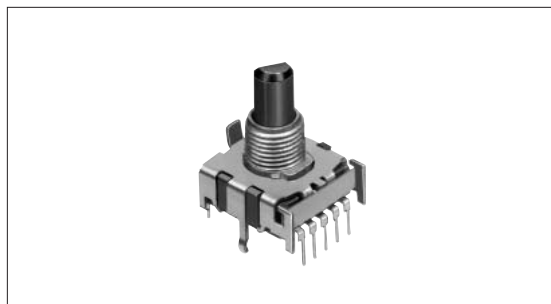


Rotary Switch 8-position Low-profile Vertical Type

SRBV Series



A height of just 7.5mm increases flexibility in set design.



Features

- Low-profile vertical rotary switch.

Applications

- Information communications devices, including telephones and radios
- Various AV devices including video cameras, speaker systems, amplifiers, and tuners
- In-vehicle air cleaners and other devices
- Printer-related equipment

Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

Multi Control
Devices

TACT Switch™

Custom-
Products

Typical Specifications

Items		Specifications
Rating (max.) / (min.) (Resistive load)		0.3A 16V DC/50μA 3V DC
Contact resistance (Initial performance/After lifetime)		50mΩ max./150mΩ max.
Rotational torque		30±15mN·m
Operating life	Without load	10,000 cycles
	With load	10,000 cycles (0.3A 16V DC)

Products Line

Poles	Positions	Changeover angle	Changeover timing	Operating section style	Length of operating section (mm)	Minimum packing unit (pcs.)	Products No.
1	2	30±3°	Non shorting	Flat	L=15	100	SRBV120800
	3				L=20		SRBV131800
	4				L=15		SRBV131500
					L=20		SRBV141400
	5				L=15		SRBV141200
					L=20		SRBV151100
	6				L=15		SRBV150900
	7				L=15		SRBV160800
L=20		SRBV170700					
8	L=15	SRBV170500					
	L=20	SRBV181000					

Note

Additional switches not included in the above list are also available. Contact us for details.

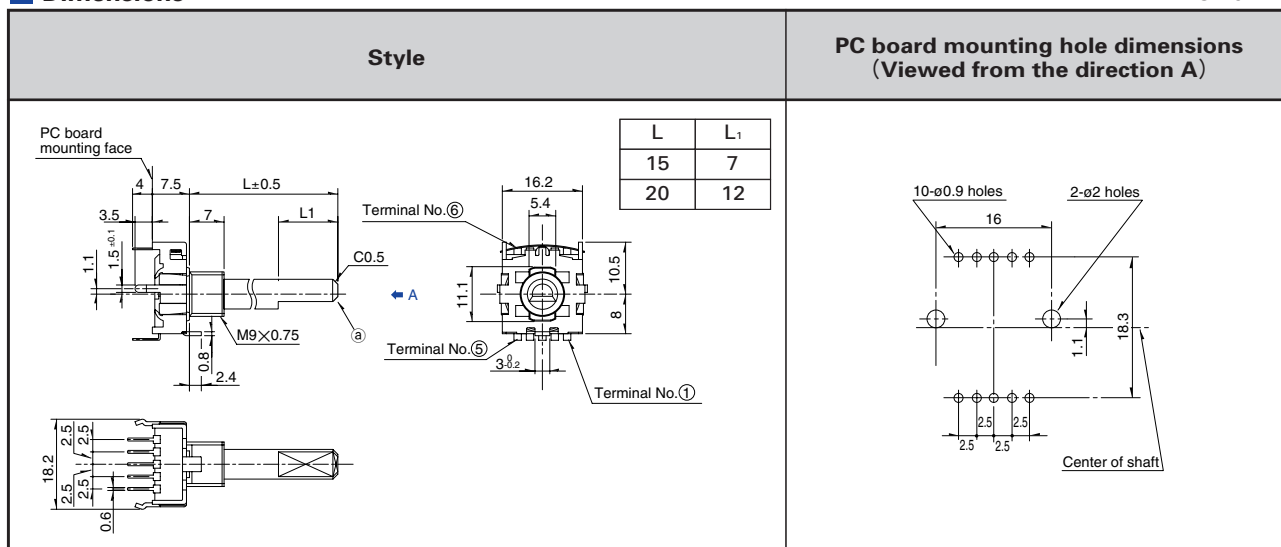
For other specifications, see P.170
For attached parts, see P.174

