# DATASHEET

## BN 120L-10Z/V 2,0M

- 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

| | |
|---|---|
| Note (Delivery capacity) | Phased-out product |
| Product type description | BN 120L-10Z/V 2,0M |
| Article number (order number) | 101210880 |
| EAN (European Article Number) | 4030661388472 |
| 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 | 56 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 |
| Mounting | central with threated 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<br>BP 10S = 5 mm<br>2 x BP 10S = 10 mm<br>BP 15S = 6 mm<br>BP 34S = 20 mm<br>BP 20S = 15 mm<br>BP 31S = 15 mm<br>BP 11S = 5 mm<br>2 x BP 11S = 15 mm<br>BP 12S = 10 mm<br>2 x BP 12S = 25 mm<br>BP 21S = 30 mm<br>2 x BP 21S = 20 ... 55 mm<br>BP 22S = 25 mm<br>2 x BP 22S = 15 ... 55 mm<br>BE 20 S = 6 mm |
| Note (Switching distance Sn) | 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 | 2 m |
| Termination | Cable |
| Wire cross-section | 0.25 $mm^2$ |
| Wire cross-section | 23 AWG |
| Material of the Cable mantle | LiYY |

## Mechanical data - Dimensions

| | |
|---|---|
| Diameter of sensor | 10.7 mm |
| width across flats | 17 BK |
| Length of sensor | 102 mm |

## Ambient conditions

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

| | |
|---|---|
| Resistance to vibrations | 10 ... 55 Hz, amplitude 1 mm |
| Restistance to shock | 30 g / 11 ms |

## Electrical data

| | |
|---|---|
| Switching voltage, maximum | 200 VAC |
| Switching voltage, maximum | 200 VDC |
| Switching current, maximum | 1 A |
| Switching capacity, maximum | 30 W |
| Switching capacity, maximum | 30 VA |
| Switching element | Normally open contact (NO) |

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

### Note

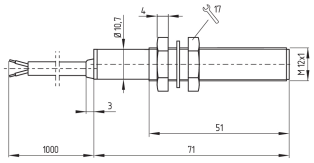
| | |
|---|---|
| Note (General) | The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.<br>When the switches and actuators come together, the colours must coincide: Red (S) to red (S) and green (N) to green (N). This does not apply to the bistable contact.<br>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: kbn12f03
| 221.1 kB | .jpg | 91.722 x 529.167 mm - 260 x 1500 px - 72 dpi
| 170.1 kB | .png | 74.083 x 427.214 mm - 210 x 1211 px - 72 dpi
| 13.4 kB | .jpg | 21.519 x 123.472 mm - 61 x 350 px - 72 dpi

### Dimensional drawing basic component

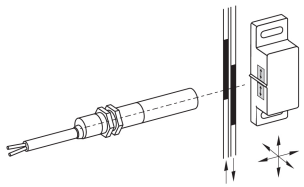



ID: 1bn12g04
| 23.3 kB | .cdr |
| 3.1 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi
| 68.5 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi

## Switch travel diagram

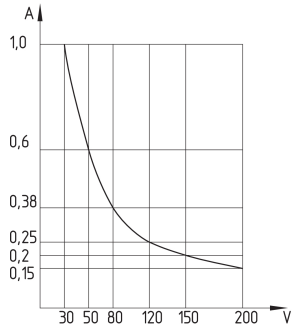
ID: ksbn4sx1
| 18.0 kB | .cdr |
| 1.1 kB | .png | 74.083 x 18.697 mm - 210 x 53 px - 72 dpi
| 23.4 kB | .jpg | 352.778 x 88.194 mm - 1000 x 250 px - 72 dpi

## 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