

## Datasheet - BNS 260-11/01ZG-ST-R

Safety sensors / BNS 260



Preferred typ



- Thermoplastic enclosure
- Small body
- Concealed mounting possible
- 26 mm x 36 mm x 13 mm
- Long life
- no mechanical wear
- Insensitive to transverse misalignment
- Insensitive to soiling
- Connector 8 mm, 6-pole, Latching interlocking

(Minor differences between the printed image and the original product may exist!)

### Ordering details

|                          |                      |
|--------------------------|----------------------|
| Product type description | BNS 260-11/01ZG-ST-R |
| Article number           | 101184368            |
| EAN code                 | 4030661321660        |
| eCl@ss                   | 27-27-24-02          |

### Approval

Approval



### Classification

|   |  |
|---|--|
| Standards   | EN ISO 13849-1   |
| B <sub>10d</sub> Opener/Normally open contact (NC/NO) | 25.000.000   |
| - notice  | at max. 20% contact load   |
| Mission time  | 20 Years   |
| notice  | $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{cp} \times 3600 \text{ s/h}}{t_{cycle}}$ |

### Global Properties

|              |         |
|--------------|---------|
| Product name | BNS 260 |
|--------------|---------|

|  |   |
|--|---|
| Standards  | IEC 60947-5-3, BG-GS-ET-14                    |
| Compliance with the Directives (Y/N)  | Yes   |
| Materials  |   |
| - Material of the housings   | Plastic, glass-fibre reinforced thermoplastic |
| Weight   | 15 g  |
| Coding available (Y/N)   | Yes   |
| Monitoring function of downstream devices (Y/N)  | No  |
| Prerequisite evaluation unit   |   |
| Recommended safety-monitoring module   |   |
| Recommended actuator   | BPS 260                                       |

## Mechanical data

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|                                      |  |
|--------------------------------------|--|
| Design of electrical connection      | Connector 8 mm, 6-pole, Latching interlocking  |
| mechanical installation conditions   | quasi-flush  |
| Active area                          |  |
| Ensured switch distance ON $S_{ao}$  | 5 mm   |
| Ensured switch distance OFF $S_{ar}$ | 15 mm  |
| notice                               | <b>Axial misalignment</b><br>The safety sensor and the actuator tolerate a horizontal and vertical misalignment to each other. The possible misalignment depends on the distance of the active surfaces of the sensor and the actuator. The sensor is active in the tolerance range. |
| Type of actuation                    | Magnet   |
| Direction of motion                  | head-on with regard to the active surface  |
| restistance to shock                 | 30 g / 11 ms   |
| Resistance to vibration              | 10 ... 55 Hz, Amplitude 1 mm   |
| Door hinge                           | right  |

## Ambient conditions

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|  |        |
|--|--------|
| Ambient temperature                      |        |
| - Min. environmental temperature         | -25 °C |
| - Max. environmental temperature         | +70 °C |
| Storage and transport temperature        |        |
| - Min. Storage and transport temperature | -25 °C |
| - Max. Storage and transport temperature | +70 °C |
| Protection class                         | IP67   |

## Electrical data

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|  |             |
|--|-------------|
| Integrated Safety monitoring module available (Y/N)    | No          |
| Cross circuit/short circuit recognition possible (Y/N) | Yes         |
| Voltage type   | VDC         |
| Switch frequency                                       | max. 5 Hz   |
| Switching voltage                                      | max. 24 VDC |
| Switching current                                      | max. 10 mA  |
| Switching capacity                                     | max. 240 mW |

## Outputs

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|  |         |
|--|---------|
| Design of control output                 |         |
| Number of shutters                       | 1 piece |
| Number of openers                        | 2 piece |
| Design of output signal switching device |         |

## Electrical data - Safety outputs

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|   |         |
|---|---------|
| Number of secure semi-conductor outputs | 0 piece |
| Number of secure outputs with contact   | 2 piece |

## Electrical data - Diagnostic output

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|   |         |
|---|---------|
| Number of semi-conductor outputs with signaling function              | 0 piece |
| Number of outputs with signaling function that already have a contact | 1 piece |

## LED switching conditions display

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|  |     |
|--|-----|
| LED switching conditions display (Y/N)             | Yes |
| - The LED is illuminated when the guard is closed. |     |

## ATEX

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|   |      |
|---|------|
| Explosion protection categories for gases | None |
| Explosion protected category for dusts    | None |

## Dimensions

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|                          |       |
|--------------------------|-------|
| Dimensions of the sensor |       |
| - Width of sensor        | 26 mm |
| - Height of sensor       | 36 mm |
| - Length of sensor       | 13 mm |

## notice

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Contact symbols shown for the closed condition of the guard device.  
The contact configuration for versions with or without LED is identical.  
The number in brackets indicate the PIN number of the connector.  
Contact S21-S22 und S11-S12 must be integrated in the safety circuit

## Included in delivery

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Actuators must be ordered separately.

