



MQ10-60APSKRDS04

MQB

MAGNETIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

| Type | Part no. |
|------------------|----------|
| MQ10-60APSKRDS04 | 1117741 |

Other models and accessories → www.sick.com/MQB

Detailed technical data

Features

| | |
|--|---|
| Housing | Rectangular |
| Dimensions (W x H x D) | 10 mm x 28 mm x 16 mm |
| Sensing range S_n | 0 mm ... 60 mm ¹⁾ |
| Safe sensing range S_a | 48.6 mm |
| Magnetic sensitivity | ≤ 1 mT |
| Switching frequency | 1,000 Hz |
| Connection type | Cable with connector M8, 3-pin, with knurled nuts, 0.21 m ²⁾ |
| Switching output | PNP |
| Output function | NO |
| Electrical wiring | DC 3-wire |
| Enclosure rating | IP67 ³⁾ |

¹⁾ Sensing range based on installation in non-magnetic material using Magnet MAG-3010-B (M4.0).

²⁾ Do not bend below 0 °C.

³⁾ According to EN 60529.

Mechanics/electronics

| | |
|---------------------------------------|-----------------------|
| Supply voltage | 10 V DC ... 30 V DC |
| Ripple | ≤ 10 % ¹⁾ |
| Voltage drop | ≤ 1.5 V ²⁾ |
| Current consumption | 5 mA ³⁾ |
| Time delay before availability | ≤ 26 ms |
| Hysteresis | 1 % ... 10 % |

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

| | |
|---|----------------------------------|
| Reproducibility | $\leq 1\%$ ⁴⁾ |
| Temperature drift (of S_r) | $\pm 10\%$ |
| EMC | According to EN 60947-5-2 |
| Continuous current I_a | $\leq 200\text{ mA}$ |
| Cable material | PUR |
| Short-circuit protection | ✓ |
| Reverse polarity protection | ✓ |
| Power-up pulse protection | ✓ |
| Shock and vibration resistance | 30 g, 11 ms / 10 ... 55 Hz, 1 mm |
| Ambient operating temperature | -25 °C ... +75 °C |
| Housing material | Plastic, VISTAL® |
| Sensing face material | Plastic, VISTAL® |

¹⁾ Of V_S.

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

Safety-related parameters

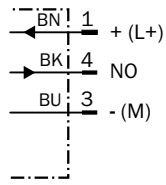
| | |
|-------------------------|-------------|
| MTTF_D | 1,924 years |
| DC_{avg} | 0 % |

Classifications

| | |
|-----------------------|----------|
| ECLASS 5.0 | 27270104 |
| ECLASS 5.1.4 | 27270104 |
| ECLASS 6.0 | 27270104 |
| ECLASS 6.2 | 27270104 |
| ECLASS 7.0 | 27270104 |
| ECLASS 8.0 | 27270104 |
| ECLASS 8.1 | 27270104 |
| ECLASS 9.0 | 27270104 |
| ECLASS 10.0 | 27270104 |
| ECLASS 11.0 | 27270104 |
| ECLASS 12.0 | 27274301 |
| ETIM 5.0 | EC002544 |
| ETIM 6.0 | EC002544 |
| ETIM 7.0 | EC002544 |
| ETIM 8.0 | EC002544 |
| UNSPSC 16.0901 | 39122230 |

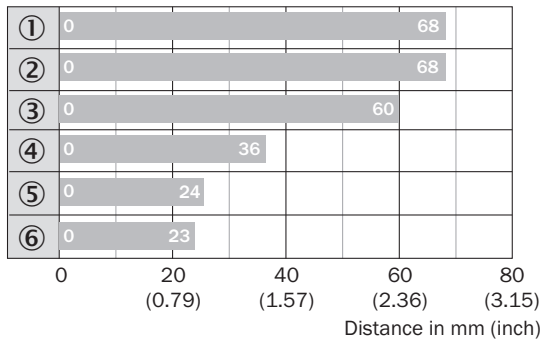
Connection diagram

Cd-002



Sensing range diagram

Sensing range

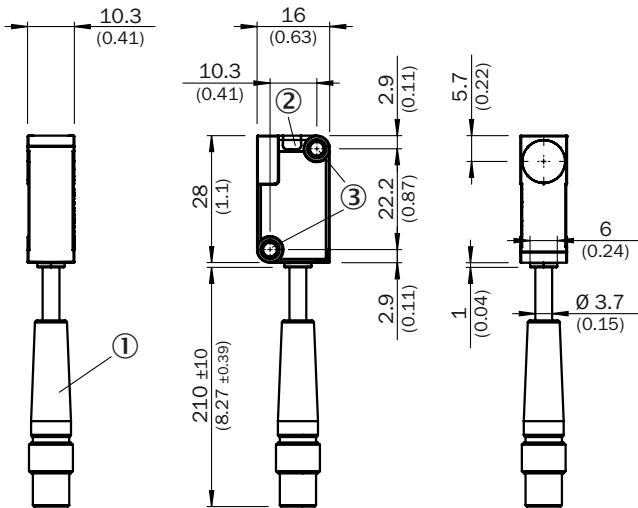


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

| Magnet type | Part no. |
|----------------------|----------|
| ① MAG-3315-B (M 5.1) | 7902086 |
| ② MAG-3015-B (M 5.0) | 7901786 |
| ③ MAG-3010-B (M 4.0) | 7901785 |
| ④ MAG-2006-B (M 3.0) | 7901784 |
| ⑤ MAG-0625-A (M 2.0) | 7901783 |
| ⑥ MAG-1003-S (M 1.0) | 7901782 |

Dimensional drawing (Dimensions in mm (inch))

MQ10, cable with male connector







- ① Connection
- ② LED indicator 270°
- ③ Threaded hole M3 (2 x)

Recommended accessories

Other models and accessories → www.sick.com/MQB

| | Brief description | Type | Part no. |
|--------|---|--------------------|----------|
| Others | | | |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YF8U13-020UA1XLEAX | 2094782 |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YF8U13-050UA1XLEAX | 2094788 |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YF8U13-020VA1XLEAX | 2095860 |
| | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YF8U13-050VA1XLEAX | 2095884 |

| | Brief description | Type | Part no. |
|---|---|--------------------|----------|
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YG8U13-020UA1XLEAX | 2094794 |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PUR, halogen-free • Description: Sensor/actuator cable, unshielded • Application: Zones with oils and lubricants, Drag chain operation, Robot | YG8U13-050UA1XLEAX | 2095586 |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YG8U13-020VA1XLEAX | 2096165 |
|  | <ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled, A-coded • Connection type head B: Flying leads • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals | YG8U13-050VA1XLEAX | 2096166 |

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com