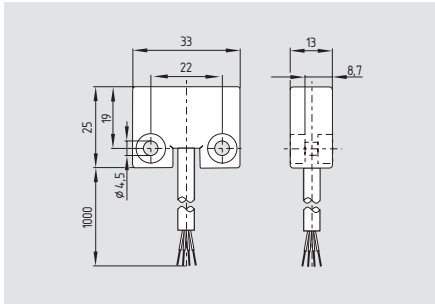


Safety sensors

EX-BNS 250-...-3G/D



- Ex certified
- Thermoplastic enclosure
- with coding
- Smallest design
- long life, no mechanical wear
- Protection class IP 67
- Actuation only possible with EX-BPS 250
- Intensive to transverse misalignment
- Concealed mounting possible
- Intensive to soiling

Technical data

Equipment category: II 3GD
 Explosion protection: Ex nC IIC T6 X
 EX-BNS 250: Ex tD A22 IP67 T80°C X
 c 80°C
 EX-BPS 250: c 80°C
 Standards: EN 60947-5-3, EN 61241-0, EN 61241-1, EN 60079-0, EN 60079-15, BG-GS-ET-14
 Design: rectangular
 Enclosure: glass-fibre reinforced thermoplastic
 Max. impact energy: 1 J
 Protection class: IP 67 to EN 60529
 Connection: Boflex cable
 Cable section: 4 x 0.25 mm²

Operating principle: magnetic
 Actuating magnet: EX-BPS 250, coded
 S_{ao}: 4 mm
 S_{ar}: 14 mm
 Switching condition indication: LED only with ordering suffix G

Max. switching voltage
 without LED: 24 VDC
 with LED: 24 VDC
 Max. switching current
 without LED: 100 mA
 with LED: 10 mA
 Max. switching capacity
 without LED: 1 W
 with LED: 240 mW
 Ambient temperature: -25 °C ... +70 °C
 Storage and transport temperature: -25 °C ... +70 °C
 Max. switching frequency: 5 Hz
 Resistance to shock: 30 g / 11 ms
 Resistance to vibration: 10 ... 55Hz, Amplitude 1 mm

Classification:
 Standards: EN ISO 13849-1
 B_{10d} NC/NO contact: 25.000.000 at 20% contact load
 Service life: 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 / 1 NC contacts

BK 13 → 14 BU
 WH 21 → 22 BN

1 NO / 2 NC contacts

BK 22 → 14 BU
 WH 32 → C BN

1 NO / 2 NC

(Ordering suffix -2187 without LED)

GY 13 → 14 PK
 GN 21 → 22 YE
 WH 31 → 32 BN

Approvals

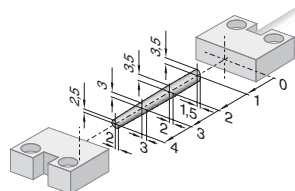


Ordering details

EX-BNS 250-①z②-③-3G/D

N°	Option	Description
①	11	1 NO / 1 NC contacts
	12	1 NO / 2 NC contacts
②		without LED
	G	with LED
③	2187	Individual contact outlet (only with 1 NO / 2 NC)

Note



Enabling zone

The actuators for the magnetic safety sensors must be ordered separately.

Note

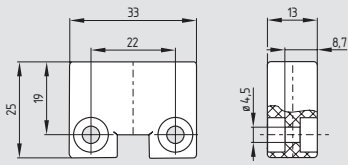
Contact symbols shown for the closed condition of the guard device.

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

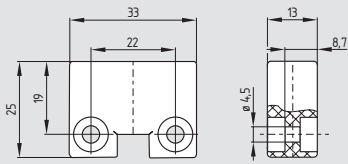
The LED is illuminated when the guard door is open.

Safety sensors

System components



Actuating magnet EX-BPS 250



Spacer BNS 250

Ordering details

Actuating magnet
Spacer

EX-BPS 250
BNS 250