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DATA SHEET

IHM06-03BPOVT0G

IMM
Inductive proximity sensors

SICK Sensor Intelligence



Illustration may differ

INDUCTIVE PROXIMITY SENSORS

IHM06-03BPOVT0G

ORDERING INFORMATION

Type	part no.
IHM06-03BPOVT0G	1103983

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

DETAILED TECHNICAL DATA

FEATURES

Housing	Cylindrical
Housing	Extremely short model
Diameter	Ø 6.5 mm
Sensing range S_n	3 mm
Safe sensing range S_a	2.43 mm
Installation type	Flush
Switching frequency	1,500 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Switching output detail	PNP
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 [1]
Special features	Visual adjustment indicator, triple sensing range

[1] According to EN 60529.

MECHANICS/ELECTRONICS

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 20 % [1]
Voltage drop	≤ 2 V [2]
Time delay before availability	≤ 50 ms

[1] Of V_s.

[2] With Ia = 200 mA.

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

Hysteresis	1 % ... 10 %
Reproducibility	≤ 2 % [3]
Temperature drift (of S_r)	≤ 10 %
EMC	EN 60947-5-2
Continuous current I_a	≤ 200 mA
Short-circuit protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	–25 °C ... +70 °C
Housing material	Stainless steel V2A, DIN 1.4305 / AISI 303
Sensing face material	Plastic, LCP
Housing length	29 mm
UL File No.	NRKH.E348498

[1] Of V_S.

[2] With Ia = 200 mA.

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

SAFETY-RELATED PARAMETERS

$MTTF_D$	1,330 years
DC_{avg}	0 %

REDUCTION FACTORS

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.75
Aluminum (Al)	Approx. 0.5
Copper (Cu)	Approx. 0.43
Brass (Br)	Approx. 0.54

INSTALLATION NOTE

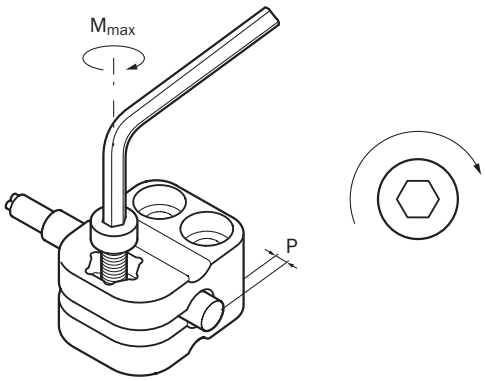
Remark	Associated graphic see "Installation note"
B	10 mm
C	6.5 mm
D	9 mm
F	24 mm

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	✓

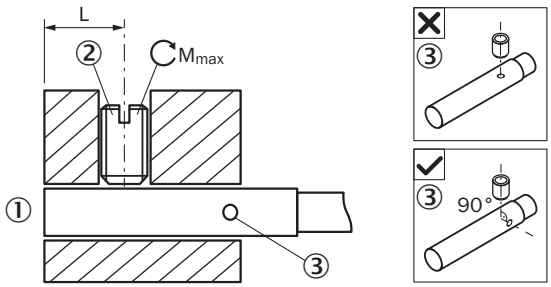
IO-Link certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

INSTALLATION NOTE MOUNTING USING BEF-KH-M06 BRACKET



Sensor type	Mounting adapter	Overrun (P)	Max. tightening torque (M_{max})
IHM06-1B5****** IHM06-02B****** IHM06-03B******	BEF-KH-M06, part no. 2101067	≥ 0 mm	≤ 0.6 Nm

