



## Inductive proximity sensors Cylindrical threaded housing, IM08

IM08-2N5NS-ZW1S03



**Model Name** > [IM08-2N5NS-ZW1S03](#)  
**Part No.** > [6022650](#)



#### At a glance

- Size M8
- IP 67 enclosure rating
- Operating temperature from -25° C to +70° 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:         | M8 x 1                                             |
| Sensing range Sn:    | 2.5 mm                                             |
| Installation type:   | Non-flush                                          |
| Switching frequency: | 2,500 Hz                                           |
| Output type:         | NPN                                                |
| Output function:     | NO                                                 |
| Electrical wiring:   | DC 3-wire                                          |
| Enclosure rating:    | IP 67 <sup>1)</sup>                                |
| Connection type:     | Cable, 3-wire, 2 m<br>cable with special connector |
| Housing:             | Standard                                           |

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

#### Mechanics/electronics

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Supply voltage:                 | 10 V DC ... 30 V DC               |
| Ripple:                         | ≤ 10 % <sup>1)</sup>              |
| Voltage drop:                   | ≤ 1.2 V <sup>2)</sup>             |
| Power consumption:              | ≤ 20 mA <sup>3)</sup>             |
| Time delay before availability: | ≤ 100 ms                          |
| Hysteresis:                     | 2 % ... 10 %                      |
| Repeatability:                  | ≤ 2 % <sup>4)</sup> <sup>5)</sup> |
| Temperature drift (% of Sr):    | ± 10 %                            |
| EMC:                            | According to EN 60947-5-2         |

|                                 |                                |
|---------------------------------|--------------------------------|
| Output current I <sub>a</sub> : | ≤ 200 mA                       |
| Cable material:                 | PVC                            |
| Conductor cross-section:        | 0.14 mm <sup>2</sup>           |
| 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:                 | 45 mm                          |
| Thread length:                  | 36.2 mm                        |
| Tightening torque, max.:        | 4 Nm                           |
| Special features:               | Phoenix cable end sleeves      |

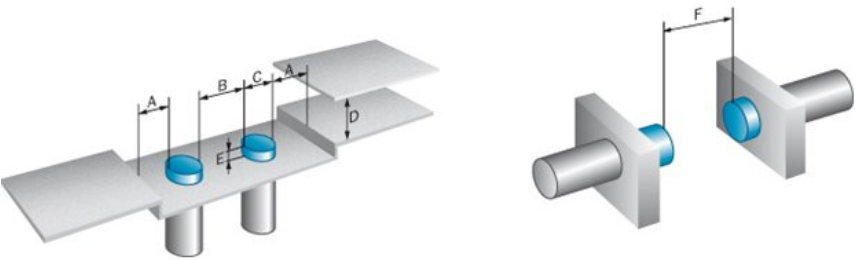
1) Of V<sub>S</sub> 2) At I<sub>a</sub> max 3) Without load 4) U<sub>b</sub> and T<sub>a</sub> constant 5) Of S<sub>r</sub>

#### Installation note

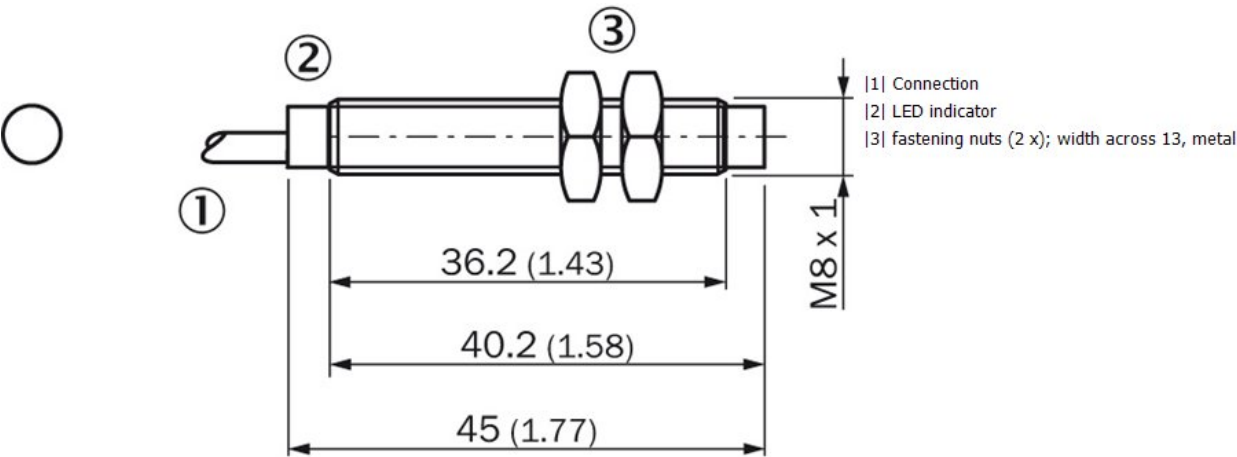
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|         |                                       |
|---------|---------------------------------------|
| A:      | 8 mm                                  |
| B:      | 16 mm                                 |
| C:      | 8 mm                                  |
| D:      | 7.5 mm                                |
| E:      | 4 mm                                  |
| F:      | 20 mm                                 |
| Remark: | Associated graphic see "Installation" |

Installation note



Dimensional drawing



All dimensions in mm (inch)

Connection diagram



Connection type



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