



BNS 16-12ZD

- 3 cable entries M 20 x 1.5
- Wiring compartment
- Thermoplastic enclosure
- Suitable for food processing industry
- Concealed mounting possible
- 52 mm x 90 mm x 32 mm
- Long life
- no mechanical wear
- Insensitive to transverse misalignment
- Insensitive to soiling
- Coded reed contact safety switch

Data

Ordering data

Product type description	BNS 16-12ZD
Article number (order number)	101172563
EAN (European Article Number)	4030661301167
eCl@ss number, version 11.0	27-27-24-02
eCl@ss number, version 9.0	27-27-24-02
ETIM number, version 7.0	EC002544
ETIM number, version 6.0	EC002544

Approvals - Standards

Certificates	TÜV BG cULus
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General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Coding level according to EN ISO 14119	Low
Working principle	Magnetic drive
Installation conditions (mechanical)	not flush
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	150 g

General data - Features

Prerequisite evaluation unit	Yes
Number of normally closed (NC)	2
Number of normally open (NO)	1

Safety classification

Standards	EN ISO 13849-1
Mission time	20 Year(s)

Safety classification - Safety outputs

B_{10D} - Value Normally-closed contact/Normally open contact (NC/NO)	25,000,000 Operations
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Mechanical data

Active area	cover-side
Actuating element	Magnet
Direction of motion	Head-on to the active surface

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

Assured switching distance "ON" S_{ao}	8 mm
Assured switching distance "OFF" S_{ar}	18 mm

Mechanical data - Connection technique

Termination	Screw terminals M20 x 1.5
Cable section, minimum	0.25 mm ²
Cable section, maximum	1.5 mm ²
Note (Cable section)	All indications including the conductor ferrules.
Wire cross-section	15 AWG

Mechanical data - Dimensions

Length of sensor	39 mm
Width of sensor	52 mm
Height of sensor	90 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature	-25_+70
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+70 °C
Resistance to vibrations	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms

Electrical data

Switching voltage, maximum	100 VAC
Switching voltage, maximum	100 VDC

Switching current, maximum	0.4 A
Switching capacity, maximum	10 W
Switching frequency, maximum	5 Hz

Electrical data - Digital Output

Design of control elements	Miscellaneous, Reed contacts
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Scope of delivery

Scope of delivery	Actuators must be ordered separately.
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Accessory

Recommendation (actuator)	BPS 16
Recommended safety switchgear	SRB-E-301ST SRB-E-201LC

Note

Note (General)	Contact symbols shown for the closed condition of the guard device.
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Ordering code

Product type description:
BNS 16-(1)Z(2)-(3)

(1)

11	1 NO contact / 1 NC contact (Only for connector version)
12	1 NO contact/2 NC contacts

(2)

V	Actuating planes front side
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R	Actuating planes right-hand side
L	Actuating planes left-hand side
D	Actuating planes cover-side
U	Actuating planes bottom
LR	Actuating planes left-hand side/right-hand side

(3)

ST1	Connector in the middle
ST2	Connector at the right-hand side
ST3	Connector at the left-hand side

Pictures

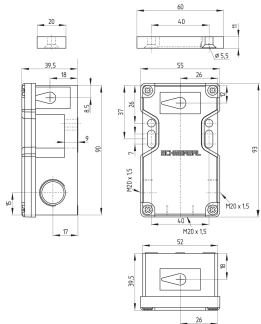
Product picture (catalogue individual photo)



ID: kbns1f03

| 1.4 MB | .jpg | 352.778 x 563.033 mm - 1000 x 1596 px - 72 dpi
| 87.5 kB | .png | 74.083 x 118.181 mm - 210 x 335 px - 72 dpi

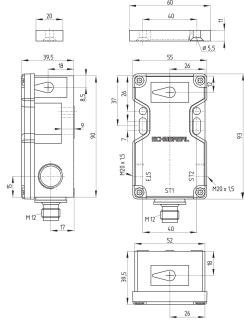
Dimensional drawing basic component



ID: kbns1g06

| 6.8 kB | .png | 74.083 x 93.839 mm - 210 x 266 px - 72 dpi
| 202.2 kB | .jpg | 352.778 x 447.322 mm - 1000 x 1268 px - 72 dpi

Dimensional drawing basic component



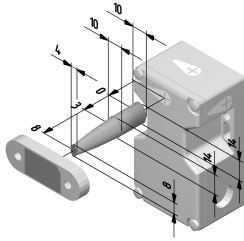
ID: kbns1g07

| 99.1 kB | .ai | 420 x 297 mm - 1190 x 841 px - 72 dpi

| 6.9 kB | .png | 74.083 x 99.131 mm - 210 x 281 px - 72 dpi

| 217.6 kB | .jpg | 352.778 x 473.075 mm - 1000 x 1341 px - 72 dpi

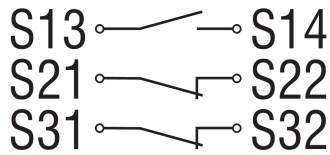
Dimensional drawing miscellaneous



ID: kbns1a05

| 133.9 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

Diagram



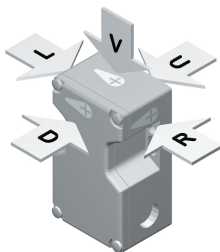
ID: k2o1sk10

| 40.1 kB | .cdr |

| 97.4 kB | .jpg | 352.778 x 157.339 mm - 1000 x 446 px - 72 dpi

| 3.2 kB | .png | 74.083 x 33.161 mm - 210 x 94 px - 72 dpi

Operating principle



ID: kbns1a04

| 147.3 kB | .jpg | 352.778 x 352.778 mm - 1000 x 1000 px - 72 dpi

| 19.9 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

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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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