

Datasheet - EX-BN 20-RZ-3G/D

Magnetic reed switch / EX-BN 20



(Minor differences between the printed image and the original product may exist!)

- Aluminium enclosure
- Long life
- 104 mm x 52 mm x 47 mm
- Non-contact principle
- 1 Reed kontakts
- Actuating distance up to 50 mm depending on actuating magnet and version
- Screw connection
- Ex certified

Ordering details

Product type description	EX-BN 20-RZ-3G/D
Article number	101182505
EAN Code	4030661332659
eCl@ss	27-27-01-04

Approval

Approval



Global Properties

Permanent light	EX-BN 20
Standards	EN 60079-0, EN 60079-15, EN 60079-31
Compliance with the Directives (Y/N)	Yes
Active principle	Magnetic drive
Materials	
- Material of the housings	light alloy die-casting, painted
- Material of the active surface	Metal film
Housing construction form	rectangular
Weight	305
Recommended actuator	BP 10 N, BP 10 S, 2 x BP 10 N, 2 x BP 10 S, BP 15 N, 2 x BP 15/2, BP 15/2 N, BP 34 N, BP 34 S, BP 20, BP 20 N, BP 20 S, BP 31 N, BP 31 S, BP 11 N, BP 11 S, 2 x BP 11 N, 2 x BP 12 S, BP 21 N, BP 21 S, 2 x BP 21 N, 2 x BP 21 S, BE 20 N(S) ST 24VDC, BE 20 N(S) 48VDC

Mechanical data

Design of electrical connection	Screw connection
Cable cross-section of the cable glands	
- Min. Cable cross-section of the cable glands	Ø 6
- Max. Cable cross-section of the cable glands	Ø 10

Mechanical life	1.000.000.000 operations
Electrical lifetime	1.000.000 ... 1.000.000.000 operations
Actuating planes	Actuation from side
Active area	lateral
Switch distance S _n	12 mm ... 50 mm
- notice	Actuating distance up to 50 mm depending on actuating magnet and version
Type of actuation	Magnet
resistance to shock	30 g / 11 ms
resistant to vibration	50 g, on sine wave oscillation
Resistance to vibration	10 ... 55 HZ, Amplitude 1 mm
Bounce duration	0,3 ... 0,6
Latching (Y/N)	Yes
Impact energy	max. 4 J
bias magnet (Y/N)	Yes
Actuating speed	max. 18 m/s
Switching point accuracy	± 0,25 mm

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-15
- Max. environmental temperature	+70
Storage and transport temperature	
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+70
Protection class	IP67

Electrical data

Design of control element	bistable contact
Number of snap-in contacts	1
Switching time - Close	0,3 - 1.5
Switching time - Open	max. 0,5 ms
Voltage type	AC, alternating current
Switch frequency	
Dielectric strength	> 600 VAC (50 HZ)
Switching voltage	max. 250 VAC/DC
Switching current	max. 3 A
Switching capacity	max. 120 VA / W
Interference resistance to magnetic fields	

Outputs

Design of control output	Reed kontakts
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LED switching conditions display

LED switching conditions display (Y/N)	No
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ATEX

EX-marking	EX II 3G Ex nC IIC T5 Gc X EX II 3D Ex tc IIIC T90°C Dc X
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Explosion protection categories for gases	ATEX gas ex-protection, Cat. 3
Explosion protection Zones for gases	2
Explosion protected category for dusts	ATEX dust ex-protection, Cat. 3
Explosion protection Zones for dusts	22

Dimensions

Dimensions of the sensor

- Width of sensor	104
- Height of sensor	52
- Length of sensor	47

notice

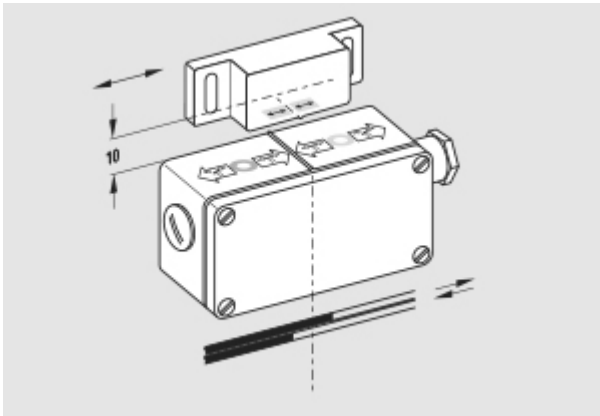
The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets. When the switches and actuators come together, the colours must coincide: Red (S) to red (S) and green (N) to green (N).

Included in delivery

Actuators must be ordered separately.

Ex-certified screwed cable gland

Diagram



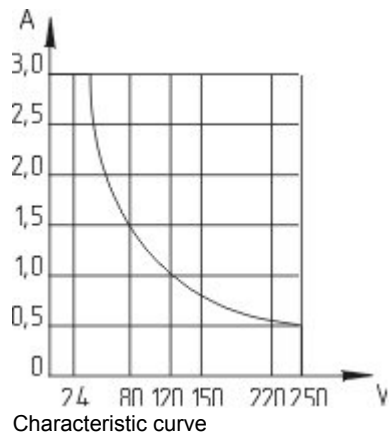
Note Diagram

- positive break NC contact
- active
- no active
- Normally-open contact
- Normally-closed contact

Ordering code

EX-BN 20-(1)Z-3G/D

(1)	
01	1 Opener (NC)
02	2 Opener (NC)
10	1 Normally open contact (NO)
20	2 Normally open contact (NO)
11	1 Opener (NC) / 1 Normally open contact (NO)
R	1 bistable contact



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The data and values have been checked thoroughly. Technical modifications and errors excepted.
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