3 Overview of Types and Type Designation

3.1 Product variants and options of the gear units

Below an overview of type designations for R, F, K, S, and W gear units and their options.

Helical gear units

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

Parallel shaft helical gear units

Designation	
F..	Foot-mounted
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
FAF..	B5 flange-mounted type, hollow shaft
FHF..	B5 flange-mounted type and hollow shaft with shrink disk
FVF..	B5 flange-mounted type 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 type, hollow shaft
FHZ..	B14 flange-mounted type and hollow shaft with shrink disk
FVZ..	B14 flange-mounted type and hollow shaft with splined hollow shaft to DIN 5480

Helical-bevel gear units

Designation	
K..	Foot-mounted
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
KAF..	B5 flange-mounted type and hollow shaft
KHF..	B5 flange-mounted type and hollow shaft with shrink disk
KVF..	B5 flange-mounted type 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 type and hollow shaft
KHZ..	B14 flange-mounted type and hollow shaft with shrink disk
KVZ..	B14 flange-mounted type and hollow shaft with splined hollow shaft to DIN 5480

Helical-worm gear units

Designation	
S..	Foot-mounted
SF..	B5 flange-mounted
SAF..	B5 flange-mounted 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 and hollow shaft
SHZ..	B14 flange-mounted and hollow shaft with shrink disk

SPIROPLAN® gear units

Designation	
W..	Foot-mounted
WF..	Flange-mounted
WAF..	Flange-mounted type, hollow shaft
WA..	Hollow shaft
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

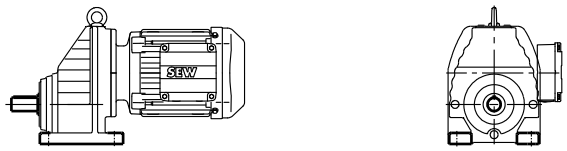
Designation	Option
/DUO	Diagnostic Unit Oil = Oil aging sensor
/DUV	Diagnostic Unit Vibration = Vibration sensor

3.2 Gearmotor variants

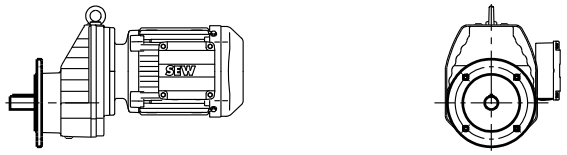
	INFORMATION
	The variants described in this chapter refer to DRL gearmotors from SEW-EURODRIVE. These variants also apply to gear units without motors.

Helical gearmotors

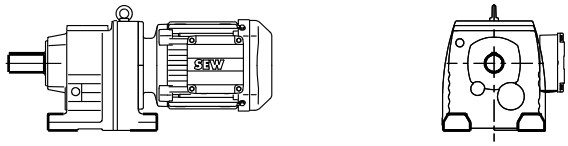
The following types of helical gearmotors are available:



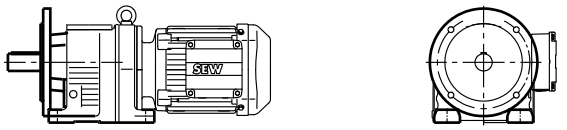
RX..DRL..
Foot-mounted single stage helical gear unit



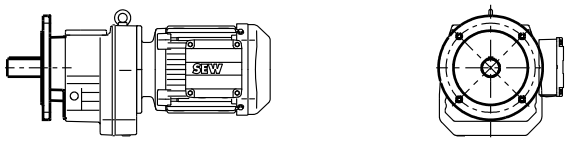
RXF..DRL..
Single-stage helical gearmotor in B5 flange-mounted design



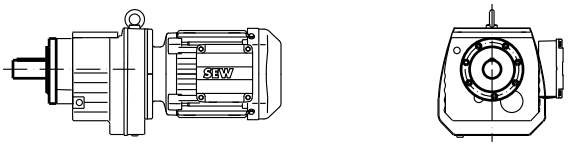
R..DRL..
Foot-mounted helical gearmotor



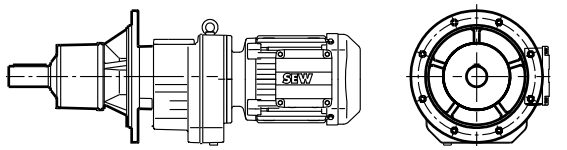
R..F DRL..
Foot and B5 flange-mounted helical gearmotor



