

ONLINE DATA SHEET
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Inductive proximity sensors
Cylindrical smooth housing, IH03

IH03-0B6NS-VU1



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Inductive proximity sensors
Cylindrical smooth housing, IH03

Model Name > IH03-0B6NS-VU1
Part No. > 6020142





At a glance

- Operating distance of 0.6 mm
- Can be flush mounted
- High switching frequency
- Short-circuit protection (pulsed)
- Stainless steel housing
- IP 67 enclosure rating
- LED status indicator

Your benefits

- Space-saving installation in space-critical applications provides a high degree of design freedom
- Reliable detection of high-speed processes increases machine throughput
- High-visibility indicator LED ensures simple monitoring of the operational state
- High positioning accuracy
- High resistance to shock and vibrations increases service life and reduces maintenance and replacement costs

Features

Design:	Cylindrical
Diameter:	3 mm
Sensing range Sn:	0.6 mm
Assured sensing range Sa:	0.486 mm
Installation type:	Flush
Switching frequency:	5,000 Hz
Output type:	NPN
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 [1)]
Electrical connection:	Cable, 3-wire, 2 m
Housing:	Standard

1) According to EN 60529

Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 20 % [1)]

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Voltage drop:	≤ 2 V [2]
Power consumption:	≤ 10 mA [3]
Time delay before availability:	≤ 10 ms
Hysteresis:	0 % ... 10 %
Repeatability:	≤ 2 % [4]
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current Ia:	≤ 100 mA
Cable material:	PUR
Conductor cross-section:	0.06 mm²
Cable diameter:	2.6 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:	Stainless steel, Stainless steel (V2A, 304)
Housing cap material:	Plastic, Polyester
Housing length:	22 mm

[1] Of V_S [2] With Ia = 100 mA [3] Without load [4] Ub = 20 V DC ... 30 V DC, Ta = 23 °C ± 5 °C

Reduction factors

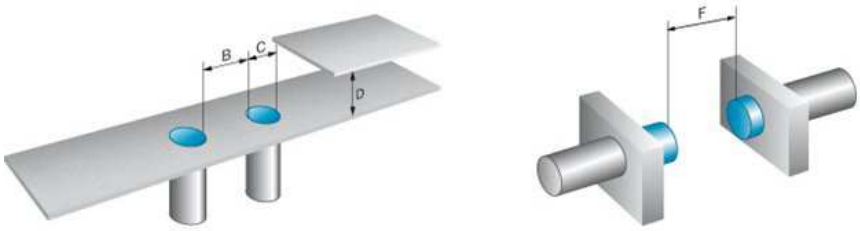
Note:	The values are reference values which may vary
Stainless steel (V2A, 304):	Ca. 0.8
Copper (Cu):	Ca. 0.5
Aluminum (Al):	Ca. 0.55
Brass (Br):	Ca. 0.65

Installation note

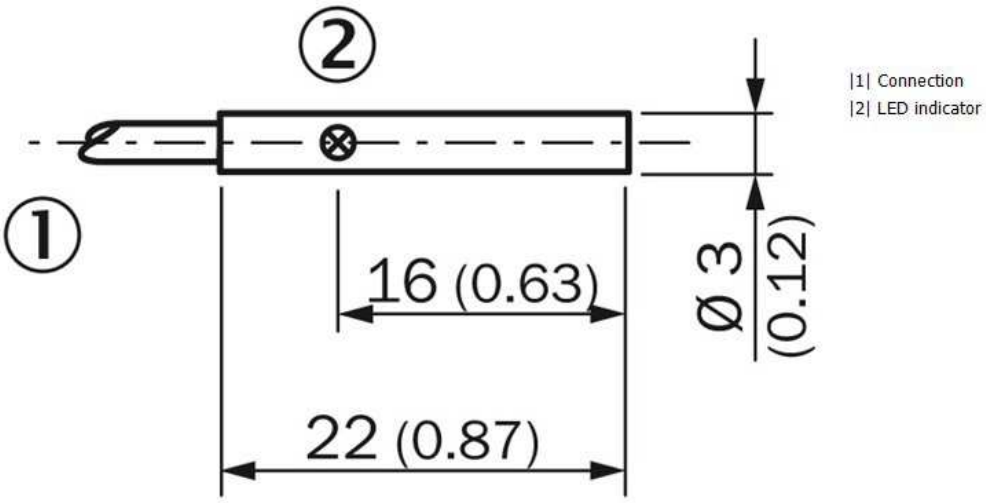
A:	0.5 mm
B:	0 mm
C:	3 mm
D:	1.8 mm
E:	0 mm
F:	5 mm
Remark:	Associated graphic see "Installation"

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Installation note



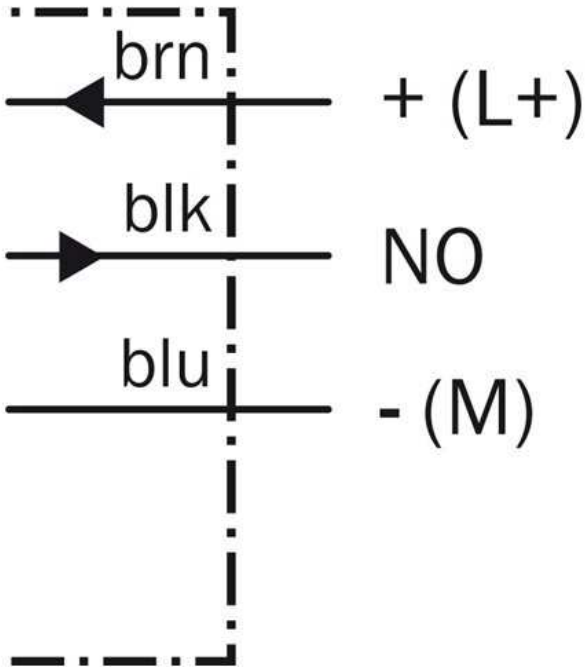
Dimensional drawing



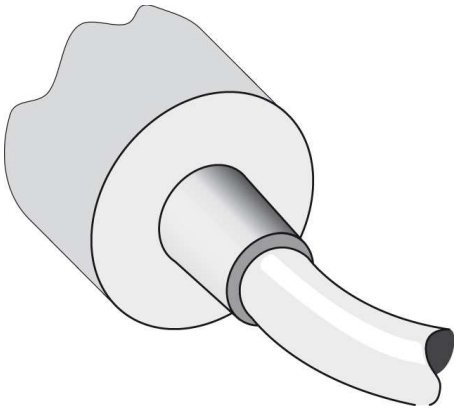
All dimensions in mm (inch)

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Connection diagram



Connection type



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