



**Inductive proximity sensors**  
**Cylindrical threaded housing, IM12**

IM12-04BNS-ZWK



**Model Name** > [IM12-04BNS-ZWK](#)  
**Part No.** > [6025683](#)



**At a glance**

- Size M12
- IP 67 enclosure rating
- Operating temperature from -25° C to +75° C

**Your benefits**

- Reduced machine downtime
- Reduced mechanical damage
- Fewer maintenance costs due to longer service life
- High resistance to shock and vibrations



**Features**

Design:	Cylindrical
Thread size:	M12 x 1
Sensing range Sn:	4 mm
Installation type:	Flush
Switching frequency:	2,000 Hz
Output type:	NPN
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Electrical connection:	Cable, 3-wire, 2 m
Housing:	Short-body

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

**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 10 % <sup>1)</sup>
Voltage drop:	≤ 1.5 V <sup>2)</sup>
Power consumption:	≤ 10 mA <sup>3)</sup>
Time delay before availability:	≤ 100 ms
Hysteresis:	1 % ... 15 %
Repeatability:	≤ 5 % <sup>4) 5)</sup>
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current I <sub>a</sub> :	≤ 300 mA

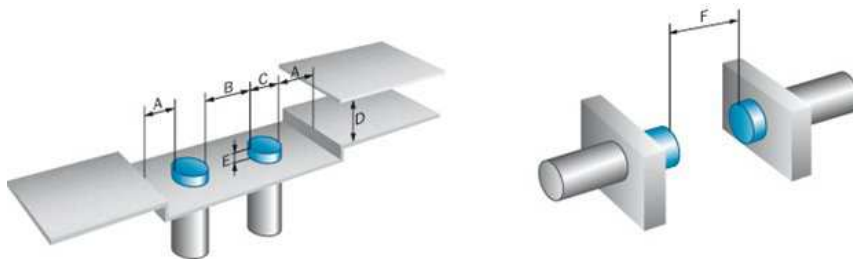
Cable material:	PVC
Conductor cross-section:	0.22 mm <sup>2</sup>
Wire-break protection:	1
Short-circuit protection:	✓
Reverse polarity protection:	✓
Power-up pulse protection:	✓
Shock and vibration resistance:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient temperature operation:	-25 °C ... 75 °C
Housing material:	Metal, Nickel-plated brass
Housing cap material:	Plastic
Housing length:	40 mm
Thread length:	30 mm
Tightening torque, max.:	7 Nm

1) Of V<sub>S</sub> 2) At I<sub>a</sub> max 3) Without load 4) U<sub>b</sub> and T<sub>a</sub> constant 5) Of S<sub>r</sub>

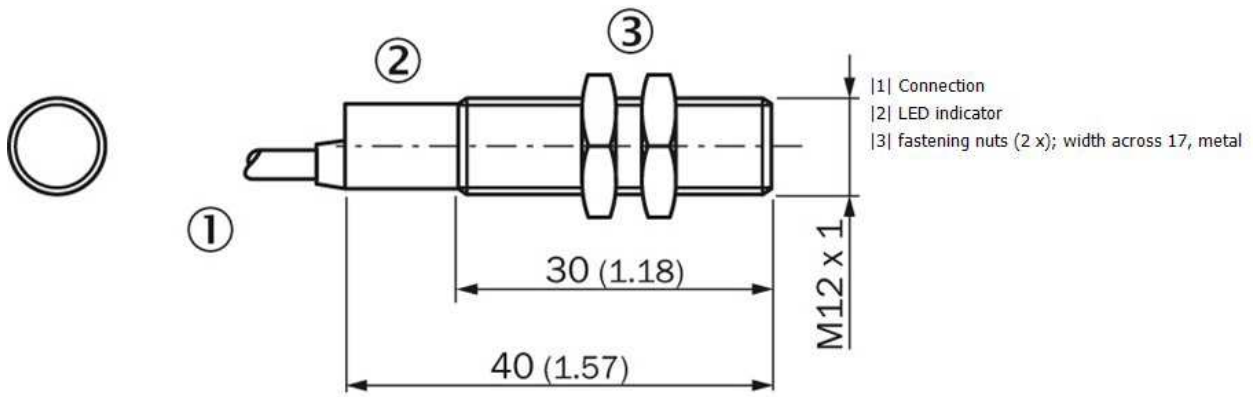
### Installation note

A:	6 mm
B:	12 mm
C:	12 mm
D:	12 mm
E:	2 mm
F:	32 mm
Remark:	Associated graphic see "Installation"

### Installation note

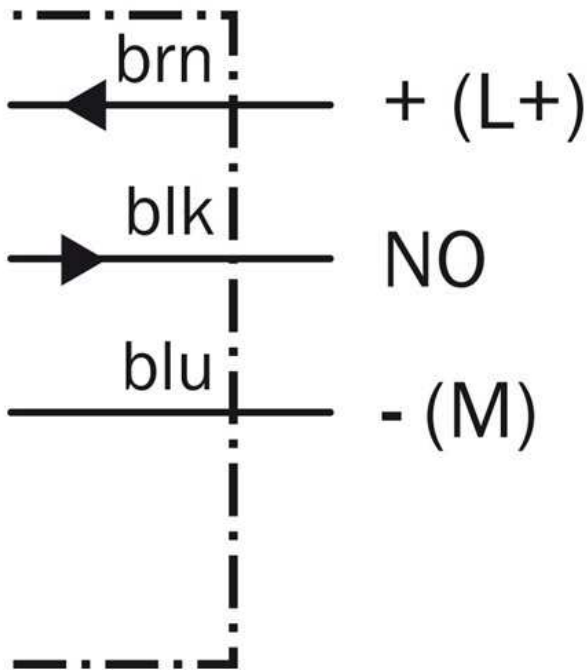


Dimensional drawing



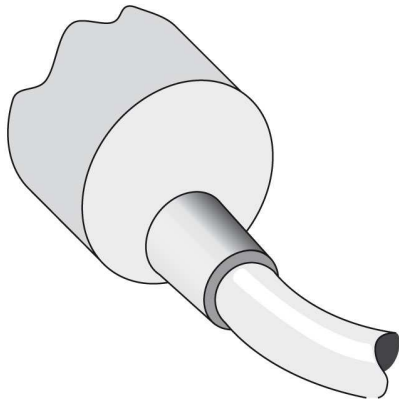
All dimensions in mm (inch)

Connection diagram



**Connection type**

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