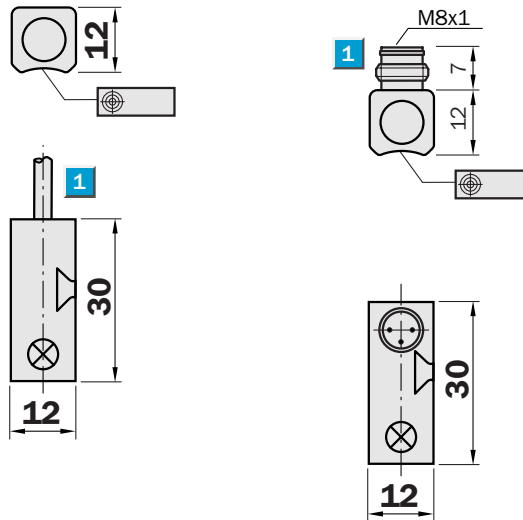




- Universal mounting using clamping band for max. cylinder diameter of 100 mm
- High repeat accuracy
- Solid aluminium housing
- Cable or connector
- LED status indicator

Dimensional drawing



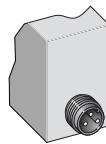
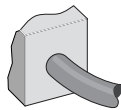
1 Connection



Connection type

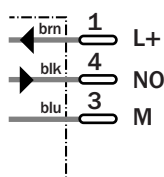
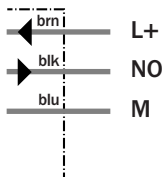
MZR2-03VNS-AU0  
MZR2-03VPS-AU0

MZR2-03VNS-ATO  
MZR2-03-VPS-ATO



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

M8, 3-pin



See chapter Accessories  
Connector, M8, 3-pin  
Mounting systems

Technical data		MZR2-	03VNS-ATO	03VNS-AUO	03VPS-ATO	03VPS-AUO						
Sensing face	Front											
<b>Electrical configuration</b>	DC 3-wire											
<b>Supply voltage <math>V_s</math></b>	DC 10 ... 30 V											
Response sensitivity	$\leq 3$ mT											
Residual ripple $V_{pp}$	$\leq 10$ % <sup>1)</sup>											
Voltage drop $V_d$	$\leq 1.5$ V <sup>2)</sup>											
Power consumption	$\leq 10$ mA <sup>3)</sup>											
<b>Continuous current <math>I_a</math></b>	$\leq 300$ mA											
Time delay before availability $t_v$	$\leq 2$ ms											
Hysteresis H, of $s_r$	$\leq 1$ mm											
Repeatability R	$\leq 0.1$ 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, PUR-PVC, 2 m											
	Connector, M8, 3-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											

1) of  $U_b$ 2) at  $I_a$  max

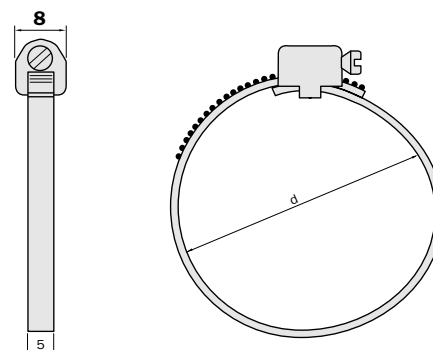
3) without load

4) according to EN 60 529

5) (pulsed)

**Accessories:****Clamping band, stainless steel**

For cylinder range with piston diameter	Clamping range d in mm	Type	Order no.
8 ... 16 mm	18 ... 29	BEF-S-R2-16	7 901 762
20 / 25 mm	28 ... 39	BEF-S-R2-25	7 901 763
32 mm	38 ... 49	BEF-S-R2-30	7 901 764
40 mm	48 ... 59	BEF-S-R2-40	7 901 765
50 mm	58 ... 69	BEF-S-R2-50	7 901 766
63 mm	68 ... 79	BEF-S-R2-63	7 901 767
80 mm	88 ... 99	BEF-S-R2-80	7 901 768
100 mm	98 ... 109	BEF-S-R2-100	7 901 769

