



# MQ10-60APSKQDS03

MQB

MAGNETIC SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



## Ordering information

| Type             | Part no. |
|------------------|----------|
| MQ10-60APSKQDS03 | 1094760  |

Other models and accessories → [www.sick.com/MQB](http://www.sick.com/MQB)

## Detailed technical data

### Features

|                                            |                                                         |
|--------------------------------------------|---------------------------------------------------------|
| <b>Housing</b>                             | Rectangular                                             |
| <b>Dimensions (W x H x D)</b>              | 10 mm x 28 mm x 16 mm                                   |
| <b>Sensing range <math>S_n</math></b>      | 0 mm ... 60 mm <sup>1)</sup>                            |
| <b>Safe sensing range <math>S_a</math></b> | 48.6 mm                                                 |
| <b>Magnetic sensitivity</b>                | $\leq 1$ mT                                             |
| <b>Switching frequency</b>                 | 1,000 Hz                                                |
| <b>Connection type</b>                     | Cable with connector M12, 3-pin, 0.4 m <sup>2) 3)</sup> |
| <b>Switching output</b>                    | PNP                                                     |
| <b>Output function</b>                     | NO                                                      |
| <b>Electrical wiring</b>                   | DC 3-wire                                               |
| <b>Enclosure rating</b>                    | IP67 <sup>4)</sup>                                      |
| <b>Special features</b>                    | Stainless steel connector                               |

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

<sup>2)</sup> Do not bend below 0 °C.

<sup>3)</sup> Stainless steel connector.

<sup>4)</sup> According to EN 60529.

### Mechanics/electronics

|                                       |                            |
|---------------------------------------|----------------------------|
| <b>Supply voltage</b>                 | 10 V DC ... 30 V DC        |
| <b>Ripple</b>                         | $\leq 10$ % <sup>1)</sup>  |
| <b>Voltage drop</b>                   | $\leq 1.5$ V <sup>2)</sup> |
| <b>Current consumption</b>            | 5 mA <sup>3)</sup>         |
| <b>Time delay before availability</b> | 26 ms                      |

<sup>1)</sup> Of  $V_S$ .

<sup>2)</sup> At  $I_a$  max.

<sup>3)</sup> Without load.

<sup>4)</sup> Von Sr (VS und Ta constant).

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

1) Of  $V_S$ .

2) At  $I_a$  max.

3) Without load.

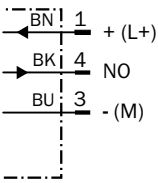
4) Von  $S_r$  ( $V_S$  und  $T_a$  constant).

## Classifications

|                       |          |
|-----------------------|----------|
| <b>eCl@ss 5.0</b>     | 27270104 |
| <b>eCl@ss 5.1.4</b>   | 27270104 |
| <b>eCl@ss 6.0</b>     | 27270104 |
| <b>eCl@ss 6.2</b>     | 27270104 |
| <b>eCl@ss 7.0</b>     | 27270104 |
| <b>eCl@ss 8.0</b>     | 27270104 |
| <b>eCl@ss 8.1</b>     | 27270104 |
| <b>eCl@ss 9.0</b>     | 27270104 |
| <b>eCl@ss 10.0</b>    | 27270104 |
| <b>eCl@ss 11.0</b>    | 27270104 |
| <b>eCl@ss 12.0</b>    | 27274301 |
| <b>ETIM 5.0</b>       | EC002544 |
| <b>ETIM 6.0</b>       | EC002544 |
| <b>ETIM 7.0</b>       | EC002544 |
| <b>ETIM 8.0</b>       | EC002544 |
| <b>UNSPSC 16.0901</b> | 39122230 |

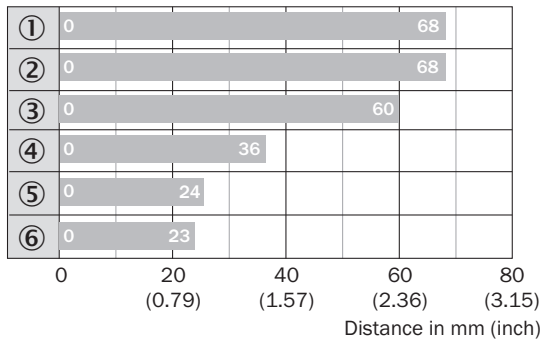
Connection diagram

Cd-002



Sensing range diagram

Sensing range

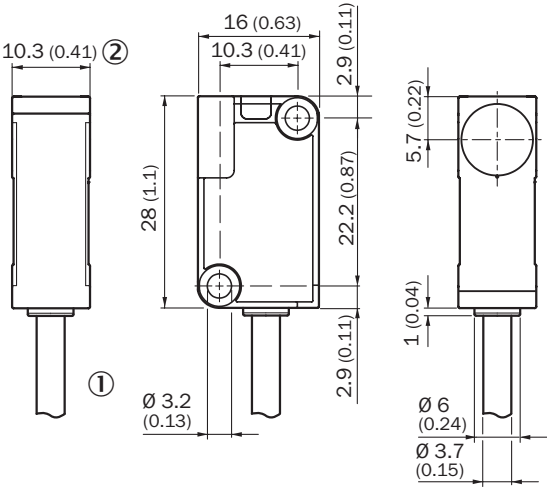


■ Max. sensing range  $S_n$ , flush or non-flush installation, non-magnetizable material

| 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°

Recommended accessories

Other models and accessories → [www.sick.com/MQB](http://www.sick.com/MQB)

|                                                                                     | Brief description                                                                                                                                  | Type               | Part no. |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|
| Plug connectors and cables                                                          |                                                                                                                                                    |                    |          |
|  | Head A: female connector, M8, 3-pin, straight, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m | YF8U13-020UA1XLEAX | 2094782  |
|  | Head A: female connector, M8, 3-pin, straight, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PVC, unshielded, 2 m               | YF8U13-020VA1XLEAX | 2095860  |
|  | Head A: female connector, M8, 3-pin, straight, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m | YF8U13-050UA1XLEAX | 2094788  |
|  | Head A: female connector, M8, 3-pin, straight, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PVC, unshielded, 5 m               | YF8U13-050VA1XLEAX | 2095884  |
|  | Head A: female connector, M8, 3-pin, angled, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m   | YG8U13-020UA1XLEAX | 2094794  |
|  | Head A: female connector, M8, 3-pin, angled, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PVC, unshielded, 2 m                 | YG8U13-020VA1XLEAX | 2096165  |
|  | Head A: female connector, M8, 3-pin, angled, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m   | YG8U13-050UA1XLEAX | 2095586  |

|                                                                                   | Brief description                                                                                                                  | Type               | Part no. |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|
|  | Head A: female connector, M8, 3-pin, angled, A-coded<br>Head B: Flying leads<br>Cable: Sensor/actuator cable, PVC, unshielded, 5 m | 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](http://www.sick.com)