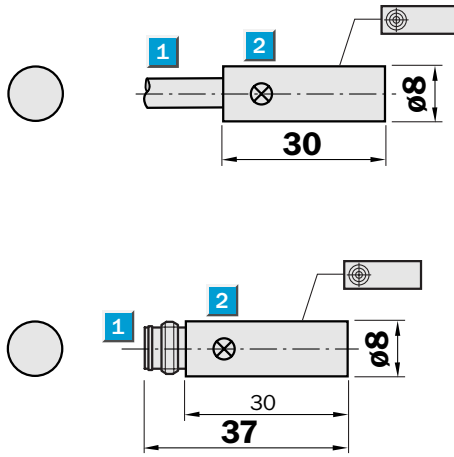


**for round-body cylinders**  
Magnetic cylinder sensor

- Mounting on round-body cylinders Ø 8 ... 63 mm using R1 mounting clamp
- High repeat accuracy
- Solid aluminium housing
- Cable or connector
- LED status indicator

Dimensional drawing



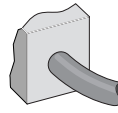
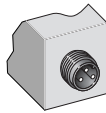
- 1 Connection
- 2 Display LED



Connection type

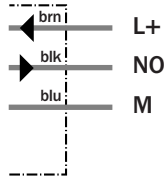
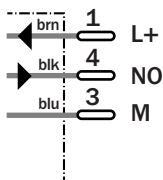
MZR1-03VNS-ATO  
MZR1-03VPS-ATO

MZR1-03VNS-AUO  
MZR1-03VPS-AUO



M8, 3-pin

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



See chapter Accessories

Connector, M8, 3-pin

Mounting systems

Technical data		MZR1-	03VNS-ATO	03VNS-AUO	03VPS-ATO	03VPS-AUO						
Sensing face	Front											
<b>Electrical configuration</b>	DC 3-wire <sup>1)</sup>											
<b>Supply voltage V<sub>s</sub></b>	DC 10 ... 30 V											
Response sensitivity	3 mT											
Residual ripple V <sub>pp</sub>	≤ 10 % <sup>2)</sup>											
Voltage drop V <sub>d</sub>	≤ 1.5 V <sup>3)</sup>											
Power consumption	≤ 10 mA <sup>4)</sup>											
<b>Continuous current I<sub>a</sub></b>	≤ 300 mA											
Time delay before availability t <sub>v</sub>	≤ 2 ms											
Hysteresis H, of s <sub>r</sub>	≤ 1 mm											
Repeatability R	≤ 0.1 mm (U <sub>b</sub> and T <sub>a</sub> 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, M8, 3-pin											
Enclosure rating	IP 67 <sup>5)</sup>											
Max. switching frequency	5,000 Hz											
<b>Wire-break protection</b>	✓											
<b>Short circuit protection</b>	✓ <sup>6)</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 <sub>a</sub>	-25 °C ... +75 °C											
Housing material	Aluminium, plastic											

<sup>1)</sup> series available as reed switch on request

<sup>2)</sup> of U<sub>b</sub>

<sup>3)</sup> at I<sub>a</sub> max

<sup>4)</sup> without load

<sup>5)</sup> according to EN 60 529

<sup>6)</sup> (pulsed)

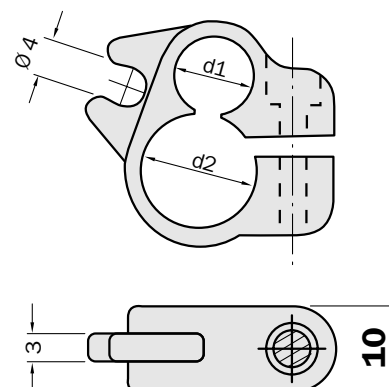
#### Accessories:

##### Mounting clamp

Plastic, with d1

Ø 8 mm

For cylinders with piston diameter	Clamping range d2 in mm	Type	Order no.
8 mm	9.2 ... 10.0	BEF-S-R1-08	7 902 337
10 mm	10.9 ... 12.0	BEF-S-R1-10	7 901 753
12 mm	12.9 ... 14.0	BEF-S-R1-12	7 901 754
16 mm	16.9 ... 18.0	BEF-S-R1-16	7 901 755
20 mm	21.0 ... 22.0	BEF-S-R1-20	7 901 756
25 mm	26.1 ... 27.2	BEF-S-R1-25	7 901 757
32 mm	33.0 ... 35.0	BEF-S-R1-32	7 901 758
40 mm	41.4 ... 42.5	BEF-S-R1-40	7 901 759
50 mm	52.5 ... 54.0	BEF-S-R1-50	7 901 760
63 mm	66.0 ... 67.0	BEF-S-R1-63	7 901 761



#### Order information

Type	Order no.
MZR1-03VNS-ATO	7 900 595
MZR1-03VNS-AUO	7 900 593
MZR1-03VPS-ATO	7 900 594
MZR1-03VPS-AUO	7 900 592