

Products and solutions 2026



Drive solutions that impress.

The reliable partner at your side!

For over 90 years, the owner-operated family business SEW-EURODRIVE has stood for a diverse range of values, including a personal and partnership-based approach, solutions and services, responsibility and quality, tradition and innovation, and a whole lot more besides.

As a market leader in drive and automation technology, we don't just power countless applications in virtually every industry. With over 22 000 employees, we're also playing a key role in shaping the future of drive technology, ensuring you and your systems and machines are always at the cutting edge – not just now, but in the future, too. We want you to achieve shared success with us.



Where you can find us?

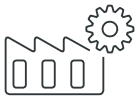
We are never far away!



Country
Germany



33
locations



5
production plants



More than 800
sales and
service experts



More than 30
services



Thanks to our 33 sales and service sites, 5 production plants and more than 800 sales and service experts, we are just a phone call away across the whole of Germany – offering personal, committed, reliable, and partnership-based service. That applies in Germany, in Europe, and worldwide.

What makes us truly stand out from other manufacturers? Thanks to our unique, dense network of service sites and service experts throughout the world, you never have to wait long for spare parts, repairs, or professional advice.



Drive Office



Drive Center



Drive Technology Center



Service Competence Center

SEW-EURODRIVE – the right solution for any requirement



Control technology, inverters and software

Efficiency and flexibility for your processes:
Solutions from the modular automation
system MOVI-C®.

→ [Page 6](#)

System solutions

Customized drive technology for efficient,
future-proof processes.

→ [Page 16](#)

Gear units, gearmotors, and motors

High-performance drive solutions that offer
maximum efficiency and durability.

→ [Page 21](#)

Industrial gear units

A compact design and maximum performance
for demanding applications.

→ [Page 40](#)

Life Cycle Services

Maximum availability and efficiency for your
drive systems – throughout the entire life cycle.

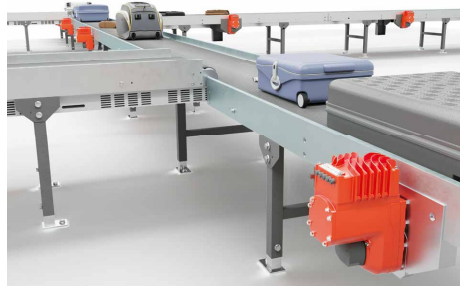
→ [Page 42](#)

→ We have highlighted all important information
and news for you in red!

MOVI-C® modular automation system

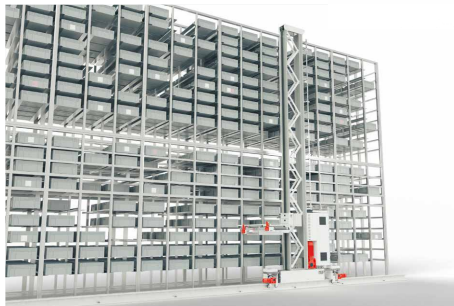


Potential uses / typical applications



Decentralized solutions, e.g. logistics

- Rotary tables
- Scissor lift tables
- Conveyor units
- Belt conveyors



Modularity for e.g. warehouse technology

- Storage/retrieval systems
- Indoor cranes
- Material handling vehicles



Automation components

- Cartoning machines
- FFS machines
- Winders
- Filling systems

The advantages at a glance



A true all-rounder!

MOVISUITE® is software for planning, startup, operation, and diagnostics that saves users time and money thanks to its optimized user-friendliness.



Standardized or customized!

To help ensure a quick startup, MOVIKIT® offers you a large number of parameterizable software modules for the controller. These can be expanded in the convenient programming environment to include custom logic.



For all needs!

MOVI-C® is the all-in-one automation toolkit from SEW-EURODRIVE, offering flexible components for single-axis automation right through to module automation applications – one manufacturer, one end-to-end solution.



Modular!

MOVI-C® offers a complete, all-in-one modular automation system. The individual components can be used to create solutions tailored to your requirements and bus topology.

Overview of the technology

The modular automation system

MOVI-C® is the all-in-one solution for automation tasks, no matter if you are implementing single-axis or multi-axis applications based on standards. Whether you want to create customized and/or highly complex motion control applications – MOVI-C® can help you do all that and gives you the scope to achieve optimum automation in new projects.

Designed for industrial use

The devices and software have been designed with special attention to the requirements for efficient startup, maintenance, and troubleshooting. The components meet all requirements and technical standards regarding industrial use.

New control modes

Newly developed and optimized control modes to support asynchronous and synchronous motors both with and without encoders on all devices ensure excellent performance, while also maintaining a high level of flexibility.

State-of-the-art fieldbus systems

Having a variety of fieldbus protocols available is essential when it comes to flexibly integrating solutions into existing infrastructures. MOVI-C® supports all the latest standard fieldbus protocols.

Integrated, digital motor interface

The integrated, digital motor interface allows for extremely robust and high-performance data transmission – well equipped for both current and future motor functions. It opens up a whole host of new possibilities when used in conjunction with electronic nameplates or integrated and expandable diagnostic units on the motor.



Energy efficiency

In addition to the inverters, which have been streamlined for efficient energy conversion, the devices in the Power and Energy Solutions series offer a wide range of options for storing energy and releasing it again when required. This helps reduce energy spikes and increase availability, for example.

Integrated safety technology

The inverters from the MOVI-C® modular automation system offer a range of safety functions – from integrated STO to higher-level safety functions and safe communication.

MOVI-C® CONTROLLER

type UHX15A

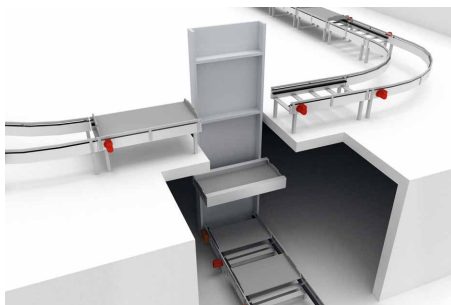


Potential uses / typical applications



Ideal for up to three frequency inverters

The controller extends the portfolio in the lower power range and has been developed for implementing simple applications.



Wide range of possible applications

The controller can be used for logic and motion control tasks – from conveying and lifting devices to motion control and automation applications.



Ready-made software modules

For simple motion control tasks such as positioning and speed mode through to synchronized motion sequences such as speed and torque coupling or position-related synchronous operation.

The advantages at a glance



Cost-effective!

The controller offers an optimum price-performance ratio for applications with up to three subordinate frequency inverters.



Straightforward!

Thanks to the state-of-the-art MOVISUITE® engineering and programming environment, motion tasks can be implemented quickly and easily.



Open!

Thanks to the real-time programming system, applications can be created on the basis of the IEC 61131-3 programming standards.



Flexible!

Thanks to a range of fieldbus connection variants, this series of controllers can be integrated into EtherNet/IP™, Modbus TCP, and PROFINET. Subordinate actuators and sensors can be connected via EtherCAT®.

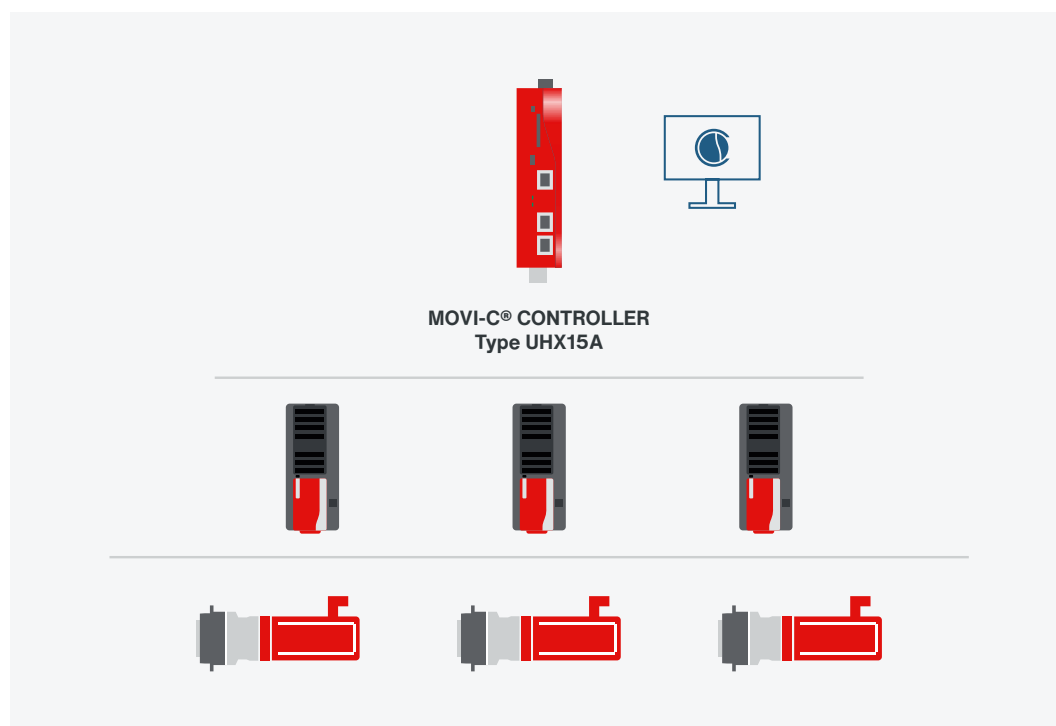
Overview of the technology

The MOVI-C® CONTROLLER type UHX15A satisfies all requirements for applications with up to three frequency inverters. It has been developed to enable users to implement applications with a small number of devices cost-effectively.

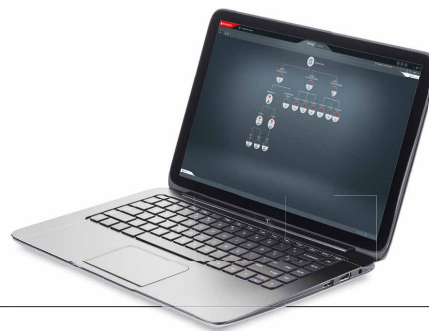
The user program is stored on a replaceable memory card, so devices can be replaced quickly.

Thanks to the user-friendly MOVISUITE® engineering and programming environment, the controller supports fast implementation of machine and system solutions, which helps boost efficiency and conserve resources in machine and system automation.

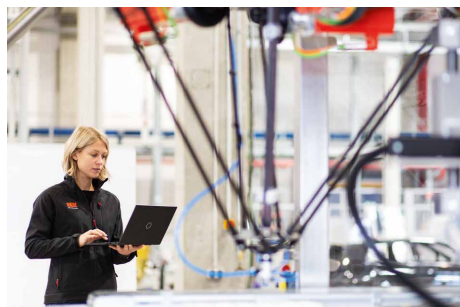
Drive electronics that are available in the MOVI-C® modular automation system and accessories from an extensive range, such as I/O modules and displays, can also be added to the controller to create the perfect solution.



Engineering software MOVISUITE® V2.80



Potential uses / typical applications



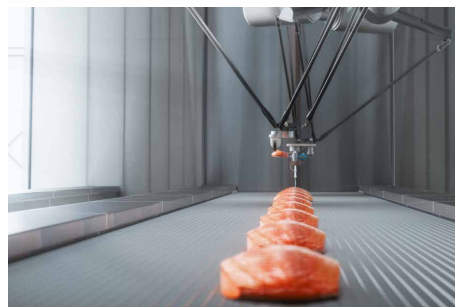
Planning

Efficient workflows for drive components thanks to offline startup.



Startup and programming

Installation and programming of all SEW-EURODRIVE drive components, including control technology devices and products.



Operation and diagnostics

The intuitive display of devices puts you in control of the system.

The advantages at a glance



Quick startup!

Thanks to the startup assistant, which enables the convenient start-up of the connected motors, the key parameters, and the used MOVIKIT® software module, for example.



Seamless and complete!

MOVISUITE® standard is the engineering software for the entire MOVI-C® modular automation system, from gear unit to control technology.



Compact!

MOVISUITE® compact offers all the functions needed to start up the inverter. Installation only takes a few minutes. What's more, there are no visualizations or programming, which saves hard disk space.



Free of charge!

Both versions of MOVISUITE® are freely available on the website. There are no charges for using them.

Overview of the technology

NEW! MOVIRUN® smart

MOVIRUN® smart significantly accelerates and simplifies the startup of a MOVI-C® CONTROLLER with lower-level inverters.

The IEC Editor is completely dispensed with – no corresponding knowledge is required. Only a few entries are required in MOVISUITE® standard using our MOVIKIT® software modules. The program for the MOVI-C® CONTROLLER is then generated and loaded automatically.

Startup assistant

- Multi-motor operation is configured quickly and easily.
- A startup step can be selected directly after opening.

Startup of MOVIRUN® smart

Device name	Device identification	Startup	Software module	License	PD length	PD address	Safety option
UHX65A	UHX65A	Fieldbus interface	MOVIRUN® smart		-	-	
sync1	MCK91A-0010-5E3-4-S00	Startup wizard	Gearing		8	1 to 8	Assist CS...
sync2	MCK91A-0010-5E3-4-S00	Startup wizard	Gearing		8	9 to 16	Assist CS...
Infeed							
DSI	DSI00-0020-5D3-A-000	Startup wizard	Positioning Drive		-	-	
StackerCrane	Software node	Startup wizard	StackerCrane effiDRIVE®		24	17 to 40	
x_Axis	MDD91A-0020-503-X-S00	Startup wizard	StackerCrane MultiMotion		-	-	Assist CS...
y_Axis	MDA90A-0020-503-X-S00	Startup wizard	StackerCrane MultiMotion		-	-	Assist CS...

Einheitliche Zykluszeit: 4 ms 40 / 512 Prozessdaten Calculate PD address

MOVIRUN® smart can be used across industries and is suitable for all applications that can be implemented with the MOVIKIT® software modules available in MOVIRUN® smart.



New devices and features

- Integration of DC 48 V motors
- DR2C.. with selection of the energy efficiency class (IE5, IE4, IE3, IE2)
- Integration of LM3S.. linear drives
- Device status for controllers, incl. description in the tooltip
- Optical localization of the inverters via context menu function
- Speed-controlled jog mode in manual mode
- License manager: License can be selected via designation or type code

Cybersecurity at SEW-EURODRIVE

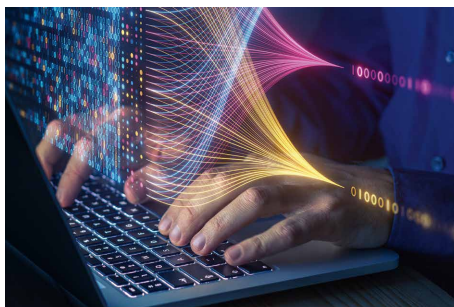


The pillars of cybersecurity



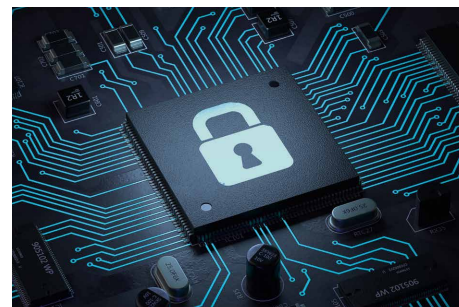
IT security and OT security

- Protecting IT systems
= information technology (IT)
- Protecting production equipment and systems
= operational technology (OT)



Data protection

- Protecting personal data, along with the right to privacy and informational self-determination
= data privacy



Product security

- Technical product features in relation to the scope of delivery
- Processes for a secure product lifecycle

The advantages at a glance



Successfully certified

Our information security management system has been certified to ISO 27001 since 2006 and our product security management has been certified to IEC 62443-4-1 since 2021.



Well protected

Our product security measures protect our products, solutions, and services against cyber threats throughout their entire lifecycle.



Feedback sought

Our central Cybersecurity Emergency Response Team (CERT) analyzes reports of security vulnerabilities that it receives. On this basis, it issues security advisories recommending protective measures and corrective actions.



Always up to date

If you register with us, our CERT experts will let you know about new and updated security advisories by e-mail.

EU laws and regulations

As a result of growing networking, and in response to a major increase in cyberattacks and cyber incidents, the EU has enacted a number of laws and regulations to improve cyber resilience in the EU:

NIS 2	Directive relating to network and information security (2022/2555/EU)
RED	Radio Equipment Directive (2014/53/EU)
MR	Machinery Regulation (2023/1230/EU)
CRA	Cyber Resilience Act (2024/2847/EU)
EU Data Act	(2023/2854/EU)
EU AI Act	(2024/1689/EU)



Find out more:

The SEW-EURODRIVE website provides information about this legislation, the company's cybersecurity setup, and the action it intends to take moving forward.

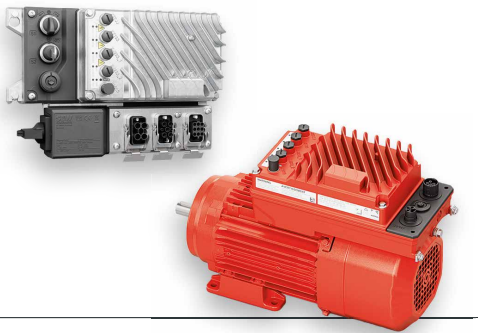


To access this information, simply scan the QR code or use the following quick link:

www.sew-eurodrive.de/security/en

MOVIONE®

decentralized drive unit and decentralized inverter



Potential uses / typical applications



Package logistics and distribution



Warehouse technology and order picking



Materials handling technology, including low-temperature applications

The advantages at a glance

Flexibility!
From a gearmotor with integrated frequency inverter to a decentralized inverter for installation close to the motor – MOVIONE® provides flexibility for your applications, while also saving you time and money.

Integrated!
From gearmotor to control technology and engineering software – end-to-end integration into the MOVI-C® modular automation system opens up synergies during planning and startup.

Optimized!
Always running the drive train at the optimum operating point is crucial for efficient system management. MOVIONE® drive units enable reliable operation of your system.

Efficient!
Whether in partial-load or full-load operation, energy-efficient motors with synchronous technology and an ECO2 design reduce energy requirements and CO₂ equivalents on a sustainable basis.

