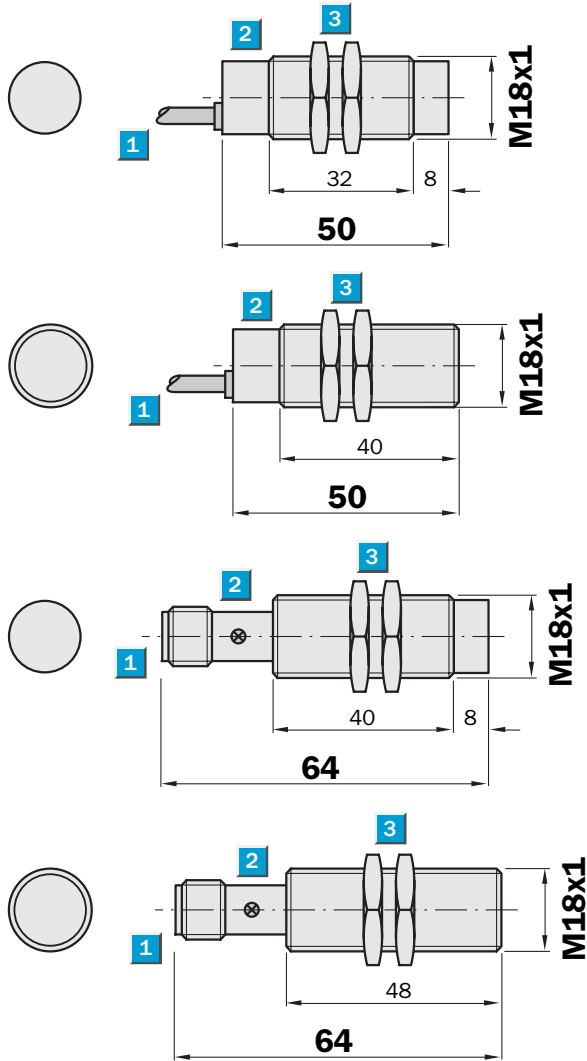


**Sensing range**  
5 / 8 mm

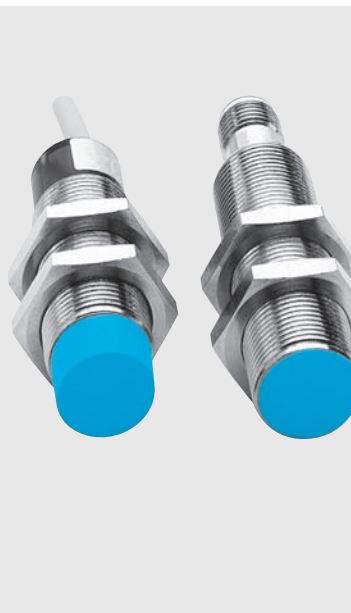
Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67

Dimensional drawing



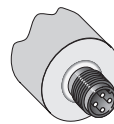
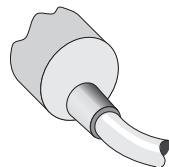
- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 24, metal



Connection type

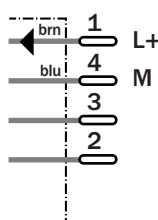
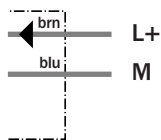
IM18-05BDS-ZW1  
IM18-08NDS-ZW1

IM18-05BDS-ZC1  
IM18-08NDS-ZC1



2 x 0.34 mm<sup>2</sup>

M12, 4-pin



See chapter Accessories

Connector, M12, 4-pin  
Mounting systems

Technical specifications		IM18-	05BDS-ZW1	05BDS-ZC1	08NDS-ZW1	08NDS-ZC1						
<b>Sensing range S<sub>n</sub></b>	5 mm											
	8 mm											
<b>Electrical configuration</b>	DC 2-wire											
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V											
Ripple U <sub>pp</sub>	≤ 10 %											
Voltage drop U <sub>d</sub>	≤ 2.8 V <sup>1)</sup>											
<b>Continuous current I<sub>a</sub></b>	≤ 100 mA											
Min. load current	≥ 3 mA											
Residual current	≤ 0.8 mA											
Time delay before availability t <sub>v</sub>	≤ 50 ms											
Hysteresis H, of s <sub>r</sub>	2 ... 10 %											
Repeatability R	≤ 2 % (U <sub>b</sub> and T <sub>a</sub> constant) <sup>2)</sup>											
Temperature drift, of s <sub>r</sub>	± 10 %											
EMC	According to EN 60947-5-2											
<b>Output function</b>	Normally open <sup>3)</sup>											
<b>Installation</b>	Flush											
	Non-flush											
<b>Connection type</b>	Cable, PVC, 2 m											
	Connector, M12, 4-pin											
<b>Enclosure rating</b>	IP 67 <sup>4)</sup>											
Max. switching frequency	300 Hz											
Dimensions	M18 x 1 <sup>5)</sup>											
<b>Short-circuit protection</b>	✓ <sup>6)</sup>											
<b>Reverse polarity protection</b>	✓											
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm											
Ambient temperature T <sub>a</sub>	-25 °C ... +70 °C											
<b>Housing material</b>	Brass nickel-plated, plastic											
Tightening torque	30 Nm											

<sup>1)</sup> at I<sub>a</sub> max  
<sup>2)</sup> of s<sub>r</sub>

<sup>3)</sup> normally closed function available on request

<sup>4)</sup> according to EN 60529  
<sup>5)</sup> Thread diameter x pitch (mm)

<sup>6)</sup> (pulsed)

Order information	
Type	Order no.
IM18-05BDS-ZW1	6 020 318
IM18-05BDS-ZC1	6 020 320
IM18-08NDS-ZW1	6 020 322
IM18-08NDS-ZC1	6 020 324