



## BNS 120-02Z 5,0M

- 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 5,0M
Article number (order number)	101178078
EAN (European Article Number)	4030661309903
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
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### General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
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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	176 g

### General data - Features

Coding	Yes
Number of normally closed (NC)	2
Number of safety contacts	2
Number of cable wires	4

### Safety classification

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

### Safety classification - Safety outputs

B <sub>10D</sub> Normally-closed contact (NC)	25,000,000 Operations
B <sub>10D</sub> - 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 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	5 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	-25 ... +70 °C
Resistance to vibrations	10 ... 55 Hz, amplitude 1 mm
Resistance 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)

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<b>11</b>	1 NO contacts/1 NC contact
<b>12</b>	1 NO contact/2 NC contacts
<b>02</b>	2 NC contact

## Pictures

**Product picture (catalogue individual photo)**



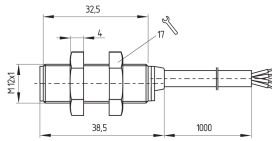
ID: kbns1f01

| 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



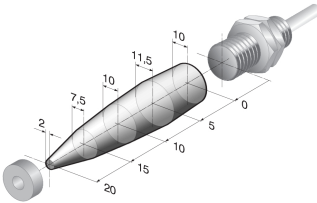
ID: 1bns1g01

| 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: 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

Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

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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