Overview of the technology

- Rated power of 1.5 kW
 - Continuous current of up to 4.0 A and overload capacity of 200%
 - Integrated brake control
 - DI/DIO with status LED
 - Communication via PROFINET or EtherNet/IP™
 - STO via communication
- MOVIONE® – integrated into the motor**

 - All brake types and braking torques for the relevant motor size can be controlled
 - Standard ECO2 design, with the option of selecting a painted variant
 - The inverter can be rotated 180° before it is mounted
 - Selection of connection technology: 1 × S15* (in) or 2 × S15* (in & out)
 - Local engineering interface
- MOVIONE® – installed close to the motor**

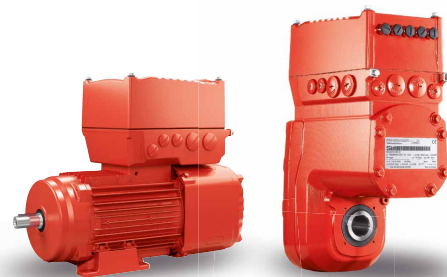
 - Selection of options:
 - Maintenance switch /D11 (input side of inverter)
 - Local control elements
 - Selection of connection technology:
 - 1 × S15* (in) or 2 × S15* (in & out)
 - 1 × HAN Q4/2 or 2 × HAN Q4/2
 - HAN Q8/0 motor output connector
 - Local engineering interface

* Size 15 round plug connector, in accordance with DIN EN IEC 61076-2-116, with bayonet lock
Compatible connection cables: MQ15 Power (Murrelektronik) and S15 Power (Phoenix Contact)

Efficiency/ speed min ⁻¹	Nominal motor power kW DR2C.. synchronous motors / DRN.. asynchronous motors					
	0.25	0.37	0.55	0.75	1.1	1.5
IE5/2000 ¹⁾	DR2C71MKAR4	DR2C71MKA4	DR2C71MSAR4	DR2C71MSA4	DR2C71MA4	DR2C80MKA4
IE5/3000 ¹⁾	-	DR2C71MKAR4	DR2C71MKA4	DR2C71MSAR4	DR2C71MSA4	DR2C71MA4
IE3/1450 ¹⁾	DRN71MS4	DRN71M4	DRN80MK4	DRN80M4	DRN90S4	DRN90L4
IE3/2960 ²⁾	-	DRN71MS4	DRN71M4	DRN80MK4	DRN80M4	DRN90S4

¹⁾ Y-type motor connection, motor design: integrated into the motor and installed close to the motor
²⁾ D-type motor connection, motor design: installed close to the motor

MOVI-C®: decentralized drive technology



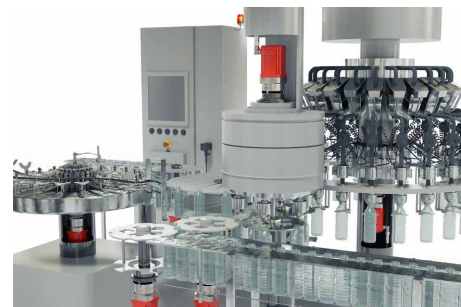
Potential uses / typical applications



Conveying technology



Logistics / warehouse technology



Materials handling

The advantages at a glance



Scalability/consistency!

Whether you require control cabinet installation or inverter installations in the field, our new inverter platform offers you consistency and scalability for your entire system.



Lower costs!

Increase overall equipment effectiveness – thanks to condition monitoring and predictive maintenance. An integrated standby mode and flux optimization boost energy efficiency.



Open solution!

A wide range of integrated communication interfaces enables easy integration into modern installation topologies.



Flexibility!

Whether you require a gearmotor with integrated frequency inverter or a decentralized inverter for installation close to the motor, our decentralized drive solutions provide flexibility for your applications, while also saving on costs and energy.

Overview of the technology

MOVIONE®

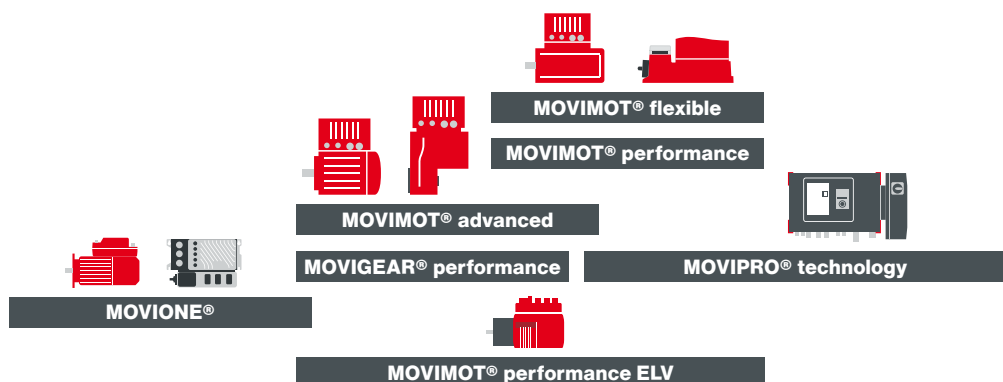
- DRN.. motors in IE3 and DR2C.. motors in IE5
- Rated power of 1.5 kW
- Continuous current of up to 4.0 A and overload capacity of 200%
- Integrated brake control
- DI/DIO with status LED
- PROFINET or EtherNet/IP™
- STO via communication

MOVIMOT® performance ELV

- Compact drives, 180 – 503 W
- DC 48 V voltage supply (DC 22 – 59 V)
- Synchronous motor with MOVILINK® DDI single-turn / multi-turn encoder
- Holding brake, brake control
- Safe Torque Off HW (STO, PL d)
- MOVIKIT® software modules
- PROFINET, EtherCAT®, POWERLINK, EtherNet/IP™, Modbus TCP

MOVIMOT® flexible

- Drive unit for installation close to the motor
- Various connection options for different drive types
- 2.0 – 16 A nominal output current



MOVIMOT® advanced

- Motors in IE3 or IE5 with integrated inverter
- Nominal power of 0.37 – 7.5 kW

MOVIMOT® performance

- CM3C.. synchronous motors with integrated inverter
- Nominal power of 0.75 – 4 kW

MOVIGEAR® performance

- Gearmotor with integrated inverter
- Highly efficient – exceeds IE5 and IES2 requirements
- Decentralized inverter for 4 product families
- Available in 4 sizes

MOVIPRO® technology

- Operation of synchronous and asynchronous motors
- 9 performance classes from 4 kW to 30 kW
- 200% overload capacity
- MOVILINK® DDI motor interface
- Evaluation of commonly used motor encoders

MOVIMOT® performance ELV

Compact extra-low voltage drive



Potential uses / typical applications



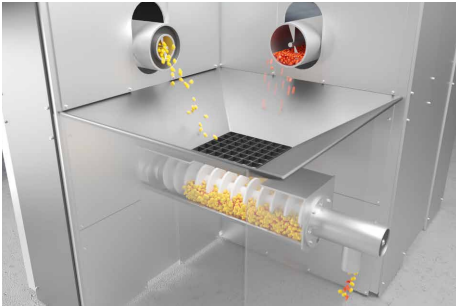
Transporting lightweight unit loads

- Stationary conveyor systems
- Shuttles running on rails
- Mobile logistics vehicles



Handling small parts

- Aligning and positioning
- Separating and grouping
- Distributing and sorting



Automating processes

- Adjusting (hatches, doors, barriers)
- Metering (fillers, mixers)
- Setting (formats, level control)

The advantages at a glance



High-performance!

- Industrial Ethernet interface
- Data exchange using standard profiles
- Full functional connectivity



Efficient!

- Excellent efficiency
- Energy exchange in the DC network
- Control with minimal system vibrations, wear, etc.



Compact!

- Sustainable design
- Small installed size
- Low weight



Simple!

- Minimal installation work
- Fast startup (MOVILINK®)
- End-to-end engineering (MOVISUITE®)

Overview of the technology

Rated data

- Power rating of 180 W – 503 W at 4000 min⁻¹
- DC 48 V voltage supply (DC 22 V – 59 V)

Functions

- Signal/power electronics, brake control, MOVILINK® DDI position encoder, digital I/O interface, Ethernet fieldbus, CFC closed loop system
- Operating modes: torque, speed, and positioning

Options

- Holding brake, absolute encoder, Safe Torque Off HW (STO, PL d), and MOVIKIT® software modules

Portfolio of gearmotors with high short-term overload capacity, optimized dimensioning, and compact designs



SBus^{PLUS}

EtherNet/IP

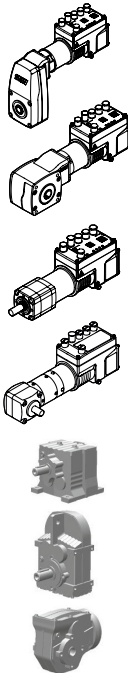


ETHERNET POWERLINK



DCA63S-4LP	DCA63M-4LP	DCA63L-4LP	DCA80M-4LP
180 W	272 W	356 W	503 W
0.43 Nm	0.65 Nm	0.85 Nm	1.2 Nm
4000 min ⁻¹	4000 min ⁻¹	4000 min ⁻¹	4000 min ⁻¹
2.05 kg*	2.35 kg*	2.65 kg*	3.2 kg*

* Without brake



F.02/F.03 parallel-shaft helical gear units

- 2 sizes, 3-stage, solid shaft or hollow shaft
- 5 reduction ratios, i = 6 – 48

SPIROPLAN® W.02/W.03 right-angle gear units

- 2 sizes, 1-stage, solid shaft or hollow shaft
- 5 reduction ratios, i = 6 – 48

PNZ... planetary gear units

- PNZ63A: 3 reduction ratios, 1- to 2-stage, i = 5, 15, 45
- PNZ80A: 4 reduction ratios, 1- to 2-stage, i = 5, 15, 25, 45

KNZ63A right-angle gear units

- 2- or 3-stage
- 3 reduction ratios, i = 17, 54, 84.8

R.07
R.17
R.27

F..27

W..19
W..29
W..39



Can be combined with 7-/9-series gear unit types using an ADC adapter

ECDriveS® – scalable extra-low voltage system for roller conveyors



Potential uses / typical applications



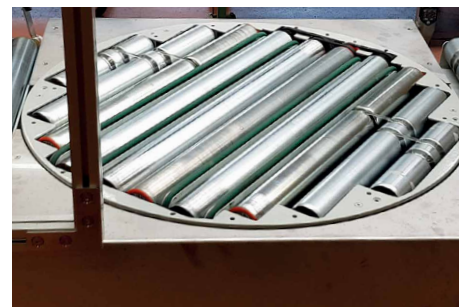
Zero pressure accumulation

Zero pressure accumulation of boxes or packages in intralogistics and e-commerce



Conveyor belts for machines and systems

Conveyor belts for machines and systems in mobile and stationary applications.



Rotary tables and corner transfer units

Use of gearmotors in complementary applications in the area around roller conveyors

The advantages at a glance



High power density

Power rating up to 65 W and 200% overload capacity, higher torque than typical comparable solutions with up to 8 Nm dynamic limit torque.



Advanced controller

You still have a free choice – central control via PLC or decentralized, intelligent conveyor logic for zero pressure accumulation; automatic startup (electr. nameplate); integrated encoders reduce sensors/limit switches.



Optimum system availability

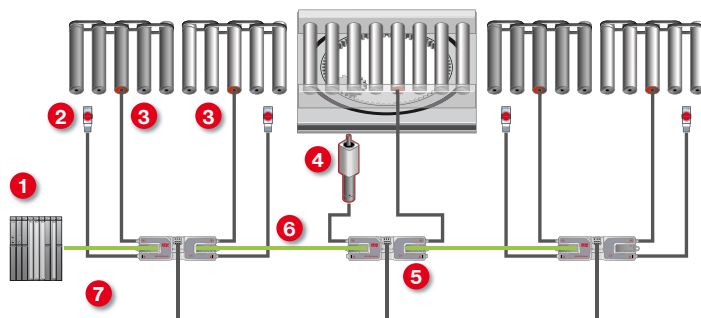
Thanks to diagnostics and visualization for every space, digital motor interface consistently connects all drives, continuous monitoring and preventive maintenance, simple handling in the event of failures.



Long service life

Brushless permanent magnet motor, full-metal planetary gear unit with bearings on both ends of the planetary gears ensures high stiffness, optimum tooth engagement, and minimum wear – even at high loads.

Overview of the technology



Installation topology with ECC DFC-..

- 1 PLC/controller
- 2 Sensors
- 3 ECR roller motors
- 4 ECG gearmotors
- 5 ECC-DFC fieldbus controller
- 6 Fieldbus
- 7 24 V supply or 48 V supply



EtherCAT
Technology Group

EtherNet/IP



ECR.. roller drive and ECG.. gearmotor

Type	IA2M	A2M	A4M
Nominal voltage	24 V	24 V	48 V
Power rating / current	40 W / 2.5 A	50 W / 3 A	65 W / 1.9 A
Overload	150%	200%	230%
Description	Integrated commutation electronics - Operating modes: analog (0 - 10 V) - Connection to third-party motor control modules, especially ASI motor modules		
	External commutation electronics - High overload capacity and thermal reserves for high cycle rates - Optionally with integrated holding brake at 24 V - Connection to ECC-DFC fieldbus module or ECC-DBC binary module		

MOVIDYN® decentralized servo system



Potential uses / typical applications



Form, fill, and seal machines



Multipackers
in sideloader and topper configurations



Gantry palletizers and palletizing robots
with simple or complex kinematic models

The advantages at a glance



Modular!

This decentralized, star-type concept facilitates modular and scalable machine concepts, including I/O topology.



End to end!

The entire system comes from a single supplier – from gear unit to software – with everything coordinated.



Simple!

Fewer variants, defined sizes, and a clear system topology. Fast configuration and quick installation, without complex control cabinet technology in processing industries.



Flexible!

Whether integrated or mounted close to the motor, and whether decentralized or centralized – DC 560 V or DC 48 V – everything is fully incorporated into a single system.

Overview of the technology

The MOVIDYN® decentralized servo system is a fully integrated drive system for modular machine architectures. It features a compact design, scalable power ratings, and dynamic performance.

Seamless integration into control, communication, and energy topologies makes for an efficient overall solution, with reduced use of control cabinets, short cable routes, flexible machine modules, and end-to-end engineering processes in automation applications.

Resource-friendly and simple

- Safe Torque Off (STO) functionality included in the basic module, Safety over EtherCAT® integrated
- Hybrid cables throughout (M23) to reduce the amount of cabling work and the installation time

Optimized for modular machine concepts

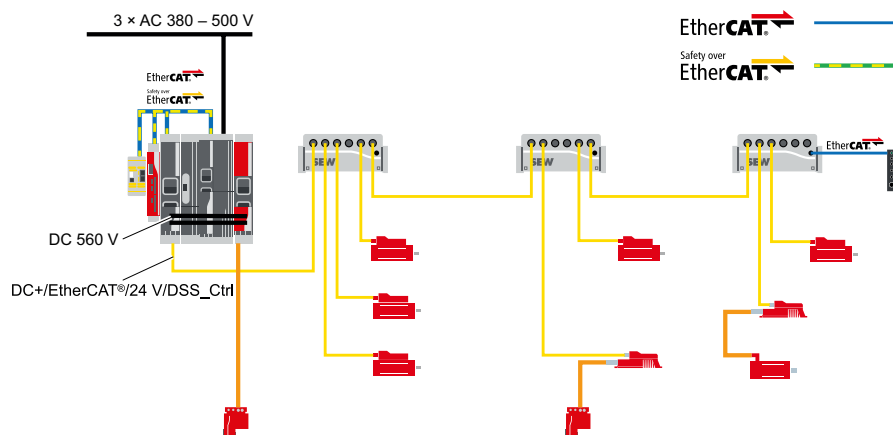
- Star-type topology
- Servo inverters integrated or mounted close to the motor, for variable installation concepts
- Decentralized incorporation of I/Os via the distribution module

Fully integrated into the automation platform

- Compatible with the MOVI-C® modular system and the portfolio of gear units
- Suitable for all kinds of different drive technologies

Scalable during the machine life cycle

- Performance can be enhanced and axis expansion is possible while keeping the same architecture, with identical tools and engineering processes



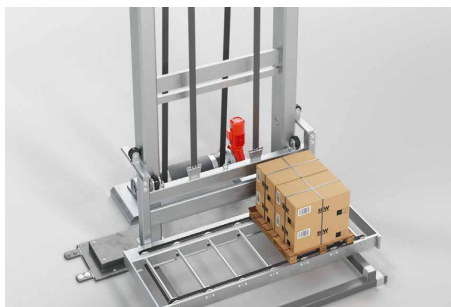
MOVITRAC® advanced control cabinet inverter



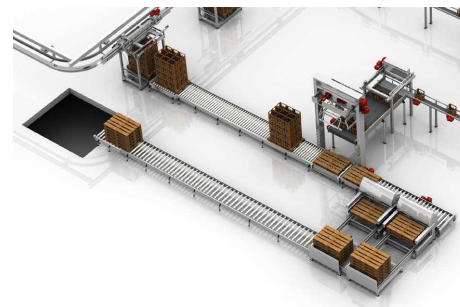
Potential uses / typical applications



Materials handling technology



Vertical drives



Palletizers

The advantages at a glance



Saves time!

Quick and easy startup thanks to the electronic nameplate and the use of preconfigured MOVIKIT® software modules.



Simple!

Quick and easy unit replacement during servicing, without an engineering PC, thanks to a portable memory module for storing all device data.



Open solution!

Connection to standard control systems thanks to various fieldbus protocols and the CiA® 402 drive profile being supported.

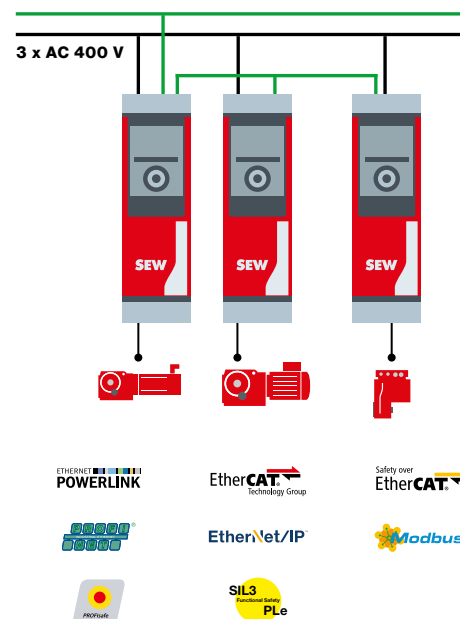


Flexible!

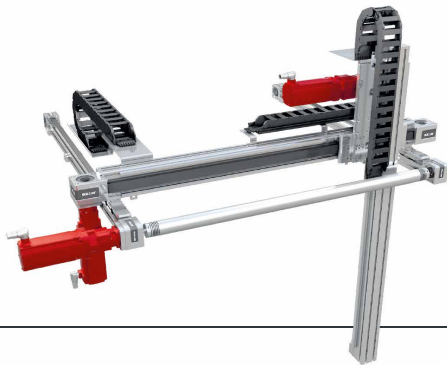
Configurable functional safety – from integrated STO safety function to higher-level safety functions and safe communication.

