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DATA SHEET

IME18-12NPSVW2S

IME
Inductive proximity sensors

SICK Sensor Intelligence



INDUCTIVE PROXIMITY SENSORS

IME18-12NPSVW2S

ORDERING INFORMATION

Type	part no.
IME18-12NPSVW2S	1065020

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

DETAILED TECHNICAL DATA

FEATURES

Housing	Metric
Housing	Standard design
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	12 mm
Safe sensing range S_a	9.72 mm
Installation type	Non-flush
Switching frequency	1,000 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 [1]
Items supplied	Mounting nut, V2A stainless steel (2x)

[1] According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V [1]
Time delay before availability	≤ 100 ms

[1] At I_a max.

[2] Supply voltage U_s and constant ambient temperature Ta.

[3] Of Sr.

Hysteresis	5 % ... 15 %
Reproducibility	≤ 2 % [2] [3]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
No load current	≤ 10 mA
Cable material	PVC
Conductor size	0.25 mm²
Cable diameter	Ø 3.9 mm
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
Ambient operating temperature	–25 °C ... +75 °C
Housing material	Stainless steel V2A, DIN 1.4305 / AISI 303
Sensing face material	Plastic, PA 66
Housing length	67 mm
Thread length	42 mm
Tightening torque, max.	≤ 40 Nm
UL File No.	NRKH.E181493

[1] At I_a max.

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

[3] Of Sr.

SAFETY-RELATED PARAMETERS

$MTTF_D$	1,735 years
DC_{avg}	0 %

REDUCTION FACTORS

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

INSTALLATION NOTE

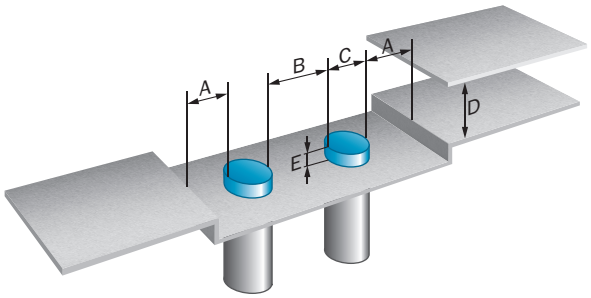
Remark	Associated graphic see "Installation note"
A	18 mm
B	36 mm
C	18 mm
D	36 mm
E	24 mm
F	96 mm

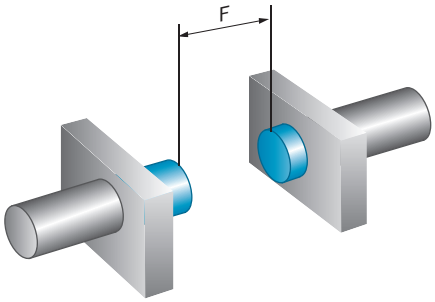
CERTIFICATES

EU declaration of conformity	✓

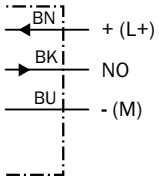
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓

INSTALLATION NOTE NON-FLUSH INSTALLATION

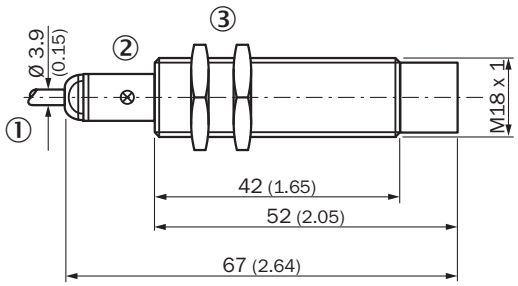




CONNECTION DIAGRAM CD-001



DIMENSIONAL DRAWING IME18 STANDARD, CABLE, NON-FLUSH



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/1065020

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SICK AT A GLANCE

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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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