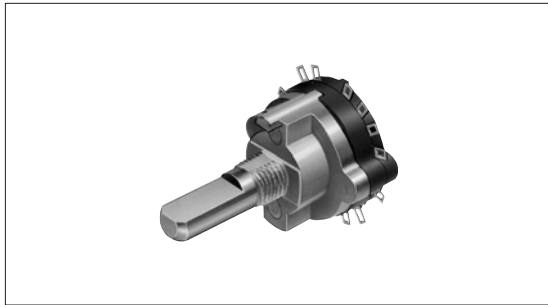


Rotary Switch 6-position Vertical Type

SRRN Series



Lead wiring compatible switch.



Features

- Excellent operating feel and environmentally friendly.

Applications

- For electronic devices, measuring devices, and control devices
- For audio systems

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

Product Line

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

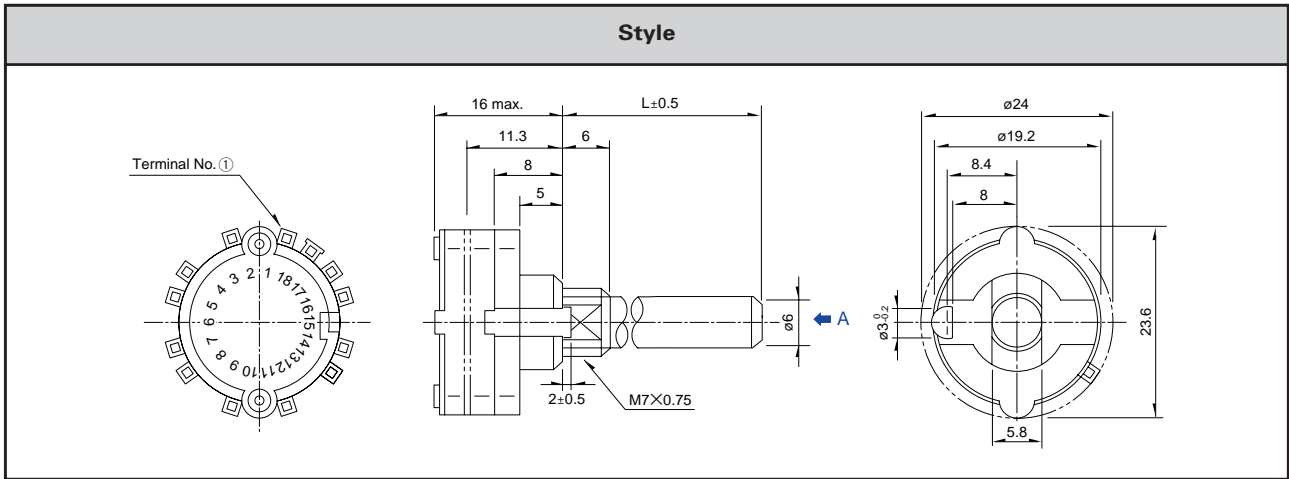
Note

1. Products other than those listed in the above chart are also available. Please contact us for details.
2. All the axis are cutting shafts.

Refer to **P.175** for product specifications.
Refer to **P.173** for shaft configurations.
Refer to **P.175** for attached parts.

Dimensions

Unit:mm

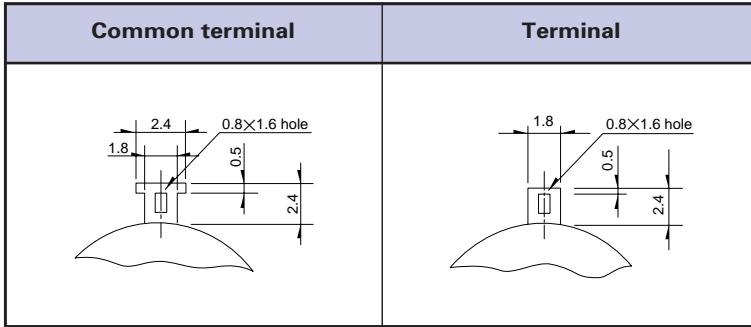


- Detector
- Push
- Slide
- Rotary**
- Encoders
- Power

- Dual-in-line Package Type
- Multi Control Devices
- TACT Switch™
- Custom-Products

Terminal Configuration

Unit:mm



Standard Circuit Diagram (Standard Poles Per Step)

Number of poles	2	3	4
Circuit diagram			
Dummy terminals	2-positions: 17 16 14 13 8 7 5 4 3-positions: 17 16 14 8 7 5 4-positions: 17 16 8 7 5-positions: 17 8 6-positions: —	2-positions: 17 16 11 10 5 4 3-positions: 17 11 5 4-positions: — 5-positions: — 6-positions: —	2-positions: 17 12 8 3 3-positions: — 4-positions: — 5-positions: — 6-positions: —

Note

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

Refer to P.173 for shaft configurations.

