



MM18-00APS-ZU0

MM

MAGNETIC PROXIMITY SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MM18-00APS-ZUO	1029952

Included in delivery: BEF-MU-M18 (2)

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

Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Advanced
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	5 mm ... 120 mm ¹⁾
Safe sensing range S_a	97.2 mm
Magnetic sensitivity	0.4 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
Magnetic alignment	Axial
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	10 mA ³⁾

¹⁾ Of V_S .

²⁾ At I_a max.

³⁾ Without load.

⁴⁾ Von S_r (V_S und T_a constant).

⁵⁾ Pulsed.

Time delay before availability	≤ 2 ms
Hysteresis	1 % ... 10 %
Reproducibility	≤ 1 % ⁴⁾
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 300 mA
Cable material	PUR
Short-circuit protection	✓ ⁵⁾
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	Metal, Nickel-plated brass
Housing length	50 mm
Thread length	40 mm
Tightening torque, max.	25 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)

1) Of V_S.

2) At I_a max.

3) Without load.

4) Von Sr (VS und Ta constant).

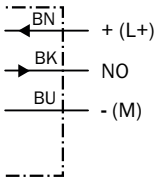
5) Pulsed.

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
UNSPSC 16.0901	39122230

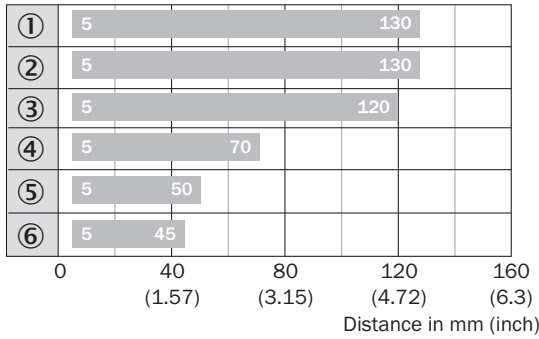
Connection diagram

Cd-001



Sensing range diagram

Sensing range

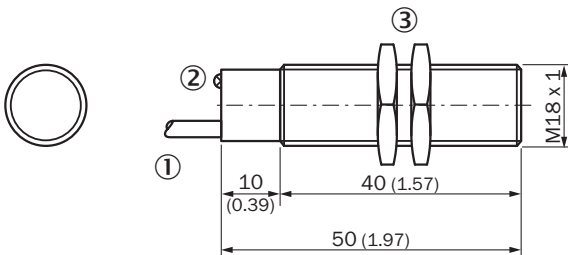


■ Max. sensing range S_n , flush or non-flush installation, non-magnetizable material

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))


MM18, cable, standard housing



- ① Connection
- ② Indication LED
- ③ Fastening nuts (2x); width across 17, metal

Recommended accessories

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

	Brief description	Type	Part no.
Universal bar clamp systems			
	Plate N06 for universal clamp bracket, M18, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware	BEF-KHS-N06	2051612
	Plate N06N for universal clamp bracket, M18, Stainless steel 1.4571 (sheet), Stainless steel 1.4408 (clamp), Universal clamp (5322627), mounting hardware	BEF-KHS-N06N	2051622
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482
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

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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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