

## 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

<b>Hollow shaft design</b>	<ul style="list-style-type: none"> <li>– With key</li> <li>– With TorqLOC® hollow shaft mounting system</li> </ul>	
<b>Hollow shaft diameter</b>	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
<b>MOVILINK® DDI</b>	<ul style="list-style-type: none"> <li>– Contains an electronic nameplate with all the drive unit details</li> <li>– No startup necessary</li> </ul>	
<b>Output speed range</b> Speed control range 1:40 (without encoder)	MGF..2-C	0.9 – 593 min <sup>-1</sup>
	MGF..4-C/ MGF..4-C/XT	0.9 – 566 min <sup>-1</sup>
<b>Encoder option</b>	Multi-turn absolute encoder /AZ1Z for positioning and extended control range 1:2000	
<b>Universal mounting position /MU (M1, M2, M3, M4, M5, M6)</b>	Pressure compensation of gear unit /PG	
<b>Overload capacity</b>	<ul style="list-style-type: none"> <li>– Up to 300%</li> <li>– Prevents oversizing in static operation</li> <li>– Reduces installed size of necessary supply infrastructure</li> <li>– Integrated overload protection device</li> </ul>	
<b>Communication/installation variants</b>	<ul style="list-style-type: none"> <li>– DFC – Direct Fieldbus Communication (PROFINET, EtherNet/IP™, Modbus TCP, POWERLINK/ CiA 402)</li> <li>– DBC – Direct Binary Communication</li> <li>– DAC – Direct AS-Interface Communication</li> <li>– DSI – Direct System Bus Installation (EtherCAT® / SBus<sup>PLUS</sup>, EtherCAT® / CiA 402)</li> </ul>	
<b>Digital and analog inputs/outputs</b>	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	
<b>Optional plug connectors</b>	<ul style="list-style-type: none"> <li>– AC 400 V – supply with M15 or M23 plug connectors</li> <li>– Safe Torque Off (STO) with M12 plug connectors (A coded, 5-pin)</li> <li>– DC 24 V – backup voltage with M12 plug connectors (L coded, 5-pin)</li> <li>– M23 plug connectors for hybrid installation</li> </ul> <p>All plug connectors can also be used for further looping.</p>	
<b>DynaStop® option</b>	DynaStop® electrodynamic retarding function (/DSP)	
<b>Functional safety</b>	<ul style="list-style-type: none"> <li>– Integrated STO (Safe Torque Off) safety function to IEC 61800-5-2</li> <li>– Safety Integrity Level 3 to EN 61800-5-2: 2017, EN 61508: 2010</li> <li>– PL e to EN ISO 13849-1: 2015</li> <li>– PROFIsafe and FSoE optional</li> </ul> <p>In preparation: CIP Safety</p>	

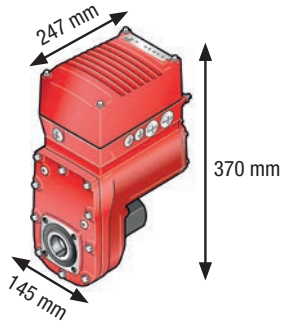
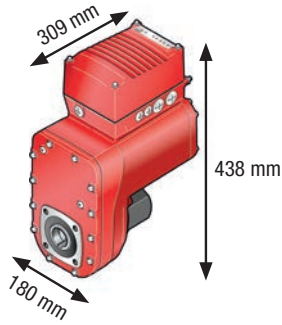
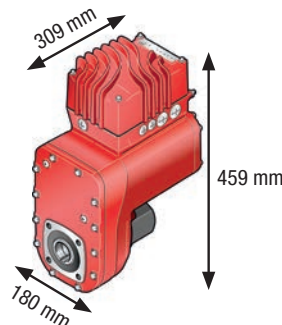
**The global motor**

<b>Certifications/conformity</b>	CE (Europe) / CMIM (Morocco) / RCM (Australia) / UA.TR (Ukraine) / UL-approved (USA and Canada)
<b>Connection voltage</b>	380 V – 500 V at 50/60 Hz (also available as IT system variant)

**Energy-saving potential**

<b>Motor efficiency according to IEC 60034</b>	Corresponds to efficiency class IE5 according to IEC TS 60034-30-2
<b>Drive system efficiency according to IEC 61800-9-2 (Power Drive System)</b>	<ul style="list-style-type: none"> <li>– Surpasses the highest defined energy efficiency class IES2 according to IEC 61800-9-2 for the system comprising motor and inverter</li> <li>– The losses of the PDS of MOVIGEAR® are only half those of the IES2 reference system</li> </ul>

**Dimensions and weight**

<b>MGF..2</b>	<b>MGF..4</b>	<b>MGF..4/XT</b>
		
16 kg	26 kg	28 kg

**Ambient conditions**

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