Product Specifications

Items	Series	SRBM		SRRN		
		Rotary	Pulse			
Detector	Operating temperature range		-40°C to +85°C		-10°C to +60°C	
Push	Rating (max.) (Resistive load)		0.1A 16V DC		0.15A 12V DC	
Slide	Electrical performance	Initial contact resistance		50mΩ max.		
Rotary		Insulation resistance		100MΩ min. 100V DC		100MΩ min. 500V DC
Encoders		Voltage proof		100V AC for 1minute		500V AC for 1minute
Power	Terminal strength		5N for 1minute			
Dual-in-line Package Type	Actuator strength	Rotational direction	0.5N·m	—	1N·m	
Multi Control Devices		Push direction	100N			
TACT Switch™	Wobble of actuator		Measuring position from mounting surface		Shaft wobble (max. value)	Applicable mounting dimension
Custom-Products			10mm		0.17mm	15mm
			15mm		0.25mm	20mm
		Load at the tip of shaft : 5N				
		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 ⁺ 1s		
		Dip soldering		260±3°C 5s max.		260±5°C, 10±1s
		Reflow soldering		—		
Durability	Operating life without load		10,000cycles 100mΩ max.	30,000cycles 100mΩ max.	10,000cycles 70mΩ max.	
	Operating life with load Load : (at rated load)		10,000cycles 150mΩ max.		10,000cycles 100mΩ max.	
Environmental performance	Cold		-20±2°C for 96h			
	Dry heat		85±2°C for 96h			
	Damp heat		40±2°C, 90 to 95%RH for 96h			

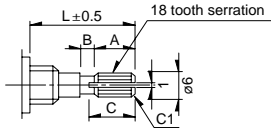
Shaft Configurations

18-tooth Serration Shaft

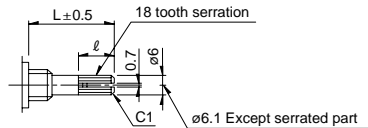
The shaft shows the position in which it is turned fully counterclockwise.

Unit:mm

① Cutting Shaft



② Die Casting Shaft



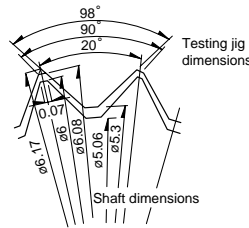
Shaft length L	A	B	C
15	6	1	7
20	10	2	11

Unit:mm

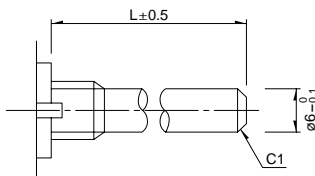
Shaft length L	l
15	8
20	12

Details About Serration

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

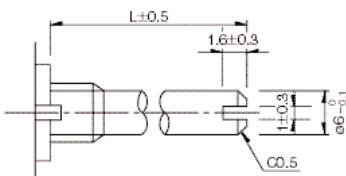


Round Shaft



Round Shaft with Groove

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

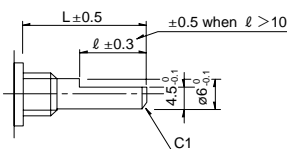


Shaft flatten angle	Shaft Configuration Type
	S26

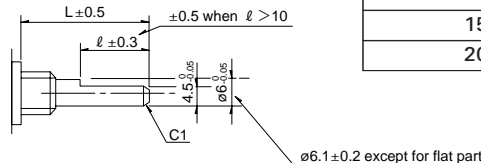
Flat Shaft

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

Shaft flatten angle	Shaft Configuration 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™

