

SAS 06 Series snap-action switches have one NO and one NC contacts. The change of the switching position is realized by the mechanism, which ensures rapid switching and gives the possibility for switching of high currents. The electric circuit interrupts by double break. The snap-action switches are in the procession of a mechanism, which in case of short-circuit breaks forced the welded normally closed contact. The contact system is placed in a small design made of transparent light blue plastic material with high electrical and mechanical characteristics. The contact system in various versions is actuated directly or through lever system.

APPLICATION

Limit control track switches; command controllers and reversers for battery-operated and diesel trucks; electric driving; automatical devices; transport means; household appliances; non inductive and low inductive resistance furnaces; DC magnet and contactor control

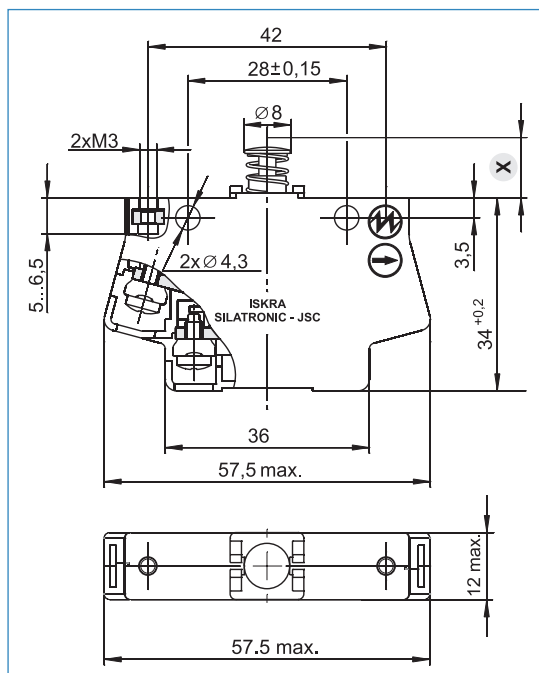
TYPE CHARACTERISTIC

SAS xx x x xx

<p>type / contact system SAS / 1N.O. and (or) 1N.C. ; 1 contact bridge</p> <p>protection of terminals/ material of the actuator 06 IP 20 / metal actuator</p> <p>actuating and front mounting</p> <ul style="list-style-type: none"> b push button c push button, two mounting brackets cl push button, two mounting brackets, one of them slotted a roller lever, two mounting brackets al roller lever, two mounting brackets, one of them slotted d roller lever, two mounting brackets, one of them angled 90° e roller lever, no mounting brackets fa two rollers lever, two mounting brackets fe two rollers lever, no mounting brackets <p><i>*other combinations are possible</i></p>	<p>actuation force</p> <table border="0"> <tr> <td style="padding-right: 10px;">/with push button/ standard - 3N</td> <td style="border: 1px solid black; padding: 2px;">-</td> <td style="padding-left: 10px;">/with roller lever/ 2N - standard</td> </tr> <tr> <td style="padding-right: 10px;">strengthened - 3,5N</td> <td style="border: 1px solid black; padding: 2px;">3,5</td> <td></td> </tr> <tr> <td style="padding-right: 10px;">stronger - 9N</td> <td style="border: 1px solid black; padding: 2px;">9</td> <td></td> </tr> </table> <p>mounting</p> <table border="0"> <tr> <td style="border: 1px solid black; padding: 2px;">-</td> <td>without rivet, mounting hole 4,3 mm</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">r</td> <td>with rivet, mounting hole 3,2 mm</td> </tr> </table>	/with push button/ standard - 3N	-	/with roller lever/ 2N - standard	strengthened - 3,5N	3,5		stronger - 9N	9		-	without rivet, mounting hole 4,3 mm	r	with rivet, mounting hole 3,2 mm
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OVERALL AND CONNECTING DIMENSIONS

EXAMPLE SAS 06b



SAS 06 b



TECHNICAL DATA	Standard	SAS 06 /b, c/	SAS 06 /a, d, e/
Contact configuration	EN 60947	1N.O. and (or) 1N.C. ; 1 contact bridge	
Conventional thermal current I_{th}	EN 60947	16 A	
Rated insulation voltage U_i	EN 60947	400 V	
Pollution degree	EN 60947	3	
Rated impulse withstand voltage U_{imp}	EN 60947	4 kV	
Utilization category	EN 60947	AC - 15, 230 VAC / 1.6A DC - 13, 110 VDC / 1A	
Contact material	--	Silver (Ag)	
N.C. Contact force	EN 60947	0,70 N min.	
Acuation travel	--	2.25 mm	3.40 mm
Actuation force (standard)	EN 60947	3 N min.	2 N min.
Actuation speed	EN 60947	1 mm/s min.	
Mechanical life, cycles	EN 60947	10 ⁷	
Wire connecting type	--	multi-core 0.75 ÷ 2.5 mm ²	
Max.number of wires for one terminal	--	2 pcs.	
Tightening torque of terminal screws	EN 60947	0.9 Nm	
Protection degree	EN 60529	contact system - IP 40 terminals - IP 20	
Casing material	--	transparent light blue polycarbonate	
Sea level	EN 60947	up to 2000 m	
Operating conditions	--	normal fire hazard	
Ambient temperature	EN 60947	- 40°C ÷ + 85°C	
Weight	--	29 ÷ 39 g	

