

IM08-06NPS-ZW1







Inductive proximity sensors Cylindrical threaded housing, IM08

Model Name > IM08-06NPS-ZW1

Part No. > 6027506





At a glance

- · Triple operating distance up to 6 mm
- Operating temperature from -25 °C to +70 °C
- · High switching frequencies
- Sizes M8

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: M8 x 1 Sensing range Sn: 6 mm Assured sensing range Sa: 4.86 mm Installation type: Non-flush 500 Hz Switching frequency: **PNP** Output type: Output function: NO Electrical wiring: DC 3-wire IP 67 1) Enclosure rating:

Electrical connection: Cable, 3-wire, 2 m

Housing: Standard

1) According to EN 60529

Mechanics/electronics

Supply voltage: $10 \text{ V DC } \dots 30 \text{ V DC}$ Residual ripple: $\leq 20 \% \frac{1}{2}$

Voltage drop: \leq 2 V $^{2)}$ Power consumption: \leq 10 mA $^{3)}$ Time delay before availability: \leq 50 ms

Hysteresis: 1% ... 15%Repeatability:: \leq 5 % $^{4)} 5)$ Temperature drift (of Sr): \pm 10 %

EMC: According to EN 60947-5-2

 Output current la:
 ≤ 200 mA

 Cable material:
 PVC

 Conductor cross-section:
 0.14 mm²

 Cable diameter:
 3.5 mm

 Short-circuit protection:
 ✓

 Reverse polarity protection:
 ✓

 Power-up pulse protection:
 ✓

Shock and vibration resistance: 30 g, 11 ms/10 ... 55 Hz, 1 mm

Adjustment indicator: -

Ambient temperature operation: -25 °C ... 70 °C

Housing material: Metal, Chrome-plated brass

Housing cap material: Plastic, PBTP

Housing length: 45 mm
Thread length: 41 mm
Tightening torque, max.: 4 Nm

1) Of V $_{S}^{2}$ At I $_{a}$ max $_{a}^{3}$ Without load $_{a}^{4}$ Of Sr $_{b}^{5}$ UB = 20 V DC ... 30 V DC, TA = 23 °C ± 5 °C $_{b}^{6}$ LED lights continuously (0 ≤ s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s ≤ 0.8 Sr); LED flashing (0.8 Sr < s

Reduction factors

Note: The values are reference values which may vary

 Stainless steel (V2A, 304):
 Ca. 0.77

 Copper (Cu):
 Ca. 0.44

 Aluminum (Al):
 Ca. 0.47

 Brass (Br):
 Ca. 0.55

Installation note

 A:
 8 mm

 B:
 20 mm

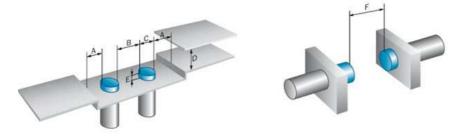
 C:
 8 mm

 D:
 18 mm

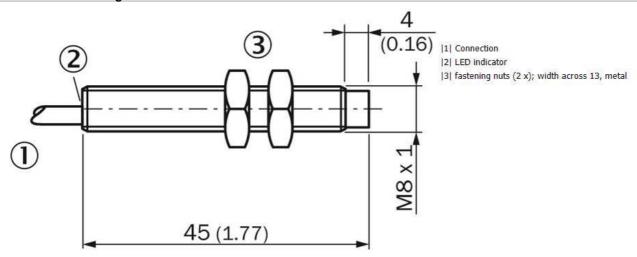
 E:
 8 mm

 F:
 60 mm

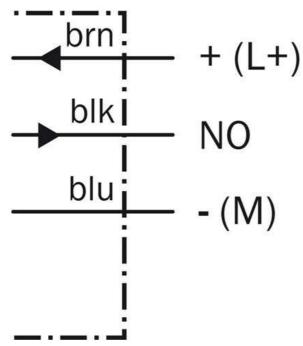
Remark: Associated graphic see "Installation"



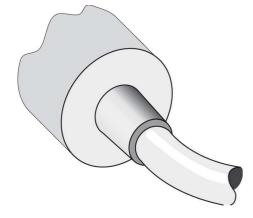
Dimensional drawing



All dimensions in mm (inch)



Connection type



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