

# IME30-20BNOZW2K

**INDUCTIVE PROXIMITY SENSORS** 





# Ordering information

Туре	Part no.
IME30-20BNOZW2K	1071284

Included in delivery: BEF-MU-M30 (2)

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

Illustration may differ









#### Detailed technical data

#### **Features**

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S <sub>n</sub>	20 mm
Safe sensing range S <sub>a</sub>	16.2 mm
Installation type	Quasi-flush
Switching frequency	200 Hz
Connection type	Cable, 3-wire, 2 m
Switching output	NPN
Output function	NC
Electrical wiring	DC 3-wire
Enclosure rating	IP67 <sup>1)</sup>
Special features	Triple sensing range

 $<sup>^{1)}</sup>$  According to EN 60529.

#### Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	$\leq$ 2 V $^{1)}$
Current consumption	10 mA <sup>2)</sup>
Time delay before availability	≤ 200 ms

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

<sup>&</sup>lt;sup>2)</sup> Without load.

 $<sup>^{</sup>m 3)}$  Ub and Ta constant.

<sup>&</sup>lt;sup>4)</sup> Of Sr.

Warm-up time	60 s
Hysteresis	1 % 15 %
Reproducibility	≤ 5 % <sup>3) 4)</sup>
Temperature drift (of S <sub>r</sub> )	± 10 %
ЕМС	According to EN 60947-5-2
Continuous current I <sub>a</sub>	≤ 200 mA
Current consumption, no load	≤ 10 mA
Cable material	PVC
Conductor size	0.25 mm <sup>2</sup>
Cable diameter	Ø 3.9 mm
Short-circuit protection	✓
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 storage temperature	-25 °C +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	51 mm
Thread length	35 mm
Tightening torque, max.	≤ 70 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)
UL File No.	NRKH.E181493

<sup>&</sup>lt;sup>1)</sup> At I<sub>a</sub> 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. 0.78	
Aluminum (AI)	Approx. 0.35	
Copper (Cu)	Approx. 0.27	
Brass (Br)	Approx. 0.38	

#### Installation note

Remark	Associated graphic see "Installation"
Α	33 mm
В	80 mm

<sup>&</sup>lt;sup>2)</sup> Without load.

<sup>3)</sup> Ub and Ta constant.

<sup>&</sup>lt;sup>4)</sup> Of Sr.

# IME30-20BNOZW2K | IME

#### INDUCTIVE PROXIMITY SENSORS

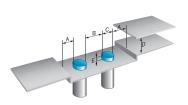
c	30 mm
D	60 mm
E	6 mm
F	200 mm

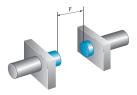
#### Classifications

ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101
ECI@ss 6.0	27270101
ECI@ss 6.2	27270101
ECI@ss 7.0	27270101
ECI@ss 8.0	27270101
ECI@ss 8.1	27270101
ECI@ss 9.0	27270101
ECI@ss 10.0	27270101
ECI@ss 11.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
UNSPSC 16.0901	39122230

#### Installation note

Quasi-flush installation





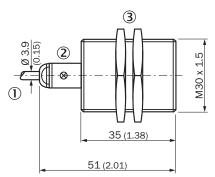
# Connection diagram

Cd-003



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

IME30 Short-body housing, cable, flush



- ① Connection
- ② Indication LED
- 3 Fastening nuts (2x); width across 36, metal

#### Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brackets and plates			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871
40	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445

# 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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