DATASHEET



EX-BNS 120-02Z-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 120-02Z-3G/D
Article number (order number)	101212052
EAN (European Article Number)	4030661392097
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	EN IEC 60947-5-3
Housing construction form	Cylinder, thread
Installation conditions (mechanical)	quasi-flush
Housing material	Glass-fibre, reinforced thermoplastic
Gross weight	75 g

General data - Features

Short circuit detection	Yes
Cross-circuit detection	Yes
Number of normally closed (NC)	2
Number of safety contacts	2

Safety classification

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

Safety classification - Safety outputs

B_{10D} Normally-closed contact (NC)	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^2
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
Restistance 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	3 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

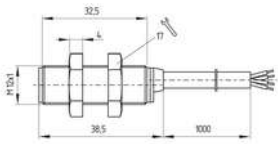
Pictures

Product picture (catalogue individual photo)



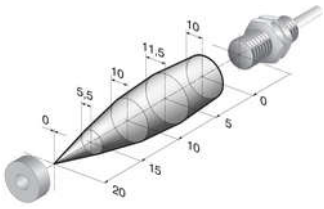
ID: kbns1f01
| 183.5 kB | .jpg | 104.069 x 382.058 mm - 295 x 1083 px - 72 dpi
| 113.8 kB | .png | 74.083 x 271.639 mm - 210 x 770 px - 72 dpi
| 16.8 kB | .jpg | 33.514 x 123.472 mm - 95 x 350 px - 72 dpi

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

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