



Catalog



ECDriveS® 24 V Drive System for Roller Conveyors



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1 Introduction

1.1 The SEW-EURODRIVE group of companies

1.1.1 Global presence

Driving the world – with innovative drive solutions for all industries and for every application. Products and systems from SEW-EURODRIVE are used all over the world. Be it in the automotive, building materials, food and beverage, or metal-processing industry – the decision to use drive technology "made by SEW-EURODRIVE" stands for reliable products in regard of functionality and investment.

Products and services from SEW-EURODRIVE are represented in all important industries of our time. We also show this presence with subsidiaries and production plants all over the world, as well as with our service, which we see as an integrative part of our portfolio that extends SEW-EURODRIVE's high quality standards.

1.1.2 Always the right drive solution

With the broad product portfolio from SEW-EURODRIVE, which also includes mechatronic drive units, frequency inverters, controllers, software and communication in addition to the tried-and-tested modular system for gearmotors, it is possible to implement the perfect drive solution for every application.

Gear units and motors

Thanks to the modular system, gearmotors can be combined individually according to the required speed and torque ranges, the space requirements and the ambient conditions. Gear units and gearmotors offering a unique and finely tuned performance range and the best economic prerequisites to face any drive challenge.

Motors by SEW-EURODRIVE can be mounted directly or via adapter to SEW-EURODRIVE gear units. They meet all worldwide requirements regarding energy efficiency and technical regulations. A wide range of options and accessories ensures high flexibility for adjusting the motor to the requirements of the user and the application.

Inverters

The proven inverter series MOVITRAC®, MOVIDRIVE® and MOVIAXIS® enhance the gearmotors, forming a combination that blends in perfectly with the existing SEW-EURODRIVE systems program.

Modular automation system

With its brand MOVI-C®, SEW-EURODRIVE launches a new generation of drive and automation technology. MOVI-C® is the modular automation system that allows for the highest level of system and machine automation. It comprises drive technology, MotionControl, control technology and visualization.

MOVIDRIVE® modular is the modular application inverter for all types of applications, ranging from simple open-loop speed control to servo drives with kinematic model. MOVIDRIVE® modular can be supplemented by connecting MOVIDRIVE® system single-axis units. These possess functionalities comparable to those of axis modules, but have their own line connection. Especially in the upper power range, MOVIDRIVE® system complements the modular application inverter.

MOVIDRIVE® modular and system are intended for operation at the MOVI-C® CONTROLLER, the controller from SEW-EURODRIVE. They offer a powerful clock-synchronous connection via the integrated EtherCAT®/SBus^{PLUS} communication interface. Other EtherCAT® stations from SEW-EURODRIVE or other manufacturers can be controlled and diagnosed by the MOVI-C® CONTROLLER.

The MOVISUITE® engineering software, with its unique operating philosophy, prevails over all MOVI-C® hardware and software components. MOVISUITE® was developed with a focus on systematically shortening the startup time and covers the entire engineering process, from planning to diagnostics.

Decentralized drive technology

For economical, decentralized installations, SEW-EURODRIVE offers decentralized drive technology components, 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 decentralized drive technology portfolio is complemented by the DRC.. electronic motor, MOVIGEAR® mechatronic drive system, MOVIFIT® decentralized drive controller, MOVIPRO® decentralized drive, positioning, and application controller, as well as MOVITRANS® system components for contactless energy transfer.

The smart energy management system MOVI-DPS® enhances the modular product portfolio from SEW-EURODRIVE. With MOVI-DPS®, SEW-EURODRIVE offers the perfect combination: Conserving resources. Reducing costs.

MOVI-DPS® allows for stable power grids, no power failures, and consequently reliable system availability. MOVI-DPS® shows what it can do in both mobile and stationary applications. In addition, MOVI-DPS® can be combined with other systems such as the contactless energy transfer system MOVITRANS®, resulting in further important synergy effects.

Industrial gear units

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.

Individual system solutions with MAXOLUTION®

MAXOLUTION® from SEW-EURODRIVE provides individual application solutions in all areas of system and machine automation. From electromechanical drives, controllers and communication to visualization and the contactless energy transfer system MOVITRANS® up to a comprehensive service portfolio, MAXOLUTION® offers all modules required to design customer-specific solutions for machines and systems.

MAXOLUTION® combines individual products of the proven modular system with innovative system components to form individual solutions that perfectly match the requirements of the specific application – "powered by SEW-EURODRIVE".

Safe – flexible – effective: safetyDRIVE

Guaranteeing the safety of all employees and preventing work accidents while ensuring trouble-free production processes are demands placed on all production areas. safetyDRIVE, the comprehensive safety concept, allows you to implement your machines "safely," in accordance with the currently valid guidelines. With controllers that meet the respective requirement of the safety categories or the performance levels and that monitor instead of switch off.

All of our drive and frequency inverters provide the function that safely stops the electrical power to the motor (STO). The MOVISAFE® components complete the portfolio – integrated into the inverter as option cards DFS..B or DCS..B or modular as safety monitors UCS..B. The decentralized MOVIFIT® and MOVIPRO® drive technologies with integrated safety functions are ready for use in decentralized installations.

The functionally safe motor options allow for implementing safety functions in safety-related applications. Safety encoders are used to implement safety functions with respect to speed, direction of rotation, standstill, and relative position. Safety brakes can implement safety functions with respect to decelerating and stopping.

1.1.3 Your ideal partner

Its global presence, extensive product portfolio 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 drive tasks in all industries and applications.

For detailed information on the entire SEW-EURODRIVE product portfolio, refer to our website www.sew-eurodrive.com where you can find out about components, system solutions, services and industries. Via the Online Support, you can access a large selection of documents and tools such as the product configurator and different selection guides as well as all documentation in different languages for download.

1.2 Product names and trademarks

All product names included in this documentation are trademarks or registered trademarks of the respective titleholders.

1.3 Copyright notice

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2 System description

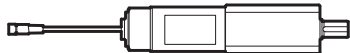
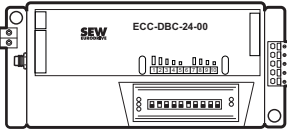
2.1 Characteristics and features

The ECDriveS® 24 V drive system by SEW-EURODRIVE consists of a brushless DC motor that can be directly integrated into a conveyor roller, or be universally used as gearmotor.

The drive is controlled by remote commutation electronics with Ethernet-based zone control or binary control.

The Ethernet control is characterized by an integrated conveyor logic capable of decentralized implementation of zero pressure accumulation and many other handling tasks.

Thanks to the integrated encoder, precise load-independent ramps and exact positioning of the conveyed material are possible.

Components of the ECDriveS® modular system		
ECDriveS® roller drive ECR		
ECDriveS® gearmotor ECG		
ECDriveS® control ECC	ECC-DBC (direct binary control)	
	ECC-DFC (direct fieldbus control)	

2.1.1 General ECDriveS® features

ECR roller drive

2

	Designation	
	Type:	ECDriveS® ECR roller drive
	Voltage:	DC 24 V
	Power:	40 W
	Conveying speed:	2.0 – 300 m/min

- Conveyor roller with integrated brushless 24 V motor
- 40 W continuous power with an overload capacity of 240%
- High mechanical stability through planet carrier with support on both sides
- Integrated Hall-effect motor encoder for simple positioning tasks
- Electronic holding brake with position hold control for slopes or lifting applications
- Electronic nameplate for automatic startup
- Remote commutation electronics with energy management system
 - Maximum system efficiency due to energy recovery during braking
 - Dissipation of regenerative energy if no consumer is available
- Low noise level < 50 dB (A) due to integrated damping elements (depending on the installation situation)
- Tube material: Galvanized steel or stainless steel
- Maximum roller length: 1500 mm (greater lengths available upon request)
- Motor connection: robust standard connector M8 (4 pins) with 1 m cable

ECG gearmotor

	Designation	
	Type:	ECDriveS® ECG gearmotor
	Voltage:	DC 24 V
	Power:	40 W
	Rotational speed:	8.5 – 529 min ⁻¹

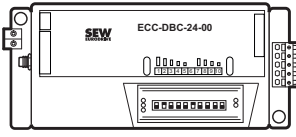
- Gearmotor with integrated brushless 24 V motor
- 40 W continuous power with an overload capacity of 240%
- High mechanical stability through planet carrier with support on both sides
- Integrated Hall-effect motor encoder for positioning tasks
- Electronic holding brake with position hold control for slopes or lifting applications
- Electronic nameplate for automatic startup
- Remote commutation electronics
- Motor connection: robust standard connector M8 (4 pins) with 1 m cable

ECC-DFC fieldbus control

	Designation	
	Type:	ECDriveS® ECC-DFC-24-00 fieldbus control
	Voltage:	DC 24 V
	Rated output power:	80 W
	Current:	5 A

- Remote motor commutation electronics with conveyor logic
- 2 zones Ethernet controller with 3 operating modes
 - ZPA mode for autonomous operation
 - PLC mode for operation at a PLC
 - Binary mode
- Interfaces: 2 × motor connection, 2 × sensor connection (can be expanded to 4)
- Communication: PROFINET IO, EtherNet/IP™, Modbus TCP
- Parameterization via the ECShell engineering software or the fieldbus master
- Parameterization of speeds, directions of rotation, brake and acceleration ramps, sensor-based positioning, timer
- Operation with protective extra-low voltage
- Integrated logic functions for zero pressure accumulation conveying (ZPA mode)
 - Individual discharge, block discharge, block-gap discharge
 - Auto configuration of the conveyor line with automatic address assignment
 - Automatic sensor detection
 - Automatic drive startup
 - 2 additional inputs/outputs that can be configured as required (for wake up signal, lane full signal etc.)
 - Configuration of T connections
 - Traffic recognition
 - Graphical representation of the transport state and drive diagnostics via the ECShell engineering software
 - Flexible zone length by automatically interconnecting several zones
 - Conveyor line starts when the material to be conveyed touches it

ECC-DBC binary control

	Designation	
	Type:	ECDriveS® ECC-DBC-24-00 binary control
	Voltage:	DC 24 V
	Rated output power:	40 W
	Current:	2.5 A

- Remote motor commutation electronics without conveyor logic
- 32 speed levels can be set via DIP switch
- 16 braking and acceleration times can be set via DIP switch
- 3 speed levels can be selected via digital input or DIP switch
- Reversal of direction of rotation via digital input or DIP switch
- Short circuit brake for the drive (short circuit of the motor winding)
- Speed control for constant conveying speed

2.2 Product features

2.2.1 Power and torque

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

2.2.2 Mounting positions of the gearmotor

In general, only mounting positions M1, M3, M5 and M6 are approved. Contact SEW-EURODRIVE when using the ECG gearmotor in mounting position M2 or M4.

2.2.3 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 applies to an installation altitude of maximum 1000 m above sea level. Installation altitudes > 1000 m asl must be taken into account for project planning of gear units and gearmotors.

2.2.4 Tube cover

As an option for increasing the friction coefficient and/or for reducing the noise, SEW-EURODRIVE offers the following tube covers:

- PVC hose 2 mm with 66 Shore A hardness
- PU hose 2 mm with 80 Shore A hardness

For smooth tubes or tubes with Poly-V transmission head, the hose length corresponds to the length of the tube. With grooved tubes, the hose ends before the first groove. Other hose lengths or a cut hose are available on request. A customer drawing including the respective measurement is required for the order.

2.2.5 Conical elements

SEW-EURODRIVE delivers conical rollers with an installation angle of 1.8° for curves. For the conical drive rollers, plastic elements are pressed onto the standard drive rollers. The conical elements are available in 50 mm steps up to a length of 900 mm. If not specified otherwise, the outer element with the largest radius is installed to be flush with the roller base on the motor side. The transmission head of the roller is located at the inner radius.

2.2.6 Special groove position

In addition to transmission head option G1, grooved tubes with differing groove positions can be delivered. Contact SEW-EURODRIVE for possible groove positions. The minimum distance between 2 grooves is 23 mm. Specify the distance of the grooves from the conveyor frame in the order.

Examples for order details:

- GX transmission head: A = 55 mm from conveyor frame
- GX transmission head: A = 55 mm, B = 77 mm from conveyor frame

2.3 Type code

2.3.1 Type code ECR roller drive

Example: ECR-A2M-50-450-045-Z-A-V1		
Product family	EC	EC = ECDriveS® device family
Product type	R	R = Roller
Design	A	- A = IP54 degree of protection (standard) - W = IP66 degree of protection (wet area application) - Z = Operation up to -30 °C (deep-freezing application)
Voltage	2	2 = 24 V
Motor connection	M	Motor cable M8, 1000 mm
Roller diameter	50	50 = 50 mm 48 = 48.6 mm¹⁾
Length between frames	450	Roller length in mm
Speed class	045	Speed in m/min 015 020 025 035 045 060 075 095 125 175 215
Tube options	Z	- Z = Galvanized steel (standard) - J = Stainless design - U = PUR coating 2 mm - P = PVC hose 2 mm - K = Cone 1.8° on galvanized steel - C = Cone 1.8° on steel in stainless steel design - D = PVC hose on steel in stainless steel design - E = PUR hose on steel in stainless steel design - X = Special design
Axis design	A	- A = - Cable side: M12×1.25 on 11 mm hexagon - Opposite side: M8 female thread - B = - Cable side: M12×1.25 on 11 mm hexagon - On the opposite side: Smooth 11 mm spring-loaded hexagon axis
Transmission heads	V1	- A0 = Smooth tube without groove or drive head - V1 = Drive head for Poly-V-belt in shape PJ according to DIN 7867 - G0 = Tube with groove head - G1 = Grooved tube with groove position 50/80 - GX = Grooved tube with special groove position

1) Only available in the USA (1.9 inch).

