



Inductive proximity sensors  
Cylindrical smooth housing, IH06

IH06-1B5PS-VWK



**Model Name** > [IH06-1B5PS-VWK](#)  
**Part No.** > [6020165](#)



#### At a glance

- Operating distance of up to 4 mm
- High switching frequency
- Short-circuit protection (pulsed)
- IP 67 enclosure rating
- Stainless steel housing
- LED status indicator

#### Your benefits

- Reliable detection of high-speed processes increases machine throughput
- High-visibility indicator LED ensures simple monitoring of the operational state
- High resistance to shock and vibrations increases service life and reduces maintenance and replacement costs



#### Features

Design:	Cylindrical
Diameter:	6.5 mm
Sensing range Sn:	1.5 mm
Assured sensing range Sa:	1.215 mm
Installation type:	Flush
Switching frequency:	5,000 Hz
Output type:	PNP
Output function:	NO
Electrical wiring:	DC 3-wire
Enclosure rating:	IP 67 <sup>1)</sup>
Electrical connection:	Cable, 3-wire, 2 m
Housing:	Short-body

<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:	≤ 2 V <sup>2)</sup>
Power consumption:	≤ 10 mA <sup>3)</sup>
Time delay before availability:	≤ 10 ms
Hysteresis:	≤ 10 %

Repeatability:	≤ 1.5 % <sup>4)</sup>
Temperature drift (of Sr):	± 10 %
EMC:	According to EN 60947-5-2
Output current I <sub>a</sub> :	≤ 200 mA
Cable material:	PVC
Conductor cross-section:	0.14 mm <sup>2</sup>
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, PA 66
Housing length:	16 mm

1) Of V<sub>S</sub> <sup>2)</sup> With I<sub>a</sub> = 200 mA <sup>3)</sup> Without load <sup>4)</sup> U<sub>b</sub> = 20 V DC ... 30 V DC, T<sub>a</sub> = 23 °C ± 5 °C

### Reduction factors

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Note:	The values are reference values which may vary
Stainless steel (V2A, 304):	Ca. 0.8
Copper (Cu):	Ca. 0.4
Aluminum (Al):	Ca. 0.45
Brass (Br):	Ca. 0.5

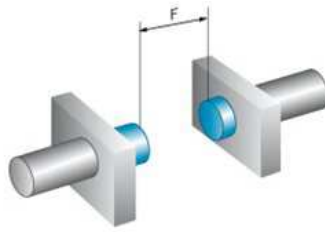
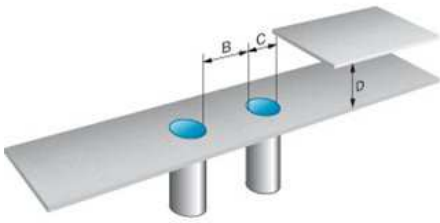
### Installation note

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A:	1,75 mm
B:	3 mm
C:	6,5 mm
D:	4.5 mm
E:	0 mm
F:	12 mm
Remark:	Associated graphic see "Installation"

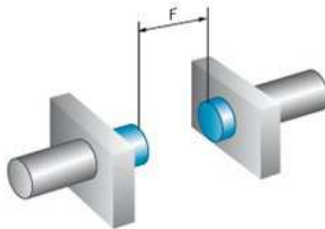
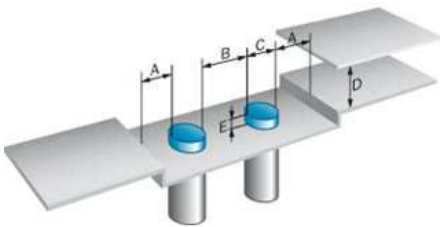
**Installation note**

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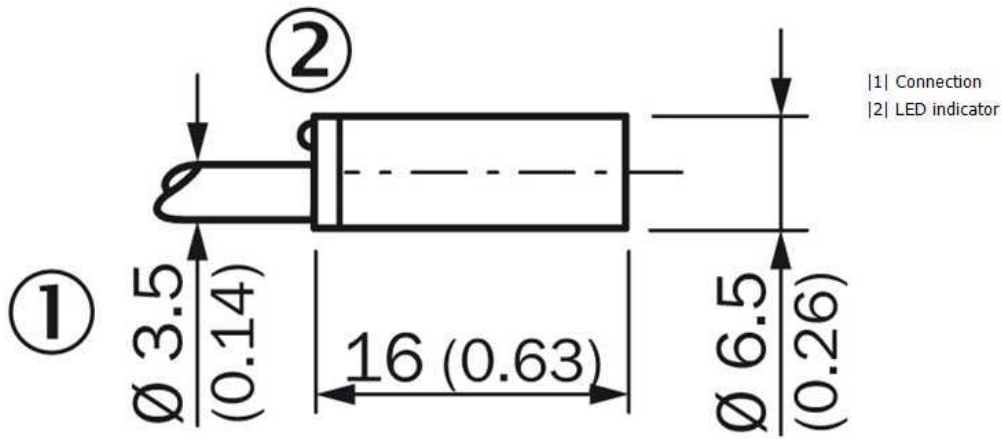


**Installation note non-flush installation**

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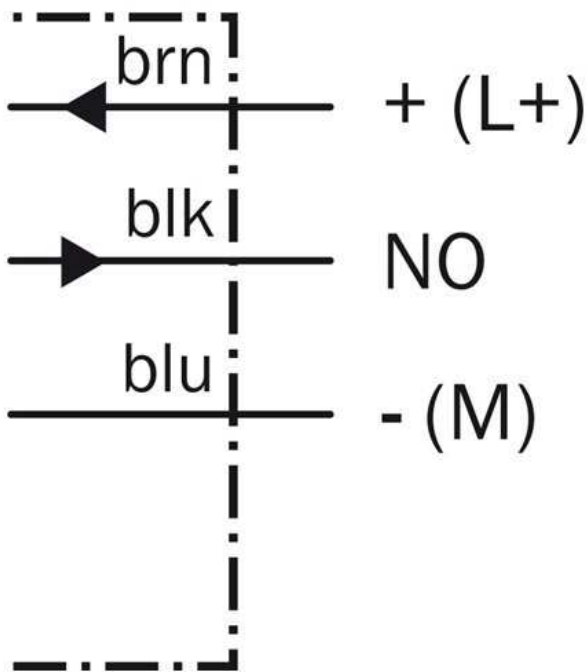


Dimensional drawing



All dimensions in mm (inch)

Connection diagram



**Connection type**

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