

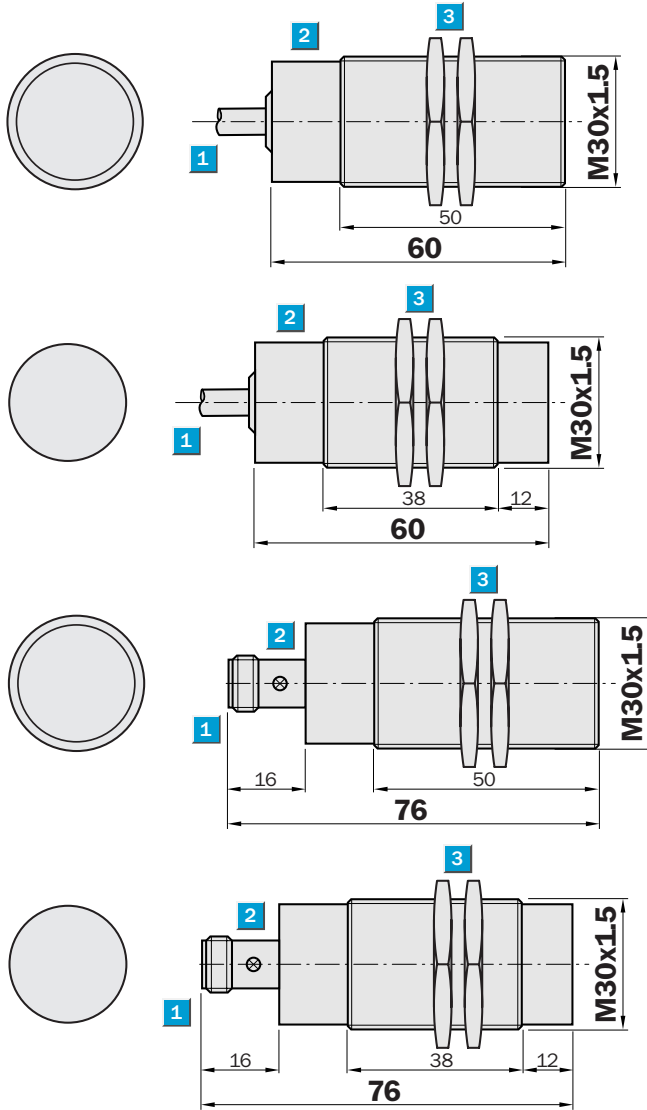
**Sensing range**  
10 / 15 mm

Inductive sensor

- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M30 x 1 mm
- Enclosure rating IP 67



Dimensional drawing

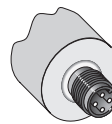
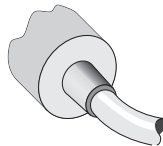


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 36, metal



Connection type

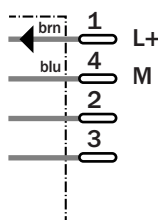
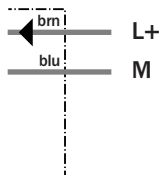
IM30-10BDS-ZW1	IM30-10BDS-ZC1
IM30-15NDS-ZW1	IM30-15NDS-ZC1



See chapter Accessories  
Connector, M12, 4-pin  
Mounting systems

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

M12, 4-pin



Technical data		IM30-	10BDS-ZW1	10BDS-ZC1	15NDS-ZW1	15NDS-ZC1						
<b>Sensing range <math>S_n</math></b>	15 mm											
	10 mm											
<b>Electrical configuration</b>	DC 2-wire											
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V											
Ripple $V_{pp}$	$\leq 10 \%$											
Voltage drop $V_d$	$\leq 2.8 V^1$											
<b>Continuous current <math>I_a</math></b>	$\leq 100 mA$											
Min. load current	$\geq 3 mA$											
Residual current	$\leq 0.8 mA$											
Time delay before availability $t_v$	$\leq 50 ms$											
Hysteresis H (of $s_r$ )	2 ... 10 %											
Repeatability R	$\leq 2 \%$ ( $U_b$ and $T_a$ constant) <sup>2)</sup>											
Temperature drift, of $s_r$	$\pm 10 \%$											
EMC	According to EN 60 947-5-2											
<b>Output function</b>	Normally open <sup>3)</sup>											
<b>Installation</b>	Non-flush											
	Flush											
<b>Connection types</b>	Plug, M12, 4-pin											
	Cable, PVC, 2 m											
Enclosure rating	IP 67 <sup>4)</sup>											
Max. switching frequency	150 Hz											
Dimensions	M30 x 1.5 <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 $T_a$	-25 °C ... +70 °C											
Housing material	Brass nickel-plated, plastic											
Tightening material	60 Nm											

<sup>1)</sup> at  $I_a$  max  
<sup>2)</sup> of  $s_r$

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

<sup>4)</sup> according to EN 60 529  
<sup>5)</sup> thread diameter x pitch (mm)

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

#### Order information

Type	Order no.
IM30-10BDS-ZW1	6 020 326
IM30-10BDS-ZC1	6 020 328
IM30-15NDS-ZW1	6 020 330
IM30-15NDS-ZC1	6 020 332