

Electromagnet – EM4162

Special Features:

- High reliability design
- Force of 1.5 N guaranteed in all specified range
- Maximum stroke 10 mm
- Symmetrical assembly points
- Wide operating temperature -25 °C to 85 °C
- Temperature Class H (180 °C)
- Rated DC voltage 205 V ± 10 %
- Low rusting
- DIN VDE 0580 - 2011-11 compliant

Typical Applications:

- ON/OFF actuators
- High reliability systems

Packaging possibilities:

- ESD box
- Cardboard box

For samples please contact directly

Environmentally friendly solution:

- Design suitable for recycling
- No glue or varnish added
- RoHS and REACH compliant



Figure 1. View of Electromagnet.

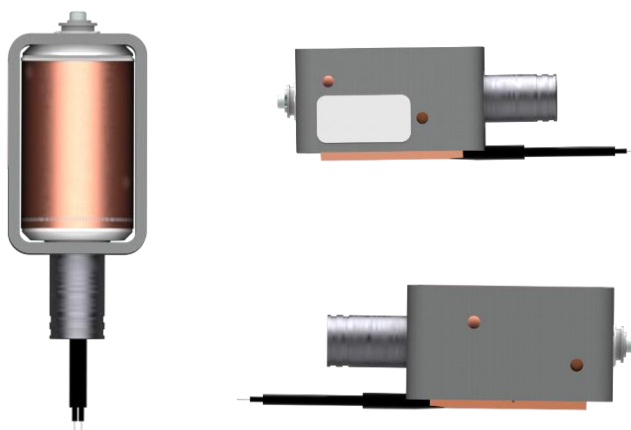


Figure 2. View of product.

Table 1. Electrical parameters.

Parameter description	Parameter	Comment
Maximum stroke	10 mm	-
Resulting force @ 1-8 mm, 20°C	min. 1.5 N	-
Resulting force @ 8 mm, 70°C	min. 1 N	-
Maximum Duty Cycle	100%	Continuous operation
Rated voltage	$V_{dc} = 205 \text{ V} \pm 10\%$	generated from bridge rectifier of the 230 AC grid nominal voltage
Winding dc resistance (@20°C)	$6.5 \text{ k}\Omega \leq R_{DC} \leq 8 \text{ k}\Omega$	-
Rated ambient temperature	$T_a = -25 \text{ }^{\circ}\text{C}$ to $+85 \text{ }^{\circ}\text{C}$	Natural convection cooling
Insulation class	H (180°C)	For ambient temperature higher than rated in 1.1.7, forced cooling shall be applied to prevent exceeding of 155 °C on windings surface.
Dielectric strength	1000 V_{ACRMS} @50 Hz	Winding to Metal parts

