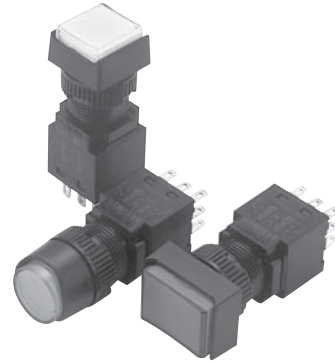


SR series

Push button switch (non-illuminating, illuminating)

- Ø16 panel mounting type
(actuator and contact part detachable)
- Contact part composed of 1a1b and 2a2b
- Light source: incandescent lamp and LED selection
- 3 kinds of actuator and 5 kinds of color
- Various accessories such as guard cover, waterproof cover and etc



●● Suffix code

Model	Code						Description
SRF--	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ø16 push button switch
Protective cover	A						Standard type
	B						Waterproof type (Option)
Illumination	F						Non-illuminating type
	X						Illuminating type
Operation function	M						Momentary
	A						Alternate
Shape of actuator		1					Round type
		2					Square type
		3					Rectangle type
Contact composition		1					1a1b Contact
		2					2a2b Contact
Light source and voltage (only illuminating type assigned)		1					6.3 V Incandescent lamp
		2					12 V Incandescent lamp
		3					24 V Incandescent lamp
		4					12 V Luminescent diode (LED)
		5					24 V Luminescent diode (LED)
Color of actuator			R				R (Red), G (Green), Y (Yellow), W (White), B (Blue)

Control switch
Combination
display light

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

Sign tower
Signal light


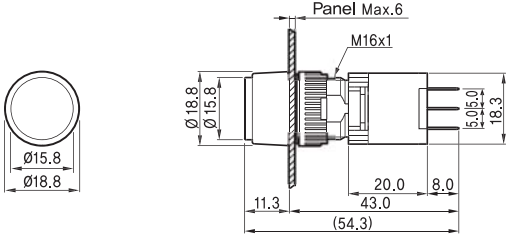

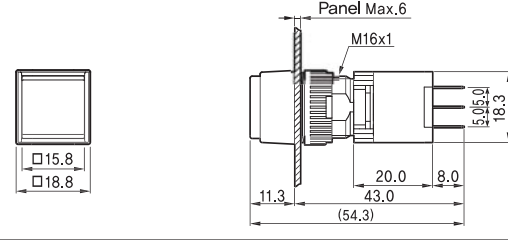

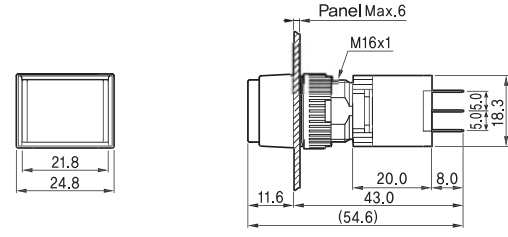
Buzzer
Terminal block
Fuse holder

Control box
Cable connector


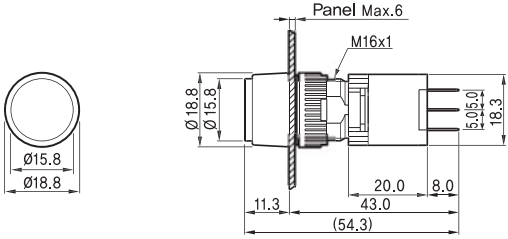

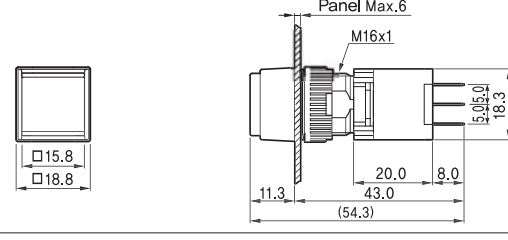

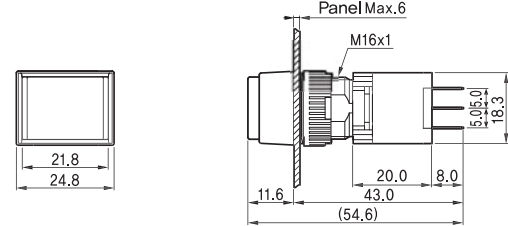
Discontinued
Products

Dimension (unit : mm)

