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DATA SHEET

IHM06-1B5PSVT0G

IMM
Inductive proximity sensors

SICK Sensor Intelligence



Illustration may differ

INDUCTIVE PROXIMITY SENSORS

IHM06-1B5PSVT0G

ORDERING INFORMATION

Type	part no.
IHM06-1B5PSVT0G	1101119

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	1.5 mm
Safe sensing range S_a	1.215 mm
Installation type	Flush
Switching frequency	5,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Switching output detail	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 [1]
Special features	Visual adjustment indicator

[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 %

COMMUNICATION INTERFACE

Communication interface	IO-Link V1.1
Communication Interface detail	COM2 (38,4 kBaud)
Cycle time	10.4 ms
Process data length	1 Byte
Process data structure	Bit 0 = Sr reached Bit 1 = Sa reached

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

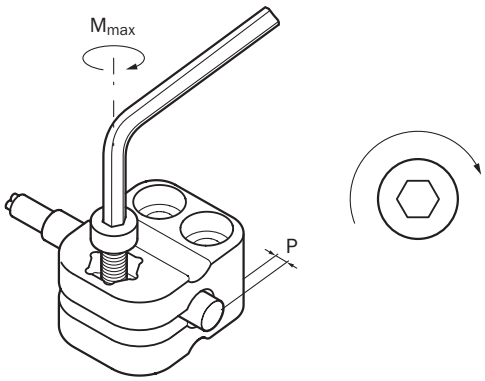
Remark	Associated graphic see "Installation note"
B	6 mm
C	6.5 mm
D	4.5 mm
F	12 mm

CERTIFICATES

EU declaration of conformity	✓

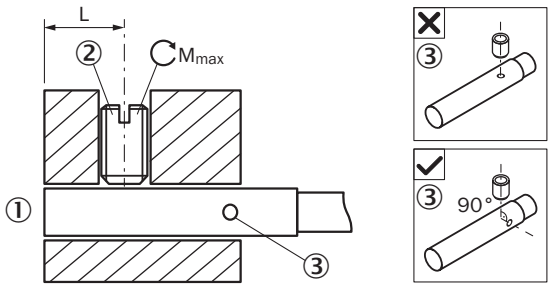
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓
cULus certificate	✓
IO-Link certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

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

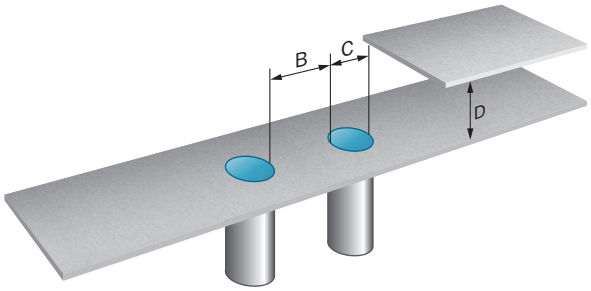
INSTALLATION NOTE FIXING WITH SETSCREW

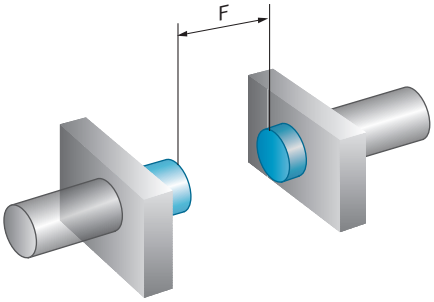


① Sensing face
② Recommended setscrew: M3, flat point
③ Display LED

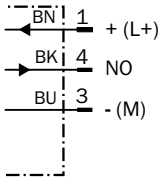
Sensor type	Mounting area (L)	Max. tightening torque (M_{max})
IHM06-********G	6 mm ... 11 mm	≤ 0.4 Nm
IHM06-******T0G	6 mm ... 21 mm	≤ 0.4 Nm
IHM06-********K	6 mm ... 21 mm	≤ 0.4 Nm
IHM06-******T0K	6 mm ... 32 mm	≤ 0.4 Nm
IHM06-********S	6 mm ... 32 mm	≤ 0.4 Nm
IHM06-******T0S	6 mm ... 42 mm	≤ 0.4 Nm

INSTALLATION NOTE FLUSH INSTALLATION

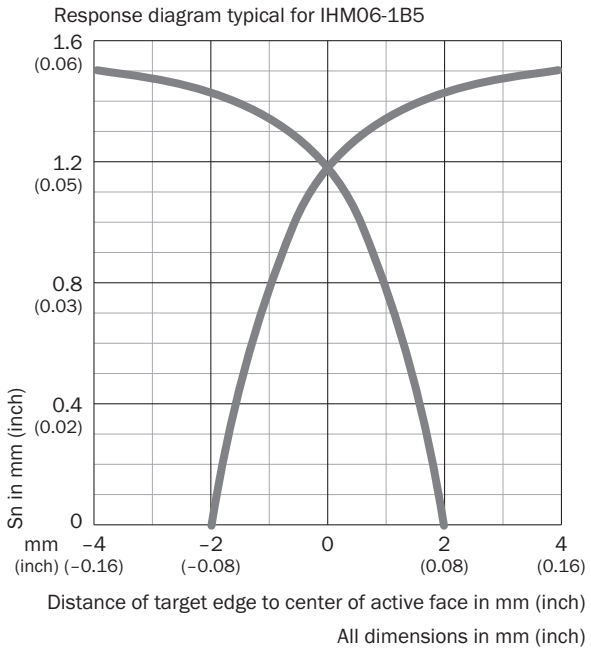




CONNECTION DIAGRAM CD-002

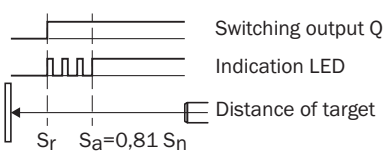


RESPONSE DIAGRAM

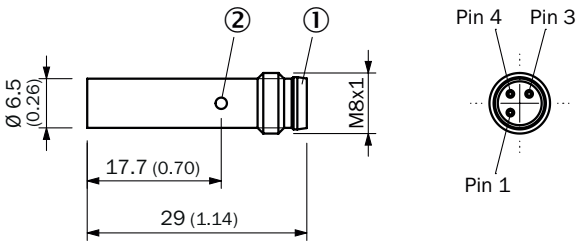


All dimensions in mm (inch)

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/1101119

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SICK AT A GLANCE

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