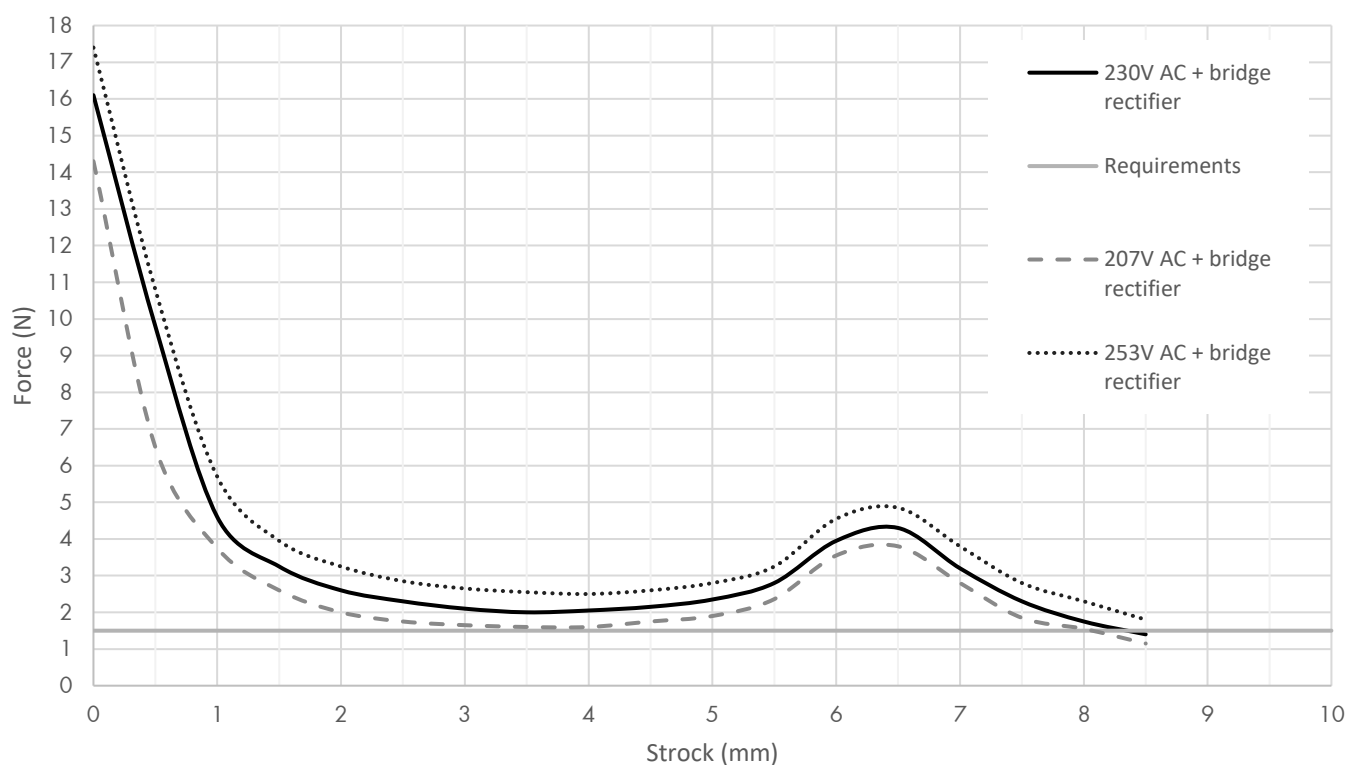


Figure 3. Typical electromagnet force envelope vs. stroke characteristics at @20°C. Limits are including worse case tolerance.

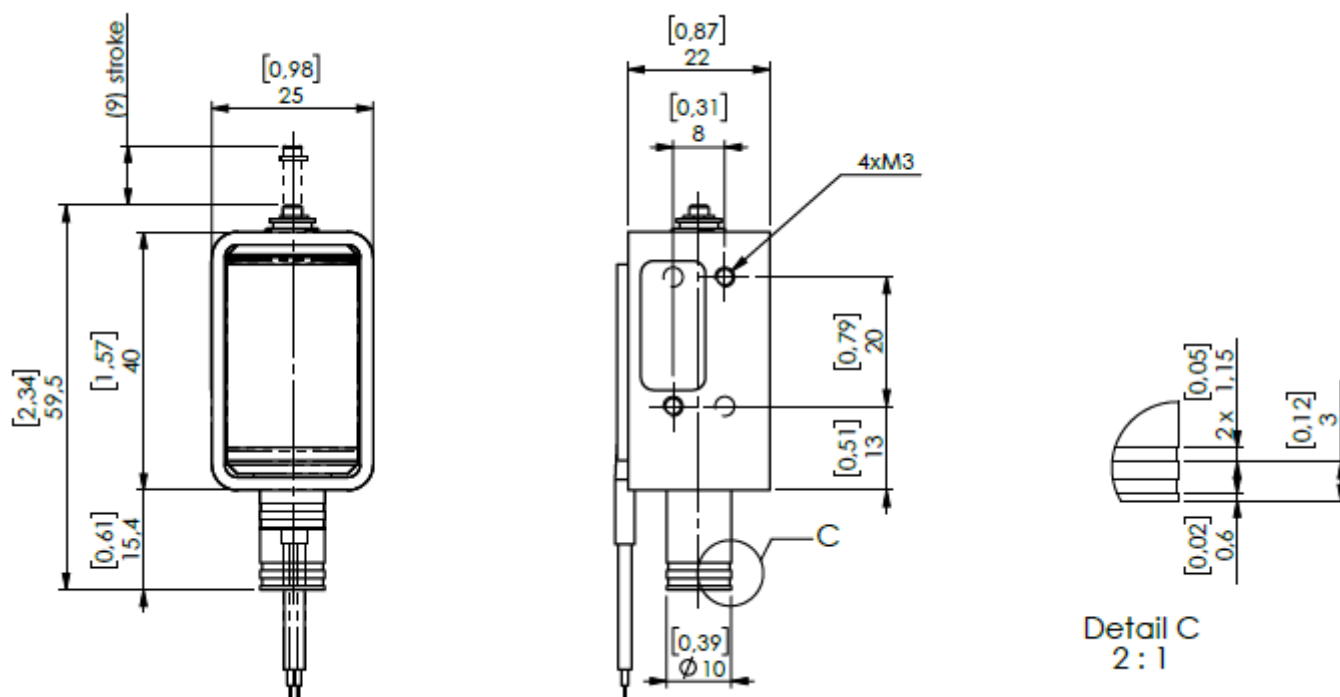


Figure 4. Electromagnet view (nominal dimensions in mm [inch]; standards EN 22768 -mK, EN ISO 8015:2011).

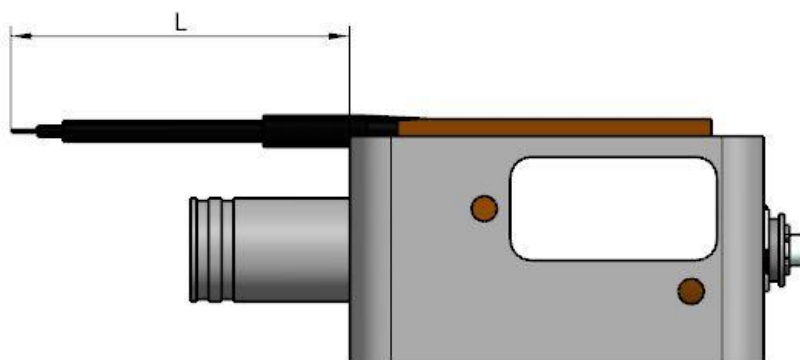


Figure 5. Cable length L.

Table 2. Terminals of the electromagnet.

Cable cross section	Cable length L	Terminal end/cable description	Tubing
0.25 mm ² /AWG24	400 mm ±20 mm	Tinned wire, AWG24 300 V	Additional shrinking tubes for both cables. On the coil 30 mm±10 mm, for the leads 350 mm±10 mm
0.25 mm ² /AWG24	400 mm ±20 mm	Tinned wire, AWG24 300 V	

*Cable length, terminal end and tubing could be customized