



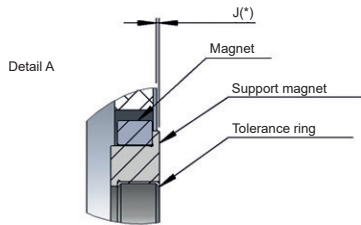
SERIE MR

MAGNETIC INCREMENTAL ENCODER

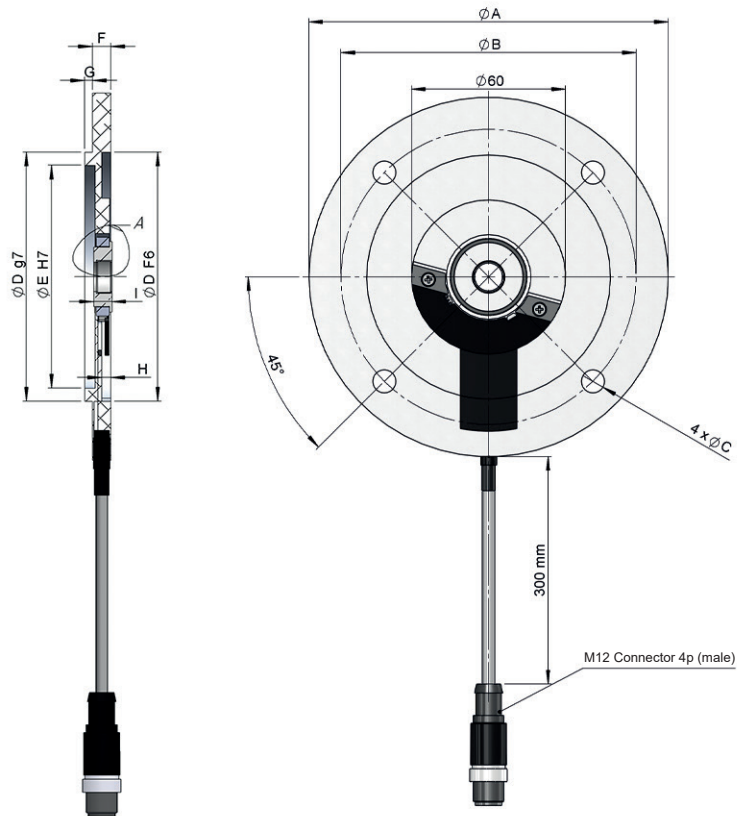
- Non-contacting measuring system
- Easy assembly
- 5...30 VDC Push-Pull not differential
- High protection class IP67
- Compact dimensions
- For applications under possible adverse ambient conditions (vibrations, humidity, dust, etc.)



Magnetic Encoder Incremental Encoder Vibration and shock resistant IP67 Express Delivery



J(*) Distance to mounting between support of magnet and surface to fix the sensor.
Mounting tolerance: ± 0.7 mm



| Ø A | Ø B | Ø C | Ø D | Ø E | F | G | H | I | J |
|-------|-----|-----|-----|-----|---|-----|-----|---|-----|
| Ø 105 | 85 | 7 | 70 | 62 | 7 | 2,5 | 3 | 7 | 0 |
| Ø 120 | 100 | 7 | 80 | 72 | 7 | 3 | 3,5 | 7 | 0 |
| Ø 140 | 115 | 9 | 95 | 85 | 7 | 3 | 3,5 | 7 | 0,5 |
| Ø 160 | 130 | 9 | 110 | 100 | 7 | 3,5 | 4 | 7 | 0,5 |

REFERENCE

Reference example: MR-105-14-001

| Serie | External diameter / Shaft diameter | Resolution | Special Customer |
|-------|------------------------------------|------------|------------------|
| MR - | □ □ □ - □ □ - | 0 0 1 | . □ □ □ □ |

105-14. Ø 105 mm / Shaft Ø 14 mm
 120-19. Ø 120 mm / Shaft Ø 19 mm
 140-11. Ø 140 mm / Shaft Ø 11 mm
 160-14. Ø 160 mm / Shaft Ø 14 mm

Order your reference
Step file 3D

info@encoderhohner.com
service available in 24 h



SERIE MR

MAGNETIC INCREMENTAL ENCODER

MECHANICAL SPECIFICATIONS

| | |
|--|---|
| Materials | Flange: Aluminium Support magnet: Stainless Steel Magnet: Ferrite |
| Maximum number of revolutions permitted mechanically | 6000 rpm |
| Shaft diameter | 11, 14, 19 mm |
| Housing fixing | 4 holes (see dimensions table $\varnothing B - \varnothing C$) |
| Permitted misalignment | ± 0.7 mm axial, ± 1 mm radial |
| Protection against dust and splashes according to DIN EN 60529 | IP67 |
| Weight aprox. | 0,4 Kg |
| Operating temperature range | -20 to +85°C |
| Vibration according to DIN EN 60068-2-6 | 100 m/s ² (10Hz...2000Hz) |
| Shock according to DIN EN 60068-2-27 | 1000 m/s ² (6ms) |
| Radial connection | 30 cm cable ended with M12 4p industrial male connector Female connector not included |

