

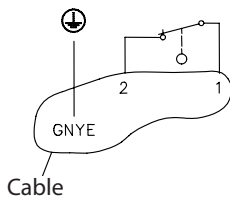
Safety switch

Series Safety Hinge Switch SHS

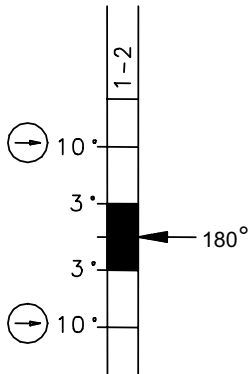
Description **SHS-A1Z-KR 1.2-180**

Article number **6119261007**

Circuit diagram



Operating diagram



Fixing point fixed at 180°.
The wiring diagram depicts the switching state after defining the operating point (factory settings).



Tolerances:
switching angle (opening) $+2,0^\circ / -1,5^\circ$;
direct opening torque 10 %,
direct opening angle $+0,5^\circ / -3^\circ$
Switching angle hysteresis
(closing the N.C. contact $-1,0^\circ$)
from the hinge's typical switch-off point

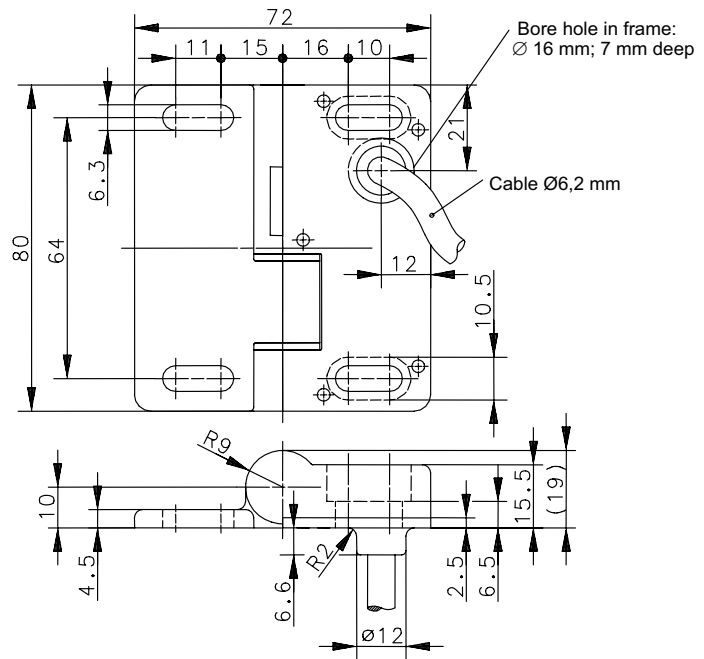
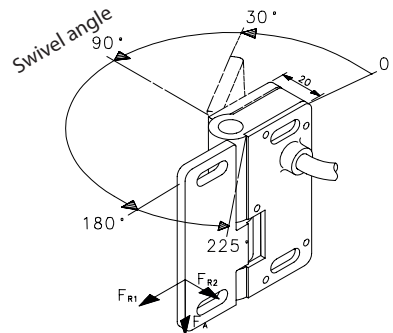


Illustration with fixed shaft and sheared-off set screw.



Electrical Data		
Rated insulation voltage	U_i	250 V
Rated impulse withstand voltage	U_{imp}	2,5 kV
Conv. thermal current	I_{the}	3 A
Rated operational voltage	U_e	230 V AC / 60 V DC
Utilization category		AC-15, 230 V AC / 1,5 A, DC-13, 60 V DC / 0,5 A
Direct opening action	\ominus	acc. to IEC/EN 60947-5-1, annex K
Short-circuit protective device		Fuse 4 A gG
Protection class		I

Mechanical data	
Enclosure	GD-Zn
Cover	GD-Zn
Wing	GD-Zn
Ambient air temperature	-25 °C to +70 °C (with permanently installed cable)
Contact type	1 Change-over
Mechanical life	1 x 10 ⁶ operating cycles
Switching frequency	max. 1200 switching operations / hour
Attachment	4 x M6 screws DIN 7984 or DIN 6912
Connection type	3x 0,5 mm ² (AWG 20); 1,2 m long; with conductor end sleeves minimum bending radius = 25 mm
Weight	≈ 0,4 kg +0,8 kg cable
Installation position	operator definable
Protection type	IP 67 in acc. with IEC/EN 60529
Switching angle	+/- 3 ° from fixing point (180°)
Direct opening angle	+/- 10 ° from fixing point (180°)
Direct opening torque	1,5 Nm
Mechanical load	F_{R1} = max. 1000 N
(see dimensioned drawing for the introduction direction of the forces)	F_{R2} = max. 500 N
	F_A = max. 750 N

ID for safety engineering	
B10d	2 x 10 ⁶ cycles

Standards	
	DIN EN 60947-5-1
	DIN EN 60204-1
	DIN EN ISO 13849-1

EU Conformity	
	acc. to directive 2006/42/EC (Safety-of-Machinery-Directive)

Approvals	
	CCC

Notes

At least two SHS hinge switches are required per protective installation! Confer max. load/stress.

The use and operation of SHS safety hinges at 70°C ambient temperature can accelerate supply cable aging!

Protect the supply cable against mechanical influences and damage. We recommend installing cables in cable conduits or ducts.

Protect the supply cable against mechanical influences and damage. We recommend installing cables in cable conduits or ducts.

The manufacturer/supplier of the machines/plants is obliged to duly observe the effective standards for determining the required safety margins between separative safety devices and points of risk or danger.

These standards include, but are not limited to: DIN EN ISO 13857, DIN EN ISO 13854, DIN EN ISO 14120, DIN EN ISO 14119.