2.3.2 Type code ECG gearmotor

Example: ECG-A2M-67-A-K0		
Product family	EC	EC = ECDriveS® device family
Product type	G	G = Gearmotor
Design	A	A = IP54 degree of protection
Voltage	2	2 = 24 V
Motor options	M	M8 plug connector
Gear unit ratio	67	Gear ratio i: • 67 • 45 • 33 • 27 • 18 • 15 • 11 • 9
Version	A	A = Standard mounting 4xM5x7
Output shaft	K0	K = Key
	X	Special design

2.3.3 Type designation of the controls

- ECC-DBC-24-00: Binary control
- ECC-DFC-24-00: Fieldbus controller

2.3.4 Type designation fastening kit

Option	Designation	Description
Fastening/anti-twist protection for straight roller	ECF-30H-V-N-ST	Hexagonal tip pointing upwards
	ECF-30H-Z-N-ST	Hexagonal flat side pointing upwards
Fastening/anti-twist protection for conical rollers with installation angle 1.8°	ECF-K-30H-V-N-ST	Conical roller, hexagonal tip pointing upwards
	ECF-K-30H-Z-N-ST	Conical roller, hexagonal flat side pointing upwards

The fastening kits are recommended for large gear ratios to ensure secure torque transmission or allow for a rapid exchange with as little force as possible.

INFORMATION



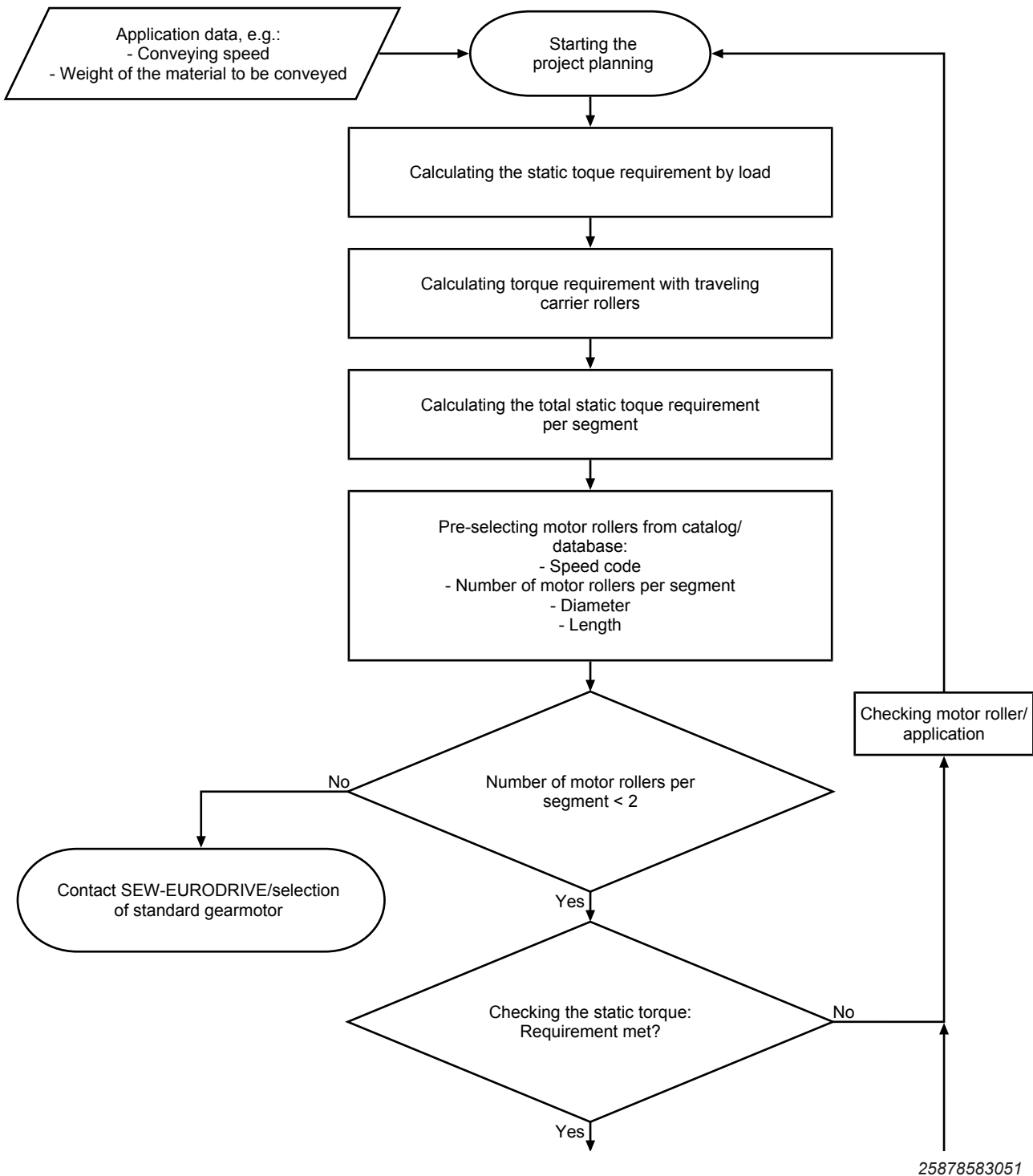
Design Z or V are selected according to the position of the hexagonal hole in the pre-punched conveyor frame.

3 Project planning for ECDriveS®

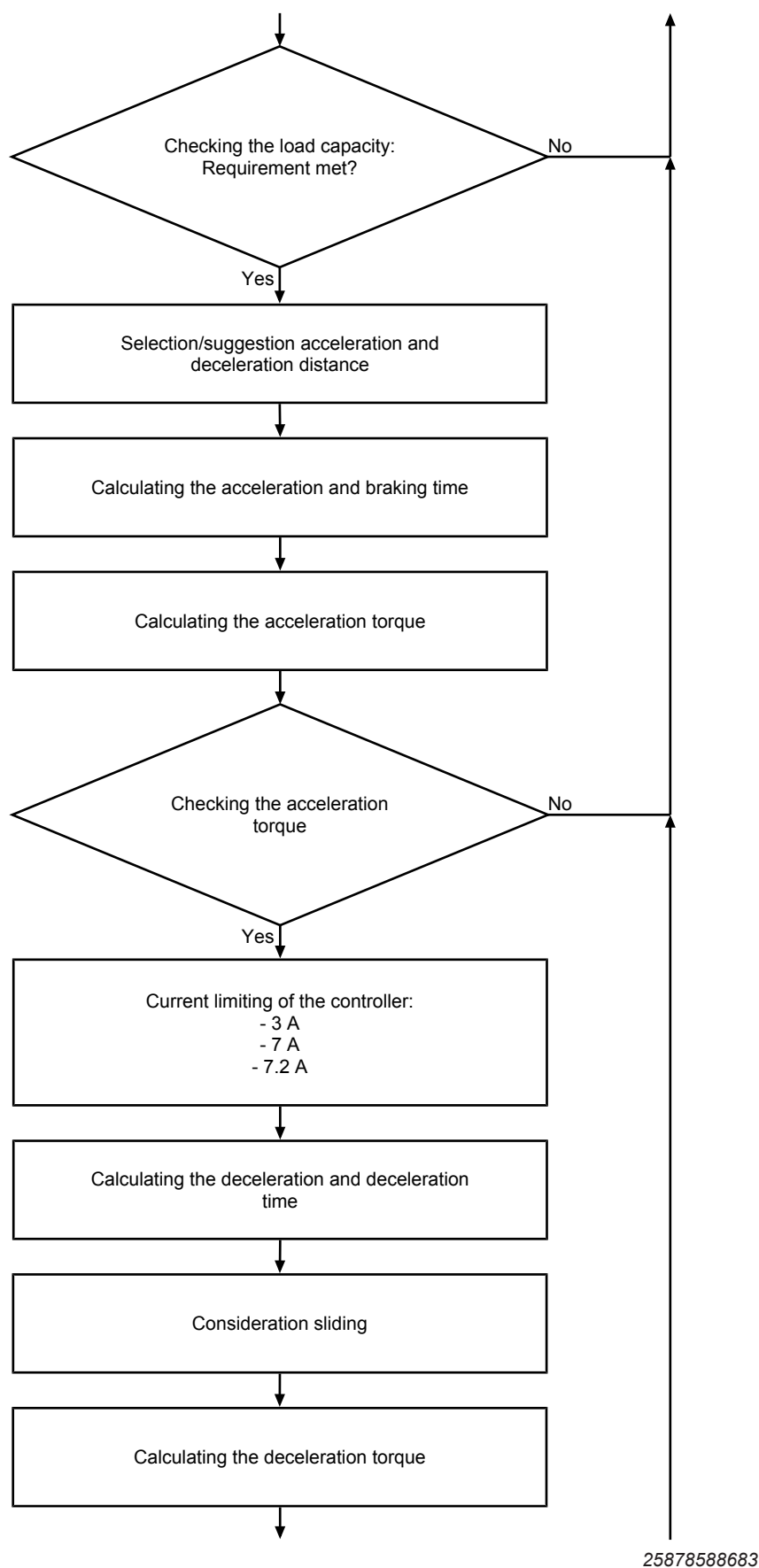
Contact SEW-EURODRIVE if you need assistance with calculating the individual values.

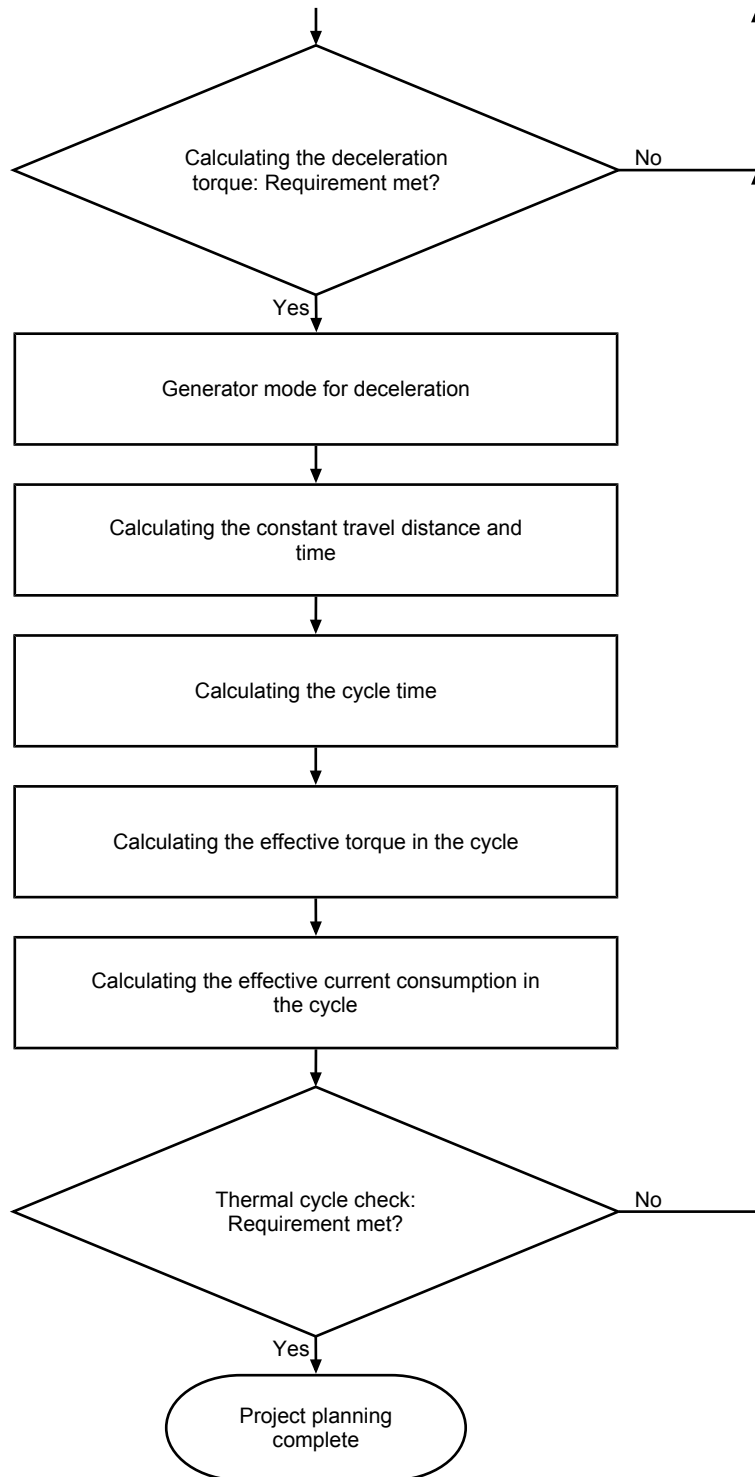
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3.1 Project planning procedure ECR roller drive

