13.02.2019

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SCHMERSAL

Datasheet - BNS 36-02ZG-ST-L

Safety sensors / BNS 36

X Preferred typ



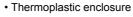
(Minor differences between the printed image and the original product may exist!) $\label{eq:magnetized}$

Ordering details

Product type description Article number EAN Code eCl@ss

Approval

Approval



- Long life
- no mechanical wear
- 88 mm x 25 mm x 13 mm
- Concealed mounting possible
- Insensitive to transverse misalignment
- Insensitive to soiling
- Connector M8, 4-pole, Latching interlocking

BNS 36-02ZG-ST-L 101193160 4030661359847 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 $MTTF_{d} = \frac{B_{10d}}{0.1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{0.000 \text{ s/h}}$

t _{oyole}

Global Properties

Permanent light	BNS 36
Standards	IEC 60947-5-3, BG-GS-ET-14
Compliance with the Directives (Y/N) C ϵ	Yes
Category safety pursuant to EN ISO 13849-1	up 4 - Only in combination with safety monitoring module
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
Weight	29
Coding available (Y/N)	Yes

Monitoring function of downstream devices (Y/N) Prerequisite evaluation unit Recommended safety-monitoring module Recommended actuator

BPS 36-1, BPS 36-2

Mechanical data

Design of electrical connection AWG-Number	Connector M8, 4-pole, Latching interlocking
mechanical installation conditions	quasi-flush
Active area	
Ensured switch distance ON Sao	7 mm
Ensured switch distance OFF Sar	17 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	−25 °C
- 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	IP67

Electrical data

No
/es
/DC
nax. 5 HZ
nax. 24 VDC
nax. 10 mA
nax. 240 mW
r r

Outputs

Design of control output	
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

0
1
Yes
None
None
88 mm
25 mm
13 mm
-

The number in brackets indicate the $\ensuremath{\mathsf{PIN}}$ number of the connector.

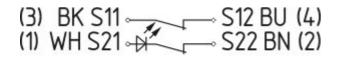
Contact symbols shown for the closed condition of the guard device.

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

Included in delivery

Actuators must be ordered separately.

Diagram



Note Diagram → positive break NC contact active no active Normally-open contact Normally-closed contact

Ordering code

BNS 36-(1)(2)Z(3)-(4)-(5)

(1)

(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

(2)

Operating instructions and Declaration of conformity (nl) 324 kB, 24.09.2018 Code: mrl_bns36_nl

Operating instructions and Declaration of conformity (en) 296 kB, 24.09.2018 Code: mrl_bns36_en

Operating instructions and Declaration of conformity (es) 294 kB, 24.09.2018 Code: mrl_bns36_es

Operating instructions and Declaration of conformity (sv) 318 kB, 16.04.2012 Code: mrl bns36 sv

Operating instructions and Declaration of conformity (pt) 297 kB, 24.09.2018 Code: mrl_bns36_pt

Operating instructions and Declaration of conformity (fr) 295 kB, 24.09.2018 Code: mrl_bns36_fr

Operating instructions and Declaration of conformity (de) 290 kB, 24.09.2018 Code: mrl_bns36_de

Operating instructions and Declaration of conformity (da) 282 kB, 22.08.2013 Code: mrl_bns36_da

Operating instructions and Declaration of conformity (pl) 331 kB, 24.09.2018 Code: mrl_bns36_pl

Operating instructions and Declaration of conformity (it) 287 kB, 24.09.2018 Code: mrl_bns36_it

Operating instructions and Declaration of conformity (cs) 322 kB, 04.06.2012 Code: mrl_bns36_cs

Operating instructions and Declaration of conformity (jp) 555 kB, 24.09.2018 Code: mrl_bns36_jp

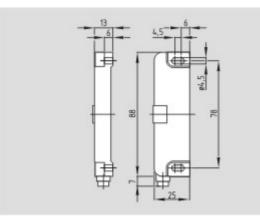
Operating instructions and Declaration of conformity (cn) 381 kB, 02.04.2015 Code: mrl_bns36_cn

Operating instructions and Declaration of conformity (br) 289 kB, 18.12.2018

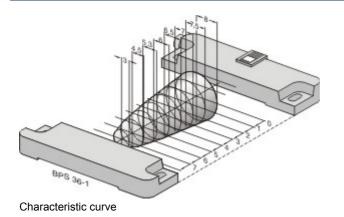
Code: mrl_bns36_br

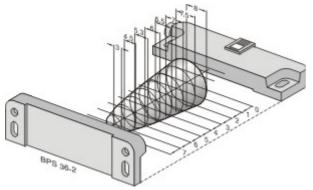
EAC certification (ru) 782 kB, 05.10.2015 Code: q_6044p17_ru

Images

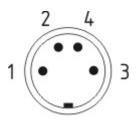


Dimensional drawing (basic component)

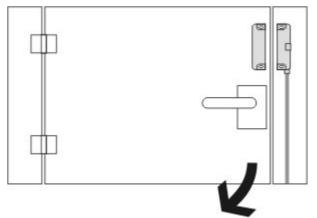




Characteristic curve



Contact arrangement



Operating principle

System components

Actuator	101190052 - BPS 36-1 • Actuator and sensor on a mounting level
	101191859 - BPS 36-2 • Actuator 90 ° attached to the sensor
Accessories	101188624 - SPACER BNS 36 • 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)

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The data and values have been checked throroughly. Technical modifications and errors excepted. Generiert am 13.02.2019 - 14:26:15h Kasbase 3.3.0.F.64l