Mechatronic drive systems

MOVIGEAR®

effiDRIVE®: Energy-saving potential up to 50% and significant reduction of CO₂ emissions

Features / benefits

- High overall efficiency of all components (motor, gear unit and electronics):
  - Optimized interfaces between motor and gear unit
  - Permanent-field synchronous motor
  - Highly efficient gearings
  - New electronic components and intelligent control methods
- The highest motor efficiency complies already today with efficiency class IE4 (Super Premium Efficiency) of the international standard IEC 60034
- Compact design: Motor, gear unit and electronics are combined in one mechatronic drive system
- Optimized housing, particularly suited for use in conveyor systems
- No restrictions during operation: High breakaway and acceleration torques
- The power required to drive the system can be reduced significantly
- Reduction of required reactive power (compared to motors operated directly on the grid)
- Long service life makes for high system availability
- Intelligent system with own control concept, easy to network
- Short startup times
- Supports monitoring and reduce maintenance
- Integrated user software
- Installation topology with SEW controller:
  - SNI: only one cable for power supply and communication; installation effort reduced by up to 60%
  - SBus: for applications with higher performance requirements, such as angular synchronism, etc.
- Installation topology binary or AS-Interface
- Reduced number of variants due to wide setting range and universal mounting position
- Reduced storage costs
- High degree of protection
- Hygienic surface design for applications in hygienic areas
- High degree of reliability due to systematic development of all components
- Reduced total costs and operating costs of the materials handling system
- Integrated functional safety: Safe Torque Off (STO) up to PL e according to EN ISO 13849-1

Verified by an independent entity:
Energy saving potential of up to 50%
Decentralized drive systems

MOVIGEAR® drive units

MOVIGEAR® is available in two sizes and two mechanical versions.

MOVIGEAR® sizes
- MGF.2 (torque class: 200 Nm)
- MGF.4 (torque class: 400 Nm)
- MGF.4/XT (torque class: 400 Nm / increased torque)

MOVIGEAR® variants
- MOVIGEAR® with hollow shaft and key
- MOVIGEAR® with TorqLOC® hollow shaft mounting system

Application slot – electronics cover

Available electronics covers for MOVIGEAR® DSC-B and MOVIGEAR® SNI-B sizes:
- Electronics cover without application slot
- Electronics cover with application slot
The electronics cover of MOVIGEAR® DBC-B and MOVIGEAR® DAC-B is designed without application slot.

Application options

MOVIGEAR® with optional inputs and outputs

- Installation in the application slot to implement specific interfaces, such as digital inputs or digital outputs
- Option is supplied with energy in a contactless manner
- Contactless communication between MOVIGEAR® electronics and option

GIO12B application option
For controlling up to 2 digital actuators and for processing up to 4 digital sensors

GIO13B application option
Equipped with the following interfaces:
- 1 digital output
- 4 digital inputs (two of them can be used as primary frequency input)
- 1 analog output
- 1 analog input

Variants

- MOVIGEAR® meets hygienic design requirements as standard
Also available as:
- Clean room variant, up to air cleanliness 2 according to ISO 14644-1
- Wet area variant (specific anti-stick surface HP200)