

Datasheet - BN 85-R-1831-1

Magnetic reed switch / BN 85



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

- Mounting on C DIN rail and 2 single wires without screws
- Non-contact principle
- 1 Reed kontakts
- Long life
- Actuating distance up to 40 mm depending on actuating magnet and version
- 40 mm x 35 mm x 16,5 mm
- Thermoplastic enclosure
- Reed-contact to clip-in, on-location assembly


Ordering details

Product type description	BN 85-R-1831-1
Article number	10BN 85-R-1831-1
EAN Code	
eCl@ss	27-27-01-04

Approval

Approval	-
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Global Properties

Permanent light	BN 85
Standards	-
Compliance with the Directives (Y/N) 	Yes
suitable for elevators (Y/N)	Yes
Mounting	C DIN rail and 2 single wires without screws
Active principle	Magnetic drive
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the cable mantle	LiY
Housing construction form	Block
Weight	
Recommended actuator	BP 6 S, BP 8 S, BP 10 S, 2 x BP 10 S, BP 15 S, 2 x BP 15 S, BP 34 S, BP 20 S, BP 31 S, BP 11 S, BP 12 S

Mechanical data

Design of electrical connection	Cable
Cable length	1
Conductors	2 x 0,75
AWG-Number	18
Mechanical life	1.000.000.000 operations
Electrical lifetime	500.000.000 operations
Actuating planes	front side
Active area	lateral
Switch distance	2 ... 40 BP 6S = 2 ... 12 mm BP 8S = 2 ... 10 mm BP 10S = 5 ... 20 mm 2 x BP 10S = 6 ... 27 mm BP 15S = 5 ... 22 mm 2 x BP 15S = 7 ... 28 mm BP 34S = 10 ... 40 mm BP 20S = 3 ... 28 mm BP 31S = 4 ... 30 mm BP 11S = 4 ... 23 mm BP 12S = 5 ... 27 mm
- notice	Actuating distance up to 40 mm depending on actuating magnet and version
Type of actuation	Magnet
resistance to shock	60 g, on sine wave oscillation
Bounce duration	0,2
Latching (Y/N)	Yes

Ambient conditions

Ambient temperature	
- Min. environmental temperature	0
- Max. environmental temperature	+75
Protection class	IP40 to IEC/EN 60529

Electrical data

Design of control element	bistable contact
Number of snap-in contacts	1
Switching time - Close	2
Switching time - Open	0,07
Voltage type	
Dielectric strength	400
Switching voltage	60
Switching current	1 A
Switching capacity	30

Outputs

Design of control output	Reed kontakts
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LED switching conditions display

LED switching conditions display (Y/N)	No
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ATEX

Explosion protection categories for gases	None
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Explosion protected category for dusts

None

Dimensions

Dimensions of the sensor

- Width of sensor	40
- Height of sensor	35
- Length of sensor	16.5

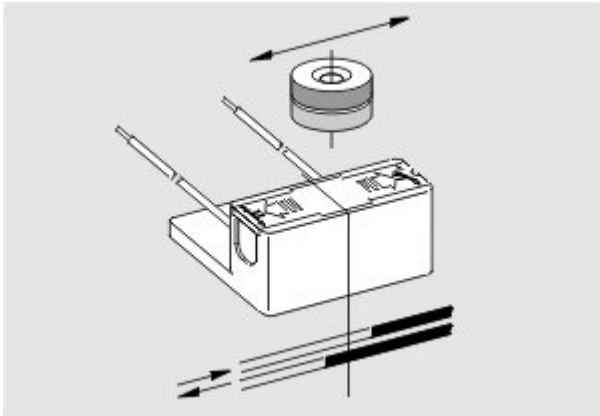
notice

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






Included in delivery

Actuators must be ordered separately.