Overview of the technology

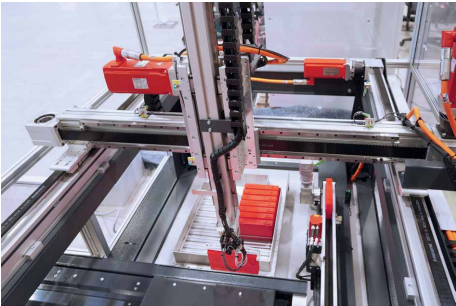
Technical data	Nominal voltage V	1 × AC 200 – 240 3 × AC 200 – 240 3 × AC 380 – 500
	Nominal power kW	0.25 – 315
	Overload capacity	150%
Control mode	Controlling and monitoring of: – Synchronous and asynchronous AC motors with/without an HTL encoder, with evaluation possible via digital inputs – Asynchronous motors with LSPM technology – Synchronous and asynchronous linear motors	
Communication interface	– Integrated communication interface – choose from PROFINET, EtherNet/IP™, Modbus TCP, EtherCAT®/SBUS ^{PLUS} , EtherCAT® CiA® 402, and POWERLINK CiA® 402	
Functional safety	– STO (safe torque off) to PL d integrated into the basic unit – Other safety functions configurable – such as SBC, SDI, or SLS – Safe communication configurable via PROFIsafe/PROFINET, Safety over EtherCAT®, and CIP Safety™	
Additional features and equipment	– Configurable MOVILINK® DDI digital data interface – State-of-the-art control modes: U/f, VFCPLUS, ELSM®, and CFC – Control of torque, rotational speed, and position – Startup via plug-in and scalable keypads or MOVISUITE® engineering software – Simple startup using MOVIKIT® software modules – Portable memory module for easy unit replacement without engineering software	



Solutions for gantry robots



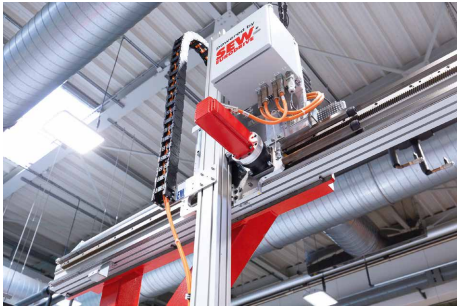
Potential uses / typical applications



Handling applications
e.g. in battery production, where precision gantry robots place individual cells into trays.



Order picking
e.g. in a storage table – products are placed gently and with precision into containers as they pass.



Production/processing
Suitable for use in any cuboid space, gantry robots adapt their dimensions and load bearing capacity to the application.

The advantages at a glance

- ✓

Flexible!
Make planning easier – shorten startup. The software modules of the MOVIKIT® bundle can help you with this. These modules offer every opportunity to coordinate the robot's functionality with the application requirements.
- ✓

Simple!
The MOVIKIT® Robotics software module offers a robot controller with 3D simulation and integrated user interface. No PLC programming expertise is required for startup.
- ✓

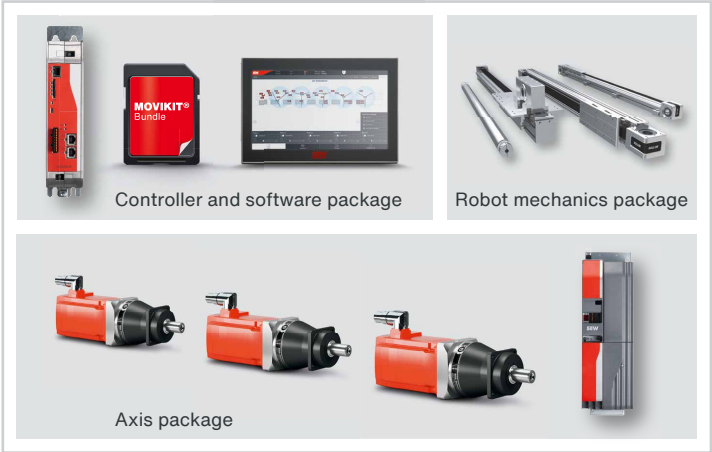
User-friendly!
The MOVISUITE® RobotMonitor user interface is always the same, whether startup is conducted using a PC, tablet, or handheld device. This makes it more user-friendly during operations and service.
- ✓

Customized for a perfect fit!
The preconfigured components have a modular design. As a result, the application can be flexibly adapted and expanded easily – to any specific requirements.

Overview of the technology

Collaboration between SEW-EURODRIVE and linear technology specialist Rollon GmbH has produced a completely new offering for implementing gantry robots. This joint package includes servo gearmotors, electronics, control technology, and the necessary software, resulting in a simple, plug-and-play solution. It has as much standardization as needed, but is always application-specific and custom-designed. The MOVIKIT® Robotics software module is at the heart of the solution and offers a fully programmed robot controller with integrated user interface.

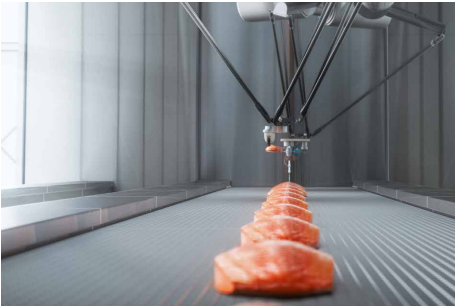
You benefit from a partnership that closely networks teams of experts, thus reducing the number of contacts you have to deal with to a minimum. Not only does this collaboration speed up your projects, it also enables you to cut total costs considerably. SEW-EURODRIVE and Rollon stand for rapid processes, quick coordination, and fast delivery times.



Delta Robot

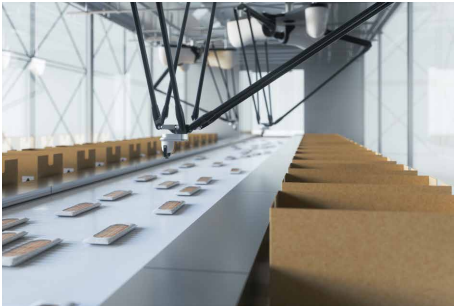


Potential uses / typical applications



Food and beverage industry

In fish and meat processing, for example, cutting and filleting; available as standard or hygienic design version for sensitive food areas.



Packaging technology

for precise pick-and-place tasks as well as applications with high cycle rates, e.g. loading, positioning, gluing and sorting of secondary and third packaging.



Intralogistik

Aligning or grouping small to large loads in handling systems or in order picking.

The advantages at a glance

- 

Simple!
Parameterization instead of programming thanks to the MOVIKIT® Robotics software module including 3D simulation. The pick-and-place control modules are PackML-compatible.
- 

Individual!
Open interfaces for integrating common peripheral devices. Modularity and adaptability as a scalable component in the respective process.
- 

Precise!
High repeatability thanks to precise positioning accuracy and mechanical software coordination.
- 

Energy-efficient!
Application optimized component packages ensure resource saving and highly efficient solutions.

Overview of the technology

The modular delta robot solutions be precisely tailored to you needs – from modular systems to fully integrated system solutions Coordinated mechanics, drive, and software packages enable fast assembly and easy commissioning without requiring specialized robotics programming knowledge. The special kinematics allow precise, high-speed pick-and-place operations. Selection and configuration are carried out to ensure seamless integration into existing production processes.

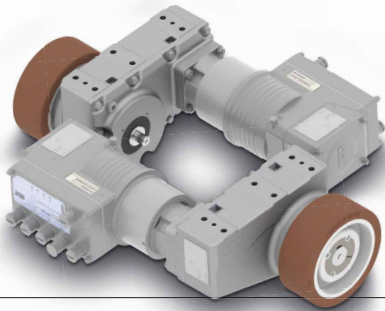
Under the MAXOLUTION® brand SEW-EURODRIVE implements individual and integral system solutions with innovative components and solution packages from the modular technology system. When it comes to automating entire systems and creating a networked factory, we prioritize future-proof technologies and accountability for performance. From planning and project management to Commissioning – with many years of experience and expertise. Innovative engineering for the processes of tomorrow.



Designation	Number of arms	Optional axes	Hygienic design ¹⁾	Working space mm	Payload kg	MOVIKIT® Robotics
D2	two	Rotation axis	yes	200 – 1400	3 – 150	yes
D4	three	Rotation axis	yes	200 – 2000	0,5 – 50	yes
D5	three	Rotation axis, inclination axis	no	1050 – 1900	1 – 12	yes

¹⁾ Mechanics also available in stainless steel design.

Travel drives for mobile systems FL.9 series



Potential uses / typical applications



Mobile systems: AGV/AGVS



Shuttles in warehouse logistics



Pallet transfer carriage

The advantages at a glance



- Variant-rich!**
- Wide gear ratio range
 - Multiple sizes
 - Extensive motor portfolio
 - Individual wheel selection



- Efficient!**
- High efficiency
 - Long service life
 - Cost-optimized
 - Easy to maintain



- Application-specific!**
- Optimum installation space
 - Small vehicle width
 - Gear axes are optimized for coaxial and overhung loads
 - Ideal for using ELV technology



- Automation from a single source!**
- Extensive drive portfolio
 - Flexible control and safety technology
 - Preconfigured software modules
 - Simple startup and comprehensive service

Overview of the technology

Gear unit series



Size		FL09	FL29*	FL39*
Gear ratio range		6 – 48	7 – 140	7 – 128
Nominal output torque		40 Nm	130 Nm	200 Nm
Nominal wheel load		7500 N	10000 N	15000 N
Wheel diameter	minimum recommended	120 mm 200 mm	150 mm 200 mm	180 mm 250 mm
Mounting option		Top baseboards (series), flange on output (on request)		
Options		– Mounting the encoder on the output shaft – Wheel according to customer request or from the preferred series by SEW-EURODRIVE		
Gear unit type		Helical gear unit in two-part aluminum housing		
ELV motor portfolio		DCA63S – DCA80M / CMP50S/M/L / CM3C63M		
Electronics portfolio ELV		MOVIMOT® performance ELV compact extra-low voltage drive – Nominal power 180 – 503 W Multi-axis servo controller of type SCM – System power up to 1.9 kW		



Optional second shaft end
e.g. for encoder mounting



Versatile wheel interface

* Product announcement

Mobile Robots Platform 1600



Potential uses / typical applications



Transporting all kinds of goods

With a variety of load handling devices, the fleet offers flexible solutions for numerous transport tasks – from driving under, lifting, and moving loads to precise docking.



Simple integration of custom modules

Multifunctional, flexible interfaces for project-specific superstructures. Seamless integration into existing materials handling technology – quick, reliable, and future-proof.



In-process contactless charging

Maximum availability and capacity utilization without additional charging times – energy exactly where it is needed.

The advantages at a glance



Intelligent load handling!

A mobile robot with integrated lift, roller conveyor, and/or interface for custom load handling. Automatic transfers and seamless integration into existing materials handling technology for an optimum material flow.



Maximum flexibility!

One platform with endless possibilities. A modular design and scalability for flexible use, fast parameterization and adaptation, plus lower operating and implementation costs.



Well connected!

Thanks to the standardized VDA 5050 interface, mobile robots from different manufacturers can communicate with the fleet manager – for agile, future-proof solutions that are easy to integrate.



Available fast!

Our mobile robots are ready to ship in just 20 days, or just 5 days for urgent orders, with precise planning and flexible scaling of availability for building or expanding fleets.

Overview of the technology



Dimensions

L = 1500 mm, W = 1000 mm,
H = 365 – 400 mm



Positioning accuracy

Down to +/- 4 mm



Payload

Up to 1600 kg



Navigation

Laser navigation with parking function



Load handling device

Lift (150 mm), roller conveyor, customer-specific load handling (1 axis)



Power supply

Inductive charging with MOVITRANS® spot or MOVITRANS® line



Weight

430 – 625 kg



Communication

WLAN, VDA 5050



Speed

Max. 1.6 m/s



Drive concept

Bidirectional operation
(differential drive)



Safety

Intrinsically safe vehicle with
CE certificate and RED compliance



Options

3D cameras, flashing light and
wiper strip



Energy storage

LFP battery or MOVI-DPS® double-layer capacitor



Gradient

Up to +/- 7%

High quality – 80% of the technology comes from SEW-EURODRIVE

A modular design and exceptionally easy servicing – from the powerful drive and intelligent control through to reliable communication, resulting in a maintenance-friendly robot with a long service life.

MAXOLUTION®

Under the MAXOLUTION® brand, SEW-EURODRIVE creates bespoke, fully integrated system solutions with innovative components and solution packages from our modular technology system. When it comes to automating entire systems and creating a networked factory, we are committed to future-proof technologies and accountability for performance.

By rethinking processes and applications in the areas of logistics and assembly, we help companies on their journey to achieving a lean smart factory.

We have many years of experience and expertise – from planning and project management through to startup and well beyond – delivering innovative engineering for the processes of the future.

Rail-guided systems with ASi-5



Potential uses / typical applications



Electrified monorail system (EMS)



Floor track system (FTS)



Pallet transfer shuttle

The advantages at a glance



Networked!

State-of-the-art ASi-5 communication technology makes it easy to integrate devices with high volumes of data and large parameter sets.



Adaptable!

Customized project planning and flexible adaptation for both hardware and software. Based on IEC 61131-3 (CODESYS) with MOVIKIT® RailGuidedSystems software modules.



Tried and tested!

Approved solutions with a functional warranty based on the MOVI-C® modular automation system – simply wire and parameterize, then you're good to go!



Available worldwide!

Automation solution with global availability, local service, and spare parts kept in stock at SEW-EURODRIVE sites.

Overview of the technology

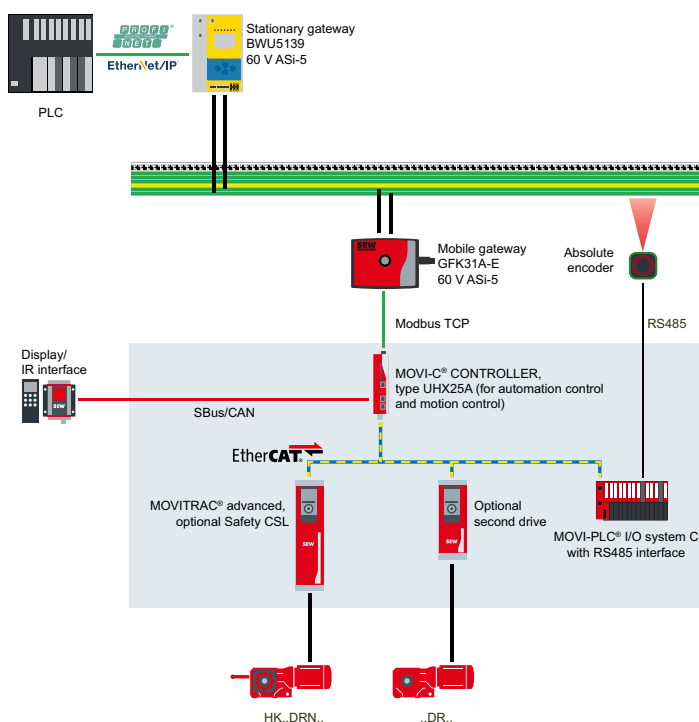
ASi-5 technology sets new standards in communication technology and expands the potential uses of the decentralized MOVI-C® modular automation system. When used as rail bus communication for system solutions, ASi-5 facilitates quick startup and easy integration of devices.

Stationary

- Open-system connection of the stationary, higher-level system controller to the ASi-5 DC 60 V railbus device:
- Possible communication interfaces: PROFINET, EtherNet/IP™
- Up to 2 track segments of max. 200 m each
- Up to 40 mobile devices
- Short communication cycle of 40 ms at 17 bytes per vehicle
- Switch control (optional)

Mobile

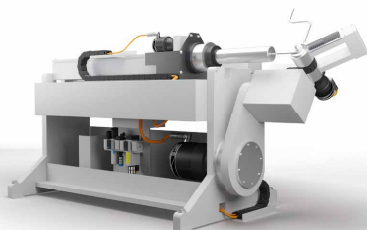
- Preconfigured ASi-5 gateway for quick startup and reliable communication
- MOVI-C® CONTROLLER of type UHX25A with MOVIKIT® RailGuidedSystems application software module
- Inverter from the MOVI-C® modular automation system, e.g. MOVITRAC® advanced
- Monorail system gearmotors that can be decoupled mechanically
- Display with infrared interface for manual operation (optional)



PxG[®] integrated precision planetary gearmotors



Potential uses / typical applications



Wire and pipe bending machine



Chain magazine and tool changer



Four-way pallet shuttle

The advantages at a glance



Dynamic!

Three different gear unit sizes are available, each in three performance classes, with peak torques ranging from 70 to 990 Nm.



Compact!

Installation length up to 40% shorter than conventional servo gearmotors mounted using an adapter



Precise!

Single-stage, two-stage, and three-stage precision gear units with gear ratios ranging from 4 to 220



Flexible!

Wide range of options, such as reduced rotational clearance, food-grade lubrication, and all kinds of encoder systems

Overview of the technology

Developed for challenging robotics and automation applications, the new PxG[®] integrated precision planetary gearmotors combine precision with an extremely compact design.

The impressive features of this fully integrated gear unit and motor combination include state-of-the-art magnet and winding technology, dynamic performance, versatility, and hygienic lubricant options, if required.

A further focal point is ensuring the solution can be used even in the tightest of spaces. PxG[®] integrated variants are up to 40% shorter than comparable planetary servo gear units mounted using an adapter. Boasting accuracy down to one angular minute, they are the ideal drive solution for demanding applications and can boost productivity by up to 34% in applications with short cycle times.

Further flexibility is provided by the variety of encoder options available:

- MOVILINK[®] DDI digital motor interface¹⁾
- HIPERFACE[®]
- Resolver
- HIPERFACE[®] DSL from SICK Stegmann
- EnDat 2.2 from Heidenhain
- DRIVE-CLiQ from Siemens AG
- No encoder

PxG® precision planetary gear unit	P5.G		P6.G		P7BG	
Gear ratio i	4 – 100		4 – 100		16 – 220	
Dyn. output torque Nm	47 – 760		47 – 480		70 – 990	
Rotational clearance	≤ 1 (R) – 6 (N)		≤ 2 (R) – 8 (N)		≤ 1 (R) – 3 (N)	
CM3G.. servomotors	71S	71M	80S	80M	100S	100M
System voltage V	400/48					
	3000/6000					
Standstill torque Nm	2.45	5.8	4.65	15.6	8.8	25.5
Standstill current A	1.46/2.75	3.95/7.3	3.15/6.2	10.1/18.9	7.3/14.4	12.5/22
Dyn. limit torque Nm	4.5	12.6	8	30	15.6	60
Max. motor current A	3.2/6	9.2/17	6.1/12	21.5/40	16.7/33	33.5/59



PxG[®] economy planetary servo gear units



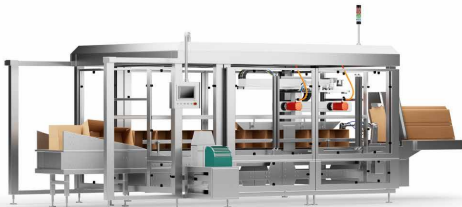
Potential uses / typical applications



Sprue picker



Linear robots



Cartonizers

The advantages at a glance



Cost-effective!
Cost-optimized and tailored to your application.



Powerful!
Different classes for the respective overhung loads and precision specifications



Versatile!
– 6 different performance classes
– 7 different sizes
– Wide range of gear ratios and options



Adaptable!
All standard mounting flanges and output variants are available.

