	-	384		
3.9	110	3320	-	359		
4.3	110	3320	-	327		
4.9	110	3320	-	286		
5.2	110	3320	-	267		
6.0	110	3320	-	233		
6.8	110	3320	-	207		
7.6	110	3320	-	184		
8.8	110	3320	-	160		



W37R17, n_e = 1400 1/min — 110 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
9.9	110	3320	-	141		
11	110	3320	-	125		
13	110	3320	-	109		
15	110	3320	-	96		
17	110	3320	-	82		
19	90	3610	-	73		
22	90	3610	-	63		
26	90	3610	-	53		
29	90	3610	-	48		

W47, n_e = 1400 1/min — 180 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M
19	180	6500	-	74.98						
20	180	6500	-	68.93						
24	180	6500	-	58.98						
27	180	6300	-	51.12						
29	180	6110	-	47.78						
34	180	5720	-	41.30						
40	180	5290	-	35.09						
44	160	5620	-	31.62						
45	180	5010	-	31.33						
51	160	5280	-	27.41						
52	180	4640	-	26.76						
55	160	5130	-	25.62						
56	180	4490	-	25.07						
63	160	4800	-	22.15						
74	160	4460	-	18.82						
83	160	4230	-	16.80						
98	160	3930	-	14.35						
104	160	3810	-	13.44						
114	110	4600	-	12.30						
124	160	3500	-	11.32						
131	110	4350	-	10.66						
141	110	4240	-	9.96						
163	110	4000	-	8.61						
191	110	3750	-	7.32						
214	110	3580	-	6.53						
251	110	3360	-	5.58						
268	110	3270	-	5.23						
318	110	3050	-	4.40						
360	110	2900	-	3.89						
428	110	2690	-	3.27						

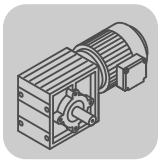
W47R17, n_e = 1400 1/min — 180 Nm

n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	$\varphi_{(/R)}$ [']	i	DR63 DRS71S DRS71M	DRS80
			2	3		
0.29	180	6400	-	4815		
0.34	180	6400	-	4173		
0.36	180	6400	-	3870		
0.39	180	6400	-	3598		
0.42	180	6400	-	3354		
0.44	180	6400	-	3171		
0.51	180	6400	-	2748		
0.58	180	6400	-	2425		

W47R17, n_e = 1400 1/min						**180 Nm**
n_a [1/min]	**M_{amax} [Nm]**	**F_{Ra} [N]**	**$\varphi_{(/R)}$ [']**	**i**	**DR63 DRS71S DRS71M**	**DRS80**
0.62	180	6400	-	2258		
0.66	180	6400	-	2111		
0.71	180	6400	-	1959		
0.78	180	6400	-	1797		
0.88	180	6400	-	1595		
0.94	180	6400	-	1486		
0.97	180	6400	-	1448		
1.2	180	6400	-	1170		
1.9	180	6400	-	754		
			2	**2**		
1.1	180	6400	-	1290		
1.2	180	6400	-	1183		
1.3	180	6400	-	1042		
1.5	180	6400	-	956		
1.6	180	6400	-	869		
2.1	180	6400	-	661		
2.3	180	6400	-	596		
2.6	180	6400	-	536		
3.0	180	6400	-	473		
3.2	180	6400	-	434		
3.6	180	6400	-	386		
3.9	180	6400	-	359		
4.4	180	6400	-	318		
4.8	180	6400	-	291		
5.2	180	6400	-	270		
5.3	180	6400	-	265		
5.9	180	6400	-	237		
6.7	180	6400	-	210		
7.7	180	6400	-	183		
8.8	180	6400	-	159		
9.9	180	6400	-	141		
11	160	6650	-	124		
12	180	6400	-	120		
13	160	6650	-	105		
15	160	6650	-	95		
16	160	6650	-	85		
18	160	6650	-	77		
19	160	6650	-	72		

13.3 W..DRS [kW]

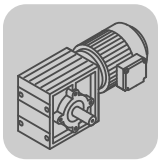
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.09	**17**	20	75.00*	1800	1.25						
	22	18	60.00*	1800	1.45						
	27	16	48.00*	1800	1.55						
	33	15	39.00*	1800	1.70						
	40	13	32.50*	1800	1.90						
	47	12	27.50*	1800	2.0	**W**	**10**	**DT**	**56M4**	5.3	643
	53	11	24.50*	1800	2.3	**WF**	**10**	**DT**	**56M4**	5.5	644
	67	9.4	19.50*	1800	2.7	**WA**	**10**	**DT**	**56M4**	5.3	645
	79	8.4	16.50*	1800	2.4	**WAF**	**10**	**DT**	**56M4**	5.5	644
	91	7.6	14.33	1800	2.9						
	127	5.8	10.25*	1800	2.2						
	159	4.8	8.20*	1800	2.5						
	198	4.0	6.57	1800	3.0						
0.12	**3.8**	135	359	0	0.80						
	4.2	128	327	1780	0.85						
	4.8	112	286	3280	1.00						
	5.2	107	267	3370	1.05						
	5.9	94	233	3560	1.15						
	6.7	81	207	3720	1.35						
	7.5	73	184	3800	1.50						
	8.6	68	160	3850	1.60	**W**	**37R17**	**DR**	**63S4**	13	661
	9.8	60	141	3910	1.80	**WF**	**37R17**	**DR**	**63S4**	13	661
	11	54	125	3960	2.0	**WA**	**37R17**	**DR**	**63S4**	13	661
	13	48	109	4000	2.3	**WAF**	**37R17**	**DR**	**63S4**	13	661
	14	43	96	4030	2.6						
	17	37	82	4060	3.0						
	19	38	73	4050	2.3						
	22	34	63	4070	2.6						
	26	29	53	4090	3.1						
	29	27	48	4100	3.3						
	20	39	69.05	4050	2.8						
	22	36	63.33	4060	3.1						
	26	31	53.92	4080	3.5	**W**	**37**	**DR**	**63S4**	10	652
	30	27	46.49	4100	4.0	**WF**	**37**	**DR**	**63S4**	10	653
	36	23	37.88	4110	4.8	**WA**	**37**	**DR**	**63S4**	10	655
	40	24	34.52	4110	3.8	**WAF**	**37**	**DR**	**63S4**	10	653
	44	22	31.67	4120	4.1						
	12	40	75.00*	3000	1.75	**W**	**30**	**DR**	**63M6**	9.0	649
	15	38	60.00*	3000	1.85	**WF**	**30**	**DR**	**63M6**	9.4	650
	28	25	32.50*	3000	2.8	**WA**	**30**	**DR**	**63M6**	8.8	651
	33	24	27.50*	3000	3.0	**WAF**	**30**	**DR**	**63M6**	9.1	650
	18	28	75.00*	3000	2.5						
	23	26	60.00*	3000	2.7	**W**	**30**	**DR**	**63S4**	9.0	649
	29	22	48.00*	3000	3.1	**WF**	**30**	**DR**	**63S4**	9.4	650
	35	20	39.00*	3000	3.4	**WA**	**30**	**DR**	**63S4**	8.8	651
	42	17	32.50*	3000	4.1	**WAF**	**30**	**DR**	**63S4**	9.1	650
	12	36	75.00*	2200	1.10	**W**	**20**	**DR**	**63M6**	6.6	646
	15	32	60.00*	2200	1.25	**WF**	**20**	**DR**	**63M6**	6.8	647
	28	27	32.50*	2200	1.50	**WA**	**20**	**DR**	**63M6**	6.3	648
	33	22	27.50*	2200	1.80	**WAF**	**20**	**DR**	**63M6**	6.3	647
	18	25	75.00*	2200	1.60						
	23	22	60.00*	2200	1.80						
	29	20	48.00*	2200	1.95						
	35	18	39.00*	2200	2.2						
	42	18	32.50*	2200	2.2						
	50	15	27.50*	2200	2.6	**W**	**20**	**DR**	**63S4**	6.6	646
	56	14	24.50*	2200	2.9	**WF**	**20**	**DR**	**63S4**	6.8	647
	71	12	19.50*	2200	2.9	**WA**	**20**	**DR**	**63S4**	6.3	648
	84	10	16.50*	2200	2.9	**WAF**	**20**	**DR**	**63S4**	6.3	647
	96	9.5	14.33	2200	3.2						
	135	7.2	10.25*	2140	3.5						
	168	5.9	8.20*	1990	3.4						
	210	4.9	6.57	1890	4.1						



W..DRS
W..DRS [kW]

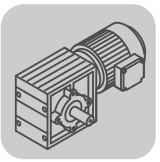
P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.12	**17**	26	75.00*	1800	0.95						
	22	23	60.00*	1800	1.05						
	27	21	48.00*	1800	1.15						
	33	20	39.00*	1800	1.30						
	40	18	32.50*	1800	1.40						
	47	16	27.50*	1800	1.55	**W**	**10**	**DT**	**56L4**	5.3	643
	53	15	24.50*	1800	1.70	**WF**	**10**	**DT**	**56L4**	5.5	644
	67	13	19.50*	1800	2.00	**WA**	**10**	**DT**	**56L4**	5.3	645
	79	11	16.50*	1800	1.80	**WAF**	**10**	**DT**	**56L4**	5.5	644
	91	10	14.33	1800	2.2						
	127	7.7	10.25*	1800	1.70						
	159	6.3	8.20*	1800	1.90						
	198	5.3	6.57	1800	2.3						
0.18	**4.2**	225	318	6080	0.80						
	4.9	193	270	6320	0.95						
	5.6	178	237	6420	1.00						
	6.3	156	210	6560	1.15						
	7.2	135	183	6680	1.35						
	8.3	122	159	6760	1.50	**W**	**47R17**	**DR**	**63M4**	18	661
	9.3	108	141	6840	1.65	**WF**	**47R17**	**DR**	**63M4**	19	661
	11	114	124	6900	1.40	**WA**	**47R17**	**DR**	**63M4**	17	661
	11	93	120	6930	1.95	**WAF**	**47R17**	**DR**	**63M4**	18	661
	13	96	105	6990	1.65						
	14	90	95	7020	1.75						
	16	79	85	7070	2.0						
	17	74	77	7090	2.2						
	18	67	72	7120	2.4						
	6.4	134	207	580	0.80						
	7.2	121	184	2620	0.90						
	8.2	110	160	3320	1.00						
	9.3	99	141	3500	1.10						
	11	88	125	3630	1.25	**W**	**37R17**	**DR**	**63M4**	13	661
	12	79	109	3740	1.40	**WF**	**37R17**	**DR**	**63M4**	13	661
	14	71	96	3820	1.55	**WA**	**37R17**	**DR**	**63M4**	13	661
	16	61	82	3910	1.80	**WAF**	**37R17**	**DR**	**63M4**	13	661
	18	64	73	3890	1.40						
	21	56	63	3940	1.60						
	25	48	53	4000	1.85						
	27	44	48	4020	2.0						
	18	69	74.98	7060	2.6						
	19	64	68.93	7090	2.8						
	22	56	58.98	7130	3.2	**W**	**47**	**DR**	**63M4**	16	658
	26	49	51.12	7170	3.7	**WF**	**47**	**DR**	**63M4**	16	659
	28	46	47.78	7180	3.9	**WA**	**47**	**DR**	**63M4**	14	660
	32	40	41.30	7210	4.5	**WAF**	**47**	**DR**	**63M4**	15	659
	42	34	31.62	7030	4.6						
	19	60	69.05	3920	1.85						
	21	56	63.33	3950	1.95						
	24	49	53.92	4000	2.3						
	28	43	46.49	4030	2.6						
	35	36	37.88	4070	3.1	**W**	**37**	**DR**	**63M4**	10	652
	38	37	34.52	4060	2.4	**WF**	**37**	**DR**	**63M4**	10	653
	42	34	31.67	4070	2.6	**WA**	**37**	**DR**	**63M4**	10	655
	48	27	27.78	4100	4.1	**WAF**	**37**	**DR**	**63M4**	10	653
	49	29	26.96	4090	3.1						
	57	26	23.25	4100	3.5						
	62	21	21.33	4120	5.2						
	70	21	18.94	4120	4.3						
	12	62	75.00*	3000	1.15	**W**	**30**	**DR**	**63L6**	9.8	649
	14	58	60.00*	3000	1.20	**WF**	**30**	**DR**	**63L6**	10	650
	27	39	32.50*	3000	1.80	**WA**	**30**	**DR**	**63L6**	9.5	651
	32	36	27.50*	3000	1.90	**WAF**	**30**	**DR**	**63L6**	9.8	650

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.18	**18**	44	75.00*	3000	1.60						
	22	40	60.00*	3000	1.75						
	28	35	48.00*	3000	2.00						
	34	32	39.00*	3000	2.2						
	41	27	32.50*	3000	2.6						
	48	25	27.50*	3000	2.8	**W**	**30**	**DR**	**63M4**	9.0	649
	54	23	24.50*	3000	3.0	**WF**	**30**	**DR**	**63M4**	9.4	650
	68	20	19.50*	3000	3.6	**WA**	**30**	**DR**	**63M4**	8.8	651
	81	17	16.33	3000	3.6	**WAF**	**30**	**DR**	**63M4**	9.1	650
	92	15	14.33	3000	3.9						
	129	12	10.25*	3000	4.3						
	161	9.5	8.20*	3000	4.2						
	201	7.9	6.57	2950	5.1						
	111	12	24.50*	3000	5.9						
	139	9.9	19.50*	3000	7.1	**W**	**30**	**DR**	**63S2**	9.0	649
	167	8.5	16.33	3000	7.1	**WF**	**30**	**DR**	**63S2**	9.4	650
	190	7.7	14.33	3000	7.8	**WA**	**30**	**DR**	**63S2**	8.8	651
	265	5.7	10.25*	2710	8.8	**WAF**	**30**	**DR**	**63S2**	9.1	650
	332	4.7	8.20*	2520	8.5						
						W	**20**	**DR**	**63L6**	7.3	646
	14	49	60.00*	2200	0.80	**WF**	**20**	**DR**	**63L6**	7.4	647
	32	35	27.50*	2200	1.15	**WA**	**20**	**DR**	**63L6**	7.0	648
	45	27	19.50*	2200	1.30	**WAF**	**20**	**DR**	**63L6**	7.0	647
	18	39	75.00*	2200	1.00						
	22	34	60.00*	2200	1.15						
	28	32	48.00*	2200	1.25						
	34	29	39.00*	2200	1.40						
	41	28	32.50*	2200	1.40						
	48	24	27.50*	2200	1.70	**W**	**20**	**DR**	**63M4**	6.6	646
	54	22	24.50*	2200	1.85	**WF**	**20**	**DR**	**63M4**	6.8	647
	68	19	19.50*	2200	1.90	**WA**	**20**	**DR**	**63M4**	6.3	648
	80	16	16.50*	2200	1.85	**WAF**	**20**	**DR**	**63M4**	6.3	647
	92	15	14.33	2200	2.0						
	129	11	10.25*	2110	2.2						
	161	9.2	8.20*	1970	2.2						
	201	7.7	6.57	1890	2.6						
	111	11	24.50*	2200	3.6						
	139	9.4	19.50*	2070	3.7	**W**	**20**	**DR**	**63S2**	6.6	646
	165	8.2	16.50*	1970	3.7	**WF**	**20**	**DR**	**63S2**	6.8	647
	190	7.5	14.33	1890	4.0	**WA**	**20**	**DR**	**63S2**	6.3	648
	265	5.6	10.25*	1710	4.5	**WAF**	**20**	**DR**	**63S2**	6.3	647
	332	4.6	8.20*	1590	4.4						
0.25	**7.1**	196	183	6300	0.90						
	8.2	175	159	6430	1.05						
	9.2	157	141	6550	1.15						
	11	164	124	6630	0.95	**W**	**47R17**	**DR**	**63L4**	19	661
	11	134	120	6690	1.35	**WF**	**47R17**	**DR**	**63L4**	20	661
	12	139	105	6760	1.15	**WA**	**47R17**	**DR**	**63L4**	18	661
	14	129	95	6820	1.25	**WAF**	**47R17**	**DR**	**63L4**	18	661
	15	114	85	6900	1.40						
	17	106	77	6940	1.50						
	18	97	72	6980	1.65						
	10	128	125	1880	0.85						
	12	114	109	3220	0.95						
	14	102	96	3450	1.10	**W**	**37R17**	**DR**	**63L4**	14	661
	16	88	82	3640	1.25	**WF**	**37R17**	**DR**	**63L4**	14	661
	18	92	73	3580	0.95	**WA**	**37R17**	**DR**	**63L4**	14	661
	21	82	63	3720	1.10	**WAF**	**37R17**	**DR**	**63L4**	14	661
	24	70	53	3840	1.30						
	27	64	48	3880	1.40						
						W	**47**	**DRS**	**71S6**	18	658
	12	135	74.98	6680	1.35	**WF**	**47**	**DRS**	**71S6**	19	659
	13	125	68.93	6740	1.45	**WA**	**47**	**DRS**	**71S6**	17	660
						WAF	**47**	**DRS**	**71S6**	17	659
	17	97	74.98	6910	1.85	**W**	**47**	**DR**	**63L4**	16	658
	19	90	68.93	6950	2.0	**WF**	**47**	**DR**	**63L4**	17	659
	22	78	58.98	7010	2.3	**WA**	**47**	**DR**	**63L4**	15	660
	25	69	51.12	7060	2.6	**WAF**	**47**	**DR**	**63L4**	16	659
	27	65	47.78	7080	2.8						

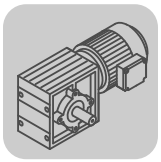


W..DRS
W..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.25	**19**	85	69.05	3680	1.30						
	21	79	63.33	3750	1.40						
	24	68	53.92	3850	1.60						
	28	60	46.49	3920	1.85						
	34	50	37.88	3990	2.2						
	38	52	34.52	3980	1.75						
	41	48	31.67	4000	1.90						
	47	38	27.78	4060	2.9	**W**	**37**	**DR**	**63L4**	11	652
	48	41	26.96	4040	2.2	**WF**	**37**	**DR**	**63L4**	11	653
	56	36	23.25	4060	2.5	**WA**	**37**	**DR**	**63L4**	11	655
	61	30	21.33	4090	3.7	**WAF**	**37**	**DR**	**63L4**	11	653
	69	30	18.94	4090	3.0						
	83	25	15.67	4110	3.6						
	94	22	13.89	4110	4.0						
	102	21	12.70	4120	3.3						
	112	20	11.65	4120	3.6						
	122	17	10.67	3910	5.2						
	131	17	9.92	3920	4.2						
	12	84	75.00*	3000	0.85						
	15	78	60.00*	3000	0.90	**W**	**30**	**DRS**	**71S6**	12	649
	28	53	32.50*	3000	1.35	**WF**	**30**	**DRS**	**71S6**	12	650
	37	46	24.50*	3000	1.50	**WA**	**30**	**DRS**	**71S6**	11	651
	46	39	19.50*	3000	1.80	**WAF**	**30**	**DRS**	**71S6**	12	650
	17	62	75.00*	3000	1.15						
	22	57	60.00*	3000	1.25						
	27	50	48.00*	3000	1.40						
	33	45	39.00*	3000	1.55						
	40	38	32.50*	3000	1.85						
	47	35	27.50*	3000	2.00	**W**	**30**	**DR**	**63L4**	9.8	649
	53	33	24.50*	3000	2.1	**WF**	**30**	**DR**	**63L4**	10	650
	67	28	19.50*	3000	2.5	**WA**	**30**	**DR**	**63L4**	9.5	651
	80	24	16.33	3000	2.5	**WAF**	**30**	**DR**	**63L4**	9.8	650
	91	22	14.33	3000	2.8						
	127	16	10.25*	3000	3.1						
	159	13	8.20*	3000	3.0						
	198	11	6.57	2940	3.6						
	109	17	24.50*	3000	4.2						
	136	14	19.50*	3000	5.0	**W**	**30**	**DR**	**63M2**	9.0	649
	163	12	16.33	3000	5.0	**WF**	**30**	**DR**	**63M2**	9.4	650
	186	11	14.33	3000	5.5	**WA**	**30**	**DR**	**63M2**	8.8	651
	260	8.1	10.25*	2700	6.2	**WAF**	**30**	**DR**	**63M2**	9.1	650
	324	6.6	8.20*	2520	6.1						
	33	47	27.50*	2200	0.85						
	37	43	24.50*	2200	0.95						
	46	37	19.50*	2200	0.95	**W**	**20**	**DRS**	**71S6**	9.1	646
	62	30	14.33	2200	1.00	**WF**	**20**	**DRS**	**71S6**	9.2	647
	87	22	10.25*	2200	1.10	**WA**	**20**	**DRS**	**71S6**	8.8	648
	109	19	8.20*	2190	1.10	**WAF**	**20**	**DRS**	**71S6**	8.8	647
	136	16	6.57	2090	1.30						
	22	48	60.00*	2200	0.85						
	27	44	48.00*	2200	0.90						
	33	41	39.00*	2200	1.00						
	40	40	32.50*	2200	1.00						
	47	34	27.50*	2200	1.20	**W**	**20**	**DR**	**63L4**	7.3	646
	53	30	24.50*	2200	1.30	**WF**	**20**	**DR**	**63L4**	7.4	647
	67	26	19.50*	2200	1.35	**WA**	**20**	**DR**	**63L4**	7.0	648
	79	23	16.50*	2200	1.30	**WAF**	**20**	**DR**	**63L4**	7.0	647
	91	21	14.33	2200	1.45						
	127	16	10.25*	2050	1.60						
	159	13	8.20*	1920	1.55						
	198	11	6.57	1860	1.85						
	82	21	32.50*	2200	1.95						
	97	17	27.50*	2200	2.3						
	109	16	24.50*	2150	2.6	**W**	**20**	**DR**	**63M2**	6.6	646
	136	13	19.50*	2020	2.6	**WF**	**20**	**DR**	**63M2**	6.8	647
	161	12	16.50*	1930	2.6	**WA**	**20**	**DR**	**63M2**	6.3	648
	186	11	14.33	1860	2.8	**WAF**	**20**	**DR**	**63M2**	6.3	647
	260	7.9	10.25*	1680	3.2						
	324	6.5	8.20*	1570	3.1						

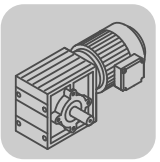


P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**9.8**	220	141	6110	0.80						
	11	192	120	6320	0.95	**W**	**47R17**	**DRS**	**71S4**	21	661
	13	198	105	6430	0.80	**WF**	**47R17**	**DRS**	**71S4**	21	661
	15	183	95	6520	0.90	**WA**	**47R17**	**DRS**	**71S4**	19	661
	16	163	85	6640	1.00	**WAF**	**47R17**	**DRS**	**71S4**	20	661
	18	150	77	6710	1.05						
	19	138	72	6770	1.15						
	17	126	82	2020	0.85	**W**	**37R17**	**DRS**	**71S4**	15	661
	26	100	53	3480	0.90	**WF**	**37R17**	**DRS**	**71S4**	15	661
	29	91	48	3600	1.00	**WA**	**37R17**	**DRS**	**71S4**	15	661
						WAF	**37R17**	**DRS**	**71S4**	15	661
	12	198	74.98	6280	0.90	**W**	**47**	**DRS**	**71M6**	19	658
	13	184	68.93	6380	1.00	**WF**	**47**	**DRS**	**71M6**	20	659
	15	160	58.98	6530	1.15	**WA**	**47**	**DRS**	**71M6**	18	660
	18	141	51.12	6650	1.30	**WAF**	**47**	**DRS**	**71M6**	19	659
	19	133	47.78	6700	1.35						
	18	136	74.98	6680	1.30						
	20	126	68.93	6740	1.45						
	23	110	58.98	6830	1.65						
	27	97	51.12	6910	1.85						
	29	91	47.78	6940	2.00						
	33	80	41.30	6950	2.2						
	39	69	35.09	6670	2.6						
	44	68	31.62	6570	2.4						
	44	62	31.33	6470	2.9	**W**	**47**	**DRS**	**71S4**	18	658
	50	59	27.41	6320	2.7	**WF**	**47**	**DRS**	**71S4**	19	659
	52	54	26.76	6210	3.3	**WA**	**47**	**DRS**	**71S4**	17	660
	54	56	25.62	6200	2.9	**WAF**	**47**	**DRS**	**71S4**	17	659
	55	51	25.07	6100	3.6						
	62	48	22.15	5960	3.3						
	73	42	18.82	5690	3.9						
	82	37	16.80	5500	4.3						
	96	32	14.35	5260	5.0						
	112	29	12.30	5120	3.7						
	129	26	10.66	4900	4.3						
	139	24	9.96	4790	4.6						
	22	110	63.33	3310	1.00						
	26	96	53.92	3540	1.15						
	30	84	46.49	3680	1.30						
	36	70	37.88	3830	1.55						
	40	73	34.52	3810	1.25						
	44	67	31.67	3860	1.35						
	50	53	27.78	3970	2.1						
	51	58	26.96	3930	1.55	**W**	**37**	**DRS**	**71S4**	13	652
	59	50	23.25	3990	1.80	**WF**	**37**	**DRS**	**71S4**	13	653
	65	42	21.33	4040	2.6	**WA**	**37**	**DRS**	**71S4**	13	655
	73	42	18.94	4040	2.2	**WAF**	**37**	**DRS**	**71S4**	13	653
	88	35	15.67	4070	2.6						
	99	31	13.89	4030	2.9						
	109	30	12.70	4090	2.3						
	118	27	11.65	3990	2.6						
	129	24	10.67	3740	3.7						
	139	23	9.92	3800	3.0						
	161	20	8.55	3630	3.5						
	18	86	75.00*	3000	0.80						
	23	80	60.00*	3000	0.90						
	29	69	48.00*	3000	1.00						
	35	63	39.00*	3000	1.10						
	42	53	32.50*	3000	1.30						
	50	49	27.50*	3000	1.40	**W**	**30**	**DRS**	**71S4**	12	649
	56	46	24.50*	3000	1.55	**WF**	**30**	**DRS**	**71S4**	12	650
	71	39	19.50*	3000	1.80	**WA**	**30**	**DRS**	**71S4**	11	651
	84	33	16.33	3000	1.80	**WAF**	**30**	**DRS**	**71S4**	12	650
	96	30	14.33	3000	2.00						
	135	23	10.25*	3000	2.2						
	168	19	8.20*	3000	2.1						
	210	16	6.57	2870	2.6						

