Rotary Switch BS/EBS

Rotary switch for conventional wiring or for direct soldering to printed circuits (EBS)

- Multi-wafer switch for conventional wiring.
- Up to 4 circuits per wafer.
- Flexible due to many different detent angles: 15°, 22,5°, 25,71°, 30°, 36°, 45°, 51,43°, 60° or 72°.
- Lever detent mechanism for angles 72°, 60°, 51,43° and 45°, other angles with ball detent mechanism with plastic housing. On request with lever mechanism.
- Shorting or non-shorting mode of switching.
- Stops adjustable retrospectively (Version V).
- Version watertight against front panel available.
- Available with hollow shaft for addition of another switch or potentiometer.
- Many special designs:

– Tandem version for shorter overall length.
– Locking device, switch can be operated only when shaft is pushed.
– Spring return version (momentary contact) operated clockwise or anti-clockwise, also over several switching positions.
– Turn-back interlock for switch operating only in one direction.
– Dummy wafers for mounting of electronic components.
– Two point mounting.

1.0 Construction	
1.1 Number of wafers max.	10 wafers
1.2 Switching combinations per wafer	—
Design A, detent angle 72°	1x5 to 1x2; 2x3 to 2x2
Design B, detent angle 60°	1x6 to 1x2; 2x3 to 2x2; 3x2; 4x2
Design C, detent angle 51° 25,8´	1x7 to 1x2; 2x4 to 2x2; 3x2; 4x2
Design G, detent angle 45°	1x8 to 1x2; 2x4 to 2x2; 4x2
Design D, detent angle 36°	1x10 to 1x2; 2x5 to 2x2
Design E, detent angle 30°	1x12 to 1x2; 2x6 to 2x2; 3x4 to 3x2 4x3 to 4x2
Design F, detent angle 25° 42,6´	1x14 to 1x2; 2x7 to 2x2; 3x4 to 3x2 4x3 to 4x2
Design H, detent angle 22° 30´	1x16 to 1x2; 2x8 to 2x2; 4x4 to 4x2
Design P, detent angle 15°	1x24* to 1x2; 2x11 to 2x2; 3x7 to 3x2; 3x5 to 4x2
1.3 Contacts	Soldering lugs, single-wafer switch also with pins
1.4 Mounting	Central mounting

* With 1x24 fixed stop only or no stop possible.

2.0 Electrical Data		Ag-version	AuNi-version
2.1 Switching power max.		40 VA / W	20 VA / W
2.2 Switching voltage max.		125 V–	60 V–
2.3 Switching current max.		1 A	0,5 A
2.4 Rest current max. at ∂u 20°C		4 A	4 A
2.5 Test voltage at 50 Hz	between contacts	1000 V	1000 V
	contact / ground	2000 V	2000 V
2.6 Life expectancy without electric load		≥ 25000 cycles	≥ 25000 cycles
2.7 Contact resistance initial value		≤ 8 mΩ	≤ 12 mΩ
2.8 Insulation resistance		≥ 10^{11} Ω	≥ 10^{11} Ω
2.9 Capacity between 2 contacts		~1 pF	~1 pF

3.0 Mechanical Data	
3.1 Switching mode	Shorting or non-shorting
3.2 Stops	Fixed or without stop Version V variable
3.3 Operating torque according to design	≥ 9 Ncm
3.4 Stop strength	≥ 150 Ncm
3.5 Fastening torque max.	≥ 500 Ncm
3.6 Dust protection	Dust protection cap on request

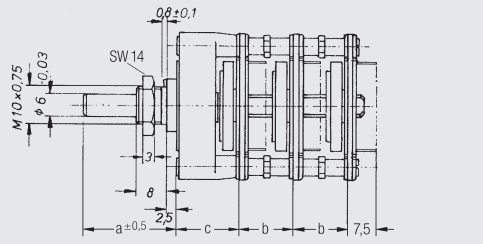
4.0 Other Data		
4.1 Contact material		Ag or AuNi
4.2 Insulating material	Wafer	Diallylphthalate, DAP; Code DI
	Rotor	Polycarbonate, PC
4.3 Soldering time and temperature max.		5 s at 260°C
		3 s at 350°C, manual soldering

Additional description for »adjustable stops«

Please add **V** at the end of the ordering code of the desired switch.

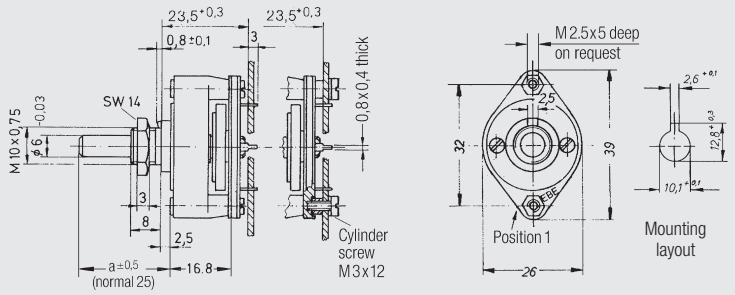
The bold-typed data in the yellow order blocks remain unchanged.
Normal-typed data match the drawings and can be modified according to your wishes.
Blanks need to be completed according to the ordering details on the inside front cover.

