



Inductive proximity sensors  
Cylindrical smooth housing, IH03

IH03-0B6NS-VU1



**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 <sup>1)</sup>
Electrical connection:	Cable, 3-wire, 2 m
Housing:	Standard

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

**Mechanics/electronics**

Supply voltage:	10 V DC ... 30 V DC
Residual ripple:	≤ 20 % <sup>1)</sup>

Voltage drop:	$\leq 2 \text{ V}^{2)}$
Power consumption:	$\leq 10 \text{ mA}^{3)}$
Time delay before availability:	$\leq 10 \text{ ms}$
Hysteresis:	0 % ... 10 %
Repeatability:	$\leq 2 \%^{4)}$
Temperature drift (of Sr):	$\pm 10 \%$
EMC:	According to EN 60947-5-2
Output current $I_a$ :	$\leq 100 \text{ mA}$
Cable material:	PUR
Conductor cross-section:	0.06 mm <sup>2</sup>
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  $I_a = 100 \text{ mA}$  3) Without load 4)  $U_b = 20 \text{ V DC} \dots 30 \text{ V DC}$ ,  $T_a = 23 \text{ °C} \pm 5 \text{ °C}$

### 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

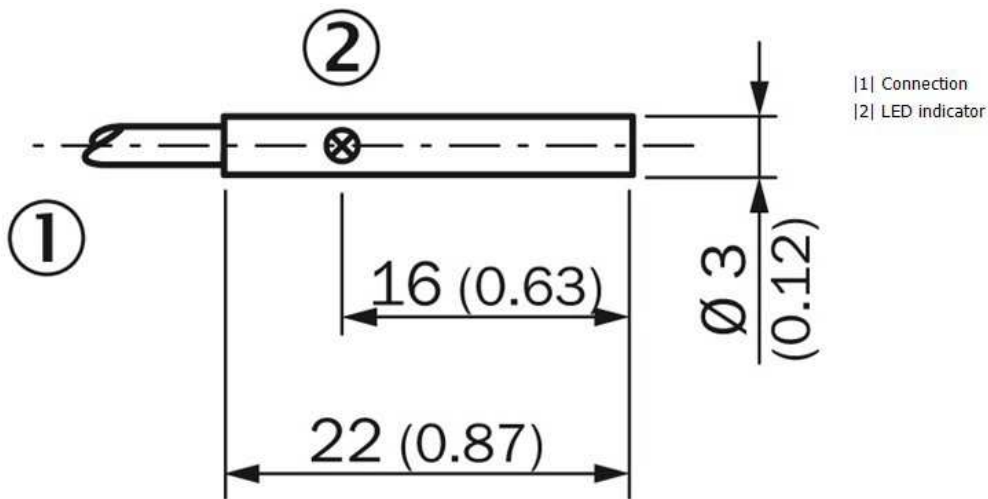
### Installation note

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"

## Installation note



## Dimensional drawing



All dimensions in mm (inch)

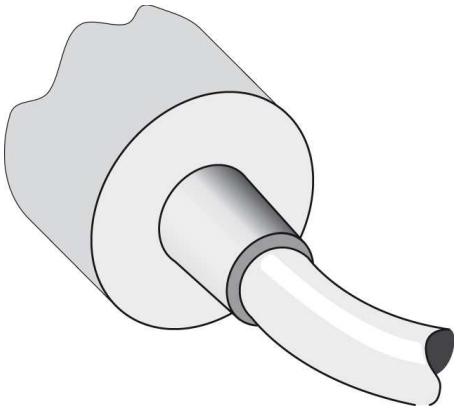
Connection diagram

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Connection type

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