

## MQ10-60APSKQDS02 MQB

**MAGNETIC SENSORS** 





#### Ordering information

Туре	Part no.
MQ10-60APSKQDS02	1078005

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Rectangular
Dimensions (W x H x D)	10 mm x 28 mm x 16 mm
Sensing range S <sub>n</sub>	0 mm 60 mm <sup>1)</sup>
Safe sensing range S <sub>a</sub>	48.6 mm
Magnetic sensitivity	≤ 1 mT
Switching frequency	1,000 Hz
Connection type	Cable with connector M12, 3-pin, 1 m $^{2)}$
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>3)</sup>

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

#### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 % <sup>1)</sup>
Voltage drop	$\leq$ 1.5 V $^{2)}$
Current consumption	5 mA <sup>3)</sup>
Time delay before availability	26 ms
Hysteresis	1 % 10 %

 $<sup>^{1)}</sup>$  Of  $V_S$ .

 $<sup>^{2)}</sup>$  Do not bend below 0  $^{\circ}\text{C}.$ 

 $<sup>^{3)}</sup>$  According to EN 60529.

 $<sup>^{2)}</sup>$  At I $_{\rm a}$  max.

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

 $<sup>^{\</sup>rm 4)}$  Von Sr (VS und Ta constant).

Reproducibility	≤ 1 % <sup>4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes
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®

 $<sup>^{1)}</sup>$  Of  $V_{\mbox{\scriptsize S}}.$ 

#### 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

<sup>&</sup>lt;sup>2)</sup> At I<sub>a</sub> max.

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

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

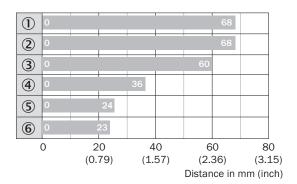
#### Connection diagram

Cd-002



#### Sensing range diagram

Sensing range

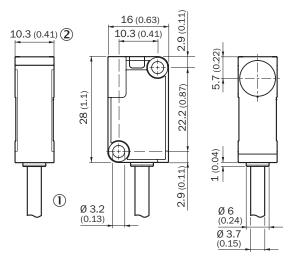


 $\begin{tabular}{ll} \hline & Max. sensing range $S_n$, flush or non-flush installation, \\ & non-magnetizable material \\ \hline \end{tabular}$ 

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
<b>⑤</b> MAG-0625-A (M 2.0)	7901783
<b>6</b> MAG-1003-S (M 1.0)	7901782

#### Dimensional drawing (Dimensions in mm (inch))

MQ10, cable with male connector



- ① Connection

#### Recommended accessories

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

	Brief description	Туре	Part no.
Others			
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 020VA1XLEAX	2095860
40	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 050VA1XLEAX	2095884
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 020VA1XLEAX	2096165
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 050VA1XLEAX	2096166

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	Brief description	Туре	Part no.
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF8U13- 020UA1XLEAX	2094782
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YF8U13- 050UA1XLEAX	2094788
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YG8U13- 020UA1XLEAX	2094794
13	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with oils and lubricants, Drag chain operation, Robot</li> </ul>	YG8U13- 050UA1XLEAX	2095586

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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:**

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