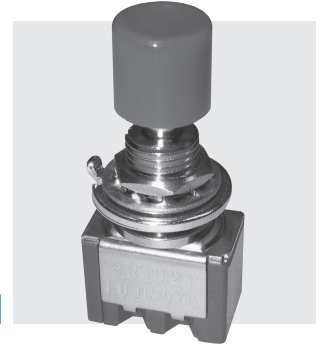






# 8R-N

## Soft Touch Pushbutton Switches



RoHS compliant

### Features

The **8R** Soft-Touch Pushbutton switches has a unique snap action structure which provides light and soft tactile feel.

The short travel distance (Alternate action: 2.5 mm, Momentary: 1 mm) and the low-profile design make the **8R** series suitable for applications where panel space is limited.

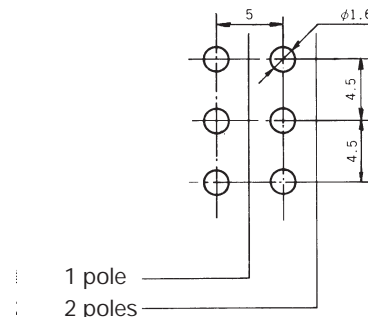
### Specifications

Rating	Silver plated	3A 125VAC (Resistive load)	
	Gold plated	Max. 60mA 30VDC (Resistive load)	
Initial contact resistance	Silver plated	10m max( 1A 2 ~ 4VDC )	
	Gold plated	20m max( 5mA 200μVAC )	
Initial Dielectric strength	1,000VAC 1 minute		
Initial insulation resistance	1,000M min. ( 500VDC )		
Electrical life	25,000 operations( 50,000 operations:Gold plate )		
Operating temperature range	- 20 ~ + 85		
Storage temperature range	- 40 ~ + 85		
Operating force	Alternate type	8R101 - N - Z	3.92 ± 1.96N
		8R201 - N - Z	4.9 ± 1.96N
	Momentally type	8R102 - N - Z	2.94 ± 0.98N
		8R202 - N - Z	4.9 ± 0.98N

### Table of Part Numbers

Terminal style	No. of poles	1 - pole	2 - pole
	Switching function		
S/D ( Solder )	ON - ON	8R1011 - N - Z	8R2011 - N - Z
	ON -( ON )	8R1021 - N - Z 8R1021B - N - Z	8R2021 - N - Z 8R2021B - N - Z
P/C	ON -( ON )	8R1022 - N - Z 8R1022B - N - Z	8R2022 - N - Z 8R2022B - N - Z

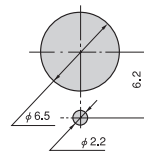
### PC Hole Layouts



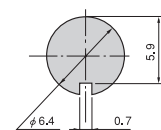
Terminal Styles ..... Page 259.

### Panel Cut - Out Dimensions

Panel thickness : 2 mm max.

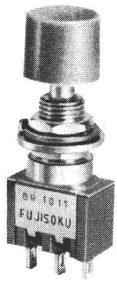


With Locking Ring

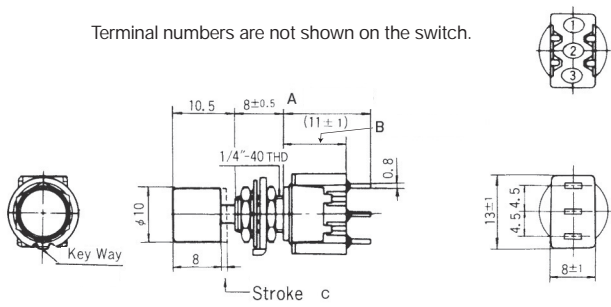


Without Locking Ring

SPDT



Terminal numbers are not shown on the switch.



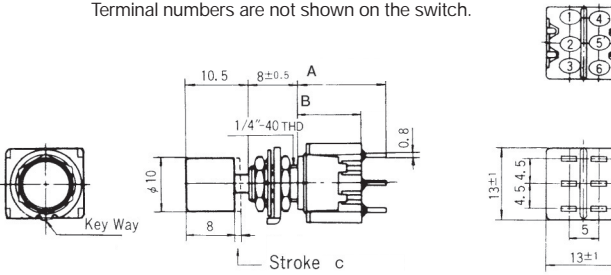
Switching function		
Part No.		
8R101 - N - Z	ON	ON
8R102 - N - Z	ON	( ON )
Connecting terminals	3 - 2	3 - 1

: The circuit switches each time the switch button is pressed.  
 : Please refer to "Table of Part Numbers" on P.267 for a list of full part numbers.

DPDT



Terminal numbers are not shown on the switch.



