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

BNS 260-02Z-ST-L 101184377

4030661321752

Approval

Approval



Classification

Standards

B_{10d} Opener (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

Product name

Standards

Compliance with the Directives (Y/N) \Box \in

BNS 260

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

Yes

www.comoso.com

Materials

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

Weight 20 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 left

Ambient conditions

Ambient temperature

Min. environmental temperature
 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

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 voltagemax. 75 VDCSwitching currentmax. 400 mASwitching capacitymax. 10 VA

Outputs

Design of control output

Number of shutters 0 piece
Number of openers 2 piece

Design of output signal switching device

Electrical data - Safety outputs

www.comoso.com

Number of secure semi-conductor outputs	0 piece
Number of secure outputs with contact	2 piece

Electrical data - Diagnostic output

Number of semi-conductor outputs with signaling function	
Number of outputs with signaling function that already have a contact	0 piece

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	26 mm
- Height of sensor	36 mm
- 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









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

1 Opener (NC)

(3)

without without LED switching conditions display

G with LED switching conditions display

(4)

withoutPre-wired cableSTwith connector

(5)

L Door hinge on left-hand sideR 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

www.comoso.com

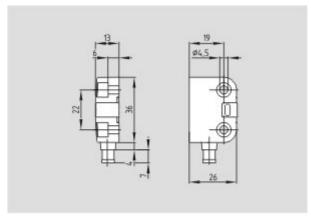
Operating instructions and Declaration of conformity (es) 320 kB, 13.09.2011

Code: mrl_bns260_es

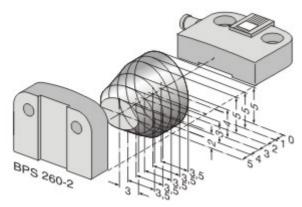
Operating instructions and Declaration of conformity (da) 314 kB, 27.08.2012

Code: mrl_bns260_da

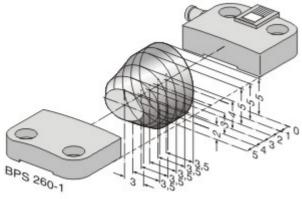
Images



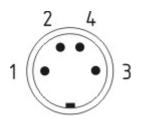
Dimensional drawing (basic component)



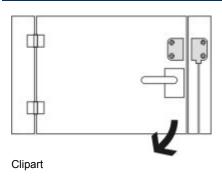
Characteristic curve



Characteristic curve



Contact arrangement



System components

Actuator



101184395 - BPS 260-1

Actuator and sensor on a mounting level



101184396 - BPS 260-2

 \bullet Actuator 90 $^\circ$ 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)

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 22.08.2014 - 04:17:33h Kasbase 2.2.18.F DBI

