



# IME30-20BNOZW2S

IME

INDUCTIVE PROXIMITY SENSORS

**SICK**  
Sensor Intelligence.



### Ordering information

Type	Part no.
IME30-20BNOZW2S	1071292

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

Other models and accessories → [www.sick.com/IME](http://www.sick.com/IME)

Illustration may differ



### Detailed technical data

#### Features

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

<sup>1)</sup> According to EN 60529.

#### Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC
<b>Ripple</b>	≤ 10 %
<b>Voltage drop</b>	≤ 2 V <sup>1)</sup>
<b>Current consumption</b>	10 mA <sup>2)</sup>
<b>Time delay before availability</b>	≤ 200 ms

<sup>1)</sup> At  $I_a$  max.

<sup>2)</sup> Without load.

<sup>3)</sup>  $U_b$  and  $T_a$  constant.

<sup>4)</sup> Of  $S_r$ .

<b>Warm-up time</b>	60 s
<b>Hysteresis</b>	1 % ... 15 %
<b>Reproducibility</b>	≤ 5 % <sup>3) 4)</sup>
<b>Temperature drift (of S<sub>r</sub>)</b>	± 10 %
<b>EMC</b>	According to EN 60947-5-2
<b>Continuous current I<sub>a</sub></b>	≤ 200 mA
<b>Current consumption, no load</b>	≤ 10 mA
<b>Cable material</b>	PVC
<b>Conductor size</b>	0.25 mm <sup>2</sup>
<b>Cable diameter</b>	Ø 3.9 mm
<b>Short-circuit protection</b>	✓
<b>Reverse polarity protection</b>	✓
<b>Power-up pulse protection</b>	✓
<b>Shock and vibration resistance</b>	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
<b>Ambient operating temperature</b>	-25 °C ... +75 °C
<b>Ambient storage temperature</b>	-25 °C ... +75 °C
<b>Housing material</b>	Brass, nickel-plated
<b>Sensing face material</b>	Plastic, PA 66
<b>Housing length</b>	70 mm
<b>Thread length</b>	54 mm
<b>Tightening torque, max.</b>	≤ 70 Nm
<b>Items supplied</b>	Mounting nut, brass, nickel-plated (2x)
<b>UL File No.</b>	NRKH.E181493

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

2) Without load.

3) U<sub>b</sub> and T<sub>a</sub> constant.

4) Of S<sub>r</sub>.

### Safety-related parameters

<b>MTTF<sub>D</sub></b>	1,735 years
<b>DC<sub>avg</sub></b>	0%

### Reduction factors

<b>Note</b>	The values are reference values which may vary
<b>St37 steel (Fe)</b>	1
<b>Stainless steel (V2A, 304)</b>	Approx. 0.78
<b>Aluminum (Al)</b>	Approx. 0.35
<b>Copper (Cu)</b>	Approx. 0.27
<b>Brass (Br)</b>	Approx. 0.38

### Installation note

<b>Remark</b>	Associated graphic see "Installation"
<b>A</b>	33 mm
<b>B</b>	80 mm

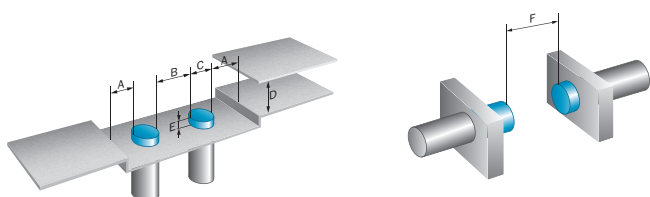
<b>C</b>	30 mm
<b>D</b>	60 mm
<b>E</b>	6 mm
<b>F</b>	200 mm

## Classifications

<b>ECl@ss 5.0</b>	27270101
<b>ECl@ss 5.1.4</b>	27270101
<b>ECl@ss 6.0</b>	27270101
<b>ECl@ss 6.2</b>	27270101
<b>ECl@ss 7.0</b>	27270101
<b>ECl@ss 8.0</b>	27270101
<b>ECl@ss 8.1</b>	27270101
<b>ECl@ss 9.0</b>	27270101
<b>ECl@ss 10.0</b>	27270101
<b>ECl@ss 11.0</b>	27270101
<b>ETIM 5.0</b>	EC002714
<b>ETIM 6.0</b>	EC002714
<b>ETIM 7.0</b>	EC002714
<b>UNSPSC 16.0901</b>	39122230

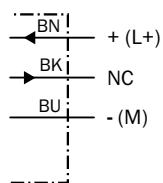
## Installation note

Quasi-flush installation



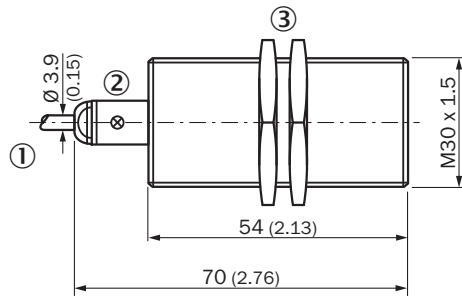
## Connection diagram

Cd-003



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



IME30 Standard, 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](http://www.sick.com/IME)

	Brief description	Type	Part no.
<b>Mounting brackets and plates</b>			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871
	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.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)