Inductive proximity sensors Cylindrical threaded housing, IM18

IM18-20NPS-ZWB







 Model Name
 > IM18-20NPS-ZWB

 Part No.
 > 6035726





- Triple operating distance up to 20 mm
- Operating temperature from -25 °C to +70 °C
- High switching frequencies
- Sizes M18

# Your benefits

- · Reduced machine downtime and maintenance costs
- Large operating reserve due to triple operating distance improves machine throughput - no missed targets
- Saves installation space on the machine. Less space required for the same operating distance when compared with standard sensors
- Lower risk of mechanical damage due their ability to be mounted further from the target
- High level of sensitivity makes them suitable for detecting difficult parts such as wires, thin sheets, small screws reduces design and installation time



## Features

| Design:                             | Cylindrical         |  |
|-------------------------------------|---------------------|--|
| Thread size:                        | M18 x 1             |  |
| Sensing range Sn:                   | 20 mm               |  |
| Installation type:                  | Non-flush           |  |
| Switching frequency:                | 200 Hz              |  |
| Output type:                        | PNP                 |  |
| Output function:                    | NO                  |  |
| Electrical wiring:                  | DC 3-wire           |  |
| Enclosure rating:                   | IP 67 <sup>1)</sup> |  |
| Electrical connection:              | Cable, 3-wire, 5 m  |  |
| Housing:                            | Standard            |  |
| <sup>1)</sup> According to EN 60529 |                     |  |

# Mechanics/electronics

| Supply voltage:                 | 10 V DÇ 30 V DC       |
|---------------------------------|-----------------------|
| Residual ripple:                | ≤ 20 % <sup>1</sup>   |
| Voltage drop:                   | $\leq 2 V^{2}$        |
| Power consumption:              | ≤ 10 mA <sup>3)</sup> |
| Time delay before availability: | ≤ 100 ms              |

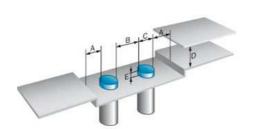
| Hysteresis:   | 1 % 15 %                     |  |  |
|---|------------------------------|--|--|
| Repeatability::   | ≤ 5 % <sup>4) 5)</sup>       |  |  |
| Temperature drift (of Sr):  | ± 10 %                       |  |  |
| EMC:  | According to EN 60947-5-2    |  |  |
| Output current la:  | ≤ 200 mA                     |  |  |
| Cable material:   | PVC                          |  |  |
| Conductor cross-section:  | 0.34 mm²                     |  |  |
| Cable diameter:   | 5 mm                         |  |  |
| Short-circuit protection:   | $\checkmark$                 |  |  |
| Reverse polarity protection:  | $\checkmark$                 |  |  |
| Power-up pulse protection:  | $\checkmark$                 |  |  |
| Shock and vibration resistance:   | 30 g, 11 ms ∕ 10 55 Hz, 1 mm |  |  |
| Ambient temperature operation:  | -25 °C 70 °C                 |  |  |
| Housing material:   | Metal, Chrome-plated brass   |  |  |
| Housing cap material:   | Plastic, PBTP                |  |  |
| Housing length:   | 50 mm                        |  |  |
| Thread length:  | 40 mm                        |  |  |
| Tightening torque, max.:  | 25 Nm                        |  |  |
| <sup>1)</sup> Of V $_{S}^{2)}$ At I max $_{a}^{3)}$ Without load $_{a}^{4)}$ Of Sr $_{DB}^{5)}$ UB = 20 V DC 30 V DC, TA = 23 °C ± 5 °C |                              |  |  |

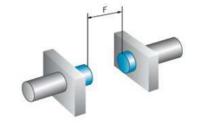
# Installation note

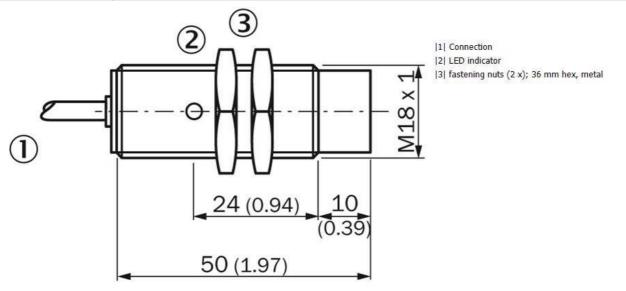
Remark:

Associated graphic see "Installation"

Installation note non-flush installation

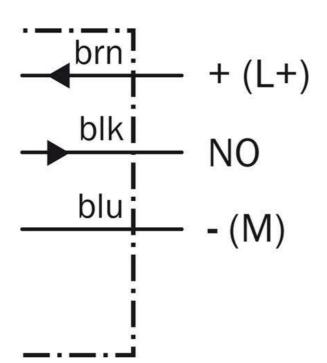




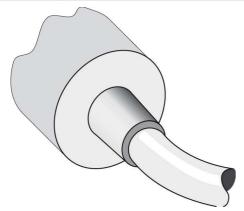


All dimensions in mm (inch)

**Connection diagram** 



# **Connection type**



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