



IH06-04NPS-VT1

IMM

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
IH06-04NPS-VT1	7900183

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

Detailed technical data

Features

Housing	Cylindrical smooth housing
Housing	Standard design
Diameter	Ø 6.5 mm
Sensing range S_n	4 mm
Safe sensing range S_a	3.24 mm
Installation type	Non-flush
Switching frequency	1,800 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 % ¹⁾
Voltage drop	≤ 2 V ²⁾
Time delay before availability	≤ 50 ms
Hysteresis	1 % ... 20 %
Reproducibility	≤ 5 % ³⁾ ⁴⁾

¹⁾ Of V_S .

²⁾ With $I_a = 200$ mA.

³⁾ Supply voltage U_B and constant ambient temperature T_a .

⁴⁾ Of S_r .

Temperature drift (of S_r)	± 10 %
EMC	EN 60947-5-2 IEC 61000-4-2: (Testlevel 2) IEC 61000-4-4: (Testlevel 3)
Continuous current I_a	≤ 200 mA
Short-circuit protection	✓
Reverse polarity 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, POM
Housing length	50 mm
UL File No.	NMFT2.E175606

1) Of V_S.

2) With I_a = 200 mA.

3) Supply voltage U_B and constant ambient temperature T_a.

4) Of S_r.

Safety-related parameters

MTTF_D	1,221 years
DC_{avg}	0 %

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.77
Aluminum (Al)	Approx. 0.47
Copper (Cu)	Approx. 0.42
Brass (Br)	Approx. 0.52

Installation note

Remark	Associated graphic see "Installation"
A	6.5 mm
B	13 mm
C	6.5 mm
D	12 mm
E	8 mm
F	32 mm

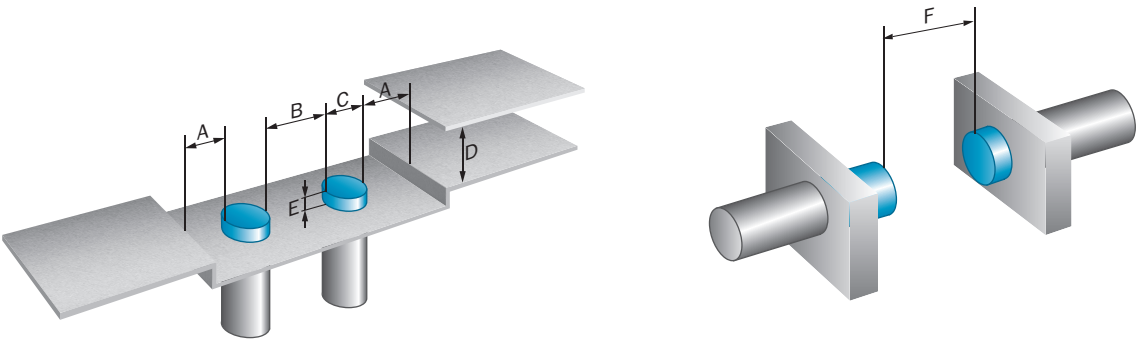
Classifications

ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101

ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

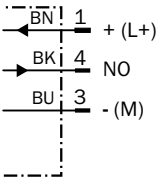
Installation note

Non-flush installation



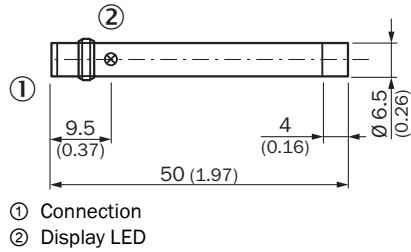
Connection diagram

Cd-002



Dimensional drawing (Dimensions in mm (inch))






Standard-body, non-flush, connector



Recommended accessories

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

	Brief description	Type	Part no.
Plug connectors and cables			
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF8U13-020VA1XLEAX	2095860
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF8U13-050VA1XLEAX	2095884
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF8U13-100VA1XLEAX	2095885
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG8U13-020VA1XLEAX	2096165
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG8U13-050VA1XLEAX	2096166
	<ul style="list-style-type: none"> Connection type head A: Female connector, M8, 3-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 3-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG8U13-100VA1XLEAX	2096209

	Brief description	Type	Part no.
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Male connector, M12, 3-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 2 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF8U13-020VA1M2A13	2096605
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight, A-coded • Connection type head B: Male connector, M12, 3-pin, straight, A-coded • Signal type: Sensor/actuator cable • Cable: 5 m, 3-wire, PVC • Description: Sensor/actuator cable, unshielded • Application: Zones with chemicals 	YF8U13-050VA1M2A13	2096606
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, straight • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	DOS-0803-G	7902077
	<ul style="list-style-type: none"> • Connection type head A: Female connector, M8, 3-pin, angled • Description: Unshielded • Connection systems: Solder connection • Permitted cross-section: ≤ 0.25 mm² 	DOS-0803-W	7902078
	<ul style="list-style-type: none"> • Connection type head A: Male connector, M8, 3-pin, straight • Description: Unshielded • Connection systems: Screw-type terminals • Permitted cross-section: 0.14 mm² ... 0.5 mm² 	STE-0803-G	6037322
Terminal and alignment brackets			
	Plastic (PA6), without mounting hardware	BEF-KH-M06	2101067

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For us, that is “Sensor Intelligence.”

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