

**INDUCTIVE PROXIMITY SENSORS** 



### IME18-20NPSZW2K | IME

INDUCTIVE PROXIMITY SENSORS



### **Ordering information**

Туре	Part no.
IME18-20NPSZW2K	1071264

Included in delivery: BEF-MU-M18 (1)

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



### Detailed technical data

Features	
Housing	Cylindrical thread design
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S <sub>n</sub>	20 mm
Safe sensing range S <sub>a</sub>	16.2 mm
Installation type	Non-flush
Switching frequency	200 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Special features	Triple sensing range
Items supplied	Mounting nut, brass, nickel-plated (2x)

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

### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	$\leq 2 V^{(1)}$
Time delay before availability	≤ 100 ms

 $^{1)}$  At I<sub>a</sub> max.

 $^{2)}\ensuremath{\,\text{Supply voltage U}_B}$  and constant ambient temperature Ta.

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

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Hysteresis	1 % 15 %
Reproducibility	< 5 % <sup>2) 3)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
EMC	According to EN 60947-5-2
Continuous current l <sub>a</sub>	≤ 200 mA
No load current	≤ 10 mA
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
Short-circuit protection	1
Reverse polarity 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	48 mm
	23 mm
Thread length	20 1111
Thread length Tightening torque, max.	≤ 30 Nm

<sup>1)</sup> At I<sub>a</sub> max.

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

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

### Safety-related parameters

MTTFD	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. 0.78	
Aluminum (AI)	Approx. 0.43	
Copper (Cu)	Approx. 0.37	
Brass (Br)	Approx. 0.4	

### Installation note

Remark	Associated graphic see "Installation"
A	30 mm
В	86 mm
c	18 mm
D	60 mm

## IME18-20NPSZW2K | IME

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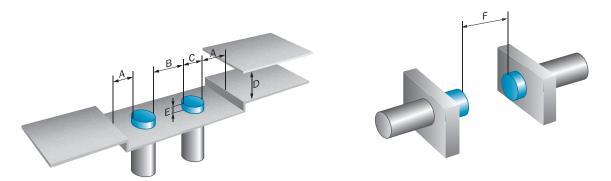
E	20 mm
F	200 mm

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

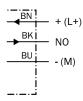
### Installation note

Non-flush installation



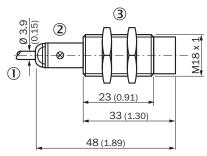
### **Connection diagram**

Cd-001



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

IME18 Short-body housing, cable, non-flush



1 Connection

② Display LED

③ Fastening nuts (2x); width across 24, metal

#### **Recommended accessories**

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

	Brief description	Туре	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
40	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
NO.	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber re- inforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber rein- forced, mounting hardware included	BEF-KHF-M18	2051482

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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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