

The drive unit MOVIGEAR® performance



Fully integrated, compact design

Permanent magnet synchronous motor, gear unit and inverter combined in a single drive unit

MOVIGEAR® performance – performance classes and designs

MOVIGEAR® performance is available in two sizes and three power classes:

- MGF..2-C: 200 Nm torque class, nominal power of up to 0.8 kW
- MGF..4-C: 400 Nm torque class, nominal power of up to 1.5 kW
- MGF..4-C/XT: 400 Nm torque class with extended continuous torque, nominal power of up to 2.1 kW

Hollow shaft design	<ul style="list-style-type: none"> – With key – With TorqLOC® hollow shaft mounting system 	
Hollow shaft diameter	MGF..2-C	20 mm, 25 mm, 30 mm, 35 mm, 40 mm
	MGF..4-C/ MGF..4-C/XT	30 mm, 35 mm, 40 mm
Output speed range Speed control range 1:40 (without encoder)	MGF..2-C	0.9 – 593 min ⁻¹
	MGF..4-C/ MGF..4-C/XT	0.9 – 566 min ⁻¹
Encoder option	Multi-turn absolute encoder /AZ1Z for positioning and extended control range 1:2000	
Universal mounting position /MU (M1, M2, M3, M4, M5, M6)	Pressure compensation of gear unit /PG	
Overload capacity	<ul style="list-style-type: none"> – Up to 300% – Prevents oversizing in static operation – Reduces installed size of necessary supply infrastructure – Integrated overload protection device 	
Communication/installation variants	<ul style="list-style-type: none"> – DFC – Direct Fieldbus Communication (PROFINET, EtherNet/IP™, Modbus TCP, POWERLINK/ CiA 402) – DBC – Direct Binary Communication – DAC – Direct AS-Interface Communication – DSI – Direct System Bus Installation (EtherCAT® / SBus^{PLUS}, EtherCAT® / CiA 402) 	
Digital and analog inputs/outputs	DFC / DSI: Up to 4 digital inputs and up to 2 digital inputs or outputs DBC: 4 digital inputs / 1 relay output and 1 analog input (0..10 V, 0..20 mA, 4..20 mA) DAC: 4 digital inputs / 1 relay output	
Plug connectors	<ul style="list-style-type: none"> – AC 400 V connection for supplying devices on terminals or with M23 plug connector – Connection for safe disconnection (STO) with M12 plug connector (5-pin, A-coded) – DC 24 V input for backup voltage with M12 plug connector (5-pin, L-coded) All plug connectors can be used for further looping.	
DynaStop® option	DynaStop® electrodynamic retarding function (/DSP)	
Functional safety	<ul style="list-style-type: none"> – Integrated STO (Safe Torque Off) safety function to IEC 61800-5-2 – Safety Integrity Level 3 to EN 61800-5-2: 2017, EN 61508: 2010 – PL e to EN ISO 13849-1: 2015 	

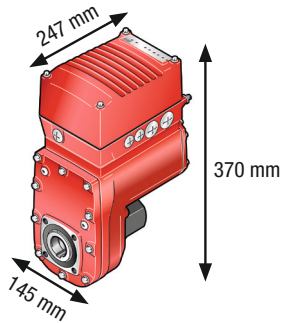
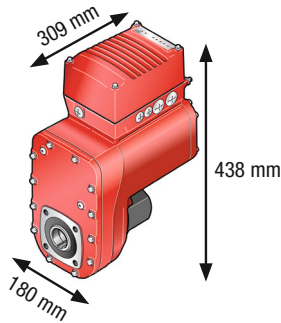
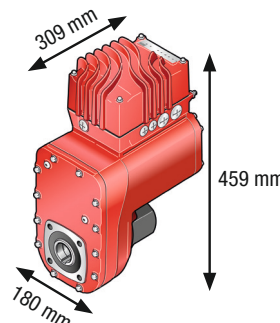
The global motor

Certifications/conformity	CE (Europe) / UkrSEPRO (Ukraine) / EAC (Russia, Belarus, Kazakhstan) In preparation: UL approval (USA and Canada)
Connection voltage	– MGF..2-C/MGF..4-C: 380 V – 500 V at 50/60 Hz – MGF..4-C/XT: 400 V – 500 V at 50/60 Hz

Energy-saving potential

Motor efficiency according to IEC 60034	Corresponds to efficiency class IE5 according to IEC TS 60034-30-2
Drive system efficiency according to IEC 61800-9-2 (Power Drive System)	– Surpasses the highest defined energy efficiency class IES2 according to IEC 61800-9-2 for the system comprising motor and inverter – The losses of the PDS of MOVIGEAR® are only half those of the IES2 reference system

Dimensions and weight

MGF..2 	MGF..4 	MGF..4/XT 
16 kg	26 kg	28 kg

Ambient conditions

Degree of protection	Standard: IP65 according to EN 60529
Ambient temperature	-25 °C to +60 °C