



## EX-BN 20-10Z-3G/D

- 1 Reed contacts
- Explosion protection for ATEX Zones 2 and 22
- Aluminium enclosure
- 104 mm x 52 mm x 47 mm
- Actuating distance up to 50 mm depending on actuating magnet and version
- Non-contact principle
- Screw connection



## Data

### Ordering data

Product type description	EX-BN 20-10Z-3G/D
Article number (order number)	101189041
EAN (European Article Number)	4030661345871
eCl@ss number, version 12.0	27-27-43-02
eCl@ss number, version 11.0	27-27-01-05
eCl@ss number, version 9.0	27-27-01-05
ETIM number, version 7.0	EC002544
ETIM number, version 6.0	EC002544

### Explosion protection

Explosion protection: regulations	EN IEC 60079-0 EN IEC 60079-15 EN 60079-31
Explosion protection zones	2 22
Explosion protection category	3G 3D

Explosion protection designation	 II 3G Ex nC IIC T5 Gc X  II 3D Ex tc IIIC T90°C Dc X
Manufacturer declaration	ATEX Zone 2 and 22

## General data

Working principle	Magnetic drive
Housing construction form	rectangular
Housing material	Light-alloy diecast, paint finish
Active area	Metal film
Gross weight	315 g

## General data - Features

bias magnet	Yes
Number of normally open (NO)	1

## Mechanical data

Actuating panels	lateral
Active area	lateral
Actuating element	Magnet
Mechanical life, minimum	1,000,000,000 Operations
Impact energy, maximum	4 J
Actuating speed, maximum	18 m/s

## Mechanical data - Switching distances according EN IEC 60947-5-3

Switching distance $S_n$	12 mm ... 45 mm
Note (Switching distance $S_n$ )	Actuating distance up to 45 mm depending on version and actuating magnet
Repeat accuracy R	0.3 mm

## Mechanical data - Connection technique

Termination	Screw terminals M20 x 1.5
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Cable cross-section of the cable glands, minimum	6 mm
Cable cross-section of the cable glands, maximum	10 mm

## Mechanical data - Dimensions

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

## Ambient conditions

Degree of protection	IP67
Ambient temperature	-15 ... +70 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+70 °C
Resistance to vibrations	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms
Resistant to vibration	50 g, on sine wave oscillation

## Electrical data

Switching voltage, maximum	250 VAC
Switching voltage, maximum	250 VDC
Switching current, maximum	3 A
Switching capacity, maximum	120 W
Switching capacity, maximum	120 VA
Switching element	Normally open contact (NO)
Bounce duration, minimum	0.3 ms
Bounce duration, maximum	0.6 ms

## Electrical data - Digital Output

Design of control elements      Reed contacts

## Scope of delivery

Scope of delivery      Actuator must be ordered separately.  
Ex-certified screwed cable gland

## Accessory

Recommendation (actuator)      2x BP 10  
2x BP 15/2  
BP 20  
BP 31  
BP 11  
BP 12  
BP 21  
BE 20

## Note

Note (General)      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).

## Ordering code

Product type description:  
EX-BN 20-(1)Z-3G/D

(1)

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<b>01</b>	1 NC contact
<b>02</b>	2 NC contact
<b>10</b>	1 NO contact
<b>20</b>	2 NO contacts
<b>11</b>	1 NC contacts / 1 NO contact
<b>R</b>	1 bistable contact
<b>2R</b>	2 bistable contact

## Pictures

### Product picture (catalogue individual photo)



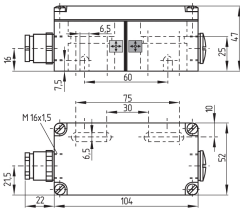
ID: kexbnf01

| 507.1 kB | .jpg | 352.778 x 181.328 mm - 1000 x 514 px - 72 dpi

| 35.7 kB | .png | 74.083 x 38.1 mm - 210 x 108 px - 72 dpi

| 68.9 kB | .jpg | 123.472 x 63.5 mm - 350 x 180 px - 72 dpi

### Dimensional drawing basic component



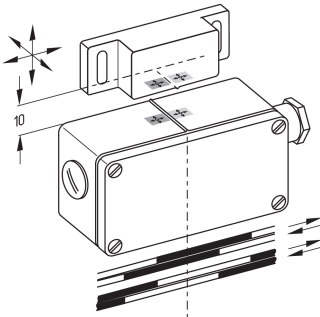
ID: 1bn20g03

| 33.4 kB | .cdr |

| 10.8 kB | .png | 74.083 x 51.858 mm - 210 x 147 px - 72 dpi

| 127.3 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 px - 72 dpi

### Diagram



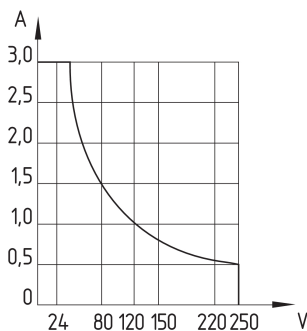
ID: 1bn20k01

| 66.1 kB | .cdr |

| 187.4 kB | .jpg | 352.778 x 349.25 mm - 1000 x 990 px - 72 dpi

| 18.5 kB | .png | 74.083 x 73.378 mm - 210 x 208 px - 72 dpi

### Characteristic curve



ID: kbn32d01

| 110.5 kB | .jpg | 352.425 x 371.828 mm - 999 x 1054 px - 72 dpi

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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