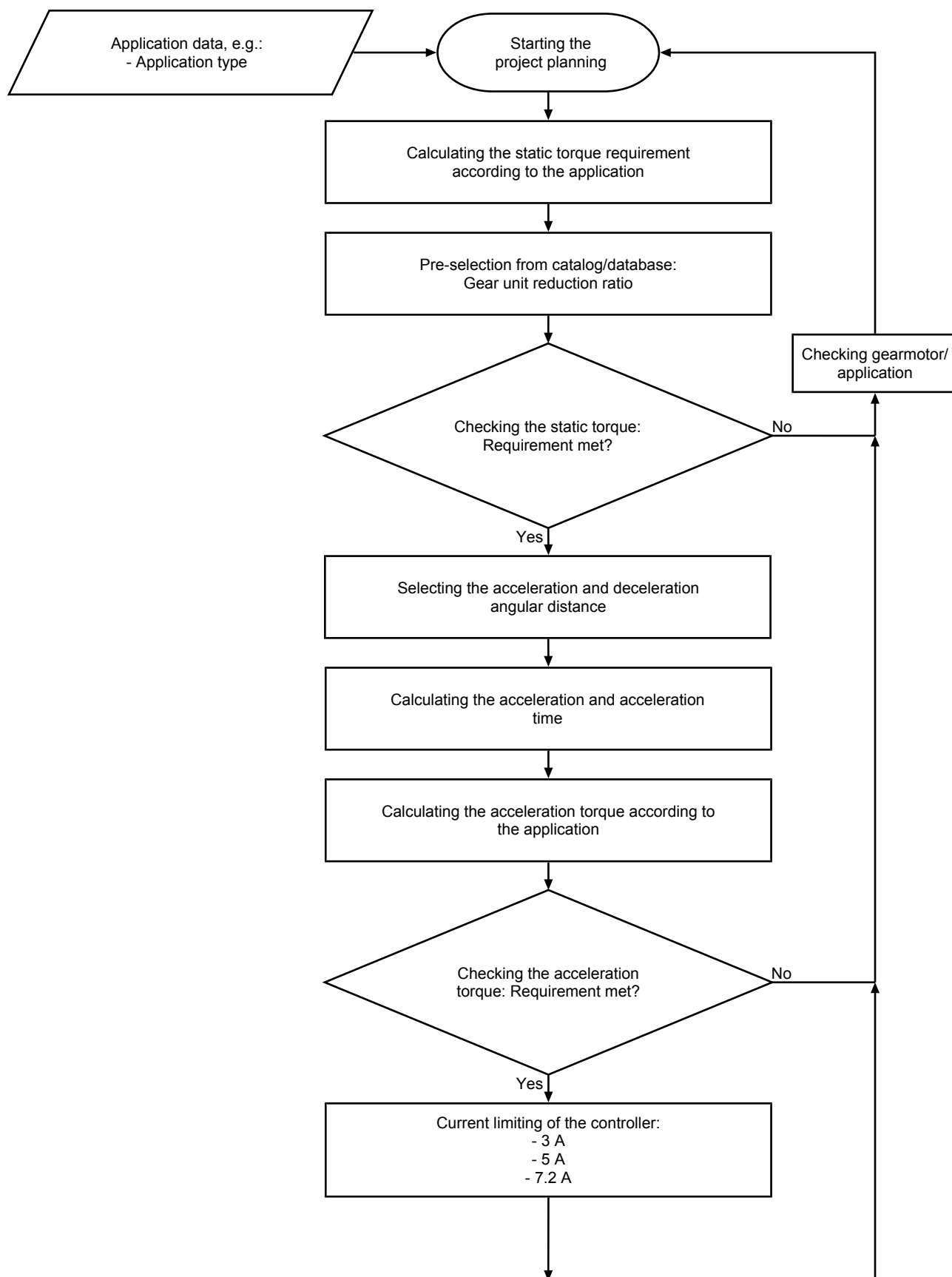


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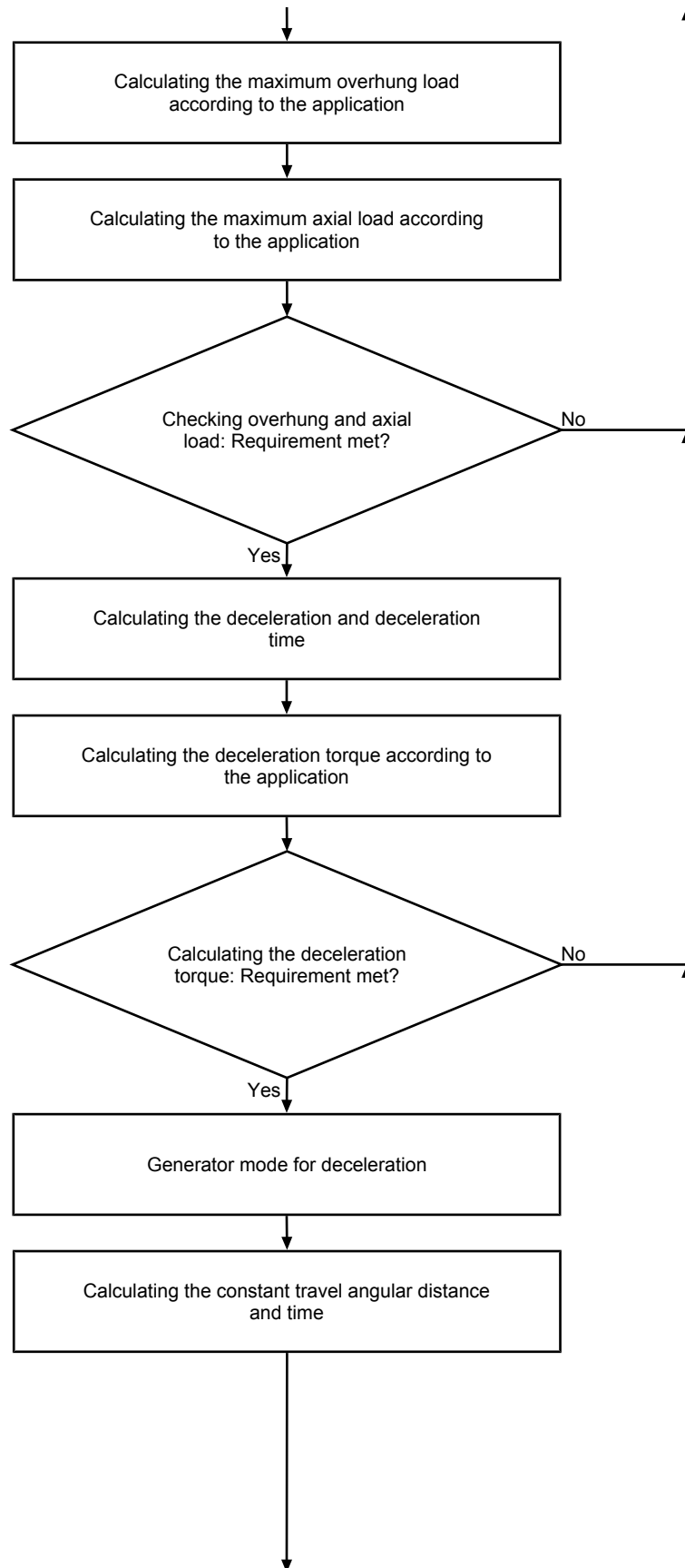


3.2 Project planning procedure ECG gearmotor

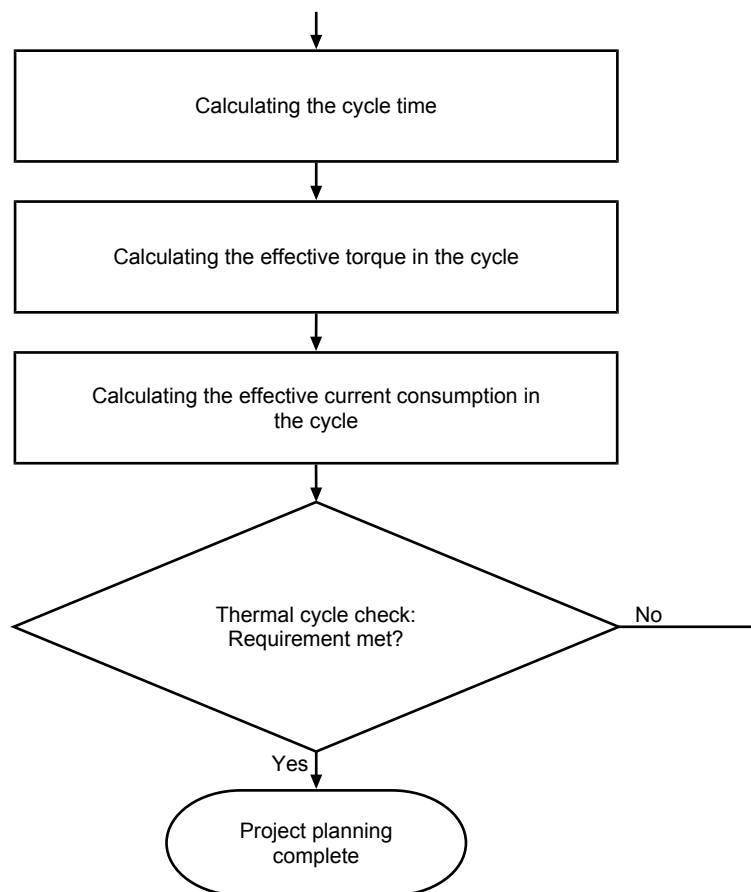


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4 Technical data of the ECR roller drive

4.1 Electrical data

	ECR-A2M-..
Voltage:	DC 24 V
Nominal mechanical output power at 25 °C:	40 W
Nominal current:	2.5 A
Maximum overload capacity:	240% for max. 60 s
Ambient temperatures:	-10 °C – 40 °C
Humidity:	10 to 90%, not condensing
Degree of protection:	IP54, optional IP66
Maximum motor cable length:	5 m ¹⁾

1) Derating: 1 W per m, from 2 m cable length at nominal load

4.2 Minimum installation length of the rollers (BF)

Tube diameter	Speed class	Transmission head options			
		Smooth tube	Poly V	Grooved head	Grooves ¹⁾
		A0	V1	G0	G1
		Minimum roller length (RL) in mm			
50 mm	15, 20, 25	310	335	333	346
	35, 45, 60, 75	286	311	309	322
	95, 125, 175, 215	259	284	282	295

1) Position of the grooves at 50 mm and 80 mm

On request, a shortened design with single-row ball bearings instead of double ball bearings is available for designs A0 and G1 with axis option A. The minimum installation length of the shortened design is reduced by 26 mm for A0 and 20 mm for G1.

4.3 Minimum roller length for wet area design

Tube diameter	Speed class	Transmission head options			
		Smooth tube	Poly V	Grooved head	Grooved tube ¹⁾
		A0	V1	G0	G1
		Minimum roller length (RL) in mm			
50 mm	15, 20, 25	281	351	–	363
	35, 45, 60, 75	309	327	–	339
	95, 125, 175, 215	333	299	–	311

1) Position of the grooves at 50 mm and 80 mm

4 Technical data of the ECR roller drive

Wall thickness of the tubes

4.4 Wall thickness of the tubes

The wall thickness of the tubes is 1.5 mm.

4.5 Permitted load capacity of the tubes

Diameter	Roller length (RL) in mm					
	300	400	500	600	700	800
	Load capacity in kg					
50 mm	80	70	60	55	50	45

Diameter	Roller length (RL) in mm					
	900	1000	1100	1200	1300	1500
	Load capacity in kg					
50 mm	40	35	25	17	12	7

The listed permitted load capacities refer to the point load and not the surface load as point load is the more critical case. The maximum tube bending must not exceed 0.55 mm as otherwise the ball bearings may be damaged.

4.6 Weight

Diameter	Speed class	Roller length (RL) in mm					
		300	400	500	600	700	800
		Weight in kg					
50 mm	15, 20, 25	2.0	2.2	2.4	2.5	2.7	2.9
	35, 45, 60, 75	1.8	2.0	2.2	2.4	2.5	2.7
	95, 125, 175, 215	1.7	1.9	2.0	2.2	2.4	2.4

Diameter	Speed class	Roller length (RL) in mm					
		900	1000	1100	1200	1300	1500
		Weight in kg					
50 mm	15, 20, 25	3.0	3.2	3.3	3.4	3.6	3.8
	35, 45, 60, 75	2.9	3.0	3.1	3.2	3.4	3.6
	95, 125, 175, 215	2.7	2.9	3.0	3.1	3.3	3.5

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4.7 Deep-freezing design /Z

	Designation
Degree of protection	IP54
Ambient temperature	-30 °C, not suited for condensing temperature changes
Tube material	Bright steel, galvanized steel, stainless steel (material number: 1.4307, X2CrNi18-9)
Roller plate material	Aluminum
Minimum roller length	Depends on design, for details see table
Maximum roller length	1500 mm, greater lengths available upon request

For all kinds of deep-freezing applications, contact the technical support of SEW-EURODRIVE for consultation and approval.

4.8 Selection table ECR roller drive

The speed and tangential force values refer to a motor roller with a diameter of 50 mm.

Speed class	Speed m/min	Number of gear unit stages	i	M _a Nm	M _{a_pk} Nm	M _H Nm	M _{Hpk} Nm
15	2.0 – 20.3	3-stage	45	2.67	6.41	5.85	7.70
20	2.7 – 27.7		33	1.96	4.70	4.29	5.64
25	3.4 – 33.8		27	1.60	3.84	3.51	4.62
35	4.9 – 49.9	2-stage	18.33	1.21	2.90	2.39	3.14
45	6.0 – 60.8		15	0.99	2.38	1.95	2.57
60	8.2 – 83.1		11	0.72	1.73	1.43	1.88
75	10.1 – 101.4		9	0.59	1.42	1.17	1.54
95	13.3 – 133.8	1-stage	6.82	0.50	1.20	0.89	1.17
125	18.1 – 182.5		5	0.37	0.89	0.65	0.86
175	24.7 – 249.3		3.66	0.26	0.62	0.48	0.63
215	30.2 – 304.1		3	0.22	0.53	0.39	0.51

i Gear unit ratio

M_a Maximum permitted output torque for continuous duty

M_{a_pk} Maximum permitted output torque for short-time duty, maximum of 1 min at 30% cyclic duration factor

M_H Maximum permitted holding torque for continuous duty

M_{Hpk} Maximum permitted holding torque for short-time duty, maximum of 10 min at 50% cyclic duration factor

The torques listed in the table refer to a maximum ambient temperature of 40 °C, higher ambient temperatures lead to reduced power output. The drive is protected from overheating by a thermistor installed in the motor. The actual current profile depends on the application and the mechanical construction of the conveyor.

