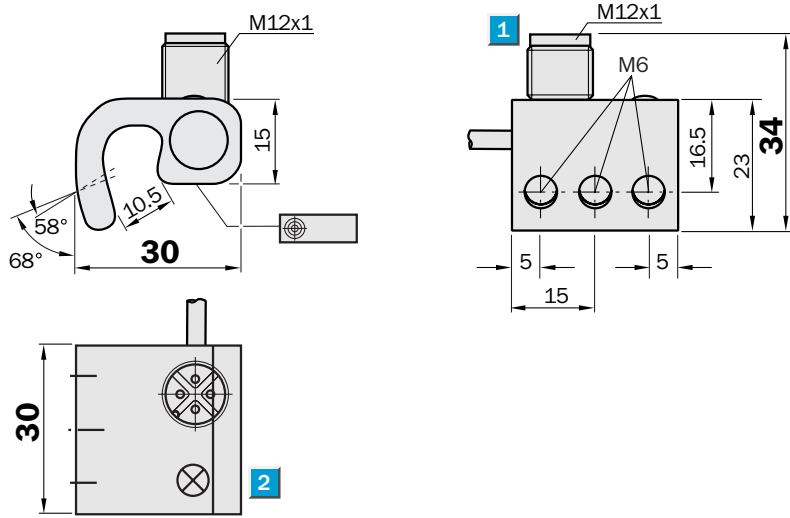
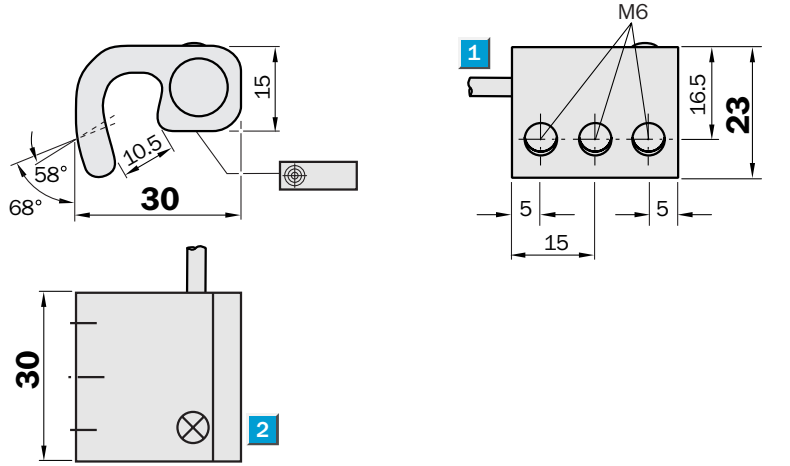


for tie-rod cylinders
Magnetic cylinder sensor

- Tie-rod mounting for max. rod diameter of 10 mm
- High repeat accuracy
- Solid aluminium housing with integrated mounting
- Cable or connector
- LED status indicator

Dimensional drawing



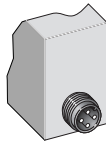
- 1 Connection
- 2 Display LED



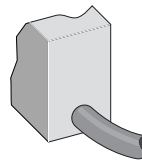
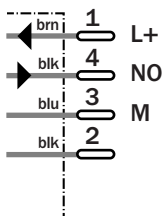
Connection type

MZZ1-03VNS-ACO
MZZ1-03VPS-ACO

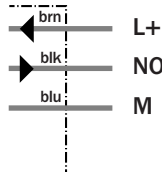
MZZ1-03VPS-AUO



M12, 4-pin



3 x 0.25 mm²



See chapter Accessories
Connector, M12, 4-pin

Technical data		MZZ1-	03VNS-ACO	03VPS-ACO	03VPS-AUO						
Sensing face	Front										
Electrical configuration	DC 3-wire										
Supply voltage V_s	DC 10 ... 30 V										
Response sensitivity	3 mT										
Residual ripple V_{pp}	$\leq 10\%$ ¹⁾										
Voltage drop V_d	$\leq 1.5\text{ V}$ ²⁾										
Power consumption	$\leq 10\text{ mA}$ ³⁾										
Continuous current I_a	$\leq 300\text{ mA}$										
Time delay before availability t_v	$\leq 2\text{ ms}$										
Hysteresis H, of s_r	$\leq 1\text{ mm}$										
Repeatability R	$\leq 0.1\text{ mm}$ (U_b and T_a constant)										
EMC	According to EN 60947-5-2										
Switching output	PNP										
	NPN										
Output function	Normally open										
Connection type	Cable, PVC/PUR, 2 m										
	Connector, M12, 4-pin										
Enclosure rating	IP 67 ⁴⁾										
Max. switching frequency	5,000 Hz										
Wire-break protection	✓										
Short circuit protection	✓ ⁵⁾										
Reverse polarity protection	✓										
Power-up pulse suppression	✓										
Shock/vibration stress	30 g, 11 ms / 10 ... 55 Hz, 1 mm										
Ambient operating temperature T_a	-25 °C ... +75 °C										
Housing material	Aluminium, plastic										

¹⁾ of U_b ²⁾ at I_a max³⁾ without load⁴⁾ according to EN 60 529⁵⁾ (pulsed)**Order information**

