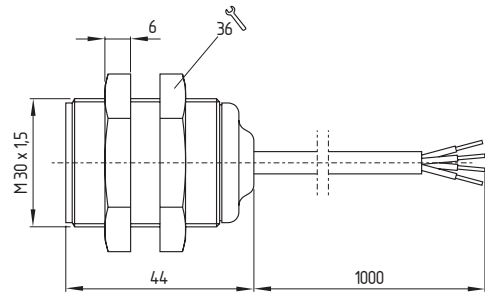


**5. Magnetic safety sensors**  
**5.3 Cylindrical design**  
**5.3.3 BNS 303 range**



- Features**
- Thermoplastic enclosure
  - Protection against manipulation
  - Long life, no mechanical wear
  - IP 67
  - Suitable for food processing industry
  - Insensitive to transverse misalignment
  - Concealed mounting possible
  - Insensitive to soiling

**Contacts**

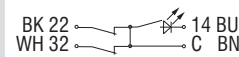
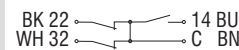
**1 NO**  
**1 NC**



With LED



**1 NO**  
**2 NC**



Without LED  
With LED

**BNS 303-11z**  
**BNS 303-11zG**

**BNS 303-12z**  
**BNS 303-12zG**

Control Category

**3**

**1**

Using safety monitoring modules

From **AES range**, which fulfill Control Category 3 (see chapter 10.2)

**AES 6112, 7112, 1102 or 1112** (see chapter 10.2)

Monitoring up to two guard devices

Actuator  
Actuator for food processing industry

**BPS 300**  
**BPS 303, BPS 303 SS**

**BPS 300**  
**BPS 303, BPS 303 SS**

**Notes**

The LED is illuminated when the guard is open.  
Contact symbols shown for the closed condition of the guard device.  
The actuator for the magnetic safety sensors must be ordered separately.

**Approvals**

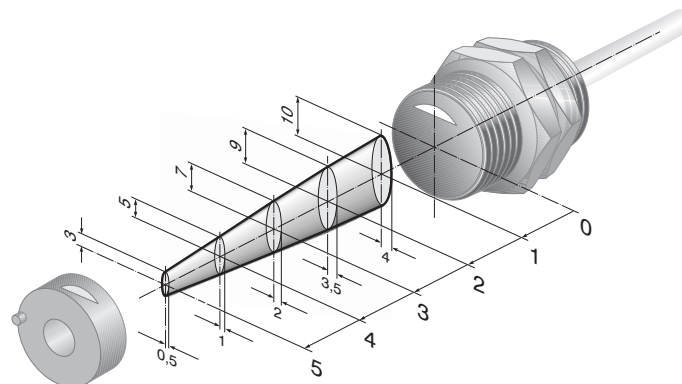


**5. Magnetic safety sensors**  
**5.3 Cylindrical design**  
**5.3.3 BNS 303 range**



**Axial-misalignment**

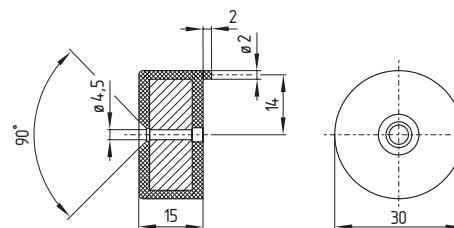
- Enabling zone



**Actuators**

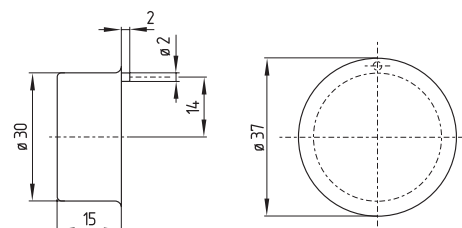
**BPS 300**

- Thermoplastic enclosure
- Actuator including a tamperproof screw



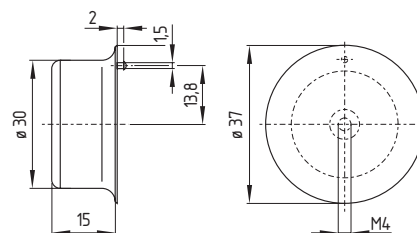
**BPS 303**

- Thermoplastic enclosure
- Actuator for use in food processing industry
- Includes a self-tapping tamperproof screw



**BPS 303 SS**

- Stainless steel enclosure
- Actuator for use in food processing industry
- Includes a self-tapping tamperproof screw



**Ordering details**

BNS 303 with one NO and one NC contact, with LED:  
 BNS 303-11zG  
 Actuator for food processing industry including tamperproof screw: BPS 303  
 Guard door monitor for Control Category 3 to EN 954-1 to monitor a guard device, e.g.: AES 1145

**Info** For other guard door monitors, see chapter 10.1 and 10.2

## 5. Magnetic safety sensors

### 5.5 Technical data



	BNS 180	BNS 303	BNS 300
Standards:	DIN VDE 0660-209, EN 1088, BG-GS-ET-14 (In combination with AES safety monitoring modules)		DIN VDE 0660-209, EN 1088, EN 954-1, BG-GS-ET-14
Design:	Cylindrical		
Enclosure material:	Glass-fibre reinforced thermoplastic	Glass-fibre reinforced thermoplastic	
Tightening force on nut 24 mm A/F	Tightening force on 2 thermoplastic nuts 36 mm A/F max. 300 Ncm max. 500 Ncm		
Protection class:	IP 67 to IEC/EN 60529/DIN VDE 0470-1		
Termination:	Boflex cable 4 x 0.25 mm <sup>2</sup>		Boflex cable 4 x 0.75 mm <sup>2</sup>
Mode of operation:	Magnetic		
Limiting distances:	20 mm 32 mm	5 mm 15 mm	
Switching-position indicator:	–	–	LED
Actuator:	Uncoded, BP 10, BP 15 SS	Coded, BPS 300, BPS 303, BPS 303 SS	
Max. switching voltage:			
Without LED	100 VAC/DC		–
With LED	–	24 VDC	250 VAC
With connector	–	–	–
Max. switching current:			
Without LED	250 mA	400 mA	–
With LED	–	10 mA	3 A
Output:	–	–	1 enabling circuit
Operating voltage:	–	–	24 VDC
Operating current:	–	–	30 mA
Max. switching capacity:			–
Without LED	3 VA/W	10 VA/W	–
With LED	–	240 mW	750 VA
Ambient temperature:	– 25 °C ... + 70 °C		– 25 °C ... + 55 °C
Storage and transport temperature:	– 25 °C ... + 70 °C		
Resistance to shock:	30 g / 11 ms		
Resistance to vibration:	10 ... 55 Hz, amplitude 1 mm		