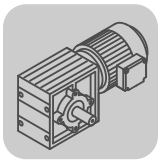


W..DRS
W..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.37	**108**	25	24.50*	3000	2.8						
	136	21	19.50*	3000	3.4	**W**	**30**	**DR**	**63L2**	9.8	649
	162	18	16.33	3000	3.4	**WF**	**30**	**DR**	**63L2**	10	650
	185	16	14.33	2940	3.7	**WA**	**30**	**DR**	**63L2**	9.5	651
	259	12	10.25*	2660	4.1	**WAF**	**30**	**DR**	**63L2**	9.8	650
	323	9.9	8.20*	2480	4.0						
	50	47	27.50*	2200	0.85						
	56	43	24.50*	2200	0.95						
	71	37	19.50*	2200	0.95	**W**	**20**	**DRS**	**71S4**	9.1	646
	84	32	16.50*	2180	0.95	**WF**	**20**	**DRS**	**71S4**	9.2	647
	96	29	14.33	2130	1.00	**WA**	**20**	**DRS**	**71S4**	8.8	648
	135	22	10.25*	1970	1.15	**WAF**	**20**	**DRS**	**71S4**	8.8	647
	168	18	8.20*	1020	1.10						
	210	15	6.57	1510	1.30						
	108	23	24.50*	2020	1.70						
	136	20	19.50*	1920	1.75	**W**	**20**	**DR**	**63L2**	7.3	646
	161	17	16.50*	1840	1.75	**WF**	**20**	**DR**	**63L2**	7.4	647
	185	16	14.33	1780	1.90	**WA**	**20**	**DR**	**63L2**	7.0	648
	259	12	10.25*	1620	2.1	**WAF**	**20**	**DR**	**63L2**	7.0	647
	323	9.6	8.20*	1530	2.1						
0.55	**18**	205	51.12	6220	0.85						
	19	195	47.78	6300	0.90						
	22	172	41.30	6460	1.05	**W**	**47**	**DRS**	**80S6**	22	658
	26	148	35.09	6600	1.20	**WF**	**47**	**DRS**	**80S6**	22	659
	29	149	31.62	6710	1.05	**WA**	**47**	**DRS**	**80S6**	20	660
	29	134	31.33	6630	1.35	**WAF**	**47**	**DRS**	**80S6**	21	659
	33	130	27.41	6590	1.25						
	36	122	25.62	6500	1.30						
	18	200	74.98	6250	0.90						
	20	188	68.93	6350	0.95						
	23	163	58.98	6510	1.10						
	27	144	51.12	6630	1.25						
	29	135	47.78	6640	1.35	**W**	**47**	**DRS**	**71M4**	19	658
	33	119	41.30	6460	1.50	**WF**	**47**	**DRS**	**71M4**	20	659
	39	102	35.09	6240	1.75	**WA**	**47**	**DRS**	**71M4**	18	660
	44	101	31.62	6220	1.60	**WAF**	**47**	**DRS**	**71M4**	19	659
	44	92	31.33	6090	1.95						
	50	88	27.41	6010	1.80						
	54	83	25.62	5920	1.95						
	36	104	37.88	3410	1.05						
	44	100	31.67	3480	0.90						
	50	79	27.78	3740	1.40						
	51	86	26.96	3660	1.05						
	59	75	23.25	3790	1.20						
	65	62	21.33	3900	1.75						
	73	62	18.94	3900	1.45						
	88	52	15.67	3940	1.75	**W**	**37**	**DRS**	**71M4**	14	652
	99	46	13.89	3830	1.95	**WF**	**37**	**DRS**	**71M4**	14	653
	109	44	12.70	3990	1.60	**WA**	**37**	**DRS**	**71M4**	14	655
	118	41	11.65	3900	1.70	**WAF**	**37**	**DRS**	**71M4**	14	653
	129	36	10.67	3590	2.5						
	139	35	9.92	3720	2.0						
	161	30	8.55	3560	2.3						
	198	24	6.97	3350	2.9						
	239	20	5.77	3160	3.4						
	270	18	5.11	3050	3.9						
	352	14	3.93	2810	5.0						
	42	79	32.50*	3000	0.90						
	50	73	27.50*	3000	0.95						
	56	68	24.50*	3000	1.05	**W**	**30**	**DRS**	**71M4**	13	649
	84	50	16.33	3000	1.20	**WF**	**30**	**DRS**	**71M4**	13	650
	96	45	14.33	3000	1.35	**WA**	**30**	**DRS**	**71M4**	13	651
	135	34	10.25*	3000	1.45	**WAF**	**30**	**DRS**	**71M4**	13	650
	168	28	8.20*	2980	1.45						
	210	23	6.57	2800	1.70						



P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
0.55	**115**	35	24.50*	3000	2.0						
	144	29	19.50*	3000	2.4	**W**	**30**	**DRS**	**71M2**	13	649
	172	25	16.33	2940	2.4	**WF**	**30**	**DRS**	**71M2**	13	650
	196	23	14.33	2840	2.6	**WA**	**30**	**DRS**	**71M2**	13	651
	274	17	10.25*	2650	2.9	**WAF**	**30**	**DRS**	**71M2**	13	650
	343	14	8.20*	2420	2.9						
0.75	**24**	220	58.98	6130	0.80						
	27	194	51.12	6060	0.95						
	29	182	47.78	6010	1.00						
	34	160	41.30	5900	1.15						
	40	138	35.09	5760	1.30						
	44	136	31.62	5820	1.20	**W**	**47**	**DRS**	**80S4**	22	658
	45	124	31.33	5650	1.45	**WF**	**47**	**DRS**	**80S4**	22	659
	51	118	27.41	5660	1.35	**WA**	**47**	**DRS**	**80S4**	20	660
	52	108	26.76	5490	1.65	**WAF**	**47**	**DRS**	**80S4**	21	659
	55	111	25.62	5580	1.45						
	56	102	25.07	5420	1.75						
	63	97	22.15	5410	1.65						
	74	83	18.82	5220	1.95						
	114	59	12.30	4890	1.85						
	45	119	31.33	2820	0.95						
	50	107	27.78	3380	1.05						
	60	101	23.25	3470	0.90						
	66	84	21.33	3690	1.30						
	74	83	18.94	3700	1.10						
	89	69	15.67	3690	1.30						
	101	62	13.89	3610	1.45	**W**	**37**	**DRS**	**80S4**	16	652
	131	48	10.67	3420	1.85	**WF**	**37**	**DRS**	**80S4**	16	653
	141	47	9.92	3620	1.50	**WA**	**37**	**DRS**	**80S4**	16	655
	164	40	8.55	3470	1.75	**WAF**	**37**	**DRS**	**80S4**	16	653
	201	33	6.97	3280	2.1						
	243	27	5.77	3100	2.6						
	274	24	5.11	2990	2.9						
	357	19	3.93	2760	3.7						
	438	15	3.20*	2600	4.6						
	86	67	16.33	3000	0.90						
	98	61	14.33	3000	1.00	**W**	**30**	**DRS**	**80S4**	15	649
	137	46	10.25*	3000	1.10	**WF**	**30**	**DRS**	**80S4**	15	650
	171	37	8.20*	2870	1.05	**WA**	**30**	**DRS**	**80S4**	15	651
	213	31	6.57	2720	1.25	**WAF**	**30**	**DRS**	**80S4**	15	650
	114	48	24.50*	3000	1.45						
	171	34	16.33	2840	1.75	**W**	**30**	**DRS**	**80S2**	15	649
	195	31	14.33	2750	1.95	**WF**	**30**	**DRS**	**80S2**	15	650
	273	23	10.25*	2620	2.2	**WA**	**30**	**DRS**	**80S2**	15	651
	341	19	8.20*	2380	2.1	**WAF**	**30**	**DRS**	**80S2**	15	650
1.1	**40**	200	35.09	4940	0.90						
	45	198	31.62	5140	0.80						
	45	181	31.33	4920	1.00						
	51	173	27.41	5070	0.95						
	53	157	26.76	4850	1.15						
	55	162	25.62	5030	1.00						
	56	148	25.07	4820	1.20	**W**	**47**	**DRS**	**80M4**	24	658
	64	141	22.15	4930	1.15	**WF**	**47**	**DRS**	**80M4**	25	659
	75	121	18.82	4810	1.30	**WA**	**47**	**DRS**	**80M4**	23	660
	84	108	16.80	4710	1.45	**WAF**	**47**	**DRS**	**80M4**	24	659
	98	93	14.35	4570	1.70						
	105	88	13.44	4510	1.80						
	115	86	12.30	4700	1.30						
	132	74	10.66	4530	1.50						
	142	70	9.96	4450	1.60						
	164	60	8.61	4280	1.80						

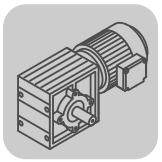


W..DRS
W..DRS [kW]

P_m [kW]	n_a [1/min]	M_a [Nm]	i	F_{Ra} [1)] [N]	SEW f_B					m [kg]	
1.1	**90**	101	15.67	3280	0.90						
	102	90	13.89	3240	1.00						
	132	70	10.67	3120	1.30						
	142	68	9.92	3460	1.05	**W**	**37**	**DRS**	**80M4**	19	652
	165	59	8.55	3340	1.20	**WF**	**37**	**DRS**	**80M4**	19	653
	202	48	6.97	3160	1.45	**WA**	**37**	**DRS**	**80M4**	19	655
	245	40	5.77	3010	1.75	**WAF**	**37**	**DRS**	**80M4**	19	653
	276	35	5.11	2910	2.00						
	359	27	3.93	2700	2.6						
	441	22	3.20*	2540	3.1						
	174	50	16.33	2660	1.20	**W**	**30**	**DRS**	**80M2**	18	649
	198	45	14.33	2590	1.35	**WF**	**30**	**DRS**	**80M2**	18	650
	277	34	10.25*	2540	1.50	**WA**	**30**	**DRS**	**80M2**	17	651
	346	27	8.20*	2290	1.45	**WAF**	**30**	**DRS**	**80M2**	18	650
1.5	**52**	215	26.76	4130	0.85						
	56	200	25.07	4140	0.90						
	63	194	22.15	4400	0.80						
	74	166	18.82	4350	0.95						
	83	150	16.80	4300	1.05						
	97	129	14.35	4220	1.25	**W**	**47**	**DRS**	**90M4**	29	658
	104	121	13.44	4180	1.30	**WF**	**47**	**DRS**	**90M4**	30	659
	123	103	11.32	4070	1.55	**WA**	**47**	**DRS**	**90M4**	28	660
	131	102	10.66	4360	1.05	**WAF**	**47**	**DRS**	**90M4**	29	659
	140	96	9.96	4290	1.15						
	162	83	8.61	4140	1.30						
	191	71	7.32	3980	1.55						
	214	63	6.53	3860	1.75						
	131	97	10.67	2800	0.95						
	163	81	8.55	3200	0.85						
	200	66	6.97	3050	1.05	**W**	**37**	**DRS**	**90M4**	23	652
	242	55	5.77	2920	1.30	**WF**	**37**	**DRS**	**90M4**	23	653
	273	49	5.11	2830	1.45	**WA**	**37**	**DRS**	**90M4**	23	655
	355	38	3.93	2640	1.85	**WAF**	**37**	**DRS**	**90M4**	23	653
	436	31	3.20*	2490	2.3						
2.2	**98**	188	14.35	3590	0.85						
	104	177	13.44	3580	0.90						
	124	150	11.32	3560	1.05						
	163	121	8.61	3880	0.90						
	191	104	7.32	3750	1.05	**W**	**47**	**DRS**	**90L4**	32	658
	214	93	6.53	3660	1.20	**WF**	**47**	**DRS**	**90L4**	32	659
	251	79	5.58	3530	1.40	**WA**	**47**	**DRS**	**90L4**	30	660
	268	74	5.23	3480	1.50	**WAF**	**47**	**DRS**	**90L4**	31	659
	318	63	4.40	3330	1.75						
	360	56	3.89	3230	2.00						
	429	47	3.27	3090	2.4						
	243	80	5.77	2740	0.90	**W**	**37**	**DRS**	**90L4**	26	652
	274	71	5.11	2670	1.00	**WF**	**37**	**DRS**	**90L4**	26	653
	357	55	3.93	2520	1.30	**WA**	**37**	**DRS**	**90L4**	26	655
	438	45	3.20*	2390	1.55	**WAF**	**37**	**DRS**	**90L4**	26	653
3.0	**214**	126	6.53	3440	0.85						
	251	108	5.58	3340	1.00	**W**	**47**	**DRS**	**100M4**	37	658
	268	101	5.23	3300	1.10	**WF**	**47**	**DRS**	**100M4**	37	659
	318	86	4.40	3180	1.30	**WA**	**47**	**DRS**	**100M4**	35	660
	360	76	3.89	3090	1.45	**WAF**	**47**	**DRS**	**100M4**	36	659
	429	64	3.27	2970	1.70						
4.0	**276**	131	5.23	3050	0.85	**W**	**47**	**DRS**	**100LC4**	42	658
	328	111	4.40	2970	1.00	**WF**	**47**	**DRS**	**100LC4**	42	659
	372	98	3.89	2910	1.10	**WA**	**47**	**DRS**	**100LC4**	40	660
	442	82	3.27	2810	1.35	**WAF**	**47**	**DRS**	**100LC4**	41	659
5.5						**W**	**47**	**DRS**	**132S4**	55	658
	372	135	3.89	2660	0.80	**WF**	**47**	**DRS**	**132S4**	55	659
	442	113	3.27	2600	0.95	**WA**	**47**	**DRS**	**132S4**	53	660
						WAF	**47**	**DRS**	**132S4**	54	659

13.4 W..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
110	**0.31**	4402	3320						
	0.36	3795	3320						
	0.42	3272	3320						
	0.48	2899	3320						
	0.54	2558	3320						
	0.58	2382	3320	**W**	**37R17**	**DR**	**63S4**	13	661
	0.64	2172	3320	**WF**	**37R17**	**DR**	**63S4**	13	661
	0.71	1952	3320	**WA**	**37R17**	**DR**	**63S4**	13	661
	0.77	1795	3320	**WAF**	**37R17**	**DR**	**63S4**	13	661
	0.87	1593	3320						
	0.94	1463	3320						
	1.1	1298	3320						
	1.8	754	3320						
	2.1	669	3320						
	1.2	1173	3320						
	1.3	1063	3320						
	1.4	956	3320						
	1.6	854	3320						
	2.3	600	3320	**W**	**37R17**	**DR**	**63S4**	13	661
	2.6	532	3320	**WF**	**37R17**	**DR**	**63S4**	13	661
	2.9	472	3320	**WA**	**37R17**	**DR**	**63S4**	13	661
	3.2	434	3320	**WAF**	**37R17**	**DR**	**63S4**	13	661
	3.6	384	3320						
	3.8	359	3320						
	4.2	327	3320						
	4.8	286	3320						
	5.0	267	3320	**W**	**37R17**	**DR**	**63M4**	13	661
	5.7	233	3320	**WF**	**37R17**	**DR**	**63M4**	13	661
	6.4	207	3320	**WA**	**37R17**	**DR**	**63M4**	13	661
	7.2	184	3320	**WAF**	**37R17**	**DR**	**63M4**	13	661
	8.2	160	3320						
	9.2	141	3320	**W**	**37R17**	**DR**	**63L4**	14	661
	10	125	3320	**WF**	**37R17**	**DR**	**63L4**	14	661
	12	109	3320	**WA**	**37R17**	**DR**	**63L4**	14	661
				WAF	**37R17**	**DR**	**63L4**	14	661
				W	**37R17**	**DRS**	**71S4**	15	661
	14	96	3320	**WF**	**37R17**	**DRS**	**71S4**	15	661
	17	82	3320	**WA**	**37R17**	**DRS**	**71S4**	15	661
				WAF	**37R17**	**DRS**	**71S4**	15	661
90				**W**	**37R17**	**DR**	**63L4**	14	661
	18	73	3610	**WF**	**37R17**	**DR**	**63L4**	14	661
				WA	**37R17**	**DR**	**63L4**	14	661
				WAF	**37R17**	**DR**	**63L4**	14	661
				W	**37R17**	**DRS**	**71S4**	15	661
	22	63	3610	**WF**	**37R17**	**DRS**	**71S4**	15	661
	26	53	3610	**WA**	**37R17**	**DRS**	**71S4**	15	661
	29	48	3610	**WAF**	**37R17**	**DRS**	**71S4**	15	661
180	**0.29**	4815	6400						
	0.33	4173	6400						
	0.36	3870	6400						
	0.38	3598	6400						
	0.41	3354	6400						
	0.44	3171	6400						
	0.50	2748	6400						
	0.57	2425	6400	**W**	**47R17**	**DR**	**63S4**	19	661
	0.61	2258	6400	**WF**	**47R17**	**DR**	**63S4**	19	661
	0.65	2111	6400	**WA**	**47R17**	**DR**	**63S4**	17	661
	0.70	1959	6400	**WAF**	**47R17**	**DR**	**63S4**	18	661
	0.77	1797	6400						
	0.87	1595	6400						
	0.93	1486	6400						
	0.95	1448	6400						
	1.2	1170	6400						
	1.8	754	6400						



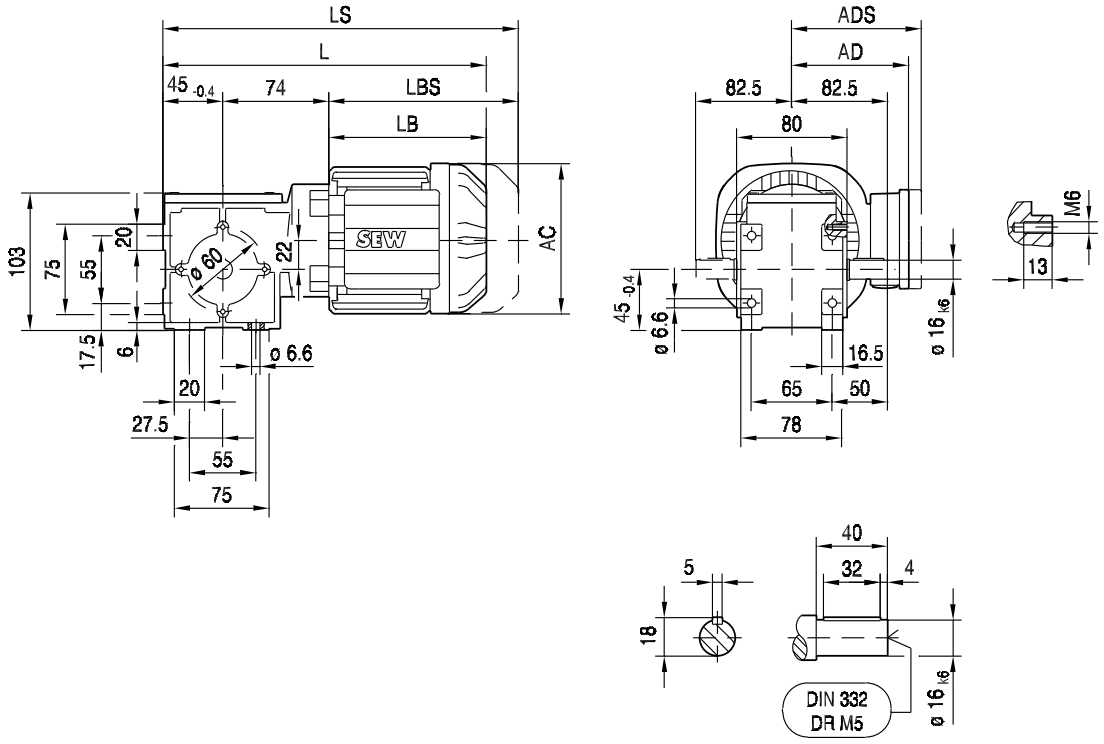
W..DRS
W..R..DRS [Nm]

$M_{a\ max}$ [Nm]	n_a [1/min]	i	F_{Ra} [1)] [N]					m [kg]	
180	**1.1**	1290	6400						
	1.2	1183	6400						
	1.3	1042	6400						
	1.4	956	6400	**W**	**47R17**	**DR**	**63S4**	18	661
	1.6	869	6400	**WF**	**47R17**	**DR**	**63S4**	19	661
	2.1	661	6400	**WA**	**47R17**	**DR**	**63S4**	17	661
	2.3	596	6400	**WAF**	**47R17**	**DR**	**63S4**	18	661
	2.6	536	6400						
	2.9	473	6400						
	3.2	434	6400						
	3.4	386	6400						
	3.7	359	6400	**W**	**47R17**	**DR**	**63M4**	18	661
	4.2	318	6400	**WF**	**47R17**	**DR**	**63M4**	19	661
	4.5	291	6400	**WA**	**47R17**	**DR**	**63M4**	17	661
	4.9	270	6400	**WAF**	**47R17**	**DR**	**63M4**	18	661
	5.0	265	6400						
	5.5	237	6400	**W**	**47R17**	**DR**	**63L4**	19	661
	6.2	210	6400	**WF**	**47R17**	**DR**	**63L4**	20	661
	7.1	183	6400	**WA**	**47R17**	**DR**	**63L4**	18	661
				WAF	**47R17**	**DR**	**63L4**	18	661
				W	**47R17**	**DRS**	**71S4**	21	661
	8.7	159	6400	**WF**	**47R17**	**DRS**	**71S4**	21	661
	9.8	141	6400	**WA**	**47R17**	**DRS**	**71S4**	19	661
				WAF	**47R17**	**DRS**	**71S4**	20	661
160				**W**	**47R17**	**DR**	**63L4**	19	661
	11	124	6650	**WF**	**47R17**	**DR**	**63L4**	20	661
				WA	**47R17**	**DR**	**63L4**	18	661
				WAF	**47R17**	**DR**	**63L4**	18	661
180				**W**	**47R17**	**DRS**	**71S4**	21	661
	11	120	6400	**WF**	**47R17**	**DRS**	**71S4**	21	661
				WA	**47R17**	**DRS**	**71S4**	19	661
				WAF	**47R17**	**DRS**	**71S4**	20	661
160				**W**	**47R17**	**DRS**	**71S4**	21	661
	13	105	6650	**WF**	**47R17**	**DRS**	**71S4**	21	661
	15	95	6650	**WA**	**47R17**	**DRS**	**71S4**	19	661
	16	85	6650	**WAF**	**47R17**	**DRS**	**71S4**	20	661
				W	**47R17**	**DRS**	**71M4**	22	661
	18	77	6650	**WF**	**47R17**	**DRS**	**71M4**	23	661
	19	72	6650	**WA**	**47R17**	**DRS**	**71M4**	21	661
				WAF	**47R17**	**DRS**	**71M4**	22	661

13.5 W..DRS [mm]

W10..

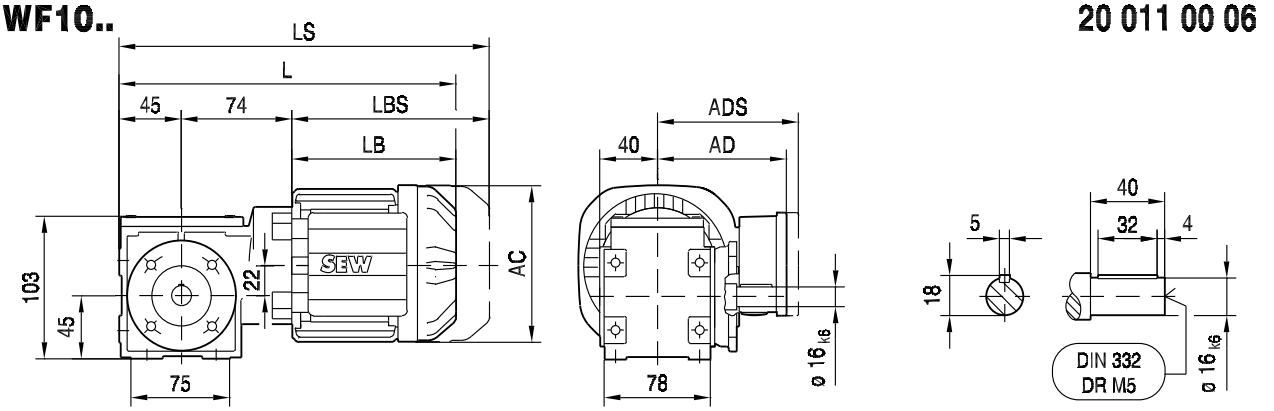
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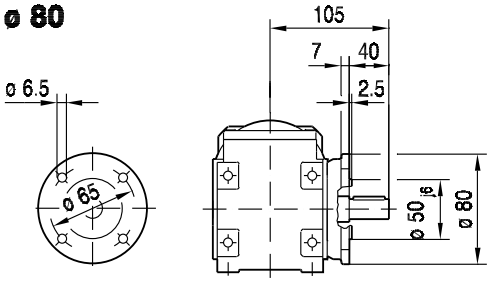
(→ 131)	DT56..							
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AD	87							
ADS	87							
L	255							
LS	291							
LB	136							
LBS	172							

WF10..

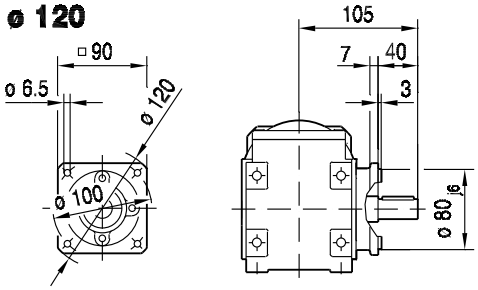
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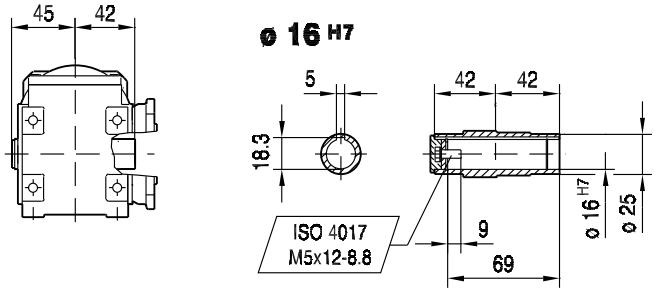
ø 80



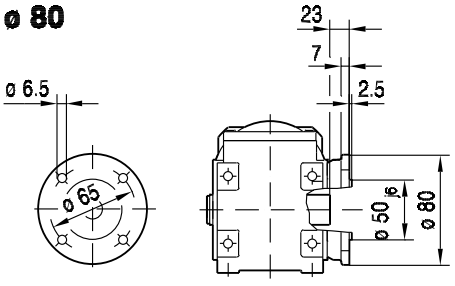
ø 120



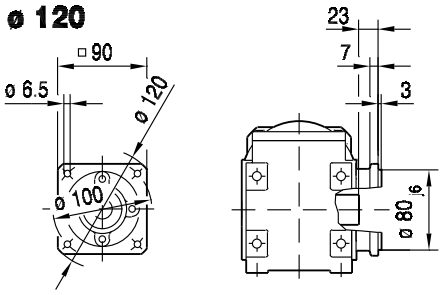
WAF10..



