# Datasheet - BNS 260-02ZG-L

Safety sensors / BNS 260

X Preferred typ





(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
- Pre-wired cable

## **Ordering details**

Product type description

Article number

EAN Code

eCl@ss

BNS 260-02ZG-L

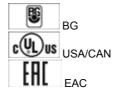
101184389

4030661321899

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

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

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

### **Global Properties**

Permanent light

Standards

IEC

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

Yes

BNS 260

Materials

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

- Material of the cable mantle PVC
Weight 50
Coding available (Y/N) Yes

Coding available (Y/N)

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 Cable
Cable length 1

Conductors 4 x 0,25

AWG-Number

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 left

**Ambient conditions** 

Ambient temperature

Min. environmental temperature
 Max. environmental temperature
 +70 °C

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. 24 VDC

Switching current

max. 10 mA

Switching capacity

max. 240 mW

**Outputs** 

Design of control output

Number of shutters

0

#### 2

0

0

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

Number of secure semi-conductor outputs

Number of secure outputs with contact 2

#### **Electrical data - Diagnostic output**

Number of semi-conductor outputs with signaling function

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

### LED switching conditions display

LED switching conditions display (Y/N)

- The LED is illuminated when the guard is closed.

Yes

# **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 mm

### notice

Contact symbols shown for the closed condition of the guard device.

The contact configuration for versions with or without LED is identical.

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

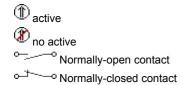
The actuating graph also applies to the BPS 260-2, the actuator with 90° inverted actuation.

#### 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

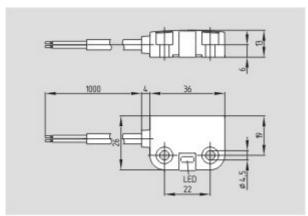
Operating instructions and Declaration of conformity (da) 343 kB, 25.10.2018

Code: mrl\_bns260\_da

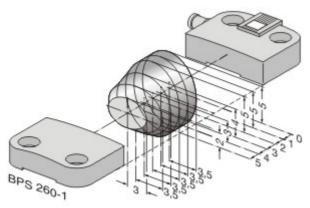
EAC certification (ru) 782 kB, 05.10.2015

Code: q\_6044p17\_ru

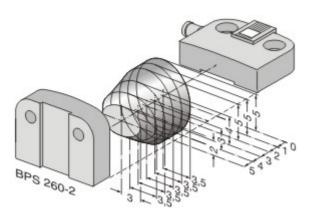
### **Images**



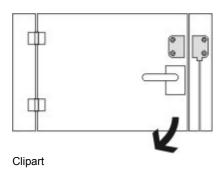
Dimensional drawing (basic component)



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 13.02.2019 - 14:23:43h Kasbase 3.3.0.F.64l