

IM08-03BPS-VT1

IMI

INDUCTIVE PROXIMITY SENSORS





Ordering information

Туре	Part no.
IM08-03BPS-VT1	6068715

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

Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Thread size	M8 x 1
Diameter	Ø 8 mm
Pressure resistance	≤ 100 bar
Sensing range S _n	3 mm
Safe sensing range S _a	2.43 mm
Installation type	Flush
Switching frequency	1,200 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68, IP69K ¹⁾
Special features	Sensing face made of stainless steel V2A, Resistant against coolant lubricants, triple sensing range, Visual adjustment indicator, IO-Link
Special applications	Zones with coolants and lubricants, Difficult application conditions
Items supplied	Mounting nut, V2A stainless steel (2x) Washer, V2A stainless steel, with locking teeth (2x)

 $^{^{1)}}$ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 20 % ¹⁾
Voltage drop	\leq 2 V $^{2)}$
Time delay before availability	≤ 10 ms
Hysteresis	1 % 20 %
Reproducibility	≤ 5 % ^{3) 4)}
Temperature drift (of S _r)	≤ 10 %
ЕМС	According to EN 60947-5-2
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 +85 °C
Housing material	Stainless steel V2A, DIN 1.4305 / AISI 303
Sensing face material	Stainless steel V2A, DIN 1.4305 / AISI 303
Housing length	60 mm
Thread length	45.5 mm
Tightening torque, max.	≤ 8 Nm
Protection class	III
UL File No.	E191603

 $^{^{1)}}$ Of V_{S} .

Communication interface

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

Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	Approx. 1
Stainless steel (V4A, 316L)	Approx. 0.4 ¹⁾
Aluminum (AI)	Approx. 1
Copper (Cu)	Approx. 0.9
Brass (Br)	Approx. 1.3

¹⁾ Material thickness/Reduction factor: 1 mm/0.4 2 mm/0.8.

²⁾ At I_a max.

³⁾ Of Sr.

 $^{^{4)}}$ UB = 20 V DC ... 30 V DC, TA = 23 °C \pm 5 °C.

Installation note

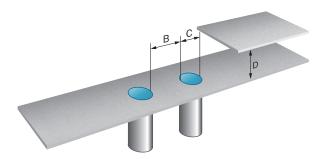
Remark	Associated graphic see "Installation"
В	14 mm
c	6 mm
D	6 mm
F	30 mm

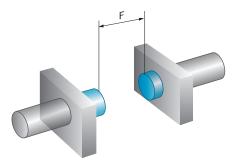
Classifications

eCl@ss 5.0 27270101 eCl@ss 5.1.4 27270101 eCl@ss 6.0 27270101 eCl@ss 6.2 27270101 eCl@ss 7.0 27270101 eCl@ss 8.0 27270101 eCl@ss 8.1 27270101 eCl@ss 9.0 27270101 eCl@ss 10.0 27270101 eCl@ss 11.0 27270101 eCl@ss 12.0 27274001 ETIM 5.0 EC002714
eCl@ss 6.0 27270101 eCl@ss 6.2 27270101 eCl@ss 7.0 27270101 eCl@ss 8.0 27270101 eCl@ss 8.1 27270101 eCl@ss 9.0 27270101 eCl@ss 10.0 27270101 eCl@ss 11.0 27270101 eCl@ss 12.0 27274001
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eCl@ss 10.0 27270101 eCl@ss 11.0 27270101 eCl@ss 12.0 27274001
eCl@ss 11.0 27270101 eCl@ss 12.0 27274001
eCl@ss 12.0 27274001
FTIM F 0
E11W 5.0
ETIM 6.0 EC002714
ETIM 7.0 EC002714
ETIM 8.0 EC002714
UNSPSC 16.0901 39122230

Installation note

Flush installation





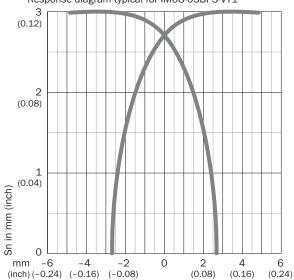
Connection diagram

Cd-453



Response diagram

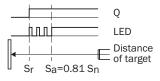
Response diagram typical for IM08-03BPS-VT1



Distance of target edge to center of active face in mm (inch) All dimensions in mm (inch)

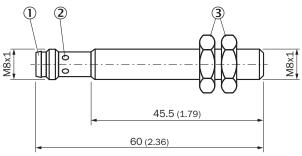
Adjustments

Installation aid



Dimensional drawing (Dimensions in mm (inch))

IM08 Inox, flush



- ① Connection
- ② Display LED
- Fastening nuts (2 x); width across 13, stainless steel V2A

Recommended accessories

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

	Brief description	Туре	Part no.	
Mounting bra	Mounting brackets and plates			
	Mounting plate for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M08	5321722	
	Mounting bracket for M8 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M08	5321721	
Plug connecto	ors and cables			
6	Head A: female connector, M8, 3-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PP, unshielded, 2 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is carried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-0803-G02MRN	6058504	
	Head A: female connector, M8, 3-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PP, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is car- ried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-0803-G05MRN	6058505	
	Head A: female connector, M8, 3-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PP, unshielded, 2 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is car- ried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2), only suitable for PNP sensors	DOL-0803-L02MRN	6058787	

	Brief description	Туре	Part no.
	Head A: female connector, M8, 3-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PP, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is car- ried out, the material's resistance to the cleaning agent being used must be checked.	DOL-0803-L05MRN	6058788
6	Head A: female connector, M8, 3-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PP, unshielded, 2 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is car- ried out, the material's resistance to the cleaning agent being used must be checked., Resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-0803-W02MRN	6058507
	Head A: female connector, M8, 3-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PP, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB) and other chemical compounds such as H2O2 and CH2O2. Before permanent installation is car- ried out, the material's resistance to the cleaning agent being used must be checked.	DOL-0803-W05MRN	6058508
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF8U13- 020UA1XLEAX	2094782
13	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG8U13- 020UA1XLEAX	2094794
	Head A: female connector, M8, 3-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m Only suitable for PNP sensors	YI8U13- 020UA1XLEAX	2095593
No to	Head A: female connector, M8, 3-pin, straight, A-coded Head B: male connector, M8, 3-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF8U13- 020UA1M8U13	2096304
	Head A: female connector, M8, 3-pin, straight, A-coded Head B: male connector, M8, 3-pin, straight, A-coded Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YF8U13- 050UA1M8U13	2096308

Recommended services

Additional services → www.sick.com/IMI

	Туре	Part no.
Function Block Factory		
• Description: The Function Block Factory supports common programmable logic controllers (PLCs) from various manufacturers, such as Siemens, Beckhoff, Rockwell Automation and B&R. More information on the FBF can be found here .	Function Block Factory	On request

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