RF..DRL..
B5 flange-mounted helical gearmotor



RZ..DRL..
B14 flange-mounted helical gearmotor



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

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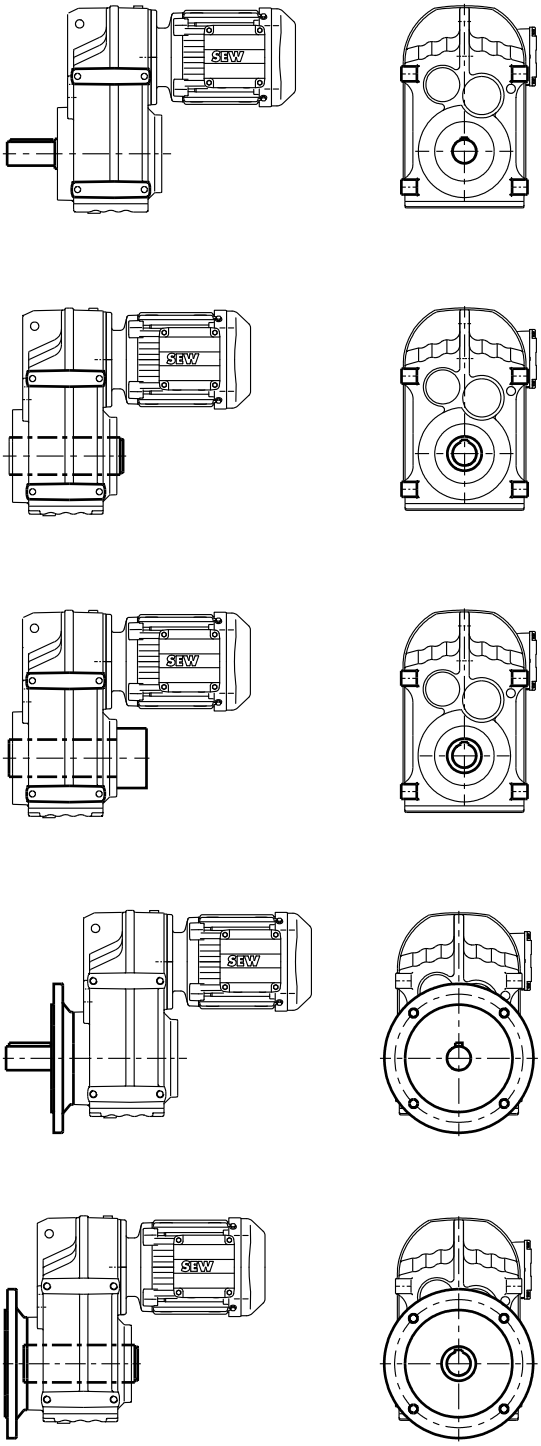
Parallel shaft helical gearmotors

The following types of parallel shaft helical gearmotors are available:



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

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

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

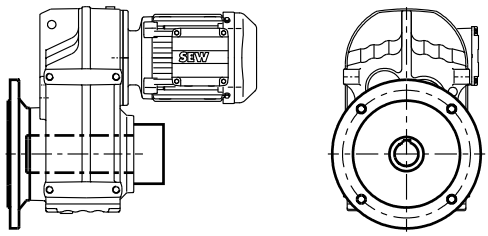
FH..B DRL..
Foot-mounted parallel shaft helical gearmotor with hollow shaft and shrink disk

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

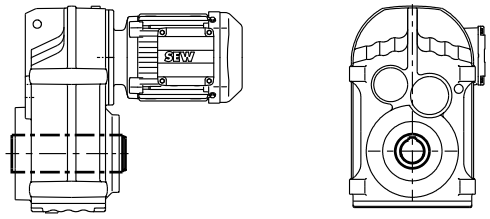
FAF..DRL..
B5 flange-mounted parallel shaft helical gearmotor with hollow shaft

FVF..DRL..
B5 flange-mounted parallel shaft helical gearmotor in B14 with hollow shaft and splining according to DIN 5480

60383AXX

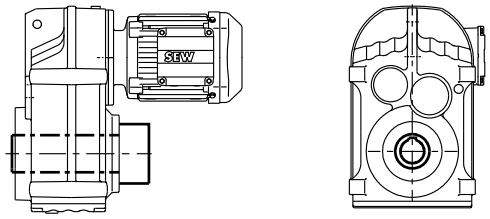


FHF..DRL..
B5 flange-mounted parallel shaft helical gearmotor with hollow shaft and shrink disk



