



BN 20-RZ-M16

- 1 Reed kontakts
- Non-contact principle
- Long life
- 104 mm x 52 mm x 47 mm
- Aluminium enclosure
- Actuating distance up to 50 mm depending on actuating magnet and version
- Screw connection
- Highly resistant to vibration
- Available for actuation from front or side

Data

Ordering data

Product type description	BN 20-RZ-M16
Article number (order number)	101168090
EAN (European Article Number)	4030661220567
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

Approvals - Standards

Certificates	cULus
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General data

Standards	EN IEC 60947-5-1
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Working principle	Magnetic drive
Housing construction form	rectangular
Housing material	Aluminium
Active area	Metal film
Gross weight	290 g

General data - Features

Latching	Yes
bias magnet	Yes
Number of snap-in contacts	1

Mechanical data

Actuating panels	lateral
Active area	lateral
Actuating element	Magnet
Mechanical life, minimum	1,000,000,000 Operations
Actuating speed, maximum	18 m/s

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

Switching distance S_n	5 mm ... 50 mm BP 10S = 5 mm 2 x BP 10S = 10 mm BP 20S = 15 mm BP 31S = 15 mm BP 11S = 5 mm 2 x BP 11S = 15 mm BP 12S = 10 mm BP 10N = 5 mm 2 x BP 10N = 10 mm BP 15N = 7 mm BP 15S = 7 mm 2 x BP 15/2N = 15 mm 2 x BP 15/2S = 15 mm BP 34N = 10 ... 25 mm BP 34S = 10 ... 25 mm BP 20N = 15 mm BP 31N = 15 mm BP 11N = 5 mm 2 x BP 11N = 15 mm BP 12N = 10 mm 2 x BP 12N = 5 ... 20 mm 2 x BP 12S = 5 ... 20 mm BP 21 N = 10 ... 35 mm BP 21 S = 10 ... 35 mm 2 x BP 21N = 15 ... 50 mm 2 x BP 21S = 15 ... 50 mm BE 20N = 10 mm BE 20S = 10 mm
Note (Switching distance S_n)	Actuating distance up to 50 mm depending on version and actuating magnet
Repeat accuracy R	0.3 mm

Mechanical data - Connection technique

Termination	Screw terminals M20 x 1.5
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Mechanical data - Dimensions

Length of sensor	47 mm
Width of sensor	104 mm
Height of sensor	52 mm

Ambient conditions

Degree of protection	IP67
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Ambient temperature	-25 ... +90 °C
Resistant to vibration	50 g, on sine wave oscillation

Electrical data

Switching voltage, maximum	250 VAC
Switching current, maximum	3 A
Switching capacity, maximum	120 W
Switching capacity, maximum	120 VA
Switching element	bistable contact
Bounce duration, minimum	0.3 ms
Bounce duration, maximum	0.6 ms
Maximum switching frequency	1,080,000 /h

Electrical data - Digital Output

Design of control elements	Reed contacts
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Scope of delivery

Scope of delivery	Actuator must be ordered separately.
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Accessory

Recommendation (actuator)	BP 10 S
	2x BP 10 S
	BP 15 S
	BP 34 S
	BP 20 S
	BP 31 S
	BP 11 S
	2x BP 11 S
	BP 12 S
	BP 21 S
	2x BP 21 S
	BE 20 S
	BP 10 N
	2x BP 10 N
	BP 15 N
	2 x BP 15/2 N
	2x BP 15/2 S
	BP 34 N
	BP 20 N
	BP 31 N
	BP 11 N
	2x BP 11 N
	BP 12 N
	2x BP 12 N
	2x BP 12 S
	BP 21 N
	2x BP 21 N
	BE 20 N

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).

Pictures

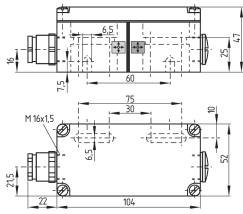
Product picture (catalogue individual photo)



ID: kbn20f01

| 569.4 kB | .jpg | 352.778 x 529.167 mm - 1000 x 1500 px - 72 dpi
| 45.1 kB | .png | 74.083 x 111.125 mm - 210 x 315 px - 72 dpi
| 32.8 kB | .jpg | 82.197 x 123.472 mm - 233 x 350 px - 72 dpi

Dimensional drawing basic component



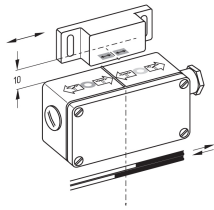
ID: 1bn20g03

| 33.4 kB | .cdr |

| 10.8 kB | .png | 74.083 x 51.858 mm - 210 x 147 px - 72 dpi

| 127.3 kB | .jpg | 352.778 x 247.297 mm - 1000 x 701 px - 72 dpi

Diagram



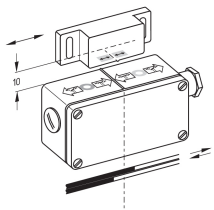
ID: 1bn20k02

| 96.2 kB | .ai | 210 x 297 mm - 595 x 841 px - 72 dpi

| 102.6 kB | .jpg | 352.778 x 244.475 mm - 1000 x 693 px - 72 dpi

| 11.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

Diagram



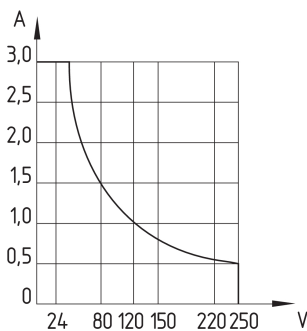
ID: 1bn20k03

| 95.6 kB | .ai | 210 x 297 mm - 595 x 841 px - 72 dpi

| 101.9 kB | .jpg | 352.778 x 244.475 mm - 1000 x 693 px - 72 dpi

| 11.7 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi

Characteristic curve



ID: kbn32d01

| 110.5 kB | .jpg | 352.425 x 371.828 mm - 999 x 1054 px - 72 dpi

EPLAN Produktgrafik



ID: 101168090
| 2.3 kB | .edz |

Schmersal India Pvt. Ltd., Plot No - G-7/1, Ranjangaon MIDC, Tal. - Shirur, Dist.- Pune 412 220

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.

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