

## Datasheet - BNS 260 STW-AS-L

AS interface safety at work / Safety switchgear / Safety sensors / BNS 260 AS



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

- Safety sensor
- Thermoplastic enclosure
- no mechanical wear
- 36 mm x 26 mm x 13 mm
- Integrated AS-Interface
- Concealed mounting possible
- Long life
- Insensitive to transverse misalignment
- Insensitive to soiling
- AS-Interface LED and status display
- 2 m Pre-wired cable with connector M12, angled, 4-pole

### Ordering details

Product type description	BNS 260 STW-AS-L
Article number	101186158
EAN Code	4030661333687
eCl@ss	27-27-24-02

### Approval


Approval



### Classification

Standards	EN ISO 13849-1, IEC 61508
PL	up e
Control category	bis 4
PFH	6.21 x 10 <sup>-9</sup> / h
- notice	up to max. 500.000 switching cycles/year
SIL	up 3
Mission time	20 Years

### Global Properties

Permanent light	BNS 260 AS
Standards	EN 50295, IEC 60947-5-3, EN ISO 13849-1, IEC 61508
Compliance with the Directives (Y/N) 	Yes
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic

- Material of the cable mantle	LSYY
Weight	100
Coding available (Y/N)	Yes
Response time	< 100
Recommended actuator	BPS 260-1, BPS 260-2

## Mechanical data

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Design of electrical connection	Pre-wired cable with connector M12, angled, 4-pole
Cable length	2
Conductors	2 x 0,23
AWG-Number	23
mechanical installation conditions	quasi-flush
Ensured switch distance ON $S_{ao}$	5 mm
Ensured switch distance OFF $S_{ar}$	15 mm
Repeat accuracy $R_R$	$R \leq 0,1 \times S_{ao}$
notice	<b>Axial misalignment</b>

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
resistance to shock	30 g / 11 ms
Resistance to vibration	10 ... 55 HZ, Amplitude 1 mm
Door hinge	left

## Ambient conditions

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Ambient temperature	
- Min. environmental temperature	-25
- Max. environmental temperature	+60
Storage and transport temperature	
- Min. Storage and transport temperature	-25
- Max. Storage and transport temperature	+70
Protection class	IP67 to IEC/EN 60529
Air clearances and creepage distances To IEC/EN 60664-1	
- Rated impulse withstand voltage $U_{imp}$	0,8 kV
- Rated insulation voltage $U_i$	32 VDC
- Overvoltage category	III
- Degree of pollution	3

## Electrical data - AS interface

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AS-i Supply voltage	26.5 ... 31.6 VDC, Protection against polarity reversal
AS-i operating current	$\leq 50$
AS-i Device insulation	internally short-circuit proof
AS-i Specification	
- version	V 2.1
- Profile	S-0.B.F.E
- IO-Code	0x0
- ID-Code	0xB
- ID-Code1	0xF
- ID-Code2	0xE
AS-i Inputs	

- Channel 1	Data bits DI 0/DI 1= dynamic code transmission
- Channel 2	Data bits DI 2/DI 3= dynamic code transmission
AS-i Outputs	DO 0 ... DO 3 not used
AS-i Parameter bits	P0 ... P3 not used
AS-i input module address	0
- Default on address 0, programmable via the AS-Interface Master or Hand-held programming device	

## LED switching conditions display

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LED switching conditions display (Y/N)	Yes
AS-i LED switching conditions display (1) green/red LED (AS-i duo LED)	Supply voltage / Communication error / slave address = 0

## ATEX

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

## Dimensions

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Dimensions of the sensor	
- Width of sensor	36
- Height of sensor	26
- Length of sensor	13

## Pin assignment

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1	AS-i +
2	None
3	AS-i -
4	None

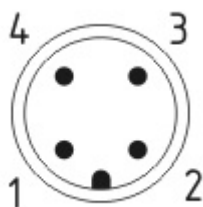
## Included in delivery

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

Actuators must be ordered separately.

