

# ROTAMAG

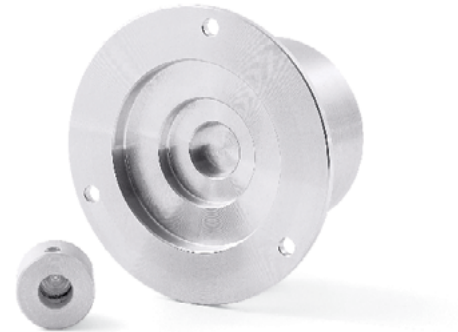
Magnetic bearingless encoder

Series

MSK36 • MMK36



- Shaftless & Bearingless encoders
- Absolute sensing
- Zero-setting function
- IP67 or IP68 protection with sealed circuits



MSK36 • MMK36

## ENVIRONMENTAL SPECIFICATIONS

Shock:	100 g, 6 ms
Vibrations:	10 g, 5-2000 Hz
Protection:	IP67
Operating temperature range:	-20°C +85°C (-4°F +185°F)
Storage temperature range:	-20°C +85°C (-4°F +185°F) (98% R.H. without condensation)
Option:	• IP68 protection with sealed circuits

## MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Hollow shaft diameter:	Ø 6, 8, 10 mm
Shaft rotational speed:	12000 rpm max. (mechanical)
Electrical connections:	M12 8 pin inline plug or cable output 1 m (3.3 ft)
Weight:	~ 50 g (1,7 oz)
Option:	• additional cable

