



INDUCTIVE PROXIMITY SENSORS



IM08-1B5P0-ZWK | IM Standard

INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IM08-1B5P0-ZWK	6020174

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





Detailed technical data

Features

Housing	Metric
Housing	Short-body
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S _n	1.5 mm
Safe sensing range S _a	1.22 mm
Installation type	Flush
Switching frequency	5,000 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NC
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	≤ 20 % ¹)
Voltage drop	$\leq 2 V^{2}$
Time delay before availability	≤ 10 ms
Hysteresis	≤ 10 %
Reproducibility	$\leq 5 \%^{(3)(4)}$

 $^{1)}$ Of $\rm V_S.$

 $^{2)}$ At I_a max.

 $^{\rm 3)}$ Supply voltage U_B and constant ambient temperature Ta.

⁴⁾ Of Sr.

IM08-1B5P0-ZWK | IM Standard

INDUCTIVE PROXIMITY SENSORS

Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current l _a	≤ 200 mA
Cable material	PVC
Conductor size	0.14 mm ²
Short-circuit protection	\checkmark
Power-up pulse protection	\checkmark
Shock and vibration resistance	30 g, 11 ms / 10 55 Hz, 1 mm
Ambient operating temperature	-25 °C +70 °C
Housing material	Brass, Nickel-plated brass
Sensing face material	Plastic
Housing length	16 mm
Thread length	16 mm
Tightening torque, max.	4 Nm

 $^{1)}$ Of V_S.

²⁾ At I_a max.

 $^{\rm 3)}$ Supply voltage ${\rm U}_{\rm B}$ and constant ambient temperature Ta.

⁴⁾ Of Sr.

Safety-related parameters

MTTF _D	186 years
DC _{avg}	0 %
T _M (mission time)	20 years
Reduction factors	
Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.5
Installation note	
Remark	Associated graphic see "Installation"
A	1.5 mm
В	2 mm
c	8 mm
D	4.5 mm
E	0 mm
F	12 mm
Classifications	
ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101

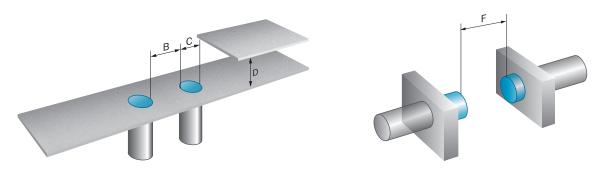
IM08-1B5P0-ZWK | IM Standard

INDUCTIVE PROXIMITY SENSORS

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

Flush installation

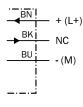


Connection type



Connection diagram

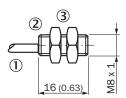
Cd-003



INDUCTIVE PROXIMITY SENSORS

Dimensional drawing (Dimensions in mm (inch))

IMM08, cable, flush



Connection
Display LED

③ Fastening nuts (2x); width across 13, metal

Recommended accessories

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

	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 rein- forced, mounting hardware included	BEF-KH-M08	2051477	

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



Online data sheet

