

IM30-22BPS-ZCK







# Inductive proximity sensors Cylindrical threaded housing, IM30

Model Name > IM30-22BPS-ZCK

Part No. > 6025566





### At a glance

- Triple operating distance up to 40 mm
- Operating temperature from -25 °C to +70 °C
- · High switching frequencies
- Sizes M30

#### 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 M30 x 1.5 Thread size: Sensing range Sn: 22 mm 17.82 mm Assured sensing range Sa: Quasi-flush 1) Installation type: 200 Hz Switching frequency: **PNP** Output type: Output function: NO Electrical wiring: DC 3-wire IP 67 2) Enclosure rating:

Electrical connection: Connector M12, 4-pin

Housing: Short-body

1) Please note the installation notes 2) 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:  $\leq$  200 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

Short-circuit protection:

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 ... 70 °C

Housing material: Metal, Chrome-plated brass

Housing cap material:
Housing length:
Thread length:
Tightening torque, max.:
Plastic, PBTP
48.5 mm
35 mm
70 Nm

1) Of  $V_S^{(2)}$  At  $I_a$  max 3) Without load 4) Of Sr 5) UB = 20 V DC ... 30 V DC, TA = 23 °C ± 5 °C

#### **Reduction factors**

Note: The values are reference values which may vary Stainless steel (V2A, 304): Ca. 0.66

 Copper (Cu):
 Ca. 0.35

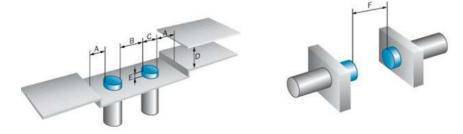
 Aluminum (Al):
 Ca. 0.4

 Brass (Br):
 Ca. 0.45

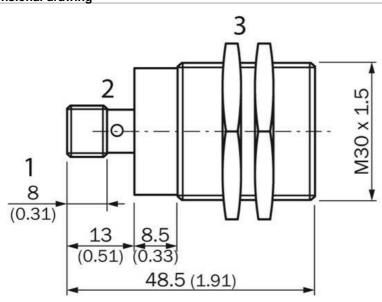
#### Installation note

A: 22 mm
B: 50 mm
C: 30 mm
D: 66 mm
E: 6 mm
F: 220 mm

Remark: Associated graphic see "Installation"



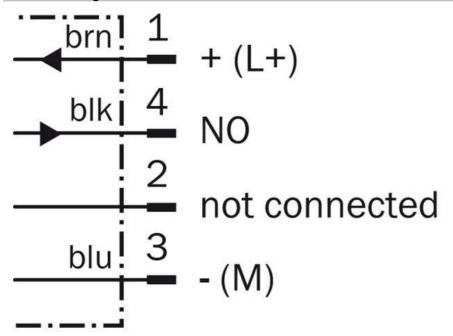
## **Dimensional drawing**



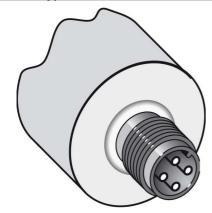
- |1| Connection
- |2| LED indicator
- |3| fastening nuts (2 x); 36 mm hex, metal

All dimensions in mm (inch)

## **Connection diagram**



# Connection type



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