

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



- 2 reed contacts
- Ex-Zone 2 and 22
- Screw connection
- Aluminium enclosure
- Non-contact principle
- 104 mm x 52 mm x 47 mm
- Actuating distance up to 50 mm depending on actuating magnet and version

### Data

#### Ordering data

|                               |                   |
|-------------------------------|-------------------|
|                               | EX-BN 20-20Z-3G/D |
|                               | 101194601         |
| EAN (European Article Number) | 4030661359007     |
| eCl@ss number, Version 9.0    | 27-27-01-05       |

#### Explosion protection

|                          |                               |
|--------------------------|-------------------------------|
|                          | EN 60079-0                    |
|                          | EN 60079-15                   |
|                          | EN 60079-31                   |
|                          | 22                            |
|                          | 2                             |
|                          | 3D                            |
|                          | 3G                            |
|                          | ⊕ 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

|                           |                                   |
|---------------------------|-----------------------------------|
|                           | EX-BN 20                          |
| Active principle          | Magnetic drive                    |
| Housing construction form | rectangular                       |
| Enclosure material        | Light-alloy diecast, paint finish |
| Active area               | Metal film                        |

|              |       |
|--------------|-------|
| Gross weight | 326 g |
|--------------|-------|

#### General data - Features

|                    |     |
|--------------------|-----|
| bias magnet        | Yes |
| Number of shutters | 2   |

#### Mechanical data

|                                 |                                                                          |
|---------------------------------|--------------------------------------------------------------------------|
| Actuating panels                | lateral                                                                  |
| Active area                     | lateral                                                                  |
| Actuating element               | Magnet                                                                   |
| Mechanical life, minimum        | 1,000,000,000 Operations                                                 |
|                                 | 12 mm ... 45 mm                                                          |
| Notice (Switch distance $S_n$ ) | Actuating distance up to 45 mm depending on version and actuating magnet |
| Repeat accuracy R R             | 0.3 mm                                                                   |
| Impact energy, maximum          | 4 J                                                                      |
| Actuating speed, maximum        | 18 m/s                                                                   |

#### Mechanical data - Connection technique

|                                                  |                  |
|--------------------------------------------------|------------------|
| Terminal Connector                               | Screw connection |
| Cable cross-section of the cable glands, minimum | 6 mm             |
| Cable cross-section of the cable glands, maximum | 10 mm            |

#### Mechanical data - Dimensions

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

#### Ambient conditions

|                                            |                                |
|--------------------------------------------|--------------------------------|
|                                            | IP67                           |
| Ambient temperature, minimum               | -15 °C                         |
| Ambient temperature, maximum               | +70 °C                         |
| Storage and transport temperature, minimum | -25 °C                         |
| Storage and transport temperature, maximum | +70 °C                         |
| Resistance to vibrations to EN 60068-2-6   | 10 ... 55 Hz, amplitude 1 mm   |
|                                            | 30 g / 11 ms                   |
| Resistant to vibration                     | 50 g, on sine wave oscillation |

## Electrical data

|                             |                            |
|-----------------------------|----------------------------|
| Voltage type                | AC (alternating current)   |
| 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

|          |               |
|----------|---------------|
| Versions | Reed contacts |
|----------|---------------|

## Scope of delivery

|                      |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| Included in delivery | Actuators must be ordered separately.<br>Ex-certified screwed cable gland |
|----------------------|---------------------------------------------------------------------------|

## Accessory

2x BP 10  
2x BP 15/2  
BP 20  
BP 31  
BP 11  
BP 12  
BP 21  
BE 20

## Notes

|                |                                                                                                                                                                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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)

**01** 1 NC contact

- 02** 2 NC contact
- 10** 1 NO contact
- 20** 2 NO contacts
- 11** 1 NC contacts / 1 NO contact
- R** 1 bistable contact
- 2R** 2 bistable contact
- 11R** 2 bistable contact NC / NO

Pictures

Photo/Product/Catalogue

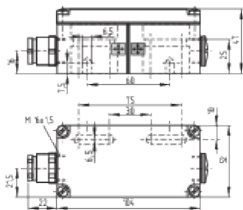


ID: kexbnf01

| 507,1 kB | .jpg | 352.778 x 181.328 mm - 1000 x 514 Pixel - 72 dpi

| 35,7 kB | .png | 74.083 x 38.1 mm - 210 x 108 Pixel - 72 dpi

Dimension/Product/Basic



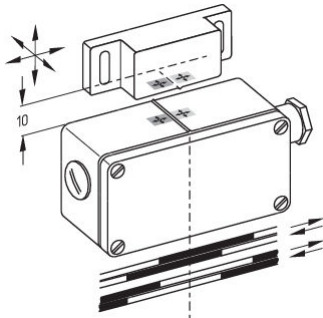
ID: 1bn20g03

| 10,8 kB | .png | 74.083 x 51.858 mm - 210 x 147 Pixel - 72 dpi

| 127,3 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 Pixel - 72 dpi

| 33,4 kB | .cdr |

Graphic/Product/Contact

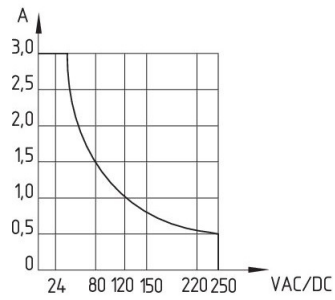


ID: 1bn20k01

| 66,1 kB | .cdr |

| 187,4 kB | .jpg | 352.778 x 349.25 mm - 1000 x 990 Pixel - 72 dpi

Diagramm/Product/Curve



ID: kbn32d01

| 110,5 kB | .jpg | 352.425 x 371.828 mm - 999 x 1054  
Pixel - 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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