ø 80

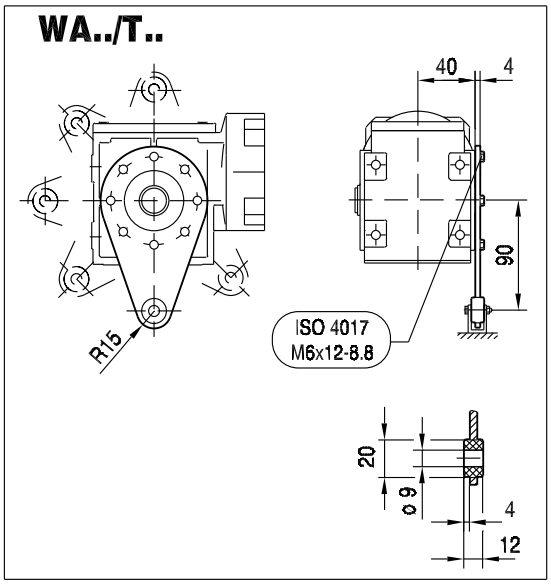


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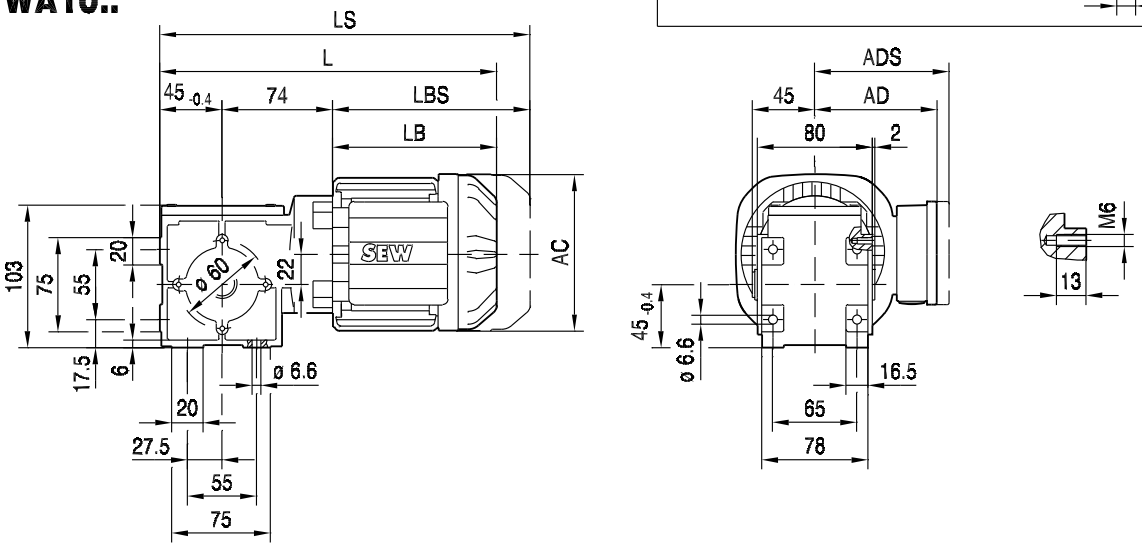


(→ 131)	DT56..							
AC	109							
AD	87							
ADS	87							
L	255							
LS	291							
LB	136							
LBS	172							

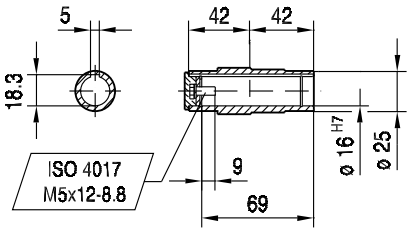
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WA10..



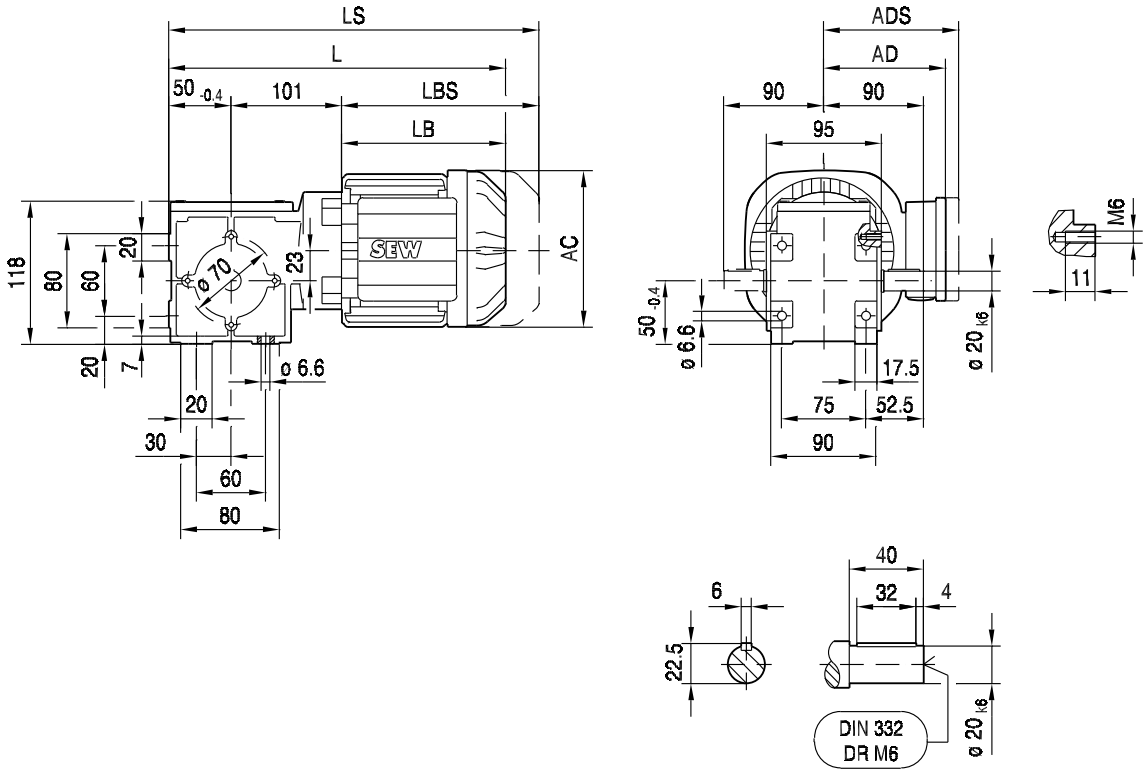
ø 16 H7



(→ 131)	DT56..							
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ADS	87							
L	255							
LS	291							
LB	136							
LBS	172							

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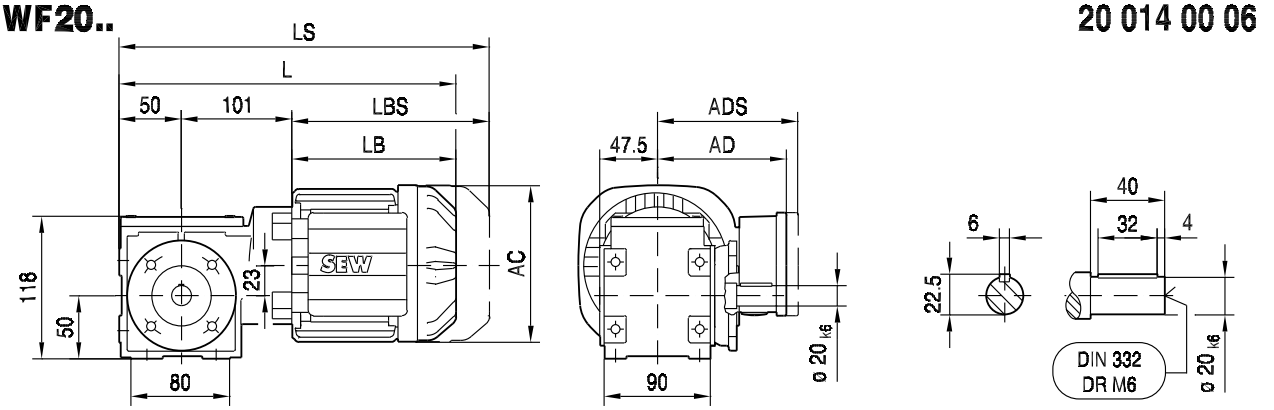
W20..



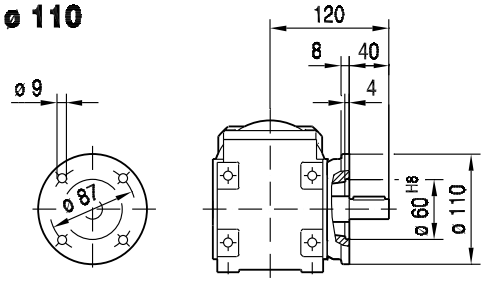
(→ 131)	DR63..	DR71S						
AC	132	139						
AD	105	119						
ADS	105	129						
L	300	311						
LS	355	379						
LB	149	160						
LBS	204	228						

WF20..

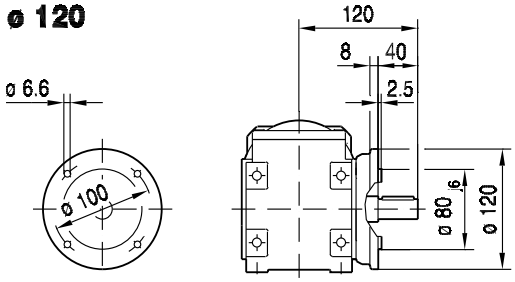
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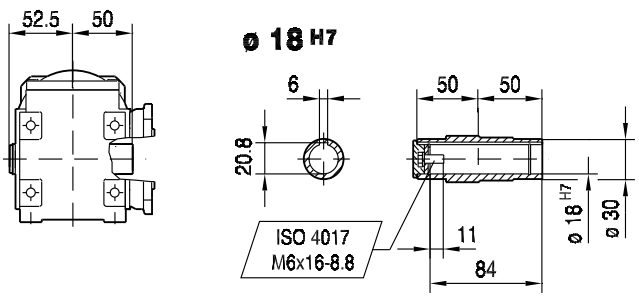
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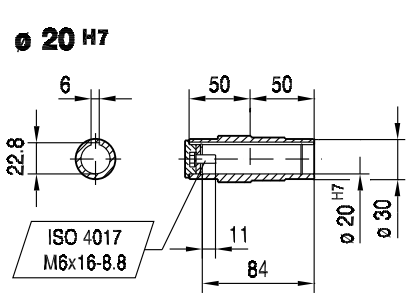


ø 120

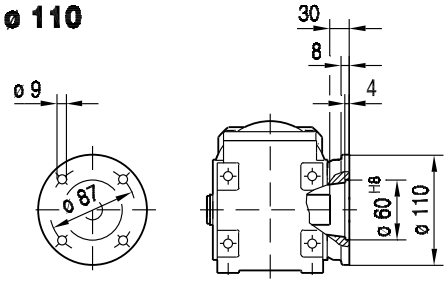


WAF20..

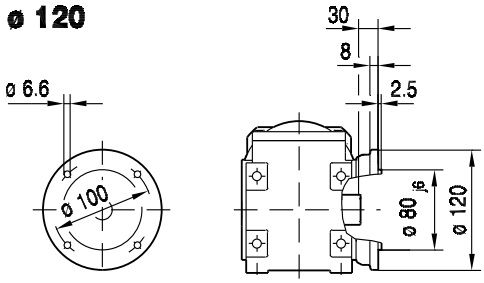




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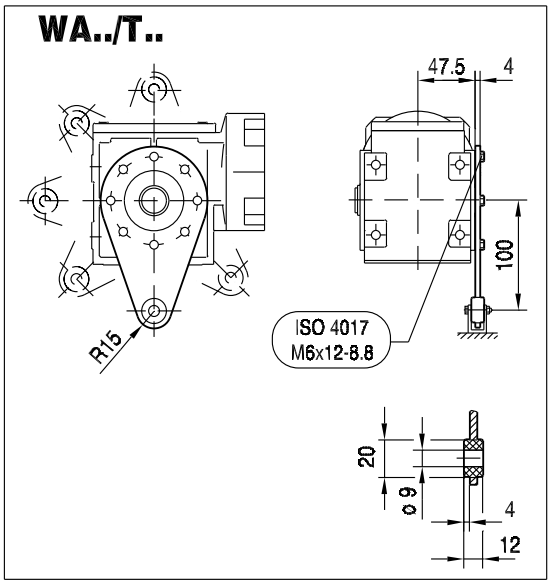


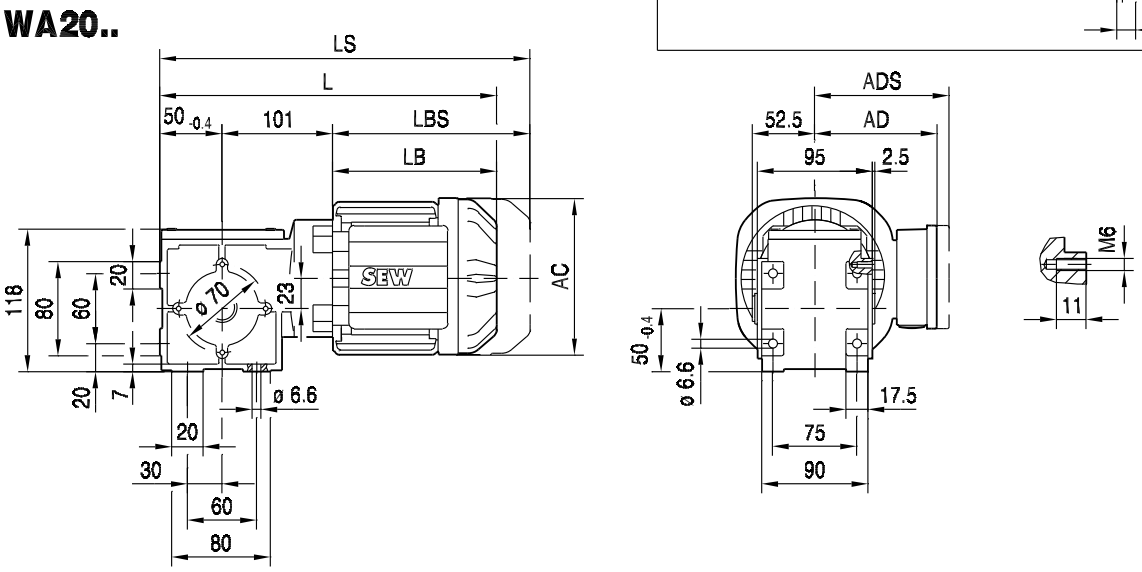
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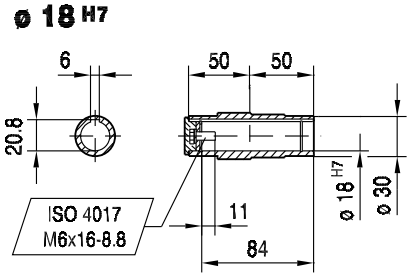


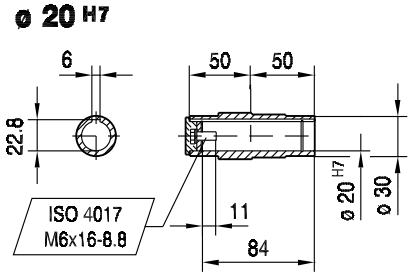
(→ 131)	DR63..	DR71S						
AC	132	139						
AD	105	119						
ADS	105	129						
L	300	311						
LS	355	379						
LB	149	160						
LBS	204	228						

20 015 00 06





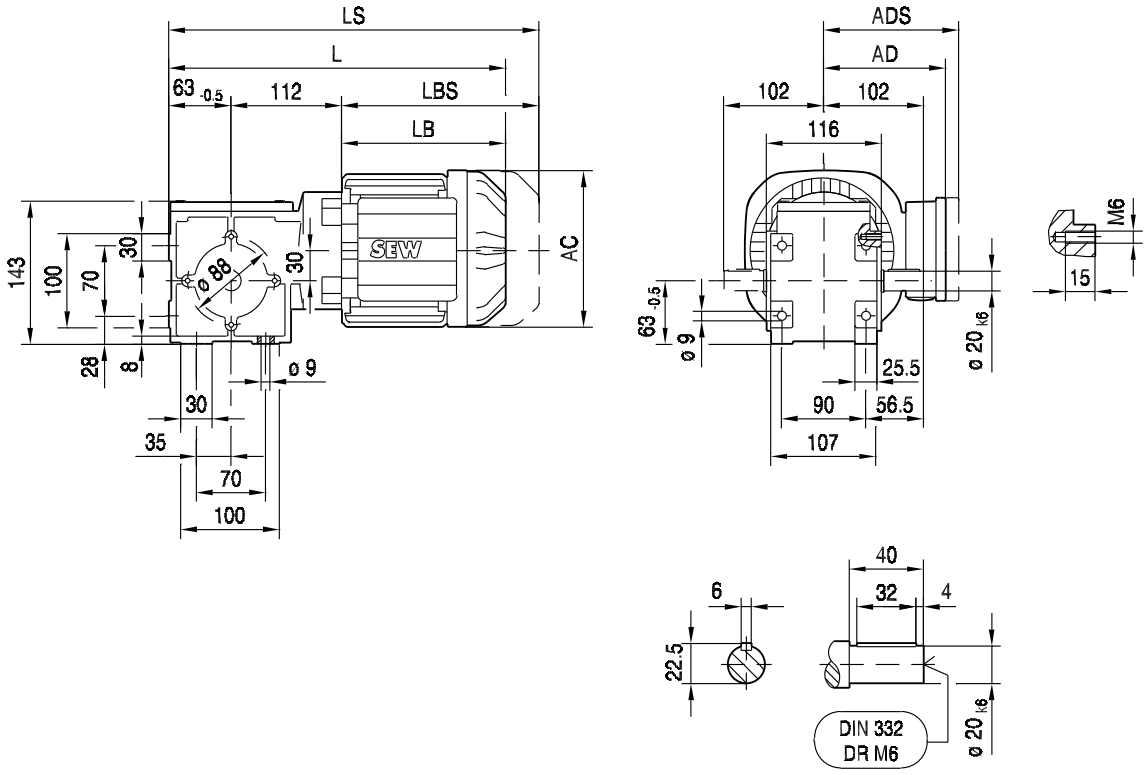




(→ 131)	DR63..	DR71S						
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AD	105	119						
ADS	105	129						
L	300	311						
LS	355	379						
LB	149	160						
LBS	204	228						

W30..

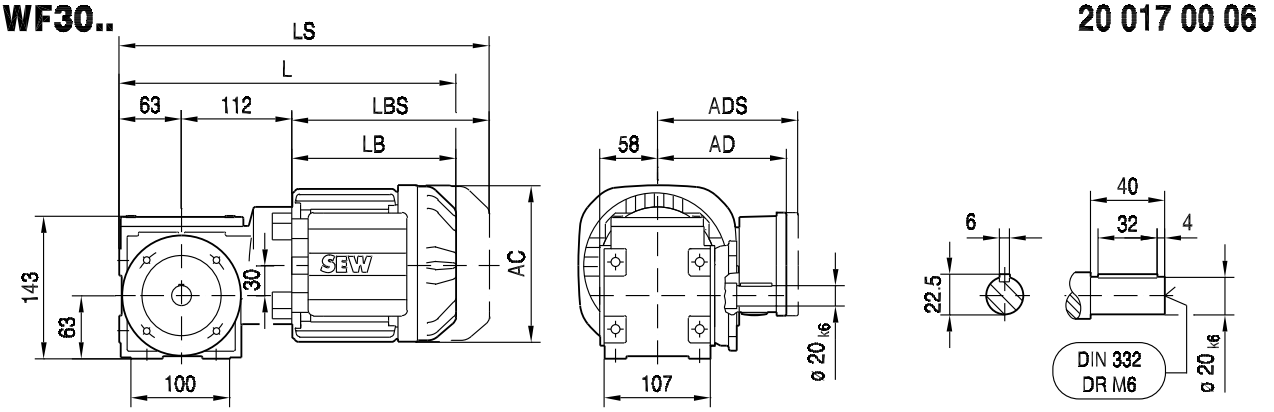
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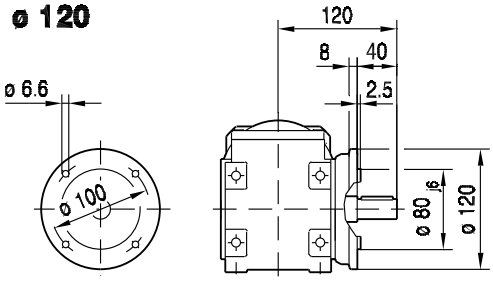
(→ 131)	DR63..	DR71S	DR71M	DR80S				
AC	132	139	139	156				
AD	105	119	119	128				
ADS	105	129	129	139				
L	324	335	360	364				
LS	379	403	428	445				
LB	149	160	185	189				
LBS	204	228	253	270				

WF30..

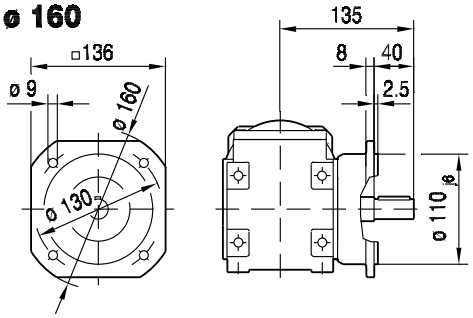
20 017 00 06



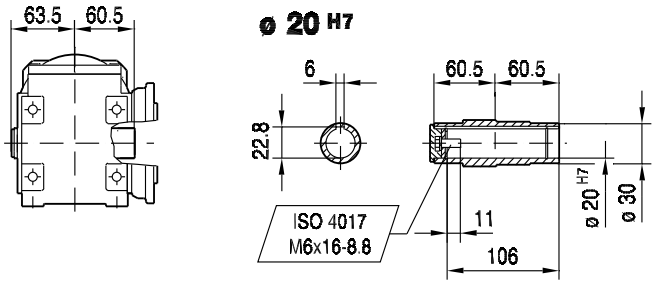
ø 120



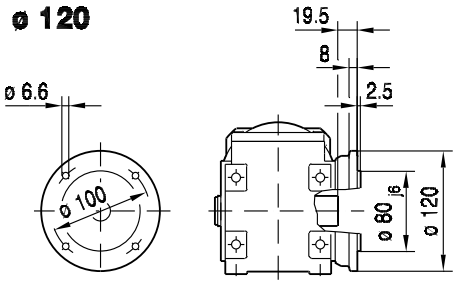
ø 160



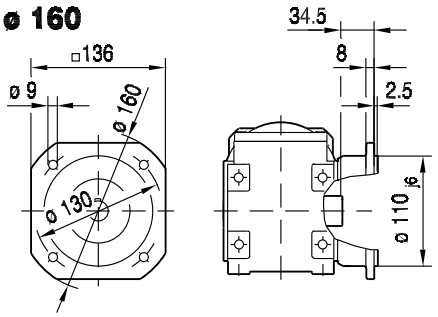
WAF30..



ø 120

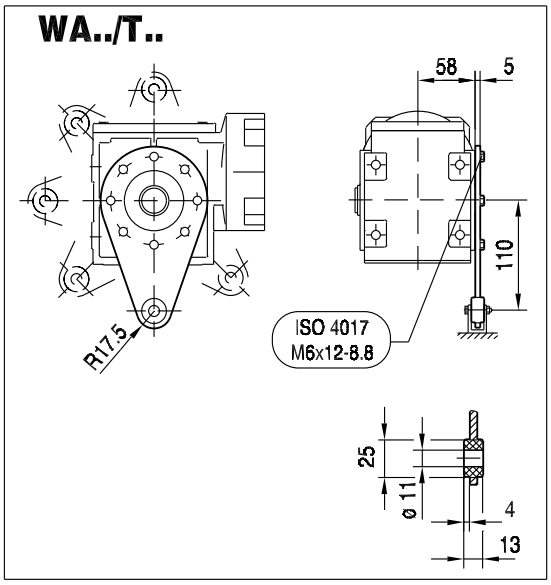


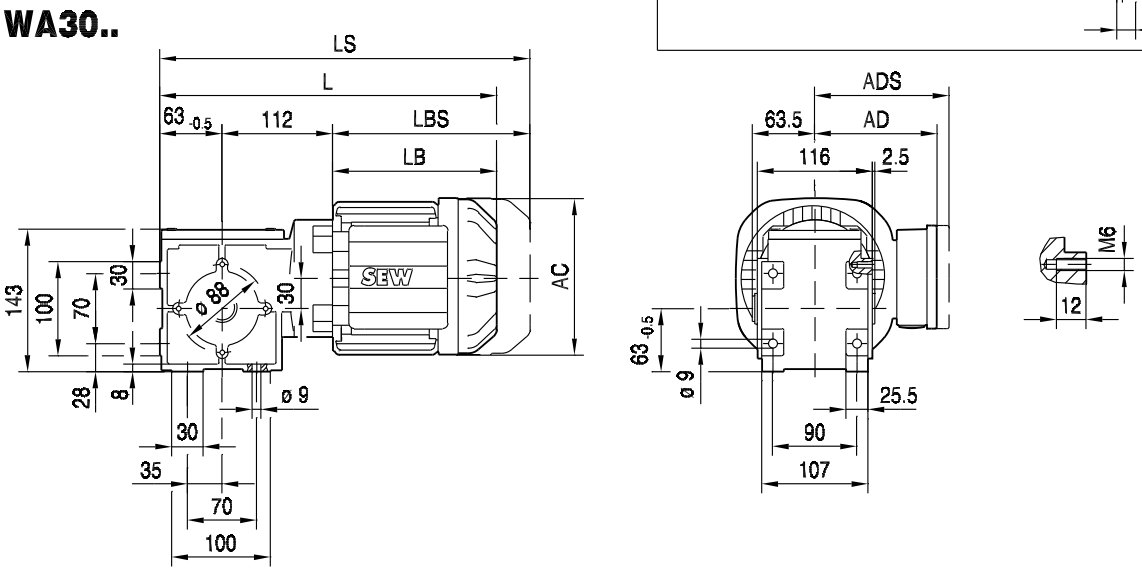
ø 160

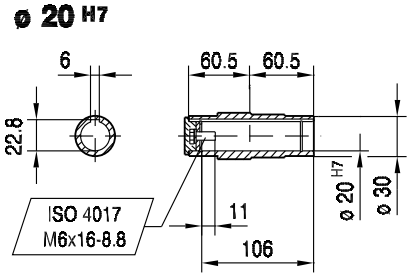


(→ 131)	DR63..	DR71S	DR71M	DR80S				
AC	132	139	139	156				
AD	105	119	119	128				
ADS	105	129	129	139				
L	324	335	360	364				
LS	379	403	428	445				
LB	149	160	185	189				
LBS	204	228	253	270				

20 018 00 06

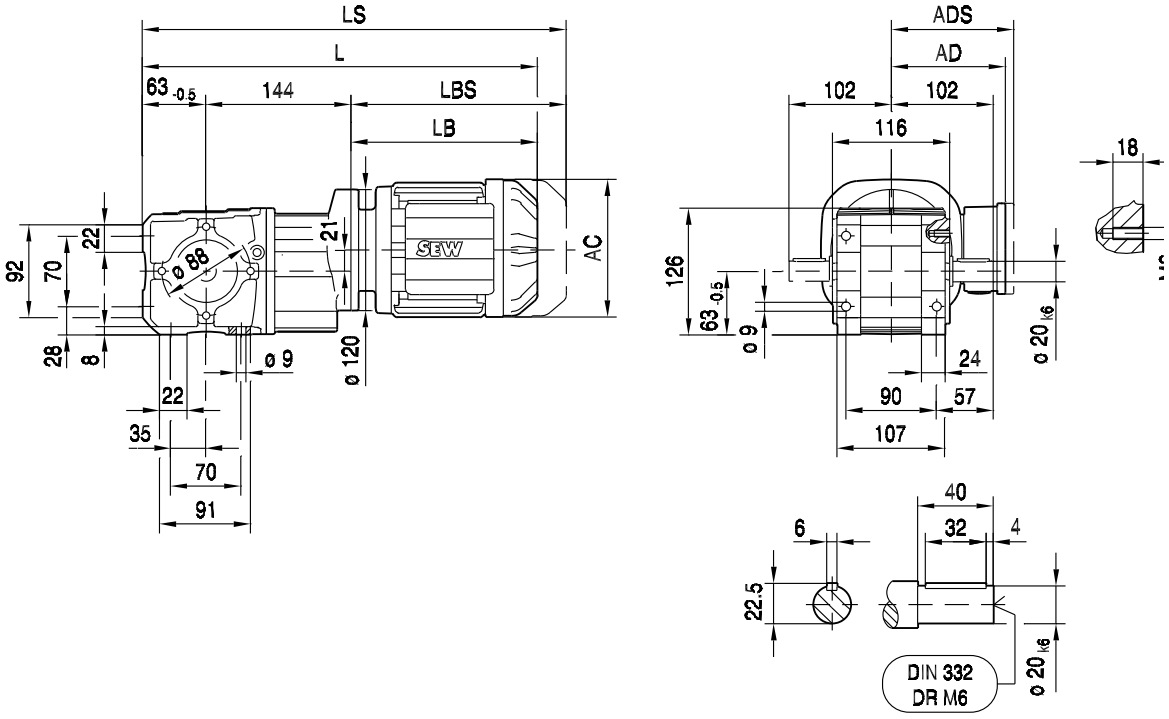




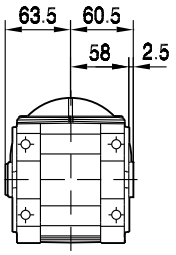


(→ 131)	DR63..	DR71S	DR71M	DR80S				
AC	132	139	139	156				
AD	105	119	119	128				
ADS	105	129	129	139				
L	324	335	360	364				
LS	379	403	428	445				
LB	149	160	185	189				
LBS	204	228	253	270				

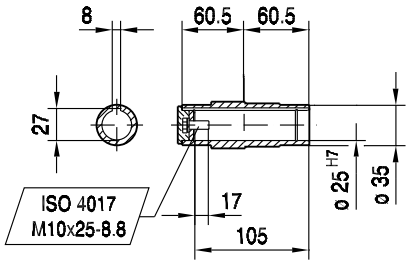
W37..



