DATASHEET



BNS 120-02Z 3,0M

- Thermoplastic enclosure
- Suitable for food processing industry only in combination with BP 15 SS
- Particularly large switching distance
- Ø M12
- Long life
- no mechanical wear
- Insensitive to transverse misalignment
- Insensitive to soiling
- uncoded, concealed installation according to ISO 14119

Data

Ordering data

Product type description	BNS 120-02Z 3,0M
Article number (order number)	101149416
EAN (European Article Number)	4030661151595
eCl@ss number, version 12.0	27-27-44-01
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

Approvals - Standards

Certificates	cULus

General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Coding level according to EN ISO 14119	None
Working principle	Magnetic drive
Installation conditions (mechanical)	quasi-flush
Housing material	Glass-fibre, reinforced thermoplastic
Gross weight	120 g

General data - Features

Coding	Yes
Number of normally closed (NC)	2
Number of safety contacts	2

Safety classification

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

Safety classification - Safety outputs

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

Mechanical data

Actuating element	Magnet

Switching distance actuator	Actuating magnet BP 6, Sao: 10 mm Actuating magnet BP 6, Sar: 22 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
Direction of motion	Head-on to the active surface

Mechanical data - Switching distances

Assured switching distance "ON" S_{ao}	10 mm 20 mm
Assured switching distance "OFF" S_{ar}	22 mm 32 mm
Note (switching distance)	All switching distances in accordance EN IEC 60947-5-3

Mechanical data - Connection technique

Length of cable	3 m
Termination	cable
Number of cable wires	4
Wire cross-section	0.25 mm^2
Cable diameter	5 mm
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	-25 ... +70 °C
Resistance to vibrations	10 ... 55 Hz, amplitude 1 mm
Restistance to shock	30 g / 11 ms

Electrical data

Switching current, maximum	0.25 A
Switching capacity, maximum	3 W
Switching element	2 NC contact
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:
BNS 120-(1)Z

(1)

11	1 NO contact/1 NC contact
12	1 NO contact/2 NC contacts
02	2 NC contact

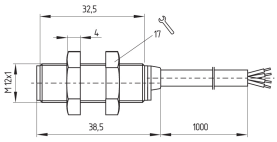
Pictures

Product picture (catalogue individual photo)



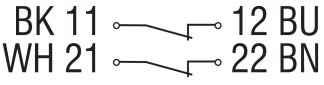
ID: kbns1f01
| 183.5 kB | .jpg | 104.069 x 382.058 mm - 295 x 1083 px - 72 dpi
| 113.8 kB | .png | 74.083 x 271.639 mm - 210 x 770 px - 72 dpi
| 16.8 kB | .jpg | 33.514 x 123.472 mm - 95 x 350 px - 72 dpi

Dimensional drawing basic component



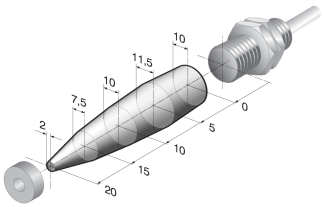
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| 5.1 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi
| 63.8 kB | .jpg | 352.778 x 245.886 mm - 1000 x 697 px - 72 dpi

Diagram



ID: k2o--k08
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| 51.9 kB | .jpg | 352.778 x 83.961 mm - 1000 x 238 px - 72 dpi
| 2.6 kB | .png | 74.083 x 17.639 mm - 210 x 50 px - 72 dpi

Characteristic curve



ID: kbns1a01
| 17.5 kB | .png | 74.083 x 46.567 mm - 210 x 132 px - 72 dpi
| 135.8 kB | .jpg | 352.778 x 221.192 mm - 1000 x 627 px - 72 dpi

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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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