Overview of the technology



Performance class	P1.G..	P2.G..	P3.G..
Permitted overhung load	+	++	+++
Torque	11 – 500 Nm	11 – 500 Nm	11 – 500 Nm
Sizes	5 sizes, 1- or 2-stage	5 sizes, 1- or 2-stage	5 sizes, 1- or 2-stage
Gear ratio range	3 – 100	3 – 100	3 – 100
Gearing	Straight-toothed	Straight-toothed	Straight-toothed
Lubrication	Grease	Grease	Grease
Service life	20 000 h	20 000 h	20 000 h
Operating mode	Dynamic	Dynamic	Dynamic



Corrosion resistance
Housing surfaces and interfaces with corrosion protection as standard, no painting



Bearing systems
Accurate bearing service life predictions using precise calculation of the contact pressure distribution

PxG[®] precision planetary servo gear units



Potential uses / typical applications



Machine tool gantry

- Assembly press
- Drilling and pegging machine



Filling and transfer starwheel

- Printing machine
- Diaper machine



Delta/tripod kinematics

- Laser cutting machine
- Chain magazine and tool changer

The advantages at a glance



Simple!

Huge time savings as a result of quick integration into existing systems, thanks to 100% geometrical compatibility with the market standard.



Customized!

Configured to meet your exact requirements in terms of service life, precision, and performance, thanks to a comprehensive modular system.



Durable!

Up to 200% of the standard service life for seals, thanks to the exclusive Premium Sine Seal.



Powerful!

High torque and simultaneously high speeds, even in the case of 100% continuous duty.

Overview of the technology



Performance class	P5.G..	P6.G..	P7.G..
Permitted overhung load	+++	+	+++
Torque	66 – 4200 Nm	40 – 2000 Nm	90 – 6150 Nm
Sizes	6 sizes, 1-, 2-, and 3-stage		
Gear ratio range	3 – 1000	3 – 700	4 – 550
Gearing	Helical		
Lubrication	Oil	Oil/grease	Oil
Service life	20 000 h	30 000 h	20 000 h
Operating mode	Dynamic	Continuous duty	Dynamic



Gearing surfaces

Precise, low-noise transfer of high torques, thanks to tribologically optimized gearing surfaces.



Sealing systems

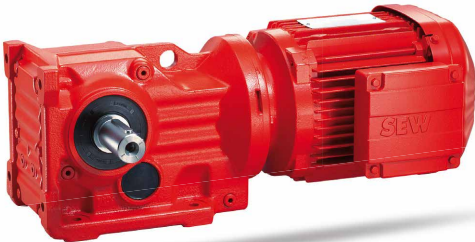
Long service life, thanks to the exclusive Premium Sine Seal oil seal in the gear unit adapter.



Tribological systems

High efficiency and low wear, thanks to factory lubrication for life with GearOil by SEW-EURODRIVE.

Gearmotors standard



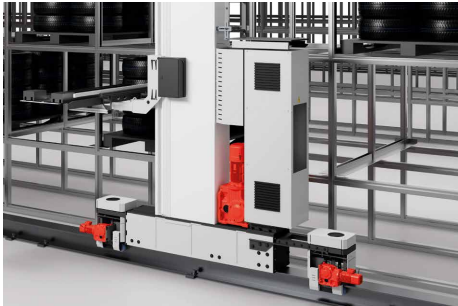
Potential uses / typical applications



Roller conveyors



Agitators



Storage/retrieval systems

The advantages at a glance

Express service!
Lead times to suit you. Thanks to our service options, we can supply our gearmotors exactly when you need them.

Customized!
Our design tools make it exceptionally easy for you to configure your gearmotor to suit your specific application – or simply ask your SEW-EURODRIVE contact for help.

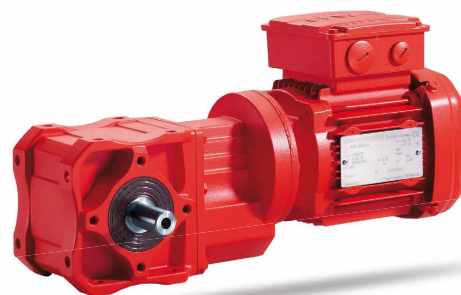
Energy-efficient!
SEW-EURODRIVE combines energy-saving motors in a fully comprehensive, modular gearmotor system – for efficient solutions that can be utilized on an economical and flexible basis.

Full-service supplier!
SEW-EURODRIVE is a leading drive technology company that offers the full range of system components – from electromechanical components to controllers and inverters. You get everything you need from a single supplier.

Overview of the technology

			
Gear units	Helical gear units (R..)	Parallel-shaft helical gear units (F..)	Helical-bevel gear units (K..)
Flow of force	Axial	Axial	Angular
Type	RX..7 (1-stage) 6 sizes 57 – 107 R..7 (2-/3-stage) 15 sizes 07 – 167	– F..7 (2-/3-stage) 11 sizes 27 – 157	K..9 (2-stage) 4 sizes 19 – 49 K..7 (3-stage) 12 sizes 37 – 187
Maximum output torque Nm	RX..7: 69 – 830 R..7: 50 – 20 000	– F..7: 120 – 20 000	K..9: 80 – 500 K..7: 200 – 53 000
Reduced backlash	R..7: Yes	F..7: Yes	K..7: Yes
Gear unit ratio i	RX..7: 1.30 – 8.65 R..7: 3.21 – 289.74	– F..7: 3.77 – 281.71	K..9: 2.81 – 75.20 K..7: 3.98 – 197.37
Compound gear unit ratio i	– R..7 R..7: 90 – 27 001	– F..7 R..7: 87 – 31 434	K..9 R..7: 75 – 7137 K..7 R..7: 94 – 32 625

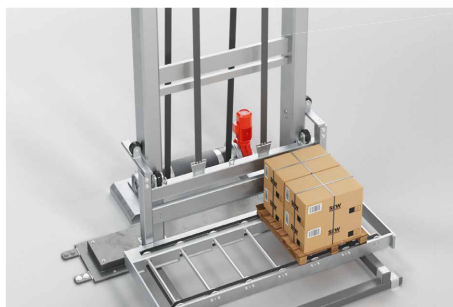
Gearmotors standard



Potential uses / typical applications



Horizontal materials handling technology
Roller conveyor, chain conveyor, belt conveyor



Vertical materials handling technology
Vertical drive



Materials handling technology with changes of direction
Rotary table, trolley

The advantages at a glance



Versatile!

Adaptability to suit your needs and requirements



Scalable!

- Speed and force
- Torque
- Power rating as required, factoring in overload
- Safety features



Durable!

Thanks to high-quality wear components and intelligent/innovative designs



Available!

Worldwide – for plannable and early consideration of laws and regulations

Overview of the technology



Gear units	Helical-worm gear units (S..)	SPIROPLAN® gear units (W..)
Flow of force	Angular	Angular
Type	S..7 (2-stage) 7 sizes 37 – 97	W..0 (1-stage) 3 sizes 10 – 30
	S..7p (2-stage) 7 sizes 37p – 97p	W..9 (2-/3-stage) 5 sizes 19 – 59
Maximum output torque Nm	S..7: 92 – 4000	W..0: 30 – 70
	S..7p: 105 – 4300	W..9: 80 – 600
Reduced backlash	–	–
Gear unit ratio i	–	W..0: 6.57 – 75.00
	S..7/S..7p: 3.97 – 288.00	W..9/W..9HG: 4.68 – 2426.20
Compound gear unit ratio i	–	–
	S..7/S..7p R..7: 110 – 33 818	W..9 R..7: 222 – 19 242

3-phase motors	
Number of poles	2, 4, 6, 8, 12, 4/2, 8/2, 8/4
Type	Single-speed: DRN.., DRU.., DR2C.., DR2S.., DR2L.., DR2M.. 31 sizes: 56 – 315
	Pole-changing: DR2S.. Sizes: 63 – 200
Power rating kW	Line and inverter operation: IE1 – DR2S..: 0.09 – 45 IE3 – DRN..: 0.09 – 375 IE4 – DRU..: 0.75 – 375 IE4 – DRU..J: 0.18 – 3
	Inverter operation: DR2L..: 0.3 – 69 DR2S..: 0.13 – 96 IE5 – DR2C..A: 0.25 – 17 IE5 – DR2C..U: 11 – 90
Frequency Hz	50, 60, 50/60

High Dynamic synchronous servomotors – CM3P.. motor design



Potential uses / typical applications



Highly dynamic handling applications
where flexibility counts.



Industrial production systems
where excellent reliability and precision are crucial.



Robotics applications
with high demands in terms of dynamics and repeat accuracy.

The advantages at a glance



Functional safety
– Optional safety brake and safety encoder
– Can be used individually or in combination



Single-cable technology
Simple startup and less installation work between hardware components thanks to MOVILINK® DDI.



Wide range of combinations
thanks to the modular gear unit system, e.g. helical, parallel shaft helical, helical-worm, helical bevel, and SPIROPLAN® right-angle gear units, plus PxG® planetary servo gear units.



Efficiency
IE5: CM3P.. servomotors exhibit exceptional efficiency compared with conventional asynchronous technology thanks to the latest winding and magnet technology.

Overview of the technology

Impressive features of synchronous servomotors in the CM3P.. motor design include high power density and maximum acceleration values. Their minimal intrinsic inertia and high overload capacity enable extremely short cycle times, making your machine considerably more cost-efficient.

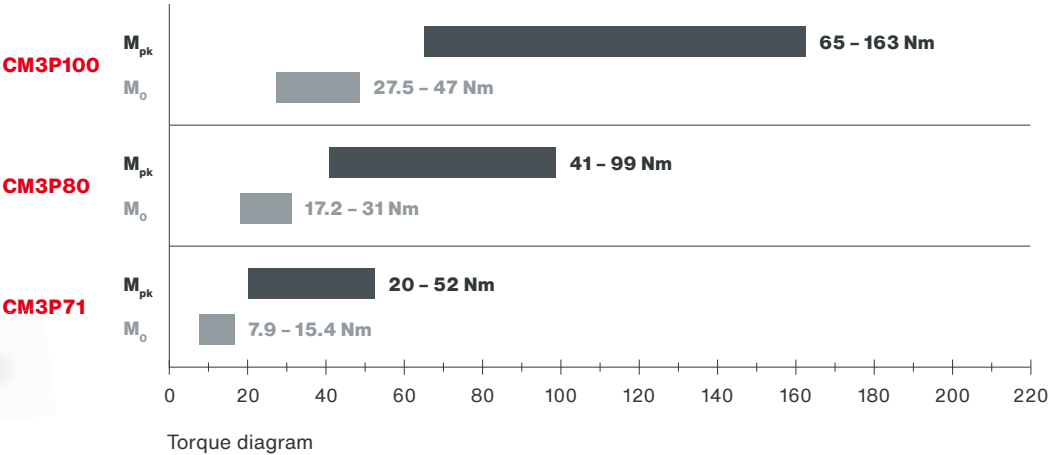
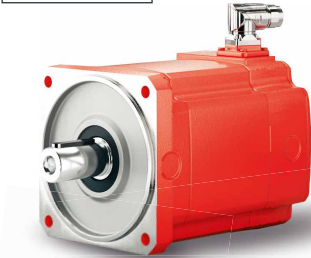
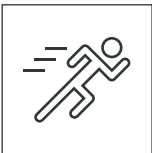
When it comes to moving light loads with speed and precision, a low load inertia to motor inertia ratio is vital. The motors cover standstill torques ranging from 0.5 to 47 Nm* and can achieve peak torques of up to 163 Nm.

* Further sizes to follow

The portfolio is enhanced by further motor features such as direct mounting on gear units, a wide range of options (including a hygiene-friendly design) and accessories, and a cable length of up to 200 m between the motor and inverter.

SEW-EURODRIVE's modular system

- One supplier – everything from a single source
- Available worldwide
- Short delivery times and longterm product availability



ECM3C.. explosion-protected synchronous servomotors



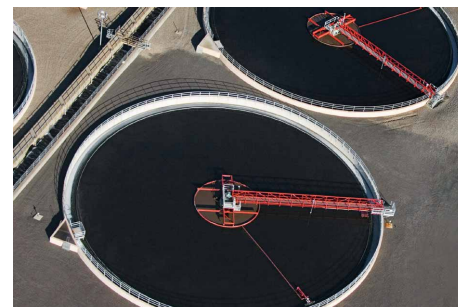
Potential uses / typical applications



Wood, construction, and construction materials industries



Chemical and pharmaceutical industries



Special applications such as biogas systems

The advantages at a glance



Certified

to ATEX and IECEx standards; protection type "e" in a gas atmosphere; protection type "t" and degree of protection IP65 in a dust atmosphere



Simple

startup and less installation work between hardware components thanks to the MOVILINK® DDI digital motor interface



Customized

with direct motor mounting on helical, parallel-shaft helical, helical-worm, and helical-bevel gear units, SPIROPLAN® right-angle gear units, and PxG® planetary servo gear units



Dynamic

across the entire speed range thanks to the latest winding and magnet technology

Overview of the technology

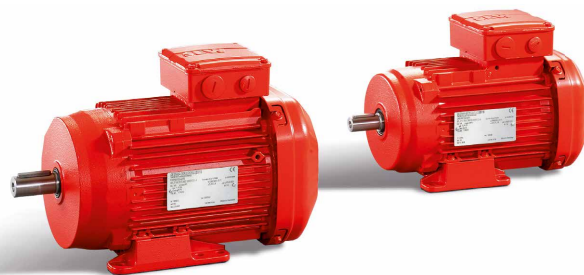
The compact, explosion-protected servomotors in the ECM3C.. series are available in four sizes – 63, 71, 80, and 100 – and offer standstill torques ranging from 2.6 Nm to 33 Nm.

Thanks to their safe design and additional protective measures, these motors meet the requirements of EU Directive 2014/34/EU (ATEX) and the IEC 60034 motor standard and can be used in a whole host of industrial applications.

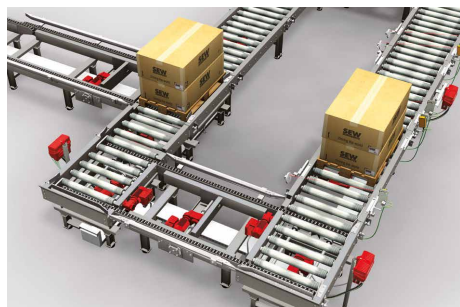
Despite the special design, numerous additional optional accessories such as brakes, encoders, and electrical connection technology are available.

Complying with Directive 2014/34/EU (ATEX)	ATEX design	Explosion protection designation	Zone	Motors	Options
	/3D	II3D Ex tc IIIC T150°C Dc	22	ECM3C 63 – 100	– Brake – HIPERFACE® encoder – Resolver
	/3GD	II3G Ex ec IIC T3 Gc II3D Ex tc IIIC T150°C Dc	2/22		– Brake – Resolver
Complying with IECEx standard	/3D-c	Ex tc IIIC T150°C Dc	22		– Brake – HIPERFACE® encoder – Resolver
	/3GD-c	Ex ec IIC T3 Gc Ex tc IIIC T150°C Dc	2/22		– Brake – Resolver

IE5 solutions – DR2C.. series synchronous motors



Potential uses / typical applications



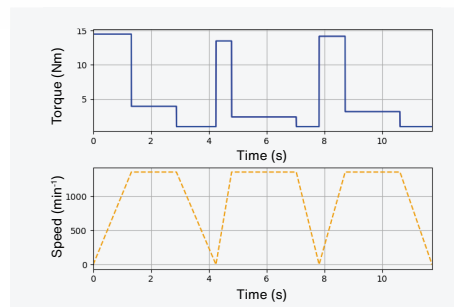
Fine-tune your materials handling

Materials are moved fast and without any collisions. Saving energy – which used to be a secondary issue – is now of equal importance in the production process.



Use speed to your advantage

Optimize motor speed and, therefore, overall speed. To ensure energy-efficient conveying, only run motors as fast as you actually need to.



Customize load profiles

Put an end to the oversizing of drives and make better use of overload capacity. Optimize drive tasks in terms of time/energy, reduce idle periods, and put productivity and energy saving on an equal footing.

The advantages at a glance



Maximum overall efficiency!

Efficient solutions utilize high-quality components and unlock further energy-saving potential in relation to system time management by making use of the range of speeds.



Standard-based efficiency!

IE5 energy efficiency is measured according to IEC 60034-2-3 and certified in the standard-based classification of the highest IE class with the maximum speeds from IEC TS 60034-30-2.



Strong options!

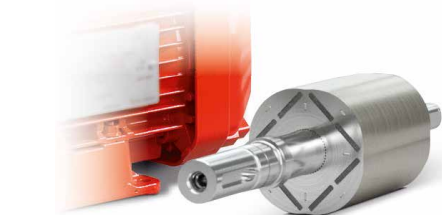
Many potential uses, thanks to **4 speed classes in 2 system voltages** and the IE5 efficiency class.



Part of a modular system!

A total of 17 installation lengths in the 4-pole design and 6 installation lengths in the 6-pole design are DR2C.. components of the DR.. modular motor system with all its options (connectors, encoders, brakes, forced cooling fans, etc.).

Overview of the technology



DR2C..A series synchronous motors: Technology: interior permanent magnets

- Speed classes: 2000 and 3000 min⁻¹
- Overload capacity for torques: 200 – 250%
- **7 installation lengths, 4-pole: 71MKAR4 to 80MA4**
 - With power ratings of 0.25 – 2.30 kW at 2000 min⁻¹
 - With power ratings of 0.37 – 3.50 kW at 3000 min⁻¹
- **6 installation lengths, 6-pole: 90SA6 to 132SA6**
 - With power ratings of 3.60 – 13.2 kW at 2000 min⁻¹
 - With power ratings of 5.80 – 17.0 kW at 3000 min⁻¹
- With or without speed feedback
- With or without MOVILINK® DDI digital interface
- Gearmotor or IEC foot-mounted and/or flange-mounted motor
- Fan-cooled as standard, but variants without ventilation and with forced air cooling are also available
- Approvals for the USA (UR) and/or Canada (CSA)
- Approval for China (CEL)



DR2C..U series synchronous motors: Technology: reluctance forces

- Speed classes: 1500, 1800, and 3000 min⁻¹
- Overload capacity for torques: up to 200%
- **10 installation lengths, 4-pole: 160MU4 to 280MU4**
 - With power ratings of 11 – 90 kW at 1500 min⁻¹
 - With power ratings of 11 – 90 kW at 1800 min⁻¹
- **4 installation lengths, 4-pole: 160MU4 to 200LU4**
 - With power ratings of 11 – 45 kW at 3000 min⁻¹
- With or without speed feedback
- With or without MOVILINK® DDI digital interface (combination options available from September 2026)
- Gearmotor or IEC foot-mounted and/or flange-mounted motor
- Fan-cooled as standard, but variants without ventilation and with forced air cooling are also available
- Approvals for USA (UR) and/or Canada (CSA) (approval available from March 2026)
- No approval for China (CEL) is necessary, as no permanent magnets installed and not an asynchronous motor

IE5 solutions – inverters for DR2C.. motors



Potential uses / typical applications



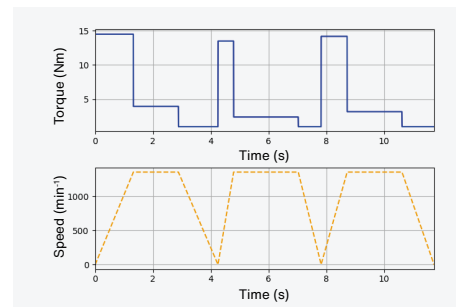
Fine-tune your materials handling

Materials are moved fast and without any collisions. Saving energy – which used to be a secondary issue – is now of equal importance in the production process.



