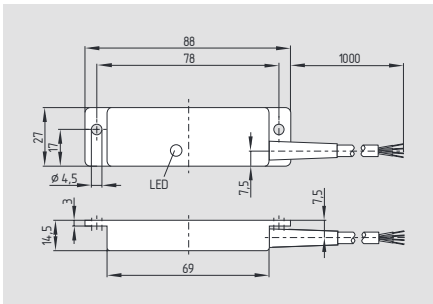


# Safety sensors

## BNS 33S



- Stainless steel enclosure
- Coded
- Rectangular design
- Long life, no mechanical wear
- Protection class IP69k
- Actuation only possible with BPS 33S
- Insensitive to lateral misalignment
- Concealed mounting possible
- Insensitive to soiling
- Suitable for food processing industry
- Cable connection suitable for the food industry

## Technical data

Standards: IEC 60947-5-3, BG-GS-ET-14

Design: rectangular

Enclosure: stainless steel V4A (to DIN 1.3960)

Protection class: IP69K to IEC/EN 60529

Connection: cable LiYY (suitable for the food industry)

Cable section: 6 x 0.25 mm<sup>2</sup>

Mode of operation: magnetic

Actuating magnet: BPS 33S, coded

S<sub>ao</sub>: 8 mm

S<sub>ar</sub>: 18 mm

Switching conditions indicator: LED only for ordering suffix G

Switching voltage

- without LED: max. 100 VAC/DC
- with LED: max. 24 VDC

Switching current

- without LED: max. 250 mA
- with LED: max. 10 mA

Switching capacity

- without LED: max. 3 W
- with LED: max. 240 mW

Ambient temperature: -25 °C ... +80 °C

Storage and transport temperature: -25 °C ... +80 °C

Switching frequency: max. 5 Hz

Resistance to shock: 30 g / 11 ms

Resistance to vibration: 10 ... 55Hz, amplitude 1 mm

### Classification:

Standards: EN ISO 13849-1

B<sub>10d</sub> (NC/NO): 25.000.000 for 20% contact load

Mission time: 20 years

$$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}} \quad n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$$

## Contact variants

### 1 NO / 2 NC

GY S13 → S14 PK  
 GN S21 → S22 YE  
 WH S31 → S32 BN

## Approvals



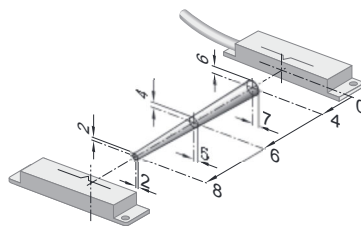
## Ordering details

### BNS 33S-12Z<sup>①</sup>

No.	Option	Description
①	G	Without LED With LED

The actuating magnet must be ordered separately.

## Note



Enabling zone

## Note

Contact symbols shown for the closed condition of the guard device.

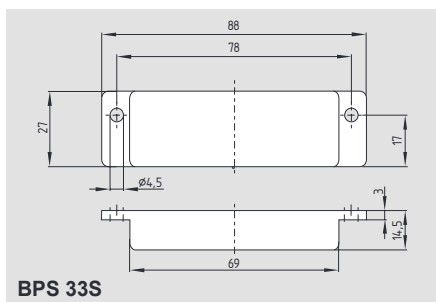
The contact configuration for versions with or without LED is identical.

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

The LED is illuminated when the guard door is closed.

## Safety sensors

### System components



### Ordering details

Actuating magnet

**BPS 33S**