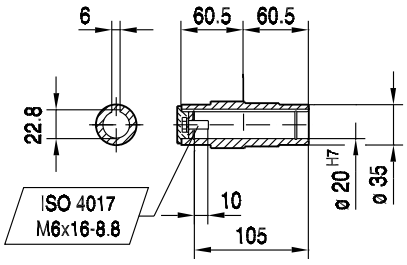
WA37B..



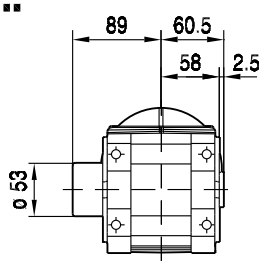
ø 25 H7
DIN 6885-3

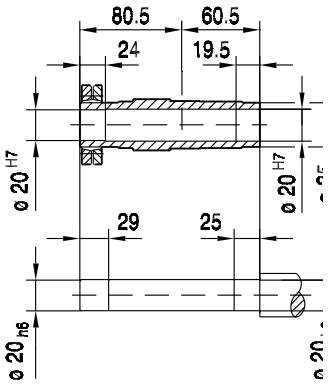


ø 20 H7



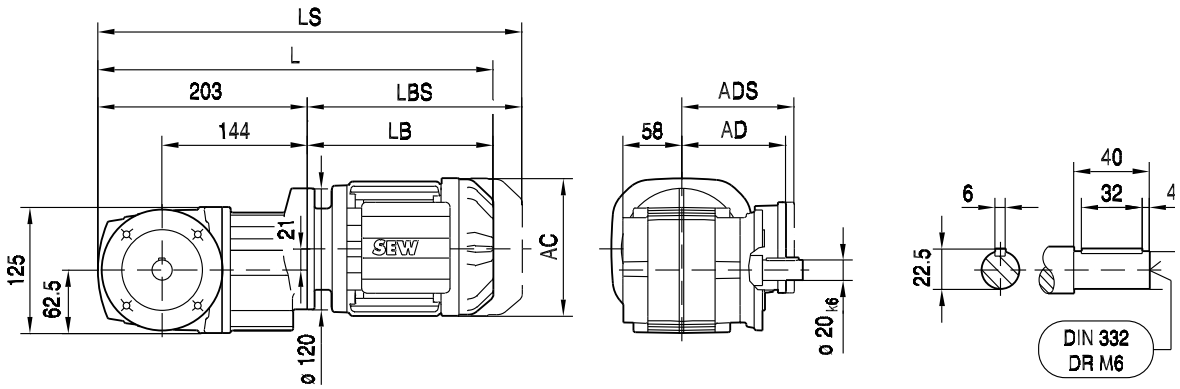
WH37B..

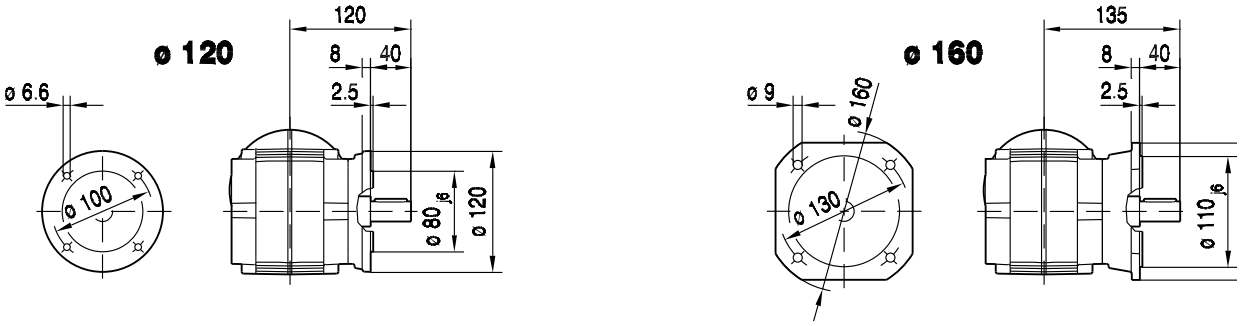




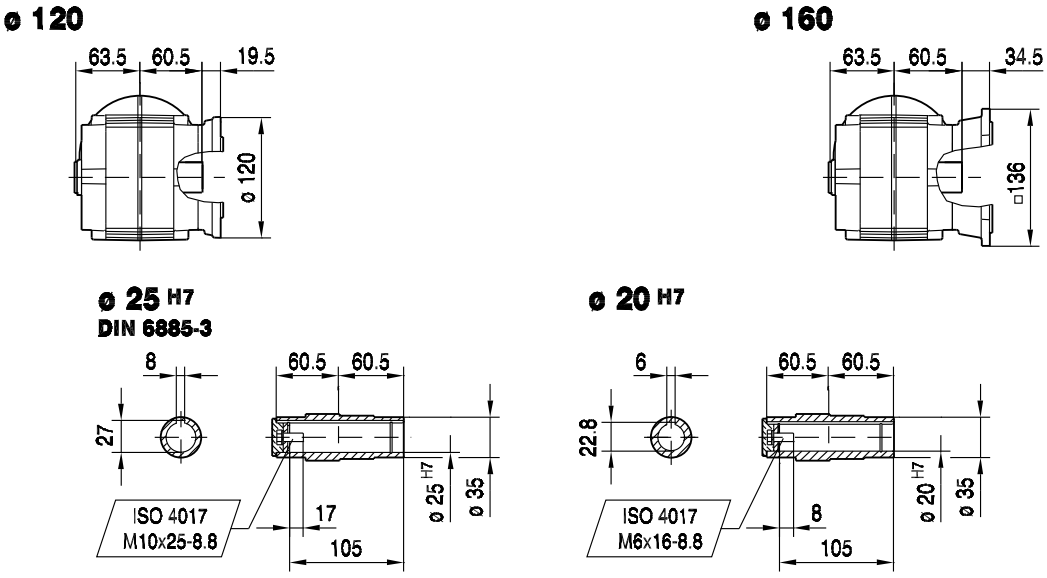
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	
AC	132	139	139	156	156	179	179	
AD	105	119	119	128	128	140	140	
ADS	105	129	129	139	139	150	150	
L	398	410	435	444	475	479	499	
LS	453	478	503	525	556	572	592	
LB	191	203	228	237	268	272	292	
LBS	246	271	296	318	349	365	385	

WF37..



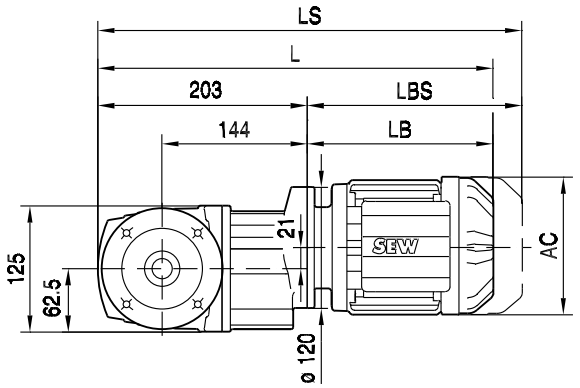


WAF37..

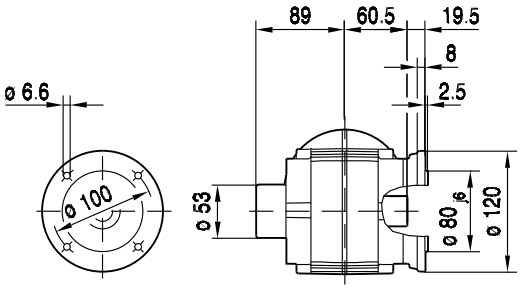


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	
AC	132	139	139	156	156	179	179	
AD	105	119	119	128	128	140	140	
ADS	105	129	129	139	139	150	150	
L	394	406	431	440	471	475	495	
LS	449	474	499	521	552	568	588	
LB	191	203	228	237	268	272	292	
LBS	246	271	296	318	349	365	385	

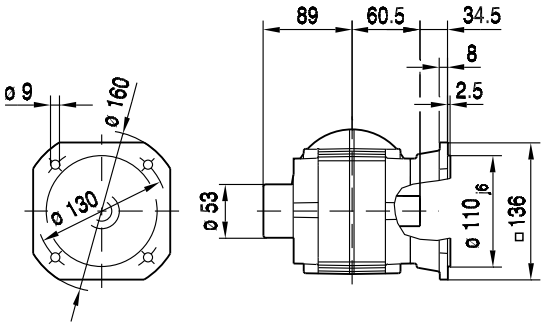
WHF37..

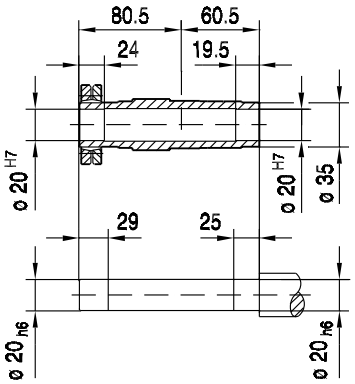


ø 120



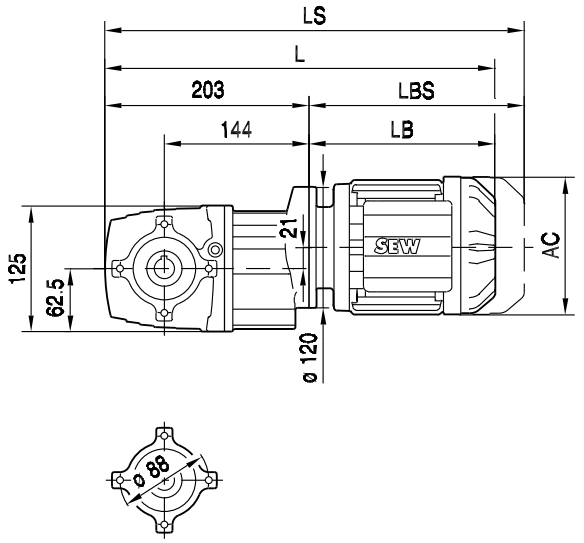
ø 160



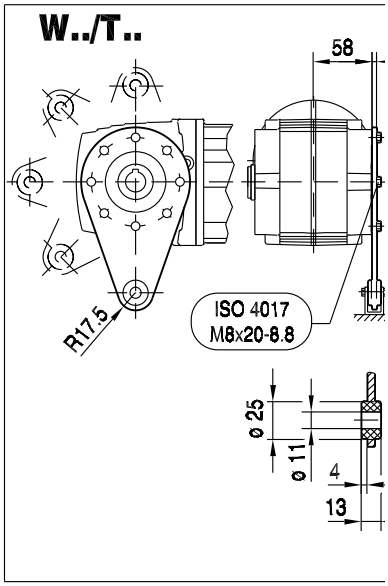


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	
AC	132	139	139	156	156	179	179	
AD	105	119	119	128	128	140	140	
ADS	105	129	129	139	139	150	150	
L	394	406	431	440	471	475	495	
LS	449	474	499	521	552	568	588	
LB	191	203	228	237	268	272	292	
LBS	246	271	296	318	349	365	385	

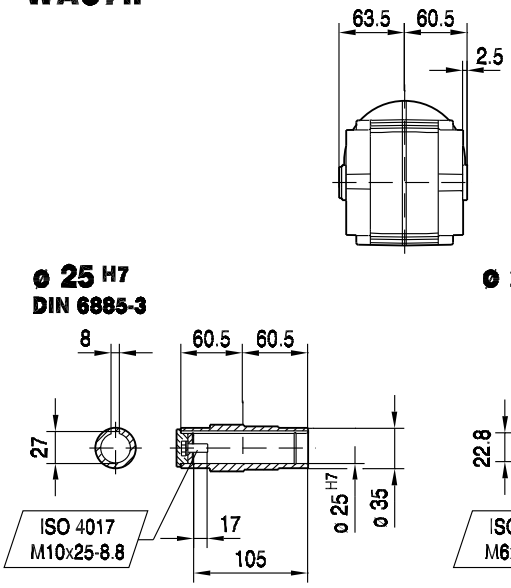
WA37..



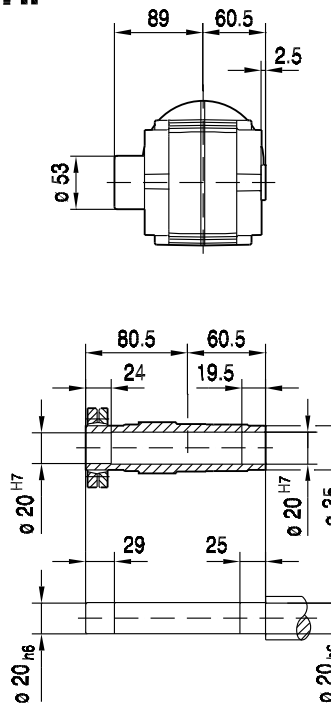
W../T..



WA37..

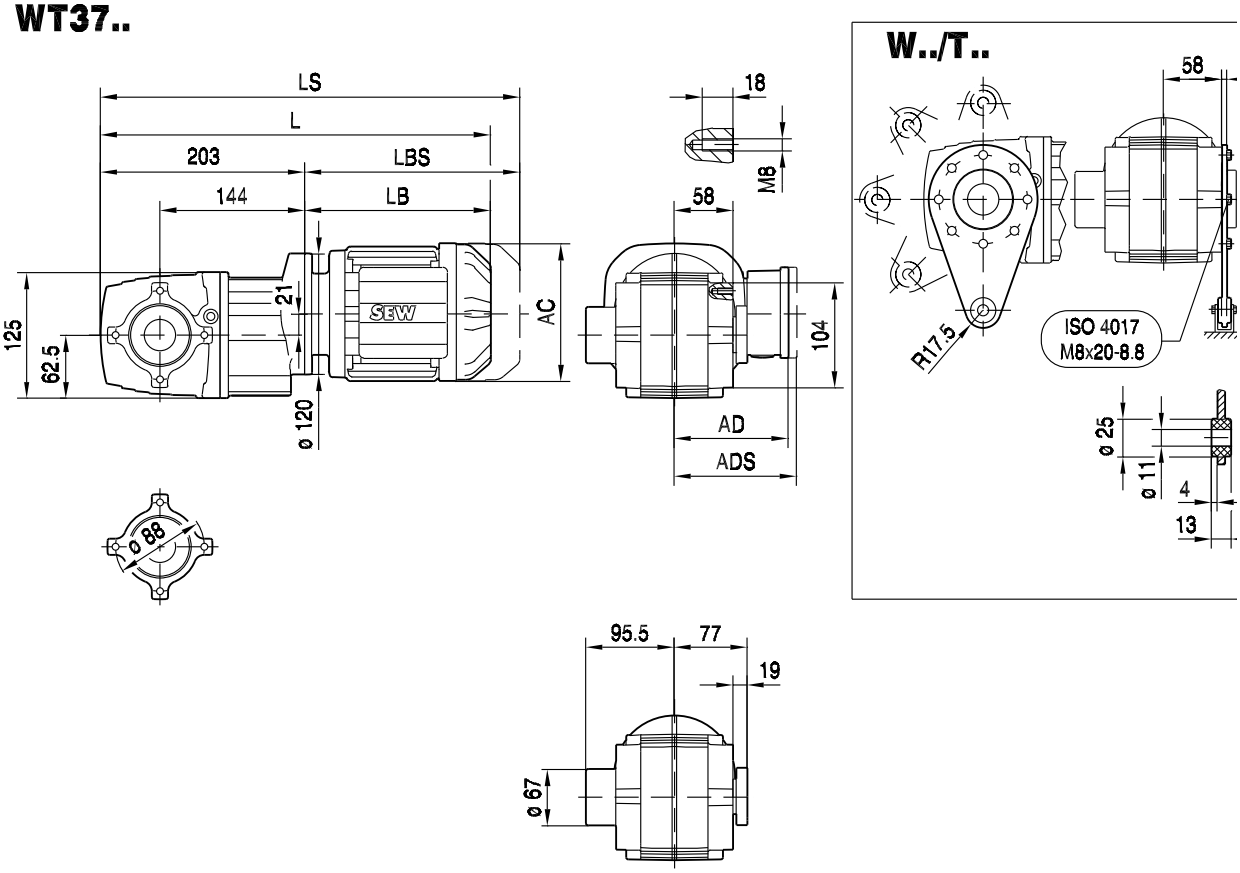


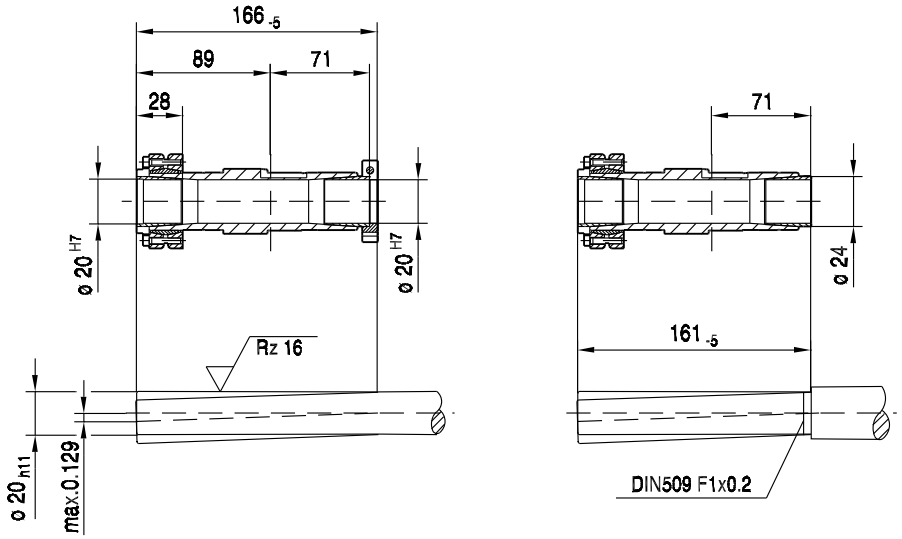
WH37..



(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	
AC	132	139	139	156	156	179	179	
AD	105	119	119	128	128	140	140	
ADS	105	129	129	139	139	150	150	
L	394	406	431	440	471	475	495	
LS	449	474	499	521	552	568	588	
LB	191	203	228	237	268	272	292	
LBS	246	271	296	318	349	365	385	

WT37..

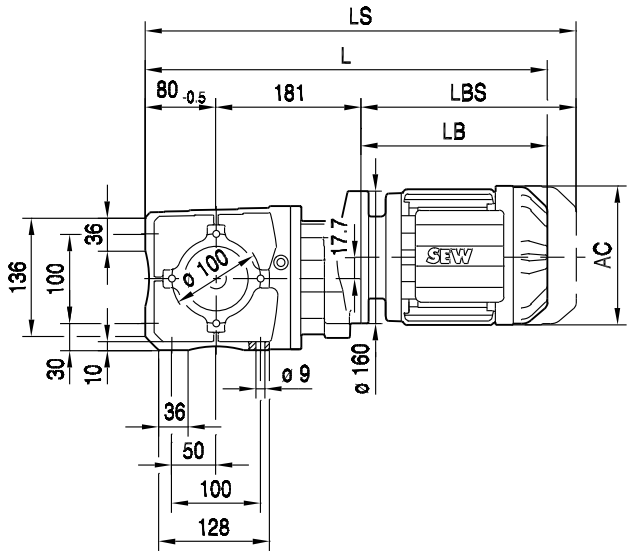


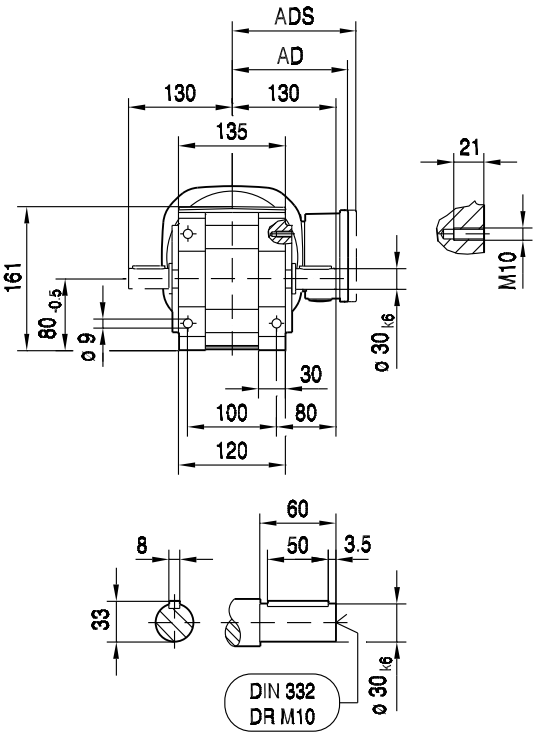


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	
AC	132	139	139	156	156	179	179	
AD	105	119	119	128	128	140	140	
ADS	105	129	129	139	139	150	150	
L	394	406	431	440	471	475	495	
LS	449	474	499	521	552	568	588	
LB	191	203	228	237	268	272	292	
LBS	246	271	296	318	349	365	385	

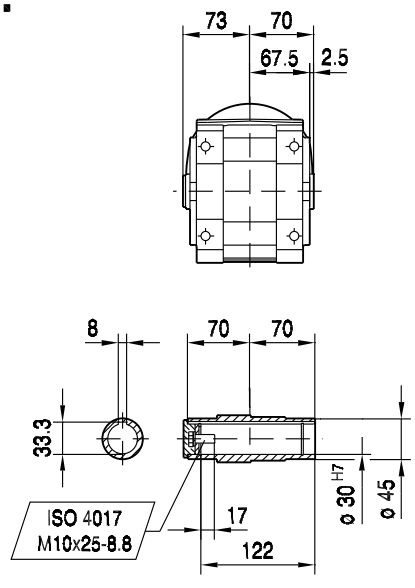
20 045 01 08

W47..

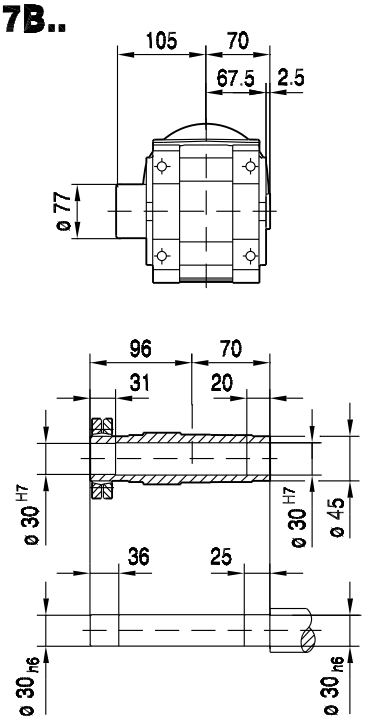




WA47B..



