



Inductive proximity sensors
Cylindrical threaded housing, IM18

IM18-08NUS-ZU0



Model Name > [IM18-08NUS-ZU0](#)
Part No. > [7902124](#)



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

Design:	Cylindrical
Thread size:	M18 x 1
Sensing range Sn:	8 mm
Assured sensing range Sa:	6.48 mm
Installation type:	Non-flush
Switching frequency::	100 Hz, 25 Hz ^{1) 2)}
Output function:	NO
Electrical wiring:	AC/DC 2-wire
Enclosure rating:	IP 67 ³⁾
Electrical connection:	Cable, 2-wire, 2 m
Housing:	Standard

¹⁾ AC ²⁾ DC ³⁾ According to EN 60529

Mechanics/electronics

Supply voltage:	20 V AC/DC ... 250 V AC/DC
Voltage drop:	≤ 6.5 V AC ≤ 6 V DC
Time delay before availability:	≤ 8 ms
Hysteresis:	1 % ... 15 %
Repeatability::	≤ 10 % ^{1) 2)}
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current Ia:	≤ 100 mA (DC), ≤ 250 mA (AC (+80 °C)), ≤ 350 mA (AC (+50 °C))
Off-state current:	≤ 0.8 mA (DC 24 V), ≤ 1.3 mA (AC 110 V), ≤ 2.5 mA (AC 250 V)

Load resistance, min.:	5 mA
Short-time withstand current:	2.2 A ³⁾
Cable material:	PUR
Conductor cross-section:	0.5 mm ²
Wire-break protection:	0
Short-circuit protection ⁴⁾ :	-
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 ... 80 °C
Housing material:	Metal, Nickel-plated brass
Housing cap material:	Plastic
Housing length:	80 mm
Thread length:	50 mm
Tightening torque, max.:	≤ 35 Nm
Protection class:	II

¹⁾ Ub and Ta constant ²⁾ Of Sr ³⁾ 20 ms/0.5 Hz ⁴⁾ Miniature fuse as per IEC 60217-2 Sheet 1, ≤ 2 A (quick-blow)

Reduction factors

Note:	The values are reference values which may vary
Stainless steel (V2A, 304):	Ca. 0.8
Copper (Cu):	Ca. 0.4
Aluminum (Al):	Ca. 0.45

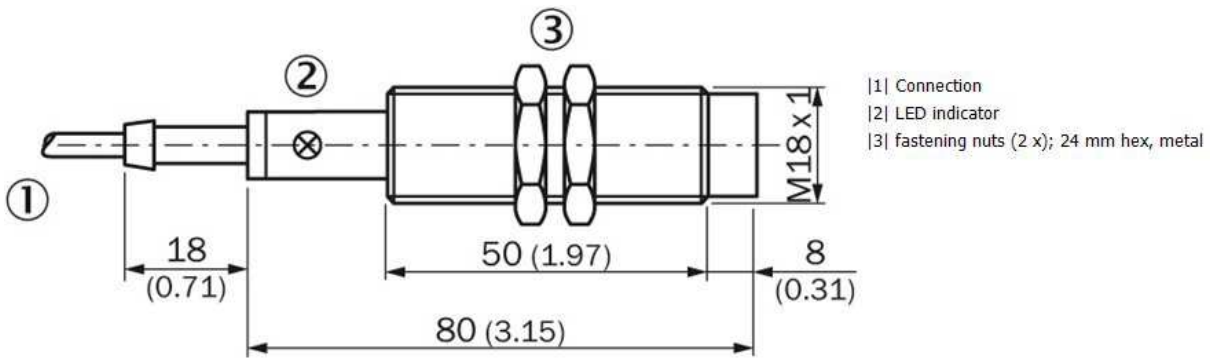
Installation note

A:	18 mm
B:	36 mm
C:	18 mm
D:	24 mm
E:	16 mm
F:	64 mm
Remark:	Associated graphic see "Installation"

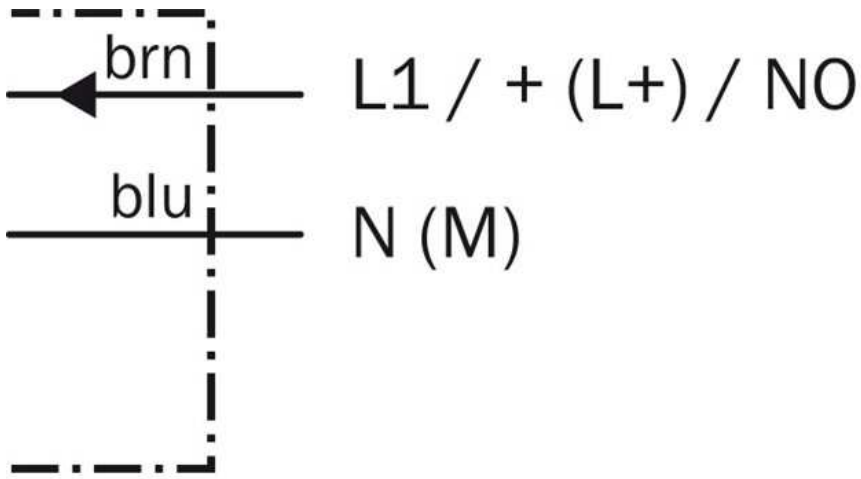
Installation note



Dimensional drawing



Connection diagram



Miniature fuse to IEC60127-2
sheet 1, ≤ 2 A (fast acting)

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