Rotary Switch

8-position Low-profile Vertical Type | SRBV Series

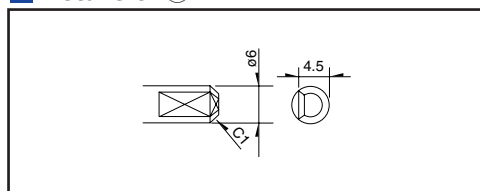
Dimensions

Unit:mm

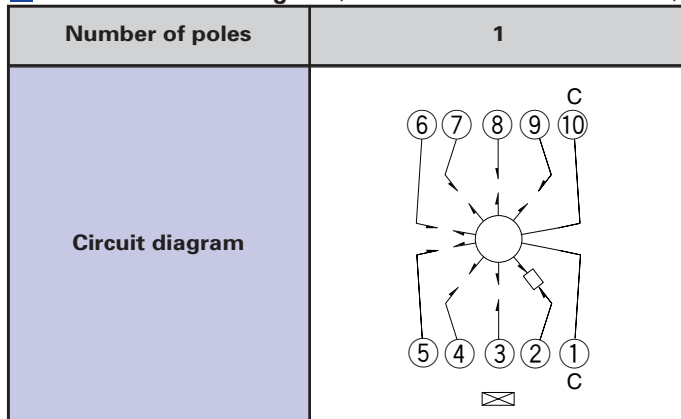


Detail of ①

Unit:mm



Standard Circuit Diagram (Viewed from the Direction A)



Dummy Terminals

2-positions	④ ⑤ ⑥ ⑦ ⑧ ⑨
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	—

For shaft style, see P.172

Products Specifications

Items	Series	SRRM	SRBQ		SRBD	SRBV			
			Insertion	Reflow type					
Detector	Operating temperature range		-10°C to +60°C		-25°C to +85°C	-10°C to +60°C			
Push	Rating (max.) (Resistive load)		0.25A 30V DC	0.1A 16V DC	1mA 5V DC	0.3A 16V DC			
Slide	Electrical performance	Initial contact resistance		20mΩ max.	50mΩ max.	200mΩ max.	50mΩ max.		
Rotary		Insulation resistance		100MΩ min. 500V DC	100MΩ min. 100V DC				
Encoders		Voltage proof		500V AC for 1 min.	100V AC for 1 min.				
Power	Robustness of terminal		10N for 1 min.	5N for 1 min.	3N for 1 min.	5N for 1 min.			
Dual-in-line Package Type	Robustness of actuator	Rotational direction		1N·m	—	—	0.6N·m		
Multi Control Devices		Push direction		100N	20N	50N	100N		
TACT Switch™	Mechanical performance	Wobble of actuator		Load at the tip of shaft SRBM, SRRM : 5N SRBV, SRBQ : 1N (Unit:mm)		The below table shows for SRBQ (Unit:mm)		The below table shows for SRBV (Unit:mm)	
Custom-Products		Measuring position from mounting surface	Shaft wobble (max. value)	Applicable mounting dimension	Distance from mounting surface to the tip of shaft	Shaft wobble (max.value)	Measuring position from mounting surface	Shaft wobble (max. value)	Applicable mounting dimension
		10	0.17	15	below 5	0.5 max.	10	0.2	15
		15	0.25	20	above 5 and below 10	0.9 max.	15	0.3	20
	Vibration		10 to 55 to 10Hz/min., the amplitude is 1.5mm for all the frequencies, in the 3 direction of X, Y and Z for 2 hours respectively						
	Resistance to soldering heat	Manual soldering		350±10°C 3 ⁺¹ 0s	350±5°C 3s max.	—	350±10°C 3 ⁺¹ 0s		
		Dip soldering		260±5°C 10±1s	260±5°C 5±1s	—	260±5°C 10±1s		
		Reflow soldering		—	Please see P.173	Please see P.173	—		
Durability	Operating life without load		10,000 cycles 40mΩ max.	10,000 cycles 100mΩ max.	10,000 cycles 250mΩ max.	10,000 cycles 100mΩ max.			
	Operating life with load Load : As rating		10,000 cycles 60mΩ max.	10,000 cycles 100mΩ max.	10,000 cycles 250mΩ max.	10,000 cycles 150mΩ max.			
Environmental performance	Cold		-20±2°C for 96h		-40±2°C for 500h	-20±2°C for 96h			
	Dry heat		85±2°C for 96h		85±2°C for 500h	85±2°C for 96h			
	Damp heat		40±2°C, 90 to 95%RH for 96h		60±2°C, 90 to 95%RH for 500h	40±2°C, 90 to 95%RH for 96h			

