

# 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.

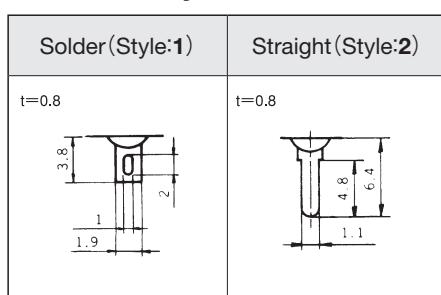
### 7. For UL-recognized and CSA-approved products, please refer to P.280.

## ■ Specifications

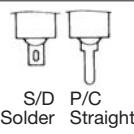
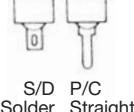
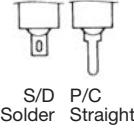
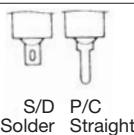
Rating	Max. rating	6A 125VAC/3A 250VAC/4A 30VDC
Initial contact resistance	10m $\Omega$ max.	(1A 2~4VDC)
Initial dielectric strength	1,500VAC 1 minute	
Initial insulation resistance	1,000M $\Omega$ min.	(500VDC)
Electrical life (Excluding 8R & 8W)	Alternate type Momentary type	40,000 operations 25,000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

(Excluding 8R & 8W. Specifications on 8R and 8W series are specified separately on P.271 and P.273.)

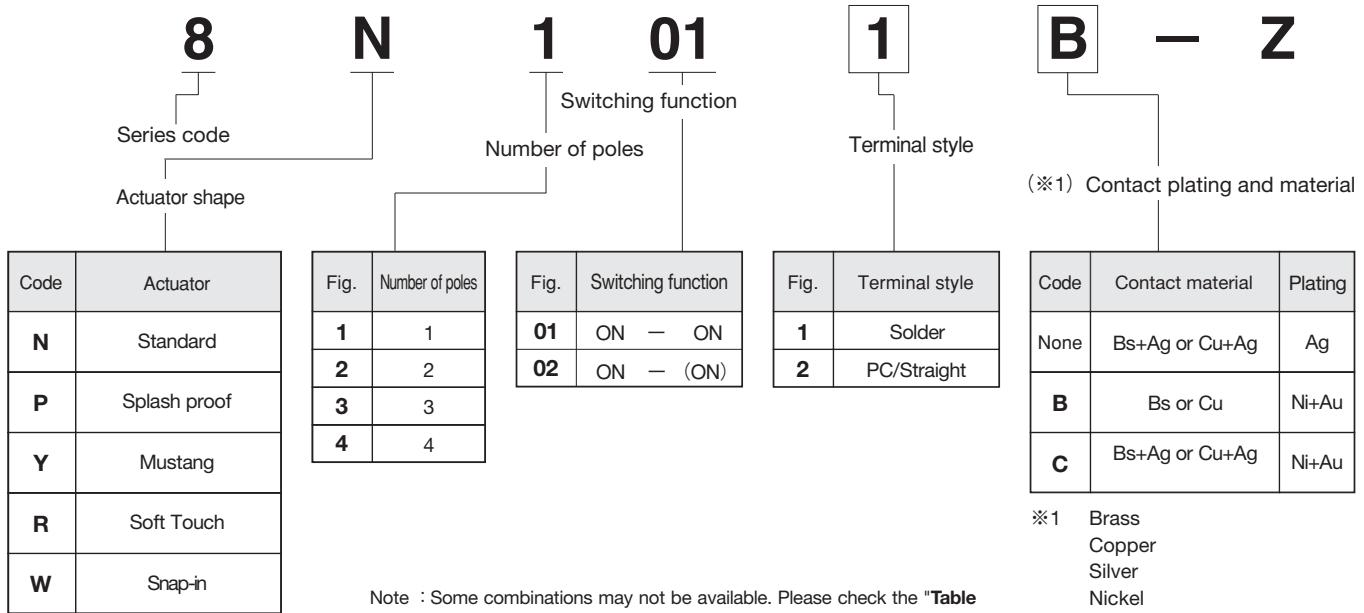
## ■ Terminal Styles



## 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 P/C Solder Straight	265
8P	Splash Proof Pushbutton		1.2.3.4	ON — ON ON — (ON)	 S/D P/C Solder Straight	267
8Y	Mustang Pushbutton		1.2.3.4	ON — ON ON — (ON)	 S/D Solder	269
8R-N	Soft Touch Pushbutton		1.2	ON — ON ON — (ON)	 S/D P/C Solder Straight	271
8W-N	Snap-in Pushbutton		1.2	ON — (ON)	 S/D P/C Solder Straight	273

### Part Numbering



# 8Y

## Mustang Pushbutton Switches

RoHS Compliant



### ■ Features

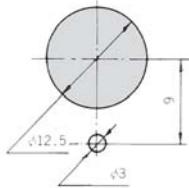
The 8Y series is a sub-miniature pushbutton switch with a larger, rugged actuator and a larger bushing. Suitable for applications where panel space is limited and a larger actuator is needed.

### ■ Table of Part Numbers

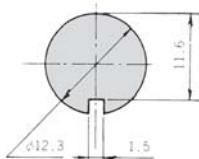
Terminal style	No. of pole Switching function	1 pole	2 poles	3 poles	4 poles
		ON — ON	8Y1011-Z	8Y2011-Z	★ 8Y4011-Z
S/D	ON — (ON)	8Y1021-Z	★ 8Y2021-Z ▲ 8Y2021C-Z	★ 8Y3021-Z	★ 8Y4021-Z

### ■ Panel Cut-Out Dimensions

Panel thickness : 5 mm max.

