

■ Typical Specifications

Items		Specifications
Rating (max.)/(min.)(Resistive load)		0.15A 12V DC / 50μA 3V DC
Contact resistance (Initial / After operating life)		50mΩ max. / 100mΩ max.
Rotational torque		70±30mN·m
Operating life	Without load	10,000 cycles
	With load	10,000 cycles (0.15A 12V DC)

■ Product Line

Number of wafers	Poles	Positions	Changeover angle	Changeover timing	Actuator configuration	Actuator length (mm)	Minimum order unit (pcs.)		Product No.	Drawing No.
							Japan	Export		
1	2	5	30±3°	Non shorting	Round	20	100	600	SRRN151800	1
		Flat			15	SRRN152000				
	18-tooth serration	20			SRRN161100					
	Round				SRRN142100	2				
	3	4			18-tooth serration	15			SRRN134300	3

Note

All the axis are cutting shafts.

■ Packing Specifications

Bulk

Number of packages (pcs.)		Export package measurements (mm)
1 case /Japan	1 case /export packing	
100	600	369×349×367

■ Dimensions

Unit:mm

No.	Style
1	

Refer to P.155 for shaft configurations.
Refer to P.156 for soldering conditions.

SRRN 6-position Vertical Type

Detector

Slide

Push

Rotary

Power

Dual-In-Line
Package Type

Dimensions

Unit:mm

No.	Style
2	<p>Technical drawing of SRRN style 2. It includes three views: a top view showing terminal positions 1-6, a side view showing dimensions (16 max., 11.3, 6, L±0.5, 8, 5, 2±0.5, φ6, M7×0.75) and a section line A-A, and a front view showing diameters (φ24, φ19.2, φ3⁺⁰_{-0.2}) and other dimensions (8.4, 8, 23.6, 5.8).</p>
3	<p>Technical drawing of SRRN style 3. It includes three views: a top view showing terminal positions 1-6, a side view showing dimensions (16 max., 11.3, 6, L±0.5, 8, 5, 2±0.5, φ6, M7×0.75) and a section line A-A, and a front view showing diameters (φ24, φ19.2, φ3⁺⁰_{-0.2}) and other dimensions (8.4, 8, 23.6, 5.8).</p>

Terminal Configuration

Unit:mm

Common terminal	Terminal
<p>Diagram of a common terminal configuration. Dimensions shown: 2.4, 1.8, 0.8×1.6 hole, 0.5, 2.4.</p>	<p>Diagram of a terminal configuration. Dimensions shown: 1.8, 0.8×1.6 hole, 0.5, 2.4.</p>

Standard Circuit Diagram (Standard Poles Per Step)

Number of poles	2		3		4	
Circuit diagram						
Dummy terminals	5-position	17 8	4-position	—	3-position	—
	6-position	—				

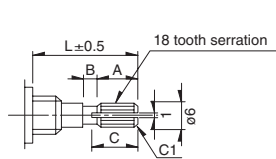
Note

The mark in the above table indicate a stopper with the shaft turned fully counterclockwise when viewed from direction A of the diagrams.

18-tooth Serration Shaft

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

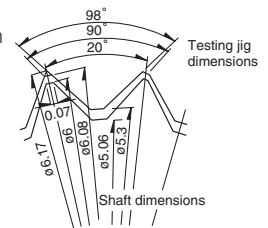
Cutting Shaft



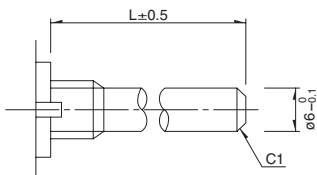
Shaft length L	Unit:mm		
	A	B	C
15	6	1	7
20	10	2	11

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.



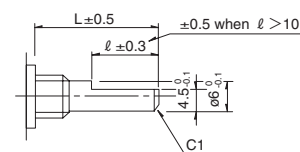
Round Shaft



Flat Shaft

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

Cutting Shaft



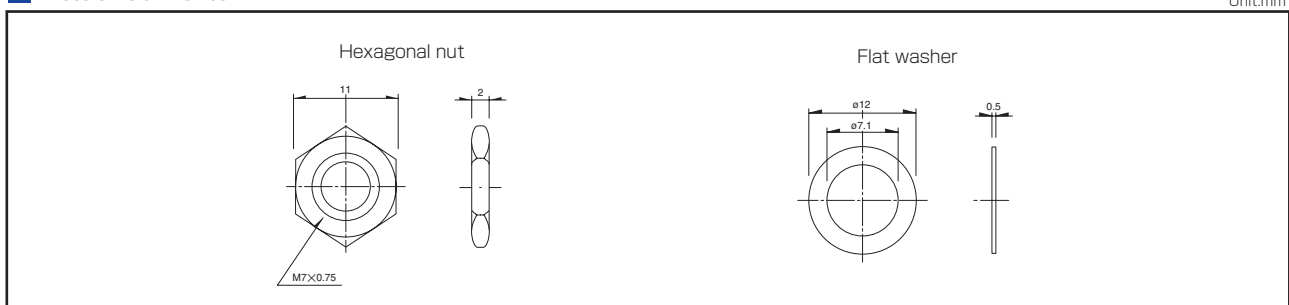
Shaft length L	Unit:mm	
	ℓ	
15	7	
20	12	



Note

SRRM Series are based on (panel lug).

