

IME08-06NNSZTOK

IME

INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IME08-06NNSZTOK	1071202

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

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

Illustration may differ



Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S _n	6 mm
Safe sensing range S _a	4.86 mm
Installation type	Non-flush
Switching frequency	500 Hz
Connection type	Connector M8, 3-pin
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾
Special features	Triple sensing range
Items supplied	Mounting nut, brass, nickel-plated (2x)

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	\leq 2 V $^{1)}$

¹⁾ At 1 may

 $^{^{\}rm 2)}$ Supply voltage U_{B} and constant ambient temperature Ta.

³⁾ Of Sr.

Time delay before availability ≤ 50 ms Hysteresis 1 % 15 % Reproducibility ≤ 5 % 2 ^{1/3}) Temperature drift (of S _r) ± 10 % EMC According to EN 60947-5-2 Continuous current I _a ≤ 200 mA No load current ≤ 10 mA Short-circuit protection ✓ Power-up pulse protection ✓ Shock and vibration resistance 30 g, 11 ms/10 Hz 55 Hz, 1 mm Ambient operating temperature -25 °C +75 °C Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length 41 mm Tightening torque, max. ≤ 5 Nm UL File No. NRKH.E181493		
Reproducibility $\leq 5 \%^{2/3}$ $\pm 10 \%$ EMC According to EN 60947-5-2 Continuous current I _a $\leq 200 \text{ mA}$ No load current Short-circuit protection \checkmark Power-up pulse protection \checkmark Shock and vibration resistance $\Rightarrow 200 \text{ ma}$ Ambient operating temperature $\Rightarrow 200 \text{ ma}$ Ambient temperature, storage $\Rightarrow 200 \text{ ma}$ Brass, nickel-plated $\Rightarrow 200 \text{ ma}$ Sensing face material $\Rightarrow 200 \text{ ma}$ Plastic, PA 66 Housing length $\Rightarrow 210 \text{ mm}$ Tightening torque, max. $\Rightarrow 500 \text{ mm}$	Time delay before availability	≤ 50 ms
Temperature drift (of S₁) ± 10 % EMC	Hysteresis	1 % 15 %
EMC Continuous current I _a ≤ 200 mA No load current Short-circuit protection ✓ Power-up pulse protection Shock and vibration resistance Ambient operating temperature -25 °C +75 °C Ambient temperature, storage Housing material Brass, nickel-plated Plastic, PA 66 Housing length Tightening torque, max. According to EN 60947-5-2 4 200 mA 5 10 mA ✓ Max. Short-circuit protection ✓ Short-circuit protection ✓ Power-up pulse protection ✓ Short-circuit protection ✓ Power-up pulse protection ✓ Short-circuit protection ✓ Short-circuit protection ✓ Power-up pulse protection ✓ Short-circuit protection ✓ Short-cir	Reproducibility	≤ 5 % ^{2) 3)}
Continuous current Ia ≤ 200 mA No load current ≤ 10 mA Short-circuit protection ✓ Power-up pulse protection ✓ Shock and vibration resistance 30 g, 11 ms/10 Hz 55 Hz, 1 mm Ambient operating temperature -25 °C +75 °C Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length 41 mm Thread length 21 mm Tightening torque, max. ≤ 5 Nm	Temperature drift (of S _r)	± 10 %
No load current Short-circuit protection Power-up pulse protection Shock and vibration resistance Ambient operating temperature -25 °C +75 °C Ambient temperature, storage Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length Thread length Tightening torque, max. ≤ 5 Nm	EMC	According to EN 60947-5-2
Short-circuit protection Power-up pulse protection Shock and vibration resistance 30 g, 11 ms/10 Hz 55 Hz, 1 mm Ambient operating temperature -25 °C +75 °C Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length Thread length 21 mm ≤ 5 Nm	Continuous current I _a	≤ 200 mA
Power-up pulse protection Shock and vibration resistance 30 g, 11 ms/10 Hz 55 Hz, 1 mm -25 °C +75 °C Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Plastic, PA 66 Housing length Thread length 21 mm ≤ 5 Nm	No load current	≤ 10 mA
Shock and vibration resistance 30 g, 11 ms/10 Hz 55 Hz, 1 mm Ambient operating temperature -25 °C +75 °C Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length 41 mm Thread length 21 mm ≤ 5 Nm	Short-circuit protection	✓
Ambient operating temperature -25 °C +75 °C Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length 41 mm Thread length 21 mm ≤ 5 Nm	Power-up pulse protection	✓
Ambient temperature, storage -25 °C +75 °C Housing material Brass, nickel-plated Sensing face material Plastic, PA 66 Housing length 41 mm Thread length 21 mm Tightening torque, max. ≤ 5 Nm	Shock and vibration resistance	30 g, 11 ms/10 Hz 55 Hz, 1 mm
Housing material Sensing face material Plastic, PA 66 Housing length Thread length 21 mm Tightening torque, max. Sensing face material Plastic, PA 66 41 mm 21 mm	Ambient operating temperature	-25 °C +75 °C
Sensing face material Plastic, PA 66 Housing length 41 mm Thread length 21 mm Tightening torque, max. ≤ 5 Nm	Ambient temperature, storage	-25 °C +75 °C
Housing length 41 mm Thread length 21 mm Tightening torque, max. ≤ 5 Nm	Housing material	Brass, nickel-plated
Thread length 21 mm Tightening torque, max. ≤ 5 Nm	Sensing face material	Plastic, PA 66
Tightening torque, max. ≤ 5 Nm	Housing length	41 mm
	Thread length	21 mm
UL File No. NRKH.E181493	Tightening torque, max.	≤ 5 Nm
	UL File No.	NRKH.E181493

