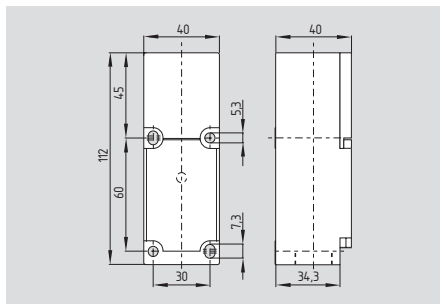


Coded magnet safety sensors

BNS 333



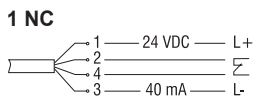
- With integral evaluation
- Thermoplastic enclosure
- Coded
- Long life, no mechanical wear
- Protection class IP65
- Insensitive to lateral misalignment
- Insensitive to soiling
- With wiring compartment
- With LED
- With actuator BPS 303 SS suitable for food processing industry

Technical data

Standards: IEC 60947-5-3, BG-GS-ET-14
 Design: rectangular
 Enclosure: glass fiber reinforced thermoplastic
 Protection class: IP65 to EN 60529
 Connection: screw terminals
 Cable section: max. 2 x 1.5 mm² (incl. conductor ferrules)
 Cable entry: 1 x M20
 Mode of operation: magnetic
 Actuating magnet: BPS 300, BPS 303, BPS 303 SS, coded
 S_{ao}: 4 mm
 S_{ar}: 14 mm
 Switching conditions indicator: LED
 Switching voltage: max. 250 VAC
 Switching current: max. 5 A
 Switching capacity: max. 1250 W
 Output: 1 enabling circuit
 U_e: 24 VDC
 I_e: max. 40 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): 20.000.000 for 20% contact load
 Mission time: 20 years
 $MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$ $n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

Contact variants



Approvals



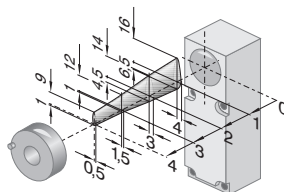
Ordering details

BNS 333-01Y①-M20

No.	Option	Description
①		Actuating plane:
	V	axial
	R	right
	L	left
	D	front (cover)
	U	rear

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

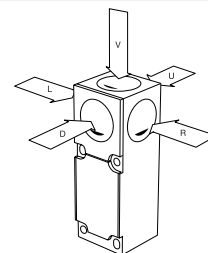
Note



Enabling zone
 Important Note:

The BNS333 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.

Note



different directions of actuation: cover, front and below, right and left
 Contact symbols shown for the closed condition of the guard device.
 The LED is illuminated when the guard door is closed.