Use speed to your advantage

Optimize motor speed and, therefore, overall speed. To ensure energy-efficient conveying, only run motors as fast as you actually need to.



Customize load profiles

Put an end to the oversizing of drives and make better use of overload capacity. Optimize drive tasks in terms of time/energy, reduce idle periods, and put productivity and energy saving on an equal footing.

The advantages at a glance



A free choice!

Whether decentralized or central, the frequency inverters from the MOVI-C® modular automation system can be combined flexibly with the DR2C.. motors as required.



Maximum combination options!

The exceptionally wide choice of permitted variants is best shown in a web-based tool with user guidance.



Part of a modular system – inverters!

Thanks to 7 series of control cabinet inverters and 4 series that are suitable for decentralized installation, directly on the DR2C.. motor or in the field, there's a solution for every drive task.



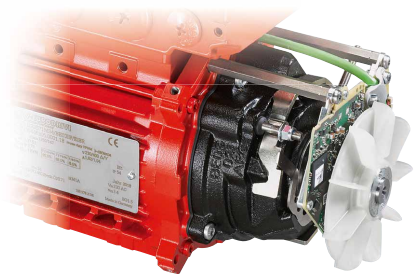
Part of a modular system – motors!

A total of 17 installation lengths in the 4-pole design and 6 installation lengths in the 6-pole design are DR2C.. components of the DR.. modular motor system with all its options (connectors, encoders, brakes, forced cooling fans, etc.).

Overview of the technology

	Speed feedback From DR2C..A		From DR2C..U	Supply system		PWM frequency				Output current	
	Without encoder as	With encoder in process		AC	V	kHz				A	
Central inverters											
MOVITRAC® classic	ELSM®	–	VFC ^{PLUS}	3	200 – 500	–	4	–	8	16	1 – 24
	ELSM®	–	–	1	200 – 240	–	4	–	8	16	5.5 – 11.1
MOVITRAC® advanced	ELSM®	CFC	VFC ^{PLUS}	3	380 – 500	2.5	4	–	8	16	1 – 380
	ELSM®	–	–	1	200 – 240	–	4	–	8	16	1.7 – 11
MOVITRAC® LTE-B+	PMVC	–	–	3	380 – 480	2	4	6	8	12	2.2 – 72
	PMVC	–	–	1	200 – 240	2	4	6	8	12	2.3 – 16
MOVITRAC® LTP-B	PMVC	–	SYN-R	3	380 – 480	2	4	6	8	12	2.2 – 370
	PMVC	–	–	1	200 – 240	2	4	6	8	12	4.3 – 10.5
MOVIDRIVE® modular	ELSM®	CFC	VFC ^{PLUS}	3	200 – 500	–	4	–	8	16	2 – 180
MOVIDRIVE® technology	ELSM®	CFC	VFC ^{PLUS}	3	380 – 500	2.5	4	–	8	16	2 – 380
MOVIDRIVE® system	ELSM®	CFC	VFC ^{PLUS}	3	380 – 500	2.5	4	–	8	16	2 – 380
Decentralized inverters											
MOVIONE®	ELSM®	–	–	3	380 – 500	–	4	–	8	16	4
MOVIMOT® advanced	ELSM®	–	–	3	380 – 500	–	4	–	8	16	2 – 16
MOVIMOT® flexible	ELSM®	CFC	–	3	380 – 500	–	4	–	8	16	2 – 16
MOVIPRO® technology	ELSM®	CFC	VFC ^{PLUS}	3	380 – 500	–	4	–	8	16	5.5 – 62

EI7. and EI8. built-in encoders for DR.. motors



Potential uses / typical applications



Reducing speeds
Lowering the speed is one way of optimizing energy costs, and speed feedback helps keep process operation stable.



Avoiding additional length
Encoder mounting adds extra length to motors. Built-in encoders are located in the fan guard, meaning they fit into system and machine structures.



Making the most of versatility
The signals from the built-in encoders' incremental interfaces can be processed in numerous controllers and used in many different ways.

The advantages at a glance

- ✓

Simple detection!
A low speed resolution is often sufficient to detect and monitor rotary motion.
- ✓

Simple transmission!
Electrical transmission via widely used incremental interfaces ensures excellent usability.
- ✓

Simple savings!
Both developing and manufacturing the built-in encoders means SEW-EURODRIVE has total control over costs.
- ✓

Simple integration!
The built-in encoders are fully integrated into the modular DR.. motor system and can be combined with a whole host of additional features.

Overview of the technology

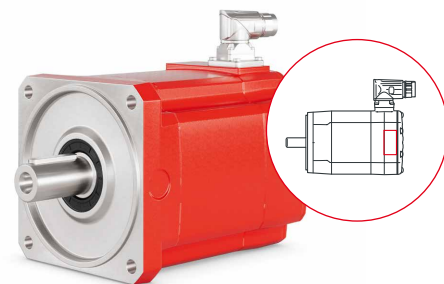
Built-in encoder type / designation ¹⁾	EI7C	EI7C	EI76	EI72	EI71	EI8C	EI8R	EI8Z
Periods per revolution	24	24	6	2	1	1024	1024	1024
Increments per revolution	96	96	24	8	4	4096	4096	4096
Absolute resolution	None	None	None	None	None	None	None	None
For motor series	DRN..., DR2S..	DRN..., DR2S..., DRU.. ²⁾	DRN..., DR2S..., DRU.. ²⁾	DRN..., DR2S..., DRU.. ²⁾	DRN..., DR2S..., DRU.. ²⁾	DRN..., DR2S..., DRU.. ²⁾	DRN..., DR2S..., DRU.. ²⁾	DRN..., DR2S..., DRU.. ²⁾
In sizes	63	71 – 132S	71 – 132S	71 – 132S	71 – 132S	71 – 132S	71 – 132S	71 – 132S
Electrical interface	HTL	HTL	HTL	HTL	HTL	HTL	TTL (RS422)	MOVILINK® DDI
Analog tracks	A, /A, B, /B	A, /A, B, /B	A, /A, B, /B	A, /A, B, /B	A, /A, B, /B	A, /A, B, /B, C, /C	A, /A, B, /B, C, /C	–
DC voltage supply V	9 – 30	9 – 30	9 – 30	9 – 30	9 – 30	7 – 30	7 – 30	Via DDI
DC voltage supply V FS	–	19.2 – 30	–	–	–	–	–	–
Cable length in meters up to	100	100	100	100	100	100	100	200
Plug connector connection with/without TF motor protection	M12	M12	M12	M12	M12	M23	M23	M23
Alternatively, terminal box connection with/without TF motor protection	–	Connection unit	Connection unit	Connection unit	Connection unit	Connection unit	Connection unit	Connection unit
Electronic nameplate	No	No	No	No	No	No	No	Via DDI
Functional safety (FS) (EN 61800-5-2)	–	SS1, SLS, SDI	–	–	–	–	–	–

¹⁾ All built-in encoders are always IP66, with no explosion protection and permitted ambient temperatures of -30 °C to +60 °C.

²⁾ DRU.. from size 90S only.

EnDat 3 – Encoders for CMP.. and CM3.. servomotors

EnDat 3



Potential uses / typical applications



Moving of kinematic models

CMP../CM3.. servomotors with EnDat 3 encoders ensure everything from heavy-duty gantries and Cartesian robots to palletizers move safely.



Machine timing

In deep drawing and forming machines, dynamic removal and loading units, and tool-carrying systems and machines, CMP../CM3.. servomotors with EnDat 3 encoders can control the timing.



Load handling

Whether in vertical drive applications or materials handling technology with high external loads and inertias – CMP../CM3.. servomotors with EnDat 3 encoders are also totally at home in third-party systems.

The advantages at a glance



Maximum choice!

Whether movement involves high dynamic requirements or high inertia extremes, EnDat 3 encoders with single-cable technology are suitable for CMP.. servomotors in 11 sizes and CM3.. servomotors in 24 sizes.



Hybrids work!

CMP.. and CM3.. servomotors with EnDat 3 encoders can be integrated into third-party power electronics and, accordingly, are supported during startup.



Strong options!

With up to four speed classes and dynamic loads exceeding 300% of the torque, the servomotors can really show their strength, including in combination with various types of SEW-EURODRIVE gear units.



Part of a modular system!

CMP.. servomotors in 11 sizes and CM3.. servomotors in 24 sizes with EnDat 3 encoders can be combined with all kinds of options (connection variants, brakes, forced cooling fans, etc.).

Overview of the technology

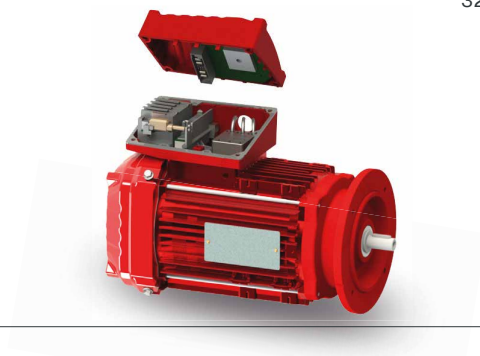
Series		CMP..	CMP..	CM3C..	CM3P.. ¹⁾	PxG® CM3G.. ²⁾
Sizes (fan-cooled)	Designation	50 – 63	112	63 – 100	63 – 100	63 ¹⁾ – 100
EnDat 3 single-turn safety encoder: 8 388 608 I/R (23 bits) Manufacturer: Heidenhain; type ECI 1323	../EH4F	X	X	X	X	X
EnDat 3 multi-turn absolute safety encoder: 8 388 608 I/R (23 bits) + 65 536 R (12 bits) Manufacturer: Heidenhain; type EQI 1335	../AH4F	X	X	X	X	X
Electronic nameplate	ET 6001	X	X	X	X	X
Terminal box with signal connector connection	../KEF	–	X	–	–	–
M23 hybrid connector (type: TE series 923, uncoded) with optional brake, DC 24 V	../SF1	X	–	X	X	X
M23 hybrid connector (type: TE series 723 htec, Code 4) with optional brake, all AC voltages	../SF4	X	–	X	X	X
M40 hybrid connector (type: TE series 740, uncoded) with optional brake, all DC and AC voltages	../SFB	X	X	X	X	–
CSA: maximum ambient temperature up to 40 °C		X	X	X	X	X
UR (from UL): maximum ambient temperature up to +60 °C (for > +40 °C, derating must be factored in)		X	X	X	X	X
Minimum ambient temperature down to -40 °C		X	X	X	X	X

Please note the further information relating to configuration and use of EnDat 3 encoders in the addenda to the operating instructions for the relevant servomotor series.

¹⁾ Size 63 from end of second quarter of 2026

²⁾ CM3G.. servomotor series in PxG® integrated

Digital motor integration for DR.. motors



Potential uses / typical applications



Basic functions

- Auto startup
- Motor identification data
- Encoder connection data
- Thermal motor protection



Brake function group

- Control
- Wear
- Temperature



Operation function group

- Accelerations and vibrations
- Oil change display
- Functional safety
- Motor operating hours
- Air pressure and humidity

The advantages at a glance



Automatic identification!

The motor transmits its data to the inverter, which sets its parameters accordingly. In the event of a replacement, the change of motor is detected and a release is requested.



Protective function!

The thermal motor protection status is permanently monitored. Any changes or the reaching of threshold values will trigger the safety functions programmed in the inverter.



Safety!

Switching the brake voltage on and off, measuring the resistance based on temperature detection, using the timing of switching to detect wear, and triggering safety functions when threshold values are reached.



Monitoring!

Sensor technology on the motor and/or gear unit records operating data for digitalized transfer. A timestamp makes it possible to work out operating times and to forward this information for monitoring purposes.

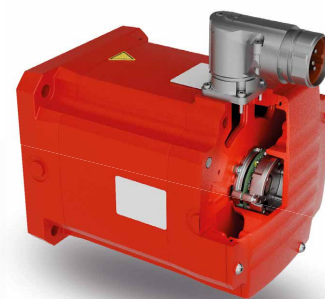
Overview of the technology

Series		DRN../DR2S../DRU..			DR2L..		DR2C..A	DR2C..U
Sizes (fan-cooled)		71 – 80	90 – 132S	132M – 225	71 – 132S	160 – 225	71 – 132S	160 – 225
Hybrid cable gland: 10 mm², M25 or M32 (KD not part of designation)	../DI	X	X	X	X	X	X	X
M23 hybrid connector: 1.5 – 4 mm²	../DI../KD1	X	X	X ¹⁾	X	X ¹⁾	X	X ¹⁾
M40 hybrid connector: 6 – 10 mm²	../DI../KDB	–	–	X	–	X	X	X
Two-cable connection (DDI M23 separate)	../DI../KDD	X	X	X	X ²⁾	X	X ²⁾	X
Y-D can be selected (for KDD)	../DI../KDD	X	X	X	X	X	X	X
Wiring diagram R76 (YY/Y)	../DI	X	X	X ¹⁾	–	–	–	–
Brake control (BG1Z)	../DI	X	X	X	X	X	X	X
AC 200 – 500 V condition monitoring								
DC 24 V – brake (3-wire)	../DI	X	X	X	X	X	X	X
Sensor module (DU1Z) for measuring temperature, humidity, air pressure, etc.	../DI	X	X	X	X	X	X	X
Without encoder	../DI	X	X	X	X	X	X	X
Forced cooling fan with encoder	../DI../V	X	X	X	X	X	X	X
Incremental encoder, 24 I/R (in FS design)	../DI../EI7C	X	X	–	X	–	–	–
Incremental encoder, 4096 I/R	../DI../EI8Z	X	X	–	X	–	–	–
Incremental encoder, 65 535 I/R	../DI../EK8Z	X	X	X	X	X	–	–
	../DI../EK9Z	–	–	–	–	–	X	X
Absolute encoder, 65 535 I/R – 65 536 R	../DI../AK8Z	X	X	X	X	X	X	X

¹⁾ Up to size 160 only

²⁾ From size 100 only

Digital motor integration for CM.. motors



Potential uses / typical applications



Basic functions

- Auto startup
- Motor identification data
- Encoder connection data
- Thermal motor protection



Brake function group

- Control
- Wear
- Temperature



Operation function group

- Accelerations and vibrations
- Oil change display
- Functional safety
- Motor operating hours

The advantages at a glance



Automatic identification!

The motor transmits its data to the inverter, which sets its parameters accordingly. In the event of a replacement, the change of motor is detected and a release is requested.



Protective function!

The thermal motor protection status is permanently monitored. Any changes or the reaching of threshold values will trigger the safety functions programmed in the inverter.



Safety!

Switching the brake voltage on and off, measuring the resistance based on temperature detection, using the timing of switching to detect wear, and triggering safety functions when threshold values are reached.



Monitoring!

Sensor technology on the motor and/or gear unit records operating data for digitalized transfer. A timestamp makes it possible to work out operating times and to forward this information for monitoring purposes.

Overview of the technology

Series		CM3C..	CM3C..	CM3P..	CM3P..
Sizes (fan-cooled)	Designation	63S - 71L	80S - 100L	71S - 71L	80S - 100L
M23 hybrid connector: 1.5 - 4 mm ²	../DI../SD1	X	X	X	X
M40 hybrid connector: 6 - 10 mm ²	../DI../SDB	-	X	-	X
Hybrid cable with M25 or M32 cable gland: 4 - 10 mm ²	../DI../KD	X	X	X	X
Terminal box with M23 hybrid plug connector, straight or angled: 1.5 - 4 mm ²	../DI../KD1 ¹⁾	X	X	X	X
Terminal box with M40 hybrid plug connector, straight only: 6 - 10 mm ²	../DI../KDB ¹⁾	X	X	X	X
Integrated BG1Z brake control ²⁾ AC 200 - 500 V condition monitoring	../DI	X	X	X	X
Integrated BS1Z brake control ²⁾ DC 24 V condition monitoring	../DI	X	X	X	X
Without encoder	../DI	X	X	X	X
Encoder, 4096 I/R	../DI../EZ2Z	X	X	X	X
Encoder, 65 536 I/R	../DI../EZ4Z	X	X	X	X
Safety encoder, 65 536 I/R	../DI../EK0Z	X	X	X	X
Absolute encoder, 4096 I/R - 65 536 R	../DI../AZ2Z	X	X	X	X
Absolute encoder, 65 536 I/R - 65 536 R	../DI../AZ4Z	X	X	X	X
Absolute safety encoder, 65 536 I/R - 65 536 R	../DI../AK0Z	X	X	X	X

¹⁾ Only in conjunction with BG1Z

²⁾ BG1Z or BS1Z only in conjunction with EZ4Z or AZ4Z

Generally: Pt1000 (PK) via DDI; ambient temperature down to -40 °C; Canada (CSA) up to +40 °C; Europe (CE) and USA (UR from UL) up to +60 °C

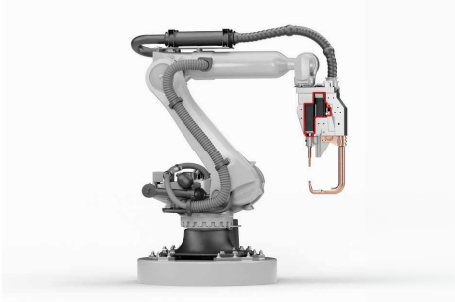
Electric cylinder series LM3S..



