

1 Introduction**1.1 The SEW-EURODRIVE group of companies****1.1.1 Global presence**

SEW-EURODRIVE is driving the world with innovative drive solutions for all industries and every application. Products and systems from SEW-EURODRIVE are used in a multitude of applications worldwide. Whether it is in the automotive, building materials, food and beverage or metal-processing industry, the decision to use drive technology "made by SEW-EURODRIVE" stands for reliability and quality.

We are represented in the most important branches of industry all over the world with 14 manufacturing plants and 79 Drive Technology Centers worldwide. In addition, our customer support is an integrative service that continues our commitment to outstanding quality.

1.1.2 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, based upon your required speed, torque, available space, and ambient conditions. We offer many gradual sizes of gear units so there is always a unit that closely matches your torque requirement to provide the best economic solution and to prevent unnecessary oversizing.

The modular DR.. motor series includes the energy-efficient motor types IE1 to IE4 and was designed and constructed with all worldwide requirements for energy efficiency classes in mind. The DR.. motor easily meets the requirements for approval and certification in all relevant countries. The energy-efficient drives achieve the highest efficiency in combination with SEW-EURODRIVE gear units.

The gearmotors are electronically enhanced by MOVITRAC® frequency inverters, MOVIDRIVE® drive inverters, and MOVIAXIS® multi-axis servo inverters – a combination that blends perfectly with the existing SEW-EURODRIVE program. As is the case with the mechanical systems, all development, production, and assembly is accomplished entirely by SEW-EURODRIVE. In combination with our drive electronics, these gearmotors 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 ensure precision and dynamics. From single-axis or multi-axis applications to synchronized process sequences, servo drive systems from SEW-EURODRIVE enable flexible and customized implementation of your applications.

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 has developed hybrid cables to provide cost-effective functional solutions, irrespective of the system philosophy or scope. The latest developments from SEW-EURODRIVE: 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.

Power, quality, and robustness combined in a single standard product: with SEW-EURODRIVE, powerful movements are delivered by industrial gear units with high torques. The modular concept once again ensures optimum adaptation of industrial gear units to meet a wide range of different applications.

1.1.3 Your ideal partner

Its global presence, extensive product range and broad spectrum of services make SEW-EURODRIVE the ideal partner for drive solutions in all industries and applications.

1.2 Products and systems from SEW-EURODRIVE

The products and systems by SEW-EURODRIVE are divided into the following product groups:

- Industrial gear units
- Gearmotors and frequency inverters
- Servo drive systems
- Decentralized drive systems
- MAXOLUTION®

Products and systems used in applications of several groups are listed in a separate group entitled "products and systems covering several product groups". The following tables indicate the products and systems included in the respective product group:

Industrial gear units
<ul style="list-style-type: none"> • X, MC, ML series helical and bevel-helical gear units • P002 – 102 series planetary gear units • XP130 – 250 series planetary gear units • P.X.. series planetary bevel-helical gear units • Application solutions with connections <ul style="list-style-type: none"> – Girth gears – Swing base – Gearmotor – Motor – Coupling – Brake – Lubrication system <p>For conveyor drives, bucket conveyors, agitators, cooling towers, crane systems, and much more</p>

Gearmotors and frequency inverters		
Gear units / gearmotors	Motors	Frequency inverters
<ul style="list-style-type: none"> • Helical gear units / helical gearmotors • Parallel-shaft helical gear units / parallel-shaft helical gearmotors • Helical-bevel gear units / gearmotors • Helical-worm gear units / helical-worm gearmotors 	<ul style="list-style-type: none"> • Asynchronous AC motors / AC brakemotors • Pole-changing AC motors / AC brakemotors • Energy-efficient motors • Explosion-proof AC motors / AC brakemotors • Torque motors 	<ul style="list-style-type: none"> • MOVITRAC® frequency inverters • MOVI4R-U® frequency inverters • MOVIDRIVE® drive inverters • Control, technology and communication options for inverters

21933480/EN-US – 04/2018

Gearmotors and frequency inverters		
Gear units / gearmotors	Motors	Frequency inverters
<ul style="list-style-type: none"> • SPIROPLAN® right-angle gearmotors • EMS drives • Geared torque motors • Pole-changing gearmotors • Variable-speed gearmotors • Aseptic gearmotors • Explosion-proof gearmotors • Explosion-proof, variable-speed gearmotors 	<ul style="list-style-type: none"> • Single-phase motors / single-phase brakemotors • Asynchronous linear motors 	

