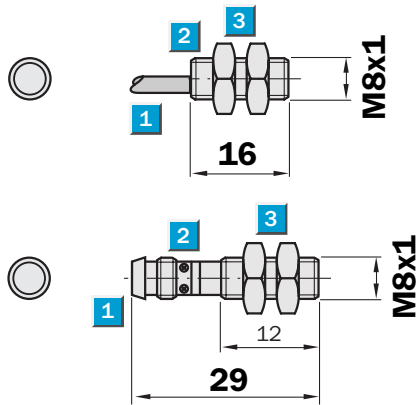


Sensing range
1.5 mm

Inductive sensor

- High switching frequency
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M8 x 1 mm
- Enclosure rating IP 67

Dimensional drawing



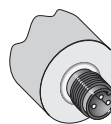
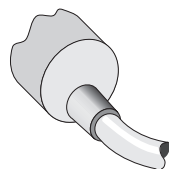
- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 13, metal



Connection type

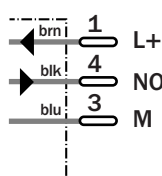
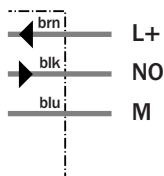
IM08-1B5NS-ZWK
IM08-1B5PS-ZWK

IM08-1B5NS-ZTK
IM08-1B5PS-ZTK



3 x 0.14 mm²

M8, 3-pin



See chapter Accessories

Connector, M8, 3-pin

Technical specifications		IM08-	1B5NS-ZWK	1B5PS-ZWK	1B5NS-ZTK	1B5PS-ZTK						
Sensing range S_n	1.5 mm											
Electrical configuration	DC 3-wire											
Supply voltage V_s	DC 10 ... 30 V											
Ripple U_{pp}	$\leq 20\%$ ¹⁾											
Voltage drop U_d	$\leq 2\text{ V}$ ²⁾											
Power consumption	10 mA ³⁾											
Continuous current I_a	$\leq 200\text{ mA}$											
Time delay before availability t_v	$\leq 10\text{ ms}$											
Hysteresis H, of s_r	10 %											
Repeatability R	$\leq 5\%$ (U_b and T_a constant)											
Temperature drift, of s_r	$\pm 10\%$											
EMC	According to EN 60947-5-2											
Switching output	NPN											
	PNP											
Output function	Normally open ⁴⁾											
Installation	Flush											
Connection type	Cable, PVC, 2 m											
	Connector, M8, 3-pin											
Enclosure rating	IP 67 ⁵⁾											
Max. switching frequency	5,000 Hz											
Dimensions	M8 x 1 ⁶⁾											
Short-circuit protection	✓ ⁷⁾											
Reverse polarity protection	✓											
Power-up pulse suppression	✓											
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 torque	4 Nm											

¹⁾ of U_b
²⁾ at $I_a = 200\text{ mA}$

³⁾ without load
⁴⁾ normally closed function available on

request
⁵⁾ according to EN 60529

⁶⁾ Thread diameter x pitch (mm)
⁷⁾ (pulsed)

Order information	
Type	Order no.
IM08-1B5NS-ZWK	6 020 173
IM08-1B5PS-ZWK	6 020 111
IM08-1B5NS-ZTK	6 020 176
IM08-1B5PS-ZTK	6 020 112