Potential uses / typical applications



Brick grapple
e.g. in concrete block production



Welding tongs
e.g. in the automotive industry



Machine tools
e.g. mounting presses

The advantages at a glance

- ✓

Dynamic and flexible
The high speeds that can be achieved and sophisticated travel profiles support short cycle times, even under high loads.
- ✓

Digital
Simple startup and less installation work between hardware components thanks to MOVILINK® DDI.
- ✓

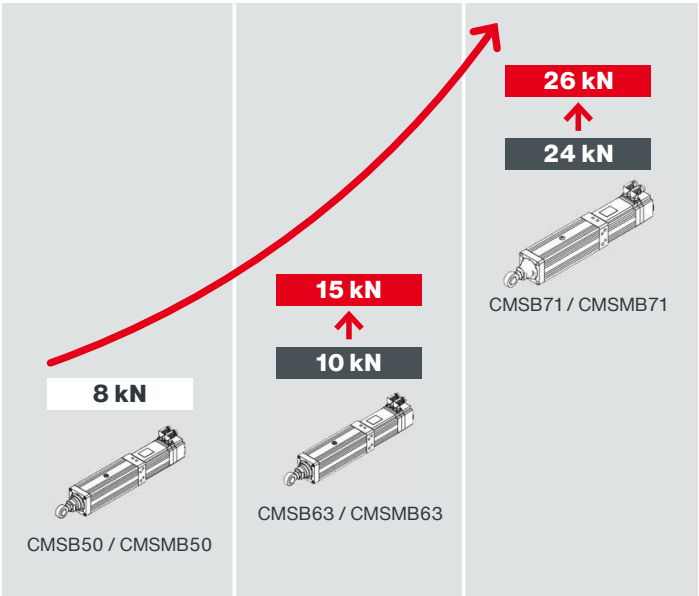
Compatible
Each cylinder is suitable for mounting two different synchronous servomotor sizes, and several belt transmissions are available. This ensures excellent adaptability in terms of dynamics, braking torques, and holding forces.
- ✓

Long service life
Patented oil lubrication makes the linear unit a maintenance-free solution and minimizes wear.

Overview of the technology

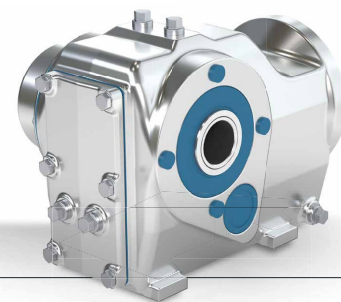
Following on from the successful CMS.. series, the LM3S.. series of electric cylinders is particularly suited to applications that call for linear movements with high accelerations/speeds and precision. The cylinders can be combined with CMP.. servomotors and the entire CM3.. modular motor system for maximum scalability, with a force range of up to 26 kN. What's more, tight installation spaces don't pose a problem – both parallel and series mounting are possible, so the cylinders are suitable for narrow and short designs.

Besides Resolver and HIPERFACE® encoders, the DDI encoder variant from SEW-EURODRIVE is also available, making it quick and easy to connect the motor to the inverter technology of the MOVI-C® modular automation system and thus enjoy all the benefits of this technology. Configuring the drives is easy, either online or using the familiar, freely available SEW-Workbench planning and configuration tool.



Enhanced performance of the new LM3S.. series

Stainless steel gear units – designs and sizes



Potential uses / typical applications



Source:
JBT/alco, Bad Iburg

Food processing

Applying fine coating materials such as flour, powder, powdered spices, and sugar to products



Food packaging

High-precision portioning and filling of yogurt or pudding



Source:
Alma, Rott am Inn

Food stirrer

Stirring milk and similar primary products in cheese production

The advantages at a glance



Scalable!

Multiple sizes in finely stepped torque classes make it easier to select the right design for an application.



High quality!

The stainless steel (V2A, SS304) used for the housing is robust, ideal for casting, and can have centering features, bores, and threads machined into it without great difficulty.



Integrated!

The stainless steel gear units are part of our modular portfolio and use the same parts wherever possible. Their connection dimensions are identical to those of the standard gear units, meaning they are interchangeable with these gear units.



Clean!

Thanks to the hygienic design and a surface that is resistant to acids and alkalis, these stainless steel gear units practically clean themselves.

Overview of the technology

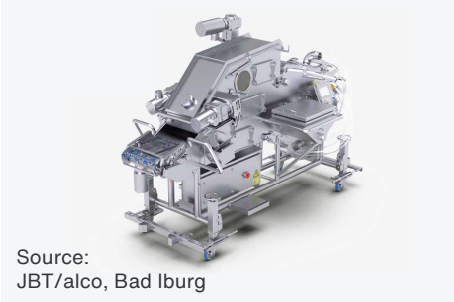


Type		Helical gear units	Helical-bevel gear units	Compound gear units	SPIROPLAN® right-angle gear units
With solid shaft and B5 flange		RESF..	KESF..	KESF.. RES..	WESF..
With hollow shaft (key)		–	KESA..	KESA.. RES..	WESA..
With hollow shaft (key) and B5 flange		–	KESAF..	KESAF.. RES..	WESAF..
With hollow shaft (shrink disk)		–	KESH..	KESH.. RES..	WESH..
With hollow shaft (shrink disk) and B5 flange		–	KESHF..	KESHF.. RES..	WESHF..
With hollow shaft (TorqLOC®)		–	KEST..	KEST.. RES..	WEST..
Sizes					
Maximum output torque	80 Nm	–	–	–	19
	130 Nm	27	–	–	29
	200 Nm	37	–	–	39
	230 Nm	–	37	–	–
	450 Nm	–	47	47..37	–
	630 Nm	–	57	57..37	–
	870 Nm	–	67	67..37	–
Number of stages possible in gear unit		2- and 3-stage	3-stage	5- and 6-stage	2- and 3-stage

Asynchronous stainless steel motors – designs and power ratings for 50 Hz



Potential uses / typical applications



Source:
JBT/alco, Bad Iburg



Food processing
Applying fine coating materials such as flour, powder, powdered spices, and sugar to products

Food packaging
High-precision portioning and filling of yogurt or pudding



Source:
Alpma, Rott am Inn

Food stirrers
Stirring milk and similar primary products in cheese production

The advantages at a glance

- ✓

Smooth!
The smooth surface is easy to keep clean and can also be cleaned with conventional high-pressure washers. Resistance to specific cleaning agents can be requested.
- ✓

High quality!
The use of 1.4301 stainless steel for the housing, terminal box, and flanges ensures the motor is well protected against acidic and alkaline cleaning, including during high-pressure cleaning.
- ✓

Efficient!
The motors keep losses low, are highly efficient in line with energy efficiency classes IE3 and IE4 (to IEC 60034-30-1 for line-operated motors), and also exhibit excellent efficiency in the partial-load range.
- ✓

Simple!
Using a simple tool, attached motors can be removed easily for inspection and maintenance purposes.

Overview of the technology

AC stainless steel motors						
Size	63	71	80	90	90	100
Designation	TENV 63-4	TENV 71-4B	TENV 80-4B	TENV 90S-4	TEFC 90L-4	TEFC 100LA-4
Type of ventilation	Non-ventilated	Non-ventilated	Non-ventilated	Non-ventilated	Fan-cooled	Fan-cooled
Power rating P _N kW	0.18	0.37	0.75	1.1	1.5 ¹⁾	2.2 ¹⁾
Frequency Hz	50	50	50	50	50	50
Voltage D/Y V	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400	230 / 400
Current D/Y A	0.95 / 0.55	1.80 / 1.04	3.08 / 1.78	4.33 / 2.50	4.07 / 2.35	5.51 / 3.20
Nominal speed (50 Hz) min ⁻¹	1385	1440	1450	1460	1445	1440
IE class (IEC 60034-30-1)	IE3	IE3	IE4	IE3	IE3	IE3
η 100% P _N	71.0%	80.0%	85.7%	85.8%	85.3%	86.7%
η 75% P _N	67.9%	82.2%	82.0%	83.5%	84.6%	85.5%
η 50% P _N	63.3%	79.2%	78.4%	79.2%	82.3%	83.1%
Operation on an inverter	Permitted; maximum dU/dt = 1.6 kV / 0.6 μs at the terminals; IEC TS 60 034-17					
Europe (EU27): manufacturer's declaration of conformity	CE					
Direct mounting to SEW-EURODRIVE gear units						
Pinion shaft end Ø mm	10	10	12	12	14	16
Hole circle / diameter	FG85 D105	X	X	–	–	–
	FG100 D120	–	X	X	–	–
	FG130 D160	–	–	X	X	X

¹⁾ Sales release expected in second half of 2026

Asynchronous stainless steel motors – designs and power ratings for 60 Hz



Potential uses / typical applications



Source:
JBT/alco, Bad Iburg

Food processing

Applying fine coating materials such as flour, powder, powdered spices, and sugar to products



Food packaging

High-precision portioning and filling of yogurt or pudding



Source:
Alma, Rott am Inn

Food stirrers

Stirring milk and similar primary products in cheese production

The advantages at a glance



Smooth!

The smooth surface is easy to keep clean and can also be cleaned with conventional high-pressure washers. Resistance to specific cleaning agents can be requested.



High quality!

The use of 1.4301 stainless steel for the housing, terminal box, and flanges ensures the motor is well protected against acidic and alkaline cleaning, including during high-pressure cleaning.



Efficient!

The motors keep losses low, are highly efficient in line with energy efficiency classes IE3 and IE4 (to IEC 60034-30-1 for line-operated motors), and also exhibit excellent efficiency in the partial-load range.



Simple!

Using a simple tool, attached motors can be removed easily for inspection and maintenance purposes.

Overview of the technology

AC stainless steel motors¹⁾

Size	71	80	90	90	100
Designation	TENV 71-4B	TENV 80-4B	TENV 90S-4	TEFC 90L-4	TEFC 100LAB-4
Type of ventilation	Non-ventilated	Non-ventilated	Non-ventilated	Fan-cooled	Fan-cooled
Power rating P_N hp	0.5	1	1.5	2	3 ²⁾
Power rating P_N kW	0.37	0.75	1.1	1.5	2.2
Frequency Hz	60	60	60	60	60
Voltage YY/Y V	230 / 460	230 / 460	230 / 460	230 / 460	230 / 460
Current YY/Y A	1.66 / 0.83	3.10 / 1.55	4.42 / 2.21	5.66 / 2.83	In preparation ²⁾
Nominal speed (60 Hz) min ⁻¹	1740	1765	1775	1750	In preparation ²⁾
IE class (IEC 60034-30-1)	IE3	IE4	IE3	IE3	In preparation ²⁾
η 100% P_N	83.2	85.5	87.8	86.9	In preparation ²⁾
η 75% P_N	82.3	84.2	86.3	86.1	In preparation ²⁾
η 50% P_N	79.5	80.4	81.5	83.6	In preparation ²⁾
Operation on an inverter	Permitted; maximum $dU/dt = 1.6 \text{ kV} / 0.6 \mu\text{s}$ at the terminals; IEC TS 60 034-17				

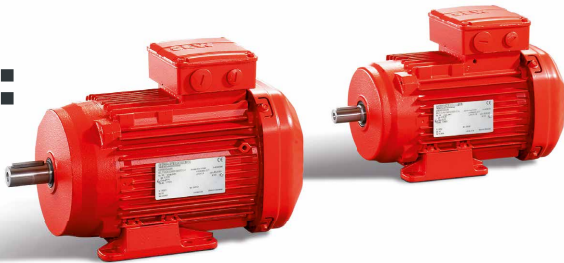
Direct mounting to SEW-EURODRIVE gear units

Pinion shaft end Ø mm	10	10	12	14	16
Hole circle / diameter	FG85 D105	X	–	–	–
	FG100 D120	X	X	–	–
	FG130 D160	–	X	X	X

¹⁾ Europe EU declaration of conformity: CE; USA/Canada cURus with E535317; USA: DoE approval if $\geq 0.75 \text{ kW}$ with CC371B

²⁾ Sales release in preparation, expected in second half of 2026

International regulations: asynchronous motors



Potential uses / typical applications



North America
The USA, Canada, and Mexico have similar minimum efficiency requirements for motors, but they ask for different approvals, each with their own means of identification.



EU27, EFTA, and UK
The minimum efficiency requirements of EU27 and EFTA countries and the UK are tiered in terms of time and content, and they apply to both motors and inverters.



South America
There are big differences in the minimum efficiency requirements for motors in Brazil, Argentina, Chile, Peru, Ecuador, and Colombia. The same applies to certification and identification requirements.

The advantages at a glance

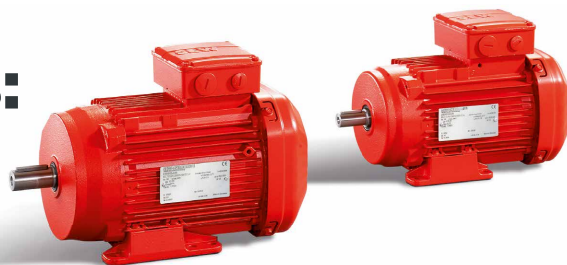
- Maximum overall efficiency!**
Efficient solutions utilize high-quality components and unlock further energy-saving potential in relation to system time management by making use of the range of speeds.
- Standard-based efficiency!**
IEC 60034-30-1:2014 specifies the minimum efficiency requirements for numerous countries. These values are often adopted in national technical standards and legislation and given their own designations.
- Online efficiency!**
SEW-EURODRIVE has an online tool that sets out the different requirements in a large number of countries:
www.sew-eurodrive.de/international-regulations/
- Part of a modular system!**
Classes IE1 to IE4 are basic designs in the modular DR.. motor system and can be combined with numerous additional features.

Overview of minimum requirements in various countries

	USA ¹⁾	Canada ¹⁾	Mexico ¹⁾	EU27 ¹⁾	Iceland, Liechtenstein, Norway, Switzerland ¹⁾	UK ¹⁾
Power ratings	1 – 500 hp (0.75 – 375 kW)	1 – 500 hp (0.75 – 375 kW)	1 – 500 hp (0.75 – 375 kW)	0.12 – 1000 kW	0.12 – 1000 kW	0.12 – 1000 kW
Energy saving	Premium (IE3)	Premium (IE3)	Premium (IE3)	IE2: 0.12 – < 0.75 kW IE3: 0.75 – 1000 kW	IE2: 0.12 – < 0.75 kW IE3: 0.75 – 1000 kW	IE2: 0.12 – < 0.75 kW IE3: 0.75 – 1000 kW
Voltages	< 600 V	< 600 V	< 600 V	> 50 V and < 1000 V	> 50 V and < 1000 V	> 50 V and < 1000 V
Frequency	60 Hz	60 Hz	60 Hz	50 Hz, 60 Hz, 50/60 Hz	50 Hz, 60 Hz, 50/60 Hz	50 Hz, 60 Hz, 50/60 Hz
Approval	By DoE	By CSA	By ANCE	–	–	–
Conformity	–	–	–	Manufacturer's declaration	Manufacturer's declaration	Manufacturer's declaration
Identification	ee logo with CC number	CSA logo with E number	NOM logo	CE logo	CE logo	CE logo
	Brazil	Argentina	Chile	Colombia	Peru	Ecuador
Power ratings	0.12 – 370 kW	0.75 – 30 kW	0.75 – 7.5 kW	0.18 – 373 kW	0.75 – 375 kW	0.75 – 375 kW
Energy saving	IE3	IE1	IE2	IE2: 0.18 – < 7.5 kW IE3: 7.5 – 373 kW	IE1	IE2
Number of poles	2- to 8-pole	2- to 8-pole	2- to 6-pole	2- to 8-pole	2- to 6-pole	2- to 8-pole
Voltages	< 600 V	< 1000 V	< 1000 V	< 1000 V	< 1000 V	< 1000 V
Frequency	60 Hz	50 Hz	50 Hz	60 Hz	60 Hz	60 Hz
Approval	By IMMETRO	Various providers	Various providers	UL Colombia	Various providers	Various providers
Identification	Procel logo and number	Sticker (local)	Sticker (local)	RETIE and RETIQ stickers	Sticker (local)	Sticker (local)

¹⁾ Number of poles for these countries: 2- to 8-pole

International regulations: asynchronous motors



Potential uses / typical applications



Middle East and Asia

Saudi Arabia, Kuwait, China, Japan, and South Korea have very different minimum efficiency requirements for motors and ask for different approvals, each with their own means of identification.



Oceania

Singapore, Malaysia, Australia, New Zealand, and Fiji specify minimum requirements for motors, but do not use logos, stickers, or special identifications.



Africa

There are big differences in the minimum efficiency requirements for motors in Egypt, South Africa, and Kenya. The same applies to certification and identification requirements.

The advantages at a glance



Maximum overall efficiency!

Efficient solutions utilize high-quality components and unlock further energy-saving potential in relation to system time management by making use of the range of speeds.



Standard-based efficiency!

IEC 60034-30-1:2014 specifies the minimum efficiency requirements for numerous countries. These values are often adopted in national technical standards and legislation and given their own designations.



More efficient online!

SEW-EURODRIVE has an online tool that sets out the different requirements in a large number of countries:
www.sew-eurodrive.de/international-regulations/



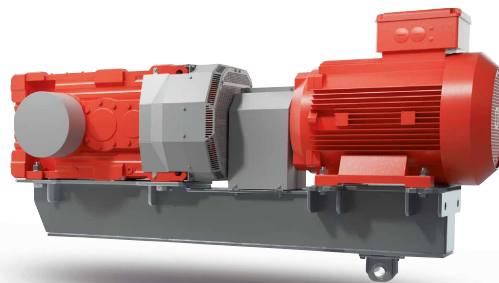
An efficient modular system!

Classes IE1 to IE4 are basic designs in the modular DR.. motor system and can be combined with numerous additional features.

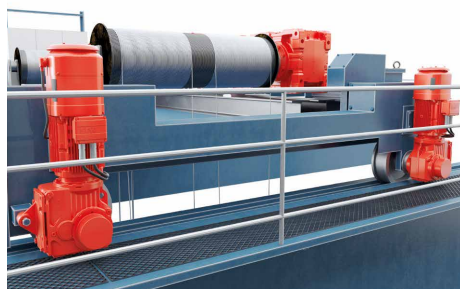
Overview of minimum requirements in various countries

	China	India	Japan	South Korea	Saudi Arabia	Kuwait
Power ratings	0.12 – 1000 kW	0.12 – 1000 kW	0.75 – 375 kW	0.75 – 375 kW	0.75 – 375 kW	0.12 – 375 kW
Energy saving	Grade 3 (IE3)	IE2	IE3	IE3	Premium (IE3)	IE1
Number of poles	2- to 8-pole	2- to 8-pole	2- to 6-pole	2- to 8-pole	2- to 6-pole	2- to 8-pole
Voltages	< 600 V	< 1000 V	< 600 V	< 600 V	< 1000 V	< 1000 V
Frequency	50 Hz	50 Hz	50 Hz, 60 Hz	60 Hz	50 Hz, 60 Hz, 50/60 Hz	50 Hz
Approval	By CNCA	By BIS	IITR	By KOSHA	By SASO	Registration only
Identification	CEL sticker	BIS logo	None	KEL sticker	Certificate number	None
	Australia / New Zealand / Fiji	Singapore	Malaysia	Egypt	South Africa	Kenya
Power ratings	0.73 – 185 kW	0.75 – 375 kW	0.75 – 375 kW	0.75 – 7.5 kW	0.75 – 375 kW	0.73 – 185 kW
Energy saving	IE2	Premium (IE3)	IE2	IE1: 0.09 – < 0.75 kW IE3: 0.75 – 1000 kW	IE3	IE1
Number of poles	2- to 8-pole	2- to 6-pole	2- to 6-pole	2- to 8-pole	2- to 8-pole	2- to 8-pole
Voltages	< 1100 V	< 1000 V	< 1000 V	< 1000 V	> 50 V and < 1000 V	< 1000 V
Frequency	50 Hz, 60 Hz	50 Hz	50 Hz	50 Hz, 50/60 Hz	50 Hz	60 Hz
Approval	Registration only	Registration only	Registration only	None at present	By NRCS	Registration only
Identification	None	None	None	None	None	Stars sticker

Complete drive systems with industrial gear units



Potential uses / typical applications



Hoists / travel drives



Stirrers/mixers



Rotary kilns

The advantages at a glance



Reliability!