## Indication legend

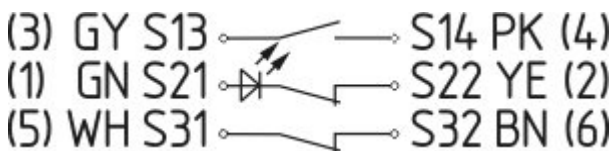
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### Switch on/off diagram


The actuating graph also applies to the BPS 260-2, the actuator with 90° inverted actuation.

## Diagram

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Note Diagram

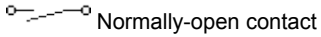
 positive break NC contact



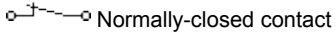
active



no active



Normally-open contact



Normally-closed contact

## Ordering code

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BNS 260-(1)(2)Z(3)-(4)-(5)

|                |  |
|----------------|--|
| <b>(1)</b>     |  |
| <b>11</b>      | 1 Normally open contact (NO) / 1 Opener (NC) |
| <b>02</b>      | 2 Opener (NC)                                |
| <b>(2)</b>     |  |
| <i>without</i> | without Diagnostic output                    |
| <b>I01</b>     | 1 Opener (NC)                                |
| <b>(3)</b>     |  |
| <i>without</i> | without LED switching conditions display     |
| <b>G</b>       | with LED switching conditions display        |
| <b>(4)</b>     |  |
| <i>without</i> | Pre-wired cable                              |
| <b>ST</b>      | with connector                               |
| <b>(5)</b>     |  |
| <b>L</b>       | Door hinge on left-hand side                 |
| <b>R</b>       | Door hinge on right-hand side                |

## Documents

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**Operating instructions and Declaration of conformity** (pt) 298 kB, 06.04.2016

Code: mrl\_bns260\_pt

**Operating instructions and Declaration of conformity** (cs) 326 kB, 24.02.2016

Code: mrl\_bns260\_cs

**Operating instructions and Declaration of conformity** (fr) 299 kB, 29.04.2016

Code: mrl\_bns260\_fr

**Operating instructions and Declaration of conformity** (de) 301 kB, 04.03.2016

Code: mrl\_bns260\_de

**Operating instructions and Declaration of conformity** (it) 293 kB, 06.04.2016

Code: mrl\_bns260\_it

**Operating instructions and Declaration of conformity** (nl) 269 kB, 05.04.2013

Code: mrl\_bns260\_nl

**Operating instructions and Declaration of conformity** (pl) 326 kB, 06.04.2016

Code: mrl\_bns260\_pl

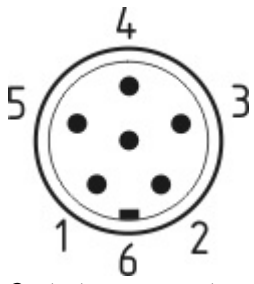
**Operating instructions and Declaration of conformity** (sv) 283 kB, 17.06.2015

Code: mrl\_bns260\_sv

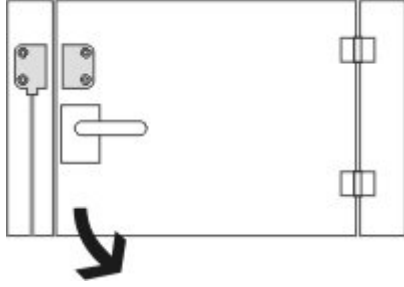
**Operating instructions and Declaration of conformity** (jp) 451 kB, 07.07.2016

Code: mrl\_bns260\_jp





Contact arrangement



Clipart

## System components

### Actuator



#### 101184395 - BPS 260-1

- Actuator and sensor on a mounting level



#### 101184396 - BPS 260-2

- Actuator 90 ° attached to the sensor

### Accessories



#### 101184643 - SPACER BNS 260

- to mount the magnetic safety sensor and actuator on ferromagnetic material