■ Non-illuminating type

Model	Design	Dimension
SRF-AFM11R		
SRF-AFM21G		
SRF-AFM31Y		

■ Illuminating type

Model	Design	Dimension
SRF-AXM113R		
SRF-AXM213G		
SRF-AXM313Y		

SR series

Pilot lamp

- One body type (Ø16 panel mounting type)
- Light source: incandescent lamp and LED selection
- Various actuator such as round, square, rectangular type and etc



Control switch
Combination display light

●● Suffix code

Model	Code	Description
SRP-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Ø16 Pilot lamp
Protective type	A	Standard type
	B	Water proof type (Option)
Actuator type	1	Round type
	2	Square type
	3	Rectangle type
Light source and voltage (Only illuminating type assigned)	1	6.3 V Incandescent lamp
	2	12 V Incandescent lamp
	3	24 V Incandescent lamp
	4	12 V Luminescent diode (LED)
	5	24 V Luminescent diode (LED)
Color of actuator	R	R (Red), G (Green), Y (Yellow), W (White), B (Blue)

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

●● Dimension (unit : mm)

Model	Design	Dimension
SRP-A1□R		
SRP-A2□G		
SRP-A3□Y		

Sign tower
Signal light

Buzzer
Terminal block
Fuse holder

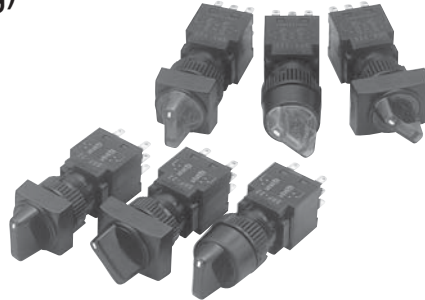
Control box
Cable connector

Discontinued Products

SR series

Selector switch (non-illuminating, illuminating)

- Detachable type of actuator and contact part (Ø16 panel mounting type)
- Contact part composed of 1a1b and 2a2b
- Light source : incandescent lamp and LED selection
- Various actuator such as round, square, rectangular type and etc



●● Suffix code



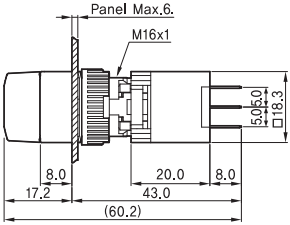

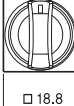
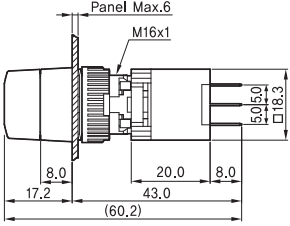

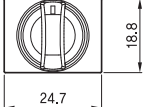
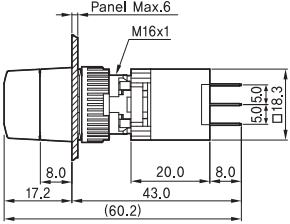
Model	Code					Description
SRS-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ø16 selector switch
Illumination	F					Non-illuminating type
	X					Illuminating type
Actuator type		1				Round type
		2				Square type
		3				Rectangle type
Number of positions		1				2 positions momentary operation
		2				2 positions alternative operation
		3				3 positions alternative operation
		6				3 positions momentary operation
Contact composition		1				1a1b Contact
		2				2a2b Contact
Light source and voltage (Only illuminating type assigned)		1				6.3 V Incandescent lamp
		2				12 V Incandescent lamp
		3				24 V Incandescent lamp
		4				12 V Luminescent diode (LED)
		5				24 V Luminescent diode (LED)
Color of actuator (Only illuminating type assigned)			R			R (Red), G (Green), Y (Yellow), W (White), B (Blue)