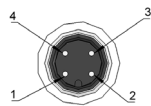
ELECTRICAL SPECIFICATIONS

| | |
|---|--------------------------------------|
| Measuring range | 0...360° |
| Resolution | 1 ppr |
| Power supply | 5...30 VDC |
| Consumption | < 20 mA (without load) |
| Reverse polarity protection of power supply | Yes (max. 2s) |
| Insulation test | 1 KV |
| Insulation resistance | 200 M Ω |
| Impulse sequence | A 90° B Tolerance $\pm 25^\circ$ el. |
| Motor shaft tolerance | According to IEC Dimensions |

OUTPUT SIGNALS

| | |
|--------------------------------|--------------------------------------|
| Electronic Output voltage | Push-Pull not differential |
| "High" signal level | > VCC -3 VDC |
| "Low" signal level | < 2.5 VDC |
| Frequency | ≤ 20 kHz |
| Duty cycle signal | 180° \pm 18° el. |
| Length of cable allowed | 50 m |
| Max. load capability / channel | 30 mA |
| Output channels | Square wave-Impulse, (2-channel) A+B |
| Short circuit protection | No |

CONNECTION

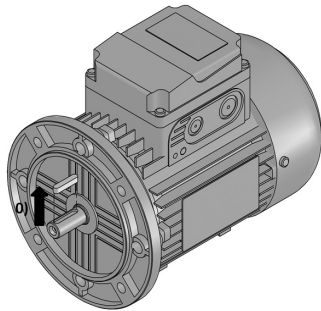


| | Connector M12 4p |
|-----|---------------------|
| GND | 3 |
| VCC | 1 |
| A | 4 |
| B | 2 |

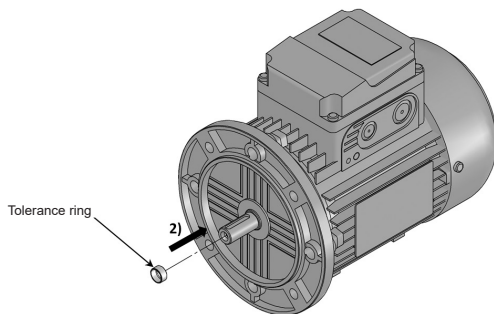
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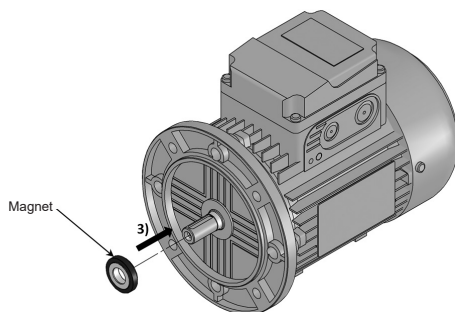
ASSEMBLY INSTRUCTIONS



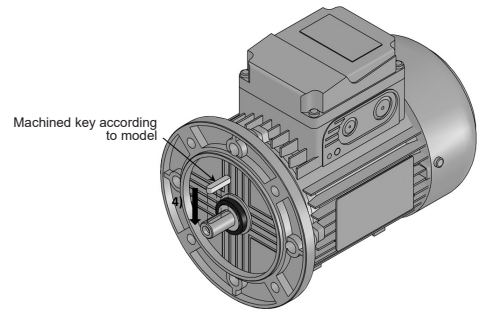
1) Dismount the key.



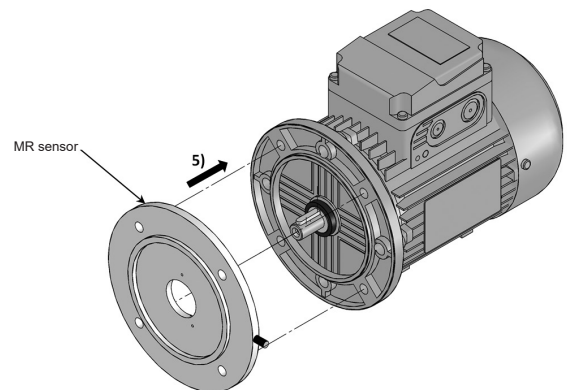
2) Push tolerance ring up to the shoulder of the shaft.



3) Mount magnet embedded with tolerance ring.



4) Push machined key according to MR model.



5) Mount MR sensor.

