

8 Series Pushbutton Switches

■ Features

1. Contacts

Silver or gold-plated contacts.

2. Epoxy resin case

UL94V-0 self-extinguishing epoxy.

3. Actuator style

Over 30 actuator variations.

4. Insulation between terminal and ground: 4 mm minimum.

5. Prevention of flux entry

The epoxy resin seal on bottom of the switch helps prevent the entry of solder and flux.

6. Insulation barrier:

Insulation barrier design between poles helps prevent short-circuiting between poles ensuring high reliability.

■ Specifications

Rating	Max. rating	6A 125 VAC/3A 250 VAC/4A 30 VDC(Resistive load)	
Initial contact resistance	10 mΩ max. (1A 2~4 VDC)		
Initial dielectric strength	1,500 VAC 1 minute		
Initial insulation resistance	1,000 MΩ min. (500 VDC)		
Electrical life (Excluding 8R & 8W)	Alternate type	40,000 operations	
	Momentary type	25,000 operations	
Operating temperature range	-30°C~+85°C		
Storage temperature range	-40°C~+85°C		

(Excluding 8R & 8W.)

■ Terminal Styles

Solder (Style:1)	PC Straight (Style:2)

Even if the products are of UL-or CSA-approved ones, The products in stock do not carry the UL mark of the CSA mark. When placing an order, be sure to specify "With UL/CSA Mark." For the products with the UL mark or the CSA mark, extra costs will be added.

**UL-Recognized, CSA certified Products
(Pushbutton type Only)**


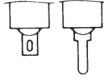




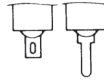

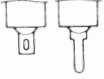
■ Eight Switch Series

Poles	Switching function	UL (※2.)			CSA (※3.)		
		8N	8P	8Y	8N	8P	8Y
1 pole	1011-Z ON - ON	○	○	○	○	○	○
	1021-Z ON -(ON)	○	○	○	○	○	○
	1022-Z	○			○		
2 poles	2011-Z ON - ON	○	○	○	○	○	○
	2012-Z	○			○		
	2022-Z ON -(ON)	○	○	○	○	○	○
3 poles	3011-Z ON - ON	○		○	○		○
	3021-Z ON -(ON)	○		○	○		○
4 poles	4011-Z ON - ON	○			○		
	4021-Z ON -(ON)	○			○		