The increased short-term torque is only supported by the ECC-DFC fieldbus controller.

5 Technical data of the ECG gearmotor

5.1 Electrical data

	ECG-A2M-..
Voltage:	DC 24 V
Nominal mechanical output power at 25 °C:	40 W
Nominal current:	2.5 A
Maximum overload capacity:	240% for max. 60 s
Ambient temperatures:	-10 °C – 40 °C
Humidity:	10 to 90%, not condensing
Degree of protection:	IP54, optional IP66
Maximum motor cable length:	5 m ¹⁾

1) Derating: 1 W per m, from 2 m cable length at nominal load

5.2 Weight

Gear unit	Gear ratio	Weight in kg
3-stage	67, 45, 33, 27	1.5
2-stage	18, 15, 11, 9	1.2

5.3 Pulses per revolution

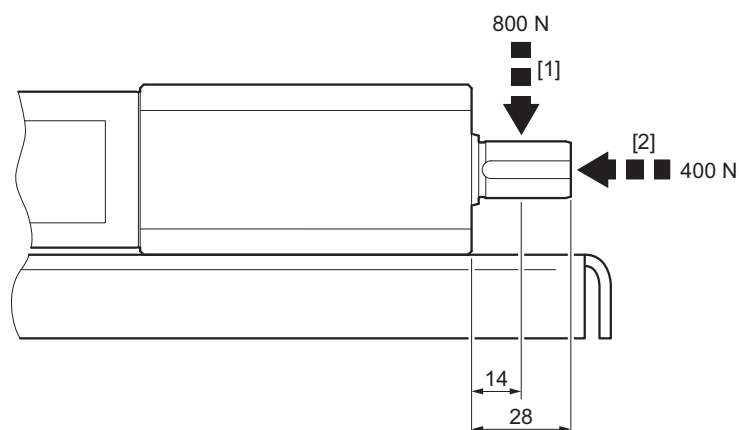
Nominal gear ratio	Real gear ratio	Pulses per revolution	Gear unit backlash in degrees
67	67.22 ¹⁾	2009	4.8
45	45.00	1350	5.1
33	32.94	988	5.1
27	27.00	810	5.1
18	18.33 ¹⁾	549	4.5
15	15.00	450	4.7
11	10.98	329	4.7
9	9.00	270	4.7

1) Infinite gear unit ratio (67.22 = 67 2/9, 18.33 = 18 1/3)

5 Technical data of the ECG gearmotor

Permitted overhung loads and axial forces

5.4 Permitted overhung loads and axial forces



19516385419

- [1] Overhung load: $F_{R_a_max}$
- [2] Axial load: $F_{A_a_max}$

5.5 Mass moment of inertia motor

The motor's mass moment of inertia is: $0.05 J_{Mot}$ in 10^{-4} kgm^2

5.6 Selection table ECG gearmotor

i	Number of gear unit stages	Rotational speed min ⁻¹	M _a Nm	M _{a_pk} Nm	M _H Nm	M _{Hpk} Nm
67.22 ¹⁾	3-stage	8.5 – 86.7	3.98	9.55	8.72	11.46
45.00		12.8 – 129.0	2.67	6.41	5.85	7.70
33.00		17.4 – 176.3	1.96	4.70	4.29	5.64
27.00		21.3 – 215.1	1.60	3.84	3.51	4.62
18.33 ¹⁾	2-stage	31.4 – 317.3	1.21	2.90	2.39	3.14
15.00		38.4 – 387.2	0.99	2.38	1.95	2.57
11.00		52.4 – 528.9	0.72	1.73	1.43	1.88
9.00		64.0 – 645.3	0.59	1.42	1.17	1.54

1) Infinite gear unit ratio (67.22 = 67 2/9, 18.33 = 18 1/3)

i Gear unit ratio

M_a Maximum permitted output torque for continuous duty

M_{a_pk} Maximum permitted output torque for short-time duty, maximum of 1 min at 30% cyclic duration factor

M_H Maximum permitted holding torque for continuous duty

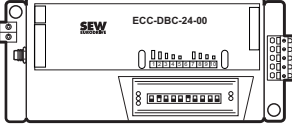
M_{Hpk} Maximum permitted holding torque for short-time duty, maximum of 10 min at 50% cyclic duration factor

The torques listed in the table refer to a maximum ambient temperature of 40 °C, higher ambient temperatures lead to reduced power output. The drive is protected from overheating by a thermistor installed in the motor. The actual current profile depends on the application and the mechanical construction of the conveyor.

The increased short-term torque is only supported by the ECC-DFC fieldbus controller.

6 Technical data controllers

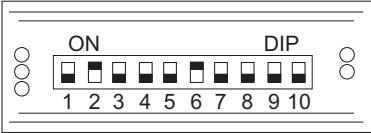
6.1 ECC-DBC binary control

	Designation	
	Type	ECDriveS® ECC-DBC-24-00 binary control
	Nominal voltage	DC 24 V
	Voltage range	18 – 28 V
	Nominal current	2.5 A
	Maximum overload capacity	120% for max. 60 s

6.1.1 Environmental conditions

Environmental condition	Limit value
Ambient temperature during operation	-10 – 40 °C
Humidity during operation/storage	10 – 90% (not condensing)
Ambient temperature during storage	-10 – 75 °C
Vibration	Max. 2 g

6.1.2 DIP switch functions

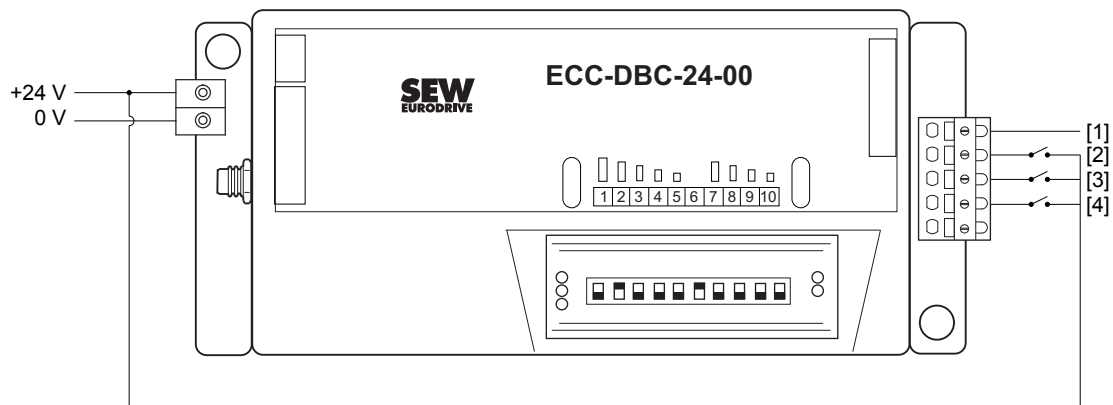


24518860299

Switch	Function	Description
1	Speed	32 adjustable speed levels
2		
3		
4		
5		
6	Direction of rotation	ON = CCW, OFF = CW
7	Brake/acceleration time ¹⁾	16 adjustable timing stages (0 – 2.5 s)
8		
9		
10		

1) The maximum acceleration and deceleration depends on the weight of the container and the selected gear unit stage.

6.1.3 PNP connection



24917160843

- [1] Error output
- [2] Start A
- [3] Start B
- [4] Direction of rotation

6.1.4 Speed settings via digital inputs

Start A	100% of the speed selected on the DIP switch
Start A and B	75% of the speed selected on the DIP switch
Start B	50% of the speed selected on the DIP switch

6.2 ECC-DFC fieldbus control

	Designation	
	Type	ECDriveS® ECC-DFC-24-00 fieldbus control
	Nominal voltage	DC 24 V
	Voltage range	18 – 28 V
	Nominal current	5 A with two drives
	Maximum overload capacity	240% for max. 60 s
	Current consumption electronics	≤ 350 mA

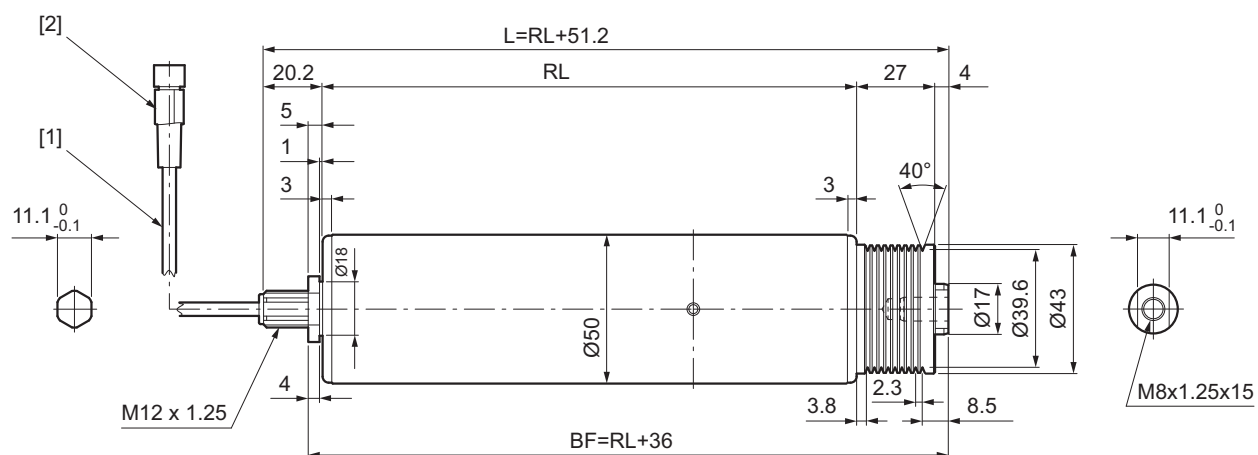
Characteristics

- ECShell engineering software for PC to configure and set many functions
- Comprehensive drive diagnostics
- Separate voltage supply for drive and communication
- Logistics error monitoring of the conveyor operation
- Baud rate: 10 Mbps/100 Mbps

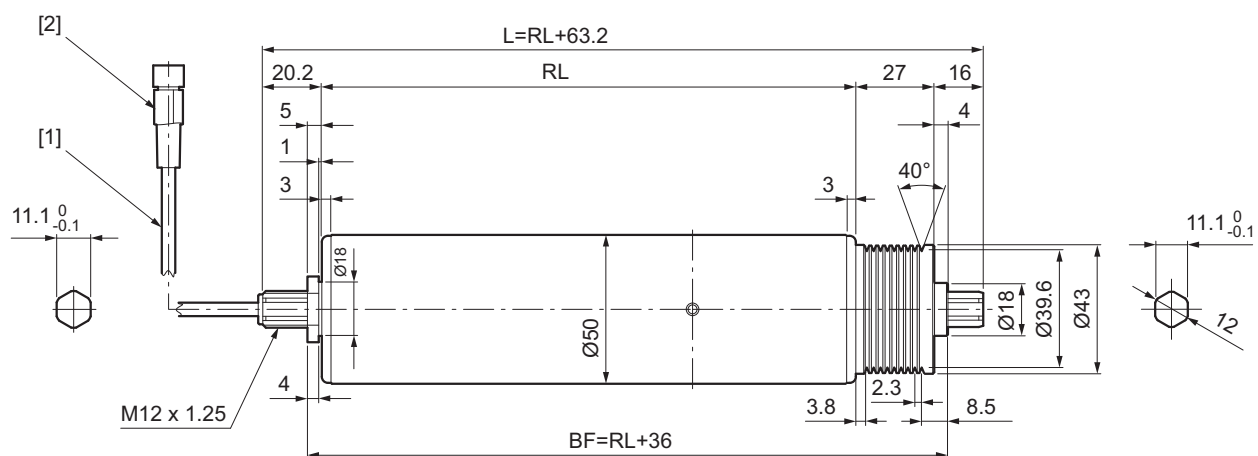
6.2.1 Environmental conditions

Environmental condition	Limit value
Ambient temperature during operation	-10 – 40 °C
Humidity during operation/storage	10 – 90% (not condensing)
Ambient temperature during storage	-10 – 75 °C
Vibration	Max. 2 g

