



## EX-BNS 250-12Z-2187-3GD 35M

- Explosion protection for ATEX Zones 2 and 22
- Thermoplastic enclosure
- Insensitive to transverse misalignment
- no mechanical wear
- 64 mm x 29.5 mm x 15.5 mm (incl. protective enclosure)

## Data

### Ordering data

|                               |                             |
|-------------------------------|-----------------------------|
| Product type description      | EX-BNS 250-12Z-2187-3GD 35M |
| Article number (order number) | 103045527                   |
| EAN (European Article Number) | 4030661565156               |
| eCl@ss number, version 11.0   | 27-27-24-02                 |
| eCl@ss number, version 9.0    | 27-27-24-02                 |
| ETIM number, version 6.0      | EC002544                    |

### Explosion protection

|                                   |                                                        |
|-----------------------------------|--------------------------------------------------------|
| Explosion protection: regulations | EN IEC 60079-0<br>EN IEC 60079-15<br>EN 60079-31       |
| Explosion protection zones        | 2<br>22                                                |
| Explosion protection category     | 3G<br>3D                                               |
| Explosion protection designation  | II 3G Ex nC IIC T6 Gc X<br>II 3D Ex tc IIIC T80°C Dc X |
| Manufacturer declaration          | ATEX Zone 2 and 22                                     |

## General data

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| Housing construction form            | Block                                 |
| Installation conditions (mechanical) | not flush                             |
| Housing material                     | Glass-fibre, reinforced thermoplastic |

## General data - Features

|                                |     |
|--------------------------------|-----|
| Coding                         | Yes |
| Short circuit detection        | Yes |
| Cross-circuit detection        | Yes |
| Prerequisite evaluation unit   | Yes |
| Number of normally closed (NC) | 2   |
| Number of normally open (NO)   | 1   |
| Number of cable wires          | 6   |

## Safety classification

|              |                |
|--------------|----------------|
| Standards    | EN ISO 13849-1 |
| Mission time | 20 Year(s)     |

## Safety classification - Safety outputs

|                                                                                |                       |
|--------------------------------------------------------------------------------|-----------------------|
| B <sub>10D</sub> - Value Normally-closed contact/Normally open contact (NC/NO) | 25,000,000 Operations |
|--------------------------------------------------------------------------------|-----------------------|

## Mechanical data

|                        |                               |
|------------------------|-------------------------------|
| Actuating element      | Magnet                        |
| Impact energy, maximum | 7 J                           |
| Direction of motion    | Head-on to the active surface |

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

|                                                 |      |
|-------------------------------------------------|------|
| Assured switching distance "ON" S <sub>ao</sub> | 4 mm |
|-------------------------------------------------|------|

|                                           |       |
|-------------------------------------------|-------|
| Assured switching distance "OFF" $S_{ar}$ | 14 mm |
|-------------------------------------------|-------|

### Mechanical data - Connection technique

|                              |                      |
|------------------------------|----------------------|
| Termination                  | Cable                |
| Wire cross-section           | 0.25 mm <sup>2</sup> |
| Wire cross-section           | 23 AWG               |
| Material of the Cable mantle | PVC                  |

### Mechanical data - Dimensions

|                  |       |
|------------------|-------|
| Length of sensor | 13 mm |
| Width of sensor  | 33 mm |
| Height of sensor | 25 mm |

### Ambient conditions

|                                            |                              |
|--------------------------------------------|------------------------------|
| Degree of protection                       | IP67                         |
| Ambient temperature                        | -25 ... +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                 |

### Electrical data

|                              |        |
|------------------------------|--------|
| Switching voltage, maximum   | 24 VDC |
| Switching current, maximum   | 0.1 A  |
| Switching capacity, maximum  | 1 W    |
| Switching frequency, maximum | 5 Hz   |

### Electrical data - Digital Output

|                            |                              |
|----------------------------|------------------------------|
| Design of control elements | Miscellaneous, Reed contacts |
|----------------------------|------------------------------|

## Scope of delivery

Scope of delivery Actuator must be ordered separately.

## Accessory

|                               |                            |
|-------------------------------|----------------------------|
| Recommendation (actuator)     | EX-BPS 250-3G/D            |
| Recommended safety switchgear | SRB-E-301ST<br>SRB-E-201LC |

## Note

Note (General) Contact symbols shown for the closed condition of the guard device.  
The contact configuration for versions with or without LED is identical.

## Ordering code

Product type description:  
EX-BNS 250-(1)Z(2)-(3)3G/D

(1)

|           |                            |
|-----------|----------------------------|
| <b>11</b> | 1 NO contacts/1 NC contact |
| <b>12</b> | 1 NO contact/2 NC contacts |

(2)

|                |                                          |
|----------------|------------------------------------------|
| <b>without</b> | without LED switching conditions display |
| <b>G</b>       | with LED switching conditions display    |

(3)

|             |                                                                          |
|-------------|--------------------------------------------------------------------------|
| <b>2187</b> | Individual contact outlet (without LED switching conditions display LED) |
|-------------|--------------------------------------------------------------------------|

## Pictures

## Product picture (catalogue individual photo)



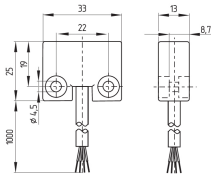
ID: kxbns2f01

| 241.8 kB | .jpg | 352.778 x 211.314 mm - 1000 x 599 px - 72 dpi

| 31.2 kB | .png | 74.083 x 44.45 mm - 210 x 126 px - 72 dpi

| 43.6 kB | .jpg | 123.472 x 74.083 mm - 350 x 210 px - 72 dpi

## Dimensional drawing basic component

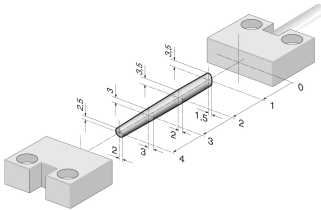


ID: 1bns2g01

| 8.7 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 68.6 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

## Characteristic curve



ID: kbns2a01

| 13.5 kB | .png | 74.083 x 47.625 mm - 210 x 135 px - 72 dpi

| 110.0 kB | .jpg | 352.778 x 227.189 mm - 1000 x 644 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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