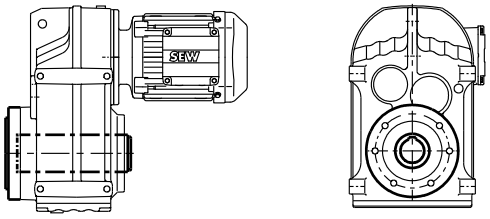
FA..DRL..
Parallel shaft helical gearmotor with hollow shaft

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



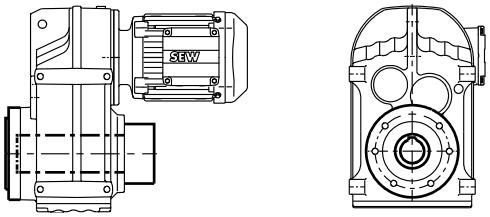
FH..DRL..
Parallel shaft helical gearmotor with hollow shaft and shrink disk

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



FAZ..DRL..
B14 flange-mounted parallel shaft helical gearmotor with hollow shaft

FVZ..DRL..
B14 flange-mounted parallel shaft helical gearmotor in B14 with hollow shaft and splining according to DIN 5480

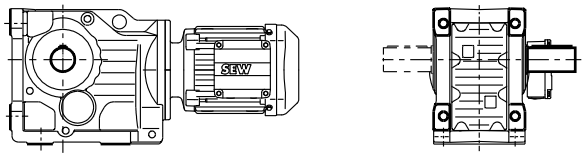


FHZ..DRL..
B14 flange-mounted parallel shaft helical gearmotor with hollow shaft and shrink disk

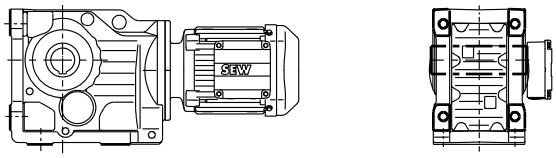
60396AXX

Helical-bevel gearmotors

The following types of helical-bevel gearmotors are available:

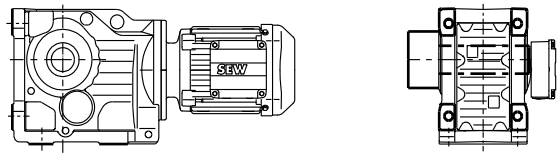


K..DRL..
Foot-mounted helical-bevel gearmotor

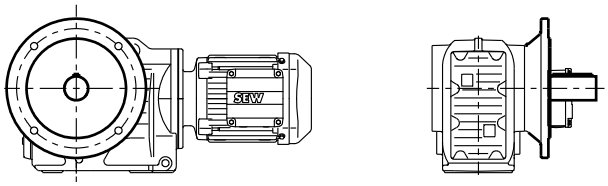


KA..B DRL..
Foot-mounted helical-bevel gearmotor with hollow shaft

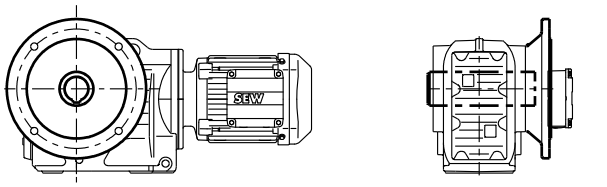
KV..B DRL..
Foot-mounted helical-bevel gearmotor with hollow shaft and splining according to DIN 5480



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



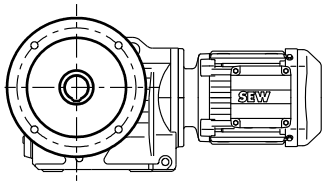
KF..DRL..
B5 flange-mounted helical-bevel gearmotor

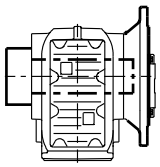


KAF..DRL..
B5 flange-mounted helical-bevel gearmotor with hollow shaft

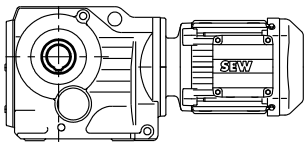
KVF..DRL..
B5 flange-mounted helical-bevel gearmotor with hollow shaft and splined hollow shaft to DIN 5480