7.2.2 Poly V



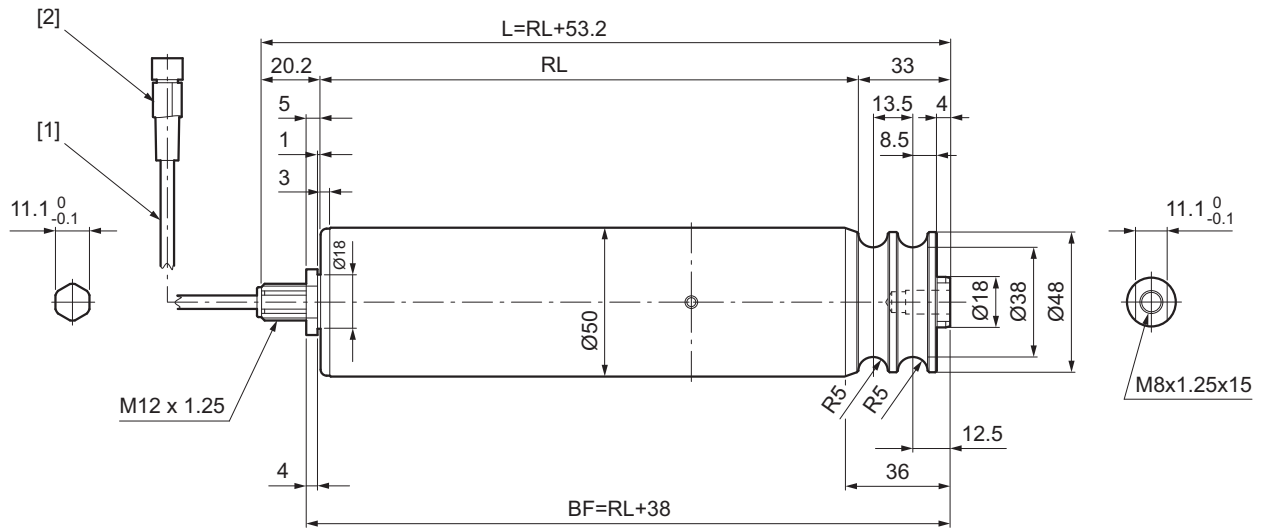
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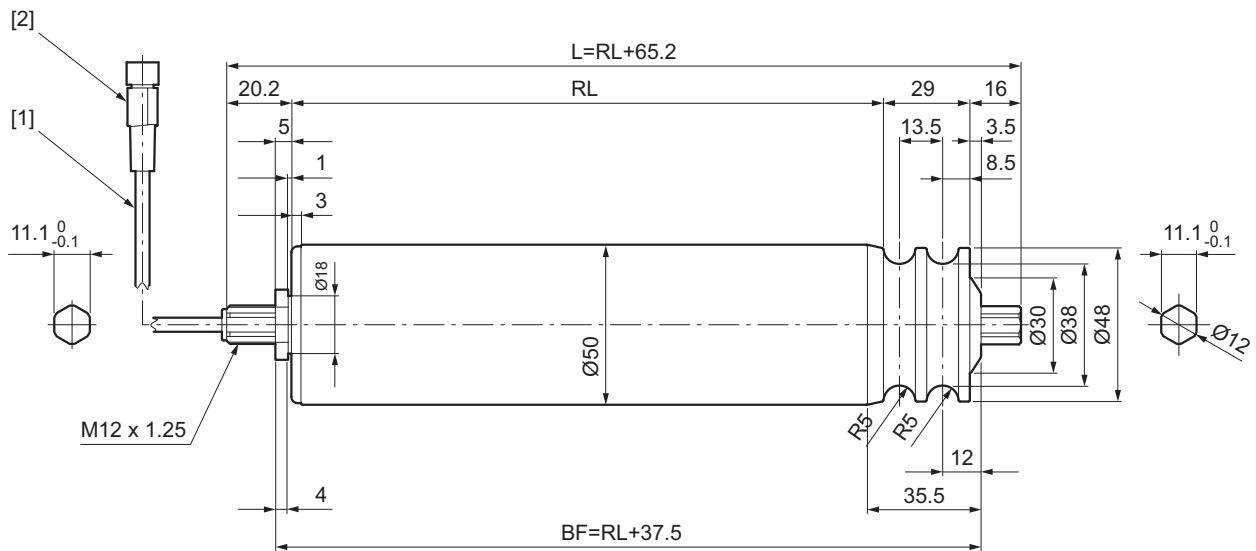
24530201483

- [1] Motor connection cable, cable length 1 m
[2] Connector plug

7.2.3 Grooved head



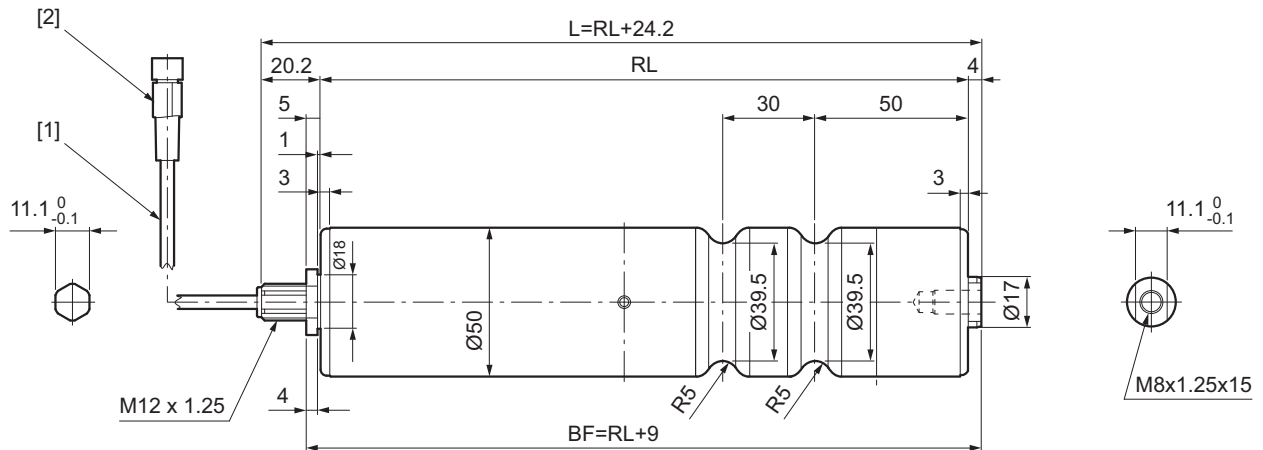
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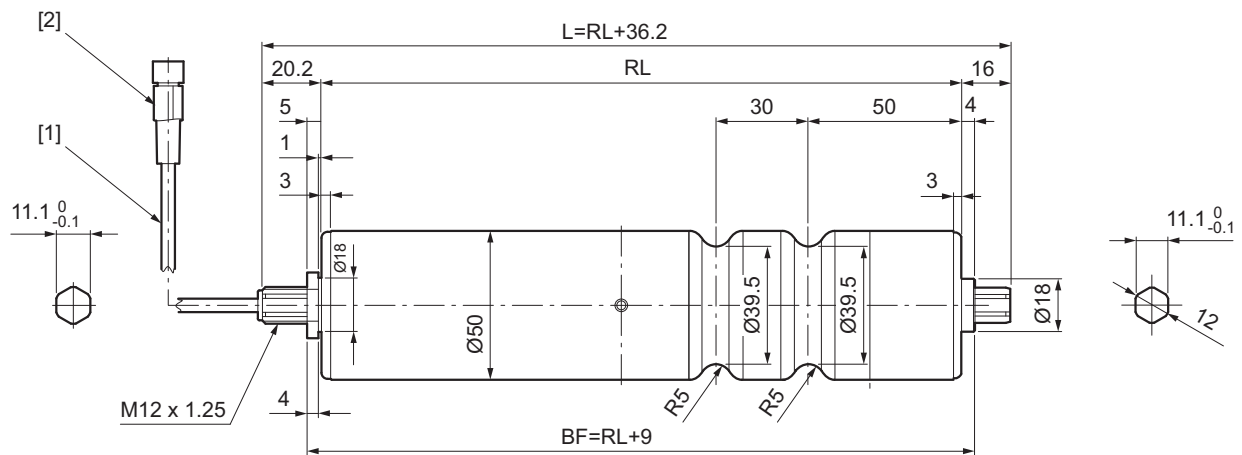
25577274891

- [1] Motor connection cable, cable length 1 m
- [2] Connector plug

7.2.4 Grooved tube



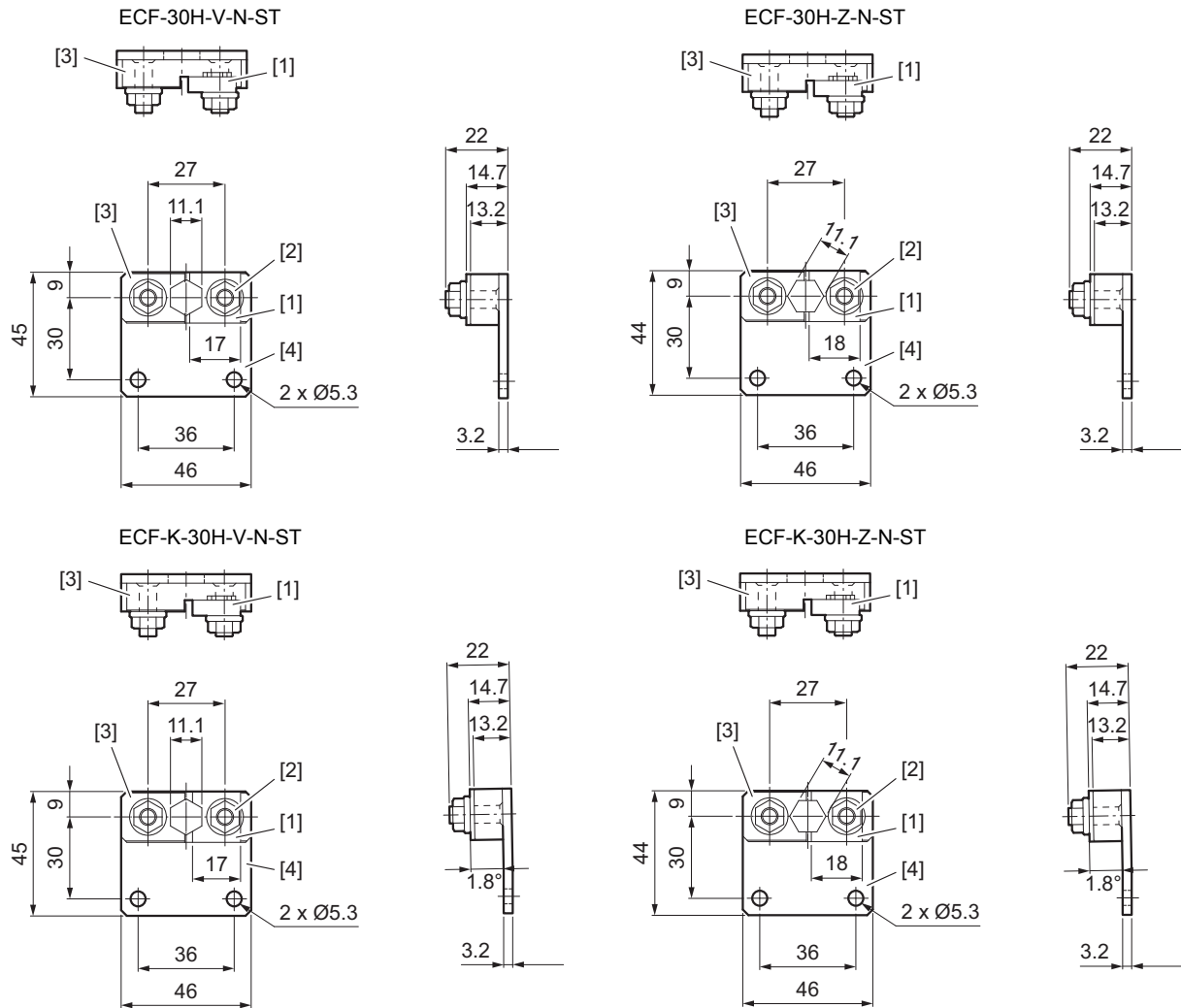
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24530813835