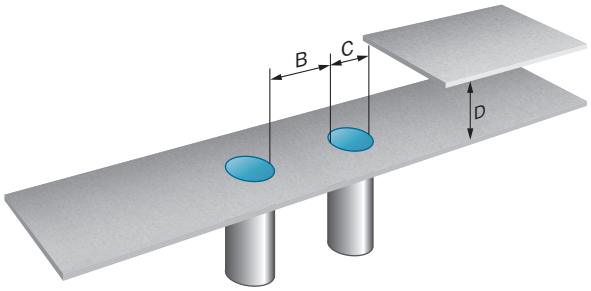
INSTALLATION NOTE FIXING WITH SETSCREW

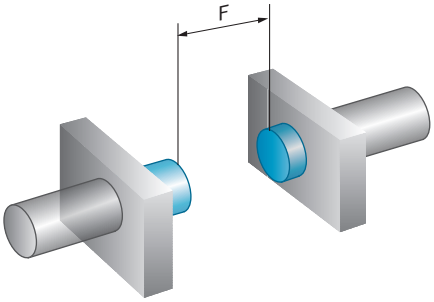


① Sensing face
② Recommended setscrew: M3, flat point
③ Display LED

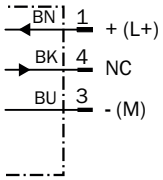
Sensor type	Mounting area (L)	Max. tightening torque (M_{max})
IHM06-********G	6 mm ... 11 mm	≤ 0.4 Nm
IHM06-******T0G	6 mm ... 21 mm	≤ 0.4 Nm
IHM06-********K	6 mm ... 21 mm	≤ 0.4 Nm
IHM06-******T0K	6 mm ... 32 mm	≤ 0.4 Nm
IHM06-********S	6 mm ... 32 mm	≤ 0.4 Nm
IHM06-******T0S	6 mm ... 42 mm	≤ 0.4 Nm

INSTALLATION NOTE FLUSH INSTALLATION

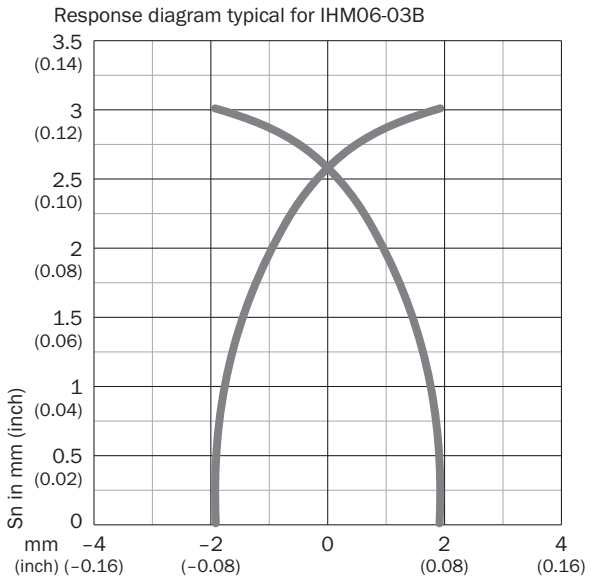




CONNECTION DIAGRAM CD-004

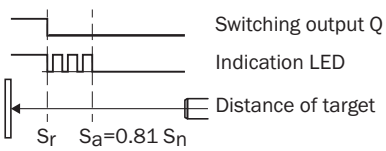


RESPONSE DIAGRAM

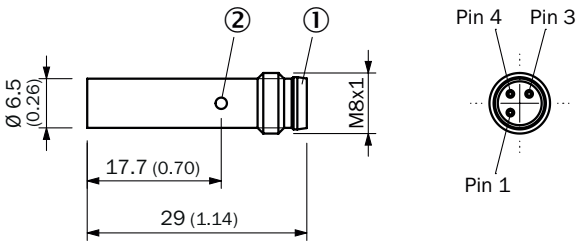


All dimensions in mm (inch)

FUNCTIONAL PRINCIPLE INSTALLATION AID



DIMENSIONAL DRAWING IHM06, EXTREMELY SHORT VARIANT, FLUSH, MALE CONNECTOR



Dimensions in mm (inch)
① Connection
② function indicator

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/1103983

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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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