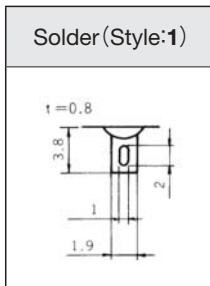


With Locking Ring



Without Locking Ring

### ■ Terminal Styles



### ■ Standard Accessories

(Supplied with switch)

Hex Nut	Lockwasher	Locking Ring
140008010243	140008030055	140008020067
15/32" - 32 THD Nickel plated	12.2 15.2 t=0.5 Zinc plated	10.4 18.2 1.9 9.5 2.3 Zinc plated

### ■ Optional Accessories

(Sold separately)

Color Cap		
Dimensions	Color	Part No.
Gloss finish	White	140000470023
Red	Red	140000470052
Black	Black	140000470051
Vinyl chloride resin	Gray	140000470057

●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.

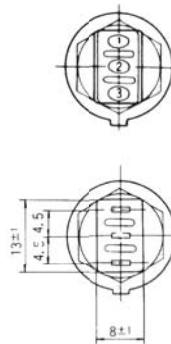
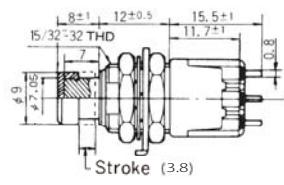
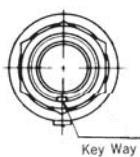
★ : Made to order products.

☆ : Semi-standard products.

(ON) : Momentary.

▲ : Inquiry products.

## SPDT

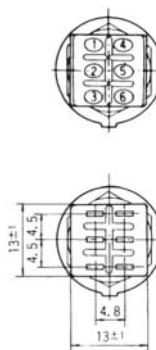
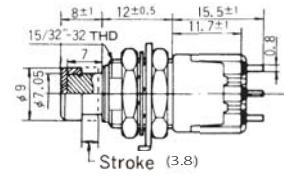
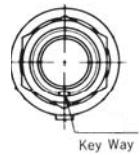


Switching function		
Part No.		
※ 8Y1011-Z	ON	ON
8Y1021-Z	ON	(ON)
Connecting terminals	2-3	2-1

S/D

Terminal numbers are not shown on the switch.

## DPDT

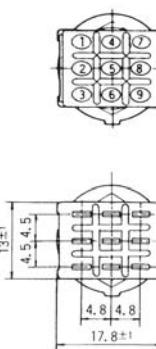
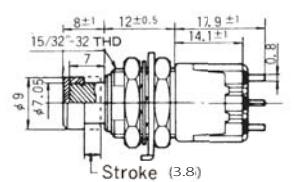
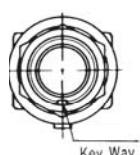


Switching function		
Part No.		
※ 8Y2011-Z	ON	ON
☆ 8Y2021-Z	ON	(ON)
Connecting terminals	2-3 5-6	2-1 5-4 5-4

S/D

Terminal numbers are not shown on the switch.

## 3PDT

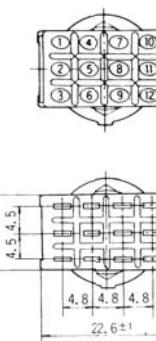
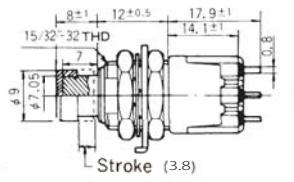
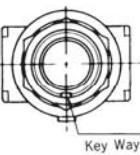


Switching function		
Part No.		
※ 8Y3011-Z	ON	ON
★ 8Y3021-Z	ON	(ON)
Connecting terminals	2-3 5-6 8-9	2-1 5-4 8-7

S/D

Terminal numbers are not shown on the switch.

## 4PDT



Switching function		
Part No.		
★※ 8Y4011-Z	ON	ON
★ 8Y4021-Z	ON	(ON)
Connecting terminals	2-3 5-6 8-9 11-12	2-1 5-4 8-7 11-10

S/D

Terminal numbers are not shown on the switch.

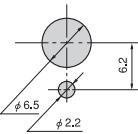
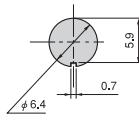
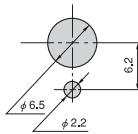
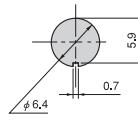
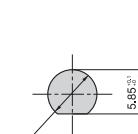
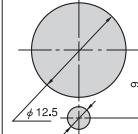
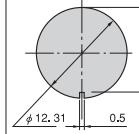
(ON) : Momentary.

★ : Semi-standard products.

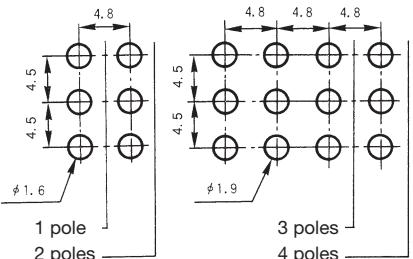
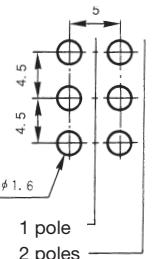
★ : Made to order products.

## Eight Switch

### 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	 Without Locking Ring	 With Locking Ring	 Without Locking Ring

### PC Hole Layouts

Series	8N · 8P	8R · 8W
Dimensions	 1 pole 2 poles	 3 poles 4 poles

### Precautions (8N·8P·8R·8W·8Y)

#### 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) **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.

### Packaging Specification