Top quality, extensive industry and application expertise, and state-of-the-art condition monitoring systems ensure maximum operational reliability and continuously dependable performance.



Flexibility!

From the modular system of standard gear units to bespoke special solutions starting from a single gear unit – you can always be sure of the most cost-efficient solution.



No interface issues!

The gear unit, motor, coupling, frequency inverter, mounted parts, etc. are all perfectly coordinated, and all from the same supplier.



Customer proximity!

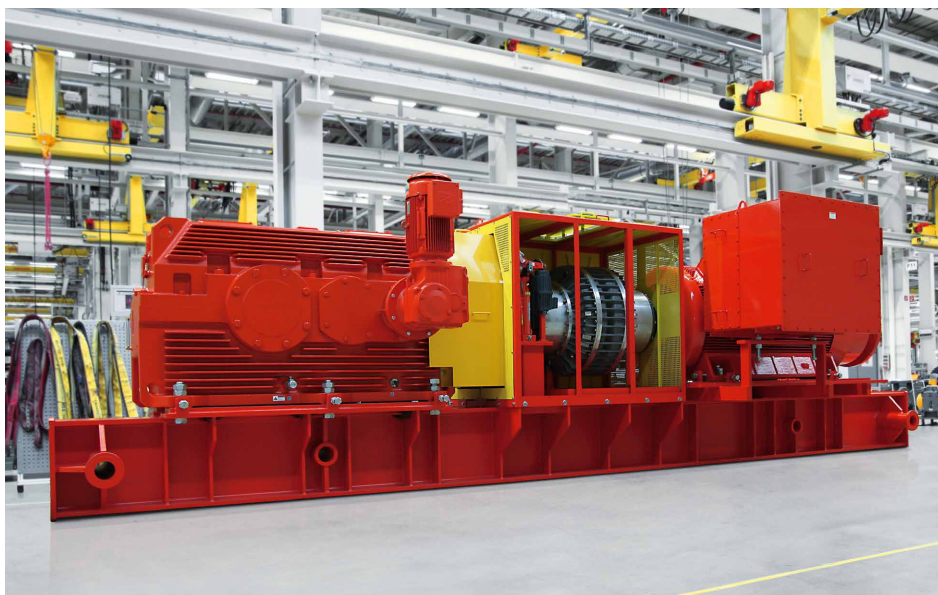
A global network of service specialists and technical experts provide consulting, startup, and after-sales services.

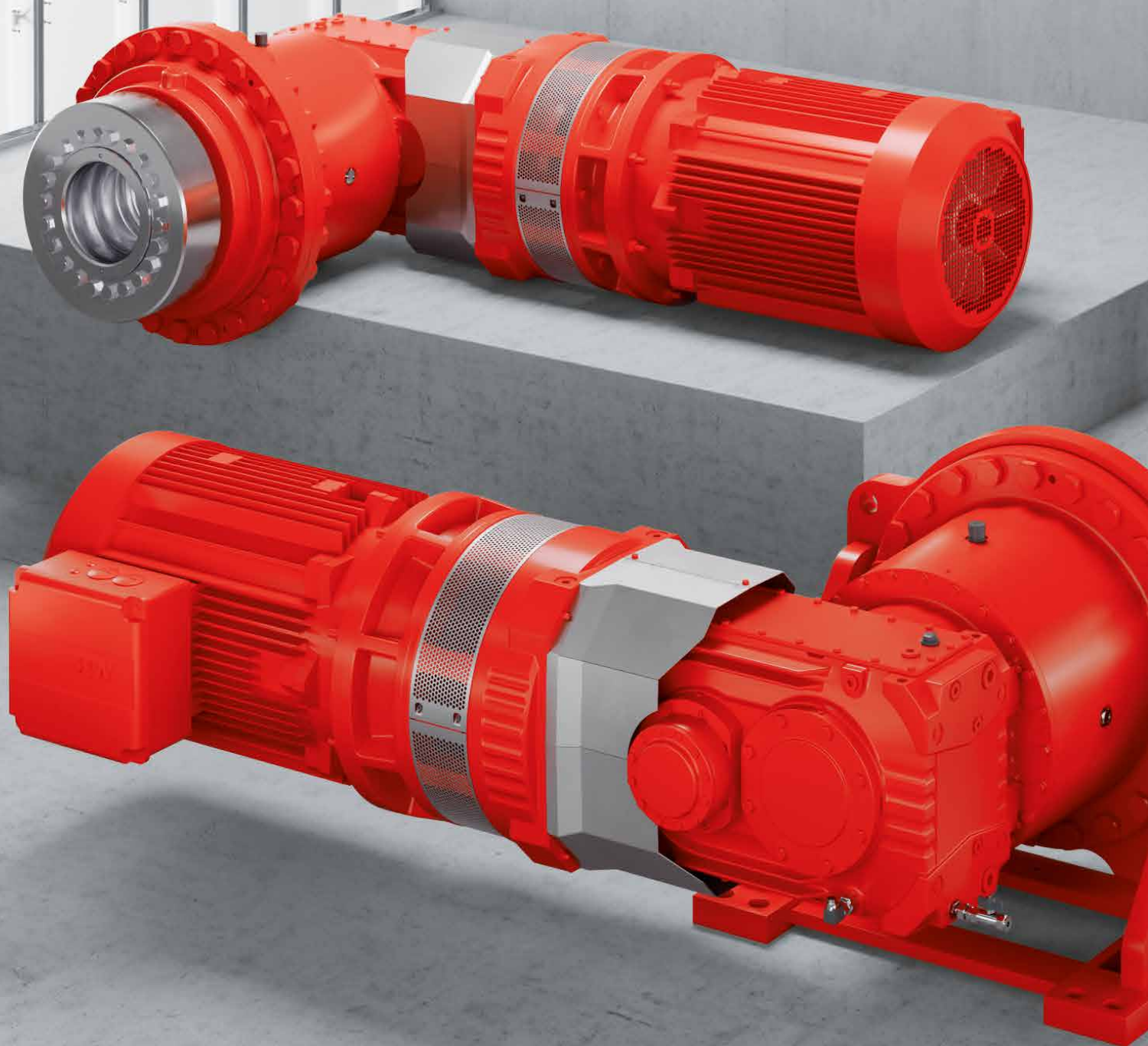
Overview of the technology

If you require very high torques, our industrial gear units are the ideal solution. They combine power, quality, and durability, even under the most challenging conditions.

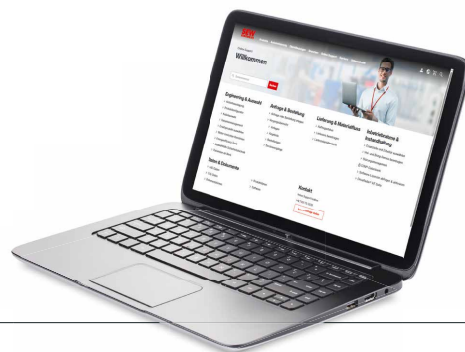
And thanks to our "Industrial gear units to go" delivery time program, many of our gear units are ready for delivery in just five working days – or in a single working day in emergencies, when your system is down.

- **Helical and bevel-helical gear units** up to 1 600 000 Nm
- **Planetary gear units** up to 9 000 000 Nm
- **Modular system of standard gear units** with the possibility of customization
- **Special gear units** to meet specific customer requirements, starting from a single gear unit
- **Complete drive systems** with frequency inverter, motor, gear unit, coupling, brake, steel frame, etc.
- **Exceptionally short delivery times** with the "Industrial gear units to go" program
- **Maximum planning certainty**, thanks to an extended warranty
- **Global service capability**

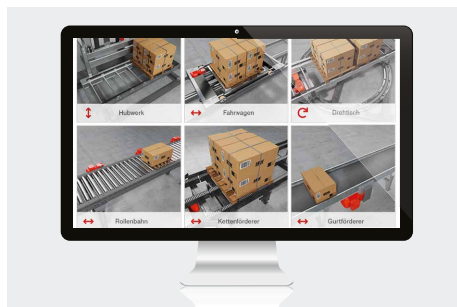




Online Support – the customer portal for your applications

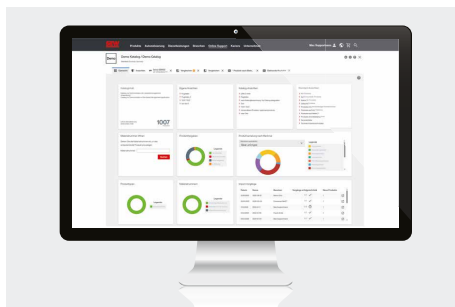


Potential uses / typical applications



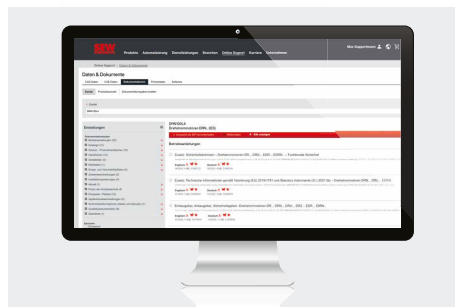
Drive selection

A guided application selection leaves no question unanswered and immediately results in a suitable and available drive.



Variant management

Direct overview of the product variants used: Extensive filter and comparison options can be used to quickly identify the right product variant.



Data & documents

Always access the latest data and documentation in all languages and for direct download or forwarding.

The advantages at a glance



Independence!

Independent use of the portal, without waiting times – anytime, anywhere



Increased efficiency!

More efficiency through self-service: Configuring, downloading information, requesting information, ordering – everything can be done online



Transparency!

All processes and documents with SEW-EURODRIVE at a glance



Time savings!

Immediate online access: Many options without login or with access protection

Overview of the technology

Our Online Support customer portal supports you in every step of the process. From engineering to purchasing and maintenance, we provide you with many helpful digital services. Many of our tools are already accessible to you without a login.

Engineering & selection

For independent selection and configuration of products:

- Drive selection
- Product configurator
- Cable selection
- Variant management
- Selecting a replacement order
- Motor/inverter characteristic curves
- Energy efficiency tools
- Safety technology selection aid

Request & order

For convenient purchasing management:

- Prices and delivery times
- Transaction overview
 - Templates
 - Quotations
 - Orders
- Service procedures

Delivery & material flow

Track your order:

- Delivery status of your order items
- Request delivery notification
- Current delivery time overview

Data & documents

For simple downloads:

- CAD data
- CAE data
- Documentation
- Product data
- Software

Startup & maintenance

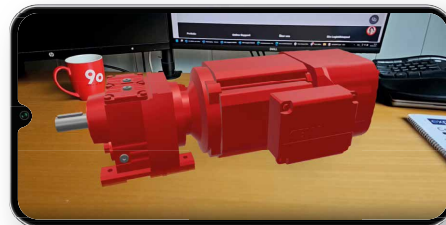
For easy and fast troubleshooting:

- Select spare parts and accessories online
- Request a pick-up and delivery service
- Troubleshooting
- CDM® database
- Query and activate software licenses

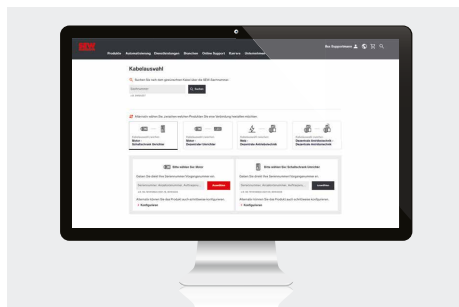


Online support for every application

Online Support – explore the latest tools

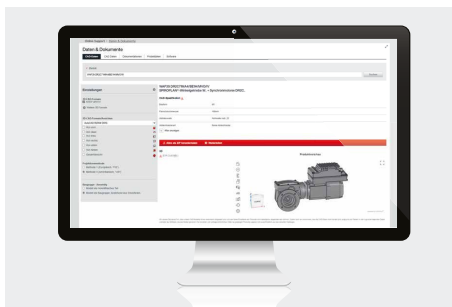


Potential uses / typical applications



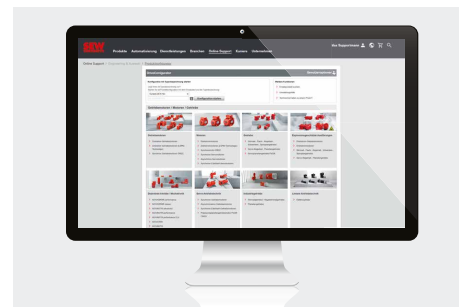
Selecting cables

A selection guide indicates which cables can be used to connect a motor to an inverter, a power supply to decentralized drive technology, and decentralized drive technology systems to each other.



Viewing CAD data in AR mode

Display CAD data in augmented reality mode to get an idea of what your drive will look like.



Configuring drives

Configure and select the latest products, designs, and options whenever you want.

The advantages at a glance



User-friendliness!

Find the right drive and the corresponding cables fast.



Cost savings!

You have fewer product variants to manage (master records).



Reliable processes!

The highly realistic depiction in AR mode makes it easy to check your drive selection.



Fewer errors!

The standardization of digital processes eliminates errors.

Overview of the technology

Cable selection tool

You can use our cable selection tool to find exactly the right cable for your particular application in just a few clicks.

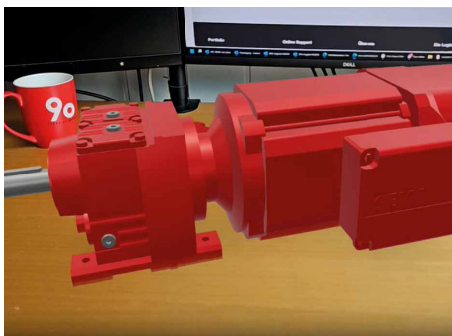
Step by step, it guides you reliably and intuitively to the perfect cable, including length selection, optional extensions, and helpful additional information.



CAD data

You can get CAD models of our products off the screen and insert them into your immediate surroundings with a few quick clicks.

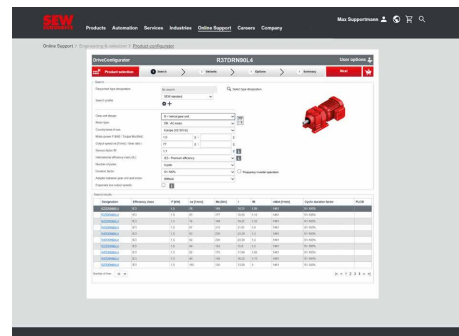
Our new 3D-Viewer enables you to interact with products in a three-dimensional environment – almost as if they were actually there with you! Simply click the AR button and scan the QR code with your smartphone.



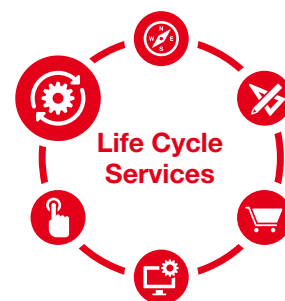
Product configurator

The guided product selection and configuration process – including all the options and designs you need – couldn't be quicker or simpler.

CAD/CAE data and all relevant documentation are then available to download, or you can proceed straight to requesting a quote or placing an order.



Retrofit service



Potential uses / typical applications



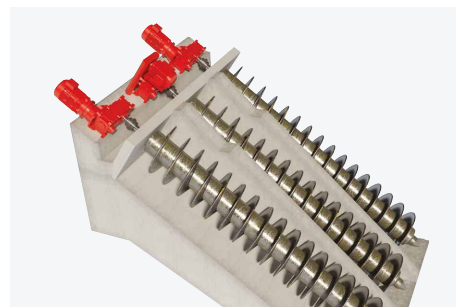
Intralogistics

- Storage/retrieval system
- Horizontal materials handling technology
- Vertical drives



Handling

- Gantry cranes
- Palletizers



Other

- Screw conveyors / screw pumps
- Stirrers/mixers
- Crushers
- Fans

The advantages at a glance



Safeguarding system and spare part availability

By using current and readily available drive technology components.



Preventing production stoppages and reducing downtimes

Thanks to planned retrofitting measures and fast, efficient startup performed by a team of SEW-EURODRIVE experts.



Cutting energy costs

Thanks to optimum project planning and the use of energy-efficient drive technology components.



Optimizing production processes while also maintaining machine safety

By increasing the level of automation and using cutting-edge control and drive technology components.

Overview of the technology

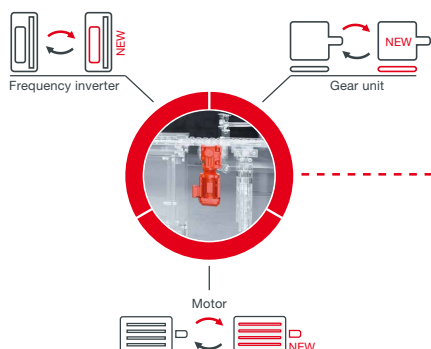
Component retrofit – replacement of drive technology components

- Analysis of current situation and condition
- Project planning and design
- Adaptation engineering of electrical and mechanical components
- Replacement of drive components and drive-related periphery
- Startup

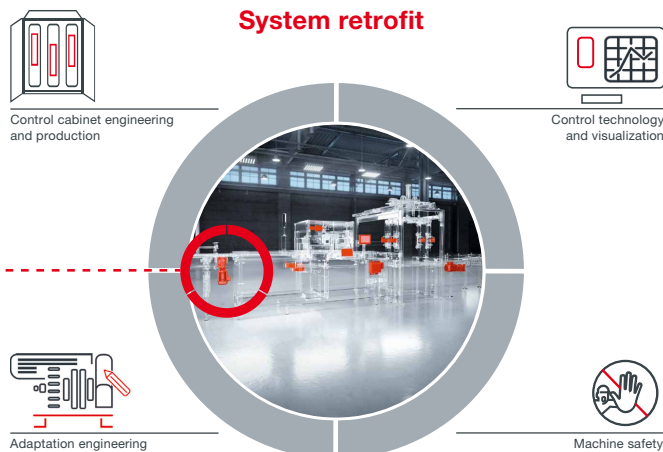
System retrofit – modernization of an entire system

- Control cabinet engineering and production
- Adaptation engineering of the system and application
- Automation and application programming
- Project management
- Technical safety consulting and machine safety evaluation
- Modification of the mechanical periphery of the application and system
- Floor installation of MOVITRANS® systems
- System acceptance

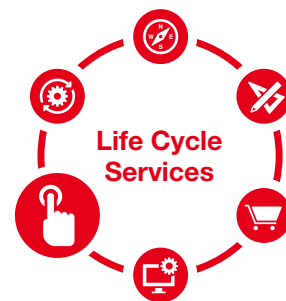
Component retrofit



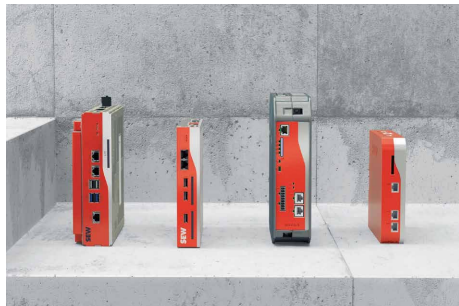
System retrofit



Electronics repairs



Potential uses / typical applications



Control technology



Control cabinet technology



Decentralized drive technology

The advantages at a glance



Short downtimes!

