



BN 310-10Z

- 1 Reed kontakts
- Non-contact principle
- Actuation from side
- Flat design
- Actuating surface and direction of actuation marked by switch symbol
- 88 mm x 25 mm x 13 mm
- Thermoplastic enclosure
- Actuating distance up to 60 mm depending on actuating magnet and version
- 2 reed contacts

Data

Ordering data

Product type description	BN 310-10Z
Article number (order number)	101133842
EAN (European Article Number)	4030661059419
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

Approvals - Standards

Certificates	cULus
--------------	-------

General data

Working principle	Magnetic drive
Housing construction form	rectangular
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	65 g

General data - Features

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

Mechanical data

Actuating panels	lateral
Actuating element	Magnet
Mechanical life, minimum	1,000,000,000 Operations
Repeat accuracy R	0.3 mm
Actuating speed, maximum	18 m/s
Mounting	Enclosure with mounting slots

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

Switching 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 20 = 20 mm
	BP 31 = 20 mm
	BP 12 = 10 ... 30 mm
	BP 34 = 5 ... 20 mm
	BP 11 = 8 ... 20 mm
	BP 21 = 25 ... 50 mm
	BE 20 = 20 mm

Note (Switching distance S_n)

Actuating distance up to 50 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.

Mechanical data - Connection technique

Termination	Cable
Length of cable	1 m
Wire cross-section	0.75 mm ²
Wire cross-section	18 AWG
Material of the Cable mantle	H03VV-F

Mechanical data - Dimensions

Length of sensor	13 mm
Width of sensor	88 mm
Height of sensor	25 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+75 °C
Resistance to vibrations	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms

Electrical data

Switching voltage, maximum	250 VAC
Switching voltage, maximum	250 VDC

Switching current, maximum	3 A
Switching capacity, maximum	120 W
Switching capacity, maximum	120 VA
Switching element	Normally open contact (NO)
Bounce duration, minimum	0.3 ms
Bounce duration, maximum	0.6 ms
Switching frequency, maximum	300 Hz

Electrical data - Digital Output

Design of control elements	Reed contacts
----------------------------	---------------

Scope of delivery

Scope of delivery	Actuators must be ordered separately.
-------------------	---------------------------------------

Accessory

Recommendation (actuator)	BP 10
	2x BP 10
	BP 15
	2x BP 15
	2x BP 15/2
	BP 34
	BP 20
	BP 31
	BP 11
	BP 12
	BP 21
	BE 20
Recommendation (actuator, lift switchgear)	BP 10
	2 x BP 15/2
	2 x BP 15
	2 x BP 10
	BP 15
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.
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)

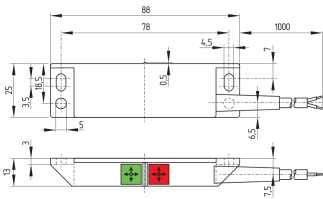


ID: sbn31f01

| 116,4 kB | .jpg | 352.778 x 94.544 mm - 1000 x 268 px - 72 dpi

| 10,2 kB | .png | 74.083 x 19.756 mm - 210 x 56 px - 72 dpi

Dimensional drawing basic component



ID: kbn31g03

| 8,1 kB | .png | 74.083 x 44.097 mm - 210 x 125 px - 72 dpi

| 115,9 kB | .jpg | 352.778 x 210.608 mm - 1000 x 597 px - 72 dpi

Switch travel diagram



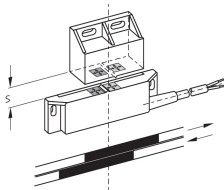
ID: ksbn4sx1

| 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



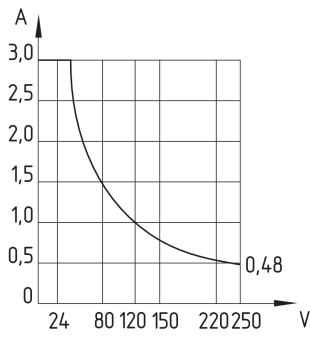
ID: 1bn31k15

| 25,3 kB | .cdr |

| 93,5 kB | .jpg | 352.778 x 243.769 mm - 1000 x 691 px - 72 dpi

| 11,4 kB | .png | 74.083 x 51.153 mm - 210 x 145 px - 72 dpi

Characteristic curve



ID: kbn32d03

| 3,1 kB | .png | 73.731 x 77.964 mm - 209 x 221 px - 72 dpi

| 116,4 kB | .jpg | 352.425 x 371.828 mm - 999 x 1054 px - 72 dpi

Schmersal Nordiska AB, F O Petersons gata 28, S-421 31 Västra Frölunda

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.

Generated on: 02/12/2022, 11:06