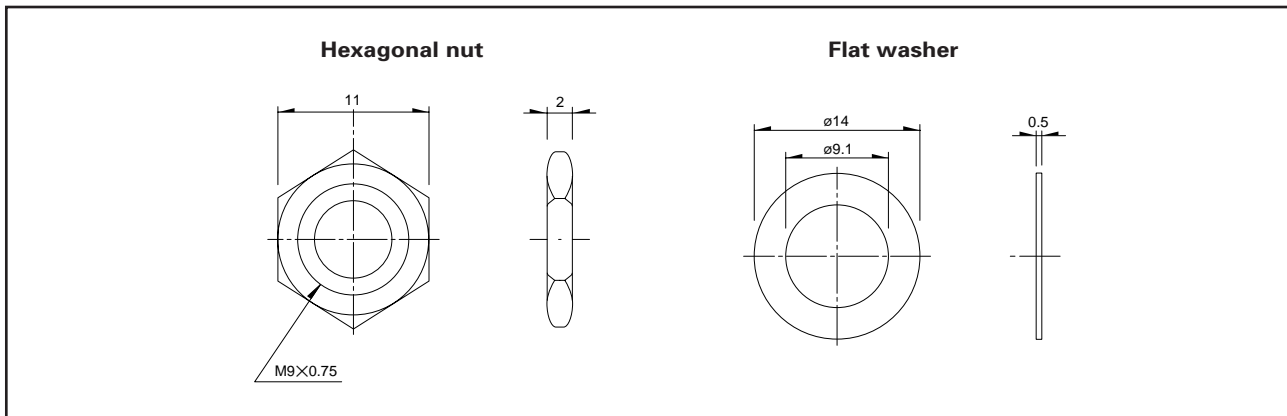
Custom-Products

Attached Parts

The following parts are included with the product.

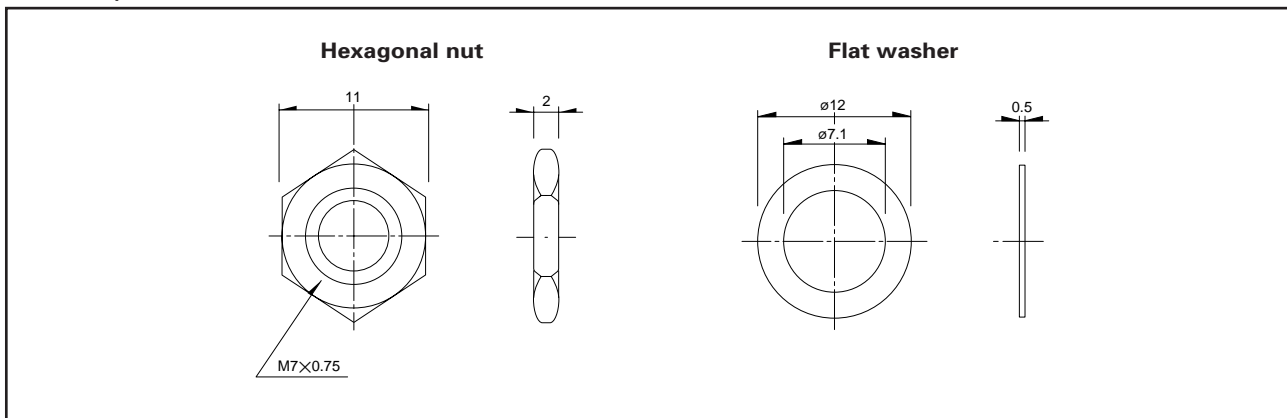
SRRM, SRBV

Unit:mm



SRBM, SRRN

Unit:mm



Detector

Push

Slide

Rotary

Encoders

Power

Dual-in-line
Package Type

Multi Control
Devices

TACT Switch™

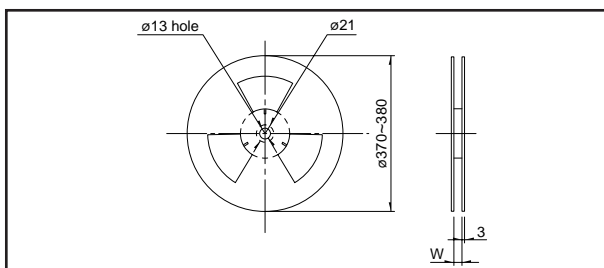
Custom-
Products

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	1.0mm	1,400	2,800	25.4	
		1.7mm	1,200	2,400		

Note

Please place purchase orders for taping products per minimum package units (1 reel or a case).