



## BN 120-10Z/V

- Actuation from front
- with bias magnet
- Non-contact principle
- Long life
- Thermoplastic enclosure
- Actuating distance up to 60 mm depending on actuating magnet and version
- Design Ø 10.7 mm
- with central mounting
- With pre-wired cable

## Data

### Ordering data

Product type description	BN 120-10Z/V
Article number (order number)	101186841
EAN (European Article Number)	4030661335414
eCl@ss number, version 12.0	27-27-43-02
eCl@ss number, version 11.0	27-27-01-05
eCl@ss number, version 9.0	27-27-01-05
ETIM number, version 7.0	EC002544
ETIM number, version 6.0	EC002544

### General data

Working principle	Magnetic drive
Housing construction form	Cylinder, thread
Housing material	Glass-fibre, reinforced thermoplastic
Gross weight	30 g

### General data - Features

Suitable for elevators	Yes
bias magnet	Yes
Number of normally open (NO)	1

### Mechanical data

Actuating panels	front side
Actuating element	Magnet
Mechanical life, minimum	10,000,000 Operations
Actuating speed, maximum	18 m/s
Mounting	central with threaded flange M12 x 1
Tightening torque of nuts, maximum	0.9 Nm

### Mechanical data - Switching distances according EN IEC 60947-5-3

Switching distance $S_n$	5 mm ... 55 mm
	BP 10S = 5 mm
	2 x BP 10S = 10 mm
	BP 15S = 6 mm
	BP 34S = 20 mm
	BP 20S = 15 mm
	BP 31S = 15 mm
	BP 11S = 5 mm
	2 x BP 11S = 15 mm
	BP 12S = 10 mm
	2 x BP 12S = 25 mm
	BP 21S = 30 mm
	2 x BP 21S = 20 ... 55 mm
	BP 22S = 25 mm
	2 x BP 22S = 15 ... 55 mm
	BE 20 S = 6 mm

Note (Switching distance  $S_n$ ) Actuating distance up to 55 mm depending on actuating magnet and version. The specified switching distances are applicable for the actuation of individually mounted components without ferromagnetic influence. A change of the distance, either positive or negative, is possible due to ferromagnetic influences. The mutual interference between multiple actuating magnets must be observed.

Repeat accuracy R 0.3 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	LiYY

### Mechanical data - Dimensions

Diameter of sensor	10.7 mm
Length of sensor	71 mm

### Ambient conditions

Degree of protection	IP67
Ambient temperature	-25 ... +70 °C

Resistance to vibrations 10 ... 55 Hz, amplitude 1 mm

Resistance to shock 30 g / 11 ms

## Electrical data

Switching voltage, maximum 200 VAC

Switching current, maximum 1 A

Switching capacity, maximum 30 W

Switching capacity, maximum 30 VA

Switching element Normally open contact (NO)

Bounce duration, maximum 0.2 ms

Switching frequency, maximum 300 Hz

## Electrical data - Digital Output

Design of control elements Reed contacts

## Scope of delivery

Scope of delivery Actuator must be ordered separately.

## Accessory

Recommendation (actuator)	BP 10 S 2x BP 10 S BP 15 S BP 34 S BP 20 S BP 31 S BP 11 S 2x BP 11 S BP 12 S 2x BP 12S BP 21 S 2x BP 21 S BP 22 S 2x BP 22 S BE 20 S
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Recommendation (actuator, lift switchgear)	BP 10 2 x BP 10 BP 15 BP 34
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## Note

Note (General)

The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.  
When the switches and actuators come together, the colours must coincide: Red (S) to red (S) and green (N) to green (N). This does not apply to the bistable contact.  
The switch is to be mounted on iron with a non-magnetic layer of at least 20 mm.

## Pictures

### Product picture (catalogue individual photo)



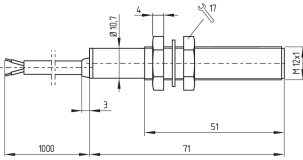
ID: kbn12f02

| 237.5 kB | .jpg | 352.778 x 528.814 mm - 1000 x 1499 px - 72 dpi

| 21.0 kB | .png | 73.731 x 110.772 mm - 209 x 314 px - 72 dpi

| 18.6 kB | .jpg | 82.197 x 123.472 mm - 233 x 350 px - 72 dpi

### Dimensional drawing basic component



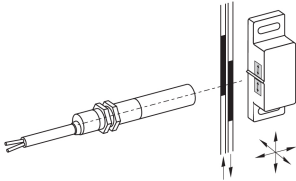
ID: 1bn12g04  
 | 23.3 kB | .cdr |  
 | 3.1 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi  
 | 68.5 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi

## Switch travel diagram



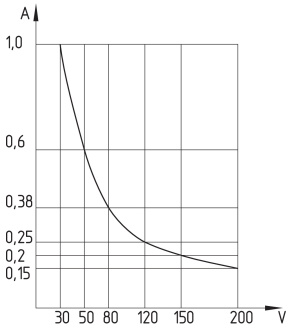
ID: ksbn4sx1  
 | 18.0 kB | .cdr |  
 | 1.1 kB | .png | 74.083 x 18.697 mm - 210 x 53 px - 72 dpi  
 | 23.4 kB | .jpg | 352.778 x 88.194 mm - 1000 x 250 px - 72 dpi

## Diagram



ID: 1bn12k05  
 | 23.9 kB | .cdr |  
 | 70.4 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi  
 | 9.1 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi

## Characteristic curve



ID: kbn65d03  
 | 2.9 kB | .png | 73.731 x 84.314 mm - 209 x 239 px - 72 dpi  
 | 112.6 kB | .jpg | 352.425 x 402.167 mm - 999 x 1140 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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