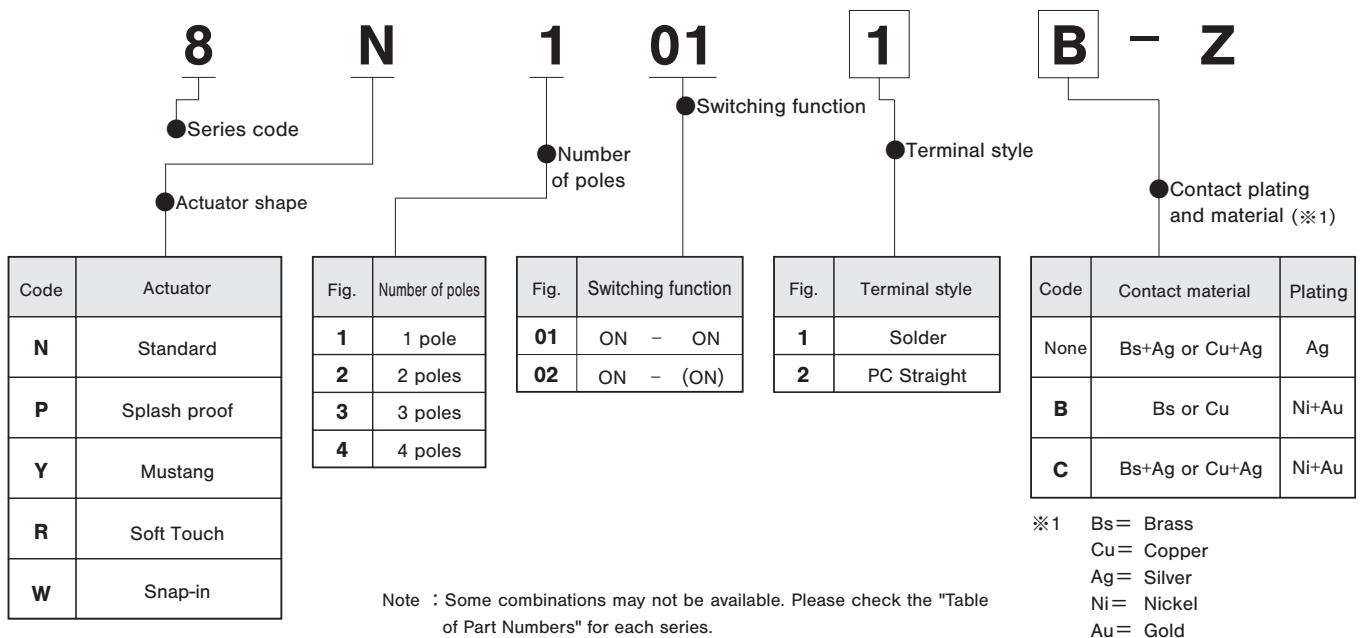
(※2.) UL File No.E43275

(※3.) CSA File No.LR38341

8 Series Pushbutton Switches Selection Table

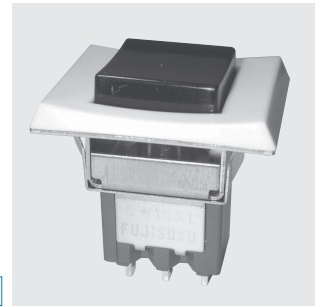
Part No.	Name	Actuator shape	Number of poles	Switching function	Terminal style	Page
8N	Standard Pushbutton		1.2.3.4	ON - ON ON - (ON)	 S/D Solder P/C Straight	239
8P	Splash Proof Pushbutton		1.2	ON - ON ON - (ON)	 S/D Solder	242
8Y	Mustang Pushbutton		1.2.3	ON - ON ON - (ON)	 S/D Solder	245
8R-N	Soft Touch Pushbutton		1.2	ON - ON ON - (ON)	 S/D Solder P/C Straight	248
8W-N	Snap-in Pushbutton		1.2	ON - (ON)	 S/D Solder P/C Straight	251

Part Numbering



8W-N

Snap-in Pushbutton Switches



RoHS compliant

Features

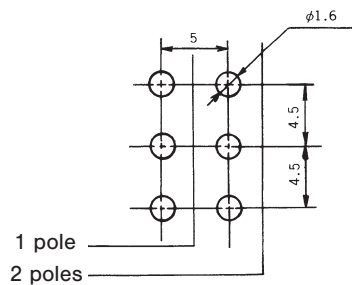
The 8W Snap-in Pushbutton switch is an 8R Soft Touch Pushbutton switch with a 12 mm square button and a mounting frame.

The panel cut-out dimensions are the same as the 8H series Lever & Rocker switches which enables side-by-side mounting. Buttons and mounting frames are available in 4 colors.

Specifications

Rating	Silver plated	3A 125VAC (Resistive load)
	Gold plated	Max. 60mA 30VDC (Resistive load)
Initial contact resistance	Silverplated	10mΩ max. (1A 2~4VDC)
	Gold plated	20mΩ max. (5mA 200μVAC)
Initial dielectric strength	1,000VAC 1 minute	
Initial insulation resistance	1,000MΩ min. (500VDC)	
Electrical life	25,000 operations (50,000 operations:Gold plate)	
Operating temperature range	-20°C~+85°C	
Storage temperature range	-40°C~+85°C	
Operating force	8W102-N-Z	2.94±0.98N
	8W202-N-Z	4.9± ^{1.96} _{0.98} N

PC Hole Layouts



Terminal Styles

Solder (Style:1)	PC Straight (Style:2)
<p>t=0.8</p>	<p>t=0.8</p>

Standard Accessories

《Supplied with switch》

Button		
Dimensions	Color	Part No.
<p>Polyamide resin R52 Gloss finish</p>	<p>White Red Black Gray</p>	<p>140000480634 140000480639 140000480640 140000480641</p>

