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℃～+85℃	
Storage temperature range		−40℃～+85℃	

(Excluding 8R & 8W.)

■ Terminal Styles

Solder（Style:1）	PC Straight（Style:2）
t=0.8	t=0.8
3.8　2　1　1.9	4.8　6.4　1.1

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.

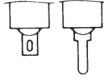## UL-Recognized, CSA certified Products （Pushbutton type Only）
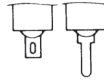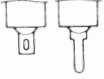
■Eight Switch Series

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		○			○		
	2021−Z	ON −(ON)	○	○	○	○	○	○
	2022−Z		○			○		
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
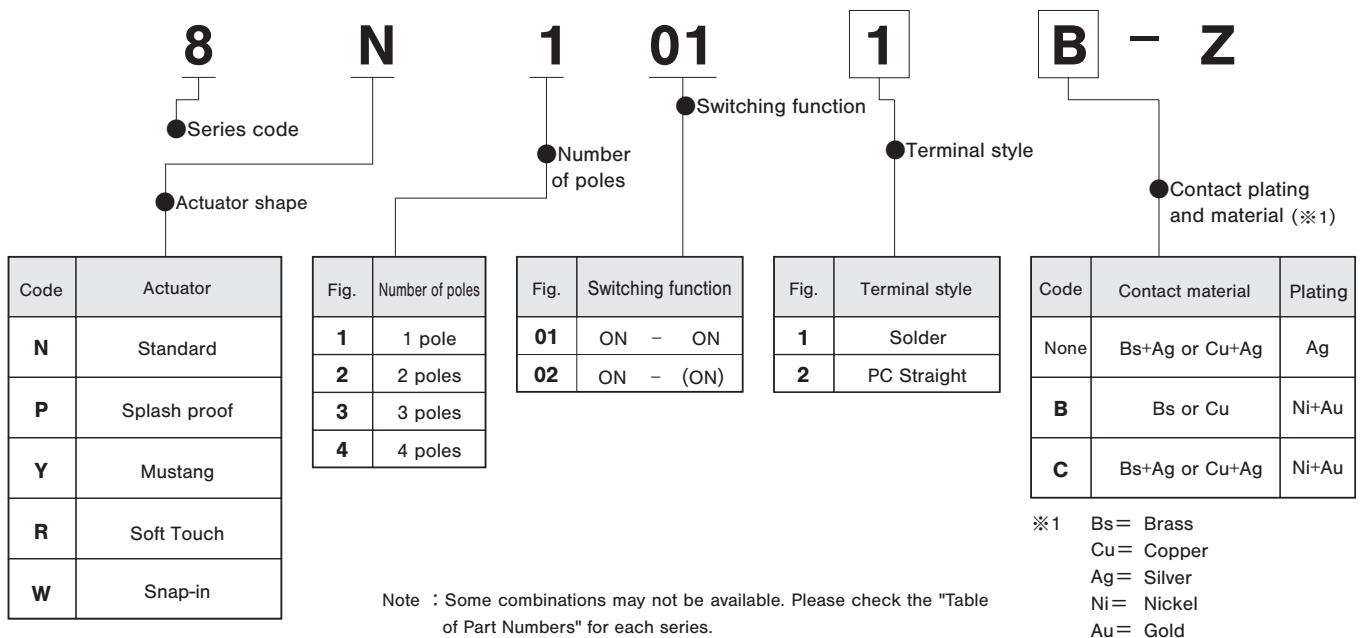
8 Series Pushbutton Switches Selection Table

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

8　N　1　01　1　B − Z

- 8 : Series code
- N : Actuator shape
- 1 : Number of poles
- 01 : Switching function
- 1 : Terminal style
- B :
- Z : Contact plating and material (※1)

Code	Actuator
N	Standard
P	Splash proof
Y	Mustang
R	Soft Touch
W	Snap-in

Fig.	Number of poles
1	1 pole
2	2 poles
3	3 poles
4	4 poles

Fig.	Switching function
01	ON − ON
02	ON − (ON)

Fig.	Terminal style
1	Solder
2	PC Straight

Code	Contact material	Plating
None	Bs+Ag or Cu+Ag	Ag
B	Bs or Cu	Ni+Au
C	Bs+Ag or Cu+Ag	Ni+Au

※1　Bs＝ Brass
　　　Cu＝ Copper
　　　Ag＝ Silver
　　　Ni＝ Nickel
　　　Au＝ Gold

Note : Some combinations may not be available. Please check the "Table of Part Numbers" for each series.

(ON):Momentary.

