Datasheet - BNS 300-01zG

Safety sensors / BNS 300









- Thermoplastic enclosure
- · Long life
- no mechanical wear
- Ø M30
- · Suitable for food processing industry
- · Insensitive to transverse misalignment
- Insensitive to soiling
- · With integral evaluation

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

Ordering details

Product type description

Article number

EAN code

eCl@ss

BNS 300-01ZG

101110514

4030661048895

27-27-24-02

Approval

Approval



Classification

Standards

B_{10d} Opener (NC)

- notice

Mission time

notice

EN ISO 13849-1

20.000.000

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 BNS 300

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

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

Materials

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

- Material of the nuts thermoplastic

- Material of the cable mantle PVC
Weight 110 g
Coding available (Y/N) Yes

Monitoring function of downstream devices (Y/N)

No

Prerequisite evaluation unit

Recommended safety-monitoring module

Recommended actuator BPS 300, BPS 303, BPS 303 SS

Mechanical data

Design of electrical connection Cable

Cable length 1 m

Conductors 4 x 0,75 mm²

AWG-Number 18

mechanical installation conditions quasi-flush

Active area

Ensured switch distance ON 5 mm

Ensured switch distance OFF 15 mm

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

Tightening torque for nuts A/F 36 max. 300 Ncm

Ambient conditions

Ambient temperature

Min. environmental temperature
 Max. environmental temperature
 +55 °C

Storage and transport temperature

- Min. Storage and transport temperature -25 °C
- Max. Storage and transport temperature +70 °C
Protection class

Electrical data

Voltage type

Integrated Safety monitoring module available (Y/N)

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

No

Switch frequency max. 5 Hz
Switching voltage max. 250 VAC
Switching current max. 3 A
Switching capacity max. 750 W

Utilisation category DC-13: 24 V / 30 mA

DC

Outputs

Number of shutters 0 piece
Number of openers 1 piece
Design of output signal switching device

Electrical data - Safety outputs

Number of secure semi-conductor outputs 0 piece
Number of secure outputs with contact 1 piece

Electrical data - Diagnostic output

Number of semi-conductor outputs with signaling function 0 piece

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

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

Explosion protected category for dusts

None

Dimensions

Dimensions of the sensor

- Length of sensor 78 mm
- Diameter of sensor M30

notice

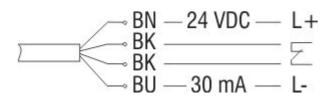
Contact symbols shown for the closed condition of the guard device.

Included in delivery

Actuators must be ordered separately.

Mounting accessories 2 Nuts M 30 x 1,5

Diagram



Note Diagram

opositive break NC contact





o—___o Normally-open contact

o-t--- Normally-closed contact

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.

Order example: BNS 300-01zG-2211

...-2211

higher switching distance

Sar: 8 mm Sao: 18 mm

Ordering code

BNS 300-01ZG-(1)-(2)

(1)

without with cable

ST male connector M12

(2)

2211 higher switching distance

2230 supplementary signalling output

2246 Ue 42 VAC

Documents

Operating instructions and Declaration of conformity (jp) 710 kB, 16.09.2011

Code: mrl_bns300_jp

Operating instructions and Declaration of conformity (pt) 418 kB, 16.04.2012

Code: mrl_bns300_pt

Operating instructions and Declaration of conformity (es) 846 kB, 02.11.2010

Code: mrl_bns300_es

Operating instructions and Declaration of conformity (en) 991 kB, 04.10.2010

Code: mrl_bns300_en

Operating instructions and Declaration of conformity (nl) 538 kB, 27.01.2011

Code: mrl_bns300_nl

Operating instructions and Declaration of conformity (de) 993 kB, 04.10.2010

Code: mrl_bns300_de

Operating instructions and Declaration of conformity (pl) 420 kB, 03.02.2015

Code: mrl_bns300_pl

Operating instructions and Declaration of conformity (fr) 847 kB, 14.12.2010

Code: mrl_bns300_fr

Operating instructions and Declaration of conformity (it) 536 kB, 26.01.2011

Code: mrl_bns300_it

Operating instructions and Declaration of conformity (da) 407 kB, 27.08.2012

Code: mrl_bns300_da

BG-test certificate (en) 559 kB, 05.01.2011

Code: z_b30p02

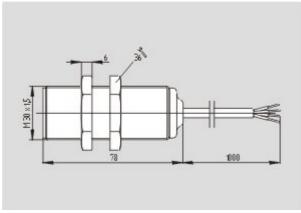
BG-test certificate (de) 571 kB, 05.01.2011

Code: z_b30p01

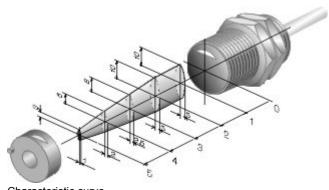
EAC certification (ru) 782 kB, 05.10.2015

Code: q_6044p17_ru

Images



Dimensional drawing (basic component)



Characteristic curve

System components

Actuator



101113734 - BPS 300



101117076 - BPS 303

• Suitable for food processing industry

Mounting accessories



101068520 - MOUNTING CLAMP H 30

 \bullet For a smooth fitting of the proximity switches with cylindric shape Ø 30 mm or thread M30

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 27.01.2016 - 21:48:33h Kasbase 3.2.1.F.64I