



## EX-BNS 120-11Z-3G/D

- Explosion protection for ATEX Zones 2 and 22
- Thermoplastic enclosure
- Ø M12
- 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 120-11Z-3G/D
Article number (order number)	101184987
EAN (European Article Number)	4030661333106
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

**General data**

Standards	EN IEC 60947-5-3
Housing construction form	Cylinder, thread
Installation conditions (mechanical)	quasi-flush
Housing material	Glass-fibre, reinforced thermoplastic
Gross weight	55 g

**General data - Features**

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

**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**

Active area	front side
Actuating element	Magnet

Switching distance actuator	Actuating magnet BP 6, Sao: 10 mm Actuating magnet BP 8, Sao: 10 mm Actuating magnet BP 8, Sar: 22 mm Actuating magnet BP 10, Sao: 20 mm Actuating magnet BP 10, Sar: 32 mm Actuating magnet BP 15 SS, Sao: 20 mm Actuating magnet BP 15 SS, Sar: 32 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" $S_{ao}$	10 mm 20 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 <sup>2</sup>
Wire cross-section	23 AWG
Material of the Cable mantle	PVC

### Mechanical data - Dimensions

ISO thread of the sensor	M12
Length of sensor	38.5 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 100 VAC

Switching voltage, maximum 100 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)

### Ordering code

Product type description:  
EX-BNS 120-(1)Z-3G/D

(1)

**11**

1 NO contacts/1 NC contact

12

1 NO contact/2 NC contacts

02

2 NC contact

## Pictures

### Product picture (catalogue individual photo)



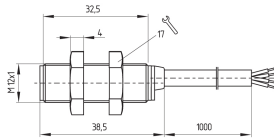
ID: kbns1f01

| 183.5 kB | .jpg | 104.069 x 382.058 mm - 295 x 1083 px - 72 dpi

| 113.8 kB | .png | 74.083 x 271.639 mm - 210 x 770 px - 72 dpi

| 16.8 kB | .jpg | 33.514 x 123.472 mm - 95 x 350 px - 72 dpi

### Dimensional drawing basic component



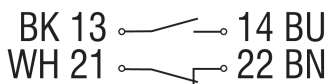
ID: 1bns1g01

| 31.6 kB | .cdr |

| 5.1 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

| 63.8 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

### Diagram

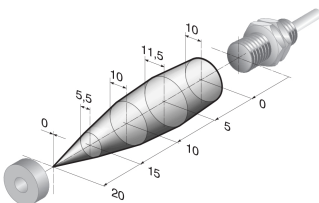


ID: k1o1sk19

| 53.4 kB | .jpg | 352.778 x 83.961 mm - 1000 x 238 px - 72 dpi

| 2.8 kB | .png | 74.083 x 17.639 mm - 210 x 50 px - 72 dpi

### Characteristic curve



ID: kbns1a02

| 17.7 kB | .png | 74.083 x 46.567 mm - 210 x 132 px - 72 dpi

| 133.7 kB | .jpg | 352.778 x 221.544 mm - 1000 x 628 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.

Generated on: 05/02/2024, 08:58