



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

Product type description	EX-BNS 180-12Z-2187-2-3G/D
Article number (order number)	101185256
EAN (European Article Number)	4030661333328
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

ATEX Zone 2 and 22

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	46 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
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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	1 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)



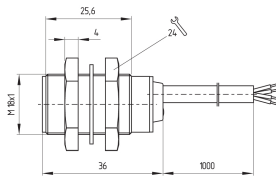
ID: kexbnf05

| 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



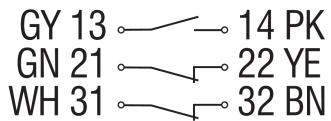
ID: 1bns1g02

| 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



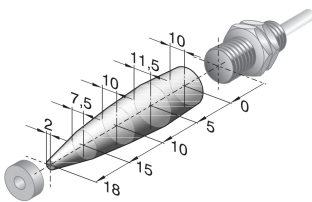
ID: k2o1sk07

| 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

Schmersal Ltd., Sparrowhawk Close, WR14 1GL Malvern

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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