Switching function		
Part No.		
8R201 - N - Z	ON	ON
8R202 - N - Z	ON	( ON )
Connecting terminals	3 - 2 6 - 5	3 - 1 6 - 4

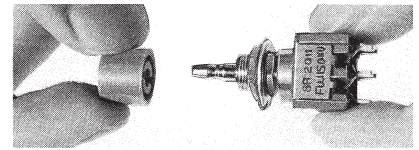
: The circuit switches each time the switch button is pressed.  
 : Please refer to "Table of Part Numbers" on P.267 for a list of full part numbers.

Standard Accessories  
( 8R & 8R - B )

《 Supplied with switch 》

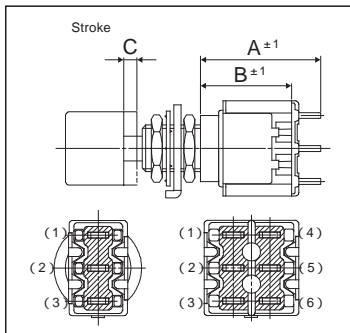
Hex Nut	Lockwasher	Locking Ring
140008010241	140008030051	140008020062
Nickel plated	Zinc plated	Zinc plated

Color Button Mounting



Snap in the color button on to the actuator.

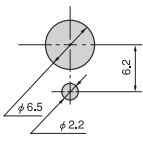
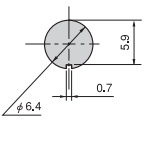
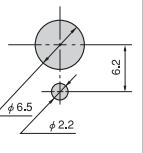
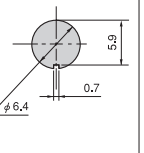
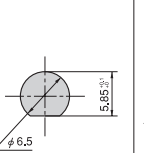
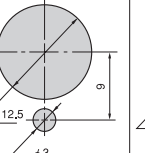
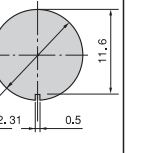
Part name	Color Button			
Dimension A	8	10	15	
Dimension B	7.5	8	10	
 (Material : PA)	White	140000481420	140000480082	140000480088
	Red	140000481421	140000480083	140000480089
	Black	140000481422	140000480081	140000480090
	Gray	140000481423	140000480084	140000480091



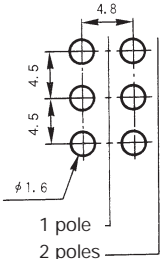
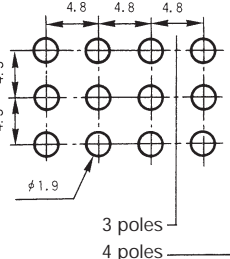
Terminal Style	Number of poles	Switching Function	Parts No.	Dimension A	Dimension B	Dimension C
S/D	1 pole	ON - ON	8R1011 ■ - N - Z	16.5	12.5	2.5
		ON -( ON )	8R1021 ■ - N - Z	15.0	11.0	1.0
	2 poles	ON - ON	8R2011 ■ - N - Z	16.5	12.5	2.5
		ON -( ON )	8R2021 ■ - N - Z	15.0	11.0	1.0
P/C	1 pole	ON -( ON )	8R1022 ■ - N - Z	17.4	11.0	1.0
	2 poles	ON -( ON )	8R2022 ■ - N - Z	17.4	11.0	1.0

■ : Blank for silver-plated contacts. "B" for gold-plated contacts. B : Gold plated

**Panel Cut-Out Dimensions**

Series	8N		8R		8P	8Y	
Panel thickness	1.5 mm Max.	2.5 mm Max.	2 mm Max.	3 mm Max.	4.5 mm Max.	5 mm Max.	6 mm Max.
Dimensions	 With Locking Ring	 Without Locking Ring	 With Locking Ring	 Without Locking Ring	 With Locking Ring	 With Locking Ring	 Without Locking Ring

**BC Hole Layouts**

Series	8N8P	8R8W
Dimensions	 <p>1 pole 2 poles</p>	 <p>3 poles 4 poles</p>

**Precautions**

**SKYPNWLJPAHP**

**Manual soldering**

Device • Solder iron

20A Max. 3 sec. Max.

**Auto soldering**

The above-stated soldering conditions shall apply only to switches with straight terminals. Auto soldering is not possible with right-angle terminals. Switches with right-angle terminals should be soldered manually according to the conditions specified in (1) above.

When putting the switches through an aging process after they were soldered onto the printing board or after installed into a complete end product, be sure to remove the buttons of the switches.

**2. Mounting**

- Do not bend the terminals before mounting the switch on the PC board.
- After mounting the switch, do not place the device in such a way that the device weight will be applied on to the actuator of the switch.
- For switches with straight terminals, solder the switch on the PC board after fixing the switch on the panel with a nut.

**3. Flux Cleaning**

Solvent : Fluorine or Alcohol type.

8A/B/C/D/E/F/J/S series are not washable. To wash the PC board, clean the soldering surface of the PC board with a brush so that the switch is not exposed to the cleaning solution.

**ANPN:WLPVU**

Perforated Plastic Bag	25 pcs/pack
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