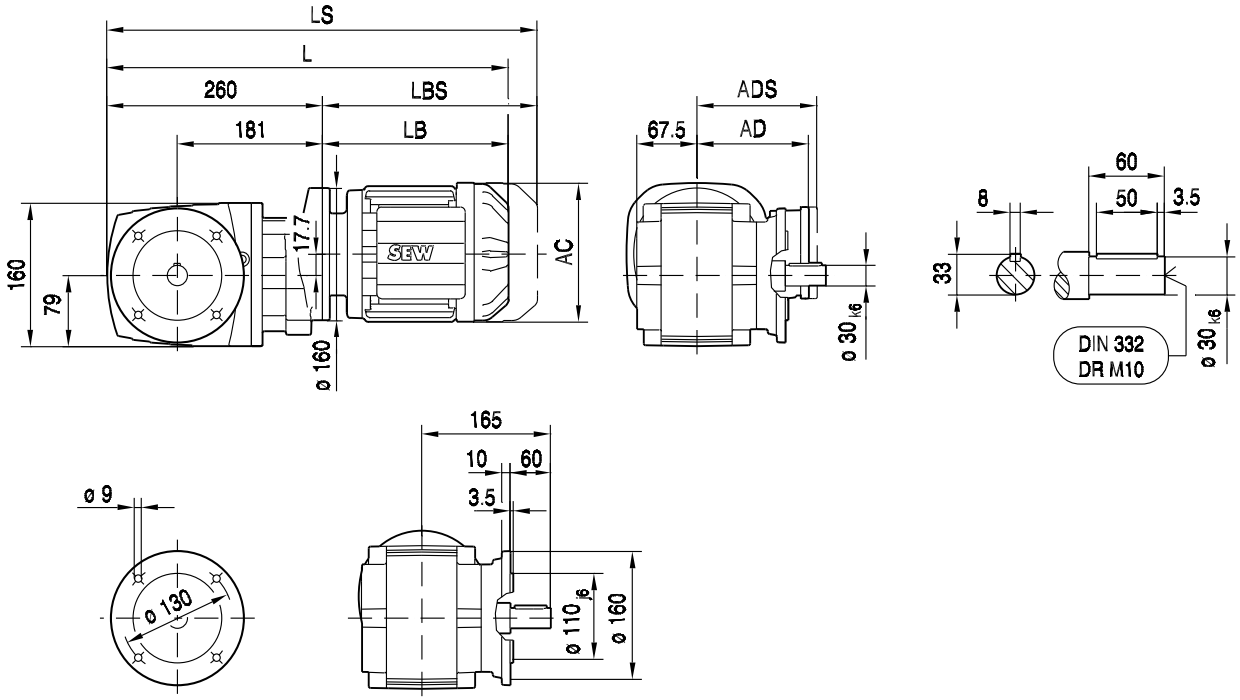
WH47B..



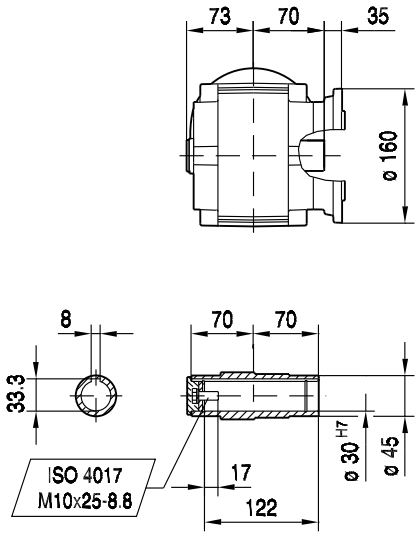
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR112M	DR132S
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	445	456	481	490	521	523	543	573	603	615	650
LS	500	524	549	571	602	616	636	666	696	727	762
LB	185	196	221	230	261	263	283	313	343	355	390
LBS	240	264	289	311	342	356	376	406	436	467	502

20 046 01 08

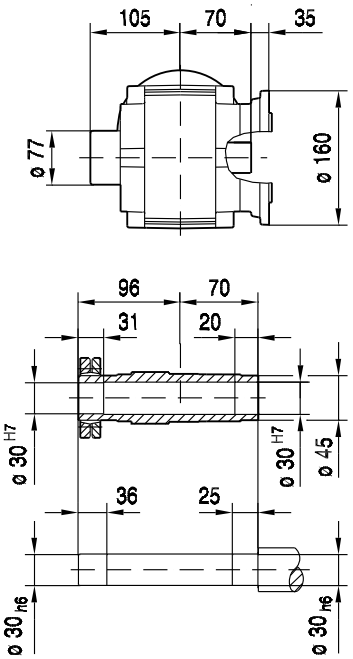
WF47..



WAF47..



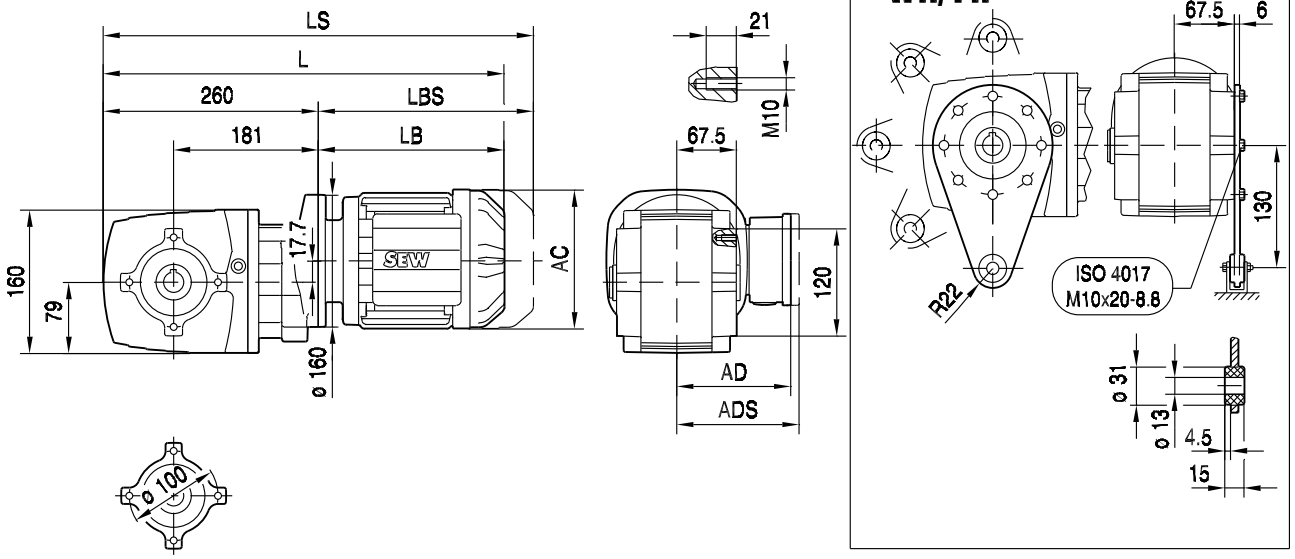
WHF47..



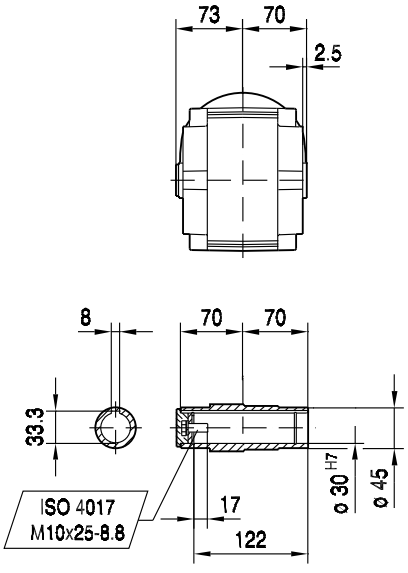
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR112M	DR132S
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	444	455	480	489	520	522	542	572	602	614	649
LS	499	523	548	570	601	615	635	665	695	726	761
LB	185	196	221	230	261	263	283	313	343	355	390
LBS	240	264	289	311	342	356	376	406	436	467	502

20 048 01 08

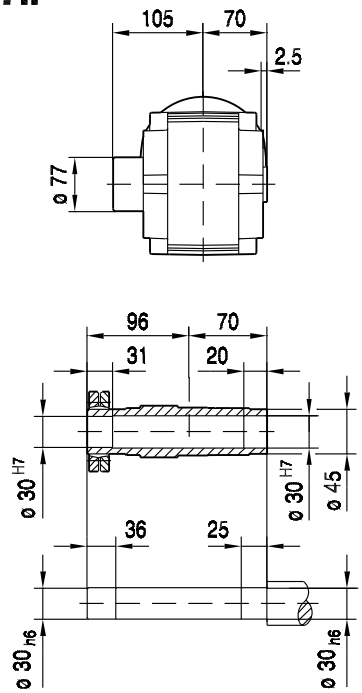
WA47..



WA47..



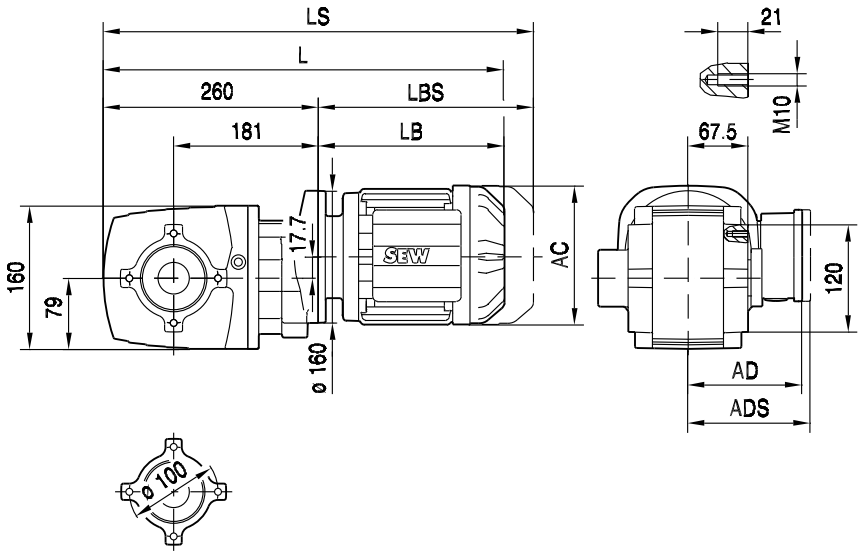
WH47..

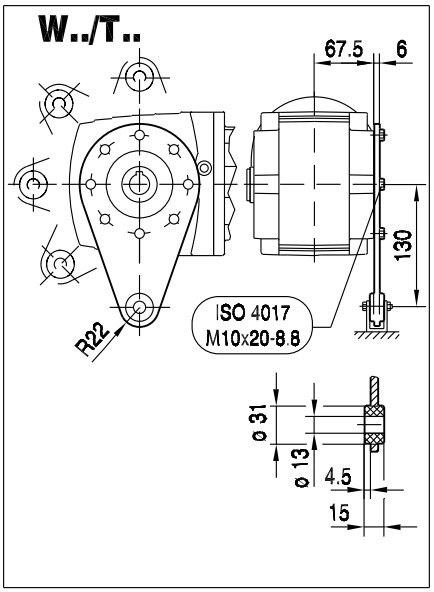


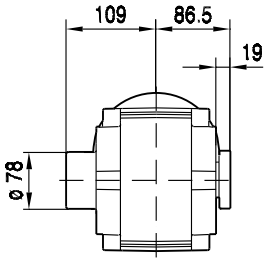
(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR112M	DR132S
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	444	455	480	489	520	522	542	572	602	614	649
LS	499	523	548	570	601	615	635	665	695	726	761
LB	185	196	221	230	261	263	283	313	343	355	390
LBS	240	264	289	311	342	356	376	406	436	467	502

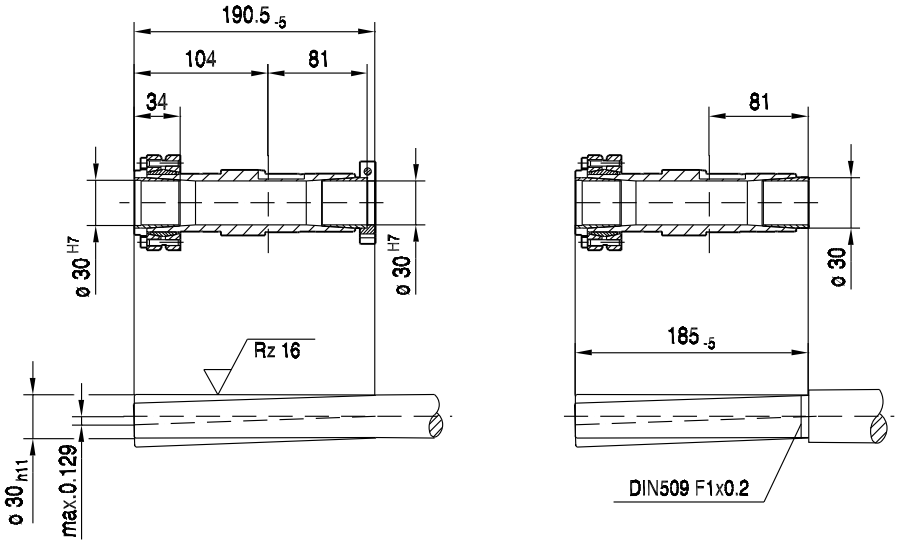
20 049 01 08

WT47..



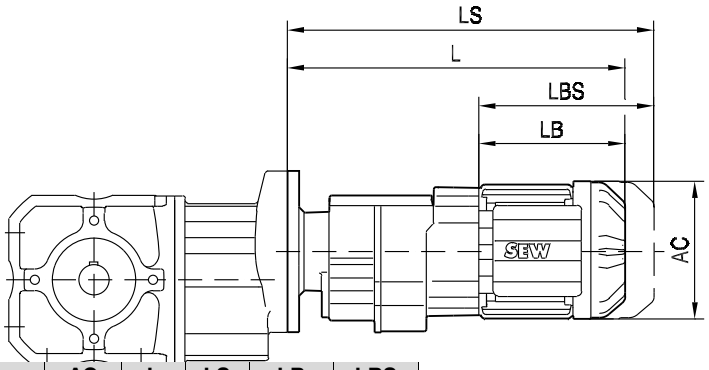




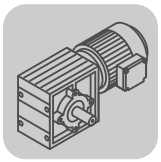


(→ 131)	DR63..	DR71S	DR71M	DR80S	DR80M	DR90M	DR90L	DR100M	DR100L/LC	DR112M	DR132S
AC	132	139	139	156	156	179	179	197	197	221	221
AD	105	119	119	128	128	140	140	157	157	170	170
ADS	105	129	129	139	139	150	150	158	158	172	172
L	444	455	480	489	520	522	542	572	602	614	649
LS	499	523	548	570	601	615	635	665	695	726	761
LB	185	196	221	230	261	263	283	313	343	355	390
LBS	240	264	289	311	342	356	376	406	436	467	502

20 018 00 09



(→ 131)		AC	L	LS	LB	LBS
W..37R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
W..47R17	DR63..	132	324	379	149	204
	DR71S..	139	335	403	160	228
	DR71M..	139	360	428	185	253



14 AC Brakemotors – Technical Data

14.1 Key to the data tables

The following table lists the short symbols used in the "Technical Data DRS AC Brakemotors" tables.

P_N	Rated power
M_N	Rated torque
n_N	Rated speed
I_N	Rated current
$\cos\varphi$	Power factor
$\eta_{75\%}$	Efficiency at 75% of the rated power
$\eta_{100\%}$	Efficiency at 100% of the rated power
I_A/I_N	Starting current ratio
M_A/M_N	Starting torque ratio
M_H/M_N	Ramp-up torque ratio
m	Mass of the motor
J_{Mot}	Mass moment of inertia of the motor
BE..	Brake used
Z_0 BG	Starting frequency for operation with BG brake controller
Z_0 BGE	Starting frequency for operation with BGE brake controller
M_B	Braking torque
m_B	Mass of the brakemotor
J_{MOT_BE}	Mass moment of inertia of the brakemotor

14.2 DRS 2-pole: 3000 1/min – S1 IE1

Motor type DRS	P_N [kW]	M_N [Nm]	n_N [1/min]	I_N 400 V [A]	I_N 380-420 V [A]	cosφ	IE class	η 75% η 100% [%][1]	I_A/I_N	M_A/M_N M_H/M_N	m [kg][2]	J_{Mot} [10^{-4} kgm^2]
DRS71M2	0.55	1.87	2810	1.37	1.42	0.79	-	73.5 72.9	4.9	2.9 2.1	9.1	7.1
DRS80S2	0.75	2.55	2800	1.73	1.78	0.84	IE1	74.6 74.4	4.6	2.5 2.3	11.5	14.9
DRS80M2	1.1	3.7	2840	2.35	2.4	0.88	IE1	77.7 76.5	6	2.7 2.5	14.3	21.5
DRS90M2	1.5	5.1	2830	3.1	3.2	0.89	IE1	80 78.3	5.9	2.7 2.6	18.4	35.5
DRS90L2	2.2	7.4	2820	4.45	4.6	0.89	IE1	82.8 80.5	5.8	2.9 2.5	21.5	43.5
DRS100M2	3	10.1	2840	5.8	6	0.91	IE1	84.6 82.5	6.4	3.1 2.8	26	56
DRS100LC2	4	13.2	2900	7.8	8	0.88	IE1	85.6 84.2	7.7	2.7 2.1	31	90
DRS112M2	4	13.2	2900	7.6	7.9	0.89	IE1	85.9 84.8	6.3	2.3 2.1	41.5	113
DRS132S2	5.5	18.2	2890	10.2	10.7	0.91	IE1	87 85.5	6.5	2.3 2.1	44	146
DRS132M2	7.5	24.5	2910	13.7	14.4	0.91	IE1	87.8 86.5	7.3	2.5 2.3	60	193
DRS132MC2	9.2	30.5	2900	16.9	17.6	0.89	IE1	88.8 87.2	6.9	2.5 2.5	60	193

1) Efficiency according to IEC 60034-2-1 Ed.1 (2007) / PLL from Residual Losses

2) Applies to foot-mounted motor (DRS.../FI..)

Motor type DRS	P_N [kW]	M_N [Nm]	n_N [1/min]	BE..	Z_0 BG[1] BGE[2] [1/h]	M_B [Nm][3]	m_B [kg][4]	J_{Mot_BE} [10^{-4} kgm^2]
DRS71M2	0.55	1.87	2810	BE05	2000 4500	3.5	11.5	8.4
DRS80S2	0.75	2.55	2800	BE05	1400 3300	5	14.2	16.4
DRS80M2	1.1	3.7	2840	BE1	1300 3000	7	17.3	23
DRS90M2	1.5	5.1	2830	BE1	1100 2700	10	22.5	37
DRS90L2	2.2	7.4	2820	BE2	900 2200	14	26	48.5
DRS100M2	3	10.1	2840	BE2	700 1800	20	30.5	61
DRS100LC2	4	13.2	2900	BE5	- 700	28	37	96
DRS112M2	4	13.2	2900	BE5	- 600	28	50	118
DRS132S2	5.5	18.2	2890	BE5	- 500	40	53	151
DRS132M2	7.5	24.5	2910	BE5	- 500	55	75	205
DRS132MC2	9.2	30.5	2900	BE11	- 380	80	75	205

1) Operation with BG brake control system

2) Operation with BGE brake control system

3) Standard braking torque for IEC brakemotor

4) Applies to foot-mounted motor (DRS...BE../FI..)



14.3 DRS 4-pole: 1500 1/min – S1 IE1

Motor type DRS	P_N [kW]	M_N [Nm]	n_N [1/min]	I_N 400 V [A]	I_N 380-420 V [A]	cosφ	IE class	η 75% η 100% [%]1)	I_A/I_N	M_A/M_N M_H/M_N	m [kg]2)	J_{Mot} [10^{-4} kgm^2]
DRS71S4	0.37	2.55	1380	1.14	1.24	0.7	-	65.3 66.6	3.5	1.8 1.8	7.8	4.9
DRS71M4	0.55	3.8	1380	1.55	1.62	0.72	-	71.9 70.6	3.6	2.1 2.1	9.1	7.1
DRS80S4	0.75	5.1	1400	1.8	1.82	0.81	IE1	76.6 75.3	4.3	1.9 1.9	11.5	14.9
DRS80M4	1.1	7.4	1410	2.40	2.50	0.84	IE1	78.6 77	5.1	2.2 1.7	14.3	21.5
DRS90M4	1.5	10.3	1395	3.30	3.40	0.82	IE1	82 79.6	5.0	2.3 2.0	18.4	35.5
DRS90L4	2.2	15	1400	4.85	4.95	0.81	IE1	83.1 81.1	5.1	2.5 2.2	21.5	43.5
DRS100M4	3	20.5	1400	6.4	6.5	0.82	IE1	84.7 82.4	5.3	2.8 2.4	26	56
DRS100LC4	4	26.5	1445	8.4	8.5	0.81	IE1	86.4 85.3	6.5	2.5 2.3	31	90
DRS112M4	4	26.5	1435	8.1	8.4	0.84	IE1	85.6 83.8	6	2 1.7	41.5	146
DRS132S4	5.5	36.5	1445	11.1	11.6	0.82	IE1	86.7 85.7	6.7	2.4 2.1	44	190
DRS132M4	7.5	49.5	1445	14.4	15.1	0.85	IE1	89.1 87.1	6.6	2.4 1.9	60	255
DRS132MC4	9.2	60	1465	18.6	19.3	0.81	IE1	88.5 87.6	7.2	2.1 1.6	63	340
DRS160S4	9.2	60	1460	18.9	19.2	0.79	IE1	89 88	6.4	2.5 2	80	370
DRS160M4	11	72	1460	22	22.5	0.81	IE1	89.1 88	6.8	2.7 2.3	92	450
DRS160MC4	15	97	1470	30	31	0.80	IE1	90.2 89.1	6.3	2.1 1.7	94	590
DRS180S4	15	98	1460	29	29.5	0.83	IE1	90.3 89.5	6.2	2.3 2	122	900
DRS180M4	18.5	121	1465	34.5	35.5	0.85	IE1	92.8 90	6.5	2.2 1.8	141	1110
DRS180L4	22	143	1465	41.5	42.5	0.84	IE1	91.2 90.5	6.9	2.4 2	152	1300
DRS180LC4	30	195	1470	57	59	0.84	IE1	92.0 90.9	5.6	1.8 1.5	161	1680
DRS200L4	30	194	1475	57	59	0.82	IE1	91.9 91.3	6.4	2.1 1.9	260	2360
DRS225S4	37	240	1475	70	72	0.82	IE1	92 91.6	7.1	2.4 1.9	295	2930
DRS225M4	45	290	1480	84	86	0.83	IE1	92.7 92.3	7.4	2.5 2.2	315	3430
DRS225MC4	55	355	1480	106	108	0.81	IE1	92.8 92.4	6.8	2.4 1.8	330	4330
DRS315K4	110	710	1482	200	210	0.84	IE1	94.2 94	6.1	2.2 1.7	850	18400
DRS315S4	132	850	1484	230	240	0.85	IE1	94.2 94.2	6.5	2.4 1.9	930	22500
DRS315M4	160	1030	1483	280	290	0.87	IE1	94.8 94.6	6.9	2.1 1.7	1090	27900
DRS315L4	200	1290	1481	350	375	0.88	IE1	94.9 94.6	6.4	2.1 1.7	1170	31900

1) Efficiency according to IEC 60034-2-1 Ed.1 (2007) / PLL from Residual Losses

2) Applies to foot-mounted motor (DRS.../FI..)



Motor type DRS	P_N [kW]	M_N [Nm]	n_N [1/min]	BE..	Z_0 BG[1] BGE[2] [1/h]	M_B [Nm][3]	m_B [kg][4]	J_{Mot_BE} [10^{-4} kgm^2]
DRS71S4	0.37	2.55	1380	BE05	6000 9500	5	10.2	6.2
DRS71M4	0.55	3.8	1380	BE1	4100 11000	10	11.7	8.4
DRS80S4	0.75	5.1	1400	BE1	3500 9000	10	14.5	16.4
DRS80M4	1.1	7.4	1410	BE2	3500 9000	14	18	26
DRS90M4	1.5	10.3	1395	BE2	2900 7500	20	23	40
DRS90L4	2.2	15	1400	BE5	- 5600	40	27.5	49.5
DRS100M4	3	20.5	1400	BE5	- 8500	40	32	62
DRS100LC4	4	26.5	1445	BE5	- 3800	55	37	96
DRS112M4	4	26.5	1435	BE5	- 3100	55	50	151
DRS132S4	5.5	36.5	1445	BE11	- 2800	80	59	200
DRS132M4	7.5	49.5	1445	BE11	- 2000	110	75	265
DRS132MC4	9.2	60	1465	BE11	- 1500	110	78	355
DRS160S4	9.2	60	1460	BE20	- 1100	150	106	420
DRS160M4	11	72	1460	BE20	- 1000	150	118	500
DRS160MC4	15	97	1470	BE20	- 900	200	120	640
DRS180S4	15	98	1460	BE20	- 900	200	154	960
DRS180M4	18.5	121	1465	BE30	- 800	300	181	1250
DRS180L4	22	143	1465	BE30	- 590	300	192	1440
DRS180LC4	30	195	1470	BE32	- 520	400	205	1910
DRS200L4	30	194	1475	BE32	- 550	400	315	2590
DRS225S4	37	240	1475	BE32	- 320	500	350	3160
DRS225M4	45	290	1480	BE32	- 270	600	370	3660
DRS225MC4	55	355	1480	BE32	- 200	600	375	4560
DRS315K4	110	710	1482	BE122	- 65	1600	1000	19500
DRS315S4	132	850	1484	BE122	- 50	2000	1080	23600
DRS315M4	160	1030	1483	BE122	- 35	2000	1230	29000
DRS315L4	200	1290	1481	BE122	- 25	2000	1310	33000

1) Operation with BG brake control system
2) Operation with BGE brake control system
3) Standard braking torque for IEC brakemotor
4) Applies to foot-mounted motor (DRS...BE../FI..)



14.4 DRS 6-pole: 1000 1/min – S1 IE1

Motor type DRS	P_N [kW]	M_N [Nm]	n_N [1/min]	I_N 400 V [A]	I_N 380-420 V [A]	cosφ	IE class	η 75% η 100% [%][1]	I_A/I_N	M_A/M_N M_H/M_N	m [kg][2]	J_{Mot} [10^{-4} kgm^2]
DRS71S6	0.25	2.65	895	0.83	0.86	0.7	-	61.4 62.2	2.7	1.7 1.7	7.8	4.9
DRS71M6	0.37	3.9	905	1.13	1.16	0.71	-	66.4 66.5	3.1	1.9 1.9	9.1	7.1
DRS80S6	0.55	5.7	915	1.64	1.66	0.71	-	68.2 67.9	3.4	1.8 1.8	11.5	14.9
DRS80M6	0.75	7.8	915	2.15	2.15	0.71	IE1	71.6 70.7	3.6	2 1.9	14.3	21.5
DRS90L6	1.1	11.3	930	3.1	3.15	0.68	IE1	76.3 75	4.2	2.3 2.3	21.5	43.5
DRS100M6	1.5	15.5	925	4.25	4.25	0.68	IE1	77.3 75.7	4.2	2.7 2.7	26	56
DRS112M6	2.2	22	955	5.4	5.5	0.74	IE1	80.5 79.3	5.5	2.1 1.8	41.5	146
DRS112M6	3	30.5	945	7	7.2	0.76	IE1	83 81	5.1	1.9 1.6	41.5	146
DRS132S6	4	40.5	640	9.8	10.2	0.76	IE1	84.2 81.7	4.3	2.1 1.9	44	190
DRS160S6	5.5	55	960	12.9	13.1	0.73	IE1	85.4 84.4	5.2	2 1.8	80	520
DRS160M6	7.5	75	955	17.3	17.6	0.73	IE1	87.1 85.9	5.1	2.2 1.9	92	630

1) Efficiency according to IEC 60034-2-1 Ed.1 (2007) / PLL from Residual Losses

2) Applies to foot-mounted motor (DRS.../FI..)