- [1] Motor connection cable, cable length 1 m
 [2] Connector plug

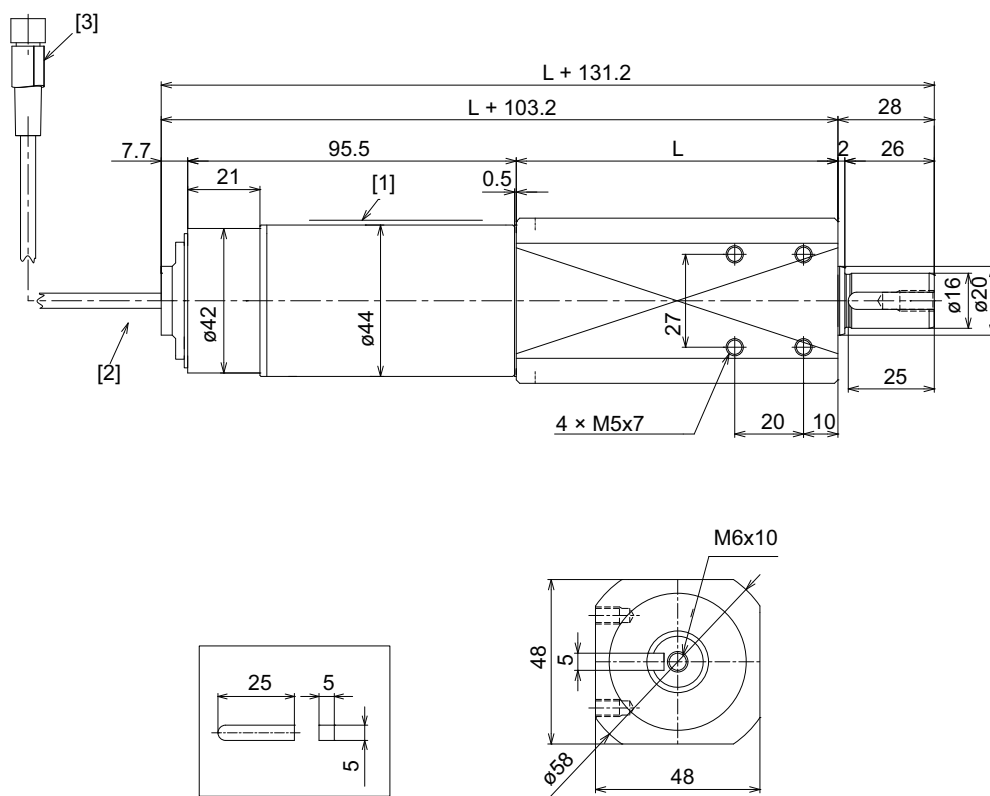
7.2.5 Dimensions retaining plate



- [1] Part A
- [2] M6 flange nut
- [3] Part B
- [4] Base plate

25602163211

7.3 Dimension sheet ECG gearmotor



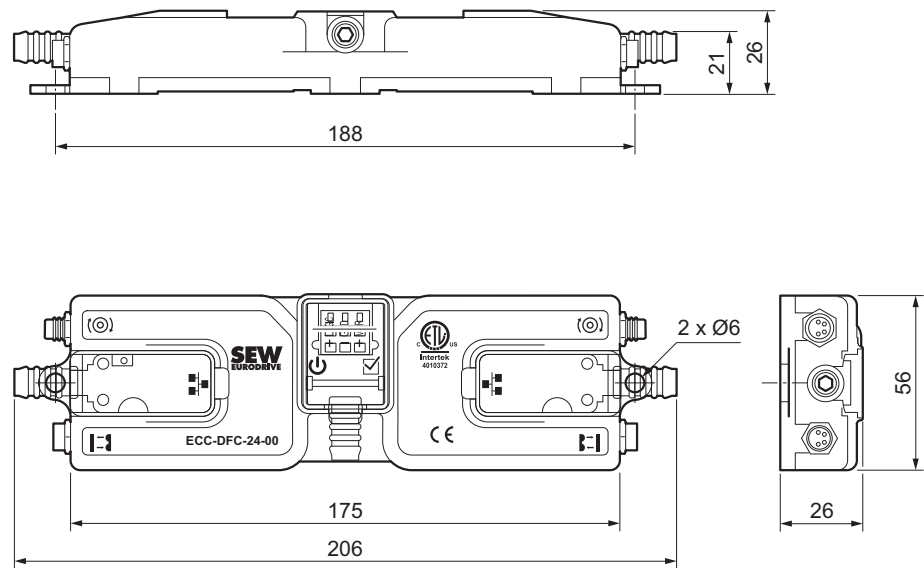
19849095435

- [1] Nameplate
 [2] Motor connection cable, cable length 1 m
 [3] Connector plug

Gear unit stages	Length (L) in mm
2-stage	93.5
3-stage	116.9

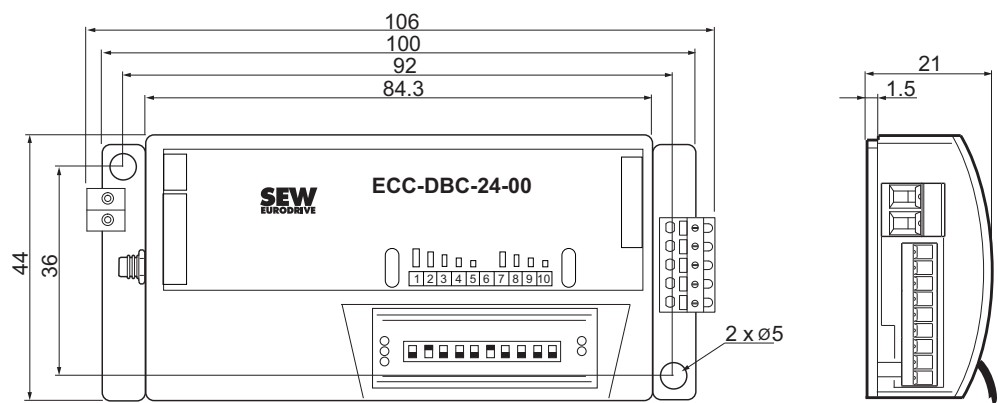
7.4 Dimension sheets controllers

7.4.1 ECC-DFC



9007218771165963

7.4.2 ECC-DBC



19853577099

8 Address list

Algeria			
Sales	Algiers	REDUCOM Sarl 16, rue des Frères Zaghroune Bellevue 16200 El Harrach Alger	Tel. +213 21 8214-91 Fax +213 21 8222-84 http://www.reducom-dz.com info@reducom-dz.com
Argentina			
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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
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Bangladesh			
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	Vancouver	SEW-EURODRIVE CO. OF CANADA LTD. Tilbury Industrial Park 7188 Honeyman Street Delta, BC V4G 1G1	Tel. +1 604 946-5535 Fax +1 604 946-2513 b.wake@sew-eurodrive.ca
	Montreal	SEW-EURODRIVE CO. OF CANADA LTD. 2001 Ch. de l'Aviation Dorval Quebec H9P 2X6	Tel. +1 514 367-1124 Fax +1 514 367-3677 n.paradis@sew-eurodrive.ca

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	Taiyuan	SEW-EURODRIVE (Taiyuan) Co., Ltd. No.3, HuaZhang Street, TaiYuan Economic & Technical Development Zone ShanXi, 030032	Tel. +86-351-7117520 Fax +86-351-7117522 taiyuan@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 84478388 Fax +86 27 84478389 wuhan@sew-eurodrive.cn
	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 68686262 Fax +86 29 68686311 xian@sew-eurodrive.cn
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Czech Republic			
Assembly Sales Service	Hostivice	SEW-EURODRIVE CZ s.r.o. Floriánova 2459 253 01 Hostivice	Tel. +420 255 709 601 Fax +420 235 350 613 http://www.sew-eurodrive.cz sew@sew-eurodrive.cz
	Drive Service Hotline / 24 Hour Service	+420 800 739 739 (800 SEW SEW)	Service Tel. +420 255 709 632 Fax +420 235 358 218 servis@sew-eurodrive.cz
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Egypt			
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Estonia			
Sales	Tallin	ALAS-KUUL AS Reti tee 4 75301 Peetri küla, Rae vald, Harjumaa	Tel. +372 6593230 Fax +372 6593231 http://www.alas-kuul.ee veiko.soots@alas-kuul.ee
Finland			
Assembly Sales Service	Hollola	SEW-EURODRIVE OY Vesimäentie 4 15860 Hollola	Tel. +358 201 589-300 Fax +358 3 780-6211 http://www.sew-eurodrive.fi sew@sew.fi
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	Brumath	SEW-USOCOME 1 Rue de Bruxelles 67670 Mommenheim Cedex	Tel. +33 3 88 37 48 00
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	Nantes	SEW-USOCOME Parc d'activités de la forêt 4 rue des Fontenelles 44140 Le Bignon	Tel. +33 2 40 78 42 00 Fax +33 2 40 78 42 20
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Production	Graben	SEW-EURODRIVE GmbH & Co KG Ernst-Blickle-Straße 1 76676 Graben-Neudorf	Tel. +49 7251 75-0 Fax +49 7251-2970
	Östringen	SEW-EURODRIVE GmbH & Co KG, Werk Östringen Franz-Gurk-Straße 2 76684 Östringen	Tel. +49 7253 9254-0 Fax +49 7253 9254-90 oesstringen@sew-eurodrive.de
Service Competence Center	Mechanics / Mechatronics	SEW-EURODRIVE GmbH & Co KG Ernst-Blickle-Straße 1 76676 Graben-Neudorf	Tel. +49 7251 75-1710 Fax +49 7251 75-1711 scc-mechanik@sew-eurodrive.de
	Electronics	SEW-EURODRIVE GmbH & Co KG Ernst-Blickle-Straße 42 76646 Bruchsal	Tel. +49 7251 75-1780 Fax +49 7251 75-1769 scc-elektronik@sew-eurodrive.de
Drive Technology Center	North	SEW-EURODRIVE GmbH & Co KG Alte Ricklinger Straße 40-42 30823 Garbsen (Hannover)	Tel. +49 5137 8798-30 Fax +49 5137 8798-55 dtc-nord@sew-eurodrive.de
	East	SEW-EURODRIVE GmbH & Co KG Dankritzer Weg 1 08393 Meerane (Zwickau)	Tel. +49 3764 7606-0 Fax +49 3764 7606-30 dtc-ost@sew-eurodrive.de
	South	SEW-EURODRIVE GmbH & Co KG Domagkstraße 5 85551 Kirchheim (München)	Tel. +49 89 909552-10 Fax +49 89 909552-50 dtc-sued@sew-eurodrive.de
	West	SEW-EURODRIVE GmbH & Co KG Siemensstraße 1 40764 Langenfeld (Düsseldorf)	Tel. +49 2173 8507-30 Fax +49 2173 8507-55 dtc-west@sew-eurodrive.de
Drive Center	Berlin	SEW-EURODRIVE GmbH & Co KG Alexander-Meißner-Straße 44 12526 Berlin	Tel. +49 306331131-30 Fax +49 306331131-36 dc-berlin@sew-eurodrive.de
	Ludwigshafen	SEW-EURODRIVE GmbH & Co KG c/o BASF SE Gebäude W130 Raum 101 67056 Ludwigshafen	Tel. +49 7251 75 3759 Fax +49 7251 75 503759 dc-ludwigshafen@sew-eurodrive.de
	Saarland	SEW-EURODRIVE GmbH & Co KG Gottlieb-Daimler-Straße 4 66773 Schwalbach Saar – Hülzweiler	Tel. +49 6831 48946 10 Fax +49 6831 48946 13 dc-saarland@sew-eurodrive.de
	Ulm	SEW-EURODRIVE GmbH & Co KG Dieselstraße 18 89160 Dornstadt	Tel. +49 7348 9885-0 Fax +49 7348 9885-90 dc-ulm@sew-eurodrive.de

Germany			
	Würzburg	SEW-EURODRIVE GmbH & Co KG Nürnbergerstraße 118 97076 Würzburg-Lengfeld	Tel. +49 931 27886-60 Fax +49 931 27886-66 dc-wuerzburg@sew-eurodrive.de
Drive Service Hotline / 24 Hour Service			0 800 SEWHELP 0 800 7394357
Great Britain			
Assembly Sales Service	Normanton	SEW-EURODRIVE Ltd. DeVilliers Way Trident Park Normanton West Yorkshire WF6 1GX	Tel. +44 1924 893-855 Fax +44 1924 893-702 http://www.sew-eurodrive.co.uk info@sew-eurodrive.co.uk
Drive Service Hotline / 24 Hour Service			Tel. 01924 896911
Greece			
Sales	Athens	Christ. Boznos & Son S.A. 12, K. Mavromichali Street P.O. Box 80136 18545 Piraeus	Tel. +30 2 1042 251-34 Fax +30 2 1042 251-59 http://www.boznos.gr info@boznos.gr
Hungary			
Sales Service	Budapest	SEW-EURODRIVE Kft. Csillaghegyi út 13. 1037 Budapest	Tel. +36 1 437 06-58 Fax +36 1 437 06-50 http://www.sew-eurodrive.hu office@sew-eurodrive.hu
Iceland			
Sales	Reykjavik	Varma & Vélaverk ehf. Knarrarvogi 4 104 Reykjavik	Tel. +354 585 1070 Fax +354 585)1071 http://www.varmaverk.is vov@vov.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 Fax +91 265 3045300 http://www.seweurodriveindia.com salesvadodara@seweurodriveindia.com
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	Jakarta	PT. Cahaya Sukses Abadi Komplek Rukan Puri Mutiara Blok A no 99, Sunter Jakarta 14350	Tel. +62 21 65310599 Fax +62 21 65310600 csajkt@cbn.net.id
	Jakarta	PT. Agrindo Putra Lestari Jl.Pantai Indah Selatan, Komplek Sentra Industri Terpadu, Pantai indah Kapuk Tahap III, Blok E No. 27 Jakarta 14470	Tel. +62 21 2921-8899 Fax +62 21 2921-8988 aplindo@indosat.net.id http://www.aplindo.com

Indonesia			
	Surabaya	PT. TRIAGRI JAYA ABADI Jl. Sukosemolo No. 63, Galaxi Bumi Permai G6 No. 11 Surabaya 60111	Tel. +62 31 5990128 Fax +62 31 5962666 sales@triagri.co.id http://www.triagri.co.id
	Surabaya	CV. Multi Mas Jl. Raden Saleh 43A Kav. 18 Surabaya 60174	Tel. +62 31 5458589 Fax +62 31 5317220 sianhwa@sby.centrin.net.id http://www.cvmultimas.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 http://www.alperton.ie info@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	Milan	SEW-EURODRIVE di R. Blickle & Co.s.a.s. Via Bernini,14 20020 Solaro (Milano)	Tel. +39 02 96 980229 Fax +39 02 96 980 999 http://www.sew-eurodrive.it milano@sew-eurodrive.it
Ivory Coast			
Sales	Abidjan	SEW-EURODRIVE SARL Ivory Coast Rue des Pêcheurs, Zone 3 26 BP 916 Abidjan 26	Tel. +225 21 21 81 05 Fax +225 21 25 30 47 info@sew-eurodrive.ci http://www.sew-eurodrive.ci
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 hamamatsu@sew-eurodrive.co.jp
Kazakhstan			
Sales	Almaty	SEW-EURODRIVE LLP 291-291A, Tole bi street 050031, Almaty	Tel. +7 (727) 350 5156 Fax +7 (727) 350 5156 http://www.sew-eurodrive.kz sew@sew-eurodrive.kz
	Tashkent	SEW-EURODRIVE LLP Representative office in Uzbekistan 96A, Sharaf Rashidov street, Tashkent, 100084	Tel. +998 71 2359411 Fax +998 71 2359412 http://www.sew-eurodrive.uz sew@sew-eurodrive.uz
	Ulaanbaatar	IM Trading LLC Olympic street 28B/3 Sukhbaatar district, Ulaanbaatar 14230	Tel. +976-77109997 Fax +976-77109997 imt@imt.mn
Kenya			
Sales	Nairobi	SEW-EURODRIVE Pty Ltd Transnational Plaza, 5th Floor Mama Ngina Street P.O. Box 8998-00100 Nairobi	Tel. +254 791 398840 http://www.sew-eurodrive.co.tz info@sew.co.tz
Latvia			
Sales	Riga	SIA Alas-Kuul Katlakalna 11C 1073 Riga	Tel. +371 6 7139253 Fax +371 6 7139386 http://www.alas-kuul.lv info@alas-kuul.com

