

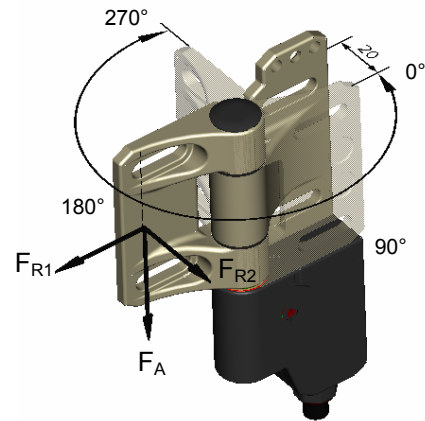
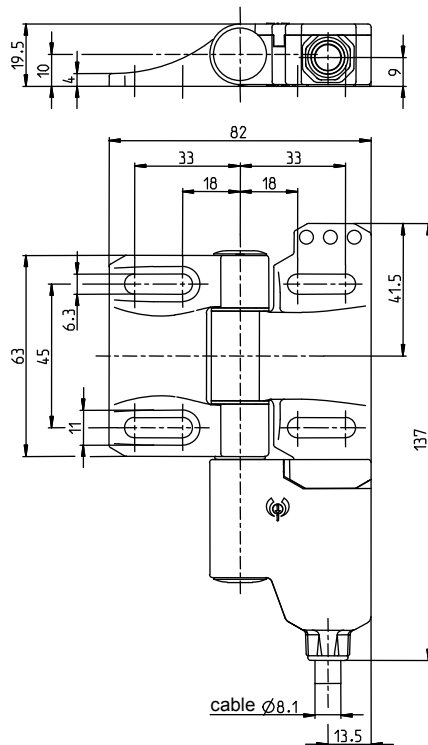
Technical Data

Safety switch

Series SHS3

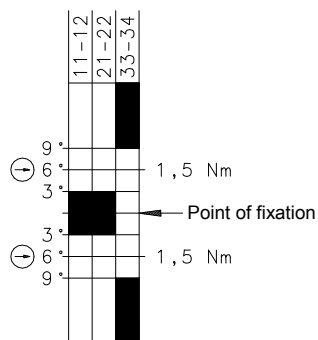
Description **SHS3-U15Z-KA5-R-IPX**

Article number **6019390064**

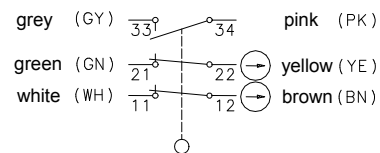


swivel range: 0° bis 270°

Operating diagram



Switching symbol



Tolerances Switching angle (N.C.) $\pm 1,5^\circ$
Tolerances Forced disconnect torque 10%
Tolerances Forced disconnect angle $\pm 1,5^\circ$

Point of fixation is in range of 0° ... 270° free selectable.

The data refer to a SHS3 with fixed switching point

Electrical Data

Rated isolation voltage	U_i	250 V
Conventional thermal current	I_{the}	5 A
Rated supply voltage	U_e	230 V AC; 24 V DC
Utilization category		AC-15, U_e/I_e 230 V / 3 A; DC-13, U_e/I_e 24 V / 1 A
Direct opening action	\ominus	acc. IEC/EN 60947-5-1, annex K
Short circuit protection		melting fuse 4 A gG
Protection class		II, protective insulation

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Mechanical Data	
Switch	PBT
Hinge	Cast stainless steel
Ambient temperature	-25°C to +70°C (connecting cable permanently mounted; no freezing over / no condensation)
Contact function	Slow make and break contacts
	2 N.C., 1 N.O.
Mechanical life	10 ⁶ operations
Switching frequency	Max. 300 operations/h
Mounting	4 x M6 screws DIN EN ISO 7984
	On flat and stiff ground
Wiring	Fixed connecting cable 6 x 0,75 mm ² x 5 m
	Bending radius = 60 mm min.
Weight	≈ 0,65 kg
Mounting position	Any
Protection class	IP69K acc. IEC/EN 60529
Switching angle	+/- 3° from fixation point for the N.C. contacts and 9° for the N.O. contact
Forced disconnect angle	6° +2° from fixation point in both directions (for 0°-3° only in Plus-direction, for 267°-270° only in Minus-direction)
Forced disconnect torque	1,5 Nm
Mechanical load (for direction of loaded forces see the illustration below)	F _{R1} = max. 1800 N F _{R2} = max. 750 N F _A = max. 1800 N
Standards	
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1	
EU-Conformity	
acc. to directive 2006/42/EG acc. to directive 2006/95/EC	
Approvals	
DGUV cCSA _{US} B300	

Notes

The safety guard shall always be mounted using two SHS3 at least! See max. load. If the risk assessment of the machine permits a single-channel monitoring a blank hinge can be used as bearing element.

High forces, unfavourable force application as well as dynamic loads can shorten the service life.

In case that the SHS3 is used at an ambient temperature of 70° an accelerated ageing of the connecting cable can occur.

The connecting cable shall be protected against mechanical damages.

The installation of the connecting cable can be done via pipes or cable ducts.

The manufacturer / supplier of the machine / equipment is obliged to take the applicable standards for the calculation of the safety distances of separating safety guards to hazardous areas into account.

Especially these standards apply: EN 349, EN 953, EN 1088, DIN EN ISO 13857, ...

The switch shall not be used as a mechanical stop.

During cleaning process, the protection class must be considered.

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