Servo drive systems		
Servo gear units / gearmotors	Servomotors	Servo drive inverters / servo inverters
<ul style="list-style-type: none"> • Low backlash planetary servo gear units / planetary gearmotors • Low backlash helical-bevel servo gear units / helical-bevel gear units • R, F, K, S, W gear units / gearmotors • Explosion-proof servo gearmotors 	<ul style="list-style-type: none"> • Asynchronous servomotors / servo brakemotors • Synchronous servomotors / servo brakemotors • Explosion-proof servomotors / servo brakemotors • Synchronous linear motors 	<ul style="list-style-type: none"> • MOVIDRIVE® servo drive inverters • MOVIAXIS® multi-axis servo inverter • Control, technology and communication options for servo drive inverters and servo inverters

Decentralized drive systems		
Decentralized drives	Communication and installation	Contactless energy transfer
<ul style="list-style-type: none"> • DRC.. electronic motors / MOVIGEAR® mechatronic drive systems <ul style="list-style-type: none"> – DBC – Direct Binary Communication – DAC – Direct AS-Interface Communication – DSC – Direct SBus Communication – SNI – Single Line Network Installation • MOVIMOT® gearmotors, motors, and brakemotors with integrated frequency inverter 	<ul style="list-style-type: none"> • Fieldbus interfaces • Field distributors for decentralized installation • MOVIFIT® product range <ul style="list-style-type: none"> – MOVIFIT® FDC for controlling MOVIGEAR® and DRC.. drive units – MOVIFIT® MC for controlling MOVIMOT® drives – MOVIFIT® SC with integrated electronic motor switch – MOVIFIT® FC with integrated freq. inverter 	<ul style="list-style-type: none"> • MOVITRANS® system <ul style="list-style-type: none"> – Stationary components for energy supply – Mobile components for energy consumption – Line cables and installation material

Decentralized drive systems		
Decentralized drives	Communication and installation	Contactless energy transfer
<ul style="list-style-type: none"> • MOVI-SWITCH[®] gearmotors with integrated switching and protection functions • MOVI-SWITCH[®] motors / brakemotors with integrated switching and protection function • Explosion-proof MOVIMOT[®] and MOVI-SWITCH[®] gearmotors 	<ul style="list-style-type: none"> • MOVIPRO[®] product range <ul style="list-style-type: none"> – MOVIPRO[®] SDC decentralized drive and positioning control 	
MAXOLUTION [®]		
<ul style="list-style-type: none"> • MAXOLUTION[®] packages for predefined application solutions • MAXOLUTION[®] systems for customer-specific system solutions and plants 		
Products and systems covering several product groups		
<ul style="list-style-type: none"> • Operator panels • MOVI-PLC[®] drive-based control system • Components of the type "functional safety" • Diagnostic units 		

1.3 Services from SEW-EURODRIVE

In addition to its products and systems, SEW-EURODRIVE offers the following comprehensive range of services.

- Technical application assistance
- Application and calculation software
- Seminars and training
- PT Pilot[®] online configurator/quotation program
- Extensive technical documentation
- 2D/3D CAD files
- Worldwide customer service

Visit our USA website at

→ www.seweurodrive.com

The website provides comprehensive information and services.

1.4 Documentation

1.4.1 Content of this publication

This "DRS/DRN.. Gearmotors" 60Hz catalog describes the following product groups from SEW-EURODRIVE in detail:

- DRN.. /EDRN helical gearmotors (R, RX-series)
- DRN.. /EDRN ^{the}Snuggler[®] helical gearmotors (F-series)
- DRN.. /EDRN helical-bevel gearmotors (K-series)
- DRN.. /EDRN helical-worm gearmotors (S-series)
- DRN.. /EDRN SPIROPLAN[®] gearmotors (W-series)

1.4.2 Additional documentation


In addition to this catalog, you can download other technical documents from our USA website at:

→ www.seweurodrive.com

Catalogs

- Gear units
- Servo gear units
- AC motors
- Synchronous servomotors
- Synchronous servo gearmotors
- Asynchronous servo gearmotors
- DRC.. gearmotors
- Variable-speed gearmotors
- Pole-changing gearmotors
- Geared torque motors

Drive Engineering – Practical Implementation

Detailed documentation about the entire topic of electrical drive engineering is available within the "Drive Engineering - Practical Implementation" publications listed below. See also (→  42).

- Project planning for drives
- EMC in Drive Engineering – Basic Theoretical Principles and EMC-Compliant Installation in Practice
- Efficient Plant Automation with Mechatronic Drive Solutions
- SEW encoder systems
- Servo technology

1.5 Product names and trademarks

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

1.6 Copyright

Copyright © 2018 – All rights reserved.

Copyright law prohibits the unauthorized reproduction, modification, distribution, and use of this document, in whole or in part.