SICK.COM



DATA SHEET

MM18-00APS-ZUK

MME
Magnetic sensors

SICK Sensor Intelligence



MAGNETIC SENSORS

MM18-00APS-ZUK

ORDERING INFORMATION

Type	part no.
MM18-00APS-ZUK	1077120

Further device versions and accessories at www.sick.com/MME

DETAILED TECHNICAL DATA

FEATURES

Housing	Metric
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	5 mm ... 120 mm [1) 2) 3)]
Safe sensing range S_a	97.2 mm [2)] [3)] [2) 3)]
Magnetic sensitivity	0.4 mT
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 [4)]
Items supplied	Mounting nut, brass, nickel-plated (2x)

1) Max. fluss density allowed at the sensor: 280mT.

2) Excluding the geomagnetic field.

3) Based on M4.0 magnet.

4) According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V [1]
Current consumption	10 mA [2]
Time delay before availability	≤ 100 ms
Hysteresis	10 % ... 20 %
Reproducibility	≤ 1 % [3] [4]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Cable material	PUR
Reverse polarity protection	Yes
Short-circuit protection	Yes [5]
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
Ambient operating temperature	–40 °C ... +75 °C [6] [7]
Housing material	Nickel-plated brass
Housing length	58 mm
Thread length	42 mm
Tightening torque, max.	≤ 40 Nm
Protection class	III

[1] At I_a max.

[2] Without load.

[3] Supply voltage U_B and constant ambient temperature Ta.

[4] Of Sr.

[5] Pulsed.

[6] Temperature changes below –25 °C reduce the service life of the sensor.

[7] At temperatures below –25 °C, the cable must be permanently installed.

SAFETY-RELATED PARAMETERS

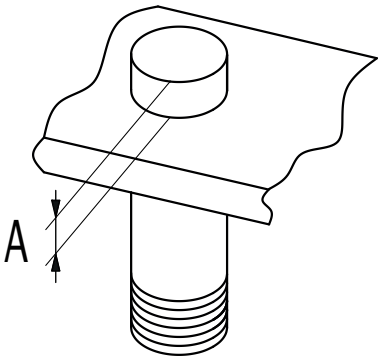
$MTTF_D$	2,238 years
DC_{avg}	0 %
T_M (mission time)	20 years

CERTIFICATES

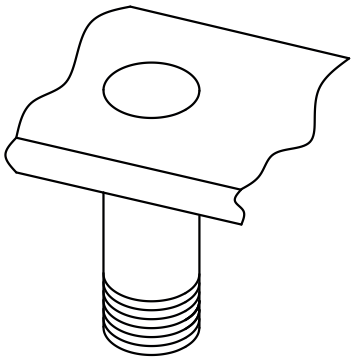
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓

INSTALLATION NOTE

installation in magnetizable material



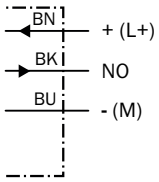
installation in non-magnetizable material



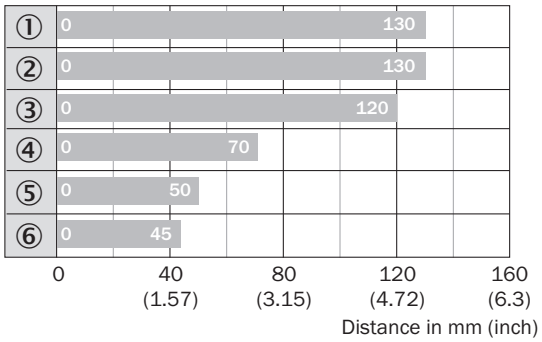


Ø	A (mm)	M (Nm)
M18	20	< 40

CONNECTION DIAGRAM CD-001



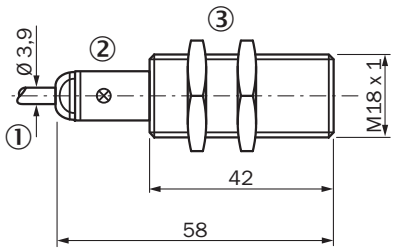
SENSING RANGE



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 MM18 NAMUR, CABLE



Dimensions in mm (inch)
① Connection
② Display LED
③ Fastening nuts (2x); width across 24, metal

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1077120

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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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