

Safety sensors

// BZ 16-02V Order no.: 90570001

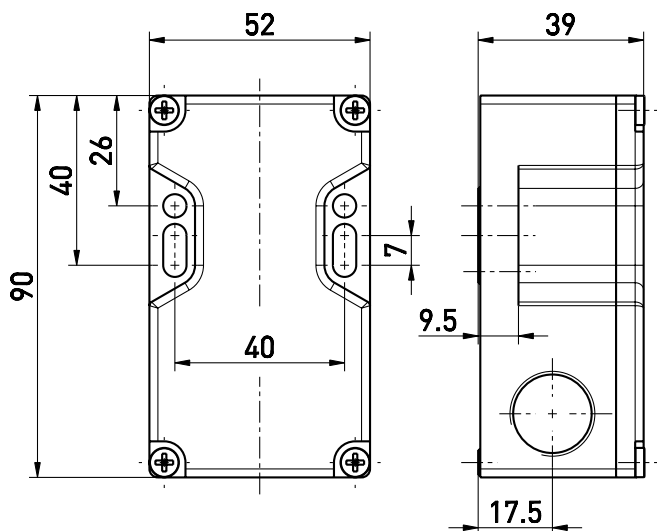
Features/Options

- Thermoplastic enclosure
- Long life
- Differential inputs: Induction/Hall sensor operating principle
- Internal monitoring, high manipulation protection
- Potential-free outputs

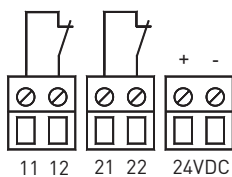
- 2 NC contacts
- Actuating plane: actuating from the front "V"
- Switching capacity s_{ao} 10 mm, s_{ar} 20 mm
- With terminal space

Note: The actuator is not included in the delivery of the switches.

Dimensions



Contact diagram



Technical data

Standards	EN 61000-6-1, -2, -3, -4; EN 60947-5-2; EN 60947-5-3/PDF-M*; EN 954-1; EN 1088; EN ISO 13849-1; DIN EN 62061; 2004/108/EG
Enclosure	glass-fibre reinforced thermoplastic, self-extinguishing
Limit distances	switch-on distance s_{ao} = 10 mm, switch-off distance s_{ar} = 20 mm (When no ferromagnetic material is present in the vicinity of the sensor or actuator. Minimum distance 2 mm for approach from side.)
Hysteresis	approx. 6 mm
Sideways tolerance	≤ 3 mm
Repeatability	< 1 mm
Safety-relevant data:	
EN 954-1	Category 4 *
EN ISO 13849-1	PL e
T_M	max. 20 years
MTTFd	57.8 years
DIN EN 62061	SIL CL 3
PFH _D	≥ 3 x 10 ⁻⁸
I_e/U_e	160 mA/24 VDC ± 15 % (reverse voltage protected)
Residual current	≤ 70 mA
Max. fuse rating U_e	0.25 A (slow blow)
Output contacts	2 enabling paths (2 NC)
Switching voltage	max. 250 VAC
Cond. short-circuit current	100 A
Voltage drop	refer to contact resistance
Max. fuse rating	4 A (gL/gG) incoming series-connected
Utilisation category	AC-15; DC-13
I_e/U_e of the outputs	3 A/230 VAC; 4 A/24 VDC
U_i	250 VAC
Overvoltage category	III
Degree of pollution	3
U_{imp}	4 kV
Max. switching frequency	1 Hz
Risk time	< 200 ms
Degree of protection	IP 67 to IEC/EN 60529
Ambient temperature	0 °C ... + 55 °C
Mech. life	50 mio. operations

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Contacts

AgSnO self-cleaning,
positive-guided

Contact resistance

100 mΩ in new condition

Connection

cable entry M20 x 1.5, terminal
space with self-lifting clamps for
max. 2 x 1.5 mm² (incl. conductor
ferrules)

Approvals



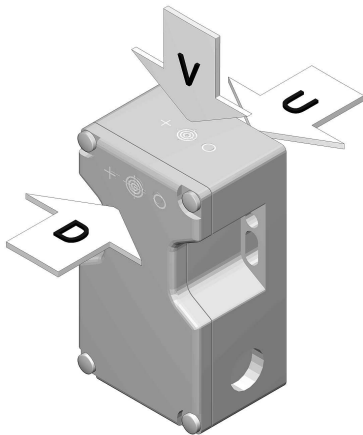
* is only achieved in combination
with a safety module

Weight

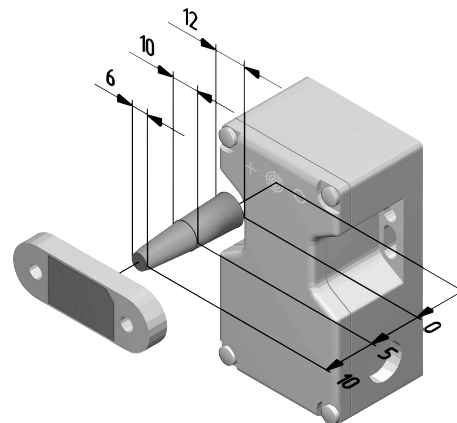
200g

Errors and omissions excepted.

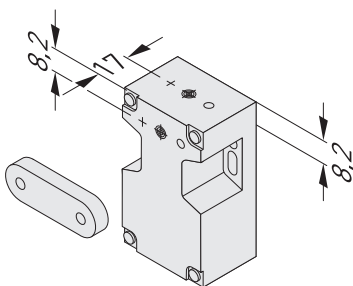
Actuating planes



Switching capacity



Actuator positioning



Distance for actuation from side

