

Datasheet - BN 120L-10Z

Magnetic reed switch / BN 120

☒ Preferred typ



(Minor differences between the printed image and the original product may exist!)

- Actuation from side
- Non-contact principle
- with bias magnet
- 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


Ordering details

Product type description	BN 120L-10Z
Article number	101210877
EAN code	4030661388465

Approval

Approval	-
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Global Properties

Product name	BN 120L
Standards	-
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	Yes
Mounting	central with threaded flange M12 x 1
Active principle	Magnetic drive
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the cable mantle	LiYY
Housing construction form	cylinder, thread
Weight	55 g
Recommended actuator	BP 10, 2 x BP 10, BP 15, 2 x BP 15, 2 x BP 15/2, BP 34, BP 20, BP 31, BP 11, BP 12, BP 21

- Lift switchgear

BP 10, 2 x BP 10, 2 x BP 15/2, BP 15, 2 x BP 15, BP 34

Mechanical data

Design of electrical connection	Cable
Cable length	2 m
Conductors	2 x 0,25 mm ²
AWG-Number	23
Mechanical life	min. 10.000.000 operations
Electrical lifetime	1.000.000 ... 10.000.000 operations
Actuating planes	Actuation from side
Switch distance S _n	5 mm ... 50 mm BP 10 = 5 mm 2 x BP 10 = 17 mm BP 15 = 6 mm 2 x BP 15 = 17 mm 2 x BP 15/2 = 17 mm BP 34 = 15 ... 20 mm BP 20 = 20 mm BP 31 = 20 mm BP 11 = 20 mm BP 12 = 10 ... 30 mm BP 21 = 25 ... 50 mm
- notice	Actuating distance up to 50 mm depending on actuating magnet and version The specifications with regard to the switching distances apply to the actuation of the individually mounted devices without ferromagnetic influence. Any change of the distance, positive either negative, is possible due to ferromagnetic interference. When multiple actuating magnets are used, the mutual interference must be observed.
Type of actuation	Magnet
restistance to shock	30 g / 11 ms
Resistance to vibration	10 ... 55 Hz, Amplitude 1 mm
Latching (Y/N)	No
bias magnet (Y/N)	Yes
Tightening torque for nuts	A/F 17 max. 90 Ncm
Actuating speed	max. 18 m/s
Switching point accuracy	± 0,25 mm

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+70 °C
Protection class	IP67 to IEC/EN 60529

Electrical data

Design of control element	Normally open contact (NO)
Number of shutters	1 piece
Number of openers	0 piece
Dielectric strength	580 V
Switching voltage	max. 200 VAC/DC
Switching current	max. 1 A
Switching capacity	max. 30 VA / W

Outputs

Design of control output

Reed kontakts

LED switching conditions display

LED switching conditions display (Y/N)

No

ATEX

Explosion protection categories for gases

None

Explosion protected category for dusts

None

Dimensions

Dimensions of the sensor

- Length of sensor

102 mm

- Diameter of sensor

10.7 mm

notice

The opening and closing functions depend on the direction of actuation, the actuating magnets and the polarity of the actuating magnets.

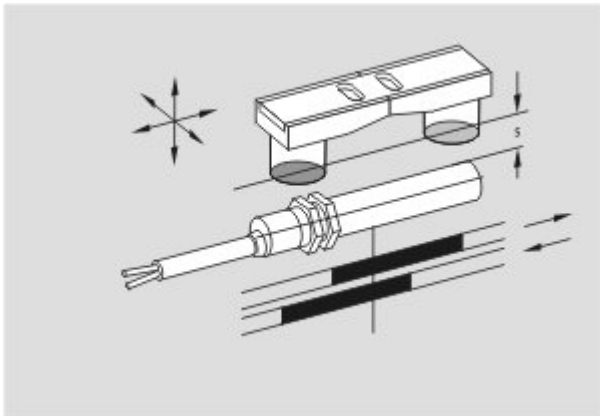
When the switches and actuators come together, the colours must coincide: Red (S) to red (S) and green (N) to green (N). This does not apply to the bistable contact.