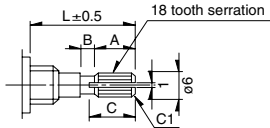
Shaft Style

18-tooth Serration Shaft

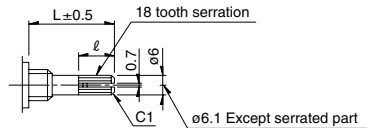
The shaft shows the position in which it is turned fully counterclockwise.

Unit:mm

①Cutting Shaft



②Die Casting Shaft



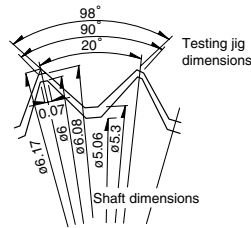
Shaft length L	A	B	C
15	6	1	7
20	10	2	11

Unit:mm

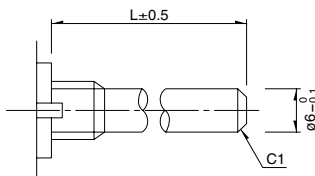
Shaft length L	l
15	8
20	12

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.

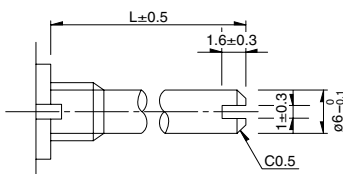


Round Shaft



Round Shaft with Groove

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



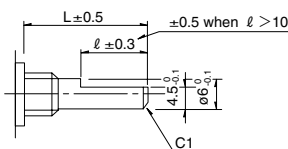
Shaft flatten angle	Type
	S26

Flat Shaft

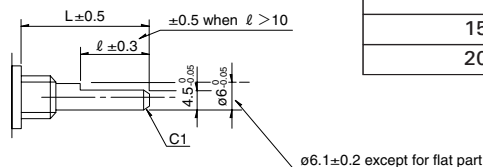
The shaft shows the position in which it is turned fully counterclockwise.