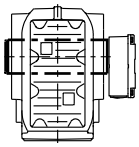
60397AXX





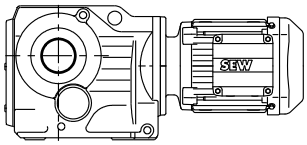
KHF..DRL..
B5 flange-mounted helical-bevel gearmotor with hollow shaft and shrink disk

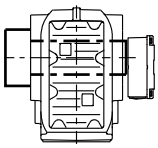




KA..DRL..
Helical-bevel gearmotor with hollow shaft

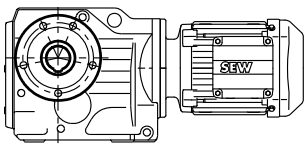
KV..DRL..
Helical-bevel gearmotor with hollow shaft and splined hollow shaft to DIN 5480

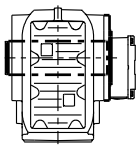




KH..DRL..
Helical-bevel gearmotor with hollow shaft and shrink disk

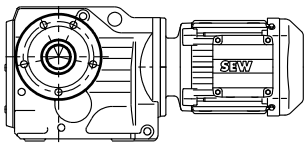
KT..DRL..
Helical-bevel gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system

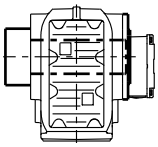




KAZ..DRL..
B14 flange-mounted helical-bevel gearmotor with hollow shaft

KVZ..DRL..
B14 flange-mounted helical-bevel gearmotor with hollow shaft and splined hollow shaft to DIN 5480





KHZ..DRL..
B14 flange-mounted helical-bevel gearmotor with hollow shaft and shrink disk

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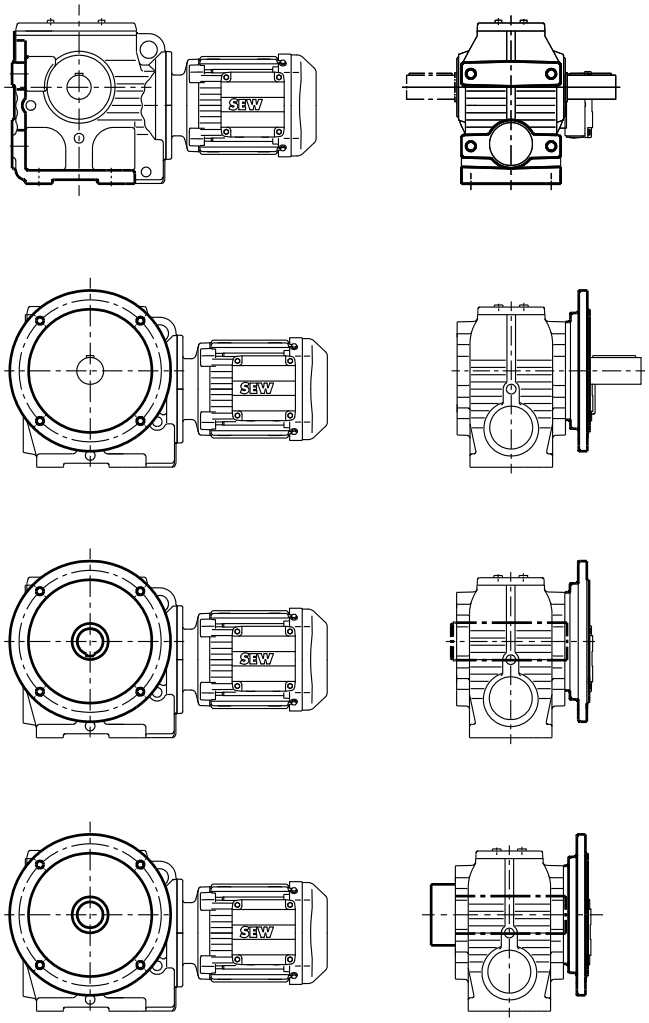
Helical-worm gearmotors

The following types of helical-worm gearmotors are available:



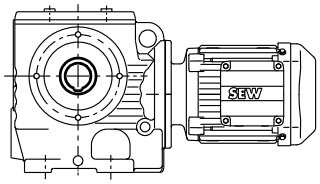
S..DRL..
Foot-mounted helical-worm gearmotor