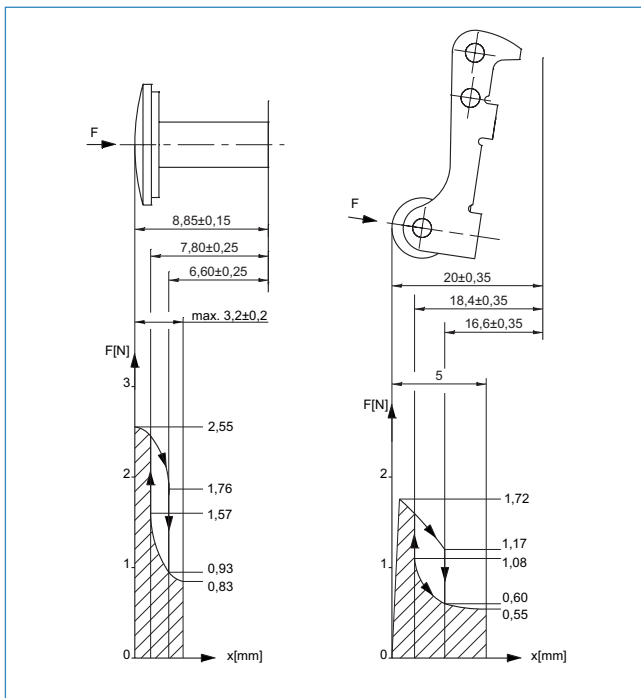
BREAKING CAPACITY at:

Value	Symbol	Measure	DC				AC	
			DC - 13				AC - 1	AC - 15
Rated operating voltage	Ue	V	12	24	40	110	230	
Rated operating current	Ie	A	8	4	2.5	1	10	1,6
Breaking capacity	cycles	pcs.	10 ⁶	10 ⁶	10 ⁶	10 ⁶	10 ⁶	

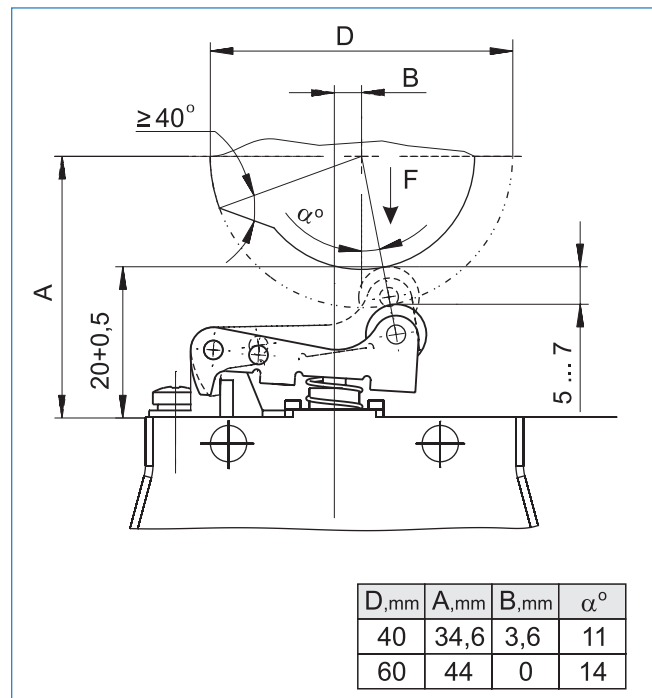
TECHNICAL DATA FOR CONTACT SYSTEM

Actuator position	SAS 06 /b, c/	SAS 06 /a, d, e/	SAS-06 fa
	Dimension "x"	Dimension "x"	Dimension "x"
Free position	8.85 mm ± 0.15 mm	20.00 mm ± 0.35 mm	26.50 mm ± 0.35 mm
Operating position	6.60 mm ± 0.25 mm	16.60 mm ± 0.35 mm	25.50 mm ± 0.35 mm
Release position	7.80 mm ± 0.25 mm	18.40 mm ± 0.35 mm	24.00 mm ± 0.35 mm
Total travel position	5.65 mm ± 0.15 mm	13.20 mm ± 0.15 mm	16.50 mm ± 0.50 mm

ACTUATION FORCE RELEASE FORCE



SWITCH WITH ROLLER LEVER ACTUATED BY CAM DISK



ELECTRICAL CONNECTION

* SCREW-TYPE TERMINALS

- Connected to the snap action switches wires can be single and multiple 0,75 mm² to 2,5 mm² (AWG 18...14). At mounting of ferrules the maximum wire gauge is 1,5mm² (AWG 16).
- Two conductors max can be clamped per terminal with the same wire gauge.
- Wire insulation must be flush with the clamping unit.
- Tightening torque of terminal screws should be within 0,5 Nm ... 0,9 Nm.

MECHANICAL FASTENING

* FRONT MOUNTING

- At SAS 06 b by way of the nut retainers (M3), inserted in the housing of the snap action switch. Tightening torque must be max. 0,9 Nm.
- At switches with roller levers (SAS 06 a, SAS 06 c и SAS 06 d) - by way of the mounting brackets.

* GANGING (lateral mounting) for SAS 06 e and SAS 06 b

- Without rivets - through the two transversal bore holes with 4 mm screws or bolts.
- With rivets - through the two transversal bore holes with 3 mm screws or bolts.
- Between the bolts head and snap action switches place feder washer.
- In order to safeguard clearance and creepage distances it is necessary to use insulating plates when ganging or mounting switches on uninsulated surface.

ATTENTION:

1. At mechanical mounting make sure to have 2 fixing points!
2. The values for maximum tightening torque must not be exceeded.
3. Be sure that after mounting, the wires are free of mechanical tension!
4. When using of screw-retaining varnish, cleaning agents, adhesives etc., they must be compatible with polycarbonate.