# Datasheet - BNS 260-02Z-ST-L

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 M8 x 1, 4-pole

## **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

BNS 260-02Z-ST-L

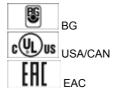
101184377

4030661321752

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**

Permanent light

**BNS 260** 

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 20
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.

max. 10 VA

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 left

## **Ambient conditions**

Ambient temperature

Min. environmental temperature
 Max. environmental temperature

Storage and transport temperature

Min. Storage and transport temperature
 Max. Storage and transport temperature
 Protection class

# **Electrical data**

Integrated Safety monitoring module available (Y/N)

Cross circuit/short circuit recognition possible (Y/N)

Voltage type

VDC

Switch frequency

max. 5 HZ

Switching voltage

max. 75 VDC

Switching current

max. 400 mA

# Outputs

Design of control output

Switching capacity

Number of shutters 0
Number of openers 2

Design of output signal switching device

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

Number of secure semi-conductor outputs 0

Number of secure outputs with contact 2

# **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) No

#### **ATEX**

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

#### **Dimensions**

Dimensions of the sensor

- Width of sensor
- Height of sensor
- Length of sensor
13

### 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  $90^{\circ}$  inverted actuation.

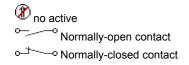
#### **Diagram**



Note Diagram

opositive break NC contact

1 active



### **Ordering code**

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

11 1 Normally open contact (NO) / 1 Opener (NC)

02 2 Opener (NC)

(2)

without without Diagnostic output

/01 1 Opener (NC)

(3)

(5)

without without LED switching conditions display

G with LED switching conditions display

(4)

without Pre-wired cable ST

with connector

Door hinge on left-hand side L

R Door hinge on right-hand side

### **Documents**

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) 322 kB, 28.06.2018

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

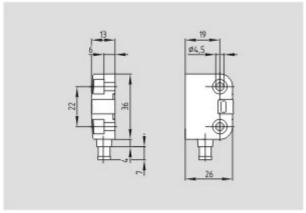
Operating instructions and Declaration of conformity (da) 286 kB, 24.09.2015

Code: mrl\_bns260\_da

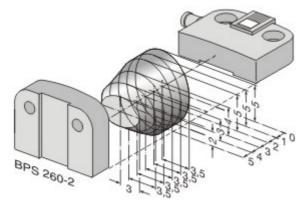
EAC certification (ru) 782 kB, 05.10.2015

Code: q\_6044p17\_ru

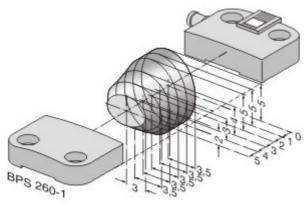
# **Images**



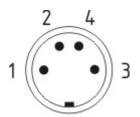
Dimensional drawing (basic component)



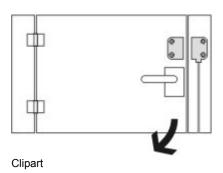
Characteristic curve



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



### 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 throroughly. Technical modifications and errors excepted. Generiert am 11.09.2018 - 08:57:00h Kasbase 3.3.0.F.64l