

Datasheet - BN 650-10Z/V

Magnetic reed switch / BN 650

 Preferred typ

- With pre-wired cable
- Non-contact principle
- Long life
- Actuation from front
- with bias magnet
- Construction form \varnothing 13 mm
- Thermoplastic enclosure
- Actuating distance up to 60 mm depending on actuating magnet and version
- with central mounting

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


Ordering details

Product type description	BN 650-10Z/V
Article number	101187281
EAN Code	4030661335735
eCl@ss	27-27-01-04

Approval

Approval	-
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Global Properties

Permanent light	BN 650
Standards	-
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	Yes
Mounting	central with threaded flange
Active principle	Magnetic drive
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the cable mantle	LiYY
Housing construction form	cylinder smooth
Weight	65

Recommended actuator	BP 10S, 2 x BP 10S, BP 15S, BP 34S, BP 20S, BP 31S, BP 11S, 2 x BP 11S, BP 12S, 2 x BP 12S, BP 21S, 2 x BP 21S, BP 22S, 2 x BP 22S, BE 20S
- Lift switchgear	BP 10, 2 x BP 10, BP 15, BP 34

Mechanical data

Design of electrical connection	Cable
Cable length	1
Conductors	2 x 0,25
AWG-Number	23
Mechanical life	100.000.000 operations
Electrical lifetime	1.000.000 ... 10.000.000 operations
Switching frequency	300/
Actuating planes	front side
Switch distance	5 ... 55 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 20S = 6 mm
- notice	Actuating distance up to 55 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
resistance to shock	30 / 11
Resistance to vibration	10 ... 55 HZ, Amplitude 1 mm
Bounce duration	0,15
Latching (Y/N)	No
bias magnet (Y/N)	Yes
Tightening torque for nuts	-
Actuating speed	18
Switching point accuracy	± 0,25 mm

Ambient conditions

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

Electrical data

Design of control element	Normally open contact (NO)
Number of shutters	1

Number of openers	0
Switching time - Close	0,35
Switching time - Open	-
Switch frequency	< 300
Dielectric strength	580
Switching voltage	200
Switching current	1 A
Switching capacity	30 /

Outputs

Design of control output	
Design of control output	Reed kontakts

LED switching conditions display

LED switching conditions display (Y/N)	No
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ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

Dimensions

Dimensions of the sensor	
- Length of sensor	103
- Diameter of sensor	13

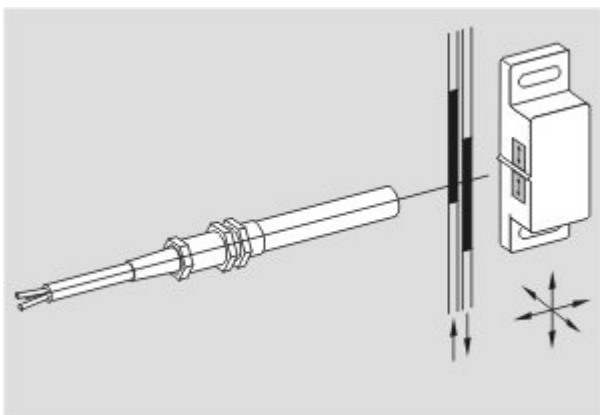
notice

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.






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) 99 kB, 11.07.2006

Code: m_bn6p01

Declaration of conformity (en) 186 kB, 12.07.2018

Code: __bn_p01_en

Declaration of conformity (de) 102 kB, 08.06.2016

Code: __bn_p01

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

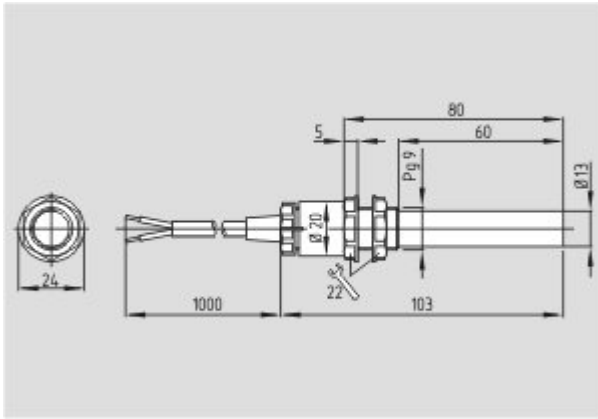
notice - Switch distance (de) 28 kB, 12.04.2013

Code: s_bn_p01_de

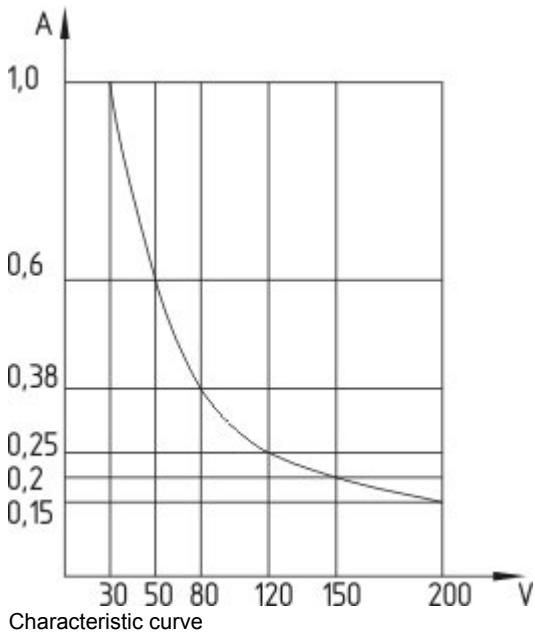
notice - Switch distance (es) 28 kB, 12.04.2013

Code: s_bn_p01_es

Images



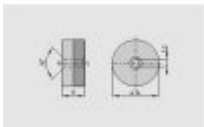
Dimensional drawing (basic component)



Characteristic curve

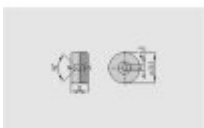
System components

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

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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