

## BNS 40S-12ZG

- LED version
- Stainless steel enclosure
- Cable connection suitable for the food industry
- Concealed mounting possible
- 88 mm x 27 mm x 14,5 mm
- Long life
- no mechanical wear
- Insensitive to soiling
- Insensitive to transverse misalignment
- Suitable for food processing industry

## Data

### Ordering data

Product type description	BNS 40S-12ZG
Article number (order number)	101215516
EAN (European Article Number)	4030661419268
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	TÜV BG cULus ECOLAB EAC
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## General data

Standards	BG-GS-ET-14 EN IEC 60947-5-3
Coding level according to EN ISO 14119	Low
Working principle	Magnetic drive
Installation conditions (mechanical)	not flush
Enclosure material	Stainless steel (V4A)
Gross weight	250 g

## General data - Features

Concealed, threaded holes on the back	No
Integral system diagnostics, status	Yes
Prerequisite evaluation unit	Yes
Number of normally closed (NC)	2
Number of normally open (NO)	1
Number of cable wires	6

## 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
Direction of motion	Head-on to the active surface

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

Assured switching distance "ON" $S_{ao}$	8 mm
Assured switching distance "OFF" $S_{ar}$	18 mm

### Mechanical data - Connection technique

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

### Mechanical data - Dimensions

Length of sensor	14.5 mm
Width of sensor	88 mm
Height of sensor	27 mm

### Ambient conditions

Degree of protection	IP69
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+80 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+80 °C
Resistance to vibration to EN 60068-2-6	10 ... 55 Hz, amplitude 1 mm
Resistance to shock	30 g / 11 ms

## Electrical data

Voltage type	DC (direct current)
Switching voltage, maximum	24 VDC
Switching current, maximum	0.01 A
Switching capacity, maximum	0.2 W
Switching frequency, maximum	5 Hz

## Electrical data - Digital Output

Design of control elements	Miscellaneous, Reed contacts
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## Status indication

Note (Integral System Diagnostics, status )	The LED is illuminated when the guard is closed.
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## Scope of delivery

Scope of delivery	Actuators must be ordered separately.
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## 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.
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## Wiring example

Note (Wiring diagram)

Contact S21-S22 must be integrated in the safety circuit.

## Ordering code

Product type description:  
BNS 40S-12Z(1)-(2)

(1)

**without**

without LED switching conditions display

**G**

with LED switching conditions display

(2)

**without**

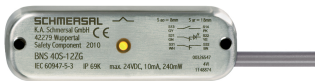
with countersunk mounting holes  $\varnothing$  4.2 mm

**C**

concealed threaded holes on the back M4

## Pictures

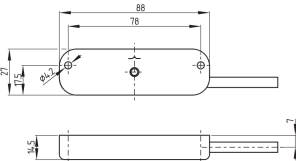
### Product picture (catalogue individual photo)



ID: kbns4f04

| 209.9 kB | .jpg | 352.778 x 89.958 mm - 1000 x 255 px - 72 dpi  
| 16.3 kB | .png | 74.083 x 19.05 mm - 210 x 54 px - 72 dpi

### Dimensional drawing basic component

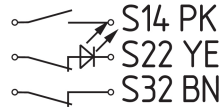


ID: 1bns4g01

| 22.8 kB | .cdr |  
| 2.8 kB | .png | 74.083 x 51.506 mm - 210 x 146 px - 72 dpi  
| 57.0 kB | .jpg | 352.778 x 245.181 mm - 1000 x 695 px - 72 dpi

## Diagram

GY S13  
GN S21  
WH S31



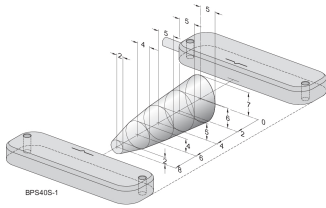
ID: kbns3k32

| 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 23.636 mm - 210 x 67 px - 72 dpi

## Characteristic curve



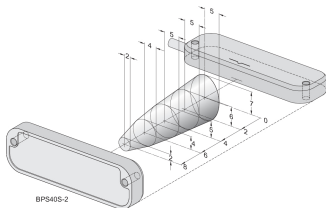
ID: kbns4d03

| 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 46.919 mm - 210 x 133 px - 72 dpi

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

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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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