Motor type DRS	P_N [kW]	M_N [Nm]	n_N [1/min]	BE..	Z_0 BG[1] BGE[2] [1/h]	M_B [Nm][3]	m_B [kg][4]	J_{Mot_BE} [10^{-4} kgm^2]
DRS71S6	0.25	2.65	895	BE05	7000 16000	5	10.2	9.4
DRS71M6	0.37	3.9	905	BE1	6600 15000	10	11.7	13
DRS80S6	0.55	5.7	915	BE2	6000 14000	14	15.2	19.4
DRS80M6	0.75	7.8	915	BE2	4300 10000	20	18	26
DRS90L6	1.1	11.3	930	BE5	3500 8000	28	27.5	49.5
DRS100M6	1.5	15.5	925	BE5	- 7000	40	32	62
DRS112M6	2.2	22	955	BE11	- 4000	80	56	156
DRS112M6	3	30.5	945	BE11	- 3600	80	56	156
DRS132S6	4	40.5	640	BE11	- 3500	80	59	199
DRS160S6	5.5	55	960	BE11	- 2700	110	98	540
DRS160M6	7.5	75	955	BE20	- 2700	150	118	680

1) Operation with BG brake control system

2) Operation with BGE brake control system

3) Standard braking torque for IEC brakemotor

4) Applies to foot-mounted motor (DRS...BE../FI..)



14.5 DRS multi-speed 8/2-pole: 750/3000 1/min – S3 40/60% cdf

Motor type DRS	P_N [kW]	n_N [1/min]	I_N 400 V [A]	cosφ	I_A/I_N	M_A/M_N	M_H/M_N	m [kg][1)]	J_{Mot} [10^{-4} kgm^2]
DRS71S8/2	0.06 0.25	685 2870	048 0.91	0.62 0.69	1.7 3.4	1.7 2	1.7 1.6	7.8	4.9
DRS71M8/2	0.1 0.4	670 2850	0.73 1.17	0.62 0.79	1.8 2.9	1.6 2.1	1.6 1.6	9.1	7.1
DRS80S8/2	0.15 0.6	655 2680	0.88 1.6	0.59 0.89	1.9 3	1.7 2.3	1.7 2.1	11.5	14.9
DRS80M8/2	0.22 0.9	680 2780	1.15 2.4	0.6 0.8	2 4	1.7 2.6	1.7 2.4	14.3	21.4
DRS90M8/2	0.3 1.3	710 2880	1.41 3.3	0.55 0.8	2.5 4.6	1.4 1.9	1.4 1.7	18.4	35.4
DRS90L8/2	0.45 1.8	710 2890	2.15 4.3	0.55 0.81	2.5 5	2.5 2	1.5 1.8	21.5	43.7
DRS100M8/2	0.6 2.4	715 2900	2.9 5.3	0.55 0.83	2.5 6.1	1.5 2.5	1.6 1.9	26	56
DRS112M8/2	0.8 3	710 2730	3.6 7.1	0.53 0.83	2.7 4.3	1.5 2.9	1.5 2.1	41.5	146
DRS132M8/2	1.1 4.6	710 2785	4.2 9.4	0.56 0.91	3.1 5.8	1.5 3	1.5 2.1	60	253

1) Applies to foot-mounted motor (DRS.../FI..)

Motor type DRS	P_N [kW]	n_N [1/min]	BE..	Z_0 BG[1)] [1/h]	Z_0 BGE[2)] [1/h]	M_B [Nm][3)]	m_B [kg][4)]	J_{Mot_BE} [10^{-4} kgm^2]
DRS71S8/2	0.06 0.25	685 2870	BE05	15000 6000	20000 90000	1.8	10.2	6.2
DRS71M8/2	0.1 0.4	670 2850	BE05	14000 6000	18000 8000	3.5	11.5	8.4
DRS80S8/2	0.15 0.6	655 2680	BE05	8000 3800	14000 5000	5	14.2	16.4
DRS80M8/2	0.22 0.9	680 2780	BE1	8000 3000	14000 4000	7	17.3	22.9
DRS90M8/2	0.3 1.3	710 2880	BE1	-	11000 3500	10	21.5	36.9
DRS90L8/2	0.45 1.8	710 2890	BE2	-	10000 3300	14	26	48.4
DRS100M8/2	0.6 2.4	715 2900	BE2	-	9000 2600	20	30.5	60.7
DRS112M8/2	0.8 3	710 2730	BE5	-	7000 1500	28	50	150.8
DRS132M8/2	1.1 4.6	710 2785	BE5	-	5000 1000	40	69	257.85

1) Operation with BG brake control system
2) Operation with BGE brake control system
3) Standard braking torque
4) Applies to foot-mounted motor with brake (DRS...BE../FI..)



14.6 DRS multi-speed 8/4-pole: 750/1500 1/min – S1

Motor type DRS	P_N [kW]	n_N [1/min]	I_N 400 V [A]	cosφ	I_A/I_N	M_A/M_N	M_H/M_N	m [kg][1)]	J_{Mot} [10^{-4} kgm^2]
DRS112M8/4	1.2 2.2	675 1390	4.2 4.6	0.58 0.87	2.9 4.8	1.9 2.2	1.9 1.9	41.5	146
DRS132S8/4	1.6 3.3	680 1385	5.8 6.8	0.55 0.87	2.9 4.7	2 2.1	2 1.9	44	190
DRS132M8/4	2.1 4.2	680 1390	7 8.6	0.59 0.87	3.3 5	1.9 2.1	1.9 1.9	60	253
DRS160S8/4	2.7 5.5	725 1470	9.2 11	0.54 0.84	4 6.3	2.1 1.9	1.9 1.4	80	370
DRS160M8/4	3.8 7.5	730 1470	12.9 15	0.54 0.84	3.9 6.2	2 1.9	1.9 1.4	92	448
DRS180S8/4	5.5 10	730 1465	17.4 18.7	0.55 0.87	4 6	2.2 1.9	2 1.4	122	895
DRS180L8/4	7.5 15	735 1470	22.5 27.5	0.55 0.87	4.4 6	2.4 1.9	2.1 1.4	152	1300
DRS200L8/4	11 22	735 1475	35.5 41.5	0.52 0.85	4 5.9	2.4 1.8	2 1.4	260	2360
DRS225S8/4	14 28	735 1475	45 52	0.52 0.85	4.1 6.2	2.5 1.9	2.2 1.5	295	2930
DRS225M8/4	18 34	740 1475	57 63	0.53 0.86	4 6.3	2.4 2	2 1.5	315	3430

1) Applies to foot-mounted motor (DRS.../FI..)

Motor type DRS	P_N [kW]	n_N [1/min]	BE..	Z_0 BGE[1)] [1/h]	M_B [Nm][2)]	m_B [kg][3)]	J_{Mot_BE} [10^{-4} kgm^2]
DRS112M8/4	1.2 2.2	675 1390	BE5	3800 1800	40	50	150.8
DRS132S8/4	1.6 3.3	680 1385	BE5	3000 1600	55	53	194.8
DRS132M8/4	2.1 4.2	680 1390	BE11	3000 1500	80	75	263.5
DRS160S8/4	2.7 5.5	725 1470	BE11	2600 1400	80	98	392
DRS160M8/4	3.8 7.5	730 1470	BE11	1900 1300	110	110	470
DRS180S8/4	5.5 10	730 1465	BE20	1600 1200	150	154	955
DRS180L8/4	7.5 15	735 1470	BE20	1100 900	200	184	1360
DRS200L8/4	11 22	735 1475	BE30	900 700	300	310	2495
DRS225S8/4	14 28	735 1475	BE32	700 500	400	350	3160
DRS225M8/4	18 34	740 1475	BE32	600 450	500	370	3660

1) Operation with BGE brake control system

2) Standard braking torque

3) Applies to foot-mounted motor with brake (DRS...BE../FI..)

14.7 DR63 2-pole: 3000 1/min – S1

Motor type	P_N M_N [kW] [Nm]	n_N [1/min]	I_N 380-415 V (400 V) [A]	cosφ	IE class	η 75% η 100% [%]	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot} 2) [10^{-4} kgm^2]	J_{Mot} 3) [10^{-4} kgm^2]	Z_0 BG[4] BGE[5] [1/h]	M_{Bmax} [Nm]	m[1] 2) [kg]	m[1] 3) [kg]
DR63S2	0.18 0.63	2720	0.46 (0.45)	0.88	-	-	4.2	2.4 2.2	3.6	4.8	5000 -	1.6	6.2	8.0
DR63M2	0.25 0.9	2660	0.66 (0.65)	0.86	-	-	3.5	2.2 1.9	3.6	4.8	4500 -	2.4	6.2	8.0
DR63L2	0.37 1.3	2650	1.0 (0.92)	0.87	-	-	3.5	2.1 1.9	4.4	5.6	4000 -	3.2	6.7	8.5

1) applies to flange motor
2) without brake
3) with brake
4) Operation with BG brake control system
5) Operation with BGE brake control system



14.8 DT56, DR63, DV250/280 4-pole: 1500 1/min – S1 IE1

Motor type	P_N M_N [kW] [Nm]	n_N [1/min]	I_N 380-415 V (400 V) [A]	cosφ	IE class	$\eta_{75\%}$ $\eta_{100\%}$ [%]	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot} [10^{-4} kgm^2] 2)	J_{Mot} [10^{-4} kgm^2] 3)	Z_0 BG[4] BGE[5] [1/h]	M_{Bmax} [Nm]	m[1] [kg] 2)	m[1] [kg] 3)
DT56M4	0.09 0.66	1300	0.31 (0.29)	0.68	-	-	2.6	2.1 1.8	1.1	1.2	10000 -	0.8	In combination with helical gear units R07, RF07, R07F or Spiroplan® gear units W10, WF10, WA10, WAF10 only	
DT56L4	0.12 0.88	1300	0.46 (0.42)	0.68	-	-	2.6	2.2 1.9	1.1	1.2	10000 -	1.2		
DR63S4	0.12 0.83	1380	0.39 (0.39)	0.69	-	-	3.3	2.4 2.2	3.6	4.8	10000 -	2.4	6.1	7.6
DR63M4	0.18 1.3	1320	0.55 (0.55)	0.78	-	-	2.9	1.8 1.7	3.6	4.8	10000 -	3.2	6.1	7.6
DR63L4	0.25 1.8	1300	0.73 (0.68)	0.81	-	-	2.8	1.8 1.7	4.4	5.6	10000 -	3.2	6.7	8.2
DV250M4	55 356	1475	106 (102)	0.83	IE1	92.7 92.5	6.0	2.7 2.0	6300	6600 6730[6]	- 200	600 1200[6]	448	528 538[6]
DV280S4	75 484	1480	142 (138)	0.83	IE1	93.1 93.3	7.2	3.2 2.2	8925	9225 9355[6]	- 150	600 1200[6]	520	600 610[6]
DV280M4	90 581	1480	173 (170)	0.81	IE1	93.4 93.5	7.1	3.3 2.2	8925	9225 9355[6]	- 100	600 1200[6]	520	600 610[6]

1) applies to flange motor
2) without brake
3) with brake
4) Operation with BG brake control system
5) Operation with BGE brake control system
6) Double disk brake



14.9 DR63, DV250/280 6-pole: 1000 1/min – S1 IE1

Motor type	P_N [kW]	M_N [Nm]	n_N [1/min]	I_N 380-415 V (400 V) [A]	cosφ	IE class	$\eta_{75\%}$ η_{100} % [%]	I_A/I_N	M_A/M_N M_H/M_N	J_{Mot} 2) [10^{-4} kgm^2]	J_{Mot} 3) [10^{-4} kgm^2]	Z_0 BG[4] BGE[5] [1/h]	M_{Bmax} [Nm]	$m^{1)}$ 2) [kg]	$m^{1)}$ 3) [kg]
DR63S6	0.09	0.95	900	0.42 (0.38)	0.64	-	-	2.2	1.8 1.6	5.4	6.6	20000 -	2.5	6.0	7.5
DR63M6	0.12	1.2	900	0.62 (0.58)	0.65	-	-	2.1	1.8 1.7	5.4	6.6	20000 -	3.2	6.0	7.5
DR63L6	0.18	2	870	0.81 (0.78)	0.70	-	-	2.2	1.6 1.5	6.8	8.0	20000 -	3.2	6.6	8.1
DV250M6	37	360	980	85 (82)	0.71	IE1	91.5 91.3	4.5	2.4 1.6	6300	6600 6730[6]	- 240	600 1200[6]	448	528 538[6]
DV280S6	45	436	985	105 (103)	0.68	IE1	92 92	4.9	2.6 1.8	8925	9225 9355[6]	- 180	600 1200[6]	520	600 610[6]

1) applies to flange motor
2) without brake
3) with brake
4) Operation with BG brake control system
5) Operation with BGE brake control system
6) Double disk brake

15 Abbreviation Key and Index

15.1 Abbreviation key

a, b, f	Constants for converting overhung loads	[mm]
c	Constant for converting overhung loads	[Nmm]
cosφ	Power factor of the motor	
F_A	Axial load on the output shaft	[N]
f_B	Service factor	
f_{Netz}	Line frequency	[Hz]
F_R	Overhung load on the output shaft	[N]
f_T, f_H	Power reduction factors of the motor	
f_Z	Transmission element factor for determining the overhung load	
H	Installation altitude	[m ü. NN]
η	Forward efficiency	
η'	Retrodriving efficiency	
$\eta_{75\%}/\eta_{100\%}$	Efficiency of the motor at 75%/100% nominal load	
I_A/I_N	Ratio betw. starting current and nominal current of the motor	
I_N	Nominal current	[A]
IP..	Degree of protection	
i_{ges}	Total gear ratio	
i_{sch}	Ratio of the helical-worm gear stage	
ϑ_{Umg}	Ambient temperature	[°C]
J_{Last}	Mass moment of inertia to be driven	[10^{-4} kgm^2]
J_{Mot}	Mass moment of inertia of the motor	[10^{-4} kgm^2]
J_X	Mass moment of inertia scaled down to the motor shaft	[10^{-4} kgm^2]
J_Z	Mass moment of inertia of the flywheel fan	[10^{-4} kgm^2]
M_a	Output torque	[Nm]
M_B	Braking torque	[Nm]
M_H/M_N	Ratio betw. acc. torque and nominal torque of the motor	
M_A/M_N	Ratio betw. starting torque and nominal torque of the motor	
n_a	Output speed	[1/min]
n_e	Input speed	[1/min]
n_M	Motor speed	[1/min]
n_N	Rated speed	[1/min]
P_a	Output power	[kW]
P_e	Calculated drive power of the gear unit	[kW]
P_N	Rated power	[kW]
S.., % ED	Duty type and cyclic duration factor cdf	
T	Cycle duration	[min]
t1	Response time of the motor brake	[10^{-3} s]
t2	Motor brake application time	[10^{-3} s]
U_{Bremse}	Operating voltage of the brake	[V]
U_{Mot}	Operating voltage of the motor	[V]
Z	Starting frequency	[1/h], [c/h]
Z_0	No-load starting frequency	[1/h], [c/h]

15.2 Index

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	Provence-Alpes-Côte d'Azur	SEW-USOCOME Résidence Les Hespérides Bât. B2 67 boulevard des Alpes F-13012 Marseille	Tel. +33 4 91 18 00 11 Fax +33 4 91 18 00 12
	Rhône-Alpes est	SEW-USOCOME Montée de la Garenne F-26750 Génissieux	Tel. +33 4 75 05 65 95 Fax +33 4 75 05 65 96
	Rhône-Alpes nord	SEW-USOCOME Parc d'Affaires Roosevelt Rue Jacques Tati F-69120 Vaulx en Velin	Tel. +33 4 72 15 37 03 Fax +33 4 72 15 37 15
	Rhône-Alpes ouest	SEW-USOCOME Parc d'Affaires Roosevelt Rue Jacques Tati F-69120 Vaulx en Velin	Tel. +33 4 72 15 37 04 Fax +33 4 72 15 37 15



Algeria			
Sales	**Alger**	Réducom 16, rue des Frères Zaghnoun Bellevue El-Harrach 16200 Alger	Tel. +213 21 8222-84 Fax +213 21 8222-84 reducom_sew@yahoo.fr

Argentina			
Assembly **Sales** **Service**	**Buenos Aires**	SEW EURODRIVE ARGENTINA S.A. Centro Industrial Garin, Lote 35 Ruta Panamericana Km 37,5 1619 Garin	Tel. +54 3327 4572-84 Fax +54 3327 4572-21 sewar@sew-eurodrive.com.ar http://www.sew-eurodrive.com.ar

Australia			
Assembly **Sales** **Service**	**Melbourne**	SEW-EURODRIVE PTY. LTD. 27 Beverage Drive Tullamarine, Victoria 3043	Tel. +61 3 9933-1000 Fax +61 3 9933-1003 http://www.sew-eurodrive.com.au enquires@sew-eurodrive.com.au
	Sydney	SEW-EURODRIVE PTY. LTD. 9, Sleigh Place, Wetherill Park New South Wales, 2164	Tel. +61 2 9725-9900 Fax +61 2 9725-9905 enquires@sew-eurodrive.com.au
Sales **Service**	**Adelaide**	SEW-EURODRIVE PTY. LTD. 9C Park Way Mawson Lakes, SA 5095	Tel. +61 8 8161 4000 Fax +61 8 8161 4002 enquires@sew-eurodrive.com.au
	Brisbane	SEW-EURODRIVE PTY.LTD. 1 /34 Collinsvale St Rocklea, Queensland, 4106	Tel. +61 7 3272-7900 Fax +61 7 3272-7901 enquires@sew-eurodrive.com.au
	Perth	SEW-EURODRIVE PTY. LTD. 105 Robinson Avenue Belmont, W.A. 6104	Tel. +61 8 9478-2688 Fax +61 8 9277-7572 enquires@sew-eurodrive.com.au
Technical Office	**Townsville**	SEW-EURODRIVE PTY. LTD. 12 Leyland Street Garbutt, QLD 4814	Tel. +61 7 4779 4333 Fax +61 7 4779 5333 enquires@sew-eurodrive.com.au

Austria			
Assembly **Sales** **Service**	**Wien**	SEW-EURODRIVE Ges.m.b.H. Richard-Strauss-Strasse 24 A-1230 Wien	Tel. +43 1 617 55 00-0 Fax +43 1 617 55 00-30 http://www.sew-eurodrive.at sew@sew-eurodrive.at
Technical Offices	**Linz**	SEW-EURODRIVE Ges.m.b.H. Reuchlinstr. 6/3 A-4020 Linz	Tel. +43 732 655 109-0 Fax +43 732 655 109-20 tb-linz@sew-eurodrive.at
	Graz	SEW-EURODRIVE Ges.m.b.H. Grabenstraße 231 A-8045 Graz	Tel. +43 316 685 756-0 Fax +43 316 685 755 tb-graz@sew-eurodrive.at
	Dornbirn	SEW-EURODRIVE Ges.m.b.H. Lustenauerstraße 27/1 A-6850 Dornbirn	Tel. +43 5572 3799-0 Fax +43 5572 3725 99-20 tb-dornbirn@sew-eurodrive.at

Bangladesh			
Sales	**Dhaka**	Jainex Industrial and Engineering Ltd B 12 Apon Nibash East Nasirabad Bangladesh	Tel. +880 1713103502 Fax +880 31 613041 jainexbd@onlinectg.net

Belarus			
Sales	**Minsk**	SEW-EURODRIVE BY RybalkoStr. 26 BY-220033 Minsk	Tel.+375 (17) 298 38 50 Fax +375 (17) 29838 50 sales@sew.by



Belgium			
Assembly **Sales** **Service**	**Brüssel**	**SEW Caron-Vector** Avenue Eiffel 5 B-1300 Wavre	Tel. +32 10 231-311 Fax +32 10 231-336 http://www.sew-eurodrive.be info@caron-vector.be
Service Competence Center	**Industrial Gears**	**SEW Caron-Vector** Rue de Parc Industriel, 31 BE-6900 Marche-en-Famenne	Tel. +32 84 219-878 Fax +32 84 219-879 http://www.sew-eurodrive.be service-wallonie@sew-eurodrive.be
	Antwerp	**SEW Caron-Vector** Glasstraat, 19 BE-2170 Merksem	Tel. +32 3 64 19 333 Fax +32 3 64 19 336 http://www.sew-eurodrive.be service-antwerpen@sew-eurodrive.be

Brazil			
Production **Sales** **Service**	**Sao Paulo**	SEW-EURODRIVE Brasil Ltda. Avenida Amâncio Gaiolli, 152 - Rodovia Presidente Dutra Km 208 Guarulhos - 07251-250 - SP SAT - SEW ATENDE - 0800 7700496	Tel. +55 11 2489-9133 Fax +55 11 2480-3328 http://www.sew-eurodrive.com.br sew@sew.com.br

Bulgaria			
Sales	**Sofia**	BEVER-DRIVE GmbH Bogdanovetz Str.1 BG-1606 Sofia	Tel. +359 2 9151160 Fax +359 2 9151166 bever@fastbg.net

Cameroon			
Sales	**Douala**	Electro-Services Rue Drouot Akwa B.P. 2024 Douala	Tel. +237 33 431137 Fax +237 33 431137

Canada			
Assembly **Sales** **Service**	**Toronto**	SEW-EURODRIVE CO. OF CANADA LTD. 210 Walker Drive Bramalea, Ontario L6T3W1	Tel. +1 905 791-1553 Fax +1 905 791-2999 http://www.sew-eurodrive.ca marketing@sew-eurodrive.ca
	Vancouver	SEW-EURODRIVE CO. OF CANADA LTD. 7188 Honeyman Street Delta. B.C. V4G 1 E2	Tel. +1 604 946-5535 Fax +1 604 946-2513 marketing@sew-eurodrive.ca
	Montreal	SEW-EURODRIVE CO. OF CANADA LTD. 2555 Rue Leger LaSalle, Quebec H8N 2V9	Tel. +1 514 367-1124 Fax +1 514 367-3677 marketing@sew-eurodrive.ca
	Additional addresses for service in Canada provided on request!		

Chile			
Assembly **Sales** **Service**	**Santiago de Chile**	SEW-EURODRIVE CHILE LTDA. Las Encinas 1295 Parque Industrial Valle Grande LAMPA RCH-Santiago de Chile P.O. Box Casilla 23 Correo Quilicura - Santiago - Chile	Tel. +56 2 75770-00 Fax +56 2 75770-01 http://www.sew-eurodrive.cl ventas@sew-eurodrive.cl

China			
Production **Assembly** **Sales** **Service**	**Tianjin**	SEW-EURODRIVE (Tianjin) Co., Ltd. No. 46, 7th Avenue, TEDA Tianjin 300457	Tel. +86 22 25322612 Fax +86 22 25322611 info@sew-eurodrive.cn http://www.sew-eurodrive.cn



China			
Assembly **Sales** **Service**	**Suzhou**	SEW-EURODRIVE (Suzhou) Co., Ltd. 333, Suhong Middle Road Suzhou Industrial Park Jiangsu Province, 215021	Tel. +86 512 62581781 Fax +86 512 62581783 suzhou@sew-eurodrive.cn
	Guangzhou	SEW-EURODRIVE (Guangzhou) Co., Ltd. No. 9, JunDa Road East Section of GETDD Guangzhou 510530	Tel. +86 20 82267890 Fax +86 20 82267891 guangzhou@sew-eurodrive.cn
	Shenyang	SEW-EURODRIVE (Shenyang) Co., Ltd. 10A-2, 6th Road Shenyang Economic Technological Development Area Shenyang, 110141	Tel. +86 24 25382538 Fax +86 24 25382580 shenyang@sew-eurodrive.cn
	Wuhan	SEW-EURODRIVE (Wuhan) Co., Ltd. 10A-2, 6th Road No. 59, the 4th Quanli Road, WEDA 430056 Wuhan	Tel. +86 27 84478398 Fax +86 27 84478388
	Xi'An	SEW-EURODRIVE (Xi'An) Co., Ltd. No. 12 Jinye 2nd Road Xi'An High-Technology Industrial Development Zone Xi'An 710065	Tel. +86 29 88241718 Fax +86 29 68686296 logistic-xa@sew-eurodrive.cn

Colombia			
Assembly **Sales** **Service**	**Bogotá**	SEW-EURODRIVE COLOMBIA LTDA. Calle 22 No. 132-60 Bodega 6, Manzana B Santafé de Bogotá	Tel. +57 1 54750-50 Fax +57 1 54750-44 http://www.sew-eurodrive.com.co sewcol@sew-eurodrive.com.co

Croatia			
Sales **Service**	**Zagreb**	KOMPEKS d. o. o. PIT Erdödy 4 II HR 10 000 Zagreb	Tel. +385 1 4613-158 Fax +385 1 4613-158 kompeks@inet.hr

Czech Republic			
Sales	**Praha**	SEW-EURODRIVE CZ S.R.O. Business Centrum Praha Lužná 591 CZ-16000 Praha 6 - Vokovice	Tel. +420 255 709 601 Fax +420 220 121 237 http://www.sew-eurodrive.cz sew@sew-eurodrive.cz
Technical Offices	**Brno**	SEW-EURODRIVE CZ S.R.O. Křenová 52 CZ -60200 Brno	Tel. +420 543 256 151 +420 543 256 163 Fax +420 543 256 845
	Hradec Králové	SEW-EURODRIVE CZ S.R.O. Čechova 498 CZ-50202 Hradec Králové	Tel. +420 495 510 141 Fax +420 495 521 313
	Plzeň	SEW-EURODRIVE CZ S.R.O. Areal KRPA a.s. Zahradni 173/2 CZ-32600 Plzeň	Tel. +420 378 775 300 Fax +420 377 970 710
	Ostrava	SEW-EURODRIVE CZ S.R.O. Studenská 6202/17 CZ-708 00 Ostrava-Poruba	Tel. +420 738 339 044 Mobile +420 724 889 965
	Klatovy	SEW-EURODRIVE CZ S.R.O. Technická kancelář Klatovy Domažlická 800 CZ-33901 Klatovy	Tel. +420 376 310 729 Fax +420 376 310 725