The switch is to be mounted on iron with a non-magnetic layer of at least 20 mm.

Included in delivery

Actuators must be ordered separately.

Diagram



Note Diagram



positive break NC contact



active



no active



Normally-open contact




Normally-closed contact

Switch travel diagram





Notes Switch travel diagram

 Contact closed

 Contact open

 Setting range

 Break point

 Positive opening sequence/- angle

VS adjustable range of NO contact

VÖ adjustable range of NC contact

N after travel

Documents

Mounting and wiring instructions (de, en, fr) 103 kB, 03.08.2006

Code: m_bn1p02

notice - Switch distance (it) 27 kB, 12.04.2013

Code: s_bn_p01_it

notice - Switch distance (fr) 29 kB, 12.04.2013

Code: s_bn_p01_fr

notice - Switch distance (en) 27 kB, 12.04.2013

Code: s_bn_p01_en

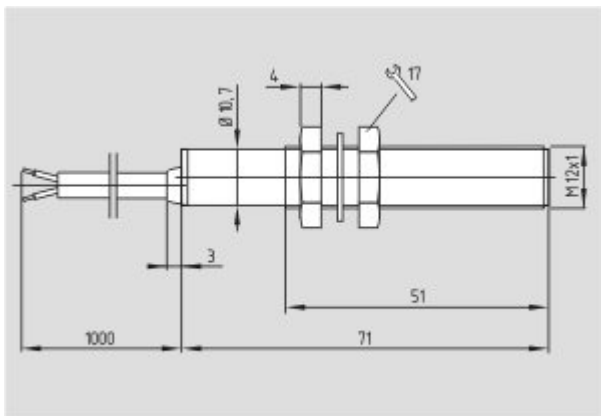
notice - Switch distance (de) 28 kB, 12.04.2013

Code: s_bn_p01_de

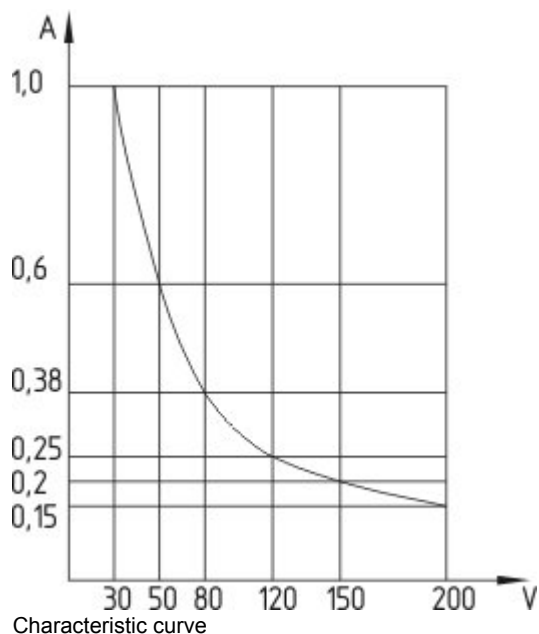
notice - Switch distance (es) 28 kB, 12.04.2013

Code: s_bn_p01_es

Images

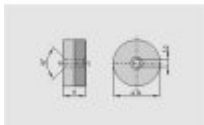


Dimensional drawing (basic component)



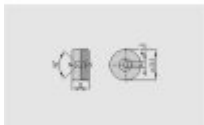
System components

Actuator



101057553 - BP 34

- thermoplastic enclosure
- S-pole marked red
- N-pole marked green
- Suitable for mounting on ferrous material with a distance of 25 mm



101060163 - BP 15

- thermoplastic enclosure
- N-pole marked green
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 18 mm



101060165 - BP 15/2

- Unenclosed
- Polarity stamped in
- Suitable for mounting on ferrous material with a distance of 18 mm



101057531 - BP 10

- Unenclosed
- Colour coding of poles by labels

