# Datasheet - BNS 260-02/01ZG-ST-R

Safety sensors / BNS 260









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

- 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

# **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

BNS 260-02/01ZG-ST-R

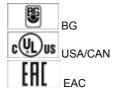
101184366

4030661321639

27-27-24-02

**Approval** 

Approval



## Classification

Standards

B10d Normally-closed contact (NC)

- notice

Mission time

notice

EN ISO 13849-1

25.000.000

at max. 20% contact load

20 Years

$$MTTF_d = \frac{B_{10d}}{0.1 \times n_{op}}$$

$$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{oyole}}$$

**Global Properties** 

Standards IEC 60947-5-3, BG-GS-ET-14

Compliance with the Directives (Y/N) € €

Materials

- Material of the housings Plastic, glass-fibre reinforced thermoplastic

Yes

Weight 18
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 8 mm, 6-pole, Latching interlocking

mechanical installation conditions quasi-flush

Active area

Ensured switch distance ON  $S_{a0}$  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  $$-25\ ^{\circ}\text{C}$$ 

- 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

0

**Outputs** 

Design of control output

Number of shutters

Number of openers 3

Design of output signal switching device

### **Electrical data - Safety outputs**

Number of secure semi-conductor outputs 0

Number of secure outputs with contact 0

# **Electrical data - Diagnostic output**

Number of semi-conductor outputs with signaling function 0

Number of outputs with signaling function that already have a contact 0

## 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

Explosion protected category for dusts

None

#### **Dimensions**

Dimensions of the sensor

- Width of sensor
- Height of sensor
- 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

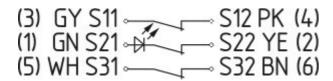
Actuators must be ordered separately.

# **Indication legend**

Switch on/off diagram

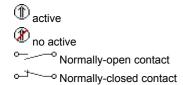
The actuating graph also applies to the BPS 260-2, the actuator with 90° inverted actuation.

## **Diagram**



Note Diagram

positive break NC contact



#### **Ordering code**

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

(1)

11 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) 331 kB, 24.10.2018

Code: mrl\_bns260\_pt

Operating instructions and Declaration of conformity (cs) 365 kB, 25.10.2018

Code: mrl\_bns260\_cs

Operating instructions and Declaration of conformity (fr) 331 kB, 24.10.2018

Code: mrl\_bns260\_fr

Operating instructions and Declaration of conformity (de) 290 kB, 01.10.2018

Code: mrl\_bns260\_de

Operating instructions and Declaration of conformity (it) 321 kB, 24.10.2018

Code: mrl\_bns260\_it

Operating instructions and Declaration of conformity (nl) 329 kB, 23.10.2018

Code: mrl\_bns260\_nl

Operating instructions and Declaration of conformity (pl) 365 kB, 25.10.2018

Code: mrl\_bns260\_pl

Operating instructions and Declaration of conformity (sv) 442 kB, 25.10.2018

Code: mrl\_bns260\_sv

Operating instructions and Declaration of conformity (jp) 398 kB, 24.09.2018

Code: mrl\_bns260\_jp

Operating instructions and Declaration of conformity (en) 330 kB, 01.10.2018

Code: mrl\_bns260\_en

Operating instructions and Declaration of conformity (es) 329 kB, 24.10.2018

Code: mrl\_bns260\_es

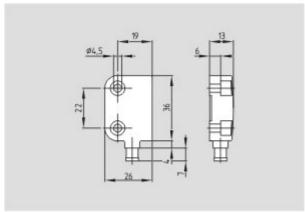
Operating instructions and Declaration of conformity (da) 343 kB, 25.10.2018

Code: mrl\_bns260\_da

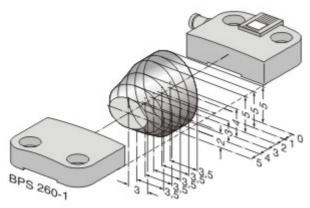
EAC certification (ru) 782 kB, 05.10.2015

Code: q\_6044p17\_ru

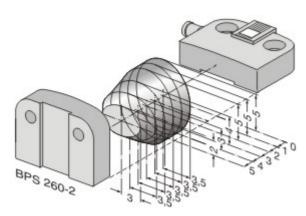
# **Images**



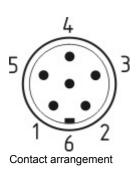
Dimensional drawing (basic component)

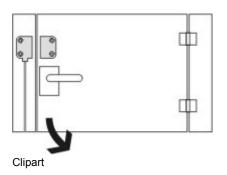


Characteristic curve



Characteristic curve





# **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

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, D-42279 Wuppertal The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 02.08.2019 - 20:45:19h Kasbase 3.3.0.F.64I