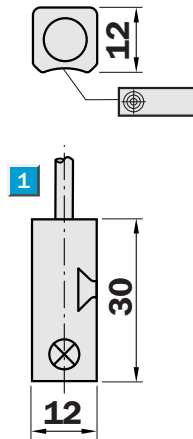
**Order information**

Type	Order no.
MZR2-03VNS-ATO	7 900 601
MZR2-03VNS-AUO	7 900 599
MZR2-03VPS-ATO	7 900 600
MZR2-03VPS-AUO	7 900 598



- Universal mounting with clamping band for max. cylinder diameter of 100 mm
- NAMUR to EN 60 947-5-6
- High repeat accuracy
- Solid aluminium housing
- Classification TÜV 99 ATEX 1398  
Ex II 2G EEx ib IIC T6
- LED status indicator

**Dimensional drawing**

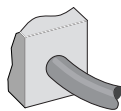


1 Connection

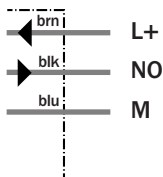


**Connection type**

MZR2-03V-N-AW0



2 x 0.34 mm<sup>2</sup>



**See chapter Accessories**

Mounting systems

Switching units

Technical data		MZR2-03V-	N-AW0										
Sensing face	Front												
<b>Electrical configuration</b>	NAMUR 2-wire												
<b>Supply voltage <math>V_s</math></b>	DC 5 ... 25 V												
Nominal voltage $V_n$	DC 8.2 V												
Response sensitivity	$\leq 3$ mT												
Residual ripple $V_{pp}$	$\leq 5\%$ <sup>1)</sup>												
Power consumption, attenuated	$\geq 2.5$ mA												
Power consumption, unattenuated	$\leq 1$ mA												
Internal capacitance	$\leq 15$ nF												
Internal inductance	$\leq 25$ $\mu$ H												
Cable resistance	$\leq 50$ Ohm												
Time delay before availability $t_v$	$\leq 2$ ms												
Hysteresis H, of $s_r$	$\leq 1$ mm												
Repeatability R	$\leq 0.1$ 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												
<b>Switching output</b>	Control current dependent on switching <sup>2)</sup>												
<b>Output function</b>	NAMUR												
<b>Connection type</b>	Cable, PVC, 2 m												
Enclosure rating	IP 67 <sup>3)</sup>												
Max. switching frequency	5,000 Hz												
<b>Short-circuit protected</b>	✓												
<b>Reverse polarity protected</b>	✓												
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												

<sup>1)</sup> of  $U_b$ <sup>2)</sup> according to EN 60 947-5-6<sup>3)</sup> according to EN 60 529

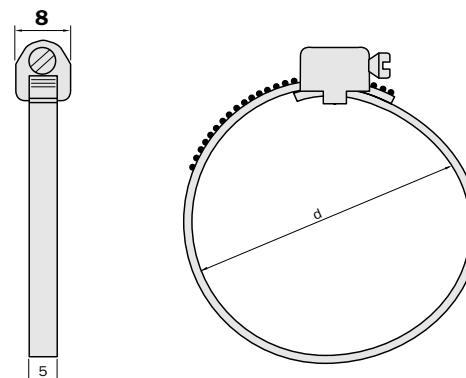
Max. data for connecting isolating unit EN 2 Ex

or other approved isolating amplifier:

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

**Clamping band,  
stainless steel**

For cylinder range with piston dimeter	Clamping range d in mm	Type	Order no.
8 ... 16 mm	18 ... 29	BEF-S-R2-16	7 901 762
20 / 25 mm	28 ... 39	BEF-S-R2-25	7 901 763
32 mm	38 ... 49	BEF-S-R2-30	7 901 764
40 mm	48 ... 59	BEF-S-R2-40	7 901 765
50 mm	58 ... 69	BEF-S-R2-50	7 901 766
63 mm	68 ... 79	BEF-S-R2-63	7 901 767
80 mm	88 ... 99	BEF-S-R2-80	7 901 768
100 mm	98 ... 109	BEF-S-R2-100	7 901 769

**Order information**

<b>Type</b>	<b>Order no.</b>
MZR2-03V-N-AW0	7 901 321