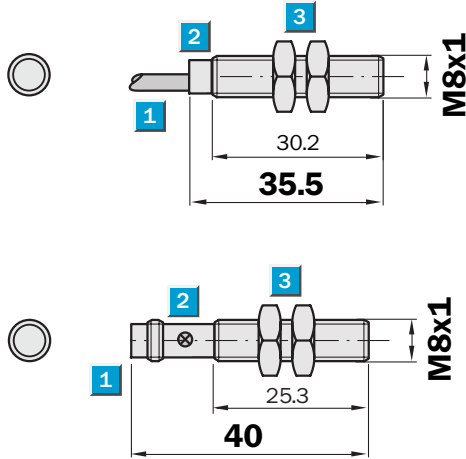


Sensing range
2 mm

Inductive sensor

- Enhanced sensing range
- 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

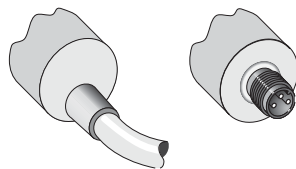


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 13, metal



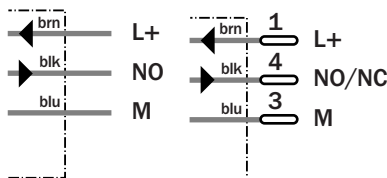
Connection type

IM08-02BNS-ZWK	IM08-02BNS-ZTK
IM08-02BPS-ZWK	IM08-02BPO-ZTK
IM08-02BPS-ZUA	IM08-02BPS-ZTK
	IM08-02BNO-ZTK



Accessories
Connector, M8, 3-pin

3 x 0.14 mm² M8, 3-pin



Technical specifications		IM08-	02BNS-ZWK	02BPS-ZWK	02BPS-ZUA	02BNS-ZTK	02BPO-ZTK	02BPS-ZTK	02BNO-ZTK			
Sensing range S_n	2 mm											
Electrical configuration	DC 3-wire											
Supply voltage V_s	DC 10 ... 30 V											
Ripple U_{pp}	$\leq 10\%$ ¹⁾											
Voltage drop U_d	$\leq 1.2\text{ V}$ ²⁾											
Power consumption	$\leq 10\text{ mA}$ ³⁾											
Continuous current I_a	$\leq 200\text{ mA}$											
Time delay before availability t_v	$\leq 5\text{ ms}$											
Hysteresis H, of s_r	1 ... 20 %											
Repeatability R	$\leq 5\%$ (U_b and T_a constant) ⁴⁾											
Temperature drift, of s_r	$\pm 10\%$											
EMC	According to EN 60947-5-2											
Switching output	NPN											
	PNP											
Output function	Normally open											
	Normally closed											
Installation	Flush											
Connection type	Cable, PVC, 2 m											
	Cable, PUR, 3 m											
	Connector, M8, 3-pin											
Enclosure rating	IP 67 ⁵⁾											
Max. switching frequency	3,000 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 max

³⁾ without load
⁴⁾ of s_r

⁵⁾ According to EN 60529
⁶⁾ Thread diameter x pitch (mm)

⁷⁾ (pulsed)

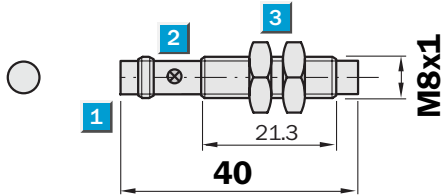
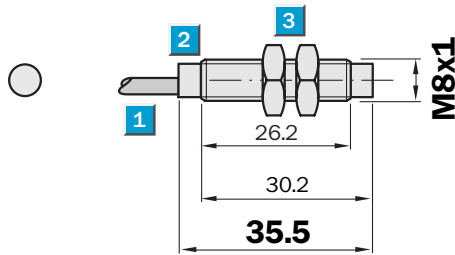
Ordering information	
Type	Order No.
IM08-02BNS-ZWK	6 025 862
IM08-02BPS-ZWK	6 025 861
IM08-02BPS-ZUA	6 030 237
IM08-02BNS-ZTK	6 025 864
IM08-02BPO-ZTK	6 025 865
IM08-02BPS-ZTK	6 025 863
IM08-02BNO-ZTK	6 025 866

Sensing range
4 mm

Inductive sensor

- Enhanced sensing range
- 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

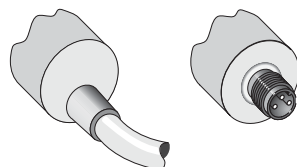


- 1 Connection
- 2 Display LED
- 3 Fastening nuts (2 x); width across 13, metal



Connection type

IM08-04NPS-ZWK	IM08-04NPS-ZTK
IM08-04NNS-ZWK	IM08-04NNO-ZTK
	IM08-04NNS-ZTK
	IM08-04NPO-ZTK

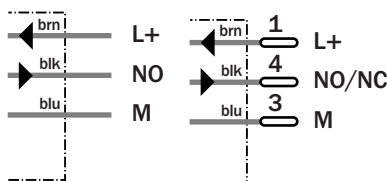


Accessories

Connector, M8, 3-pin

3 x 0.14 mm²

M8, 3-pin



Technical specifications		IM08-	04NPS-ZWK	04NNS-ZWK	04NPS-ZTK	04NNO-ZTK	04NNS-ZTK	04NPO-ZTK				
Sensing range S_n	4 mm											
Electrical configuration	DC 3-wire											
Supply voltage V_s	DC 10 ... 30 V											
Ripple U_{pp}	$\leq 10\%$ ¹⁾											
Voltage drop U_d	$\leq 1.2\text{ V}$ ²⁾											
Current consumption	$\leq 10\text{ mA}$ ³⁾											
Continuous current I_a	$\leq 200\text{ mA}$											
Time delay before availability t_v	$\leq 5\text{ ms}$											
Hysteresis H, of s_r	1 ... 20 %											
Repeatability R	$\leq 5\%$ (U_b and T_a constant) ⁴⁾											
Temperature drift, of s_r	$\pm 10\%$											
EMC	According to EN 60947-5-2											
Switching output	PNP											
	NPN											
Output function	Normally open											
	Normally closed											
Installation	Non-flush											
Connection type	Cable, PVC, 2 m											
	Connector, M8, 3-pin											
Enclosure rating	IP 67 ⁵⁾											
Max. switching frequency	2,500 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 max

³⁾ without load
⁴⁾ of s_r

⁵⁾ According to EN 60529
⁶⁾ Thread diameter x pitch (mm)

⁷⁾ (pulsed)

Ordering information	
Type	Order No.
IM08-04NPS-ZWK	6 025 867
IM08-04NNS-ZWK	6 025 868
IM08-04NPS-ZTK	6 025 869
IM08-04NNO-ZTK	6 025 872
IM08-04NNS-ZTK	6 025 870
IM08-04NPO-ZTK	6 025 871