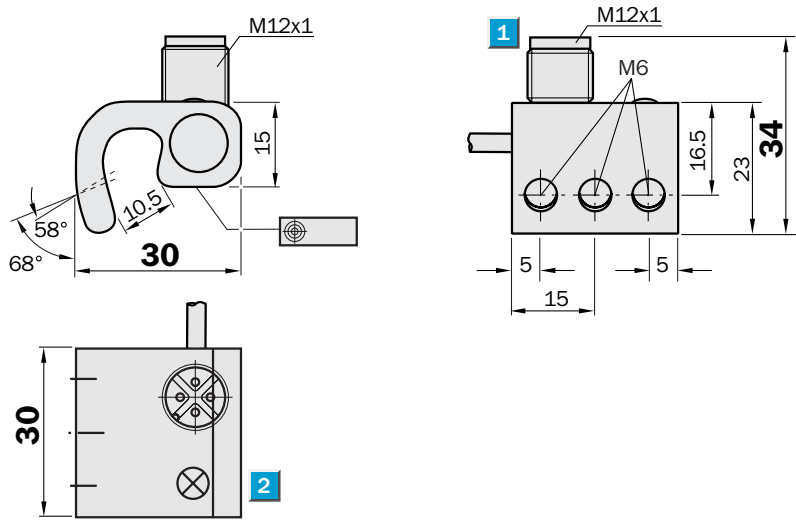
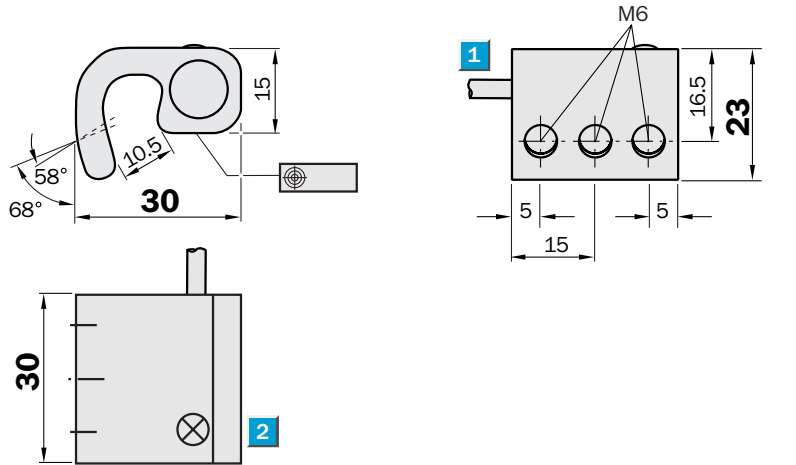


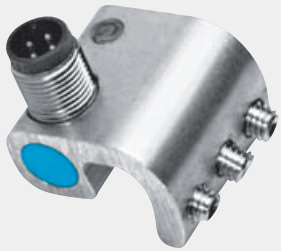
**for tie-rod cylinders**  
Magnetic cylinder sensor

- 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



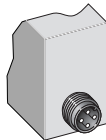
- 1 Connection
- 2 Display LED



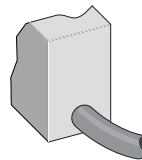
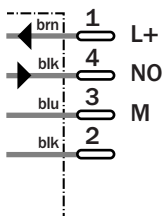
Connection type

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

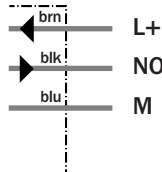
MZZ1-03VPS-AUO



M12, 4-pin



3 x 0.25 mm<sup>2</sup>



See chapter Accessories

Connector, M12, 4-pin

Technical data		MZZ1-	03VNS -ACO	03VPS -ACO	03VPS -AU0						
Sensing face	Front										
<b>Electrical configuration</b>	DC 3-wire										
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V										
Response sensitivity	3 mT										
Residual ripple $V_{pp}$	$\leq 10\%$ <sup>1)</sup>										
Voltage drop $V_d$	$\leq 1.5\text{ V}$ <sup>2)</sup>										
Power consumption	$\leq 10\text{ mA}$ <sup>3)</sup>										
<b>Continuous current <math>I_a</math></b>	$\leq 300\text{ mA}$										
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										
<b>Switching output</b>	PNP										
	NPN										
<b>Output function</b>	Normally open										
<b>Connection type</b>	Cable, PVC/PUR, 2 m										
	Connector, M12, 4-pin										
Enclosure rating	IP 67 <sup>4)</sup>										
Max. switching frequency	5,000 Hz										
<b>Wire-break protection</b>	✓										
<b>Short circuit protection</b>	✓ <sup>5)</sup>										
<b>Reverse polarity protection</b>	✓										
<b>Power-up pulse suppression</b>	✓										
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										

<sup>1)</sup> of  $U_b$ <sup>2)</sup> at  $I_a$  max<sup>3)</sup> without load<sup>4)</sup> according to EN 60 529<sup>5)</sup> (pulsed)**Order information**

Type	Order no.
MZZ1-03VNS-ACO	7 900 609
MZZ1-03VPS-ACO	7 900 608
MZZ1-03VPS-AU0	7 900 606