## Diagram

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Note Diagram

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

## Ordering code

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BNS 260 (1)-AS-(2)

(1)

*without*

**STG**

**STW**

Pre-wired cable 2 m

Pre-wired cable with connector M 12, straight, 4-pole

Pre-wired cable with Connector M12, angled, 4-pole

(2)

**L**

Door hinge left

**R**

Door hinge right

## Documents

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**Operating instructions and Declaration of conformity** (fr) 255 kB, 24.11.2017

Code: mrl\_bns260as\_fr

**Operating instructions and Declaration of conformity** (en) 254 kB, 16.11.2017

Code: mrl\_bns260as\_en

**Operating instructions and Declaration of conformity** (pl) 271 kB, 29.11.2017

Code: mrl\_bns260as\_pl

**Operating instructions and Declaration of conformity** (da) 250 kB, 21.11.2017

Code: mrl\_bns260as\_da

**Operating instructions and Declaration of conformity** (nl) 256 kB, 29.11.2017

Code: mrl\_bns260as\_nl

**Operating instructions and Declaration of conformity** (de) 232 kB, 16.11.2017

Code: mrl\_bns260as\_de

**Operating instructions and Declaration of conformity** (it) 256 kB, 29.11.2017

Code: mrl\_bns260as\_it

**Operating instructions and Declaration of conformity** (pt) 257 kB, 29.11.2017

Code: mrl\_bns260as\_pt

**Operating instructions and Declaration of conformity** (jp) 631 kB, 15.09.2011

Code: mrl\_bns260as\_jp

**Operating instructions and Declaration of conformity** (es) 263 kB, 23.11.2017

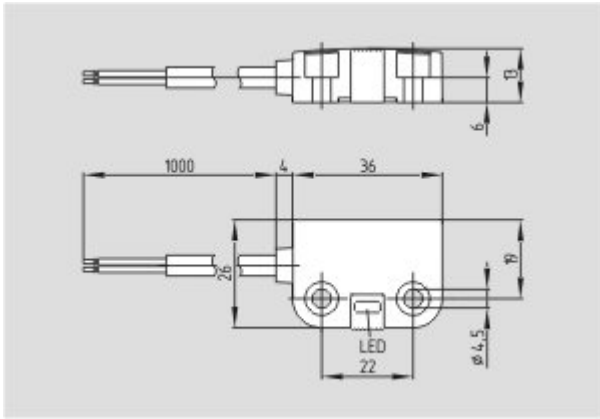
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**TÜV certification** (de, en) 1 MB, 24.09.2014

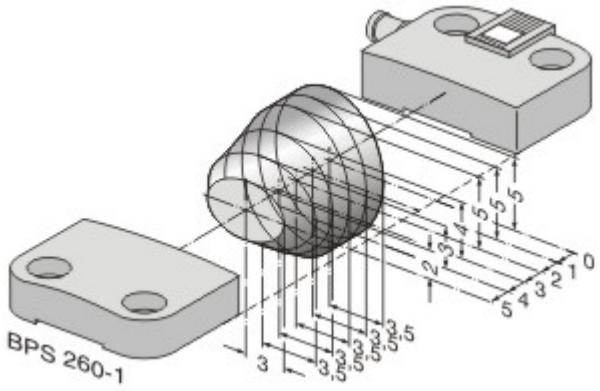
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## Images

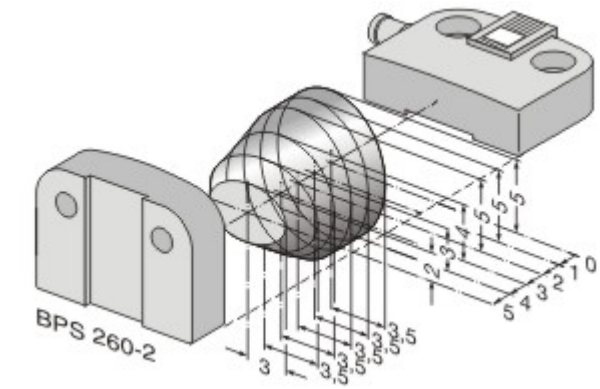
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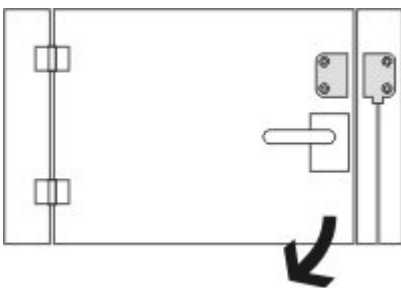
Dimensional drawing (basic component)



Characteristic curve



Characteristic curve



Clipart

## System components

### Actuator



- Actuator and sensor on a mounting level



#### **101184396 - BPS 260-2**

- Actuator 90 ° attached to the sensor

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### **Accessories**



#### **101184643 - SPACER BNS 260**

to mount the magnetic safety sensor and actuator on ferromagnetic material

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

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