

MM12

Magnetic sensor



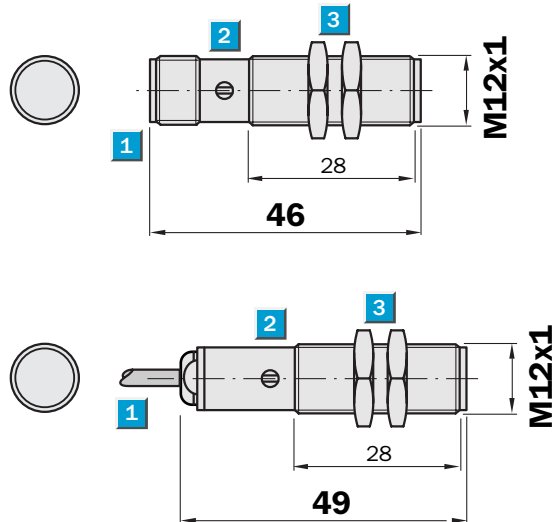
Sensing range
60 mm

Magnetic sensor

- Sensing range up to 60 mm
- Short-circuit protection (pulsed)
- Robust brass housing, nickel-plated with fine thread M12 x 1 mm
- Enclosure rating IP 67



Dimensional drawing



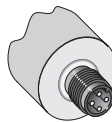
- 1** Connection
- 2** Display LED
- 3** Fastening nuts (2 x); width across 17, metal

Connection types

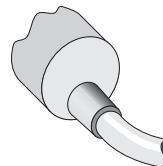
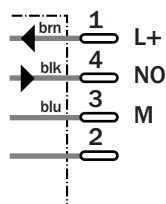
MM12-60ANS-ZCK
MM12-60APS-ZCK

MM12-60ANS-ZUK
MM12-60APS-ZUK

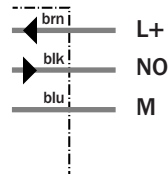
MM12-60APO-ZUK



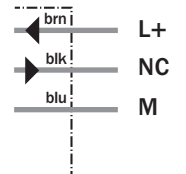
M12, 4-pin



3 x 0.25 mm²



3 x 0.25 mm²



Technical data		MM12-	60ANS-ZCK	60ANS-ZUK	60APO-ZUK	60APS-ZCK	60APS-ZUK					
Sensing range s_n	60 mm											
Magnetic alignment	Axial											
Electrical configuration	DC 3-wire											
Supply voltage V_s	10 ... 30 V DC											
Ripple U_{pp}	$\leq 10\%$											
Voltage drop U_d	$\leq 2 V^{1)}$											
Power consumption	$\leq 10 mA^{2)}$											
Continuous current I_a	$\leq 200 mA$											
Time delay before availability t_v	$\leq 20 ms$											
Hysteresis H, of s_r	5 ... 15 %											
Repeatability R	$\leq 5\%$ (U_b and T_a constant) ³⁾											
Temperature drift, of s_r	$\pm 10\%$											
EMC	According to EN 60947-5-2											
Switching output	NPN											
	PNP											
Output function	Normally open											
	Normally closed											
Connection type	Connector, M12, 4-pin											
	Cable, PVC/PUR, 2 m											
Enclosure rating	IP 67 ⁴⁾											
Max. switching frequency	1,000 Hz											
Dimensions	M12 x 1 ⁵⁾											
Wire-break protection	✓											
Short-circuit protection	✓ ⁶⁾											
Reverse polarity protection	✓											
Power-up pulse suppression	✓											
Shock/vibration stress	30 g, 11 ms/10 ... 55 Hz, 1 mm											
Ambient temperature operation	-25 °C ... +75 °C											
Housing material	Brass nickel-plated, plastic											
Tightening torque	25 Nm											

1) At I_a max
 2) Without load
 3) Of s_r
 4) According to EN 60529
 5) Thread diameter x pitch (mm)
 6) (pulsed)

Max. sensing ranges (typical values)

Magnet type	Max. sensing range s_n Any sensor installation version (flush or non-flush) in non-magnetizable material	Max. sensing range s_n Flush sensor installation in magnetizable material (e.g. iron)
MAG-1003-S (M 1.0)	23 mm	17 mm
MAG-0625-A (M 2.0)	24 mm	14 mm
MAG-2006-B (M 3.0)	36 mm	23 mm
MAG-3010-B (M 4.0)	60 mm	37 mm
MAG-3015-B (M 5.0)	68 mm	44 mm
MAG-3315-B (M 5.1)		

Order information	
Type	Order no.
MM12-60ANS-ZCK	1040071
MM12-60ANS-ZUK	1040026
MM12-60APO-ZUK	1040065
MM12-60APS-ZCK	1040070
MM12-60APS-ZUK	1040069

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