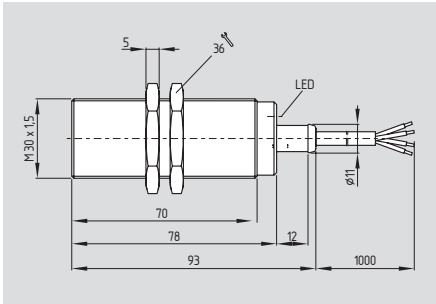


Coded magnet safety sensors

BNS 30



- With integral evaluation
- Metal enclosure
- Coded
- Long life, no mechanical wear
- Protection class IP67
- Insensitive to lateral misalignment
- Concealed mounting possible
- Insensitive to soiling
- With LED possible
- With actuator BPS 303 SS suitable for food processing industry

Technical data

Standards: IEC 60947-5-3, BG-GS-ET-14
 Design: cylindrical
 Enclosure: nickel-plated brass
 Protection class: IP67 to EN 60529
 Connection: Boflex cable, connector M12
 - Ordering suffix -ST:
 Cable section: 4 x 0.75 mm²
 Mode of operation: magnetic
 Actuating magnet: BPS 300, BPS 303, BPS 303 SS, coded

S_{ao}: 5 mm
 - Ordering suffix -2211, -2334 8 mm
 S_{ar}: 15 mm
 - Ordering suffix -2211, -2334 18 mm
 Switching conditions indicator: LED
 Switching voltage: max. 250 VAC
 Switching current: max. 3 A
 Switching capacity: max. 750 W
 Output: 1 enabling circuit
 U_e: 24 VDC
 I_e: 30 mA
 Ambient temperature: -25 °C ... +55 °C
 Storage and transport temperature: -25 °C ... +70 °C
 Switching frequency: max. 5 Hz
 Resistance to shock: 30 g / 11 ms
 Resistance to vibration: 10 ... 55Hz, amplitude 1 mm

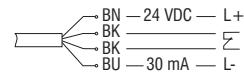
Classification:

Standards: EN ISO 13849-1
 B_{10d} (NC/NO): 20.000.000
 for 20% contact load
 Mission time: 20 years

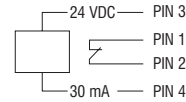
$$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}} \quad n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$$

Contact variants

1 NC

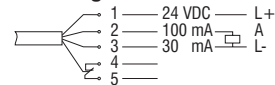


Connector -ST



1 NC

Supplementary signal output Ordering suffix -2230 and -2334



Approvals

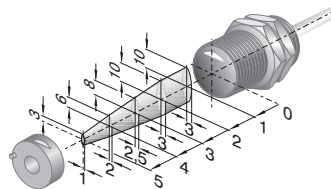


Ordering details

BNS 30-01Z^①-^②-^③

No.	Option	Description
①		Without LED
	G	With LED (only for cable)
②		With cable
	ST	With connector M12
③	2211	Increased switching distance
	2230	Supplementary signal output
	2334	Increased switching distance and supplementary signal output
	2246	U _e 42 VAC

Note



Enabling zone

Note

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

The LED is illuminated when the guard door is closed.

Important Note:

The BNS30 is a 4-wire sensor designed to satisfy PLC per EN ISO 13849-1, or control Category 1 per EN 954-1. They are not designed for use with a separate safety controller.

The actuating magnet must be ordered separately. Refer to page 1-110.