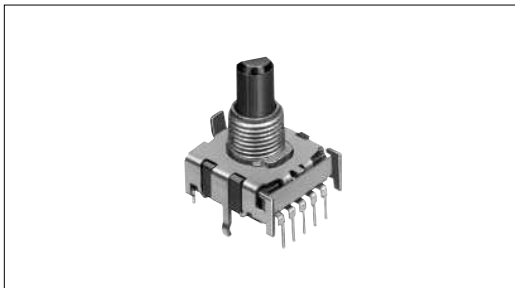


Rotary Switch 8-position Low-profile Vertical Type

SRBV Series



Low-profile 7.5mm height contributes to flexibility in set design.



Typical Specifications

Items		Specifications
Rating(max.)(min.) (Resistive load)		0.3A 16V DC/50 μ A 3V DC
Contact resistance (Initial/After operating life)		50m Ω max./150m Ω max.
Rotational torque		30 \pm 15 mN \cdot m
Operating life	Without load	10,000cycles
	With load	10,000cycles(0.3A 16V DC)

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products

Product Line

Poles	Positions	Changeover angle	Changeover timing	Actuator configuration	Actuator length (mm)	Minimum order unit(pcs.)	Product No.
1	3	30 \pm 3°	Non shorting	Flat	L=15	330	SRBV131803
					L=20		SRBV131502
	4				L=15		SRBV141404
					L=20		SRBV141201
	5				L=15		SRBV151102
					L=20		SRBV150901
	6				L=15		SRBV160803
					L=20		SRBV170701
	7				L=15		SRBV170501
					L=20		SRBV181004
	8				L=15		
					L=20		

Notes

1. Products other than those listed in the above chart are also available. Please contact us for details.
2. Please place purchase orders per minimum order unit(integer).

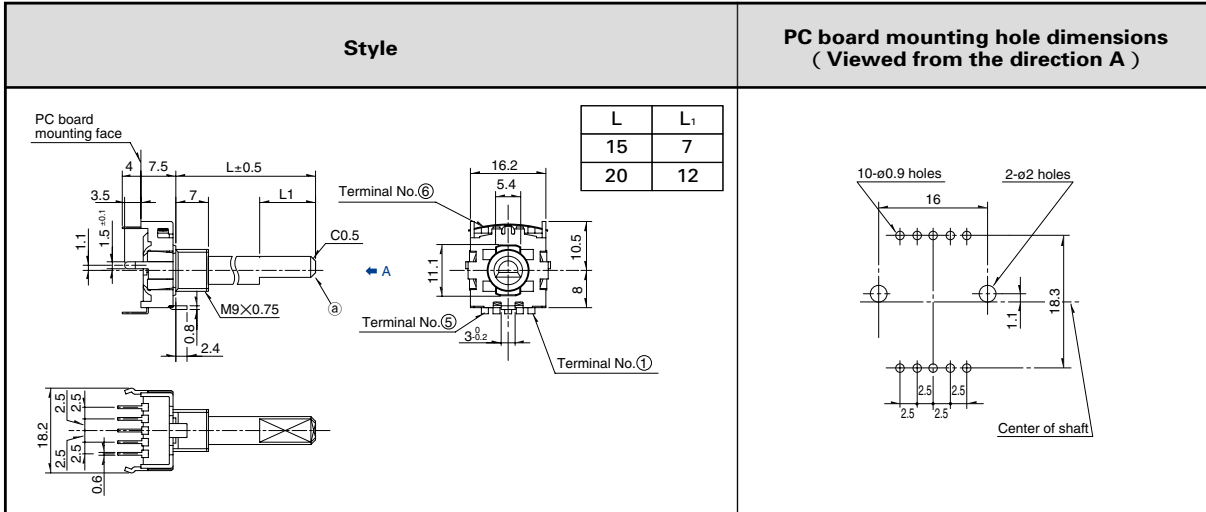
Refer to P.171 for shaft configurations.
Refer to P.173 for attached parts.

