



Prerequisite evaluation unit	Yes
Recommended safety-monitoring module	
Recommended actuator	BPS 33, BPS 33-2326

## Mechanical data

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Design of electrical connection	Connector M8
mechanical installation conditions	not flush
Active area	Side
Ensured switch distance ON	5 mm / 8 mm
- BPS 33 = 5 mm Actuating magnet	
- BPS 33-2326 = 8 mm Actuating magnet	
Ensured switch distance OFF	15 mm / 18 mm
- BPS 33-2326 = 18 mm Actuating magnet	
- BPS 33 = 15 mm Actuating magnet	
Repeat accuracy R	≤ 0,1 x
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

## Ambient conditions

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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

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Integrated Safety monitoring module available (Y/N)	No
Cross circuit/short circuit recognition possible (Y/N)	Yes
Voltage type	VAC/DC
Switch frequency	max. 5 Hz
Switching voltage	max. 60 VAC/DC
Switching current	max. 400 mA
Switching capacity	max. 10 W

## Outputs

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

## Electrical data - Safety outputs

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Number of secure semi-conductor outputs	0 piece
Number of secure outputs with contact	0 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)	No
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### ATEX

Explosion protection categories for gases	None
Explosion protected category for dusts	None

### Dimensions

Dimensions of the sensor	
- Width of sensor	88 mm
- Height of sensor	25 mm
- Length of sensor	13 mm

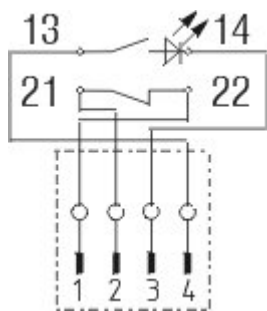
### notice

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

### 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 33-(1)Z(2)-(3)-(4)

(1)

02

2 Opener (NC)

11	1 Normally open contact (NO) / 1 Opener (NC)
12	1 Normally open contact (NO) / 2 Opener (NC)
(2)	
<i>without</i>	without LED switching conditions display
<b>G</b>	with LED switching conditions display
(3)	
<i>without</i>	with cable
<b>ST</b>	with connector M8
(4)	
<b>2187</b>	Individual contact outlet
<b>2187-10</b>	Individual contact outlet, with LED
<b>2237</b>	Actuation from cable direction

## Documents

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**Operating instructions and Declaration of conformity (jp)** 551 kB, 18.08.2017

Code: mrl\_bns33\_jp

**Operating instructions and Declaration of conformity (es)** 298 kB, 16.09.2016

Code: mrl\_bns33\_es

**Operating instructions and Declaration of conformity (pt)** 300 kB, 03.06.2016

Code: mrl\_bns33\_pt

**Operating instructions and Declaration of conformity (en)** 299 kB, 04.03.2016

Code: mrl\_bns33\_en

**Operating instructions and Declaration of conformity (fr)** 299 kB, 29.04.2016

Code: mrl\_bns33\_fr

**Operating instructions and Declaration of conformity (pl)** 327 kB, 29.04.2016

Code: mrl\_bns33\_pl

**Operating instructions and Declaration of conformity (de)** 300 kB, 04.03.2016

Code: mrl\_bns33\_de

**Operating instructions and Declaration of conformity (cs)** 307 kB, 08.01.2013

Code: mrl\_bns33\_cs

**Operating instructions and Declaration of conformity (nl)** 281 kB, 09.01.2013

Code: mrl\_bns33\_nl

**Operating instructions and Declaration of conformity (da)** 282 kB, 08.01.2013

Code: mrl\_bns33\_da

**Operating instructions and Declaration of conformity (sv)** 279 kB, 09.01.2013

Code: mrl\_bns33\_sv

**Operating instructions and Declaration of conformity (it)** 294 kB, 02.09.2016

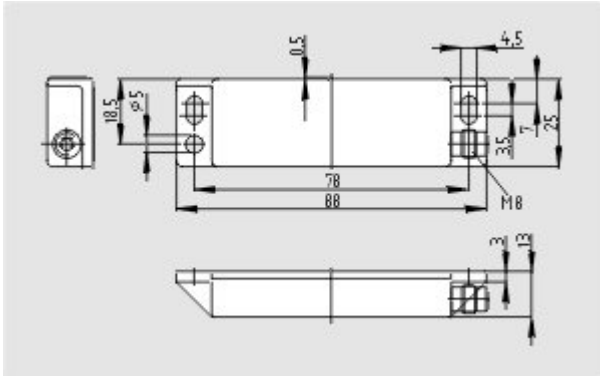
Code: mrl\_bns33\_it

**EAC certification (ru)** 782 kB, 05.10.2015

Code: q\_6044p17\_ru

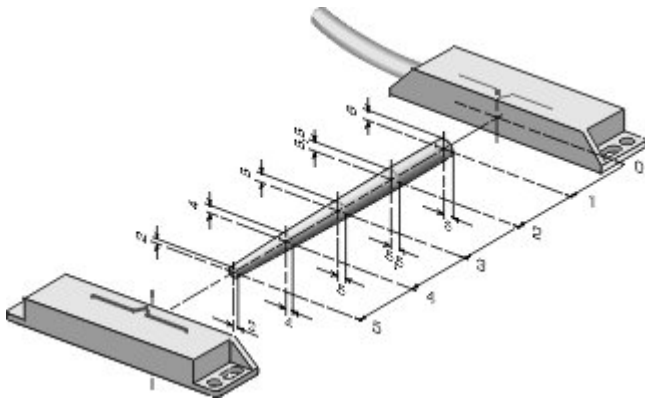
## Images

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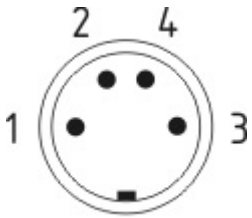
Dimensional drawing (basic component)

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Characteristic curve

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Contact arrangement

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## System components

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### Actuator

101107771 - BPS 33

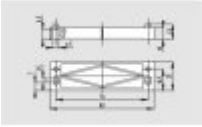


101148482 - BPS 33-2326

• higher switching distance  $S_{ao}$  8 mm



## Accessories



### 101158893 - SPACER BN 31/33

- to mount the magnetic safety sensor and actuator on ferromagnetic material

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## Connector



### 101194059 - BNS-Y-11

- enables the interconnection and the connection of BNS safety sensors to a common safety monitoring module
- for BNS 33, BNS 36, BNS 260 (with 1 NC/1 NO)

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

Generiert am 30.10.2017 - 13:31:55h Kasbase 3.2.7.F.64l