Dimensional Drawings · Dimensions in mm



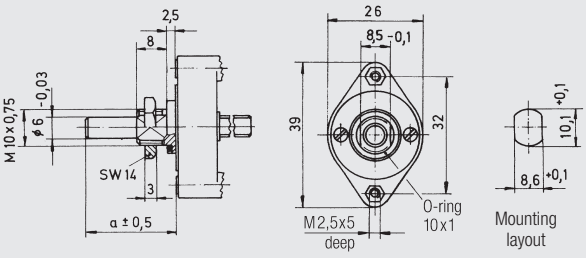
BS | 1 | 2 | 3 | 25 4 | A 5 | 6 | 7 | DI 8 | 9 | 1 10 | L 11

BS · Version with soldering lugs



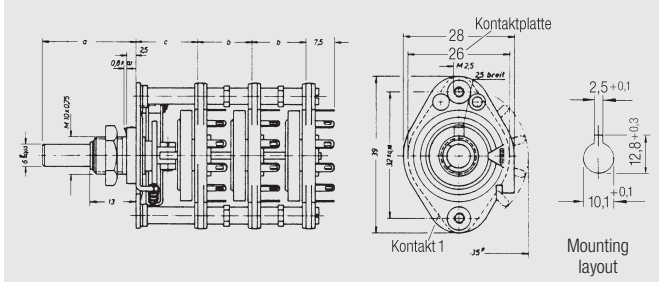
BS | 1 | 2 | 3 | 25 4 | A 5 | 6 | 7 | DI 8 | 9 | 1 10 | P 11

BS · PC board version

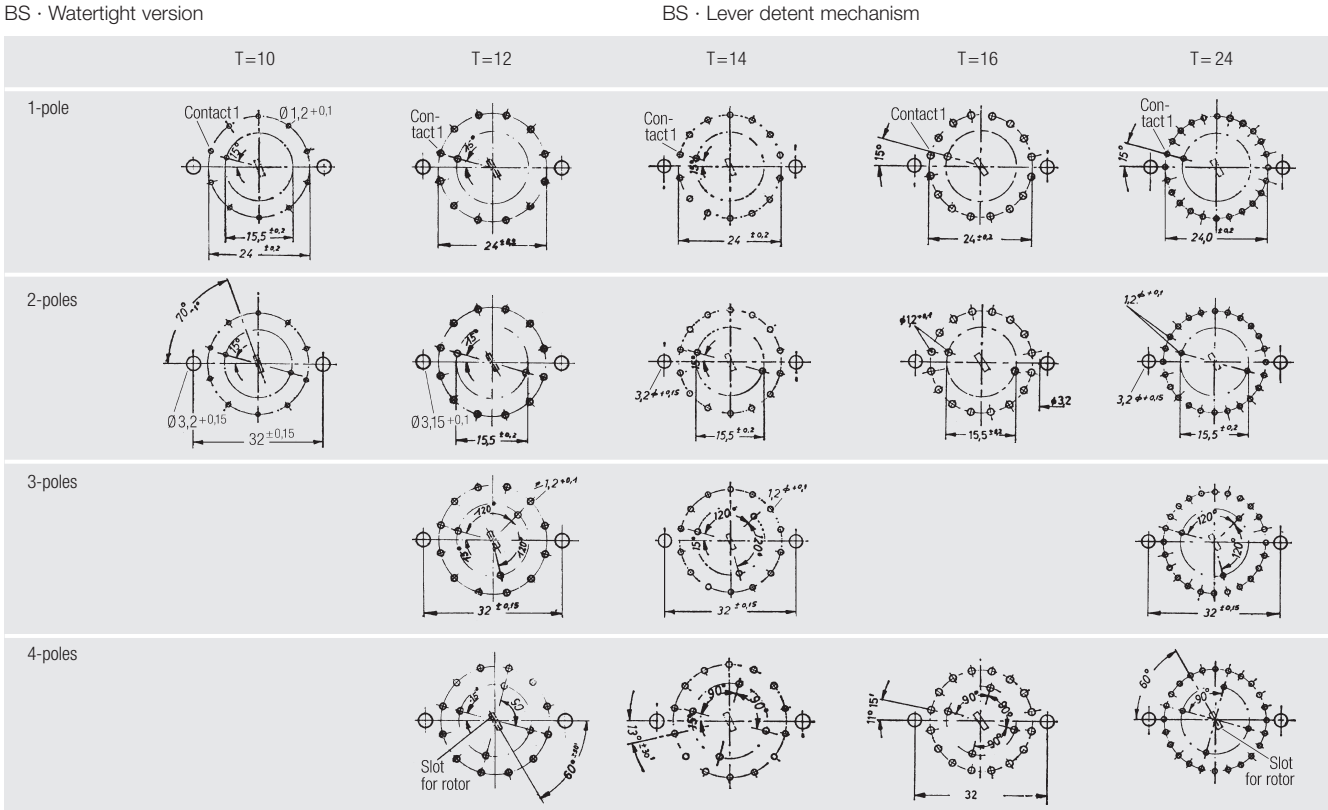


BS | 1 | 2 | 3 | 25 4 | A 5 | 6 | 7 | DI 8 | 9 | 1 10 | 11 | WD 13

BS · Watertight version



BS · Lever detent mechanism



Hole location diagrams as viewed from the mounting side