Rotary Switch 8-position Low-profile Vertical Type | SRBV Series

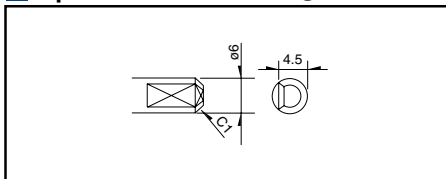
- Detector
- Push
- Slide
- Rotary
- Encoders
- Power
- Dual-in-line
Package Type
- TACT Switch™
- Custom-
Products

Dimensions

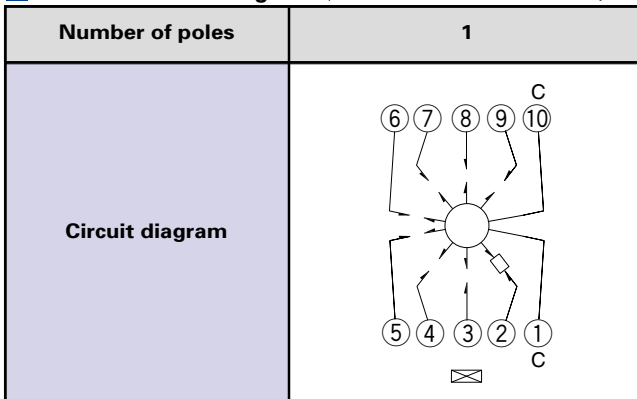
Unit:mm



Operation Part Details (a) Unit:mm









Standard Circuit Diagram (Viewed from Direction A)



Dummy Terminals

3-positions	⑤ ⑥ ⑦ ⑧ ⑨
4-positions	⑥ ⑦ ⑧ ⑨
5-positions	⑦ ⑧ ⑨
6-positions	⑧ ⑨
7-positions	⑨
8-positions	-

List of Varieties

Series		SRBD	SRBQ		SRRM	SRBV	SRBM		SRRN						
			Insertion	Reflow type			Rotary	Pulse							
Photo															
Outline specifications	Step angle	36°	40± 3°		30± 3°			18± 3°	30± 3°						
	Number of poles	1		1 2 3 4	1	1 2		2 3 4							
Dimensions (mm)		W	11.4		—	16.2	12.5		—						
		D	12.4			18.5	10								
		H	3.5			7.5	11.5								
Operating temperature range		-25°C to + 85°C		-10°C to + 60°C		-40°C to + 85°C		-10°C to + 60°C							
Rating(max)/(min) (Resistive load)		1mA 5V DC 50μA 3V DC		0.1A 16V DC 50μA 3V DC		0.25A 30V DC 50μA 3V DC		0.3A 16V DC 50μA 3V DC		0.1A 16V DC 50μA 3V DC		0.15A 12V DC 50μA 3V DC			
Electrical performance	Initial contact resistance		100MΩ min. 100V DC		100MΩ min. 500V DC		100MΩ min. 100V DC		100MΩ min. 500V DC						
	Insulation resistance		100V AC for 1minute		500V AC for 1minute		100V AC for 1minute		500V AC for 1minute						
	Voltage proof		3N for 1minute		5N for 1minute		10N for 1minute		5N for 1minute						
Mechanical performance	Actuator strength	Rotational direction	—		1N·m		0.6N·m		0.5N·m		1N·m				
		Push direction	50N		20N		100N		100N		100N				
	Wobble of actuator	Load at the tip of shaft SRRM : 5N SRBV, SRBQ : 1N		The below table shows for SRBQ (Unit : mm)		The below table shows for SRBV (Unit : mm)			Measuring position from mounting surface	Shaft wobble (max. value)	Applicable mounting dimension				
		(Unit : mm)		Distance from mounting surface to the tip of shaft		Shaft wobble (max. value)			10mm	0.17 mm	15 mm				
Measuring position from mounting surface		Shaft wobble (max. value)	Applicable mounting dimension		Measuring position from mounting surface			15mm	0.25 mm	20 mm					
Durability		Operating life without load		10,000cycles 250mΩ max.		10,000cycles 100mΩ max.		10,000cycles 40mΩ max.		10,000cycles 100mΩ max.		30,000cycles 100mΩ max.		10,000cycles 70mΩ max.	
		Operating life with load Load : (at rated load)		10,000cycles 250mΩ max.		10,000cycles 100mΩ max.		10,000cycles 60mΩ max.		10,000cycles 150mΩ max.		10,000cycles 100mΩ max.			
Environmental performance	Cold		-40± 2°C for 500h		-20± 2°C for 96h		-20± 2°C for 96h		-20± 2°C for 96h		-20± 2°C for 96h				
	Dry heat		85± 2°C for 500h		85± 2°C for 96h		85± 2°C for 96h		85± 2°C for 96h		85± 2°C for 96h				
	Damp heat		60± 2°C, 90 to 95%RH for 500h		40± 2°C, 90 to 95%RH for 96h		40± 2°C, 90 to 95%RH for 96h		40± 2°C, 90 to 95%RH for 96h		40± 2°C, 90 to 95%RH for 96h				
Soldering	Manual soldering		—		350± 10°C 3 ⁺ / ₁ s		350± 5°C 3s max.		350± 10°C, 3 ⁺ / ₁ s		350± 10°C, 3 ⁺ / ₁ s				
	Dip soldering		—		260± 5°C 5± 1s		—		260± 5°C 10± 1s		260± 3°C 5s max.		260± 5°C 10± 1s		
	Reflow soldering		Please see P.172		—		—		—		—		—		
Page		158		160		167		165		162		169			

