



## BNS-B20-02ZG-H-LST 2,0M

- 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-B20-02ZG-H-LST 2,0M |
| Article number (order number) | 101191703               |
| EAN (European Article Number) | 4030661351889           |
| 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                           | 188 g                                 |

## General data - Features

|                                      |     |
|--------------------------------------|-----|
| Coding                               | Yes |
| Integral system diagnostics, general | Yes |
| Number of normally closed (NC)       | 2   |
| Number of safety contacts            | 2   |
| Number of cable wires                | 4   |

## 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 |
| 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              | 2 m   |
| Termination                  | Connecting cable with M12 connector, straight, 4-pole |
| Wire cross-section           | 0.25 mm <sup>2</sup>                                  |
| 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 ... +70 °C               |
| Storage and transport temperature | -25 ... +70 °C               |
| Resistance to vibrations          | 10 ... 55 Hz, amplitude 1 mm |
| Resistance to shock               | 30 g / 11 ms                 |

## Electrical data

|                              |        |
|------------------------------|--------|
| 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)

---

**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)

|                |                         |
|----------------|-------------------------|
| <b>without</b> | connecting cable bottom |
| <b>H</b>       | connecting cable back   |
| <b>ST</b>      | M12 connector bottom    |

(4)

|          |  |
|----------|--|
| <b>L</b> | left hinged door (for bottom pre-wired cable or connector version only)  |
| <b>R</b> | right hinged door (for bottom pre-wired cable or connector version only) |

## Pictures

### Product picture (catalogue individual photo)



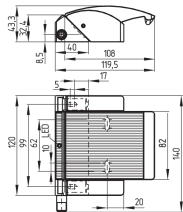
ID: kexb2f01

| 836.6 kB | .jpg | 352.778 x 529.167 mm - 1000 x 1500 px - 72 dpi

| 61.8 kB | .png | 73.731 x 110.772 mm - 209 x 314 px - 72 dpi

| 51.2 kB | .jpg | 82.197 x 123.472 mm - 233 x 350 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

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: 24/08/2024, 9:23 am