Diagram



Note Diagram

-  positive break NC contact
-  active
-  no active
-  Normally-open contact
-  Normally-closed contact

Documents

Operating instructions (en) 124 kB, 18.12.2018

Code: mrl_bn85_en

Operating instructions (de) 121 kB, 18.12.2018

Code: mrl_bn85_de

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 (de) 36 kB, 07.08.2009

Code: s_bnbsp01

notice - Switch distance (nl) 39 kB, 07.08.2009

Code: s_bnbsp04

notice - Switch distance (en) 42 kB, 07.08.2009

Code: s_bnbsp02

notice - Switch distance (fr) 41 kB, 07.08.2009

Code: s_bnbsp03

notice - Switch distance (pt) 39 kB, 07.08.2009

Code: s_bnbsp10

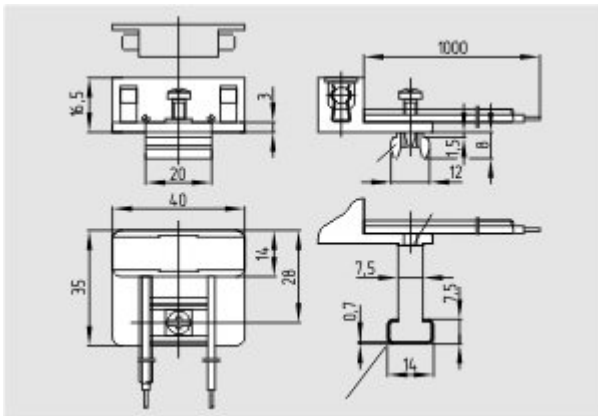
notice - Switch distance (it) 40 kB, 07.08.2009

Code: s_bnbsp05

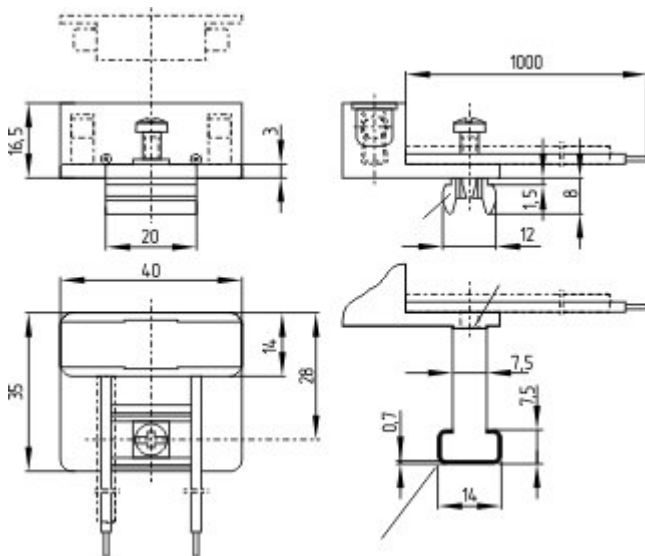
notice - Switch distance (es) 38 kB, 07.08.2009

Code: s_bnbsp09

Images



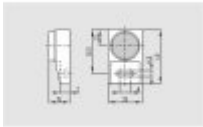
Dimensional drawing (basic component)



Dimensional drawing (basic component)

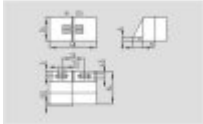
System components

Actuator



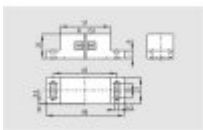
101057533 - BP 11 S

- -metal housing
- S-pole marked red
- Suitable for mounting on ferrous material



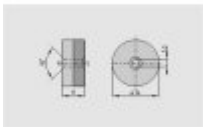
101057521 - BP 31 S

- thermoplastic enclosure
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm



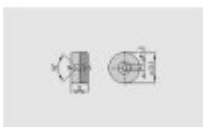
101057541 - BP 20 S

- -metal housing
- S-pole marked red
- Suitable for mounting on ferrous material with a distance of 20 mm



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



101057531 - BP 10

- Unenclosed
- Colour coding of poles by labels

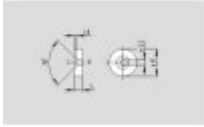


101054816 - BP 8

- Unenclosed
- S-pole marked red

101091837 - BP 6

- Unenclosed
- S-pole marked red



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

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