

ONLINE DATA SHEET
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Inductive proximity sensors
Cylindrical threaded housing, IM12

IM12-08NPS-ZC1



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Inductive proximity sensors
Cylindrical threaded housing, IM12

Model Name > IM12-08NPS-ZC1
Part No. > 7900045



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:	8 mm
Installation type:	Non-flush
Switching frequency:	1,000 Hz
Output type:	PNP
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 [1]
Electrical connection:	Connector M12, 4-pin
Housing:	Standard

[1] According to EN 60529

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 10 % [1]
Voltage drop:	≤ 1.2 V [2]
Power consumption:	≤ 10 mA [3]
Time delay before availability:	≤ 100 ms
Hysteresis:	1 % ... 15 %
Repeatability::	≤ 5 % [4] [5]
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current Ia:	≤ 200 mA

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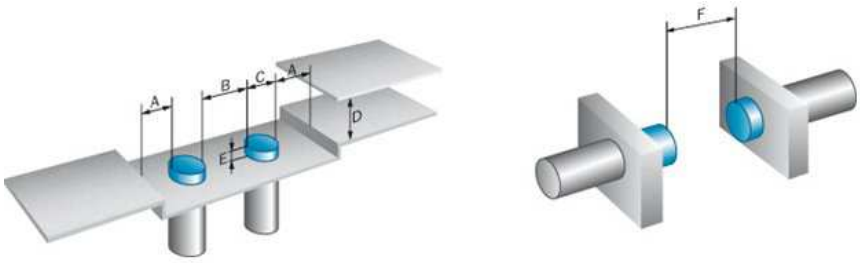
Wire-break protection:	0
Short-circuit protection:	✓
Reverse polarity protection:	✓
Power-up pulse protection:	✓
Shock and vibration resistance:	30 g, 11 ms／10 ... 55 Hz, 1 mm
Ambient temperature operation:	-25 °C ... 70 °C
Housing material:	Metal, Nickel-plated brass
Housing cap material:	Plastic
Housing length:	65 mm
Thread length:	38 mm
Tightening torque, max.:	10 Nm

[1] Of V_S [2] At I_a max [3] Without load [4] Ub and Ta constant [5] Of Sr

Installation note

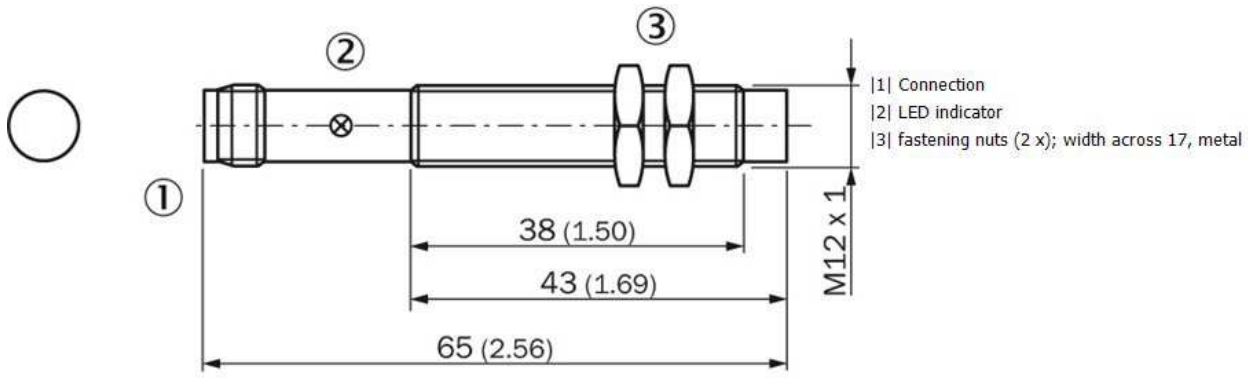
A:	12 mm
B:	24 mm
C:	12 mm
D:	24 mm
E:	8 mm
F:	64 mm
Remark:	Associated graphic see "Installation"

Installation note



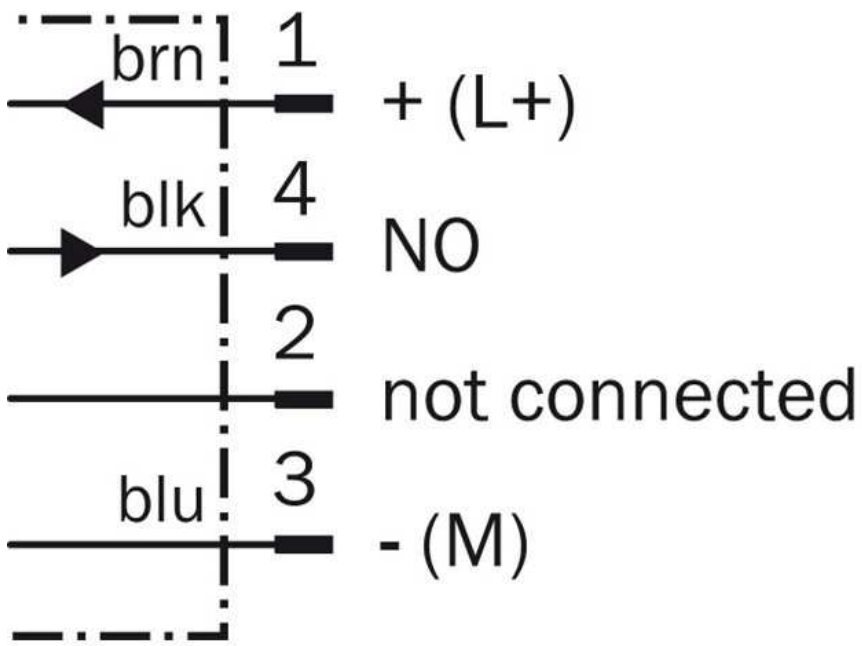
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Dimensional drawing



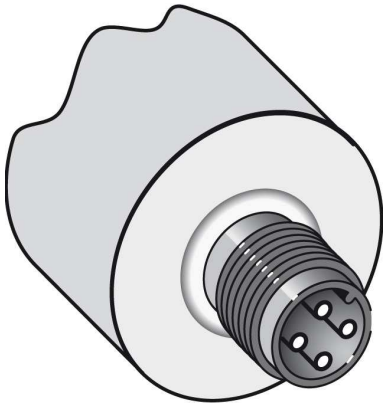
All dimensions in mm (inch)

Connection diagram



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Connection type



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