



Inductive proximity sensors Cylindrical threaded housing, IM18

IM18-12NPS-ZC1



Model Name > [IM18-12NPS-ZC1](#)
Part No. > [7900097](#)



At a glance

- Size M18
- 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

Housing:	Cylindrical
Thread size:	M18 x 1
Sensing range Sn:	12 mm
Installation type:	Non-flush
Switching frequency:	300 Hz
Output type:	PNP
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 ¹⁾
Connection type:	Connector M12, 4-pin
Housing:	Standard

¹⁾ According to EN 60529

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC
Ripple:	≤ 10 %
Voltage drop:	≤ 1 V ¹⁾
Power consumption:	≤ 10 mA ²⁾
Time delay before availability:	≤ 100 ms
Hysteresis:	2 % ... 15 %
Repeatability:	≤ 5 % ^{3) 4)}
Temperature drift (% of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current Ia:	≤ 400 mA

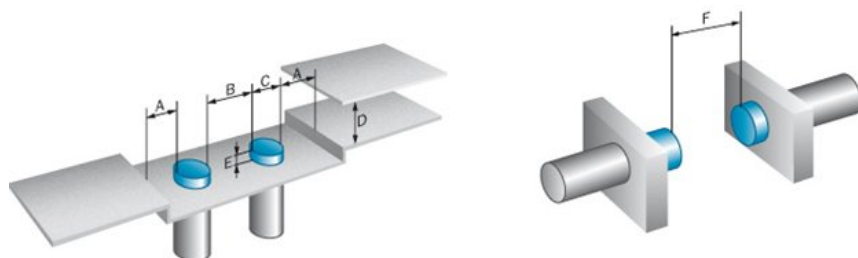
Wire-break protection:	0
Short-circuit protection:	✓
Reverse polarity protection:	✓
Power-up pulse protection:	✓
Shock/vibration:	30 g, 11 ms/10 ... 55 Hz, 1 mm
Ambient operating temperature:	-25 °C ... 70 °C
Housing material:	Metal, Nickel-plated brass
Housing cap material:	Plastic
Housing length:	64 mm
Thread length:	40 mm
Tightening torque, max.:	30 Nm

1) At I_a max 2) Without load 3) U_b and T_a constant 4) Of S_r

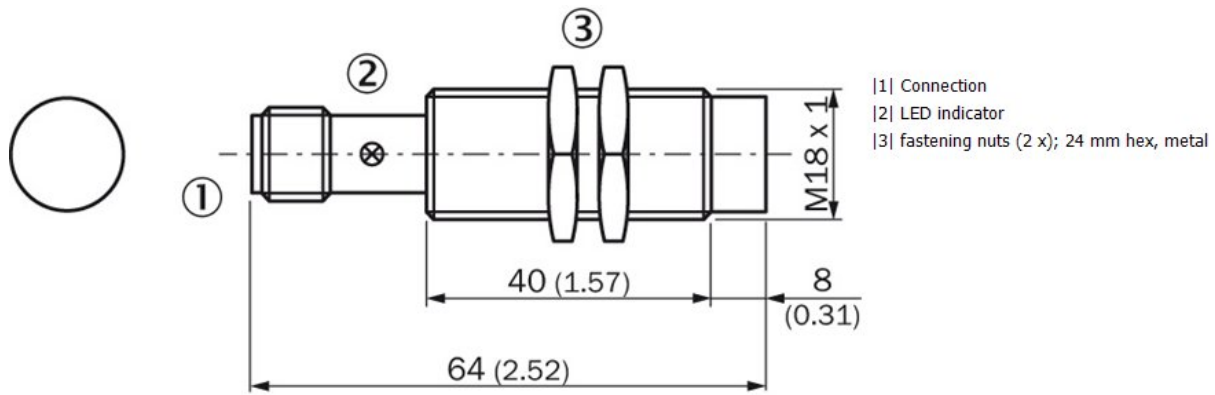
Installation note

A:	18 mm
B:	36 mm
C:	18 mm
D:	36 mm
E:	16 mm
F:	96 mm
Remark:	Associated graphic see "Installation"

Installation note

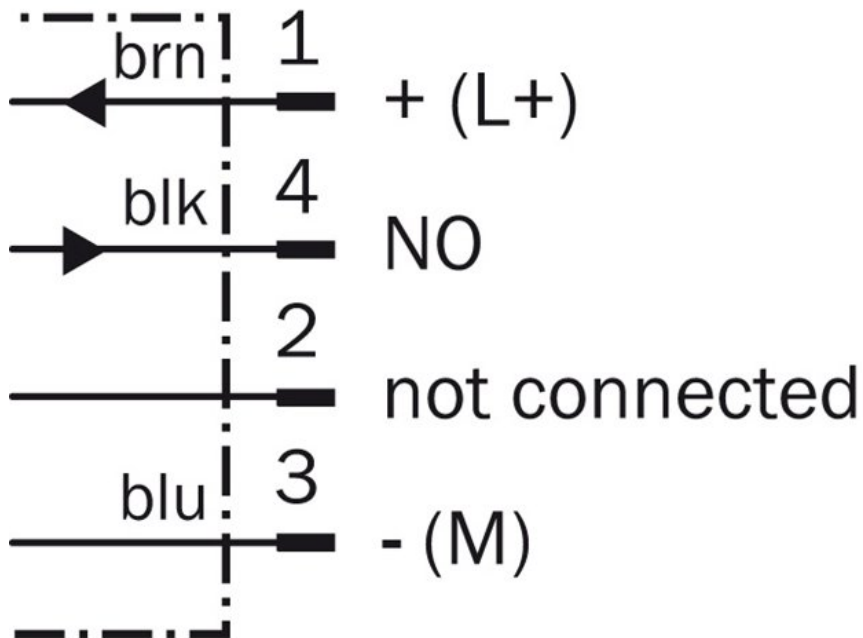


Dimensional drawing

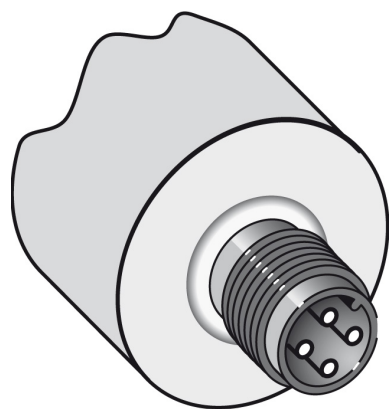


All dimensions in mm (inch)

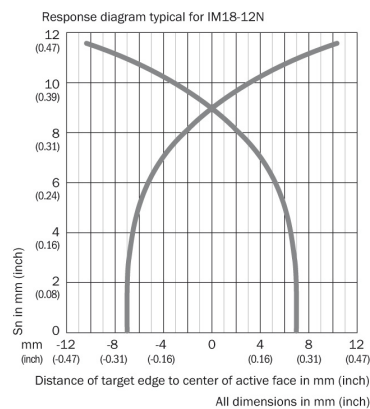
Connection diagram



Connection type



Response curve



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