

ONLINE DATA SHEET
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Inductive proximity sensors
Cylindrical threaded housing, IM30

IM30-22BNS-ZW1



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Cylindrical threaded housing, IM30

Model Name > IM30-22BNS-ZW1
Part No. > 6027520





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
Thread size:	M30 x 1.5
Sensing range Sn:	22 mm
Assured sensing range Sa:	17.82 mm
Installation type:	Quasi-flush [1]
Switching frequency:	200 Hz
Output type:	NPN
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 [2]
Electrical connection:	Cable, 3-wire, 2 m
Housing:	Standard

[1] Please note the installation notes [2] According to EN 60529

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 20 % [1]
Voltage drop:	≤ 2 V [2]
Power consumption:	≤ 10 mA [3]

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Time delay before availability:	≤ 200 ms
Hysteresis:	1 % ... 15 %
Repeatability::	≤ 5 % [4) 5)]
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current Ia:	≤ 200 mA
Cable material:	PVC
Conductor cross-section:	0.34 mm²
Cable diameter:	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
Ambient temperature operation:	-25 °C ... 70 °C
Housing material:	Metal, Chrome-plated brass
Housing cap material:	Plastic, PBTP
Housing length:	60 mm
Thread length:	60 mm
Tightening torque, max.:	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

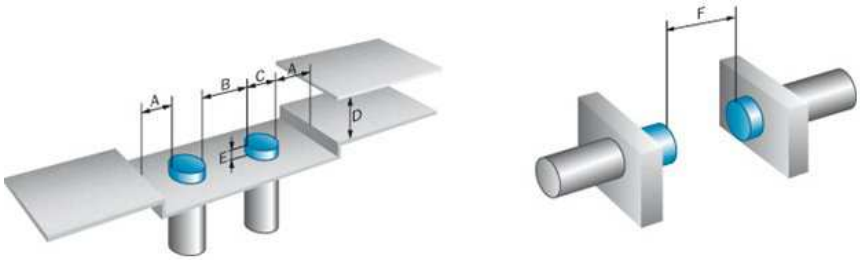
Note:	The values are reference values which may vary
Stainless steel (V2A, 304):	Ca. 0.66
Copper (Cu):	Ca. 0.35
Aluminum (Al):	Ca. 0.4
Brass (Br):	Ca. 0.45

Installation note

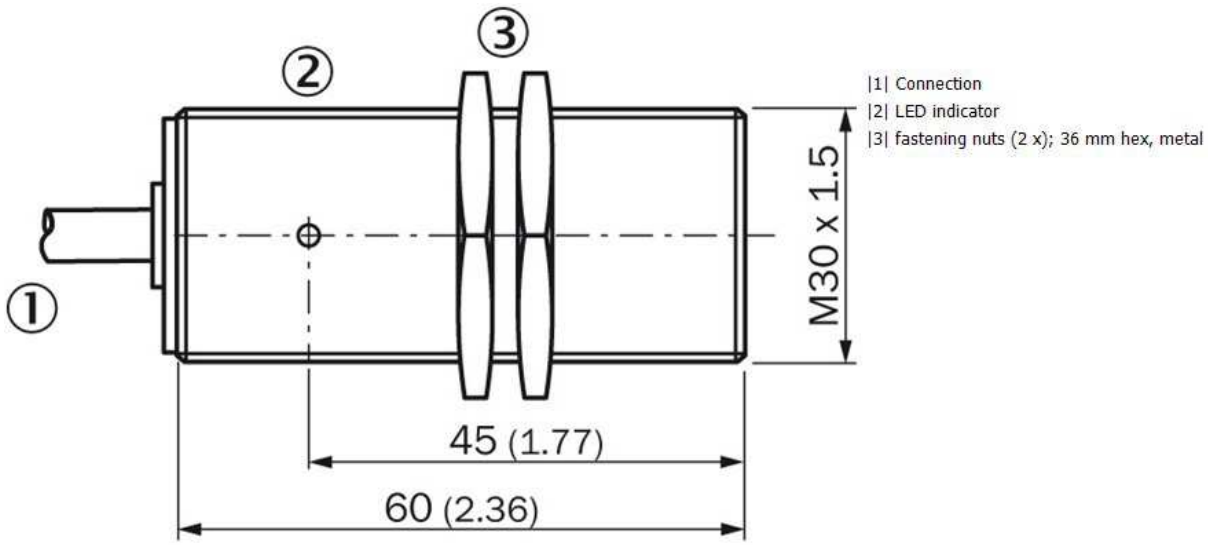
A:	22 mm
B:	50 mm
C:	30 mm
D:	66 mm
E:	6 mm
F:	220 mm
Remark:	Associated graphic see "Installation"

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Installation note non-flush installation



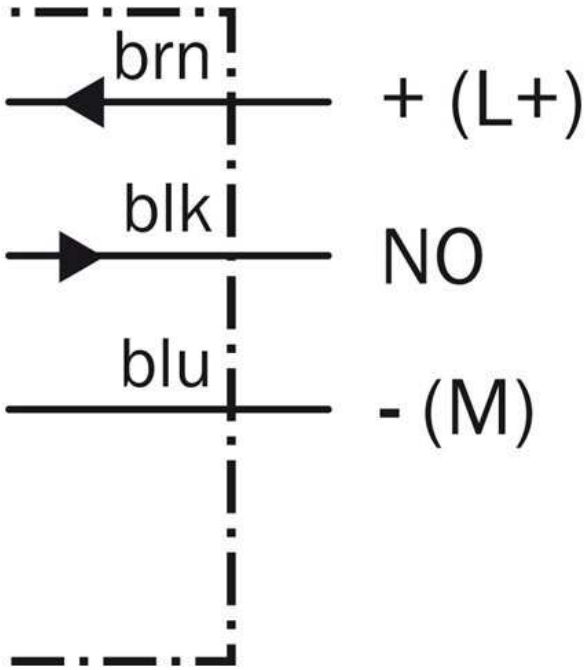
Dimensional drawing



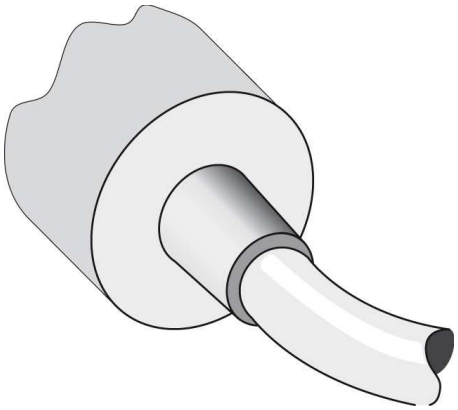
All dimensions in mm (inch)

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Connection diagram



Connection type



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