MQ10-60APSKU0

MQ

MAGNETIC PROXIMITY SENSORS

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
MQ10-60APSKU0	1078006

Other models and accessories ➜ www.sick.com/MQ

Illustration may differ

EAC

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, 3-wire, 2 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 Sr (VS und Ta constant).

Reproducibility	≤ 1 % [4]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 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 Sr (VS und Ta constant).

Safety-related parameters

$MTTF_D$	1,924 years
DC_{avg}	0 %

Classifications

ECl@ss 5.0	27270104
ECl@ss 5.1.4	27270104
ECl@ss 6.0	27270104
ECl@ss 6.2	27270104
ECl@ss 7.0	27270104
ECl@ss 8.0	27270104
ECl@ss 8.1	27270104
ECl@ss 9.0	27270104
ECl@ss 10.0	27270104
ECl@ss 11.0	27270104
ETIM 5.0	EC002544
ETIM 6.0	EC002544
ETIM 7.0	EC002544
ETIM 8.0	EC002544
UNSPSC 16.0901	39122230

Connection diagram

Cd-001

```
BN ──── + (L+)
BK ──── NO
BU ──── - (M)
```
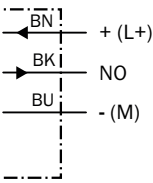
Sensing range diagram

Sensing range

	Distance in mm (inch)			
①	68			
②	68			
③	60			
④	36			
⑤	24			
⑥	23			

0   20 (0.79)   40 (1.57)   60 (2.36)   80 (3.15)

Distance in mm (inch)
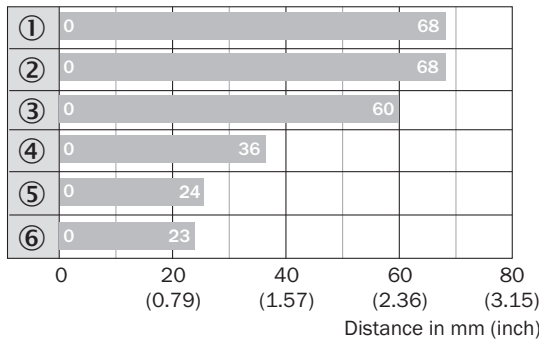
▨ Max. sensing range S_n, flush or non-flush installation, non-magnetizable material

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
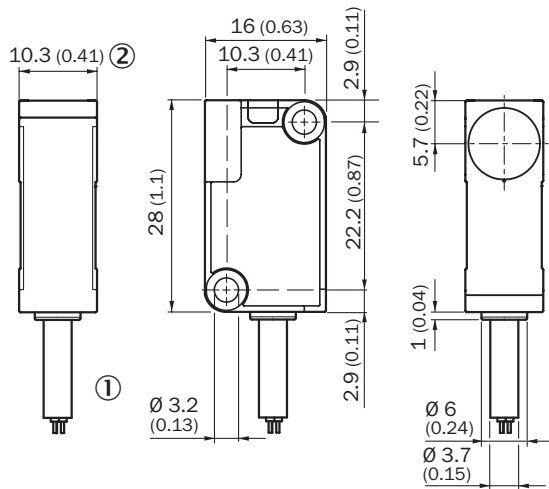
① Connection
② LED indicator 270°

Recommended accessories

Other models and accessories ➜ www.sick.com/MQ

	Brief description	Type	Part no.
Magnets			
	Magnet without mounting hole, Ø 6 mm, height 25 mm	MAG-0625-A	7901783
	Magnet without mounting hole, Ø 10 mm, height 3 mm	MAG-1003-S	7901782
	Magnet with mounting hole for M4 countersunk screw, Ø 20 mm, height 6.5 mm	MAG-2006-B	7901784
	Magnet without mounting hole, Ø 30 mm, height 10 mm	MAG-3010-B	7901785
	Magnet with mounting hole for M5 flat head screw, Ø 31 mm, height 15 mm	MAG-3015-B	7901786
	Magnet with mounting hole for M5 flat head screw, Ø 36 mm, height 19.5 mm	MAG-3515-B	7902086
Plug connectors and cables			
	Head A: female connector, M8, 3-pin, straight Head B: - Cable: unshielded	DOS-0803-G	7902077

	Brief description	Type	Part no.
	Head A: female connector, M8, 3-pin, angled Head B: - Cable: unshielded	DOS-0803-W	7902078
	Head A: male connector, M8, 3-pin, straight Head B: - Cable: unshielded	STE-0803-G	6037322

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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.

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