## **Technical Data**

# Safety switch

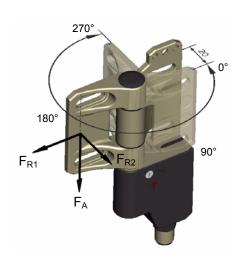
# **BERNSTEIN**

## Series SHS3 - ASI

Description ASI SHS3 SA R

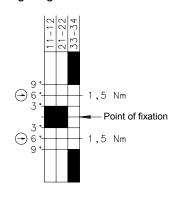
Article number 6073200011

Swivel range: 0° ... 270°



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### Operating diagram





Tolerances Switching angle (N.C.) + / -1,5° Tolerances Forced disconnect torque 10% Tolerances Forced disconnect angle + / -1,5°

Point of fixation is in range of  $0^{\circ}$  ... 270° free selectable.

The data refer to a SHS3 with fixed switching point

Electrical Data	
Operating voltage	U 26,5 31,6 V; via AS-interface, reverse-polarity proof
Operating current	I < 30mA
AS-i Specifications	Profile S-0.B
	IO-Code: 0x0 ID-Code: 0xB
	ID-Code1: 0xF ID-Code2: 0xE
AS-i Inputs	Contact 1: Date bits D0/D1 = static 00
	or dynamic code transmission
	Contact 2: Date bits D2/D3 = static 00
	or dynamic code transmission
Parameter bits	no function
AS-i Address	preset address: 0

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Mechanical Data	
Switch	PBT
Hinge	G-X22CrNi17
Indication	LEDs for slave and bus state
Ambient temperature	-25°C to +70°C (cable fixed mounted)
Contact type	2 NC (slow-action, Zb)
Mechanical life	10 <sup>6</sup> operations
Switching frequency	Max. 300 operations/h
Mounting	4 x M6 screws DIN EN ISO 7984
•	on flat and stiff ground
Connection	Plug connector M12 male
Plug connection	1: AS-i + 2: free
	3: AS-i - 4: free
Weight	≈ 0,65 kg
Mounting position	any
Protection class	IP 67 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	F <sub>R1</sub> = max. 1200 N
(Forces see the illustration page 1)	F <sub>R2</sub> = max. 500 N
	$F_A = max. 1200 N$

Standards	
	VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	EN 50295, EN ISO 13849-1

EU-Conformity acc. to EMC Directive	
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Safety Classification	
	according 13849-1 to PL e
	MTTFd = high
	PFD = $2.49 \times 10^{-10}$

## **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 used as bearing element.

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 294, EN 349, EN 953, EN 1088, ....

The switch shall not be used as a mechanical stop.

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