Denmark			
Assembly **Sales** **Service**	**Kopenhagen**	SEW-EURODRIVEA/S Geminivej 28-30 DK-2670 Greve	Tel. +45 43 9585-00 Fax +45 43 9585-09 http://www.sew-eurodrive.dk sew@sew-eurodrive.dk

Egypt			
Sales **Service**	**Cairo**	Copam Egypt for Engineering & Agencies 33 EI Hegaz ST, Heliopolis, Cairo	Tel. +20 2 22566-299 + 1 23143088 Fax +20 2 22594-757 http://www.copam-egypt.com/ copam@datum.com.eg
Service	**Sharjah**	Copam Middle East (FZC) Sharjah Airport International Free Zone P.O. Box 120709 Sharjah **United Arabian Emirates**	Tel. +971 6 5578-488 Fax +971 6 5578-499 copam_me@eim.ae

Estonia			
Sales	**Tallin**	ALAS-KUUL AS Reti tee 4 EE-75301 Peetri küla, Rae vald, Harjumaa	Tel. +372 6593230 Fax +372 6593231 veiko.soots@alas-kuul.ee

Finland			
Assembly **Sales** **Service**	**Lahti**	SEW-EURODRIVE OY Vesim€entie 4 FIN-15860 Hollola 2	Tel. +358 201 589-300 Fax +358 3 780-6211 sew@sew.fi http://www.sew-eurodrive.fi
Technical Offices	**Helsinki**	SEW-EURODRIVE OY Luutnantintie 5 FIN-00410 Helsinki	Tel. +358 201 589-300 Fax + 358 9 5666-311 sew@sew.fi
	Vaasa	SEW-EURODRIVE OY Hietasaarenkatu 18 FIN-65100 Vaasa	Tel. +358 201 589-300 Fax +358 6 3127-470 sew@sew.fi
	Rovaniemi	SEW-EURODRIVE OY Valtakatu 4 A FIN-96100 Rovaniemi	Tel. +358 201 589-300 Fax +358 201 589-239 sew@sew.fi
Production **Assembly**	**Karkkila**	SEW Industrial Gears Oy Valurinkatu 6, PL 8 FI-03600 Karkkila, 03601 Karkkila	Tel. +358 201 589-300 Fax +358 201 589-310 sew@sew.fi http://www.sew-eurodrive.fi

Gabon			
Sales	**Libreville**	ESG Electro Services Gabun Feu Rouge Lalala 1889 Libreville Gabun	Tel. +241 741059 Fax +241 741059

Great Britain			
Assembly **Sales** **Service**	**Normanton**	SEW-EURODRIVE Ltd. Beckbridge Industrial Estate P.O. Box No.1 GB-Normanton, West- Yorkshire WF6 1QR	Tel. +44 1924 893-855 Fax +44 1924 893-702 http://www.sew-eurodrive.co.uk info@sew-eurodrive.co.uk
Technical Offices	**London**	SEW-EURODRIVE Ltd. 764 Finchely Road, Temple Fortune GB-London N.W.11 7TH	Tel. +44 20 8458-8949 Fax +44 20 8458-7417

Great Britain			
	Midlands	SEW-EURODRIVE Ltd. 5 Sugar Brook court, Aston Road, Bromsgrove, Worcs B60 3EX	Tel. +44 1527 877-319 Fax +44 1527 575-245
	Scotland	SEW-EURODRIVE Ltd. Scottish Office No 37 Enterprise House Springkerse Business Park GB-Stirling FK7 7UF Scotland	Tel. +44 17 8647-8730 Fax +44 17 8645-0223

Greece			
Sales **Service**	**Athen**	Christ. Boznos & Son S.A. 12, Mavromichali Street P.O. Box 80136, GR-18545 Piraeus	Tel. +30 2 1042 251-34 Fax +30 2 1042 251-59 http://www.boznos.gr info@boznos.gr
Technical Office	**Thessaloniki**	Christ. Boznos & Son S.A. Asklipiou 26 562 24 Evosmos, Thessaloniki	Tel. +30 2 310 7054-00 Fax +30 2 310 7055-15 info@boznos.gr

Hong Kong			
Assembly **Sales** **Service**	**Hong Kong**	SEW-EURODRIVE LTD. Unit No. 801-806, 8th Floor Hong Leong Industrial Complex No. 4, Wang Kwong Road Kowloon, Hong Kong	Tel. +852 36902200 Fax +852 36902211 contact@sew-eurodrive.hk

Hungary			
Sales **Service**	**Budapest**	SEW-EURODRIVE Kft. H-1037 Budapest Kunigunda u. 18	Tel. +36 1 437 06-58 Fax +36 1 437 06-50 office@sew-eurodrive.hu

Iceland			
Sales	**Reykjavik**	Vélaverk ehf. Bolholti 8, 3h. IS - 105 Reykjavik	Tel. +354 568 3536 Fax +354 568 3537 velaverk@velaverk.is

India			
Registered Office **Assembly** **Sales** **Service**	**Vadodara**	SEW-EURODRIVE India Private Limited Plot No. 4, GIDC POR Ramangamdi • Vadodara - 391 243 Gujarat	Tel. +91 265 3045200, +91 265 2831086 Fax +91 265 3045300, +91 265 2831087 http://www.seweurodriveindia.com sales@seweurodriveindia.com subodh.ladwa@seweurodriveindia.com
Assembly **Sales** **Service**	**Chennai**	SEW-EURODRIVE India Private Limited Plot No. K3/1, Sipcot Industrial Park Phase II Mambakkam Village Sriperumbudur - 602105 Kancheepuram Dist, Tamil Nadu	Tel. +91 44 37188888 Fax +91 44 37188811 c.v.shivkumar@seweurodriveindia.com
Technical Offices	**Bengaluru**	SEW-EURODRIVE India Private Limited 308, Prestige Centre Point 7, Edward Road Bengaluru - 560052 - Karnataka	Tel. +91 80 22266565 Fax +91 80 22266569 salesbang@seweurodriveindia.com ganesh@seweurodriveindia.com
	Kolkata	SEW EURODRIVE India Private Limited 2nd floor, Room No. 35 Chowringhee Court 55, Chowringhee Road Kolkata - 700 071 - West Bengal	Tel. +91 33 22827457 Fax +91 33 22894204 saleskal@seweurodriveindia.com a.j.biswas@seweurodriveindia.com

India			
	Chandigarh	SEW EURODRIVE India Private Limited Sujit Kumar Mishra H.No.5464/3 Modern Housing Complex Manimajra Chandigarh -160101	Tel. +91 9878469579 Fax +91 1722738664 saleschand@seweurodriveindia.com
	Chennai	SEW-EURODRIVE India Private Limited 2nd Floor, Josmans Complex, No. 5, McNichols Road, Chetpet Chennai - 600031 - Tamil Nadu	Tel. +91 44 42849813 Fax +91 44 42849816 saleschen@seweurodriveindia.com c.v.shivkumar@seweurodriveindia.com
	Coimbatore	SEW-EURODRIVE India Private Limited Office No 60 Arpee Centre (Opp Annapoorna Hotel) 420 N, NSR Road, Saibaba Colony Coimbatore 641 0111 - Tamil Nadu	Tel. +91 422 2455420 Fax +91 422 2443988 salescmb@seweurodriveindia.com p.selvakumar@seweurodriveindia.com
	Cuttack	SEW-EURODRIVE India Private Limited Plot No.- 1764, Nuasahi, Nayapalli Bhubaneswar-12 Orissa	Tel. +91 9937446333 manoranjan.sahoo@seweurodriveindia.com
	Madgaon	SEW-EURODRIVE India Private Limited Flat No.-G1, Shivas-Laxmi Prasad Co-Operative Housing Society, Padmanarayan Estate, Near Jivottaam Math, Gagole Madgao, Goa - 403 602	samrat.chakravorty@seweurodriveindia.com
	Hyderabad	SEW-EURODRIVE India Private Limited 408, 4th Floor, Meridian Place Green Park Road Amerpeet Hyderabad - 500016 - Andhra Pradesh	Tel. +91 40 23414698 Fax +91 40 23413884 saleshyd@seweurodriveindia.com ma.choudary@seweurodriveindia.com
	Jamshedpur	SEW-EURODRIVE India Private Limited Flat No.: B/2, B.S. Apartment Road No.: 4, Contractor's area, Bistupur Jamshedpur 831 001 - Chhattisgarh	Tel. +91 9934123671 siddaratha.mishra@seweurodriveindia.com
	Lucknow	SEW-EURODRIVE India Private Limited 69, Shiv Vihar Colony Vikas Nagar-5 Lucknow 226022 - Uttar Pradesh	Tel. +91 9793627333 amit.nigam@seweurodriveindia.com
	Mumbai	SEW-EURODRIVE India Private Limited 312 A, 3rd Floor, Acme Plaza, J.B. Nagar, Andheri Kurla Road, Andheri (E) Mumbai - 400059 - Maharashtra	Tel. +91 22 28348440 Fax +91 22 28217858 salesmumbai@seweurodriveindia.com p.s.ray@seweurodriveindia.com
	New Delhi	SEW-EURODRIVE India Private Limited 418-419, Suneja Tower-1 District Centre, Janak Puri New Delhi 110 058	Tel. +91 11 25544111 Fax +91 11 25544113 salesdelhi@seweurodriveindia.com vikram.juneja@seweurodriveindia.com
	Pune	SEW-EURODRIVE India Private Limited Lunawat Prism 4th floor, S. No. 148, Neena Co-Operative Housing Society, Paud Road, Pune 411038 - Maharashtra	Tel. +91 20 25380730 / 735 Fax +91 20 25380721 salespune@seweurodriveindia.com praveen.hosur@seweurodriveindia.com
	Raipur	SEW-EURODRIVE India Private Limited A-42, Ashoka Millenium Complex, Ring Road-1, Raipur 492 001 - Chhattisgarh	Tel. +91 771 4090765 Fax +91 771 4090765 sutanu.sarkar@seweurodriveindia.com

Indonesia			
Represented by	**Singapore**	SEW-EURODRIVE PTE. LTD. No 9, Tuas Drive 2 Jurong Industrial Estate Singapore 638644	Tel. +65 68621701 Fax +65 68612827 http://www.sew-eurodrive.com.sg sewsingapore@sew-eurodrive.com

Ireland			
Sales **Service**	**Dublin**	Alperton Engineering Ltd. 48 Moyle Road Dublin Industrial Estate Glasnevin, Dublin 11	Tel. +353 1 830-6277 Fax +353 1 830-6458 info@alperton.ie http://www.alperton.ie

Israel			
Sales	**Tel-Aviv**	Liraz Handasa Ltd. Ahofer Str 34B / 228 58858 Holon	Tel. +972 3 5599511 Fax +972 3 5599512 http://www.liraz-handasa.co.il office@liraz-handasa.co.il

Italy			
Assembly **Sales** **Service**	**Milano**	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Via Bernini,14 I-20020 Solaro (Milano)	Tel. +39 02 96 9801 Fax +39 02 96 799781 http://www.sew-eurodrive.it sewit@sew-eurodrive.it
Technical Offices	**Bologna**	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Via della Grafica, 47 I-40064 Ozzano dell'Emilia (Bo)	Tel. +39 051 65-23-801 Fax +39 051 796-595
	Caserta	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Viale Carlo III Km. 23,300 I-81020 S. Nicola la Strada (Caserta)	Tel. +39 0823 219011 Fax +39 0823 421414
	Pescara	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Viale Europa,132 I-65010 Villa Raspa di Spoltore (PE)	Tel. +39 085 41-59-427 Fax +39 085 41-59-643
	Torino	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Filiale Torino c.so Unione Sovietica 612/15 - int. C I-10135 Torino	Tel. +39 011 3473780 Fax +39 011 3473783
	Verona	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Via P. Sgulmero, 27/A I-37132 Verona	Tel. +39 045 89-239-11 Fax +39 045 97-6079

Ivory Coast			
Sales	**Abidjan**	SICA Ste industrielle et commerciale pour l'Afrique 165, Bld de Marseille B.P. 2323, Abidjan 08	Tel. +225 2579-44 Fax +225 2584-36

Japan			
Assembly **Sales** **Service**	**Iwata**	SEW-EURODRIVE JAPAN CO., LTD 250-1, Shimoman-no, Iwata Shizuoka 438-0818	Tel. +81 538 373811 Fax +81 538 373814 http://www.sew-eurodrive.co.jp sewjapan@sew-eurodrive.co.jp
Technical Offices	**Fukuoka**	SEW-EURODRIVE JAPAN CO., LTD. C-go, 5th-floor, Yakuin-Hiruzu-Bldg. 1-5-11, Yakuin, Chuo-ku Fukuoka, 810-0022	Tel. +81 92 713-6955 Fax +81 92 713-6860 sewkyushu@jasmine.ocn.ne.jp
	Osaka	SEW-EURODRIVE JAPAN CO., LTD. Higobashi Shimizu Bldg. 10th flor 1-3-7 Tosabori, Nishi-ku Osaka, 550-0001	Tel. +81 6 6444--8330 Fax +81 6 6444--8338 sewosaka@crocus.ocn.ne.jp



Japan			
	Tokyo	SEW-EURODRIVE JAPAN CO., LTD. Omarimon Yusen Bldg. 13th floor 3-23-5 Nishinbashi, Minato-ku Tokyo 105-0003	Tel. +81 3 3239-0469 Fax +81 3 3239-0943 sewtokyo@basil.ocn.ne.jp

Korea			
Assembly **Sales** **Service**	**Ansan-City**	SEW-EURODRIVE KOREA CO., LTD. B 601-4, Banweol Industrial Estate 1048-4, Shingil-Dong Ansan 425-120	Tel. +82 31 492-8051 Fax +82 31 492-8056 http://www.sew-korea.co.kr master@sew-korea.co.kr
	Busan	SEW-EURODRIVE KOREA Co., Ltd. No. 1720 - 11, Songjeong - dong Gangseo-ku Busan 618-270	Tel. +82 51 832-0204 Fax +82 51 832-0230 master@sew-korea.co.kr
Technical Offices	**Daegu**	SEW-EURODRIVE KOREA Co., Ltd. No.1108 Sungan officetel 87-36, Duryu 2-dong, Dalseo-ku Daegu 704-712	Tel. +82 53 650-7111 Fax +82 53 650-7112
	DaeJeon	SEW-EURODRIVE KOREA Co., Ltd. No. 1502, Hongin officetel 536-9, Bongmyung-dong, Yusung-ku Daejeon 305-301	Tel. +82 42 828-6461 Fax +82 42 828-6463
	Kwangju	SEW-EURODRIVE KOREA Co., Ltd. 4fl., Dae-Myeong B/D 96-16 Unam-dong, Buk-ku Kwangju 500-170	Tel. +82 62 511-9172 Fax +82 62 511-9174
	Seoul	SEW-EURODRIVE KOREA Co., Ltd. No.504 Sunkyung officetel 106-4 Kuro 6-dong, Kuro-ku Seoul 152-054	Tel. +82 2 862-8051 Fax +82 2 862-8199

Latvia			
Sales	**Riga**	SIA Alas-Kuul Katlakalna 11C LV-1073 Riga	Tel. +371 7139253 Fax +371 7139386 http://www.alas-kuul.com info@alas-kuul.com

Lebanon			
Sales	**Beirut**	Gabriel Acar & Fils sarl B. P. 80484 Bourj Hammoud, Beirut	Tel. +961 1 4947-86 +961 1 4982-72 +961 3 2745-39 Fax +961 1 4949-71 ssacar@inco.com.lb
	Beirut	Middle East Drives S.A.L. (offshore) Sin El Fil. B. P. 55-378 Beirut	Tel. +961 1 494 786 Fax +961 1 494 971 philipppe.acar@medrives.com

Lithuania			
Sales	**Alytus**	UAB Irseva Naujoji 19 LT-62175 Alytus	Tel. +370 315 79204 Fax +370 315 56175 info@irseva.lt http://www.sew-eurodrive.lt

Luxembourg			
Assembly **Sales** **Service**	**Brüssel**	CARON-VECTOR S.A. Avenue Eiffel 5 B-1300 Wavre	Tel. +32 10 231-311 Fax +32 10 231-336 http://www.sew-eurodrive.lu info@caron-vector.be

Malaysia			
Assembly **Sales** **Service**	**Johore**	SEW-EURODRIVE SDN BHD No. 95, Jalan Seroja 39, Taman Johor Jaya 81000 Johor Bahru, Johor West Malaysia	Tel. +60 7 3549409 Fax +60 7 3541404 sales@sew-eurodrive.com.my
Technical Offices	**Kota Kinabalu**	SEW-EURODRIVE Sdn Bhd (Kota Kinabalu Branch) Lot No. 2,1st Floor, Inanam Baru Phase III, Miles 5.1 /2, Jalan Tuaran, Inanam 89350 Kota Kinabalu Sabah, Malaysia	Tel. +60 88 424792 Fax +60 88 424807
	Kuala Lumpur	SEW-EURODRIVE Sdn. Bhd. No. 2, Jalan Anggerik Mokara 31/46 Kota Kemuning Seksyen 31 40460 Shah Alam Selangor Darul Ehsan	Tel. +60 3 5229633 Fax +60 3 5229622 sewpjy@po.jaring.my
	Kuching	SEW-EURODRIVE Sdn. Bhd. Lot 268, Section 9 KTLD Lorong 9, Jalan Satok 93400 Kuching, Sarawak East Malaysia	Tel. +60 82 232380 Fax +60 82 242380
	Penang	SEW-EURODRIVE Sdn. Bhd. No. 38, Jalan Bawal Kimsar Garden 13700 Prai, Penang	Tel. +60 4 3999349 Fax +60 4 3999348 seweurodrive@po.jaring.my

Mauritania			
Sales	**Zouérate**	AFRICOM - SARL En Face Marché Dumez P.B. 88 Zouérate	Tel. +222 54 40134 Fax +222 54 40538 cybertiris@mauritel.mr

Mexico			
Assembly **Sales** **Service**	**Quéretaro**	SEW-EURODRIVE MEXICO SA DE CV SEM-981118-M93 Tequisquiapan No. 102 Parque Industrial Quéretaro C.P. 76220 Quéretaro, México	Tel. +52 442 1030-300 Fax +52 442 1030-301 http://www.sew-eurodrive.com.mx scmexico@seweurodrive.com.mx

Morocco			
Sales	**Casablanca**	Afit 5, rue Emir Abdelkader MA 20300 Casablanca	Tel. +212 522618372 Fax +212 522618351 ali.alami@premium.net.ma

Netherlands			
Assembly **Sales** **Service**	**Rotterdam**	VECTOR Aandrijftechniek B.V. Industrieweg 175 NL-3044 AS Rotterdam Postbus 10085 NL-3004 AB Rotterdam	Tel. +31 10 4463-700 Fax +31 10 4155-552 http://www.vector.nu info@vector.nu



New Zealand			
Assembly **Sales** **Service**	**Auckland**	SEW-EURODRIVE NEW ZEALAND LTD. P.O. Box 58-428 82 Greenmount drive East Tamaki Auckland	Tel. +64 9 2745627 Fax +64 9 2740165 http://www.sew-eurodrive.co.nz sales@sew-eurodrive.co.nz
	Christchurch	SEW-EURODRIVE NEW ZEALAND LTD. 10 Settlers Crescent, Ferrymead Christchurch	Tel. +64 3 384-6251 Fax +64 3 384-6455 sales@sew-eurodrive.co.nz
Technical Office	**Palmerston North**	SEW-EURODRIVE NEW ZEALAND LTD. C/-Grant Shearman, RD 5, Aronui Road Palmerston North	Tel. +64 6 355-2165 Fax +64 6 355-2316 sales@sew-eurodrive.co.nz

Norway			
Assembly **Sales** **Service**	**Moss**	SEW-EURODRIVE A/S Solgaard skog 71 N-1599 Moss	Tel. +47 69 24 10 20 Fax +47 69 24 10 40 http://www.sew-eurodrive.no sew@sew-eurodrive.no

Peru			
Assembly **Sales** **Service**	**Lima**	SEW DEL PERU MOTORES REDUCTORES S.A.C. Los Calderos, 120-124 Urbanizacion Industrial Vulcano, ATE, Lima	Tel. +51 1 3495280 Fax +51 1 3493002 http://www.sew-eurodrive.com.pe sewperu@sew-eurodrive.com.pe

Philippines			
Represented by	**Singapore**	SEW-EURODRIVE PTE. LTD. No 9, Tuas Drive 2 Jurong Industrial Estate Singapore 638644	Tel. +65 68621701 Fax +65 68612827 http://www.sew-eurodrive.com.sg sewsingapore@sew-eurodrive.com

Poland			
Assembly **Sales** **Service**	**Lodz**	SEW-EURODRIVE Polska Sp.z.o.o. ul. Techniczna 5 PL-92-518 Łódź	Tel. +48 42 676 53 00 Fax +48 42 676 53 45 http://www.sew-eurodrive.pl sew@sew-eurodrive.pl
		24 Hour Service	Tel. +48 602 739 739 (+48 602 SEW SEW) serwis@sew-eurodrive.pl
Technical Office	**Tychy**	SEW-EURODRIVE Polska Sp.z.o.o. ul. Nad Jeziorem 87 PL-43-100 Tychy	Tel. +48 32 32 32 610 Fax +48 32 32 32 649
	Bydgoszcz	SEW-EURODRIVE Polska Sp.z.o.o. ul. Fordońska 246 PL-85-959 Bydgoszcz	Tel. +48 52 3606590 Fax +48 52 3606591
	Poznan	SEW-EURODRIVE Polska Sp.z.o.o. ul. Romana Maya 1 PL-61-371 Poznań	Tel. +48 61 8741640 Fax +48 61 8741641
	Szczecinek	SEW-EURODRIVE Polska Sp.z.o.o. ul. Mickiewicza 2 pok. 36 PL-78-400 Szczecinek	Tel. +48 94 3728820 Fax +48 94 3728821

Portugal			
Assembly **Sales** **Service**	**Coimbra**	SEW-EURODRIVE, LDA. Apartado 15 P-3050-901 Mealhada	Tel. +351 231 20 9670 Fax +351 231 20 3685 http://www.sew-eurodrive.pt infosew@sew-eurodrive.pt

Portugal			
Technical Offices	**Lisboa**	SEW-EURODRIVE, LDA. Núcleo Empresarial I de São Julião do Tojal Rua de Entremuros, 54 Fracção I P-2660-533 São Julião do Tojal	Tel. +351 21 958-0198 Fax +351 21 958-0245 esc.lisboa@sew-eurodrive.pt
	Porto	SEW-EURODRIVE, LDA. Av. 25 de Abril, 68 4440-502 Valongo	Tel. +351 229 350 383 Fax +351 229 350 384 MobilTel. +351 9 32559110 esc.porto@sew-eurodrive.pt

Romania			
Sales **Service**	**Bucureşti**	Sialco Trading SRL str. Madrid nr.4 011785 Bucuresti	Tel. +40 21 230-1328 Fax +40 21 230-7170 sialco@sialco.ro

Russia			
Assembly **Sales** **Service**	**St. Petersburg**	ZAO SEW-EURODRIVE P.O. Box 36 195220 St. Petersburg Russia	Tel. +7 812 3332522 +7 812 5357142 Fax +7 812 3332523 http://www.sew-eurodrive.ru sew@sew-eurodrive.ru
Technical Office	**Yekaterinburg**	ZAO SEW-EURODRIVE Kominterna Str. 16 Office 614 RUS-620078 Ekaterinburg	Tel. +7 343 310 3977 Fax +7 343 310 3978 eso@sew-eurodrive.ru
	Irkutsk	ZAO SEW-EURODRIVE 5-Armii Str., 31 RUS-664011 Irkutsk	Tel. +7 3952 25 5880 Fax +7 3952 25 5881 iso@sew-eurodrive.ru
	Moskau	ZAO SEW-EURODRIVE RUS-107023 Moskau	Tel. +7 495 9337090 Fax +7 495 9337094 mso@sew-eurodrive.ru
	Novosibirsk	ZAO SEW-EURODRIVE pr. K Marksa, d.30 RUS-630087 Novosibirsk	Tel. +7 383 3350200 Fax +7 383 3462544 nso@sew-eurodrive.ru
	Togliatti	ZAO SEW-EURODRIVE Sportivnaya Str. 4B, office 2 Samarskaya obl. RUS-445057 Togliatti	Tel. +7 8482 710529 Fax +7 8482 810590

Senegal			
Sales	**Dakar**	SENEMECA Mécanique Générale Km 8, Route de Rufisque B.P. 3251, Dakar	Tel. +221 338 494 770 Fax +221 338 494 771 senemeca@sentoo.sn

Serbia			
Sales	**Beograd**	DIPAR d.o.o. Ustanicka 128a PC Košum, IV floor SCG-11000 Beograd	Tel. +381 11 347 3244 / +381 11 288 0393 Fax +381 11 347 1337 office@dipar.co.yu

Singapore			
Assembly **Sales** **Service**	**Singapore**	SEW-EURODRIVE PTE. LTD. No 9, Tuas Drive 2 Jurong Industrial Estate Singapore 638644	Tel. +65 68621701 Fax +65 68612827 http://www.sew-eurodrive.com.sg sewsingapore@sew-eurodrive.com

Slovakia			
Sales	**Bratislava**	SEW-Eurodrive SK s.r.o. Rybničná 40 SK-831 06 Bratislava	Tel. +421 2 33595 202 Fax +421 2 33595 200 sew@sew-eurodrive.sk http://www.sew-eurodrive.sk
	Žilina	SEW-Eurodrive SK s.r.o. Industry Park - PChZ ulica M.R.Štefánika 71 SK-010 01 Žilina	Tel. +421 41 700 2513 Fax +421 41 700 2514 sew@sew-eurodrive.sk
	Banská Bystrica	SEW-Eurodrive SK s.r.o. Rudlovská cesta 85 SK-974 11 Banská Bystrica	Tel. +421 48 414 6564 Fax +421 48 414 6566 sew@sew-eurodrive.sk
	Košice	SEW-Eurodrive SK s.r.o. Slovenská ulica 26 SK-040 01 Košice	Tel. +421 55 671 2245 Fax +421 55 671 2254 sew@sew-eurodrive.sk

Slovenia			
Sales **Service**	**Celje**	Pakman - Pogonska Tehnika d.o.o. UI. XIV. divizije 14 SLO - 3000 Celje	Tel. +386 3 490 83-20 Fax +386 3 490 83-21 pakman@siol.net

