DATASHEET



EX-BNS 180-12Z-2187-2-3G/D 5,0M

- 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

Product type description	EX-BNS 180-12Z-2187-2-3G/D 5,0M
Article number (order number)	101192525
EAN (European Article Number)	4030661352657
eCl@ss number, version 11.0	27-27-24-02
eCl@ss number, version 9.0	27-27-24-02
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 T6 Gc X II 3D Ex tc IIIC T80°C Dc X

Manufacturer declaration	Additional simple electrical apparatus (Zone 0 and 20)

General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Housing construction form	Cylinder, thread
Installation conditions (mechanical)	quasi-flush
Housing material	Glass-fibre, reinforced thermoplastic
Gross weight	235 g

General data - Features

Short circuit detection	Yes
Cross-circuit detection	Yes
Number of normally closed (NC)	2
Number of normally open (NO)	1
Number of safety contacts	2
Number of cable wires	6

Safety classification

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

Safety classification - Safety outputs

B_{10D}- Value Normally-closed contact/Normally open contact (NC/NO)	25,000,000 Operations

Mechanical data

Active area	front side
Actuating element	Magnet

Switching distance actuator	Actuating magnet BP 6, Sao: 8 mm Actuating magnet BP 6, Sar: 20 mm Actuating magnet BP 8, Sao: 8 mm Actuating magnet BP 8, Sar: 20 mm Actuating magnet BP 10, Sao: 18 mm Actuating magnet BP 10, Sar: 28 mm Actuating magnet BP 15 SS, Sao: 18 mm Actuating magnet BP 15 SS, Sar: 28 mm
Impact energy, maximum	2 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_{ao}	18 mm 8 mm
Assured switching distance "OFF" S_{ar}	22 mm 32 mm

Mechanical data - Connection technique

Length of cable	5 m
Termination	Cable
Wire cross-section	0.25 mm^2
Wire cross-section	23 AWG
Material of the Cable mantle	PVC

Mechanical data - Dimensions

ISO thread of the sensor	M18
Length of sensor	36 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
Restistance to shock	30 g / 11 ms

Electrical data

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

Scope of delivery	Actuator 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

Note

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 EN ISO 14119)

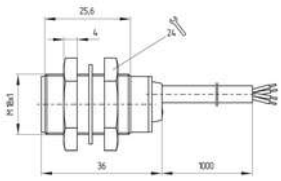
Pictures

Product picture (catalogue individual photo)



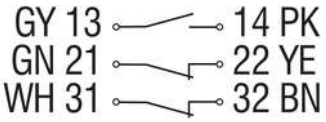
ID: kexbnf05
| 169.0 kB | .jpg | 130.881 x 263.172 mm - 371 x 746 px - 72 dpi
| 68.4 kB | .png | 74.083 x 148.872 mm - 210 x 422 px - 72 dpi
| 30.0 kB | .jpg | 61.383 x 123.472 mm - 174 x 350 px - 72 dpi

Dimensional drawing basic component



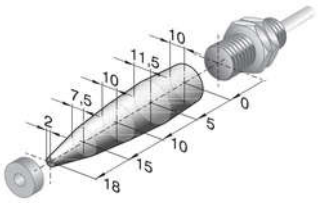
ID: 1bns1g02
| 31.2 kB | .cdr |
| 5.6 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi
| 67.5 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Diagram



ID: k2o1sk07
| 26.0 kB | .cdr |
| 82.8 kB | .jpg | 352.778 x 125.589 mm - 1000 x 356 px - 72 dpi
| 3.5 kB | .png | 74.083 x 26.458 mm - 210 x 75 px - 72 dpi

Characteristic curve



ID: 1bns1a09
| 22.8 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi
| 147.9 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi