

# MM18-00APS-ZUA

MME

**MAGNETIC SENSORS** 





## Ordering information

Туре	Part no.
MM18-00APS-ZUA	1087221

Included in delivery: BEF-MU-M18 (1)

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

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 <sub>n</sub>	5 mm 120 mm <sup>1)</sup>
Safe sensing range S <sub>a</sub>	97.2 mm
Magnetic sensitivity	0.3 mT
Switching frequency	1,000 Hz
Connection type	Cable, 3-wire, 3 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Magnetic alignment	Axial
Enclosure rating	IP67 <sup>2)</sup>
Items supplied	Mounting nut, brass, nickel-plated (2x)

 $<sup>^{1)}</sup>$  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	10 mA <sup>3)</sup>

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

<sup>&</sup>lt;sup>2)</sup> According to EN 60529.

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

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

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

<sup>&</sup>lt;sup>5)</sup> Pulsed.

Time delay before availability	≤ 30 ms
Hysteresis	< 25 %
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
Short-circuit protection	<b>✓</b> <sup>5)</sup>
Reverse polarity protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-40 °C +75 °C
Housing material	Metal, Nickel-plated brass
Housing length	50 mm
Thread length	40 mm
Tightening torque, max.	≤ 25 Nm

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

## Safety-related parameters

MTTF <sub>D</sub>	2,238 years
DC <sub>avg</sub>	0 %
T <sub>M</sub> (mission time)	20 years

## 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

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

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

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

<sup>&</sup>lt;sup>5)</sup> Pulsed.

UNSPSC 16.0901

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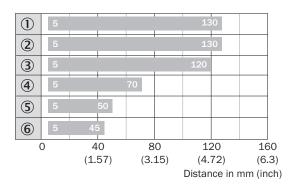
#### Connection diagram

#### Cd-001



#### Sensing range diagram

#### Sensing range

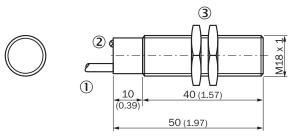


Max. sensing range S<sub>n</sub>, flush or non-flush installation, non-magnetizable material

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
<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))

MM18, cable, standard housing



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

#### Recommended accessories

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

	Brief description	Туре	Part no.
Universal bar clamp systems			
6	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			
زانا	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
40	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

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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:**

Contacts and other locations -www.sick.com