●● Actuator of positions and angle



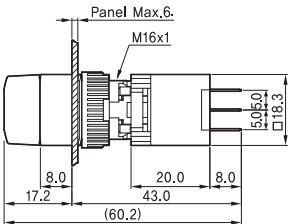

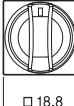
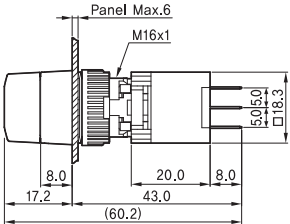

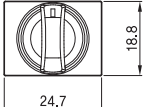
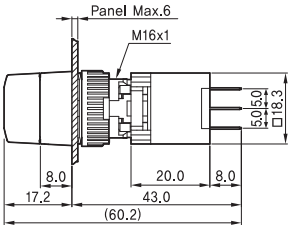
Position selection	2 positions automatic	2 positions manual	3 positions automatic	3 positions manual
Operation angle				

Dimension (unit : mm)

■ Non-illuminating type

Model	Design	Dimension	
SRS-F1□□			
SRS-F2□□			
SRS-F3□□			

■ Illuminating type

Model	Design	Dimension	
SRS-X1□□□G			
SRS-X2□□□Y			
SRS-X3□□□B			

Control switch
Combination display light

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

Signal tower
Signal light

Buzzer
Terminal block
Fuse holder

Control box
Cable connector

Discontinued Products

SR series

Key selector switch


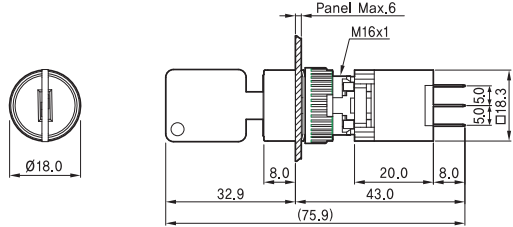

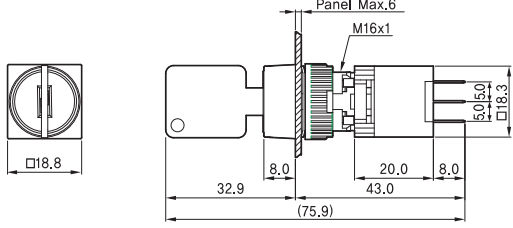

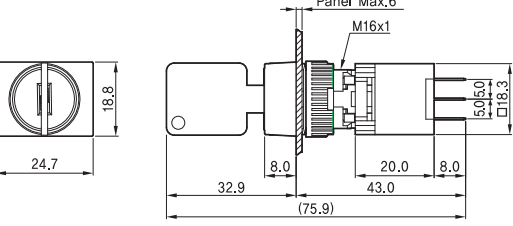
- Actuator and contact part detachable (Ø16 panel mounting type)
- Contact part composed of 1a1b and 2a2b
- Various actuator such as round, square, rectangular type and etc
- 2 positions, 3 positions, momentary type, alternative type and etc



●● Suffix code

Model	Code	Description
SRK-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Ø16 key selector switch
Actuator type	1	Round type
	2	Square type
	3	Rectangle type
Position selection	1	2 positions momentary operation
	2	2 positions alternative operation
	3	3 positions alternative operation
	6	3 positions momentary operation
Contact composition	1	1a1b Contact
	2	2a2b Contact
Color of actuator		Only black color

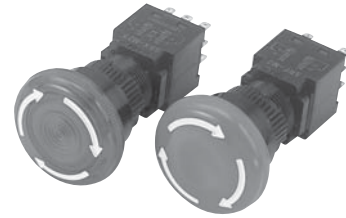
●● Dimension (unit : mm)

Model	Design	Dimension
SRK-1□□		
SRK-2□□		
SRK-3□□		

SR series

Emergency switch (non-illuminating and illuminating)

- Detachable type of actuator and contact part (Ø16 panel mounting type)
- Contact part composed of 1a1b and 2a2b
- Light source : incandescent Lamp and LED selection
- Push lock–turn reset function