8Y

Mustang Pushbutton Switches

RoHS Compliant

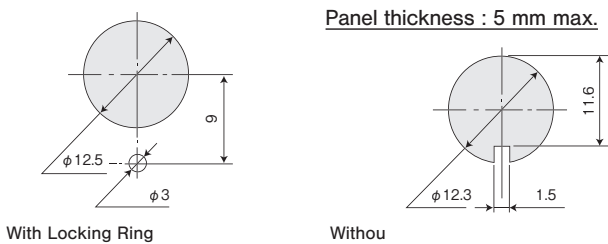■ **Features**

The 8Y series is a sub-miniature pushbutton switch with a larger, rugged actuator and a larger bushing. Suitable for applications where panel space is limited and a larger actuator is needed.
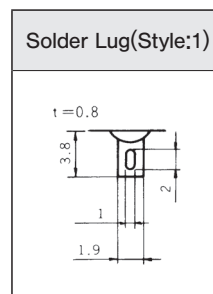
■ **Table of Part Numbers**

Terminal style	Switching function / No. of pole	1 pole	2 poles	3 poles
Solder Lug	ON − ON	8Y1011−Z	8Y2011−Z	8Y3011−Z
	ON − (ON)	8Y1021−Z	☆ 8Y2021−Z	★ 8Y3021−Z

■ **Panel Cut-Out Dimensions**

With Locking Ring

φ12.5   φ3   9

Panel thickness : 5 mm max.

Withou

11.6   φ12.3   1.5

■ **Terminal Styles**

Solder Lug(Style:1)

t=0.8   3.8   2   1   1.9

■ **Standard Accessories**

《Supplied with switch》

Hex Nut	Lockwasher	Locking Ring
140008010243	140008030055	140008020067
15/32" − 32 THD 14 1.9	12.2 t=0.5 15.2 1	10.4 φ17.9 φ18.2 9.5 2.3
Nickel plated	Zinc plated	Zinc plated

■ **Optional Accessories**

《Sold separately》

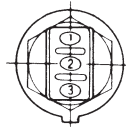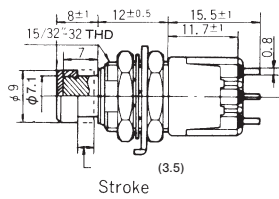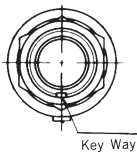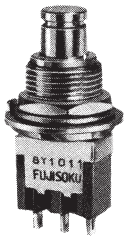| Color Cap		
Dimensions	Color	Part No.
Gloss finish φ9 C0.2 3.5 Vinyl chloride resin	White	140000470023
	Red	140000470052
	Black	140000470051

● Specify the Color Cap by part number if Color Cap is desired.

■ **Color Cap Mounting**
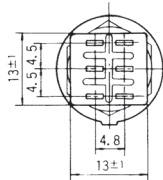
Snap in the color button on to the actuator.

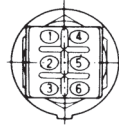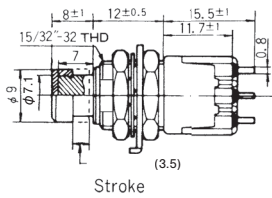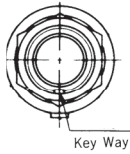☐ :Optional Accessories.   ★ : Made to order products.   ☆ : Semi-standard products.   (ON) : Momentary.
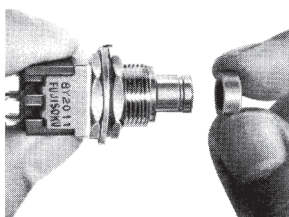
SPDT
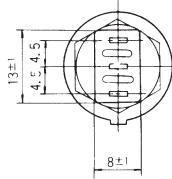
	Switching function		
Part No.			
※**8Y1011–Z**		ON	ON
8Y1021–Z		ON	(ON)
Connecting terminals		2–3	2–1

※：The circuit switches each time the switch button is pressed.

Key Way
Stroke
(3.5)

Terminal numbers are not shown on the switch.

S/D

DPDT

	Switching function		
Part No.			
※ **8Y2011–Z**		ON	ON
☆**8Y2021–Z**		ON	(ON)
Connecting terminals		2–3 5–6	2–1 5–4

※：The circuit switches each time the switch button is pressed.

Key Way
Stroke
(3.5)

Terminal numbers are not shown on the switch.

S/D

3PDT
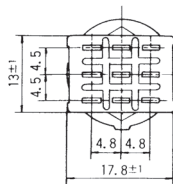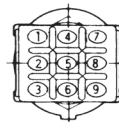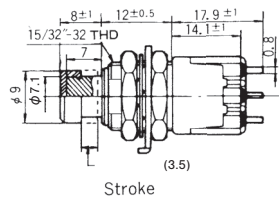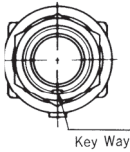
	Switching function		
Part No.			
※ **8Y3011–Z**		ON	ON
★**8Y3021–Z**		ON	(ON)
Connecting terminals		2–3 5–6 8–9	2–1 5–4 8–7

※：The circuit switches each time the switch button is pressed.

Key Way
Stroke
(3.5)

Terminal numbers are not shown on the switch.

S/D

(ON)：Momentary.　　☆：Semi-standard products.　　★：Made to order products.

■Precautions

1. Soldering Specifications

(1)Manual soldering
　　Device：Solder iron
　　①420℃ Max. 3 sec. Max.
(2)Auto soldering
　　②275℃ ±10℃ 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