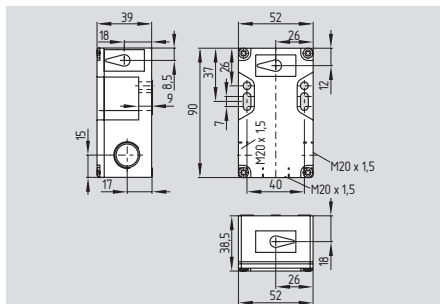


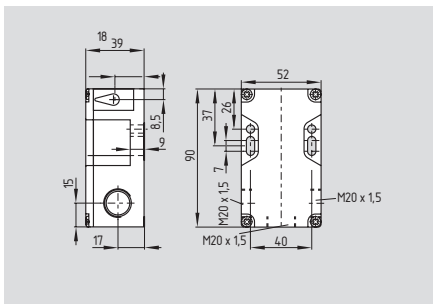
Coded magnet safety sensors

BNS 16



- Thermoplastic enclosure
- Coded
- Long life, no mechanical wear
- Protection class IP67
- Insensitive to lateral misalignment
- Concealed mounting possible
- Insensitive to soiling
- Wiring compartment
- Suitable for food processing industry
- Mounting dimensions identical to AZ 16
- 3 cable entries M20
- Screw terminals or connector
- AS-Interface Safety at Work available

BNS 16 LR



- Actuation from both sides
- Fit for double guards
- Protection against defeat
- Suitable for use with SRB / AES safety monitoring modules
- Screw terminals

Technical data

Standards:	IEC 60947-5-3, BG-GS-ET-14
Design:	rectangular
Enclosure:	glass fiber reinforced thermoplastic, self-extinguishing
Protection class:	IP67 to EN 60529
Connection:	Screw terminals or connector M12, 4- or 8-pole
Cable section:	max. 2 x 1.5 mm ² (incl. conductor ferrules)
Cable entry:	3 x M20
Mode of operation:	magnetic
Actuating magnet:	BPS 16, coded
S _{30°} :	8 mm
S _{90°} :	18 mm
Switching voltage:	max. 100 VAC/DC
Switching current:	max. 400 mA
Switching capacity:	max. 10 W
Ambient temperature:	-25 °C ... +70 °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):	25.000.000 for 20% contact load
Mission time:	20 years
MTTF _d = $\frac{B_{10d}}{0,1 \times n_{op}}$	$n_{op} = \frac{d_{op} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$

Approvals



Approvals



Ordering details

BNS 16-①Z②-③

No.	Option	Description
①	11	1 NO / 1 NC (only for connector type)
	12	1 NO / 2 NC
②	Actuating plane:	
	V	axial
	R	right
	L	left
	D	front (cover)
③	U	rear
	ST1	Connector middle
	ST2	Connector right
	ST3	Connector left

The actuating magnet must be ordered separately.

Ordering details

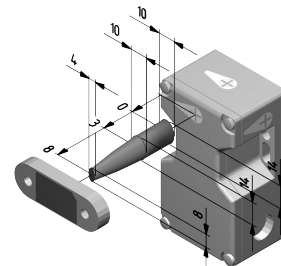
BNS 16-12Z-LR

No.	Option	Description
12		1 NO / 2 NC
LR		Actuating plane: left / right

The actuating magnets must be ordered separately.

Requires 2 actuators

Note



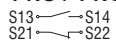
BPS 16 Enabling zone

Important Note:
Series BNS sensors are only for use in safety applications when used with an electrically compatible safety controller or safety PLC
See section 5 for appropriate safety controllers)

Coded magnet safety sensors

Contact variants

1 NO / 1 NC

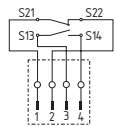


1 NO / 2 NC

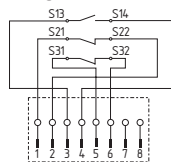


Connector

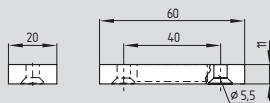
1 NO / 1 NC



1 NO / 2 NC



System components

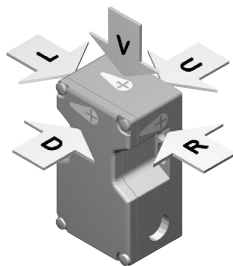


BPS 16



Connector

Note



5 different directions of actuation:
cover, front and below, right and left

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

Ordering details

Actuating magnet	BPS 16
Connector M12, 4-pole without cable	101209950
with cable 5 m	101208523
Connector M12, 8-pole with cable 5 m	101209967