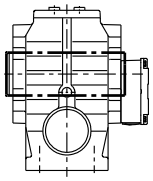
SF..DRL..
B5 flange-mounted helical-worm gearmotor

SAF..DRL..
B5 flange-mounted helical-worm gearmotor with hollow shaft

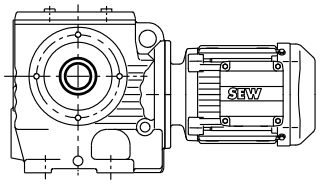
SHF..DRL..
B5 flange-mounted helical-worm gearmotor with hollow shaft and shrink disk

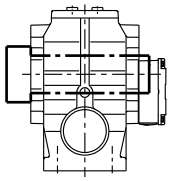
60399AXX





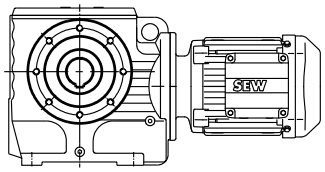
SA..DRL..
Helical-worm gearmotor with hollow shaft

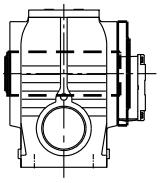




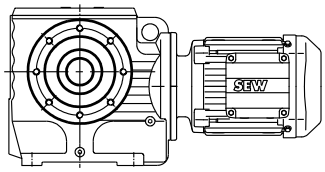
SH..DRL..
Helical-worm gearmotor with hollow shaft and shrink disk

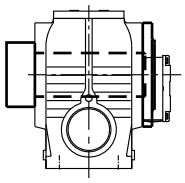
ST..DRL..
Helical-worm gearmotor with hollow shaft and TorqLOC® hollow shaft mounting system





SAZ..DRL..
B14 flange-mounted helical-worm gearmotor with hollow shaft



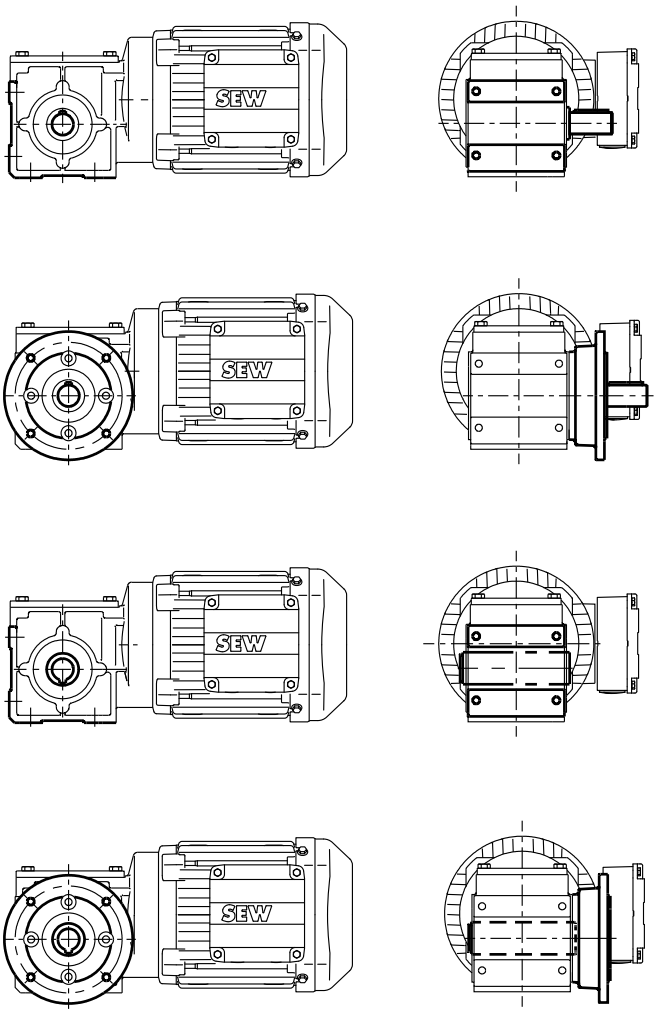


SHZ..DRL..
B14 flange-mounted helical-worm gearmotor with hollow shaft and shrink disk

60400AXX

SPIROPLAN® gearmotors

The following types of SPIROPLAN® gearmotors are available:



