

## Datasheet - BNS 260-02z-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 260-02Z-ST-R
Article number	101184361
EAN code	4030661321585
eCl@ss	27-27-24-02

### Approval

Approval



### Classification

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

### Global Properties

Product name	BNS 260
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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

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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	<b>Axial misalignment</b> 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. 75 VDC
Switching current	max. 400 mA
Switching capacity	max. 10 VA

## Outputs

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Design of control output	
Number of shutters	0 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	0 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	0 piece

## LED switching conditions display

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LED switching conditions display (Y/N)	No
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## 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

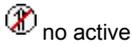
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Note Diagram

 positive break NC contact

 active



- 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

**Operating instructions and Declaration of conformity** (en) 300 kB, 04.03.2016

Code: mrl\_bns260\_en

**Operating instructions and Declaration of conformity (es)** 290 kB, 09.03.2016

Code: mrl\_bns260\_es

**Operating instructions and Declaration of conformity (da)** 286 kB, 24.09.2015

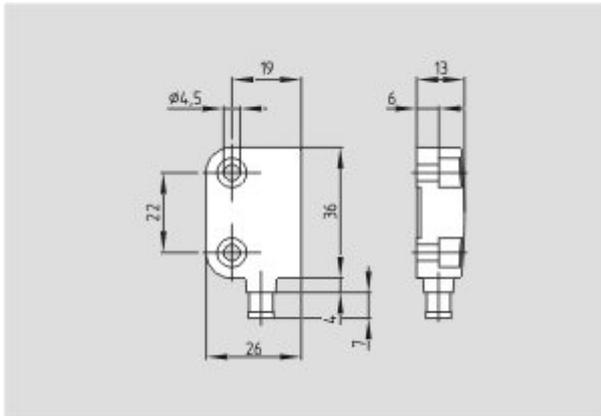
Code: mrl\_bns260\_da

**EAC certification (ru)** 782 kB, 05.10.2015

Code: q\_6044p17\_ru

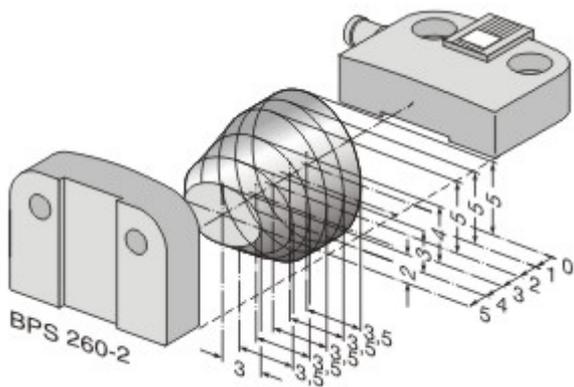
## Images

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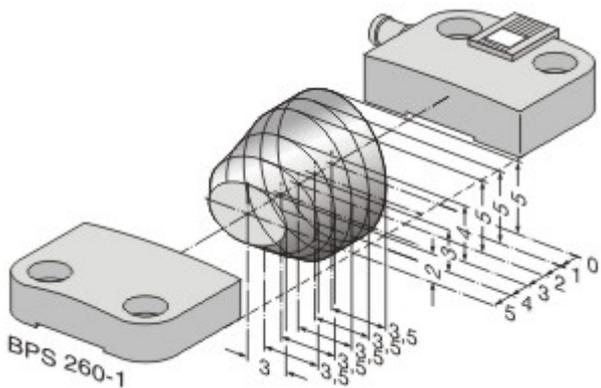
Dimensional drawing (basic component)

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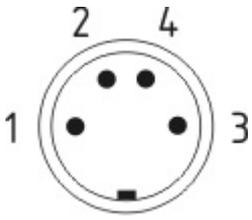
Characteristic curve

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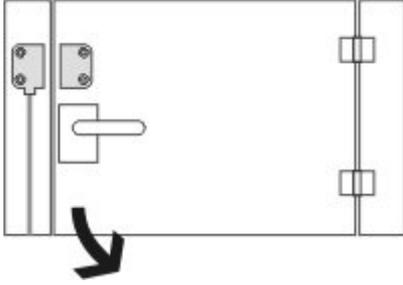


Characteristic curve

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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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