



## EX-BNS 40S-12Z

- Explosion protection for ATEX Zones 2 and 22
- Stainless steel enclosure
- 88 mm x 27 mm x 14,5 mm
- Concealed mounting possible
- Insensitive to transverse misalignment
- no mechanical wear
- Suitable for food processing industry
- Cable connection suitable for the food industry

## Data

### Ordering data

Product type description	EX-BNS 40S-12Z
Article number (order number)	103002167
EAN (European Article Number)	4030661428413
eCl@ss number, version 12.0	27-27-44-01
eCl@ss number, version 11.0	27-27-24-02
eCl@ss number, version 9.0	27-27-24-02
ETIM number, version 7.0	EC002544
ETIM number, version 6.0	EC002544

### Approvals - Standards

Certificates	ATEX (Konformitätserklärung)
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### Explosion protection

Explosion protection: regulations	EN IEC 60079-0 EN IEC 60079-15 EN 60079-31
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Explosion protection zones	2 22
Explosion protection category	3G 3D
Explosion protection designation	⊕ II 3G Ex nA nC IIC T6 Gc ⊕ II 3D Ex tc IIIC T80°C Dc X
Manufacturer declaration	ATEX Zone 2 and 22

## General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Housing construction form	Block
Installation conditions (mechanical)	not flush
Housing material	Stainless steel (V4A)
Gross weight	200 g

## General data - Features

Coding	Yes
Short circuit detection	Yes
Cross-circuit detection	Yes
Prerequisite evaluation unit	Yes
Number of normally closed (NC)	2
Number of normally open (NO)	1

## Safety classification

Standards	EN ISO 13849-1
Mission time	20 Year(s)

## Safety classification - Safety outputs

B <sub>10D</sub> - Value Normally-closed contact/Normally open contact (NC/NO)	25,000,000 Operations
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## Mechanical data

Active area	lateral
Actuating element	Magnet
Impact energy, maximum	7 J
Direction of motion	Head-on to the active surface

## Mechanical data - Switching distances

Assured switching distance "ON" $S_{ao}$	8 mm
Assured switching distance "OFF" $S_{ar}$	18 mm
Note (switching distance)	All switching distances in accordance EN IEC 60947-5-3

## Mechanical data - Connection technique

Length of cable	1 m
Termination	cable
Number of cable wires	6
Wire cross-section	0.25 mm <sup>2</sup>
Wire cross-section	23 AWG
Material of the Cable mantle	PVC
Cable type	LiYY

## Mechanical data - Dimensions

Length of sensor	14 mm
Width of sensor	88 mm
Height of sensor	27 mm

## Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature	-20 ... +60 °C
Storage and transport temperature	-25 ... +80 °C

Resistance to vibrations 10 ... 55 Hz, amplitude 1 mm

Resistance to shock 30 g / 11 ms

## Electrical data

Required rated short-circuit current	100 A
Switching voltage, maximum	24 VAC
Switching voltage, maximum	24 VDC
Switching current, maximum	0.25 A
Switching capacity, maximum	3 W
Switching element	1 NO contact, 2 NC contacts
Switching principle	Reed contacts, Non-contact principle
Switching frequency, maximum	5 Hz

## Scope of delivery

Scope of delivery Actuator must be ordered separately.

## Accessory

Recommendation (actuator)	BPS 40S-2 BPS 40S-1-C BPS 40S-2-C
Recommended safety switchgear	SRB-E-301ST SRB-E-201LC

## Note

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

## Wiring example

Note (Wiring diagram) Contact S21-S22 must be integrated in the safety circuit.

## Ordering code

Product type description:  
EX-BNS40S-12Z(1)-(2)

(1)

**without**

without LED switching conditions display

**G**

with LED switching conditions display

(2)

**without**

With countersunk mounting holes

**C**

concealed threaded holes on the back

## Pictures

### Product picture (catalogue individual photo)



ID: kexbnf13

| 122.7 kB | .jpg | 352.778 x 96.308 mm - 1000 x 273 px - 72 dpi

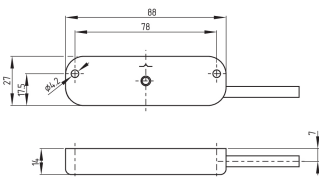
| 18.4 kB | .png | 74.083 x 20.108 mm - 210 x 57 px - 72 dpi

| 18.5 kB | .png | 74.083 x 74.083 mm - 210 x 210 px - 72 dpi

| 1.5 MB | .png | 169.333 x 46.228 mm - 2000 x 546 px - 300 dpi

| 17.4 kB | .jpg | 123.47200000000001 x 33.867000000000004 mm - 350 x 96 px - 72 dpi

### Dimensional drawing basic component



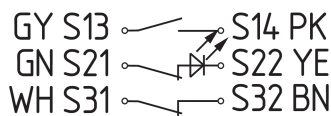
ID: 1bns4g01

| 22.8 kB | .cdr |

| 57.0 kB | .jpg | 352.778 x 190.14700000000002 mm - 1000 x 539 px - 72 dpi

| 4.5 kB | .png | 74.083 x 39.864000000000004 mm - 210 x 113 px - 72 dpi

### Diagram



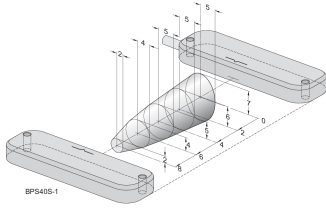
ID: kbns3k32

| 25.4 kB | .cdr |

| 91.7 kB | .jpg | 352.778 x 112.536 mm - 1000 x 319 px - 72 dpi

| 3.9 kB | .png | 74.083 x 23.636000000000003 mm - 210 x 67 px - 72 dpi

## Characteristic curve



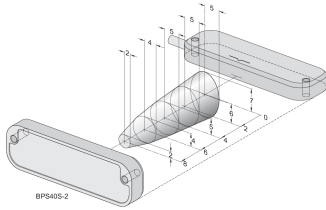
ID: kbns4d03

| 44.3 kB | .cdr |

| 14.3 kB | .png | 74.083 x 46.567 mm - 210 x 132 px - 72 dpi

| 152.2 kB | .jpg | 352.778 x 221.192 mm - 1000 x 627 px - 72 dpi

## Characteristic curve



ID: kbns4d04

| 14.3 kB | .png | 74.083 x 46.919000000000004 mm - 210 x 133 px - 72 dpi

| 149.0 kB | .jpg | 352.778 x 223.661 mm - 1000 x 634 px - 72 dpi

K.A. Schmersal GmbH & Co. KG, Möddinghofe 30, 42279 Wuppertal

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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