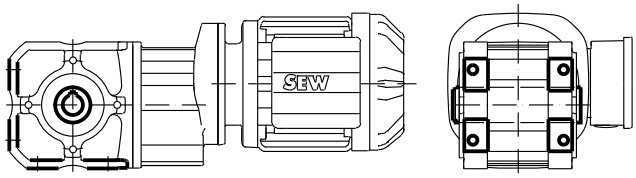
W..DRL..
Foot-mounted SPRIOPLAN® gearmotor

WF..DRL..
Flange-mounted SPIROPLAN® gearmotor

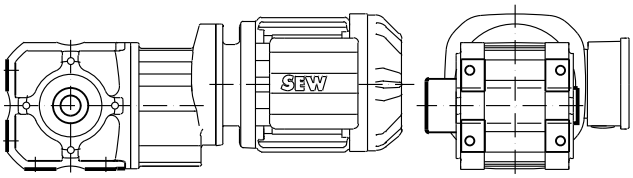
WA..DRL..
SPIROPLAN® gearmotor with hollow shaft

WAF..DRL..
Flange-mounted SPIROPLAN® gearmotor with hollow shaft

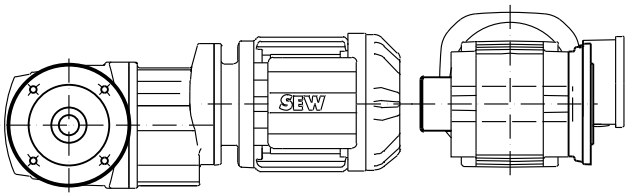
60401AXX



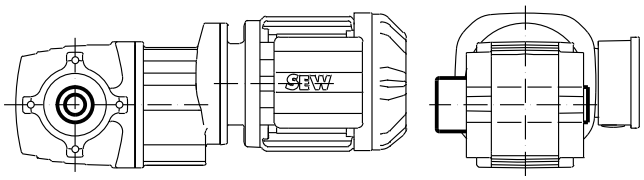
WA..B DRL..
Foot-mounted SPIROPLAN® gearmotor with hollow shaft



WH..B DRL..
Foot-mounted SPIROPLAN® gearmotor with hollow shaft and shrink disk



WHF.. DRL..
Flange-mounted SPIROPLAN® gearmotor with hollow shaft and shrink disk



WH.. DRL..
SPIROPLAN® gearmotor with hollow shaft and shrink disk

WT.. DRL..
SPIROPLAN® gearmotor with hollow shaft and TorqLOC®

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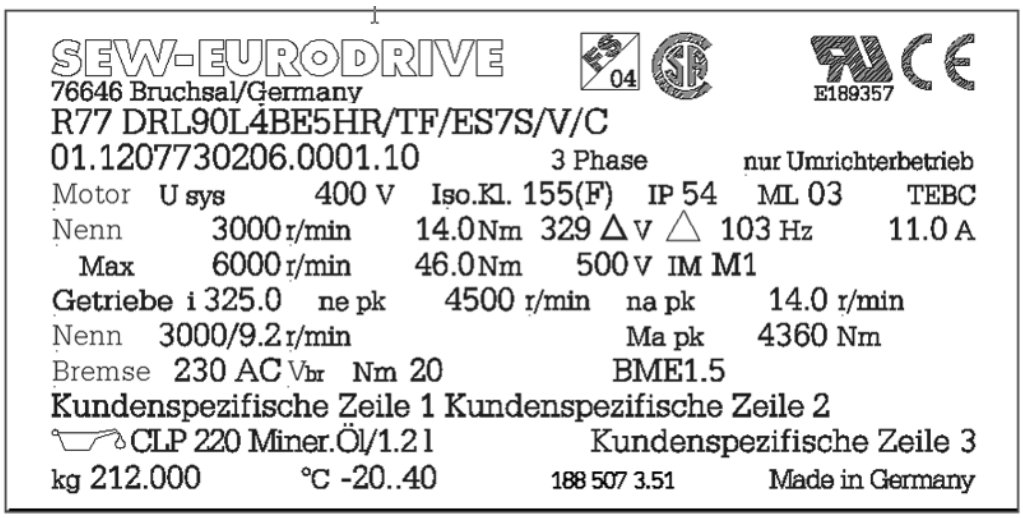
3.3 Motor variants and options

