



## BNS-B20-12ZG-L

- Pre-wired cable
- 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-L |
| Article number (order number) | 101186266      |
| EAN (European Article Number) | 4030661333496  |
| eCl@ss number, version 12.0   | 27-27-44-01    |
| 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 | cULus |
|--------------|-------|

## General data

|  |                                       |
|--|---------------------------------------|
| Standards                              | BG-GS-ET-14<br>EN IEC 60947-5-3       |
| Coding level according to EN ISO 14119 | Low                                   |
| Working principle                      | Magnetic drive                        |
| Installation conditions (mechanical)   | quasi-flush                           |
| Housing material                       | Glass-fibre, reinforced thermoplastic |
| Gross weight                           | 143 g                                 |

## General data - Features

|                                      |     |
|--------------------------------------|-----|
| Coding                               | Yes |
| Integral system diagnostics, general | Yes |
| Number of normally closed (NC)       | 2   |
| Number of normally open (NO)         | 1   |
| Number of safety contacts            | 2   |
| Number of cable wires                | 6   |

## Safety classification

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

## Safety classification - Safety outputs

|  |                       |
|--|-----------------------|
| B <sub>10D</sub> - Value Normally-closed contact/Normally open contact (NC/NO) | 25,000,000 Operations |
|--|-----------------------|

## Mechanical data

|                                     |        |
|-------------------------------------|--------|
| Actuating element                   | Magnet |
| Door hinge                          | Left   |
| Latching force                      | 100 N  |
| Door weight, Sliding guard, maximal | 3 kg   |

Door weight, Hinged guard, maximal 5 kg

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

Assured switching distance "ON"  $S_{ao}$  0 mm  
Assured switching distance "OFF"  $S_{ar}$  22 mm

### **Mechanical data - Connection technique**

Length of cable 1 m  
Cable entry bottom  
Termination Cable  
Wire cross-section  $0.25 \text{ mm}^2$   
Material of the Cable mantle PVC

### **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  $-25 \dots +70 \text{ }^\circ\text{C}$   
Storage and transport temperature  $-25 \dots +70 \text{ }^\circ\text{C}$   
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 24 VDC  
Switching current, maximum 0.01 A

Switching capacity, maximum 0.24 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

Scope of delivery Actuator must be ordered separately.

### Accessory

Recommendation (actuator) BNS-B20-B01

Recommended safety switchgear  
SRB-E-301ST  
SRB-E-201LC

### Note

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.

### Wiring 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)

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**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)

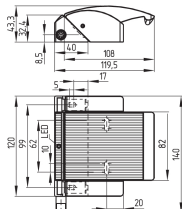


ID: kb-20f17

| 776.9 kB | .jpg | 352.425 x 388.408 mm - 999 x 1101 px - 72 dpi

| 87.3 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

(3) GY S13  
(1) GN S21  
(5) WH S31

S14 PK (4)  
S22 YE (2)  
S32 BN (6)

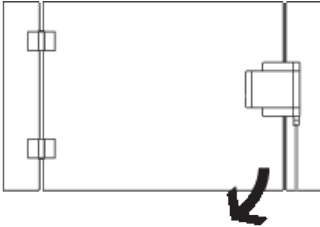
ID: kb-20k06

| 19.3 kB | .cdr |

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

| 3.9 kB | .png | 74.083 x 17.992 mm - 210 x 51 px - 72 dpi

## Clipart



ID: kb20-c04

| 18.8 kB | .cdr |

| 1.4 kB | .png | 74.083 x 52.211 mm - 210 x 148 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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