¹⁾ At I_a max.

Safety-related parameters

MTTF _D	1,735 years
DC _{avg}	0 %

Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.68
Aluminum (AI)	Approx. 0.45
Copper (Cu)	Approx. 0.39
Brass (Br)	Approx. 0.49

Installation note

Remark	Associated graphic see "Installation"
Α	16 mm
В	30 mm
c	8 mm
D	18 mm
E	10 mm
F	60 mm

 $^{^{2)}\,\}mbox{Supply}$ voltage $\mbox{U}_{\mbox{\footnotesize B}}$ and constant ambient temperature Ta.

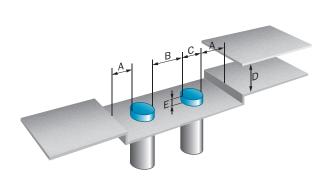
³⁾ Of Sr.

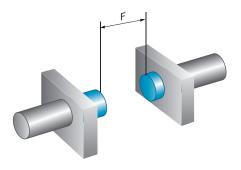
Classifications

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 type



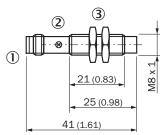
Connection diagram

Cd-002



Dimensional drawing (Dimensions in mm (inch))

IME08 Short-body housing, 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
Terminal and alignment brackets			
	Clamping block for round sensors M8, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included $$	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
Others			
6	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Male connector, M8, 4-pin, straight, A-coded Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A14- 020UA3M8U14	2096112

	Brief description	Туре	Part no.
	 Connection type head A: Female connector, M12, 5-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 5-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Zones with oils and lubricants, Drag chain operation, Robot 	YF2A15- 020UB5XLEAX	2095617
	 Connection type head A: Female connector, M8, 3-pin, straight, A-coded Description: Unshielded Connection systems: Screw-type terminals Permitted cross-section: 0.14 mm² 0.5 mm² 	DOS-0803-G	7902077
	 Connection type head A: Female connector, M8, 3-pin, angled, A-coded Description: Unshielded Connection systems: Solder connection Permitted cross-section: ≤ 0.25 mm² 	DOS-0803-W	7902078
	 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
	 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
	 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
3	 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
3	 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
	 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

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."

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