- Detector
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- Rotary Switches Shaft Style171
- Rotary Switches Soldering Conditions 172
- Rotary Switches Attached Parts 173
- Rotary Switches Cautions 174

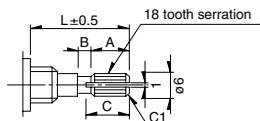
Shaft Configurations

18-tooth Serration Shaft

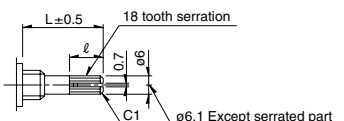
The shaft shows the position in which it is turned fully counterclockwise.

Unit:mm

① Cutting Shaft



② Die Casting Shaft



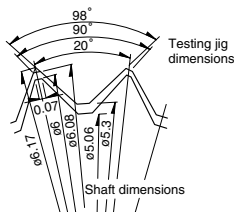
Shaft length L	A	B	C
15	6	1	7
20	10	2	11

Unit:mm

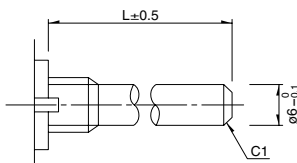
Shaft length L	l
15	8
20	12

Details About Serration

- (1) The mold dimensions of standard serration and the dimensions of test jigs are as shown in the figure at left.
- (2) Position of the serration bottom
When the shaft is turned fully counterclockwise, the position of the serration bottom is on the AA line.
- (3) Slitting angle
The slitting angle (position) is not specified.

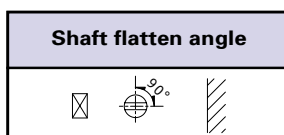
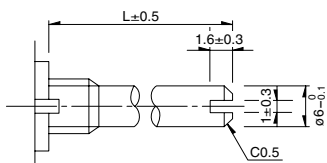


Round Shaft



Round Shaft with Groove

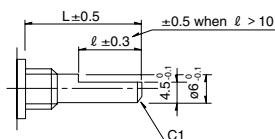
The shaft shows the position in which it is turned fully counterclockwise.



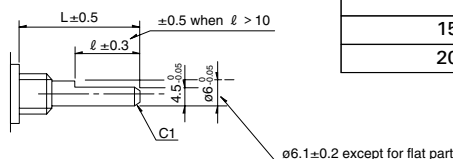
Flat Shaft

The shaft shows the position in which it is turned fully counterclockwise.