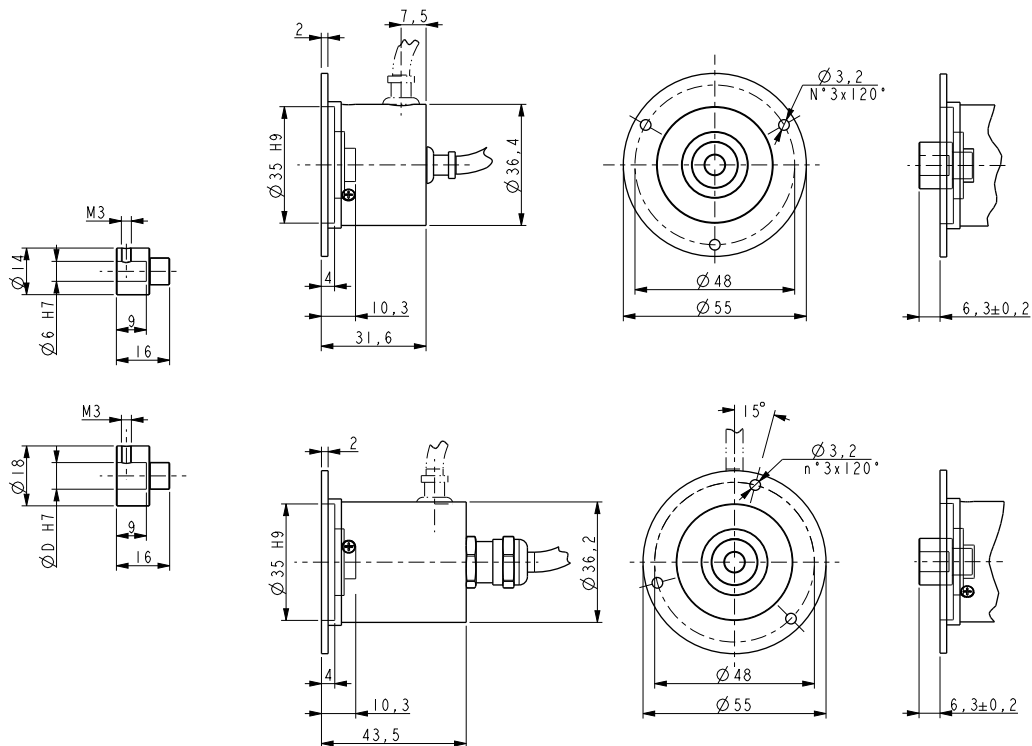
## ELECTRICAL SPECIFICATIONS

Resolution:	<b>MSK36 (cpr):</b> 8192 <b>MMK36:</b> 1024 counts/rev. x 32768 rev. 2048 cpr x 16384 rev. 4096 cpr x 8192 rev. 8192 cpr x 65536 rev.
Accuracy:	± 1°
Output circuits:	MSK36: SSI, 13 clock max. 1 MHz MMK: SSI, 29 clock max. 1 MHz
Power supply:	+10Vdc +30Vdc
Power consumption:	30 mA max.
Protection:	against inversion of polarity and short-circuit
EMC:	electro-magnetic immunity, according to: EN-61000-4-2 EN-61000-4-4
Battery life (only MMK36):	10 years min.
Functions:	• Counting direction (input) • Electronic zero setting (input)

## MATERIALS

Flange:	anticorrosive, UNI EN AW-6082
Housing:	anticorrosive, UNI EN AW-6082
Shaft:	anticorrosive, UNI EN AW-6082

Specifications subject to changes without prior notice



MSK36

MMK36

Order code - Single turn version

MSK36	XX Ⓐ	/	XX Ⓑ	-	XX Ⓒ	-	X Ⓓ	X Ⓔ	X Ⓕ	XX Ⓖ	/Sxxx Ⓗ
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<p>Ⓐ RESOLUTIONS</p> <p>13 = 8192 counts/rev.</p> <p>Ⓑ OUTPUT CODE</p> <p>BS = Binary, SSI</p> <p>GS = Gray, SSI</p>	<p>Ⓒ SHAFT DIAMETER</p> <p>6 = 6 mm</p> <p>8 = 8 mm</p> <p>10 = 10 mm</p> <p>Ⓓ CONNECTION POSITION</p> <p>- = axial</p> <p>R = radial</p>	<p>Ⓔ ZERO SETTING</p> <p>- = without (standard)</p> <p>E = zero setting</p> <p>Ⓕ PROTECTION</p> <p>- = IP67</p> <p>J = IP68 with sealed circuits</p>	<p>Ⓖ CONNECTIONS</p> <p>L1 = cable output 1 m (standard)</p> <p>L2 = cable output 2 m</p> <p>Lx = cable output x m</p> <p>M0,5 = 0,5 m cable + M12 8 pin inline plug</p> <p>M2 = 2 m cable + M12 8 pin inline plug</p>	<p>Ⓗ CUSTOM VERSION</p>
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Order code - Multi turn version

MMK36	XX/XXXXX Ⓐ	XX Ⓑ	-	XX Ⓒ	-	X Ⓓ	X Ⓔ	X Ⓕ	XX Ⓖ	/Sxxx Ⓗ
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<p>Ⓐ RESOLUTIONS</p> <p>10/32768 = 1024 CPR x 32768 rev.</p> <p>11/16384 = 2048 CPR x 16384 rev.</p> <p>12/8192 = 4096 CPR x 8192 rev.</p> <p>13/65536 = 8192 cpr x 65536 rev.</p> <p>Ⓑ OUTPUT CODE</p> <p>BB = Binary, SSI (LSB aligned)</p> <p>GB = Gray, SSI (LSB aligned)</p> <p>BS = Binary, SSI (Tree format)</p> <p>GS = Gray, SSI (Tree format)</p> <p>BG = Binary, SSI (MSB aligned)</p> <p>GG = Gray, SSI (MSB aligned)</p>	<p>Ⓒ SHAFT DIAMETER</p> <p>6 = 6 mm</p> <p>8 = 8 mm</p> <p>10 = 10 mm</p> <p>Ⓓ CONNECTION POSITION</p> <p>- = axial</p> <p>R = radial</p>	<p>Ⓔ ZERO SETTING</p> <p>- = without (standard)</p> <p>E = zero setting</p> <p>Ⓕ PROTECTION</p> <p>- = IP67</p> <p>J = IP68 with sealed circuits</p>	<p>Ⓖ CONNECTIONS</p> <p>L1 = cable output 1 m (standard)</p> <p>L2 = cable output 2 m</p> <p>Lx = cable output x m</p> <p>M0,5 = 0,5 m cable + M12 8 pin inline plug</p> <p>M2 = 2 m cable + M12 8 pin inline plug</p>	<p>Ⓗ CUSTOM VERSION</p>
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