



EX-BNS 180-12Z-2187-2-3G/D

- Explosion protection for ATEX Zones 2 and 22
- Thermoplastic enclosure
- Ø M18
- Particularly large switching distance
- Insensitive to transverse misalignment
- Suitable for food processing industry only in combination with BP 15 SS
- no mechanical wear

Data

Ordering data

| | |
|-------------------------------|---------------|
| EAN (European Article Number) | 4030661333328 |
| eCl@ss number, Version 9.0 | 27-27-24-02 |
| eCl@ss number, Version 11.0 | 27-27-24-02 |
| ETIM number, version 6.0 | EC002544 |
| ETIM number, version 7.0 | EC002544 |

Explosion protection

| | |
|-----------------------------------|---|
| Explosion protection: regulations | EN 60079-15 EN 60079-31 IEC 60079-0 |
| Explosion protection zones | 22 2 |
| Explosion protection category | 3D 3G |
| Explosion protection designation | <div> <div>⊕</div> <div>II 3G Ex nC IIC T6 Gc X</div> </div> <div> <div>⊕</div> <div>II 3D Ex tc IIIC T80°C Dc X</div> </div> |

General data

| | |
|--------------------------------------|---------------------------------------|
| Standards | IEC 60947-5-3 BG-GS-ET-14 |
| Housing construction form | Cylinder, thread |
| Installation conditions (mechanical) | quasi-flush |
| Enclosure material | Glass-fibre, reinforced thermoplastic |
| Gross weight | 46 g |

General data - Features

| | |
|---------------------------|-----|
| Short circuit detection | Yes |
| Short-circuit recognition | Yes |
| Number of openers | 2 |
| Number of shutters | 1 |
| Number of safety contacts | 2 |

Safety appraisal

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

Safety appraisal - Safety outputs

| | |
|---|-----------------------|
| B10d- Value Normally-closed contact/Normally open contact (NC/NO) | 25,000,000 Operations |
|---|-----------------------|

Mechanical data

| | |
|-------------------|------------|
| Active area | front side |
| Actuating element | Magnet |

| | |
|--------------------------|---------------------------------------|
| Actuator switch distance | Actuating magnet BP 15 SS, Sao: 18 mm |
| | Actuating magnet BP 10, Sao: 18 mm |
| | Actuating magnet BP 8, Sao: 8 mm |
| | Actuating magnet BP 6, Sao: 8 mm |
| | Actuating magnet BP 8, Sar: 20 mm |
| | Actuating magnet BP 15 SS, Sar: 28 mm |
| | Actuating magnet BP 10, Sar: 28 mm |
| | Actuating magnet BP 6, Sar: 20 mm |
| Impact energy, maximum | 2 J |
| Direction of motion | Head-on to the active surface |

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

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|--|-------|
| Ensured switch distance "ON" S_{ao} | 18 mm |
| | 8 mm |
| Ensured switch distance "OFF" S_{ar} | 22 mm |
| | 32 mm |

Mechanical data - Connection technique

| | |
|------------------------------|----------------------|
| Terminal Connector | Cable |
| Length of cable | 1 m |
| Wire cross-section | 0.25 mm ² |
| Wire cross-section | 23 AWG |
| Material of the Cable mantle | PVC |

Mechanical data - Dimensions

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|--------------------------|-------|
| ISO thread of the sensor | M18 |
| Length of sensor | 36 mm |

Ambient conditions

| | |
|------------------------------|--------|
| Degree of protection | IP67 |
| Ambient temperature, minimum | -25 °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 |
| Resistance to shock | 30 g / 11 ms |

Electrical data

| | |
|------------------------------|---|
| Voltage type | AC (alternating current) DC (direct current) |
| Switching voltage, maximum | 120 VAC |
| Switching voltage, maximum | 120 VDC |
| Switching current, maximum | 0.25 A |
| Switching capacity, maximum | 5 W |
| Switching frequency, maximum | 5 Hz |

Scope of delivery

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|----------------------|---------------------------------------|
| Included in delivery | Actuators must be ordered separately. |
|----------------------|---------------------------------------|

Accessory

| | |
|-------------------------------|-----------------------------------|
| Recommendation (actuator) | BP 10 BP 8 BP 6 BP 15 SS |
| Recommended safety switchgear | SRB-E-301ST SRB-E-201LC |

Notes

Note (General)

Contact symbols shown for the closed condition of the guard device.
The safety sensor must be mounted in such a way that actuation with another magnet is impossible (concealed mounting according to ISO 14119)

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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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