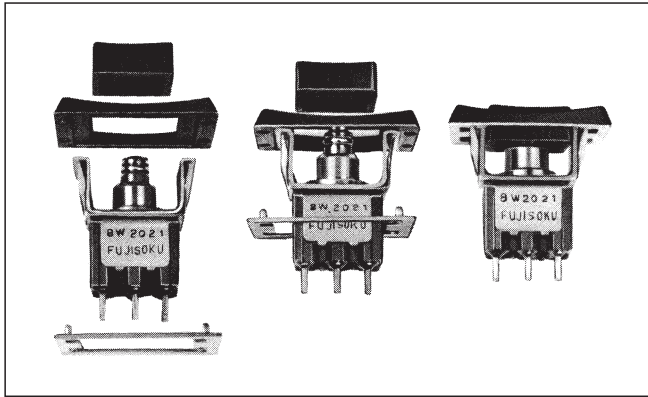
Mounting Frame		
Dimensions	Color	Part No.
<p>Polyamide resin Gloss finish</p> <p>Stainless-steel plate</p>	<p>White Red Black Gray</p>	<p>140000340135 + 140000600181 140000340136 + 140000600181 140000340137 + 140000600181 140000340138 + 140000600181</p>

● Please specify the Button and the Mounting Frame when ordering.

Table of Part Numbers

Terminal style	pole		1 pole	2 poles
	Switching function			
Solder Lug	ON - (ON)		8W1021-N-Z	★8W2021-N-Z
PC Straight	ON - (ON)		★8W1022B-N-Z	—

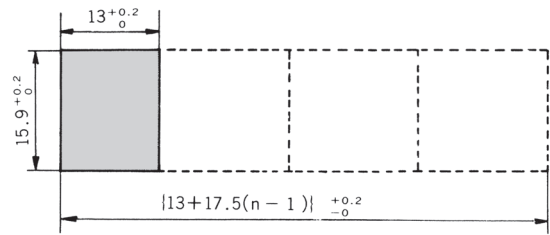
Button and Mounting Frame Installation



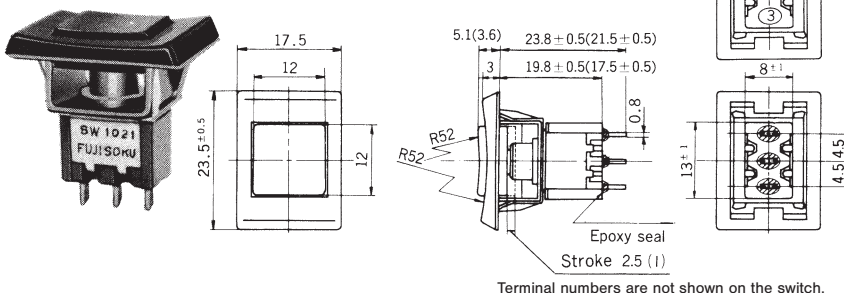
○Specify part number of Button and Mounting Frame when ordering.

Panel Cut-Out Dimensions

Panel thickness (with Mounting Frame) : 1 mm to 2.5 mm



SPDT



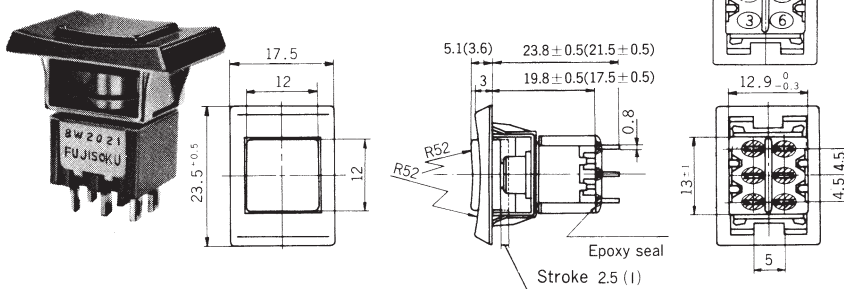
Terminal numbers are not shown on the switch.

Part No.	Switching function	
8W1021-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" above for a list of full part numbers.

DPDT



Terminal numbers are not shown on the switch.

Part No.	Switching function	
8W2021-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" above for a list of full part numbers.

■ Precautions

1. Soldering Specifications

(1) Manual soldering

Device : Solder iron

① 420°C Max. 3 sec. Max.

(2) Auto soldering

② 275°C ±10°C 5 sec. Max.

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.

(3) 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

- (1) Solvent : Fluorine or Alcohol type.
- (2) 8 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.

■ Packaging Specification

Perforated Plastic Bag

25 pcs./pack

