

Safety sensors

// BZ 16-11U Order no.: 90570006

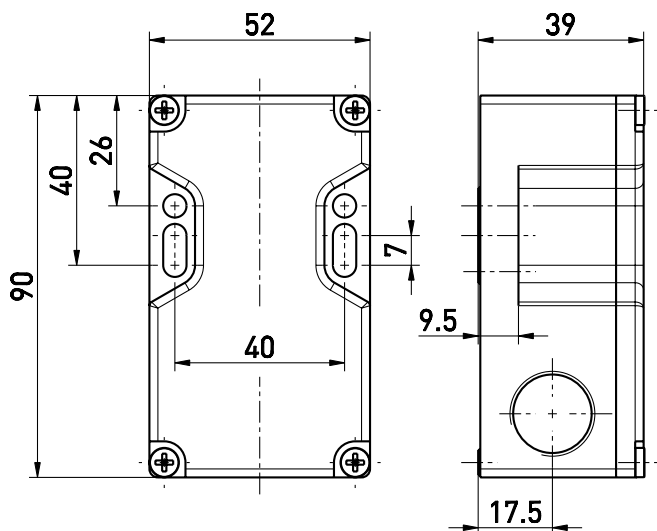
Features/Options

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

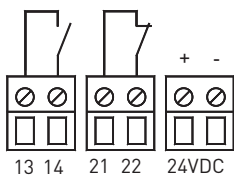
- 1 NC/1 NO contact
- Actuating plane: actuating from the bottom "U"
- Switching capacity s_{ao} 10 mm, s_{ar} 20 mm
- With terminal space

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 × 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
(1 NO/1 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

Safety sensors

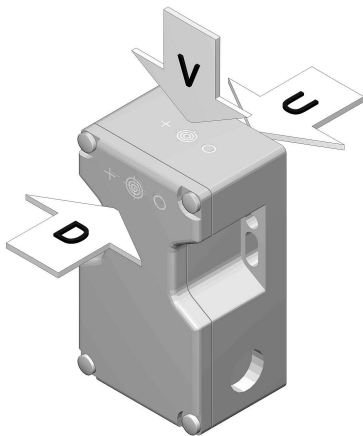
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Mech. life	50 mio. operations
Contacts	AgSnO self-cleaning, positive-guided
Contact resistance	100 mΩ in new condition
Connection	cable entry M20 x 1.5, terminal space with self-lifting clamps for max. 2 x 1.5 mm ² (incl. conductor ferrules)
Approvals	
Weight	210g

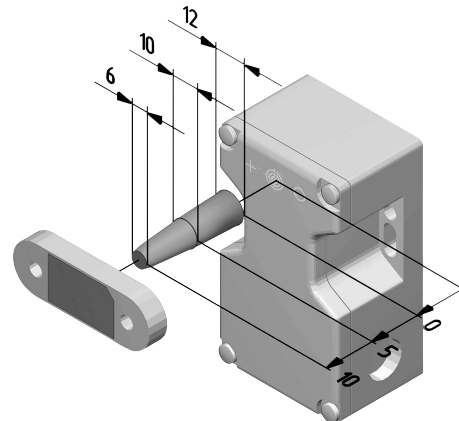
* is only achieved in combination
with a safety module

Errors and omissions excepted.

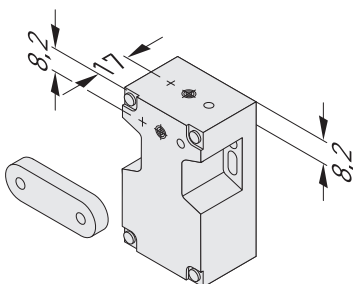
Actuating planes



Switching capacity



Actuator positioning



Distance for actuation from side

