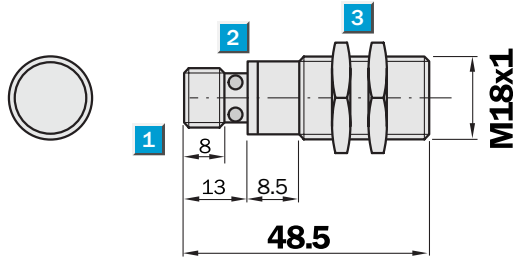


**Sensing range**  
12 mm

Inductive sensor

- Triple sensing range
- Installation quasi flush in metal
- Short-circuit protection (pulsed)
- Robust brass housing, chrome-plated with fine thread M18 x 1 mm
- Enclosure rating IP 67

Dimensional drawing

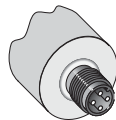


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 24, metal

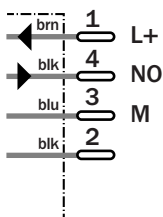


Connection type

IM18-12BPS-ZCK



M12, 4-pin



Accessories

Connector, M12, 4-pin

Mounting systems

Technical specifications		IM18-	12BPS-ZCK										
<b>Sensing range <math>S_n</math></b>	12 mm												
<b>Electrical configuration</b>	DC 3-wire												
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V												
Ripple $U_{pp}$	$\leq 10\%$ <sup>1)</sup>												
Voltage drop $U_d$	$\leq 2\text{ V}$ <sup>2)</sup>												
Current consumption	$\leq 10\text{ mA}$ <sup>3)</sup>												
<b>Continuous current <math>I_a</math></b>	$\leq 200\text{ mA}$												
Time delay before availability $t_v$	$\leq 100\text{ ms}$												
Hysteresis H, of $s_r$	1 ... 15 %												
Repeatability R	$\leq 5\%$ ( $U_b$ and $T_a$ constant) <sup>4)</sup>												
Temperature drift, of $s_r$	$\pm 10\%$												
EMC	According to EN 60947-5-2												
<b>Switching output</b>	PNP												
<b>Output function</b>	Normally open												
<b>Installation</b>	Quasi-flush <sup>5)</sup>												
<b>Connection type</b>	Connector, M12, 4-pin												
<b>Enclosure rating</b>	IP 67 <sup>6)</sup>												
Max. switching frequency	500 Hz												
Dimensions	M18 x 1 <sup>7)</sup>												
<b>Short-circuit protection</b>	$\checkmark$ <sup>8)</sup>												
<b>Reverse polarity protection</b>	$\checkmark$												
<b>Power-up pulse suppression</b>	$\checkmark$												
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm												
Ambient temperature $T_a$	-25 °C ... +75 °C												
<b>Housing material</b>	Brass, chrome-plated, plastic												
Tightening torque	30 Nm												

<sup>1)</sup> of  $U_b$   
<sup>2)</sup> at  $I_a$  max  
<sup>3)</sup> without load

<sup>4)</sup> of  $s_r$   
<sup>5)</sup> When mounting in conductible materials the sensors must be installed with a

distance A to the surface. A Steel, metal = 4 mm/A Stainless steel = 1.5 mm

<sup>6)</sup> According to EN 60529  
<sup>7)</sup> Thread diameter x pitch (mm)  
<sup>8)</sup> (pulsed)

Ordering information	
Type	Order No.
IM18-12BPS-ZCK	6 025 569