

Datasheet - BNS 260-02ZG-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 M8 x 1, 4-pole

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

Ordering details

| | |
|--------------------------|-------------------|
| Product type description | BNS 260-02ZG-ST-R |
| Article number | 101184365 |
| EAN code | 4030661321622 |

Approval

Approval



BG



USA/CAN

Classification

| | |
|------------------|------------------------------------------------------------------------------------------------------------------------|
| Standards | EN ISO 13849-1 |
| B10d Opener (NC) | 25.000.000 |
| - notice | at max. 20% contact load |
| Mission time | 20 Years |
| notice | $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{ap} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$ |

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 | 18 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

| | |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design of electrical connection | Connector M8 |
| mechanical installation conditions | quasi-flush |
| Active area | |
| Ensured switch distance ON S_{ao} | 5 mm |
| Ensured switch distance OFF S_{ar} | 15 mm |
| notice | Axial misalignment 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

| | |
|------------------------------------------|--------|
| 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

| | |
|--------------------------------------------------------|-------------|
| 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

| | |
|------------------------------------------|---------|
| Design of control output | |
| Number of shutters | 0 piece |
| Number of openers | 2 piece |
| Design of output signal switching device | |

Electrical data - Safety outputs

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

Electrical data - Diagnostic output

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

LED switching conditions display

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

ATEX

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

Dimensions

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

notice

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

Actuators must be ordered separately.

Indication legend


Switch on/off diagram


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


Diagram



Note Diagram

 positive break NC contact

 active

 no active



Normally-open contact



Normally-closed contact

Ordering code

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

| | |
|----------------|----------------------------------------------|
| (1) | |
| 11 | 1 Normally open contact (NO) / 1 Opener (NC) |
| 02 | 2 Opener (NC) |
| (2) | |
| <i>without</i> | without Diagnostic output |
| /01 | 1 Opener (NC) |
| (3) | |
| <i>without</i> | without LED switching conditions display |
| G | with LED switching conditions display |
| (4) | |
| <i>without</i> | Pre-wired cable |
| ST | with connector |
| (5) | |
| L | Door hinge on left-hand side |
| R | Door hinge on right-hand side |

Documents

Operating instructions and Declaration of conformity (pt) 313 kB, 29.11.2011

Code: mrl_bns260_pt

Operating instructions and Declaration of conformity (cs) 323 kB, 04.06.2012

Code: mrl_bns260_cs

Operating instructions and Declaration of conformity (fr) 269 kB, 19.04.2013

Code: mrl_bns260_fr

Operating instructions and Declaration of conformity (de) 266 kB, 17.01.2013

Code: mrl_bns260_de

Operating instructions and Declaration of conformity (it) 264 kB, 18.03.2013

Code: mrl_bns260_it

Operating instructions and Declaration of conformity (br) 699 kB, 11.08.2011

Code: mrl_bns260_br

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

Code: mrl_bns260_nl

Operating instructions and Declaration of conformity (pl) 323 kB, 02.04.2012

Code: mrl_bns260_pl

Operating instructions and Declaration of conformity (jp) 389 kB, 24.06.2014

Code: mrl_bns260_jp

Operating instructions and Declaration of conformity (en) 269 kB, 17.01.2013

Code: mrl_bns260_en

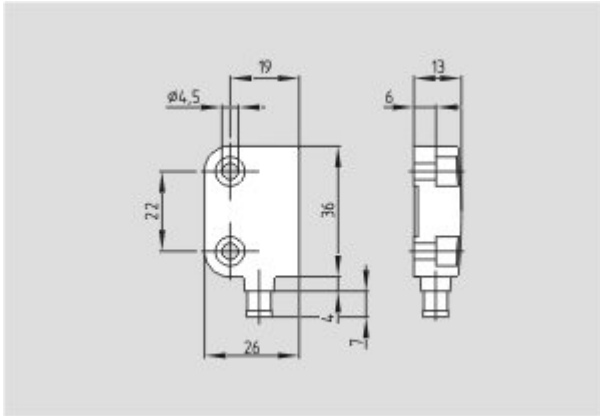
Operating instructions and Declaration of conformity (es) 320 kB, 13.09.2011

Code: mrl_bns260_es

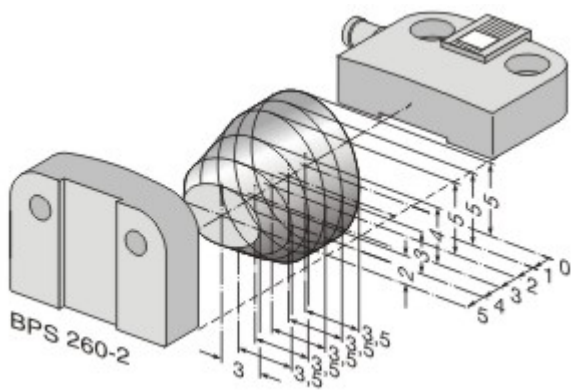
Operating instructions and Declaration of conformity (da) 314 kB, 27.08.2012

Code: mrl_bns260_da

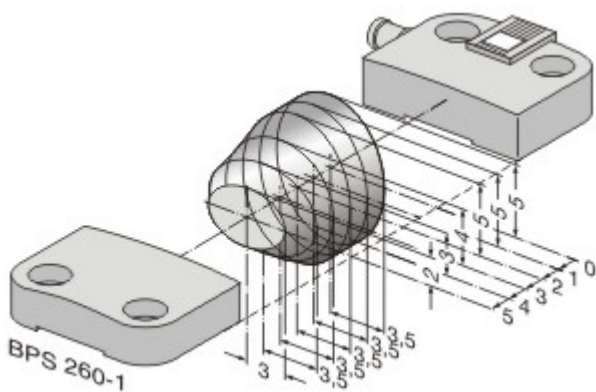
Images



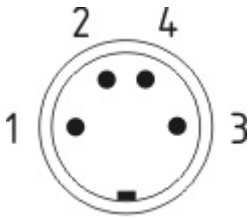
Dimensional drawing (basic component)



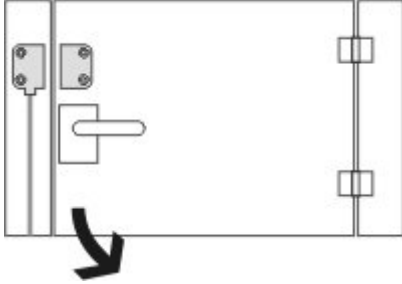
Characteristic curve



Characteristic curve



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

Connector



101194060 - BNS-Y-02

- enables the interconnection and the connection of BNS safety sensors to a common safety monitoring module
- for BNS 33, BNS 36, BNS 260 (with 2 NC)

The data and values have been checked thoroughly. Technical modifications and errors excepted.
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