Control switch
Combination display light

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

Signal tower
Signal light

Buzzer
Terminal block
Fuse holder

Control box
Cable connector

Discontinued Products

Suffix code

Model	Code	Description
SRE-	□ □ □	Ø16 emergency stop switch (push lock–turn reset)
Illumination	F	Non-illuminating type
	X	Illuminating type
Contact composition	1	1a1b Contact
	2	2a2b Contact
Light source and voltage	1	6.3 V Incandescent lamp
	2	12 V Incandescent lamp
	3	24 V Incandescent lamp
	4	12 V Luminescent diode (LED)
	5	24 V Luminescent diode (LED)
Color of actuator		Red (solid)

Dimension (unit : mm)

Model	Appearance	Dimension
SRE-F□		
SRE-X□□		

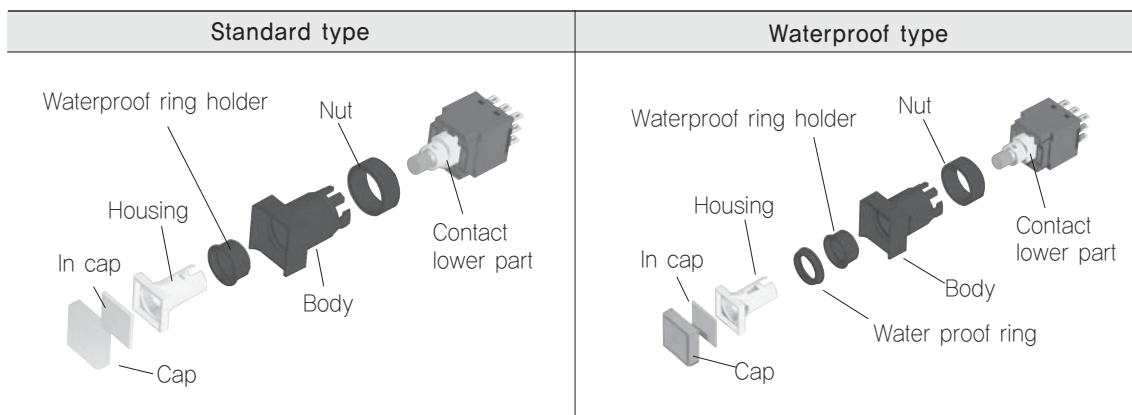
Common specification

Lists	Description
Contact material	Silver contact
Rating	6 A 250 V a.c
Insulation resistance	Min 100 M Ω
Dielectric strength	2,000 V a.c (each 50/60 Hz for 1min)
Vibration resistance	10 – 55 Hz (double amplitude 0.75 mm)
Contact resistance	Max 0.05 Ω (default value) d.c 6 V 0.1 A voltage descending type
Mechanical life expectancy	Above 100thousand times / 1800 h (button switch, illuminating button switch : above 500thousand times / 1800 h)
Electrical life expectancy	70 thousand times (with rated load)
Ambient temperature	-20 $^{\circ}$ C ~ 50 $^{\circ}$ C
Ambient humidity	45 ~ 85 % R.H.
Storage temperature	-40 $^{\circ}$ C ~ 70 $^{\circ}$ C
Force required for operation	4.50 N

Incandescent lamp and LED specification

Classification	Rated voltage	Rated current
Incandescent lamp	6.3 V a.c/d.c	60 mA
	6.3 V a.c/d.c	40 mA
	6.3 V a.c/d.c	20 mA
LED	12 V d.c	20 mA
	24 V d.c	15 mA
Base rating	BA6S-B (Incandescent lamp, LED)	

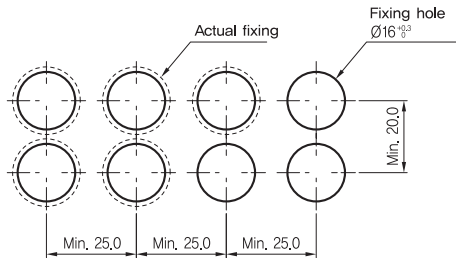
Formation



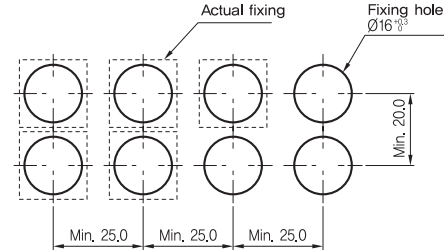
Panel cutout and min panel mounting dimension (unit : mm)

