



BNS-B20-12ZG-ST-R

- Connector M12 x 1, 8-pole
- Thermoplastic enclosure
- Non-contact safety switch
- Does not protrude into the door opening
- 119,5 mm x 140 mm x 43,3 mm
- Substitutes door-handle and safety switch, no further door fittings required
- Modern and symmetric design
- Tamper-proof because of integral coded safety sensor
- Ergonomic operation
- Suitable for hinged and sliding guards
- No protruding actuator
- Simple mounting with 4 Screws

Data

Ordering data

Product type description	BNS-B20-12ZG-ST-R
Article number (order number)	101177734
EAN (European Article Number)	4030661309194
eCl@ss number, Version 9.0	27-27-24-02
eCl@ss number, Version 11.0	27-27-24-02
ETIM number, version 7.0	EC002544
ETIM number, version 6.0	EC002544

Approval - Standards

Certificates	TÜV
	BG
	cULus
	EAC

General data

Standards	IEC 60947-5-3 BG-GS-ET-14
Coding level according to ISO 14119	Low
Active principle	Magnetic drive
Installation conditions (mechanical)	quasi-flush
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	115 g

General data - Features

Integral System Diagnostics, status	Yes
Number of openers	2
Number of shutters	1
Number of safety contacts	2
Number of cable wires	6

Safety appraisal

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

Safety appraisal - Safety outputs

B10d- Value Normally-closed contact/Normally open contact (NC/NO)	25,000,000 Operations
---	-----------------------

Mechanical data

Actuating element	Magnet
Door hinge	Right
Latching force	100 N
Door weight, Sliding guard, maximal	3 kg
Door weight, Hinged guard, maximal	5 kg

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

Ensured switch distance "ON" S_{ao}	0 mm
Ensured switch distance "OFF" S_{ar}	22 mm

Mechanical data - Connection technique

Terminal Connector	Connector M12
--------------------	---------------

Mechanical data - Dimensions

Length of sensor	43.3 mm
Width of sensor	119.5 mm
Height of sensor	140 mm

Ambient conditions

Degree of protection	IP67
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+70 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+70 °C
Resistance to vibrations to EN 60068-2-6	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms

Electrical data

Voltage type	DC (direct current)
Switching voltage, maximum	24 VDC
Switching current, maximum	0.01 A
Switching capacity, maximum	0.2 W
Switching frequency, maximum	5 Hz

Status indication

Note (Integral System Diagnostics, status)	The LED is illuminated when the guard is closed.
---	--

Scope of delivery

Included in delivery

Actuators must be ordered separately.

Accessory

Recommendation (actuator)

BNS-B20-B01

Recommended safety switchgear

SRB-E-301ST

SRB-E-201LC

Notes

Note (General)

Contact symbols shown for the closed condition of the guard device.

The contact configuration for versions with or without LED is identical.

Inductive loads (e.g. contactors, relays, etc.) are to be suppressed by means of a suitable circuit.

Circuit example

Note (Wiring diagram)

Contact S21-S22 must be integrated in the safety circuit.

Ordering code

Product type description:
BNS-B20-(1)Z(2)-(3)-(4)

(1)	
12	1 NO contact/2 NC contacts
02	2 NC contact
(2)	
without	without LED switching conditions display
G	with LED switching conditions display
(3)	
without	connecting cable bottom
H	connecting cable back
ST	M12 connector bottom
(4)	
L	left hinged door (for bottom pre-wired cable or connector version only)
R	right hinged door (for bottom pre-wired cable or connector version only)

Pictures

Product picture (catalogue individual photo)



ID: kb-20f01
| 896.0 kB | .jpg | 352.425 x 388.408 mm - 999 x 1101 px - 72 dpi
| 58.8 kB | .png | 74.083 x 81.492 mm - 210 x 231 px - 72 dpi

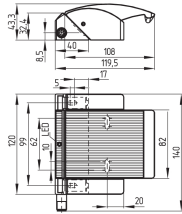
Product picture (catalogue individual photo)



ID: kb-20f15

| 373.7 kB | .jpg | 260.703 x 287.161 mm - 739 x 814 px - 72 dpi
| 46.8 kB | .png | 74.083 x 81.492 mm - 210 x 231 px - 72 dpi

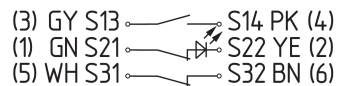
Dimensional drawing basic component



ID: 1b-20g01

| 93.9 kB | .cdr |
| 8.7 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi
| 116.1 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

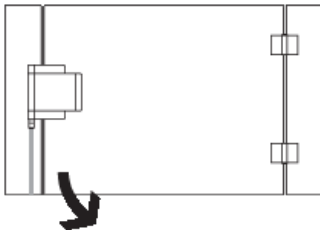
Diagram



ID: kb-20k06

| 19.3 kB | .cdr |
| 87.8 kB | .jpg | 352.778 x 85.372 mm - 1000 x 242 px - 72 dpi

Clipart



ID: kb20-c03

| 18.8 kB | .cdr |
| 1.3 kB | .png | 74.083 x 52.564 mm - 210 x 149 px - 72 dpi

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.

Generated on: 12/01/2022, 4:15 am