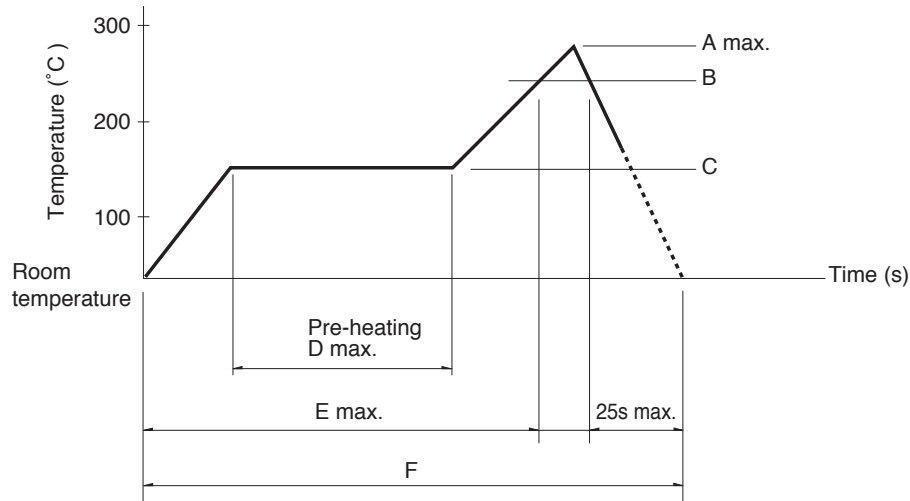
Attached Parts



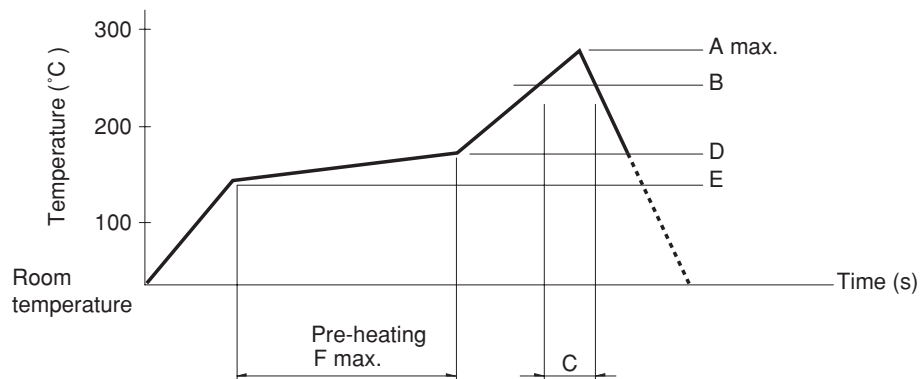
Rotary Switches Soldering Conditions

Example of Reflow Soldering Condition

1. Heating method: Double heating method with infrared heater.
2. Temperature measurement: Thermocouple $\phi 0.1$ to 0.2 CA (K) or CC (T) at soldering portion (copper foil surface). A heat resisting tape should be used for fixed measurement.
3. Temperature profile



Series (Reflow type)	A (°C) 3s max.	B (°C)	C (°C)	D (s)	E (s)	F (s)
SRBQ	250	200	150±5	80 to 100	—	—



Series (Reflow type)	A (°C) 3s max.	B (°C)	C (s)	D (°C)	E (°C)	F (s)
SRBD	260	230	40	180	150	120

- Notes**
1. The condition mentioned above is the temperature on the mounting surface of a PC board. There are cases where the PC board's temperature greatly differs from that of the switch, depending on the PC board's material, size, thickness, etc. The above-stated conditions shall also apply to switch surface temperatures.
 2. Soldering conditions differ depending on reflow soldering machines. Prior verification of soldering condition is highly recommended.

Reference for Hand Soldering

Series	Soldering temperature	Soldering time
SRBQ, SRBM, SRBV, SRRM, SRRN	350±10°C	3+1/0s
SRBQ (Reflow type)	350±5°C	3s max.

Reference for Dip Soldering

(For PC board terminal types)

Series	Items		Dip soldering	
	Preheating temperature	Preheating time	Soldering temperature	Duration of immersion
SRBM	100°C max.	60s max.	260±5°C	5s max.
SRBV, SRRM, SRRN	—	—	260±5°C	10±1s
SRBQ	—	—	260±5°C	5±1s