Cutting Shaft

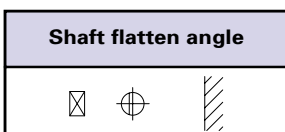


Die Casting Shaft



Unit:mm

Shaft length L	l
15	7
20	12



Note

SRBM Series are based on (printed terminal direction). SRRM, SRRN, SRBV Series are based on (panel lug).

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

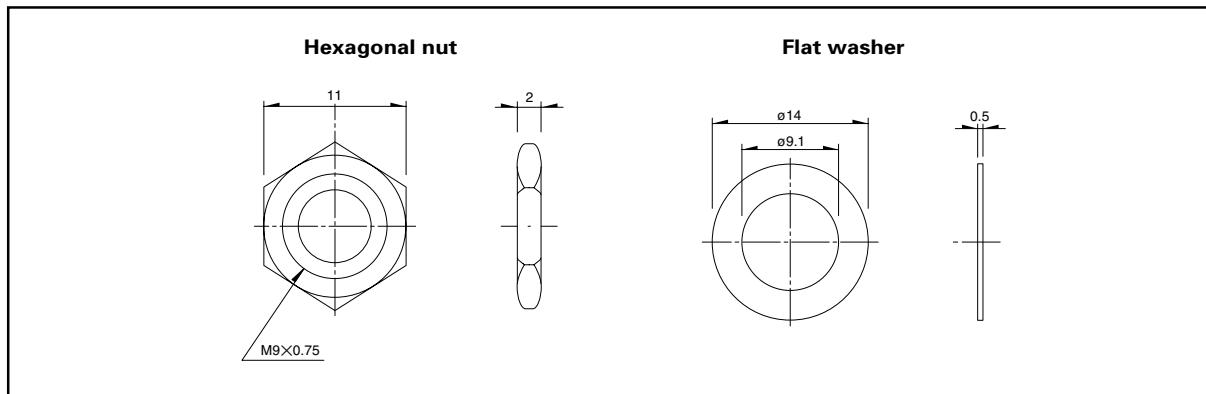
Custom-
Products

Attached Parts

The following parts are included with the product.

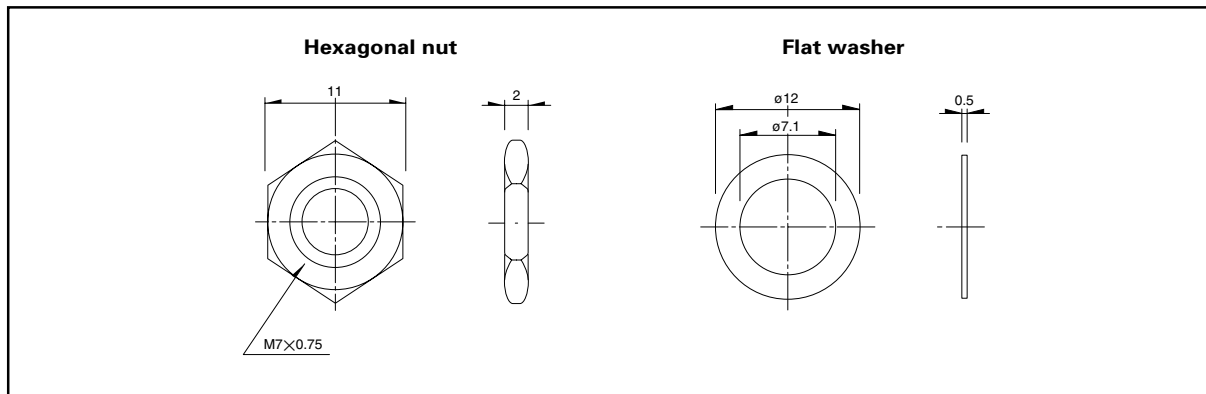
SRRM, SRBV

Unit:mm



SRBM, SRRN

Unit:mm



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

TACT Switch™

Custom-
Products