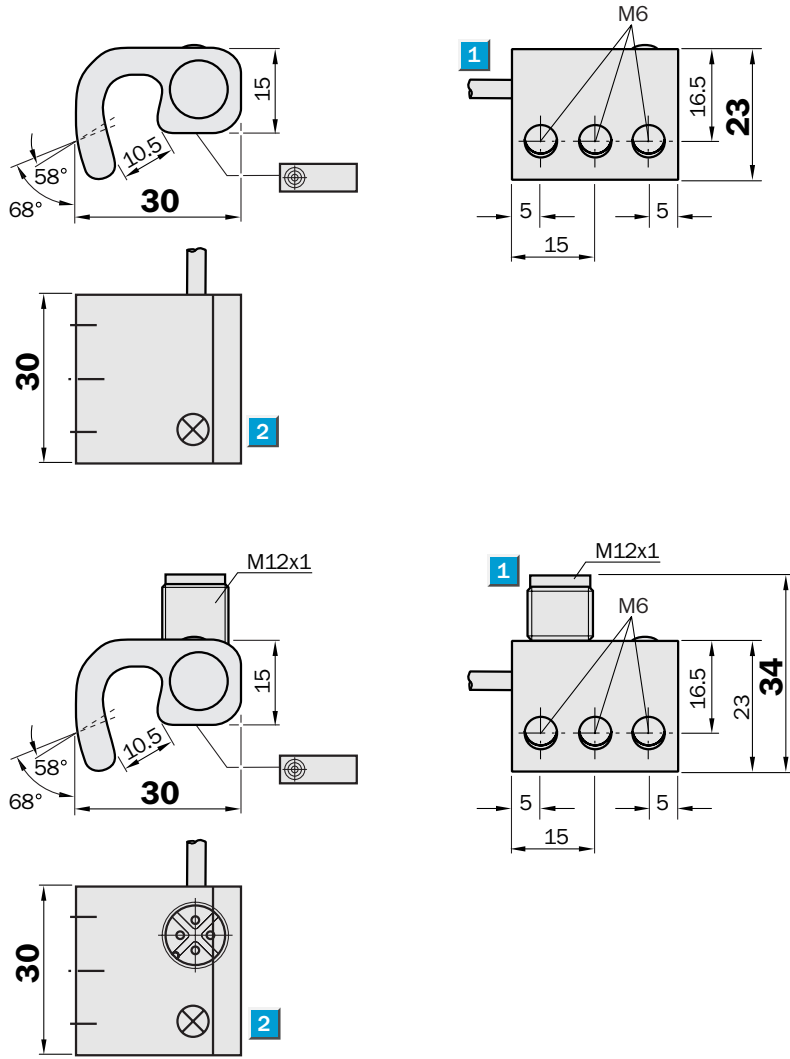
Type	Order no.
MZZ1-03VNS-ACO	7 900 609
MZZ1-03VPS-ACO	7 900 608
MZZ1-03VPS-AUO	7 900 606

for tie-rod cylinders
Magnetic cylinder sensor

- Mounting of tie-rods with max. rod diameter of 10 mm
- NAMUR to EN 60 947-5-6
- High repeat accuracy
- Solid aluminium construction with integrated mounting claw
- Classification TÜV 99 ATEX 1398
Ex II 2G EEx ib IIC T6
- LED status indicator



Dimensional drawing



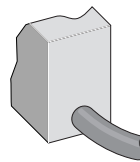
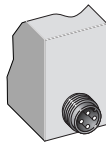
- 1 Connection
- 2 Display LED



Connection type

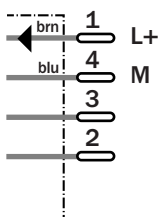
MZZ1-03V-N-ACO

MZZ1-03V-N-AWO



M12, 4-pin

2 x 0.34 mm²



See chapter Accessories

Connector, M12, 4-pin

Switching units

Technical data		MZZ1-03V-	N-ACO	N-AWO										
Sensing face	Front													
Electrical configuration	NAMUR 2-wire													
Supply voltage V_s	DC 5 ... 25 V													
Nominal voltage V_n	DC 8.2 V													
Response sensitivity	≤ 3 mT													
Residual ripple V_{pp}	$\leq 5\%$ ¹⁾													
Power consumption, attenuated	≥ 2.5 mA													
Power consumption, unattenuated	≤ 1 mA													
Internal capacitance	≤ 15 nF													
Internal inductance	≤ 25 μ H													
Cable resistance	≤ 50 Ohm													
Time delay before availability t_v	≤ 2 ms													
Hysteresis H, of s_r	≤ 1 mm													
Repeatability R	≤ 0.1 mm (U_b and T_a constant)													
Temperature drift, of s_r	$\pm 0,0005$ mm / °C													
EMC	Accroding to EN 60 947-5-6													
Switching output	Control current dependent on switching ²⁾													
Output function	NAMUR													
Connection type	Cable, PVC, 2 m													
	Connector, M12, 4-pin													
Enclosure rating	IP 67 ³⁾													
Max. switching frequency	5,000 Hz													
Short-circuit protected	✓													
Reverse polarity protected	✓													
Shock/vibration stress	30 g, 11 ms / 10 ... 55 Hz, 1 mm													
Ambient operating temperature T_a	-25 °C ... +70 °C													
Housing material	Aluminium, plastic													

¹⁾ of U_b ²⁾ according to EN 60 947-5-6³⁾ according to EN 60 529

Max. data for connecting isolating unit EN 2 Ex

or other approved isolating amplifier:

Short circuit current I_{Kmax}	30 mA
No load voltage U_0	16 V
Power loss P_{max}	75 mW

Order information

Type	Order no.
MZZ1-03V-N-ACO	7 901 324
MZZ1-03V-N-AWO	7 901 323