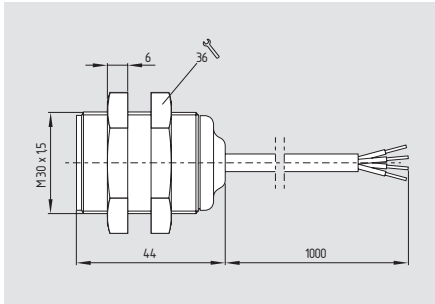


Safety sensors

EX-BNS 303-...-3G/D



- Ex certified
- Thermoplastic enclosure
- with coding
- long life, no mechanical wear
- Protection class IP 67
- Intensive to transverse misalignment
- Intensive to soiling
- Suitable for food processing industry
- LED version available

Technical data

Equipment category: II 3GD
 Ex protection: Ex nC IIC T6 X
 Ex tD A22 IP67 T80°C X
 Standards: EN 60947-5-3, EN 61241-0,
 EN 61241-1, EN 60079-0,
 EN 60079-15, BG-GS-ET-14

Design: cylindrical
 Enclosure: glass-fibre reinforced thermoplastic,
 tightening force A/F 36 mm max. 300 Ncm
 Max. impact energy: 1 J
 Protection class: IP 67 to EN 60529
 Connection: Boflex cable
 Cable section: 6 x 0.25 mm²
 Operating principle: magnetic
 Actuating magnet: BPS 300, BPS 303,
 BPS 303 SS, coded

S_{ao}: 5 mm
 S_{ar}: 15 mm
 Switching condition indication: LED only with
 ordering suffix G

Max. switching voltage
 without LED: max. 100 VAC/DC
 with LED: max. 24 VDC
 Max. switching current
 without LED: max. 400 mA
 with LED: 10 mA
 Max. switching capacity
 without LED: 10 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 contacts
2 NC contacts
 GY 13 → 14 PK
 GN 21 → 22 YE
 WH 31 → 32 BN

1 NO contacts
2 NC contacts with LED
 GY 13 → 14 PK
 GN 21 → 22 YE
 WH 31 → 32 BN

Approvals

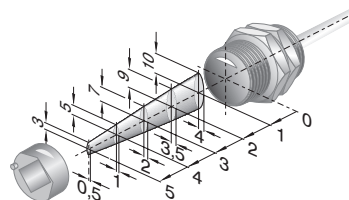


Ordering details

EX-BNS 303-12z①-2187-3G/D

N°	Option	Description
①	G	without LED with LED

Note



Enabling zone

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

Note

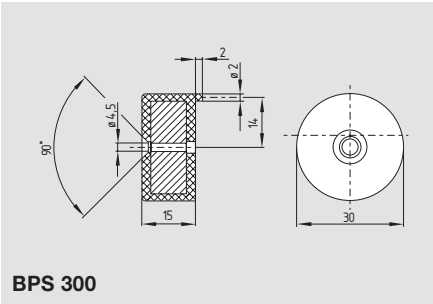
Contact symbols shown for the closed condition of the guard device.

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

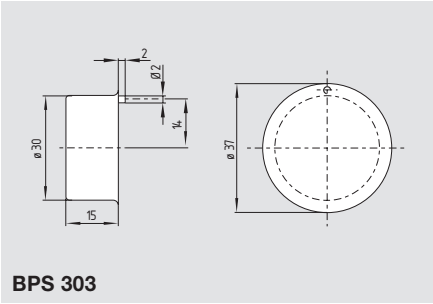
The LED is illuminated when the guard door is open.

Safety sensors

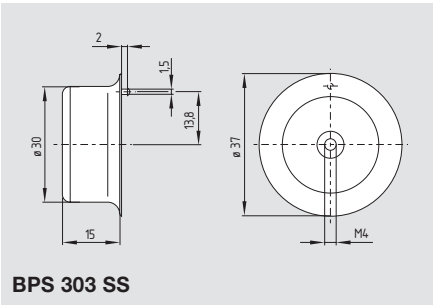
System components



BPS 300



BPS 303



BPS 303 SS

Ordering details

Actuating magnet:	
with plastic enclosure	BPS 300
with plastic enclosure for food-processing industry	BPS 303
Stainless steel for food-processing industry	BPS 303 SS