Lebanon			
Sales (Lebanon)	Beirut	Gabriel Acar & Fils sarl B. P. 80484 Bourj Hammoud, Beirut	Tel. +961 1 510 532 Fax +961 1 494 971 ssacar@inco.com.lb
Sales (Jordan, Kuwait , Beirut Saudi Arabia, Syria)		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 http://www.medrives.com info@medrives.com
Lithuania			
Sales	Alytus	UAB Irseva Statybininku 106C 63431 Alytus	Tel. +370 315 79204 Fax +370 315 56175 http://www.irseva.lt irmantas@irseva.lt
Luxembourg			
Representation: Belgium			
Macedonia			
Sales	Skopje	Boznos DOOEL Dime Anicin 2A/7A 1000 Skopje	Tel. +389 23256553 Fax +389 23256554 http://www.boznos.mk
Malaysia			
Assembly Sales Service	Johor	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
Mexico			
Assembly Sales Service	Quéretaro	SEW-EURODRIVE MEXICO S.A. de C.V. SEM-981118-M93 Tequisquiapan No. 102 Parque Industrial Quéretaro C.P. 76220 Querétaro, México	Tel. +52 442 1030-300 Fax +52 442 1030-301 http://www.sew-eurodrive.com.mx scmexico@seweurodrive.com.mx
Sales Service	Puebla	SEW-EURODRIVE MEXICO S.A. de C.V. Calzada Zavaleta No. 3922 Piso 2 Local 6 Col. Santa Cruz Buenavista C.P. 72154 Puebla, México	Tel. +52 (222) 221 248 http://www.sew-eurodrive.com.mx scmexico@seweurodrive.com.mx
Mongolia			
Technical Office	Ulaanbaatar	IM Trading LLC Olympic street 28B/3 Sukhbaatar district, Ulaanbaatar 14230	Tel. +976-77109997 Tel. +976-99070395 Fax +976-77109997 http://imt.mn/ imt@imt.mn
Morocco			
Sales Service	Bouskoura	SEW-EURODRIVE Morocco Parc Industriel CFCIM, Lot 55 and 59 Bouskoura	Tel. +212 522 88 85 00 Fax +212 522 88 84 50 http://www.sew-eurodrive.ma sew@sew-eurodrive.ma
Namibia			
Sales	Swakopmund	DB Mining & Industrial Services Einstein Street Strauss Industrial Park Unit1 Swakopmund	Tel. +264 64 462 738 Fax +264 64 462 734 anton@dbminingnam.com
Netherlands			
Assembly Sales Service	Rotterdam	SEW-EURODRIVE B.V. Industrieweg 175 3044 AS Rotterdam Postbus 10085 3004 AB Rotterdam	Tel. +31 10 4463-700 Fax +31 10 4155-552 Service: 0800-SEWHELP http://www.sew-eurodrive.nl info@sew-eurodrive.nl

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. 30 Lodestar Avenue, Wigram Christchurch	Tel. +64 3 384-6251 Fax +64 3 384-6455 sales@sew-eurodrive.co.nz
Nigeria			
Sales	Lagos	Greenpeg Nig. Ltd Plot 296A, Adeyemo Akapo Str. Omole GRA Ikeja Lagos-Nigeria	Tel. +234-701-821-9200-1 http://www.greenpeg ltd.com bolaji.adekunle@greenpeg ltd.com
Norway			
Assembly Sales Service	Moss	SEW-EURODRIVE A/S Solgaard skog 71 1599 Moss	Tel. +47 69 24 10 20 Fax +47 69 24 10 40 http://www.sew-eurodrive.no sew@sew-eurodrive.no
Pakistan			
Sales	Karachi	Industrial Power Drives Al-Fatah Chamber A/3, 1st Floor Central Com- mercial Area, Sultan Ahmed Shah Road, Block 7/8, Karachi	Tel. +92 21 452 9369 Fax +92-21-454 7365 seweurodrive@cyber.net.pk
Paraguay			
Sales	Fernando de la Mora	SEW-EURODRIVE PARAGUAY S.R.L De la Victoria 112, Esquina nueva Asunción Departamento Central Fernando de la Mora, Barrio Bernardino	Tel. +595 991 519695 Fax +595 21 3285539 sewpy@sew-eurodrive.com.py
Peru			
Assembly Sales Service	Lima	SEW EURODRIVE DEL PERU 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			
Sales	Makati	P.T. Cerna Corporation 4137 Ponte St., Brgy. Sta. Cruz Makati City 1205	Tel. +63 2 519 6214 Fax +63 2 890 2802 mech_drive_sys@ptcerna.com http://www.ptcerna.com
Poland			
Assembly Sales Service	Łódź	SEW-EURODRIVE Polska Sp.z.o.o. ul. Techniczna 5 92-518 Łódź	Tel. +48 42 293 00 00 Fax +48 42 293 00 49 http://www.sew-eurodrive.pl sew@sew-eurodrive.pl
	Service	Tel. +48 42 293 0030 Fax +48 42 293 0043	24 Hour Service Tel. +48 602 739 739 (+48 602 SEW SEW) serwis@sew-eurodrive.pl
Portugal			
Assembly Sales Service	Coimbra	SEW-EURODRIVE, LDA. Av. da Fonte Nova, n.º 86 3050-379 Mealhada	Tel. +351 231 20 9670 Fax +351 231 20 3685 http://www.sew-eurodrive.pt infosew@sew-eurodrive.pt
Romania			
Sales Service	Bucharest	Sialco Trading SRL str. Brazilia nr. 36 011783 Bucuresti	Tel. +40 21 230-1328 Fax +40 21 230-7170 sialco@sialco.ro
Russia			
Assembly Sales Service	St. Petersburg	ЗАО «СЕВ-ЕВРОДРАЙФ» а. я. 36 195220 Санкт-Петербург	Tel. +7 812 3332522 / +7 812 5357142 Fax +7 812 3332523 http://www.sew-eurodrive.ru sew@sew-eurodrive.ru

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 http://www.senemeca.com senemeca@senemeca.sn
Serbia			
Sales	Belgrade	DIPAR d.o.o. Ustanicka 128a PC Košum, IV floor 11000 Beograd	Tel. +381 11 347 3244 / +381 11 288 0393 Fax +381 11 347 1337 office@dipar.rs
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 40 831 06 Bratislava	Tel. +421 2 33595 202, 217, 201 Fax +421 2 33595 200 http://www.sew-eurodrive.sk sew@sew-eurodrive.sk
	Košice	SEW-Eurodrive SK s.r.o. Slovenská ulica 26 040 01 Košice	Tel. +421 55 671 2245 Fax +421 55 671 2254 Mobile +421 907 671 976 sew@sew-eurodrive.sk
Slovenia			
Sales Service	Celje	Pakman - Pogonska Tehnika d.o.o. Ul. XIV. divizije 14 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 11 248-7289 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	Tel. +27 21 552-9820 Fax +27 21 552-9830 Telex 576 062 bgriffiths@sew.co.za
	Durban	SEW-EURODRIVE (PROPRIETARY) LIMITED 48 Prospecton Road Isipingo Durban P.O. Box 10433, Ashwood 3605	Tel. +27 31 902 3815 Fax +27 31 902 3826 cdejager@sew.co.za
	Nelspruit	SEW-EURODRIVE (PROPRIETARY) LIMITED 7 Christie Crescent Vintonia P.O.Box 1942 Nelspruit 1200	Tel. +27 13 752-8007 Fax +27 13 752-8008 robermeyer@sew.co.za
South Korea			
Assembly Sales Service	Ansan	SEW-EURODRIVE KOREA CO., LTD. 7, Dangjaengi-ro, Danwon-gu, Ansan-si, Gyeonggi-do, Zip 425-839	Tel. +82 31 492-8051 Fax +82 31 492-8056 http://www.sew-eurodrive.kr master.korea@sew-eurodrive.com
	Busan	SEW-EURODRIVE KOREA CO., LTD. 28, Noksansandan 262-ro 50beon-gil, Gangseo-gu, Busan, Zip 618-820	Tel. +82 51 832-0204 Fax +82 51 832-0230

Spain			
Assembly Sales Service	Bilbao	SEW-EURODRIVE ESPAÑA, S.L. Parque Tecnológico, Edificio, 302 48170 Zamudio (Vizcaya)	Tel. +34 94 43184-70 http://www.sew-eurodrive.es sew.spain@sew-eurodrive.es
Sri Lanka			
Sales	Colombo	SM International (Pte) Ltd 254, Galle Raod Colombo 4, Sri Lanka	Tel. +94 1 2584887 Fax +94 1 2582981
Swaziland			
Sales	Manzini	C G Trading Co. (Pty) Ltd PO Box 2960 Manzini M200	Tel. +268 2 518 6343 Fax +268 2 518 5033 engineering@cgtrading.co.sz
Sweden			
Assembly Sales Service	Jönköping	SEW-EURODRIVE AB Gnejsvägen 6-8 553 03 Jönköping Box 3100 S-550 03 Jönköping	Tel. +46 36 34 42 00 Fax +46 36 34 42 80 http://www.sew-eurodrive.se jonkoping@sew.se
Switzerland			
Assembly Sales Service	Basel	Alfred Imhof A.G. Jurastrasse 10 4142 Münchenstein bei Basel	Tel. +41 61 417 1717 Fax +41 61 417 1700 http://www.imhof-sew.ch info@imhof-sew.ch
Taiwan			
Sales	Taipei	Ting Shou Trading Co., Ltd. 6F-3, No. 267, Sec. 2 Tung Huw S. Road Taipei	Tel. +886 2 27383535 Fax +886 2 27368268 Telex 27 245 sewtwn@ms63.hinet.net http://www.tingshou.com.tw
	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 sewtwn@ms63.hinet.net http://www.tingshou.com.tw
Tanzania			
Sales	Daressalam	SEW-EURODRIVE PTY LIMITED TANZANIA Plot 52, Regent Estate PO Box 106274 Dar Es Salaam	Tel. +255 0 22 277 5780 Fax +255 0 22 277 5788 http://www.sew-eurodrive.co.tz info@sew.co.tz
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
Tunisia			
Sales	Tunis	T. M.S. Technic Marketing Service Zone Industrielle Mghira 2 Lot No. 39 2082 Fouchana	Tel. +216 79 40 88 77 Fax +216 79 40 88 66 http://www.tms.com.tn tms@tms.com.tn
Turkey			
Assembly Sales Service	Kocaeli-Gebze	SEW-EURODRIVE Hareket Sistemleri San. Ve TIC. Ltd. Sti Gebze Organize Sanayi Böl. 400 Sok No. 401 41480 Gebze Kocaeli	Tel. +90 262 9991000 04 Fax +90 262 9991009 http://www.sew-eurodrive.com.tr sew@sew-eurodrive.com.tr
Ukraine			
Assembly Sales Service	Dnipropetrovsk	ООО «СЕВ-Евродрайв» ул. Рабочая, 23-В, офис 409 49008 Днепр	Tel. +380 56 370 3211 Fax +380 56 372 2078 http://www.sew-eurodrive.ua sew@sew-eurodrive.ua

United Arab Emirates

Sales Service	Dubai	SEW-EURODRIVE FZE PO Box 263835 Office No. S3A1SR03 Jebel Ali Free Zone – South, Dubai, United Arab Emirates	Tel. +971 (0)4 8806461 Fax +971 (0)4 8806464 http://www.sew-eurodrive.ae info@sew-eurodrive.ae
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Uruguay

Assembly Sales	Montevideo	SEW-EURODRIVE Uruguay, S. A. Jose Serrato 3569 Esquina Corumbe CP 12000 Montevideo	Tel. +598 2 21181-89 Fax +598 2 21181-90 sewuy@sew-eurodrive.com.uy
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USA

Production Assembly Sales Service	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 Production +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 +1 937 332-0038 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
	Wellford	SEW-EURODRIVE INC. 148/150 Finch Rd. Wellford, S.C. 29385	Tel. +1 864 439-7537 Fax +1 864 661 1167 IGOrders@seweurodrive.com