Motor variant	Type designation of the motor variant										
Condition monitoring											
Brake monitoring		/DUB	/DUV								
Ventilation											
Low-noise fan guard	-	/LN									
Fan guard	-	/C	/LF								
Fan	-	/Z	/AL								
Forced cooling fan	-	/V	/VE*	* in preparation							
Connection options											
Connection options	-	/IS	/AB..	/AC..	/AD..	/AK..	/AM..	/AS..	/KCC	/KC1	
Encoder											
Built-in encoder	-		/EI7C	/EI76	/EI72	/EI71					
Encoder	-		/ES7.	/EG7.	/EV7.	/AS7.	/AG7.	/XV..			
Explosion-proof motors											
Explosion protection	-	/3GD*	* in preparation								
Temperature sensor/temperature detection											
Thermal motor protection	-	/TF	/TH								
Temperature detection	-	/KT	/PT								
Output variants											
Output variant	**/FF**	/FG	/FM	/FI*	/FT	/FC	/FE*	/FY*	/FL	/FK*	*= Shaft height
Mechanical attachments											
Backstop	-	/RS									
Manual brake release	-	HF	HR								
Brake	-	BE05	BE1	BE2	BE5	BE11	BE20	BE30	BE32		
Asynchronous servomotor											
Number of poles	**4**										
Length	**S**	M	L	MC	LC						
Size	**100**	71	80	90	100	112	132	160	180	200	225
Type designation	**L**										
Series	**DR**										

Motor variant	Type designation of the motor variant		
Other additional features			
2nd shaft end	-	/2W	
Condensation drain hole	-	/DH	

3.4 Nameplate for servo gearmotors

Example: Nameplate of a servo gearmotor



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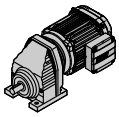
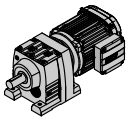
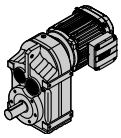
Key

i	Gear unit reduction ratio	n_{epk}	rpm	Maximum permitted input speed
IM	Mounting position	n_{apk}	rpm	Maximum permitted output speed
IP	Degree of protection	M_{apk}	Nm	Max. permitted output torque

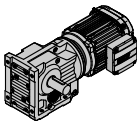
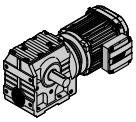
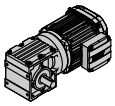
	INFORMATION
	The nameplate of servo gearmotors is fixed to the servomotor!

3.5 Overview of servo gearmotors

Axially parallel gear units

Gear unit type For details, refer to			RX.. page 132	R.. page 156	F.. page 245
Technical data					
Peak torque	M_{apk}	Nm	90 - 690	51 - 21800	130 - 18000
Max. continuous torque	M_{amax}	Nm	63 - 460	50 - 18000	87 - 18000
Max. input speed	n_{epk}	rpm	Up to 4500	Up to 4500	Up to 4500
Peak overhung load	F_{rapk}	N	3940 - 30000	1500 - 120000	4500 - 120000
Gear ratio range	i		1.3 - 6.63	3.21 - 229.71	4.16 - 267.43
Option with reduced backlash	/R		x	x	x
Option with minimized backlash	/M		-	-	-
Mechanical data					
Hollow shaft			-	-	x
Flange-mounting			x	x	x
Foot-mounting			x	x	-
Flange block			-	-	-
B5 flange			x	x	x
B14 flange			-	x	x

Right-angle gear units

Gear unit type For details, refer to			K.. page 344	S.. page 436	W.7 page 464
Technical data					
Peak torque	M_{apk}	Nm	187 - 55600	48 - 655	84 - 215
Max. continuous torque	M_{amax}	Nm	125 - 50000	32 - 480	70 - 180
Max. input speed	n_{epk}	rpm	4500	4500	4500
Peak overhung load	F_{rapk}	N	5140 - 190000	3000 - 9740	1490 - 6990
Gear ratio range	i		3.98 - 179.86	3.97 - 75.06	3.2 - 74.98
Option with reduced backlash	/R		x	x	-
Option with minimized backlash	/M		-	-	-
Mechanical data					
Hollow shaft			x	x	x
Flange-mounting			x	x	x
Foot-mounting			x	x	x
Flange block			-	-	-
B5 flange			x	x	x
B14 flange			x	x	-

For information on all available options and variants, refer to page 22 et seq.