Our extensive service network ensures a quick response and has access to large quantities of original spare parts. Exceptionally short repair times can be achieved with an express order.



High-quality repairs!

Our repair service team installs only original spare parts. In the case of a new-value repair, we provide a 24-month warranty for defects.



Central contact person!

We handle the entire repair service for our drive technology and components from other manufacturers.



No repair more expensive than a new product!

If requested, a cost estimate can also state the price of an equivalent new product.

Overview of the technology

Services

Our repair service for electronic components incorporates various elements, such as emergency repair and new-value repair with a 24-month warranty for defects on all drive components.

When things need to move fast, you can order an express repair. Naturally, our repair service can also cover modifications if your drive technology has to be adapted to new system conditions. What's more, you can utilize our Pick-Up and Delivery Service to reduce your logistics outlay.

The repair service is available for SEW-EURODRIVE inverters, control technology, options, and accessories (e.g. line filters, line chokes, braking resistors, and option cards) as well as for inverters from other manufacturers by arrangement.

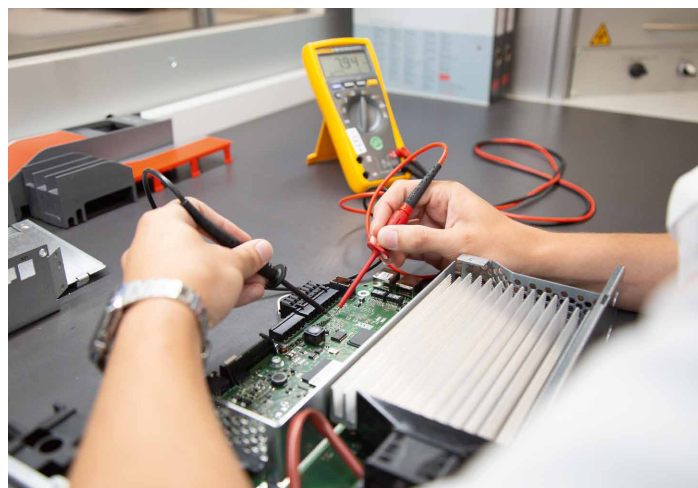
Example

New-value repair (24-month warranty for defects covering the entire drive technology component)

- Restoring the functionality of the drive technology component
- Inspecting the drive technology component
- Removing parts that have been subject to wear (e.g. electrolytic capacitors)
- Inspecting all electrical components using an impulse voltage tester, and replacing them if they are found to be defective
- Installing the new spare parts
- Performing a final inspection of the assembly, including a functional check

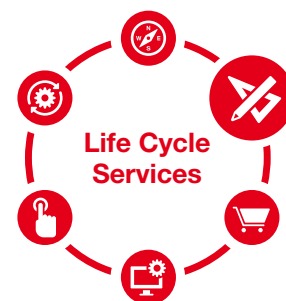
Optional

- Modifying or enhancing functionality (e.g. enabling different technology levels)
- Carrying out repairs by express order within one to three days (by arrangement)

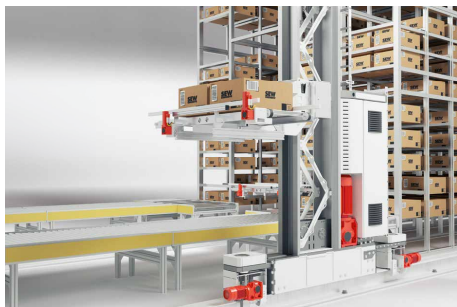


You can reach us through our 24h Service Hotline.

Control cabinet engineering and production



Potential uses / typical applications



Applications in intralogistics

- Storage/retrieval systems
- Horizontal materials handling technology
- Hoists



Handling applications

- Gantry/bridge cranes
- Palletizers



Other applications

- Custom machine design
- Test systems
- Screw pumps

The advantages at a glance



Risk minimization

On-time delivery of a turnkey, all-in-one solution



Savings

Process costs are lowered, time outlay is reduced.



Maximum efficiency

Optimally coordinated individual components are assembled to create a cost-effective turnkey solution.



Savings in time and costs

Certification requirements for the North America region are met.

Overview of the technology

Control cabinet engineering

- Incorporation of customer-specific requirements
- Production of control cabinet installation concept and the functions it requires
- Planning of circuit diagram
- Creation of 3D design
- Configuration, including the required safety elements
- Climate-based calculation of the cooling capacity in the control cabinet

Control cabinet production

- Installation and machining of control cabinet housing
- Wiring and routine test of the control cabinet
- Control cabinet acceptance inspection, including field labeling for the North American region (to UL 508A and CSA C22.2), by SEW-EURODRIVE

Planning and engineering

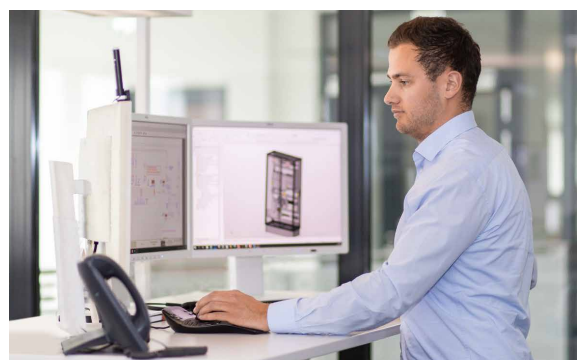
- Preparation of control cabinet documentation
- Preparation of parts list, risk assessment, circuit diagram, test protocols, and verification calculations
- Operating instructions and declaration of conformity in line with technical standards and directives

Project management

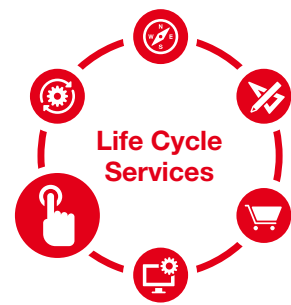
- Operational project management to ensure compliance with parameters: deadlines, costs, quality/monitoring
- Interface management and coordination of external work packages
- Creation and coordination of project documentation
- Overall contract management

Optional

- Connecting the control cabinet's power supply / assembling and securing the control cabinet at the relevant location



Quick check



Potential uses / typical applications



Logistics



Chemicals and pharmaceuticals



Food and beverages

The advantages at a glance



12-month functional warranty from SEW-EURODRIVE

on all drive components (excluding sealing elements) that are checked and found to be OK



Compliance with standards and internal requirements

especially audits, by providing evidence and documentation of any performed maintenance measures



Enhanced operational safety

through on-site condition assessments, early detection of damage, and specific recommended courses of action

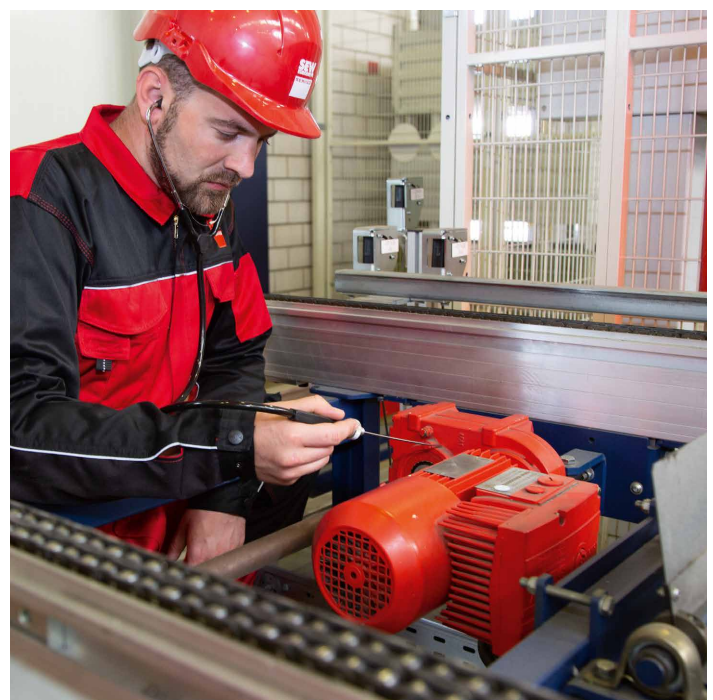


Improve system availability

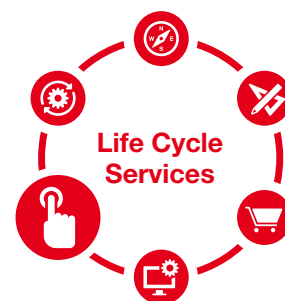
through the preventive inspection of the drive components in an existing system

Overview of the technology

- Inspection of the mounting position of the drive technology
- Visual inspection for oil leaks, check of the oil level, and all sealing points on the gear unit, e.g. oil seal
- Measurement of the degree of pollution of the used gear oils
- Acoustic check of the running noise of the gear unit and motor bearing arrangements
- Check of the terminal box (condition, ingress of water/oil, seals, screw fittings) and inspection of the wiring on the terminal board
- Brake wear check, plus (mechanical and electrical) functional test of the brake
- Visual inspection for damage and for correct installation of mounted drive electronics (e.g. MOVIMOT®, MOVIGEAR®) and servo drive technology (including motor feedback systems)
- Visual inspection of mount-on parts (e.g. belt pulleys, sprockets, couplings, etc.) for superficial damage, missing or insufficient protective covers, and oil leaks



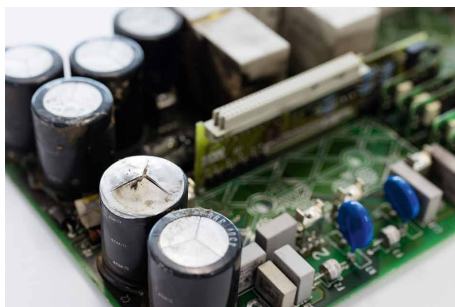
Forming



Potential uses / typical applications



Forming, including for third-party inverters



Forming to prevent capacitor explosions



Labeling of checked frequency inverters

The advantages at a glance



Available fast!

Keeping frequency inverters in storage ready for immediate use increases system availability.



Safe startup!

Avoid the risk of capacitor explosions and damage to other components during startup.



Minimized outlay!

Ensuring frequency inverters have been formed in good time reduces spare parts procurement.



Seamless documentation!

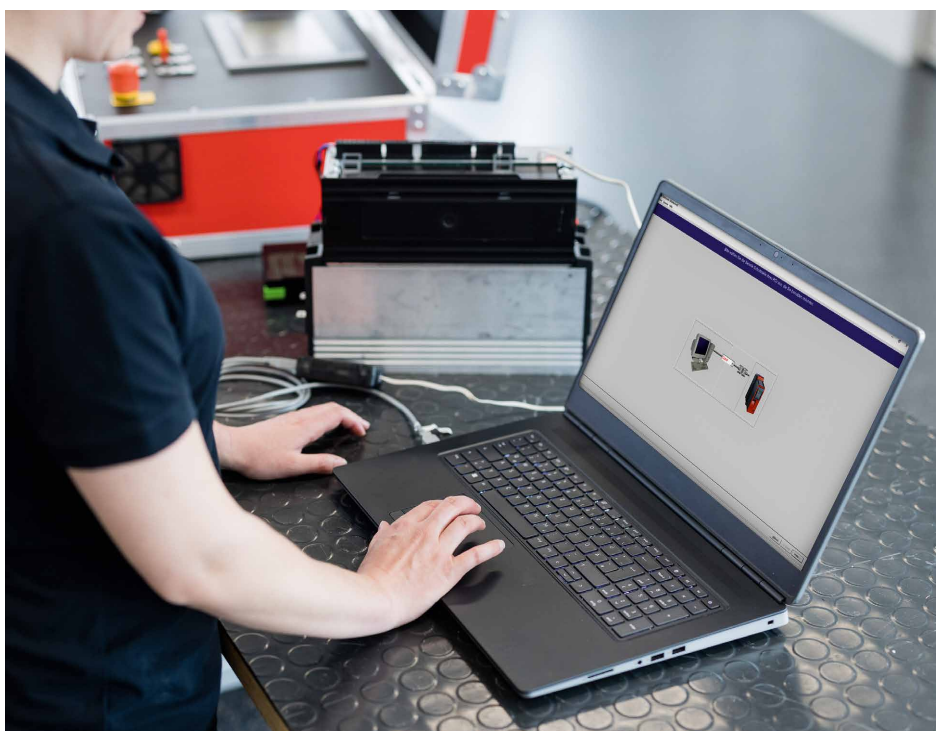
Verifying and documenting completed maintenance operations ensures auditing requirements are reliably met.

Overview of the technology

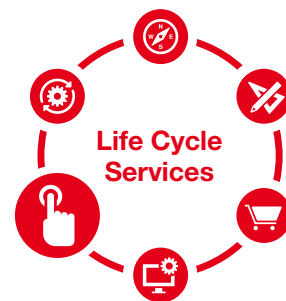
- Inspection of the frequency inverters to check for external surface damage, soiling, and missing parts
- Rapid and gentle regeneration of the oxide layer through a stepless increase in voltage and continuous condition monitoring for the DC link capacitors
- Discharging of the DC link capacitors
- Clear labeling of the checked frequency inverters, together with an indication of the next forming date
- Creation of a service report, including any necessary recommended courses of action

Optional

Following consultation, a firmware update can be performed for SEW-EURODRIVE frequency inverters, if this is technically possible.



CDM® – Complete Drive Management



Potential uses / typical applications



Logistics



Chemicals and pharmaceuticals



Food and beverages

The advantages at a glance



Safeguarding of system availability

Within the scope of the agreed response scenarios



Quick support and recommendations/advice if drive technology components fail

Thanks to replacement components being supplied within hours



Identification of the installed inventory

Thanks to transparency in relation to the material and equipment numbers issued and their assignment to the installed drive technology in its functional location



Reduction of storage and maintenance costs

Thanks to a maintenance strategy and a concept for optimum warehousing based on the installed inventory

Overview of the technology

SEW-EURODRIVE uses CDM® – Complete Drive Management to record every one of the drive technology components in your inventory, whether installed or in storage.

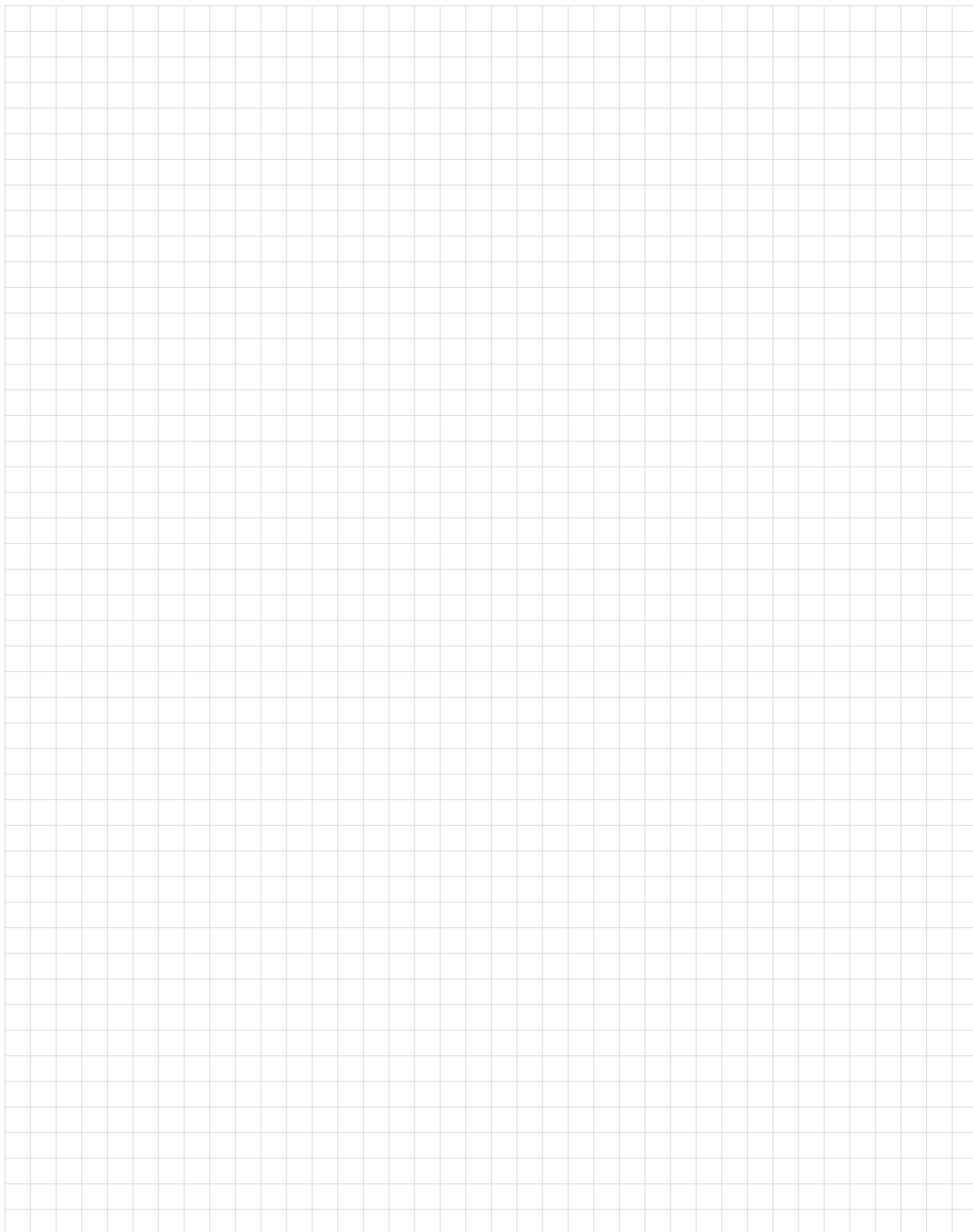
This covers everything from looking at all your drive technology with a view to optimizing storage and variants through to ensuring compliance with legal requirements (e.g. changes to technical standards), and even making availability commitments that are measured in hours.

The modular design of CDM® – Complete Drive Management gives you the option of choosing between various service packages.

You can decide to implement CDM® directly via the CDM® advanced service package or in stages using CDM® standard and a subsequent upgrade.



Notes



Further information is available at
www.sew-eurodrive.com



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