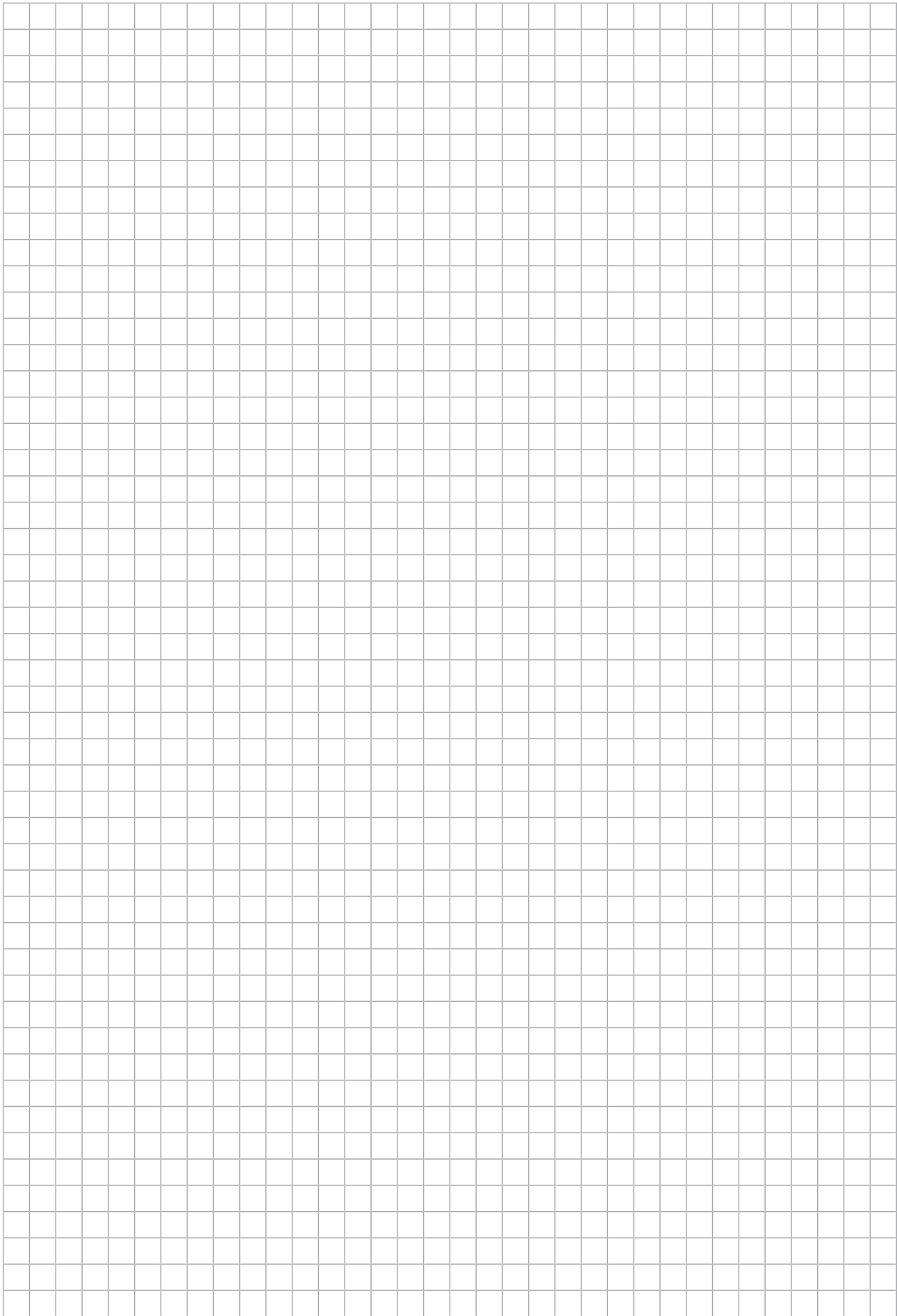
Additional addresses for service provided on request!

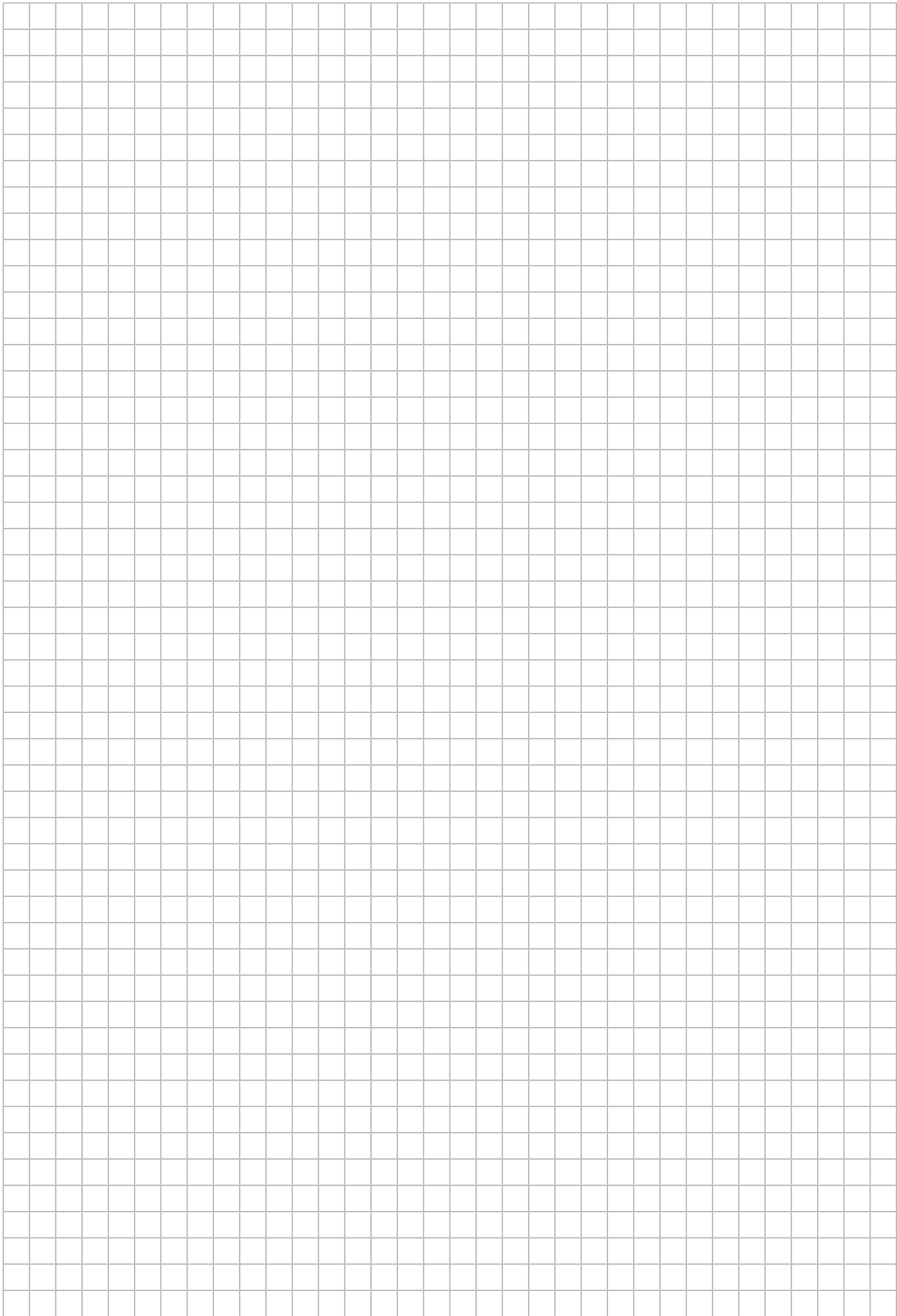
Vietnam

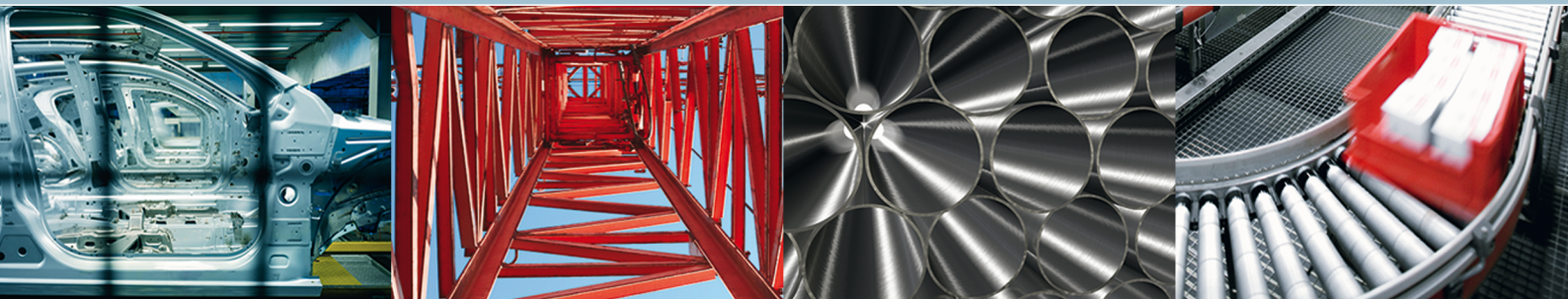
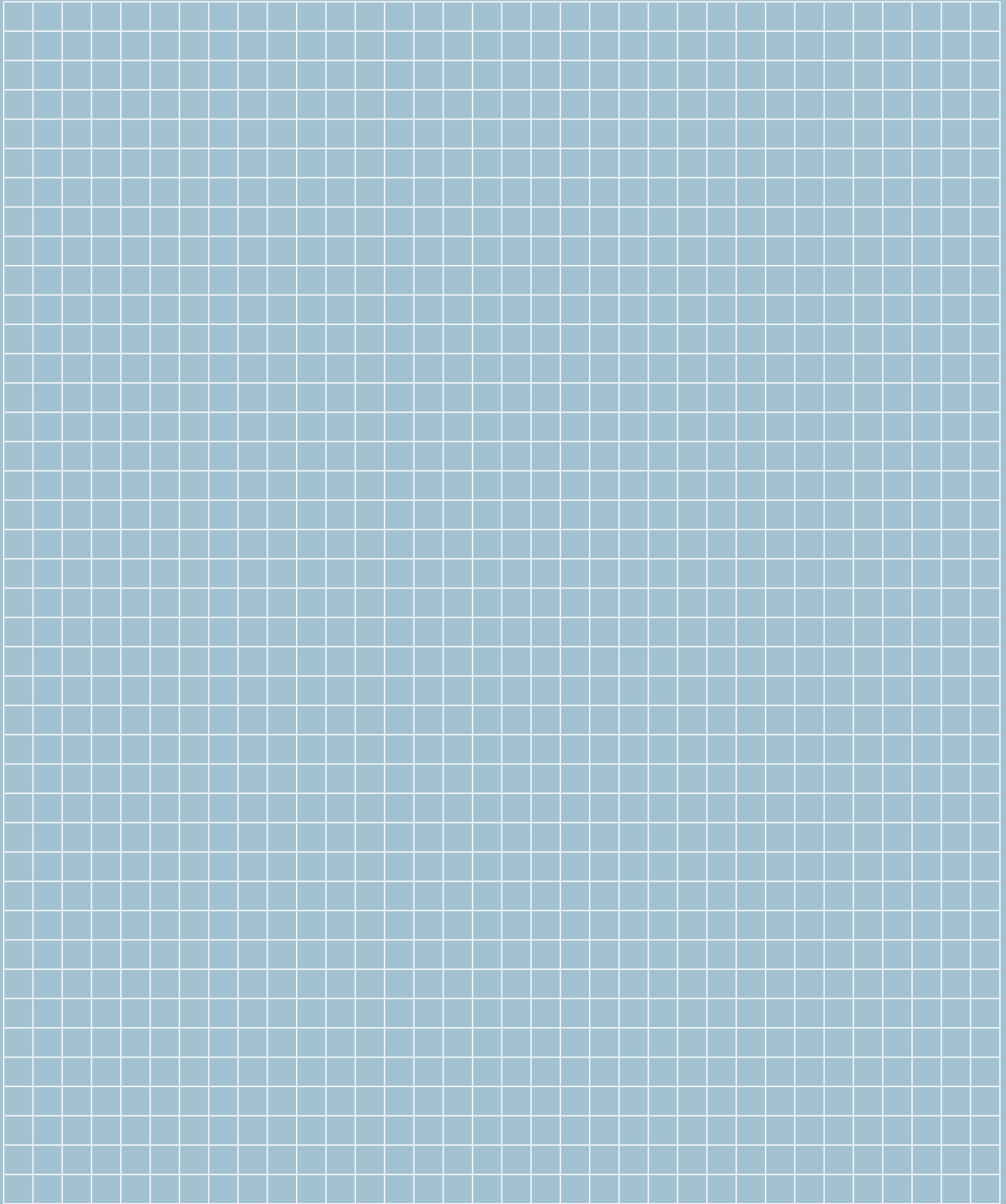
Sales	Ho Chi Minh City	SEW-EURODRIVE PTE. LTD. RO at Hochim- inh City Floor 8, KV I, Loyal building, 151-151 Bis Vo Thi Sau street, ward 6, District 3, Ho Chi Minh City, Vietnam	Tel. +84 937 299 700 Fax huytam.phan@sew-eurodrive.com
	Hanoi	MICO LTD Quảng Trị - North Vietnam / All sectors except Construction Materials 8th Floor, Ocean Park Building, 01 Dao Duy Anh St, Ha Noi, Viet Nam	Tel. +84 4 39386666 Fax +84 4 3938 6888 nam_ph@micogroup.com.vn http://www.micogroup.com.vn

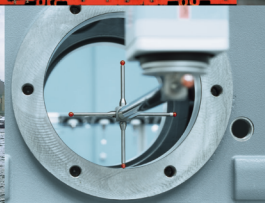
Zambia

Representation: South Africa









SEW-EURODRIVE
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