

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
Housing material	Stainless steel (V4A)
Gross weight	250 g

General data - Features

Coding	Yes
Concealed, threaded holes on the back	Yes
Integral system diagnostics, general	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 _{10D} - 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

Length of cable	1 m
Termination	Cable
Wire cross-section	0.25 mm ²
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	-25 ... +80 °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

Switching voltage, maximum	24 VDC
Switching current, maximum	0.01 A
Switching capacity, maximum	0.24 W
Switching element	1 NO contact, 2 NC contacts

Switching frequency, maximum

5 Hz

Electrical data - Digital Output

Design of control elements

Miscellaneous, Reed contacts

Status indication

Note (Integral System Diagnostics, status)

The LED is illuminated when the guard is closed.

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:
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)



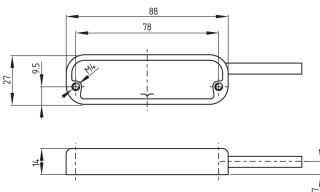
ID: kbns4f02

| 209.5 kB | .jpg | 352.778 x 89.958 mm - 1000 x 255 px - 72 dpi

| 16.0 kB | .png | 74.083 x 19.05 mm - 210 x 54 px - 72 dpi

| 26.1 kB | .jpg | 123.472 x 31.397 mm - 350 x 89 px - 72 dpi

Dimensional drawing basic component



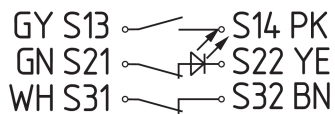
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| 22.5 kB | .cdr |

| 58.5 kB | .jpg | 352.778 x 204.258 mm - 1000 x 579 px - 72 dpi

| 4.7 kB | .png | 74.083 x 43.039 mm - 210 x 122 px - 72 dpi

Diagram



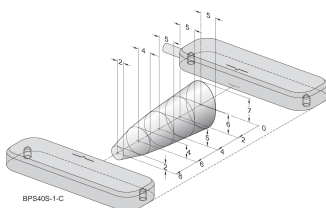
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| 25.4 kB | .cdr |

| 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

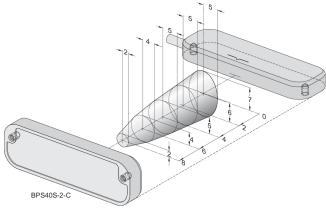


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| 14.0 kB | .png | 74.083 x 46.214 mm - 210 x 131 px - 72 dpi

| 151.1 kB | .jpg | 352.778 x 220.486 mm - 1000 x 625 px - 72 dpi

Characteristic curve



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| 14.3 kB | .png | 74.083 x 46.919 mm - 210 x 133 px - 72 dpi

| 147.9 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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