



BNS 36 STG-AS-R

- 2 m Pre-wired cable with connector M12, straight, 4-pole
- Safety sensor
- Thermoplastic enclosure
- no mechanical wear
- 88 mm x 25 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

Data

Ordering data

EAN (European Article Number)	4030661362267
eCl@ss number, Version 9.0	27-27-24-02
eCl@ss number, Version 11.0	27-27-24-02
ETIM number, version 6.0	EC002544
ETIM number, version 7.0	EC002544

Approval - Standards

Certificates	TÜV
	cULus
	ASi-SaW
	EAC

General data

Standards	IEC 61508 IEC 60947-5-3 EN 62026-2 EN ISO 13849-1
Active principle	Magnetic drive
Installation conditions (mechanical)	quasi-flush
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	110 g
Reaction time, maximum	100 ms

General data - Features

Coding	Yes
Integral System Diagnostics, status	Yes

Safety appraisal

Standards	IEC 61508
Performance level, up to	e
Control category to EN13849	4
PFH-value	1.24×10^{-8} /h
Note (PFH-value)	up to max. 500,000 switching cycles/year
Safety Integrity Level (SIL), suitable for applications in	3
Mission Time	20 Year(s)

Mechanical data

Actuating element	Magnet
Door hinge	Right

Repeat accuracy R	$\leq 0.1 \times S_{ao}$
Direction of motion	Head-on to the active surface

Mechanical data - Switching distances according IEC 60947-5-3

Notice (Switch distance S_n)	Axial misalignment, a horizontal and vertical misalignment of the safety sensor and the actuator are tolerated. The possible misalignment depends on the distance of the active surfaces of the sensor and the actuator. The sensor remains active within the tolerance range.	
Ensured switch distance "ON" S_{ao}	7 mm	
Ensured switch distance "OFF" S_{ar}	17 mm	

Mechanical data - Connection technique

Terminal Connector	Connecting cable with M12 connector, straight, 4-pole	
Length of cable	2 m	
Wire cross-section	0.23 mm ²	
Wire cross-section	23 AWG	
Material of the Cable mantle	LSYY	

Mechanical data - Dimensions

Length of sensor	13 mm
Height of sensor	25 mm

Ambient conditions

Degree of protection	IP67 to EN 60529
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+60 °C

Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+70 °C
Resistance to vibrations to EN 60068-2-6	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms

Ambient conditions - Insulation value

Rated insulation voltage U_i	32 VDC
Rated impulse withstand voltage U_{imp}	0.8 kV
Overvoltage category	III
Degree of pollution to VDE 0100	3

Electrical data - AS Interface

AS-i Operating voltage, minimum	18 VDC
AS-i Operating voltage AS-i maximum	31.6 VDC
Note (AS-i Operating voltage)	Protection against polarity reversal
AS-i Current consumption, maximum	50 mA

Electrical data - AS-Interface specification

AS-i Specification	Safety-Slave
AS-i Version	V 2.1
AS-i Profile	S-0.B.F.E
AS-i, IO-Code	0x0
AS-i, ID-Code	0xB
AS-i, ID-Code1	0xF

AS-i, ID-Code2	0xE
AS-i Input, Channel 1	Data bits DI 0 / DI 1 = dynamic code transmission
AS-i Input, Channel 2	Data bits DI 2 / DI 3 = dynamic code transmission
AS-i Outputs, DO 0 ... DO 3	No Function
AS-i Parameter bits, P0 ... P3	No function
Note (AS-i Parameter bits)	Set the parameter outputs to "1111" (0xF)
AS-i Input module address	0
Note (AS-i Input module address)	Preset to address 0, can be changed through AS-interface bus master or hand-held programming device

Status indication

Note (LED switching conditions display)	(1) LED green-red (AS-i Duo LED): Supply voltage / Communication error / Slave address = 0 (2) LED yellow: Enabling status
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Pin assignment

PIN 1	AS-i +
PIN 2	n.c.
PIN 3	AS-Interface -
PIN 4	n.c.

Scope of delivery

Included in delivery	Actuators must be ordered separately.
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Accessory

Recommendation (actuator)	BPS 36-2
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Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532

The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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