17.09.2018

09:37:46h

# Datasheet - BNS 260-02/01Z-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 eCl@ss

#### Approval

Approval

BNS 260-02/01Z-R 101184370 4030661321684 27-27-24-02



## 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  $MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$  $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$ 

#### **Global Properties**

Permanent light Standards Compliance with the Directives (Y/N) C E

BNS 260 IEC 60947-5-3, BG-GS-ET-14

# SCHMERSAL

- 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

#### Materials

- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the cable mantle	PVC
Weight	60
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	Cable
Cable length	1
Conductors	6 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	right

#### **Ambient conditions**

Ambient temperature	
- Min. environmental temperature	-25
- Max. environmental temperature	+70
Storage and transport temperature	
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+70
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. 75 VDC
Switching current	max. 400 mA
Switching capacity	max. 10 VA

# Outputs

# **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	1
LED switching conditions display	
LED switching conditions display (Y/N)	Νο
ATEX	
Explosion protection categories for gases	None
Explosion protected category for dusts	None
Dimensions	
Dimensions of the sensor	
	00
- Width of sensor	26
- Width of sensor - Height of sensor	26 36

#### 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

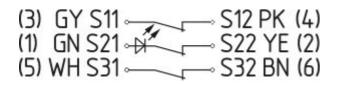
#### Included in delivery

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  $\bigcirc$  positive break NC 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) 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

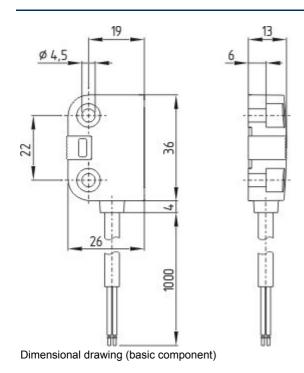
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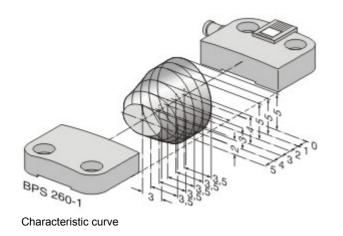
**Operating instructions and Declaration of conformity** (es) 290 kB, 09.03.2016 Code: mrl\_bns260\_es

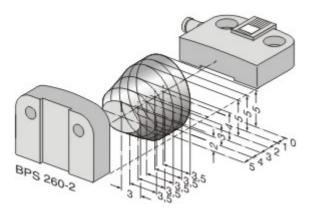
**Operating instructions and Declaration of conformity** (da) 286 kB, 24.09.2015 Code: mrl\_bns260\_da

**EAC certification** (ru) 782 kB, 05.10.2015 Code: q\_6044p17\_ru

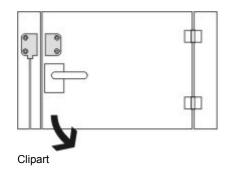
#### Images







#### 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

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The data and values have been checked throroughly. Technical modifications and errors excepted.

Generiert am 17.09.2018 - 09:37:46h Kasbase 3.3.0.F.64I