Standard

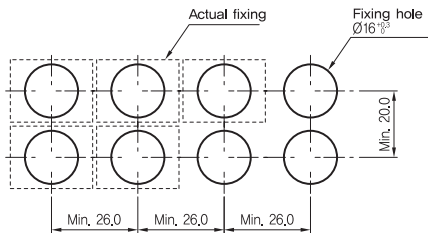
Round type



Square type



Rectangular type



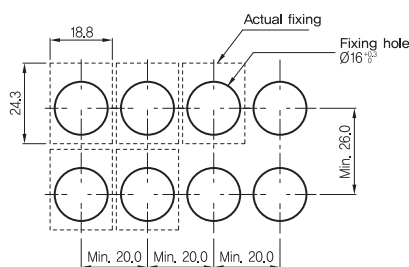
※ Panel mounting thickness 0.5 ~ 6 mm

Things to consider when using it

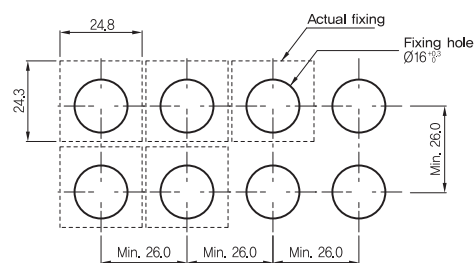
- Soldering the terminal : use soldering iron less than 40W in 40 sec
- Mounting to the panel : tightening torque of nut should be less than 0.49N.m
- Use a spin prevention ring when there are much of vibration
- For the safety after soldering the terminal, please insulate the terminal by tube or etc
- Alphabet film : Please use 0.1 mm thickness of heat-resistant film