Unit:mm

Cutting Shaft



Die Casting Shaft



Shaft length L	l
15	7
20	12

Shaft flatten angle	Type
	F00

Note

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

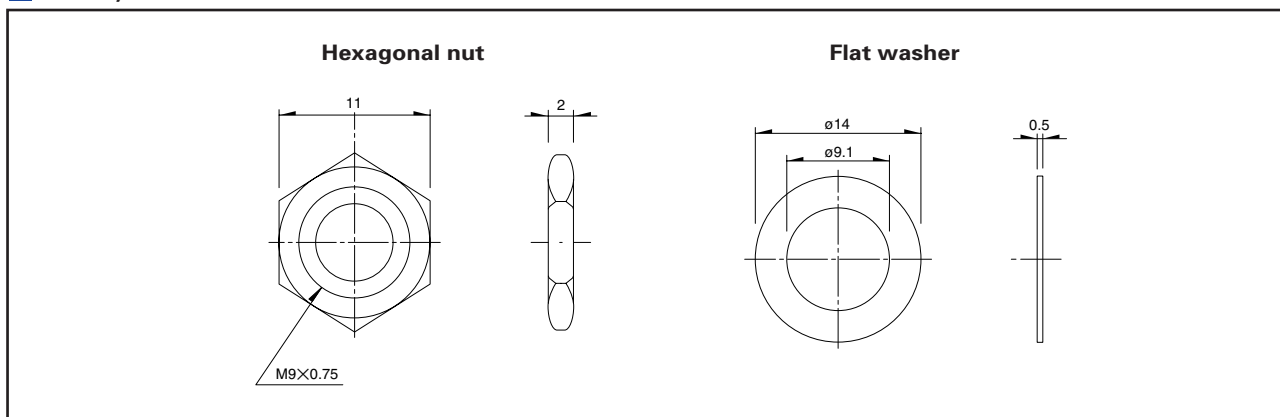
- Detector
- Push
- Slide
- Rotary**
- Encoders
- Power
- Dual-in-line Package Type
- Multi Control Devices
- TACT Switch™
- Custom-Products

Attached Parts

These parts are attached to the following products.

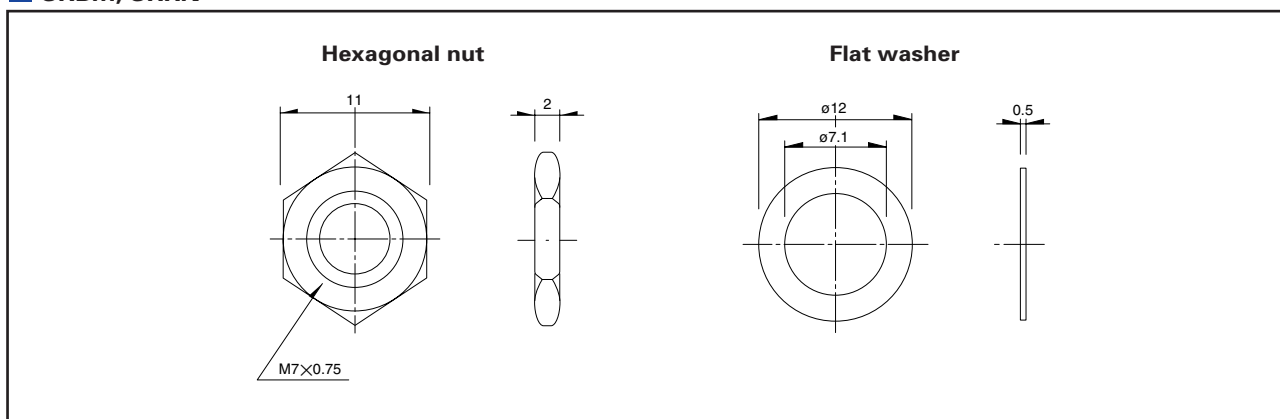
SRRM, SRBV

Unit:mm



SRBM, SRRN

Unit:mm

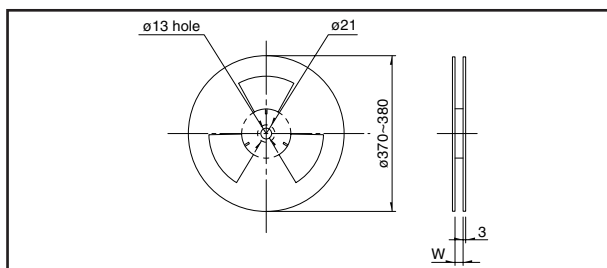


Taping Specifications

Taping Packaging

Reel Size

Unit:mm



Series	Number of packages (pcs.)			Reel width W (mm)	Tape width (mm)
	1 reel	1 case/domestic	1 case/export packing		
SRBQ	1,200	2,400	4,800	24.4	24
SRBD	Length of operation section 1.0	1,400	2,800	25.4	
	1.7	1,200	2,400		

Note

Order products in N minimum packing units (1 reel or 1 case).