

# IME08-04NPSZTOS

IME

**INDUCTIVE PROXIMITY SENSORS** 



#### INDUCTIVE PROXIMITY SENSORS

#### Ordering information

Туре	Part no.
IME08-04NPSZT0S	1040886

Included in delivery: BEF-MU-M08 (1)

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

Illustration may differ



#### Detailed technical data

#### **Features**

Housing	Cylindrical thread design
Housing	Standard design
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S <sub>n</sub>	4 mm
Safe sensing range S <sub>a</sub>	3.24 mm
Installation type	Non-flush
Switching frequency	4,000 Hz
Connection type	Connector M8, 3-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Items supplied	Mounting nut, brass, nickel-plated (2x)

<sup>&</sup>lt;sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V <sup>1)</sup>
Time delay before availability	≤ 100 ms

 $<sup>^{1)}</sup>$  At I $_{\rm a}$  max.

 $<sup>^{2)}\,\</sup>mathrm{Supply}$  voltage Ub and constant ambient temperature Ta.

<sup>3)</sup> Of Si

Hysteresis	5 % 15 %
Reproducibility	≤ 2 % <sup>2) 3)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Short-circuit protection	<b>✓</b>
Reverse polarity protection	<b>✓</b>
Power-up pulse protection	<b>✓</b>
Shock and vibration resistance	30 g, 11 ms/10 Hz 55 Hz, 1 mm
Ambient operating temperature	-25 °C +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	50 mm
Thread length	30 mm
Tightening torque, max.	≤ 5 Nm
UL File No.	NRKH.E181493

 $<sup>^{1)}</sup>$  At  $I_{\rm a}$  max.

#### Safety-related parameters

MTTF <sub>D</sub>	1,735 years
DC <sub>avg</sub>	0 %

#### Reduction factors

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

#### Installation note

Remark	Associated graphic see "Installation"
A	8 mm
В	18 mm
С	8 mm
D	12 mm
E	8 mm
F	32 mm

#### Classifications

ECLASS 5.0	27270101
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 $<sup>^{2)}\,\</sup>mathrm{Supply}$  voltage Ub and constant ambient temperature Ta.

<sup>3)</sup> Of Sr.

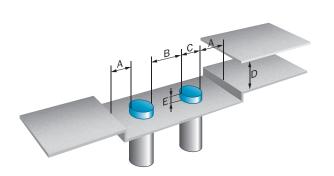
# IME08-04NPSZTOS | IME

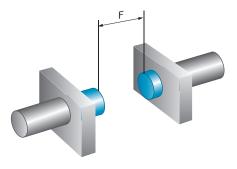
#### INDUCTIVE PROXIMITY SENSORS

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 type



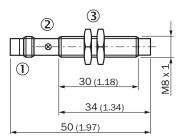
#### Connection diagram

Cd-002



#### Dimensional drawing (Dimensions in mm (inch))

IME08 standard, male connector, non-flush



- ① Connection
- ② Display LED
- 3 Fastening nuts (2x); width across 13, metal

#### Recommended accessories

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

	Brief description	Туре	Part no.
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 connect	tors and cables		
Conne Signa Cable Desci Applie Conne Conne Conne Signa Cable Desci	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 020VA1XLEAX	2095860
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 050VA1XLEAX	2095884

# IME08-04NPSZTOS | IME

### INDUCTIVE PROXIMITY SENSORS

	Brief description	Туре	Part no.
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YF8U13- 100VA1XLEAX	2095885
3	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 2 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 020VA1XLEAX	2096165
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 5 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 050VA1XLEAX	2096166
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled, A-coded</li> <li>Connection type head B: Flying leads</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 10 m, 3-wire, PVC</li> <li>Description: Sensor/actuator cable, unshielded</li> <li>Application: Zones with chemicals</li> </ul>	YG8U13- 100VA1XLEAX	2096209
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, straight</li> <li>Description: Unshielded</li> <li>Connection systems: Screw-type terminals</li> <li>Permitted cross-section: 0.14 mm² 0.5 mm²</li> </ul>	DOS-0803-G	7902077
	<ul> <li>Connection type head A: Female connector, M8, 3-pin, angled</li> <li>Description: Unshielded</li> <li>Connection systems: Solder connection</li> <li>Permitted cross-section: ≤ 0.25 mm²</li> </ul>	DOS-0803-W	7902078
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $\frac{1}{2} \frac{1}{2} $	BEF-KH-M08	2051477
	Clamping block for round sensors M8, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M08	2051478

### SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

## **WORLDWIDE PRESENCE:**

Contacts and other locations -www.sick.com

