



## MQ10-60ANSKUO MQB

MAGNETIC SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	part no.
MQ10-60ANSKUO	1078007

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

Illustration may differ



## 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>	1 mT
<b>Switching frequency</b>	1,000 Hz
<b>Connection type</b>	Cable, 3-wire, 2 m <sup>2)</sup>
<b>Switching output</b>	NPN
<b>Switching output detail</b>	NPN
<b>Output function</b>	NO
<b>Electrical wiring</b>	DC 3-wire
<b>Enclosure rating</b>	IP67 <sup>3)</sup>

<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> According to EN 60529.

## Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 10 % <sup>1)</sup>
<b>Voltage drop</b>	≤ 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  $S_r$  ( $V_S$  und  $T_a$  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>Reverse polarity protection</b>	Yes
<b>Short-circuit protection</b>	Yes
<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>	-25 °C ... +75 °C
<b>Housing material</b>	Plastic, VISTAL®
<b>Sensing face material</b>	Plastic, VISTAL®

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

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

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

<sup>4)</sup> Von  $S_r$  ( $V_S$  und  $T_a$  constant).

#### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,924 years
<b>DC<sub>avg</sub></b>	0 %
<b>T<sub>M</sub> (mission time)</b>	20 years

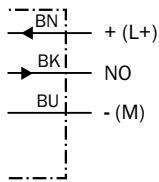
#### Certificates

<b>EU declaration of conformity</b>	✓
<b>UK declaration of conformity</b>	✓
<b>China-RoHS</b>	✓

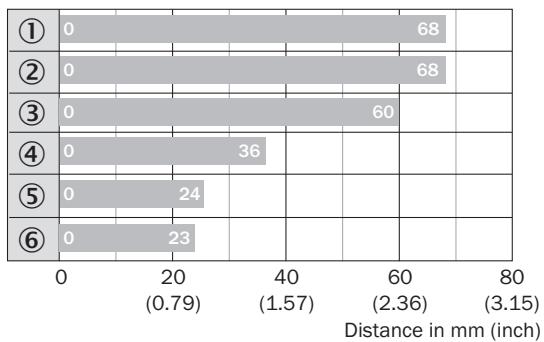
#### Classifications

<b>ECLASS 5.0</b>	27270104
<b>ECLASS 5.1.4</b>	27270104
<b>ECLASS 6.0</b>	27270104
<b>ECLASS 6.2</b>	27270104
<b>ECLASS 7.0</b>	27270104
<b>ECLASS 8.0</b>	27270104
<b>ECLASS 8.1</b>	27270104
<b>ECLASS 9.0</b>	27270104
<b>ECLASS 10.0</b>	27270104
<b>ECLASS 11.0</b>	27270104
<b>ECLASS 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

## Connection diagram Cd-001



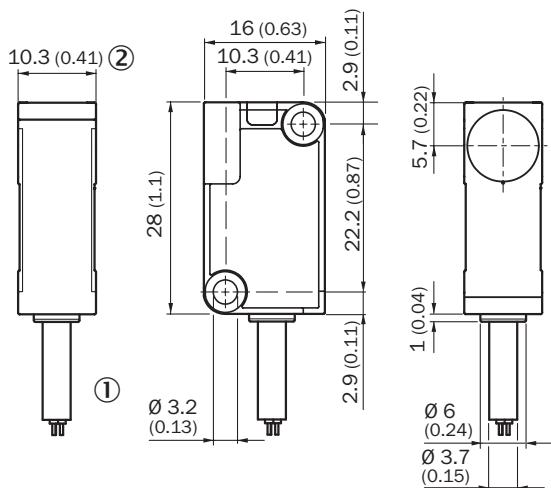
## Sensing range



Max. sensing range S<sub>n</sub>, 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 MQ10, cable



Dimensions in mm (inch)

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.
connectors and cables			
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Female connector, M8, 3-pin, straight, A-coded</li><li><b>Description:</b> Unshielded</li><li><b>Connection systems:</b> Screw-type terminals</li><li><b>Permitted cross-section:</b> 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></li></ul>	DOS-0803-G	7902077
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Female connector, M8, 3-pin, angled, A-coded</li><li><b>Description:</b> Unshielded</li><li><b>Connection systems:</b> Solder connection</li><li><b>Permitted cross-section:</b> ≤ 0.25 mm<sup>2</sup></li></ul>	DOS-0803-W	7902078
	<ul style="list-style-type: none"><li><b>Connection type head A:</b> Male connector, M8, 3-pin, straight, A-coded</li><li><b>Description:</b> Unshielded</li><li><b>Connection systems:</b> Screw-type terminals</li><li><b>Permitted cross-section:</b> 0.14 mm<sup>2</sup> ... 0.5 mm<sup>2</sup></li></ul>	STE-0803-G	6037322

## 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:

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