Attaching the protective cover

Round and square type



Rectangular type



Control switch
Combination display light

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

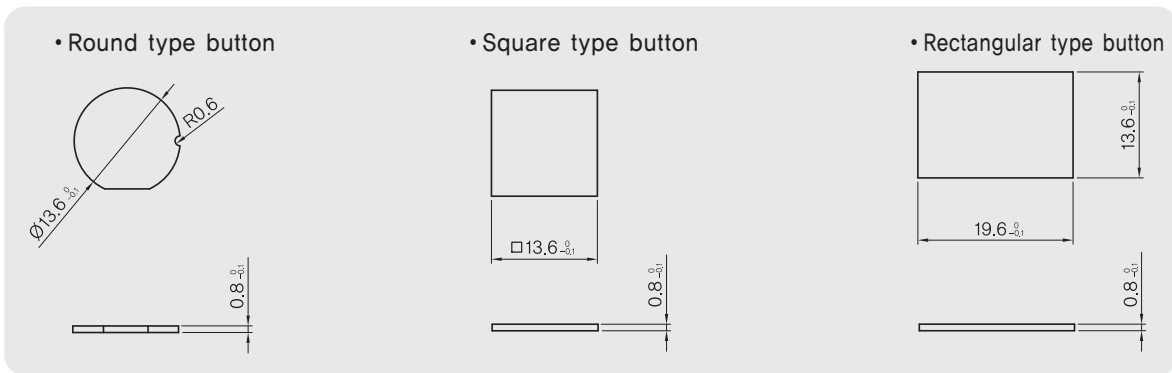
Sign tower
Signal light

Buzzer
Terminal block
Fuse holder

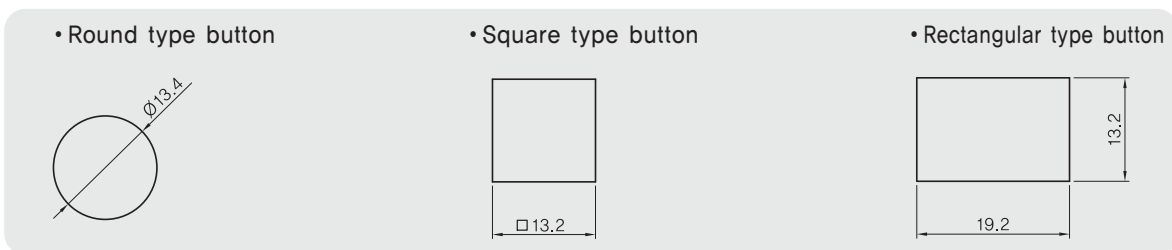
Control box
Cable connector

Discontinued Products

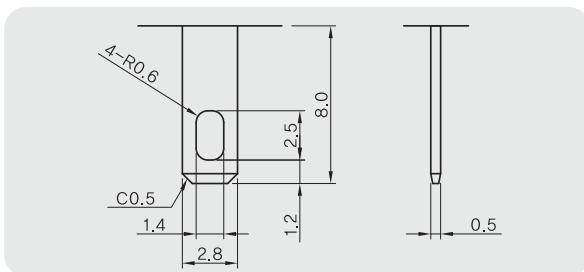
■ In-cap dimension



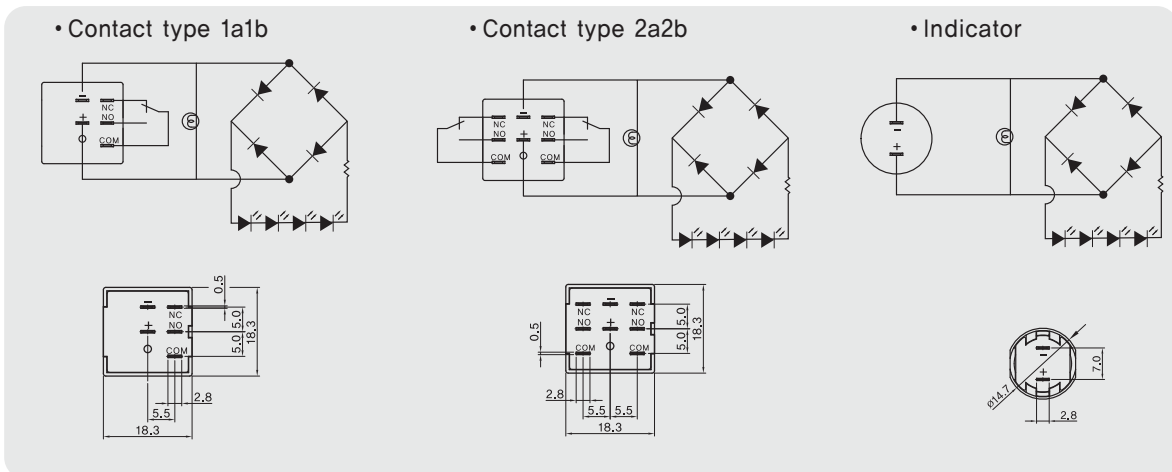
■ Film rating when using the alphabet film



■ Terminal diagram

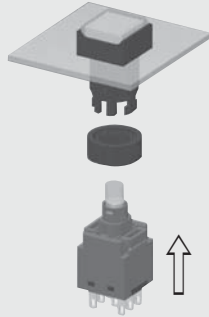


■ Terminal arrangement



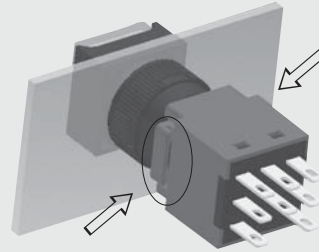
■ Assembling and disassembling method


• Assembling method



Put upper switch part to the panel and tighten it by the nut. Adjust contact part to the groove and press it until it clicks.