South Africa			
Assembly **Sales** **Service**	**Johannesburg**	SEW-EURODRIVE (PROPRIETARY) LIMITED Eurodrive House Cnr. Adcock Ingram and Aerodrome Roads Aeroton Ext. 2 Johannesburg 2013 P.O.Box 90004 Bertsham 2013	Tel. +27 11 248-7000 Fax +27 11 494-3104 http://www.sew.co.za info@sew.co.za
	Cape Town	SEW-EURODRIVE (PROPRIETARY) LIMITED Rainbow Park Cnr. Racecourse & Omuramba Road Montague Gardens Cape Town P.O.Box 36556 Chempet 7442 Cape Town	Tel. +27 21 552-9820 Fax +27 21 552-9830 Telex 576 062 cfoster@sew.co.za
	Durban	SEW-EURODRIVE (PROPRIETARY) LIMITED 2 Monaco Place Pinetown Durban P.O. Box 10433, Ashwood 3605	Tel. +27 31 700-3451 Fax +27 31 700-3847 cdejager@sew.co.za
	Nelspruit	SEW-EURODRIVE (PTY) LTD. 7 Christie Crescent Vintonia P.O.Box 1942 Nelspruit 1200	Tel. +27 13 752-8007 Fax +27 13 752-8008 robermeyer@sew.co.za
Technical Offices	**Port Elizabeth**	SEW-EURODRIVE PTY LTD. 8 Ruan Access Park Old Cape Road Greenbushes 6000 Port Elizabeth	Tel. +27 41 3722246 Fax +27 41 3722247 dtait@sew.co.za
	Richards Bay	SEW-EURODRIVE PTY LTD. 103 Bulion Blvd Richards Bay P.O. Box 458 Richards Bay, 3900	Tel. +27 35 797-3805 Fax +27 35 797-3819 jswart@sew.co.za



Spain			
Assembly **Sales** **Service**	**Bilbao**	SEW-EURODRIVE ESPAÑA, S.L. Parque Tecnológico, Edificio, 302 E-48170 Zamudio (Vizcaya)	Tel. +34 94 43184-70 Fax +34 94 43184-71 http://www.sew-eurodrive.es sew.spain@sew-eurodrive.es
Technical Offices	**Barcelona**	Delegación Barcelona Avenida Francesc Maciá 40-44 Oficina 4.2 E-08208 Sabadell (Barcelona)	Tel. +34 93 7162200 Fax +34 93 7233007
	Lugo	Delegación Noroeste Apartado, 1003 E-27080 Lugo	Tel. +34 639 403348 Fax +34 982 202934
	Madrid	Delegación Madrid Gran Via. 48-2° A-D E-28220 Majadahonda (Madrid)	Tel. +34 91 6342250 Fax +34 91 6340899
	Seville	MEB Pólogono Calonge, C/A Nave 2 - C E-41.077 Sevilla	Tel. +34 954 356 361 Fax +34 954 356 274 mebsa.sevilla@mebsa.com
	Valencia	MEB Músico Andreu i Piqueres, 4 E-46.900 Torrente (Valencia)	Tel. +34 961 565 493 Fax +34 961 566 688 mebsa.valencia@mebsa.com

Sri Lanka			
Sales	**Colombo**	SM International (Pte) Ltd 254, Galle Raod Colombo 4, Sri Lanka	Tel. +94 1 2584887 Fax +94 1 2582981

Sweden			
Assembly **Sales** **Service**	**Jönköping**	SEW-EURODRIVE AB Gnejsv€gen 6-8 S-55303 Jönköping Box 3100 S-55003 Jönköping	Tel. +46 36 3442 00 Fax +46 36 3442 80 http://www.sew-eurodrive.se jonkoping@sew.se
Sales	**Göteborg**	SEW-EURODRIVE AB Gustaf Werners gata 8 S-42132 V€stra Frölunda	Tel. +46 31 70968 80 Fax +46 31 70968 93 goteborg@sew.se
	Stockholm	SEW-EURODRIVE AB Björkholmsv€gen 10 S-14146 Huddinge	Tel. +46 8 44986 80 Fax +46 8 44986 93 stockholm@sew.se
	Malmö	SEW-EURODRIVE AB Borrgatan 5 S-21124 Malmö	Tel. +46 40 68064 80 Fax +46 40 68064 93 malmo@sew.se
	Skellefteå	SEW-EURODRIVE AB Tr€dgårdsgatan 8 S-93131 Skellefteå	Tel. +46 910 7153 80 Fax +46 910 7153 93 skelleftea@sew.se

Switzerland			
Assembly **Sales** **Service**	**Basel**	Alfred Imhof A.G. Jurastrasse 10 CH-4142 Münchenstein bei Basel	Tel. +41 61 417 1717 Fax +41 61 417 1700 http://www.imhof-sew.ch info@imhof-sew.ch
Technical Offices	**Rhaetian Switzerland**	André Gerber Es Perreyres CH-1436 Chamblon	Tel. +41 24 445 3850 Fax +41 24 445 4887
	Bern / Solothurn	Rudolf Bühler Muntersweg 5 CH-2540 Grenchen	Tel. +41 32 652 2339 Fax +41 32 652 2331
	Central Switzerland and Ticino	Beat Lütolf Baumacher 11 CH-6244 Nebikon	Tel. +41 62 756 4780 Fax +41 62 756 4786

Switzerland			
	Central Switzerland, Aargau	Armin Pfister Stierenweid CH-4950 Huttwill, BE	Tel. +41 62 962 54 55 Fax +41 62 962 54 56
	Zürich, Ticino	Gian-Michele Muletta Fischerstrasse 61 CH-8132 Egg bei Zürich	Tel. +41 44 994 81 15 Fax +41 44 994 81 16
	Bodensee and East Switzerland	Markus Künzle Eichweg 4 CH-9403 Goldach	Tel. +41 71 845 2808 Fax +41 71 845 2809

Taiwan (R.O.C.)			
Sales	**Nan Tou**	Ting Shou Trading Co., Ltd. No. 55 Kung Yeh N. Road Industrial District Nan Tou 540	Tel. +886 49 255353 Fax +886 49 257878
	Taipei	Ting Shou Trading Co., Ltd. 6F-3, No. 267, Sec. 2 Tung Hwa South Road, Taipei	Tel. +886 2 27383535 Fax +886 2 27368268 Telex 27 245 sewtwn@ms63.hinet.net

Thailand			
Assembly **Sales** **Service**	**Chonburi**	SEW-EURODRIVE (Thailand) Ltd. 700/456, Moo.7, Donhuaroh Muang Chonburi 20000	Tel. +66 38 454281 Fax +66 38 454288 sewthailand@sew-eurodrive.com
Technical Offices	**Bangkok**	SEW-EURODRIVE (Thailand) Ltd. 6th floor, TPS Building 1023, Phattanakarn Road Suanluang Bangkok,10250	Tel. +66 2 7178149 Fax +66 2 7178152 sewthailand@sew-eurodrive.com
	Hadyai	SEW-EURODRIVE (Thailand) Ltd. Hadyai Country Home Condominium 59/101 Soi.17/1 Rachas-Utid Road. Hadyai, Songkhla 90110	Tel. +66 74 359441 Fax +66 74 359442 sewthailand@sew-eurodrive.com
	Khonkaen	SEW-EURODRIVE (Thailand) Ltd. 4th Floor, Kaow-U-HA MOTOR Bldg, 359/2, Mitraphab Road. Muang District Khonkaen 40000	Tel. +66 43 225745 Fax +66 43 324871 sew-thailand@sew-eurodrive.com

Tunisia			
Sales	**Tunis**	T. M.S. Technic Marketing Service Zone Industrielle Mghira 2 Lot No. 39 2082 Fouchana	Tel. +216 71 4340-64 + 71 4320-29 Fax +216 71 4329-76 tms@tms.com.tn

Turkey			
Assembly **Sales** **Service**	**Istanbul**	SEW-EURODRIVE Hareket Sistemleri San. ve Tic. Ltd. Sti. Bagdat Cad. Koruma Cikmazi No. 3 TR-34846 Maltepe ISTANBUL	Tel. +90 216 4419163 / 4419164 Fax +90 216 3055867 http://www.sew-eurodrive.com.tr sew@sew-eurodrive.com.tr
Technical Offices	**Adana**	SEW-EURODRIVE Hareket Sistemleri San. ve Tic. Ltd. Sti. Kizilay Caddesi 8 Sokak No 6 Daðtekin Is Merkezi Kat 4 Daire 2 TR-01170 SEYHAN / ADANA	Tel. +90 322 359 94 15 Fax +90 322 359 94 16

Turkey			
	Ankara	SEW-EURODRIVE Hareket Sistemleri San. ve Tic. Ltd. Sti. Özcelik Is Merkezi, 14. Sok, No. 4/42 TR-06370 Ostim/Ankara	Tel. +90 312 385 33 90 Fax +90 312 385 32 58
	Bursa	SEW-EURODRIVE Hareket Sistemleri San. ve Tic. Ltd. Sti. Üçevler Mah. Bayraktepe Sok. Akay İş Merkezi Kat:3 No: 7/6 TR Nilüfer/Bursa	Tel. +90 224 443 45 60 Fax +90 224 443 45 58
	Izmir	SEW-EURODRIVE Hareket Sistemleri San. ve Tic. Ltd. Sti. 1203/11 Sok. No. 4/613 Hasan Atli Is Merkezi TR-35110 Yenisehir-İzmir	Tel. +90 232 469 62 64 Fax +90 232 433 61 05

Ukraine			
Sales **Service**	**Dnepropetrovsk**	SEW-EURODRIVE Str. Rabochaja 23-B, Office 409 49008 Dnepropetrovsk	Tel. +380 56 370 3211 Fax +380 56 372 2078 http://www.sew-eurodrive.ua sew@sew-eurodrive.ua
Sales	**Kiev**	SEW-EURODRIVE GmbH S. Oleynika str. 21 02068 Kiev	Tel. +380 44 503 95 77 Fax +380 44 503 95 78 kso@sew-eurodrive.ua
	Donetsk	SEW-EURODRIVE GmbH 25th anniversary of RKKA av. 1-B, of. 805 Donetsk 83000	Tel. +380 62 38 80 545 Fax +380 62 38 80 533 dso@sew-eurodrive.ua

Uruguay			
Sales	**Montevideo**	SEW-EURODRIVE Uruguay, S. A. Jose Serrato 3569 Esqina Corumbe CP 12000 Montevideo	Tel. +598 2 21181-89 Fax +598 2 21181-89 sewuy@sew-eurodrive.com.uy

USA			
Production **Assembly** **Sales** **Service** **Corporate Offices**	**Southeast Region**	SEW-EURODRIVE INC. 1295 Old Spartanburg Highway P.O. Box 518 Lyman, S.C. 29365	Tel. +1 864 439-7537 Fax Sales +1 864 439-7830 Fax Manufacturing +1 864 439-9948 Fax Assembly +1 864 439-0566 Fax Confidential/HR +1 864 949-5557 http://www.seweurodrive.com cslyman@seweurodrive.com
Assembly **Sales** **Service**	**Northeast Region**	SEW-EURODRIVE INC. Pureland Ind. Complex 2107 High Hill Road, P.O. Box 481 Bridgeport, New Jersey 08014	Tel. +1 856 467-2277 Fax +1 856 845-3179 csbridgeport@seweurodrive.com
	Midwest Region	SEW-EURODRIVE INC. 2001 West Main Street Troy, Ohio 45373	Tel. +1 937 335-0036 Fax +1 937 440-3799 cstroy@seweurodrive.com
	Southwest Region	SEW-EURODRIVE INC. 3950 Platinum Way Dallas, Texas 75237	Tel. +1 214 330-4824 Fax +1 214 330-4724 csdallas@seweurodrive.com
	Western Region	SEW-EURODRIVE INC. 30599 San Antonio St. Hayward, CA 94544	Tel. +1 510 487-3560 Fax +1 510 487-6433 cshayward@seweurodrive.com
	Additional addresses for service in the USA provided on request!		

Venezuela			
Assembly **Sales** **Service**	**Valencia**	SEW-EURODRIVE Venezuela S.A. Av. Norte Sur No. 3, Galpon 84-319 Zona Industrial Municipal Norte Valencia, Estado Carabobo	Tel. +58 241 832-9804 Fax +58 241 838-6275 http://www.sew-eurodrive.com.ve ventas@sew-eurodrive.com.ve sewfinanzas@cantv.net



Inquiry/Order

Customer data:

Company: _____ Customer no.: _____
Department: _____
Name: _____ Phone: _____
Street/P.O. Box: _____ Fax: _____
_____ Email: _____
ZIP code/city: _____

Your contact partner at SEW:

Name: _____ Phone: _____
Technical Office: _____ Fax: _____

Technical data:

Quantity: _____ Requested delivery date: _____
Catalog designation: _____

Gear unit type:

☐ Helical ☐ Parallel shaft helical ☐ Helical-bevel ☐ Helical-worm ☐ Spiroplan®
☐ Multi-stage ☐ Servo ☐ Variable speed ☐ EMS ☐ Other: _____

Power: _____ kW **Output speed:** _____ rpm **Output torque:** _____ Nm

Cycles/h: _____ c/h **Cyclic duration factor:** S _____ / _____ % cdf

☐ 1-shift operation ☐ 2-shift operation ☐ 3-shift operation
☐ Uniform ☐ Non-uniform ☐ Extremely non-uniform

Mounting position:

M1	M2	M3	M4	M5	M6	Pivoting
☐	☐	☐	☐	☐	☐	☐

Housing type:

☐ Foot-mounted ☐ Flange (bore) ☐ Flange (thread)
☐ Torque arm ☐ Other: _____

Shaft type:

☐ Solid shaft with key ☐ Shrink disk Shaft/hollow shaft ∅: _____ mm
☐ Hollow shaft with key ☐ TorqLOC® Flange ∅: _____ mm

Shaft position (right-angle units): ☐ A | ☐ B | ☐ AB

Terminal box position: ☐ 0°(R) ☐ 90°(B) | ☐ 180°(L) | ☐ 270°(T)

Cable entry: ☐X ☐1 | ☐2 | ☐3

Degree of protection:

IP54	IP55	IP56	IP65	IP66	IP69K
☐	☐	☐	☐	☐	☐

Thermal class:

130(B)	155(F)	180(H)
☐	☐	☐

Surface/corrosion protection:

KS	OS1	OS2	OS3	OS4
☐	☐	☐	☐	☐

Mains voltage: _____ V
Mains frequency: ☐ 50Hz ☐ 60Hz

Connection type: ☐ Δ ☐ Y ☐ YY ☐ Y/Y

☐ For inverter operation: Max. frequency: _____ Hz | **Control range:** _____

Required options:

☐ Brake: voltage _____ V Braking torque: _____ Nm
☐ Manual brake release: ☐ HR or ☐ HF
☐ Forced cooling fan: Forced cooling fan voltage: _____ V
☐ Motor protection: ☐ TF or ☐ TH
☐ Encoder: _____
☐ Plug connection: _____
☐ Inverter: _____
☐ RAL 7031 or ☐ RAL _____

Other options:

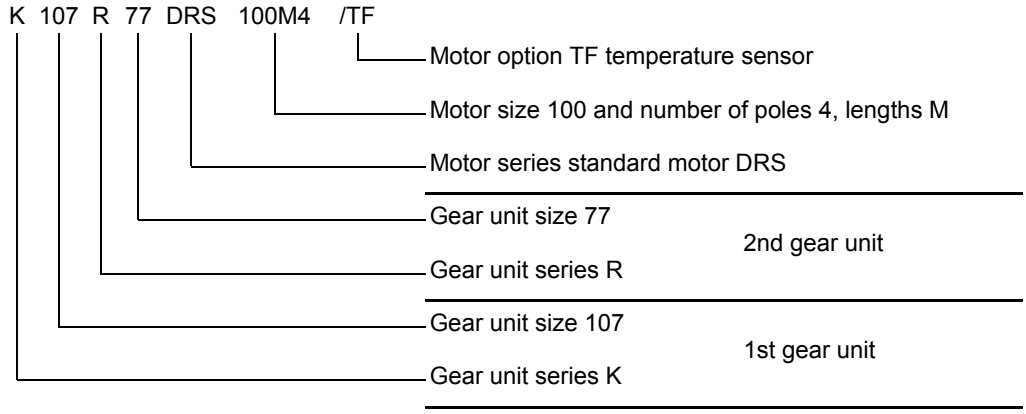
Special ambient conditions:

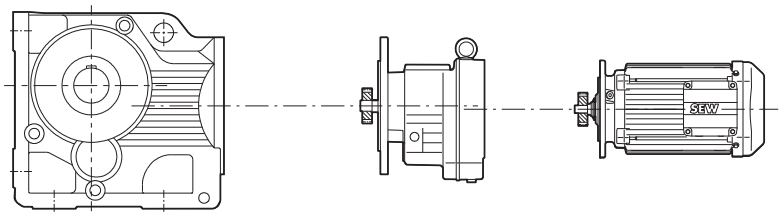
Temperature from _____ °C to _____ °C | ☐ Outdoor use | ☐ Installation >1000m above msl
Other ambient conditions: _____
Other: _____

Place, date _____ **Signature:** _____

Order information for AC gearmotors

The following diagram shows an example of the technical information required for placing an order for geared motors. The data should be given in the order starting from the output side of the unit.





K107 R77 DRS100M4/TF

65702AXX

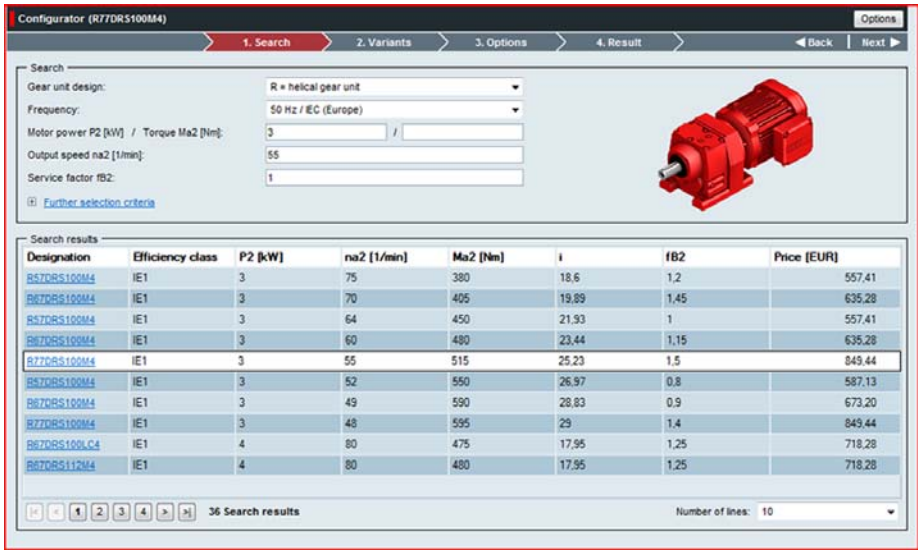
The following data is also required depending on gear unit series and type:

Type (examples)	Mounting position	Shaft at	Flange at	Position of terminal box	Cable entry	Direction of output rotation
K47DRS71S4/RS	M2	A	-	0°	"X"	CW
SF77DRS100M4	M6	AB	AB	90°	"3"	-
KA97DRS132S4	M4	B	-	270°	"2"	-
KH107DRS132M4	M1	A	-	180°	"3"	-
WF20DRS71M4	-	A	A	0°	"X"	-
KAF67A	M3	A	B	-	-	-

Drive selection using the DriveConfigurator from SEW-EURODRIVE

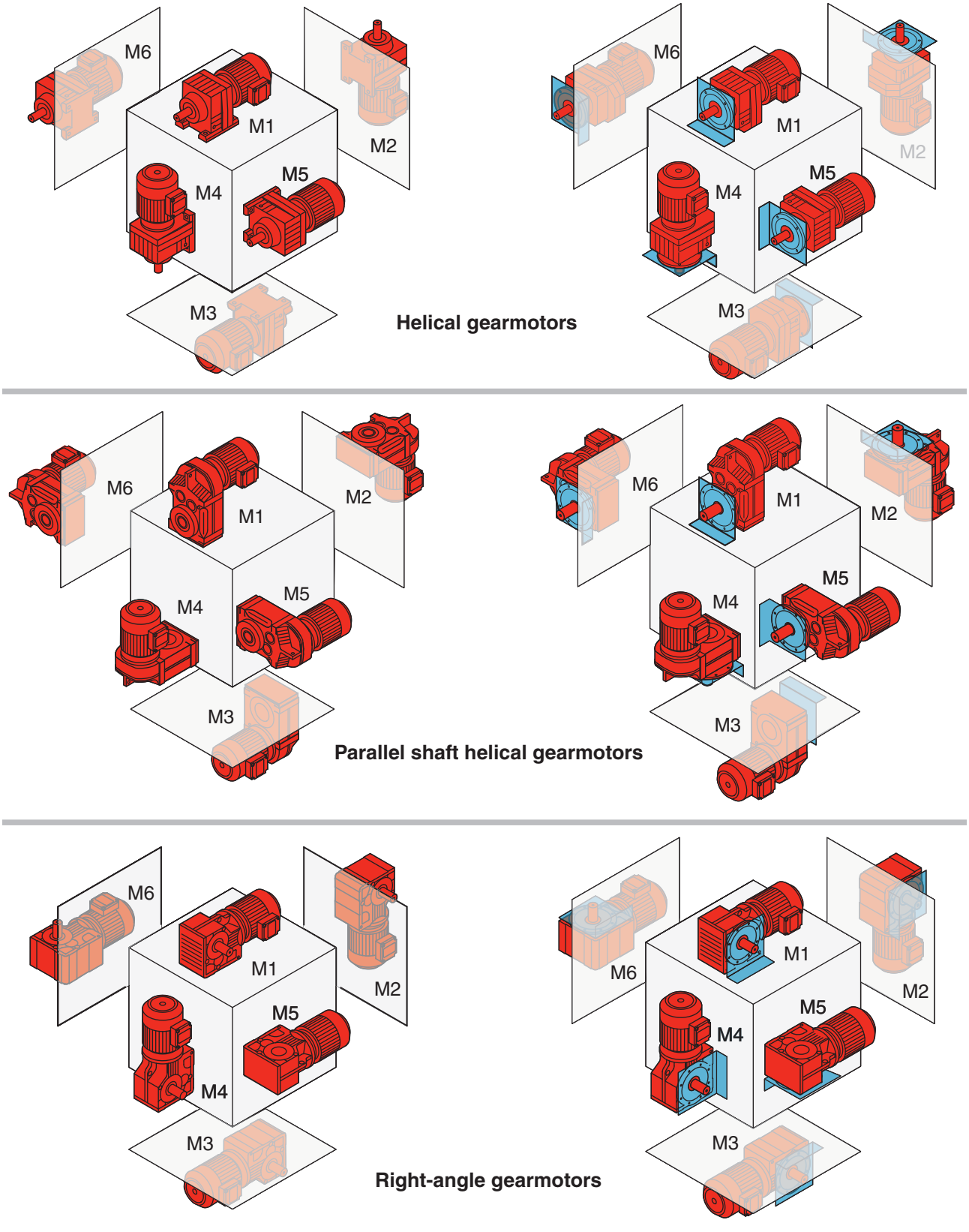
SEW-EURODRIVE offers the DriveConfigurator for the user-friendly selection of drive components. You can enter the necessary data for drive design in an interactive menu to obtain the selected drive.

DR-gearmotor



65870AEN

Overview of mounting positions*



* Refer to the main document for detailed information on mounting positions for SEW gearmotors.

Geometrically possible combinations

R57, n_e = 1400 1/min												450 Nm
n_a [1/min]	M_{amax} [Nm]	F_{Ra} [N]	φ (/R) [']	i	DR63 DRS71S DRS71M	DRS80	DRS90M	DRS90L DRS100M	DRS100LC	DRS132S DRS132M	DRS132MC	
					2							
53	450	4750	6	26.31								
56	450	4640	6	24.99*								
64	450	4370	7	21.93								
75	450	4050	7	18.60*								

Gear unit reduction ratio

No data (-): The reduced backlash (= /R) option is not possible for this i value.
Numerical value given: The reduced backlash (= /R) option is possible; the numerical value specifies the circumferential backlash of the reduced backlash version in angular minutes ['].

Permitted overhung load at maximum output torque (foot-mounted gear unit with solid shaft)

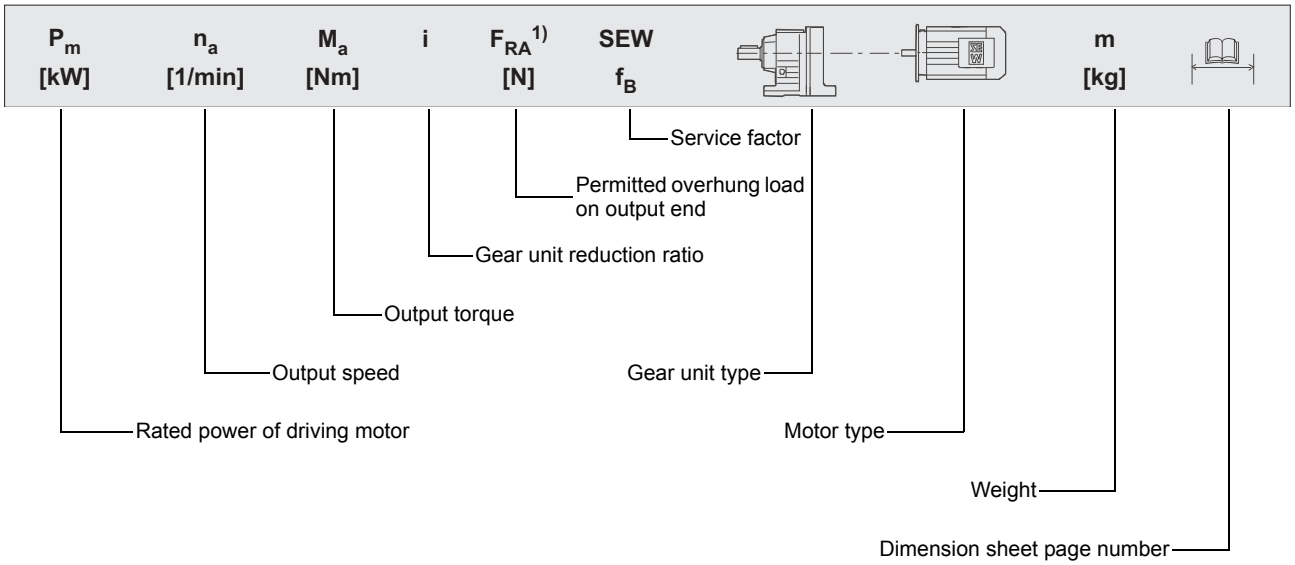
Maximum output torque

Output speed

	Combination with the motor in the header **is possible**.
	Combination with the motor in the header **is not possible**.

Structure of gearmotors selection table

61029AXX



Legend

* Finite gear ratios

1) Overhung load for foot-mounted gear units with solid shaft; overhung loads for other gear unit types upon request

Note

The motor power of drive units for particularly low output speeds (multi-stage geared motors) must be limited in relation to the maximum permissible output torque of the gear unit.



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