

Datasheet - EX-BNS 250-11ZG-3G/D

Safety sensors / EX-BNS 250



- Ex certified
- LED version
- Thermoplastic enclosure
- Small body
- 33 mm x 25 mm x 13 mm
- Concealed mounting possible
- Long life
- no mechanical wear
- Insensitive to transverse misalignment
- Insensitive to soiling

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

Ordering details

Product type description	EX-BNS 250-11ZG-3G/D
Article number	10EX-BNS 250-11ZG-3G/D
EAN Code	
eCl@ss	27-27-24-02

Approval

Approval	ATEX
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Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact/Normally open contact (NC/NO)	25.000.000
- notice	at max. 20% contact load
Mission time	20 Years
notice	$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

Global Properties

Permanent light	BNS 250
Standards	EN 60079-0, EN 60079-15, EN 60079-31, IEC 60947-5-3, EN 13463-1,

Compliance with the Directives (Y/N) 

Yes

Materials

- Material of the housings
- Material of the cable mantle

Plastic, glass-fibre reinforced thermoplastic

PVC

Housing construction form

Block

Weight

Coding available (Y/N)

Yes

Monitoring function of downstream devices (Y/N)

No

Prerequisite evaluation unit

Yes

Recommended safety-monitoring module

Recommended actuator

EX-BPS 250-3G/D

Mechanical data

Design of electrical connection	Cable
Cable length	1
Conductors	4 x 0,25
AWG-Number	23
mechanical installation conditions	not flush
Active area	front side
Ensured switch distance ON S_{ao}	4 mm
Ensured switch distance OFF S_{ar}	14 mm
Type of actuation	Magnet
Direction of motion	head-on with regard to the active surface
resistance to shock	30 g / 11 ms
Resistance to vibration	10 ... 55 HZ, Amplitude 1 mm
Impact energy	max. 1 Nm

Ambient conditions

Ambient temperature	
- Min. environmental temperature	-25
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+70
Storage and transport temperature	
- Min. Storage and transport temperature	-25 °C
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+70 °C
- 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	24 VDC max.
Switching current	100 mA max.
Switching capacity	1 W max.

Outputs

Design of control output	Other, Reed kontakts
Number of shutters	1
Number of openers	1

Electrical data - Safety outputs

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

Electrical data - Diagnostic output

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

LED switching conditions display

LED switching conditions display (Y/N)	Yes
- The LED is illuminated when the guard door is open.	

ATEX

EX-marking	EX II 3D Ex tc IIIC T80°C Dc X EX II 3G Ex nC IIC T6 Gc X
Explosion protection categories for gases	3G
Explosion protection Zones for gases	2
Explosion protected category for dusts	3D
Explosion protection Zones for dusts	22

Dimensions

Dimensions of the sensor	
- Width of sensor	33
- Height of sensor	25
- Length of sensor	13

notice

Contact symbols shown for the closed condition of the guard device.
The contact configuration for versions with or without LED is identical.

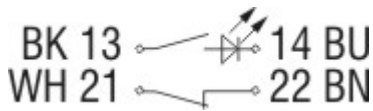
Included in delivery

Actuators must be ordered separately.






Keywords

Keywords	Ex, EEx, ATEX, Ex BNS250, Ex BNS 250, BNS250 Ex, BNS250ex, BNS 250ex, ATEX BNS 250
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Diagram



Note Diagram

-  positive break NC contact
-  active
-  no active
-  Normally-open contact
-  Normally-closed contact

Documents

Operating instructions and Declaration of conformity (da) 247 kB, 03.06.2013

Code: mrl_ex-bns250_da

Operating instructions and Declaration of conformity (de) 289 kB, 04.10.2017

Code: mrl_ex-bns250_de

Operating instructions and Declaration of conformity (it) 289 kB, 10.10.2017

Code: mrl_ex-bns250_it

Operating instructions and Declaration of conformity (fr) 287 kB, 24.10.2017

Code: mrl_ex-bns250_fr

Operating instructions and Declaration of conformity (pl) 333 kB, 01.02.2018

Code: mrl_ex-bns250_pl

Operating instructions and Declaration of conformity (jp) 654 kB, 14.09.2011

Code: mrl_ex-bns250_jp

Operating instructions and Declaration of conformity (nl) 310 kB, 11.07.2018

Code: mrl_ex-bns250_nl

Operating instructions and Declaration of conformity (pt) 295 kB, 10.10.2017

Code: mrl_ex-bns250_pt

Operating instructions and Declaration of conformity (es) 292 kB, 10.10.2017

Code: mrl_ex-bns250_es

Operating instructions and Declaration of conformity (en) 290 kB, 04.10.2017

Code: mrl_ex-bns250_en

Operating instructions and Declaration of conformity (cs) 263 kB, 03.06.2013

Code: mrl_ex-bns250_cs

Brochure (de) 7 MB, 19.10.2016

Code: b_atep01_de

Brochure (en) 7 MB, 19.10.2016

Code: b_atep01_en

Brochure (it) 3 MB, 20.07.2007

Code: b_atep05

Brochure (es) 5 MB, 18.08.2009

