IM18-08NNS-ZW1

IM Standard

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

IM18-08NNS-ZW1 | IM Standard
INDUCTIVE PROXIMITY SENSORS

Ordering information

Type	Part no.
IM18-08NNS-ZW1	6011996

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

Illustration may differ

Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	8 mm
Installation type	Non-flush
Switching frequency	600 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
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 %
Voltage drop	≤ 1 V [1]
Current consumption	20 mA [2]
Time delay before availability	≤ 100 ms
Hysteresis	2 % ... 10 %
Reproducibility	≤ 2 % [3] [4]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2

[1] At I_a max.
[2] Without load.
[3] Ub and Ta constant.
[4] Of Sr.

Continuous current I$_a$	≤ 400 mA
Cable material	PVC
Conductor size	0.34 mm²
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	Brass, Nickel-plated brass
Sensing face material	Plastic
Housing length	50 mm
Thread length	32 mm
Tightening torque, max.	30 Nm

[1] At I$_a$ max.

[2] Without load.

[3] Ub and Ta constant.

[4] Of Sr.

Safety-related parameters

MTTF$_D$	93 years
DC$_{avg}$	0%

Installation note

Remark	Associated graphic see "Installation"
A	18 mm
B	36 mm
C	18 mm
D	24 mm
E	16 mm
F	64 mm

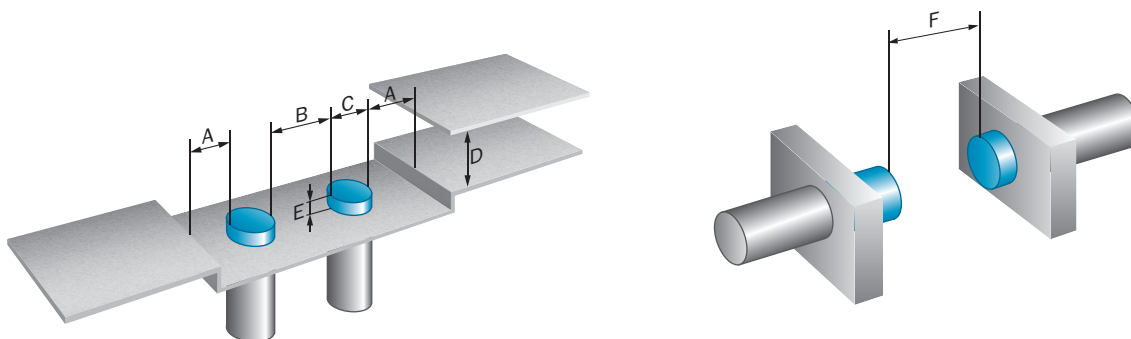## Classifications

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
ETIM 5.0	EC002714
ETIM 6.0	EC002714

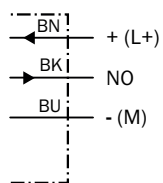| ETIM 7.0	EC002714
UNSPSC 16.0901	39122230

Installation note

Non-flush installation

Connection diagram

Cd-001

BN — + (L+)

BK — NO

BU — - (M)

Dimensional drawing (Dimensions in mm (inch))

M18 x 1

32 (1.26)

8 (0.31)

50 (1.97)
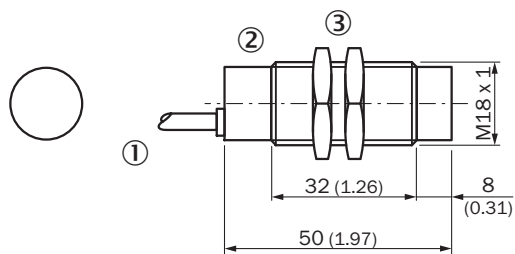
① Connection
② Indication LED
③ Fastening nuts (2x); width across 24, metal

Recommended accessories

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

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481

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**

SICK AG | Waldkirch | Germany | www.sick.com

SICK
Sensor Intelligence.