22.08.2014

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

Safety sensors / BNS 260

X Preferred typ



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

### **Ordering details**

Product type description Article number EAN code

#### Approval

Approval



BNS 260-11ZG-ST-R

101184367

4030661321646

# Classification

#### Standards

B10d Opener/Normally open contact (NC/NO) - notice Mission time notice EN ISO 13849-1 25.000.000 at max. 20% contact load 20 Years  $MTTF_{d} = \frac{B_{100}}{0.1 \times n_{op}}$  $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$ 

#### **Global Properties**

Product name Standards Compliance with the Directives (Y/N) **C€**  BNS 260 IEC 60947-5-3, BG-GS-ET-14



- · 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

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 Sao	5 mm
Ensured switch distance OFF Sar	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**

Cross circuit/short circuit recognition possible (Y/N)YesVoltage typeVDCSwitch frequencymax. 5 HzSwitching voltagemax. 24 VDCSwitching currentmax. 10 mASwitching capacitymax. 240 mW	Integrated Safety monitoring module available (Y/N)	No
Switch frequencymax. 5 HzSwitching voltagemax. 24 VDCSwitching currentmax. 10 mA	Cross circuit/short circuit recognition possible (Y/N)	Yes
Switching voltagemax. 24 VDCSwitching currentmax. 10 mA	Voltage type	VDC
Switching current max. 10 mA	Switch frequency	max. 5 Hz
5	Switching voltage	max. 24 VDC
Switching capacity max. 240 mW	Switching current	max. 10 mA
	Switching capacity	max. 240 mW

# Outputs

Design of control output		
Number of shutters	1 piece	
Number of openers	1 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	

#### 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

(3) BK S13 - S14 BU (4) (1) WH S21 - S22 BN (2)

Note Diagram → positive break NC contact ① active ② no active •----• Normally-open contact •-<sup>1+---•</sup> 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)	
without	without Diagnostic output
/01	1 Opener (NC)
(3)	
without	without LED switching conditions display
G	with LED switching conditions display
(4)	
without	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

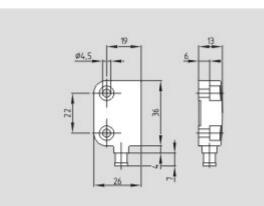
**Operating instructions and Declaration of conformity** (en) 269 kB, 17.01.2013 Code: mrl\_bns260\_en

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

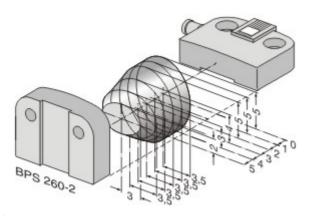
Code: mrl\_bns260\_es

**Operating instructions and Declaration of conformity** (da) 314 kB, 27.08.2012 Code: mrl\_bns260\_da

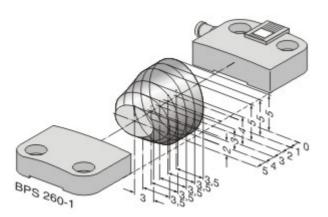
# Images



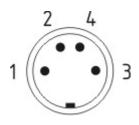
Dimensional drawing (basic component)



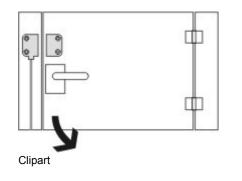
Characteristic curve



Characteristic curve



Contact arrangement



#### 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



### 101194059 - BNS-Y-11

• enables the interconnection and the connection of BNS safety sensors to a common safety monitoring module

• for BNS 33, BNS 36, BNS 260 (with 1 NC/1 NO)

The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 22.08.2014 - 04:15:34h Kasbase 2.2.18.F DBI