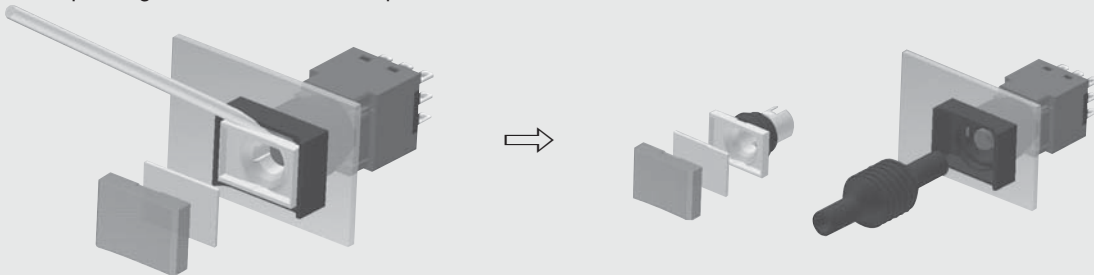
• Disassembling method




Disassemble the contact part by pressing the lever to the indicated arrow direction. By using the contact replacing tool, disassemble the contact part by pressing the () part.

■ Lamp replacing method

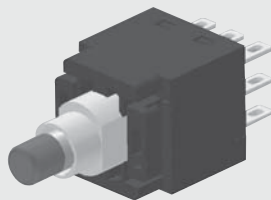
• Replacing from the outside of panel



After turning off the power, disassemble the actuator cap and housing by using a screwdriver or other appropriate tool and replace the lamp by using the lamp extractor. At this moment, please check for the rating and replace the lamp.

※ May damage your hand if lamp is destroyed so please be cautious ( Caution)

• Replacing the contact part



Grip the lamp with your fingertip and pull it. At this moment, please check for the rating and then replace the lamp.

Control switch
Combination display light

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

Signal tower
Signal light

Buzzer
Terminal block
Fuse holder

Control box
Cable connector

Discontinued Products

●● Suffix code of each part

SR series can clearly divide the suffix code of actuator (illuminating part) and contact part. Please use the suffix code formation which given in the below.

■ Button switch suffix code

Button switch is largely divided into the push button switch, illuminating push button switch, emergency button switch and illuminating emergency button switch and it is compose of actuator and contact part.

Actuator

• Push button, illuminating push button “actuator suffix code”

Model	Code	Description
SRF-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Push button, illuminating push button actuator
Protective structure	A	Standard type
	B	Waterproof type
Actuator type	1	Round type
	2	Square type
	3	Rectangular type
Color of actuator	R	R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ exclude white and blue incandescent lamp

• Emergency button, illuminating emergency button

Model	Code	Description
SRE-	<input type="checkbox"/>	Emergency button actuator (push lock–turn reset)
Actuator type	X	Illuminating emergency button actuator
	F	Emergency button actuator (non-illuminating)

Contact part

• Push button, illuminating push button “contact part suffix code”

Model	Code	Description
SR	<input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Push button, illuminating push button, emergency button contact part
Illumination	X	Illuminating
	F	Non-illuminating
Operation function	M	Momentary
	A	Alternate
Contact composition	1	1a1b Contact
	2	2a2b Contact
Light source and voltage (assigned only to the illuminating type)	1	6.3 V incandescent lamp
	2	12 V incandescent lamp
	3	24 V incandescent lamp
	4	12 V luminescent diode (LED)
	5	24 V luminescent diode (LED)
Color of light source (assigned only to the illuminating type)	R	R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ Emergency switch : only Red color

■ Indicator suffix code

Model	Code	Description
SRP-	□ □ □ □	Indicator
Protective structure	A	Standard type
	B	Waterproof type
Actuator type	1	Round type
	2	Square type
	3	Rectangular type
Light source and voltage	1	6.3 V incandescent lamp
	2	12 V incandescent lamp
	3	24 V incandescent lamp
	4	12 V luminescent diode (LED)
	5	24 V luminescent diode (LED)
Color of actuator	R	R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ white and blue incandescent lamp

Control switch
Combination display light

Power switch
Main switch
Cam switch

Limit switch
Micro switch

Hoist switch
Foot switch
Mono lever switch

Sign tower
Signal light

Buzzer
Terminal block
Fuse holder

Control box
Cable connector

Discontinued Products

■ Selector switch suffix code

Selector switch is largely divided into the non-illuminating selector, illuminating selector and key selector and composed of actuator and contact part. (But illuminating type is illuminating contact part)
Therefore, it is necessary to indicate the actuator and contact part separately.
(Caution) Selector contact part is not compatible with other products so please be cautious

Actuator

• Selector switch, illuminating selector switch “actuator suffix code”

Model	Code	Description
SRS-	□ □ □ □	Selector switch, illuminating selector switch actuator
Actuator type	1	Round type
	2	Square type
	3	Rectangular type
Number of position	1	2 positions momentary operation
	2	2 positions alternative operation
	3	3 positions alternative operation
	6	3 positions momentary operation
Illumination	X	Illuminating
	F	Non-illuminating (only black possible)
Color of actuator (Only for illuminating type)	R	R (Red), G (Green), Y (Yellow), W (White), B (Blue) ※ white and blue incandescent lamp

■ Key selector switch “actuator suffix code”







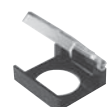
Model	Code	Description
SRK-	<input type="checkbox"/> <input type="checkbox"/>	Key selector switch actuator
Actuator type	1	Round type
	2	Square type
	3	Rectangular type
Number of position	1	2 positions momentary operation
	2	2 positions alternative operation
	3	3 positions alternative operation
	6	3 positions momentary operation

Contact part

• Selector, illuminating selector, key selector “contact part suffix code”

Model	Code	Description
SR	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Selector, Illuminating selector, Key selector contact part
Illumination	X	Illuminating
	F	Non-illuminating (Including key selector)
Position selection	2	2 positions
	3	3 positions
Contact composition	1	1a1b Contact
	2	2a2b Contact
Light source and voltage (assigned only to the illuminating type)	1	6.3 V Incandescent lamp
	2	12 V Incandescent lamp
	3	24 V Incandescent lamp
	4	12 V Luminescent diode (LED)
	5	24 V Luminescent diode (LED)
Color of light source (assigned only to the illuminating type)	R	R (Red), G (Green), Y (Yellow), W (White), B (Blue)

■ Accessories

Name	Model	Appearance	Reference
Contact	SRX / SRF		6 A 250 V a.c 1a1b / 2a2b
Spin prevention ring	SR-68		Prevent the spinning
Nut tightening tool	SR-448		Used to tightening the fixed nut at the back side of panel
Lamp extractor	SR-81		It is made of rubber and used when replacing the light bulb
Puller	SR-82		Used when replacing the contact after mounting the panel
Protective cover	SR-178		Prevents the switch malfunction (round type and square type)
	SR-239		Prevents the switch malfunction (rectangular type) use it after removing the spin prevention ring

- Control switch
Combination display light
- Power switch
Main switch
Cam switch
- Limit switch
Micro switch
- Hoist switch
Foot switch
Mono lever switch
- Sign tower
Signal light
- Buzzer
Terminal block
Fuse holder
- Control box
Cable connector
- Discontinued Products

SR series

Emergency stop switch

- Ø16 panel mounting type
(actuator and contact part are one body type)
- Contact parts composed of 1a1b and 2a2b
- Push lock–turn reset function



Specification

Model	SRE-121	SRE-122	SRE-121H	SRE-122H
Contact composition	1a1b	2a2b	1a1b	2a2b
Operation function	Push lock–turn reset			
Contact material	Silver contact (gold plating)			
Rated current	3 A 250 V a.c			
Insulation resistance	Min 100 MΩ			
Dielectric strength	1,000 V a.c for 1min (between the terminal and earth)			
Vibration resistance	10 – 55 Hz (double amplitude 0.75 mm)			
Contact resistance	Max 30 mΩ (initial)			
Mechanical life expectancy	Above 200 thousand times (30 times per min)			
Electrical life expectancy	Above 70 thousand times (30 times per min)			
Ambient temperature	-20 ~ 50 °C			
Ambient humidity	45 ~ 85 % R.H			

Dimension (unit : mm)

Model	Appearance	Dimension	
SRE-12□			
SRE-12□H			