

EIGHT SWITCH SERIES

8 Switch Series Selection Table

Part No.	Name	Actuator shape	Number of poles	Switching function	Terminal style	Page
8H	Lever • Rocker		1 • 2	ON — ON ON — OFF — ON (ON) — OFF — (ON) ON — OFF — (ON) ON — (ON)	 S/D P/C	338
8HD	Lever • Rocker (Dust Proof)		1 • 2		 S/D P/C	340
8M	Small Lever Rocker		1 • 2 • 3 • 4		 S/D	342
8V—M	Small Lever • Rocker PC		1 • 2		 P/C	344
8Q	Large Lever • Rocker		1 • 2 • 3 • 4		 S/D	346
8V—Q	Large Lever • Rocker PC		1 • 2		 P/C	348

●S/D : Show Solder terminal.
 ●P/C : Show PC terminal.

Note: For overseas standards, see page 575.

8 Switch Series Common Specifications

Contact specs.		Silver	Gold plated
Rating	Max.	125VAC 6A 250VAC 3A 30VAC 4A	20VDC 25mA
Initial contact resistance		10mΩ Max. (2~4VDC 1A)	20mΩ Max. (200 μVAC 1.5mA)
Initial dielectric strength		AC1500V 1 Minute	
Initial insulation resistance		1000MΩ Min. (500VDC)	
Electrical life	Altternate type	50,000 cycles	
	Momentary type	25,000 cycles	
Operating temperature range		-30~+85℃	
Strage temperature range		-40~+85℃	

Part Numbering

8

Series code

H

Actuator shape

1

Number of poles

01

Switching function

1

Terminal style

C

Contact material and plating

—

Z

Code	Type
H	Lever•Rocker
HD	Lever•Rocker
M	Small Lever•Rocker
V—M	Small Lever•Rocker
Q	Large Lever•Rocker
V—Q	Large Lever•Rocker

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

Fig.	Switching function
01	ON — ON
02	ON — OFF — ON
04	(ON)—OFF—(ON)
05	ON — OFF —(ON)
06	ON — (ON)

Fig.	Terminal style
1	Solder Terminal
2	PC Straight

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

Bs=Brass.
Cu=Copper.
Ag=Silver.
Ni=Nickel.
Au=Gold

Note : For some products, the part numbers according to the above-stated combinations are not registered yet. Check the Table of Part Numbers for availability.

Terminal Styles

Terminal style	Solder Terminal (Style : 1)	PC Straight (Style : 2)
Dimensions		

PC Hole Layouts

Dimensions	
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8V-M/PC Hole Layouts

1-pole	2-poles

8V-Q/PC Hole Layouts

1-pole	2-poles

(ON) : Momentary.

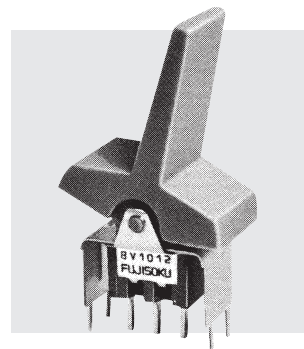
8V-Q

Large Lever & Rocker Switches for PC Board

UL

CSA

RoHS Compliant

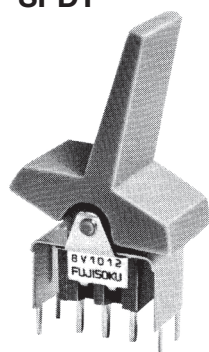


■Features

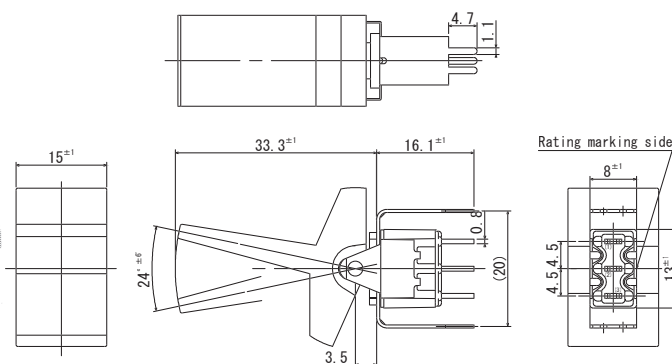
The **8V-Q** Large Lever & Rocker Switches for PC Board are designed for direct mounting on printed circuit boards. The actuator is designed for mounting of larger lever/rocker than the **8V-M** type and the switch is provided with the supporting bracket for stabilized switch mounting. The switches are best suited for the cases where the internal panel space is required to be small and a larger actuator is required.

Levers and rockers for the actuator are available in four matted colors. Choose a suitable one for the panel design.

SPDT



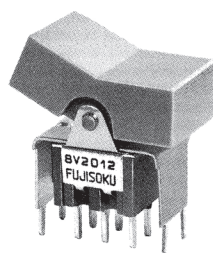
Mount with **Lever**



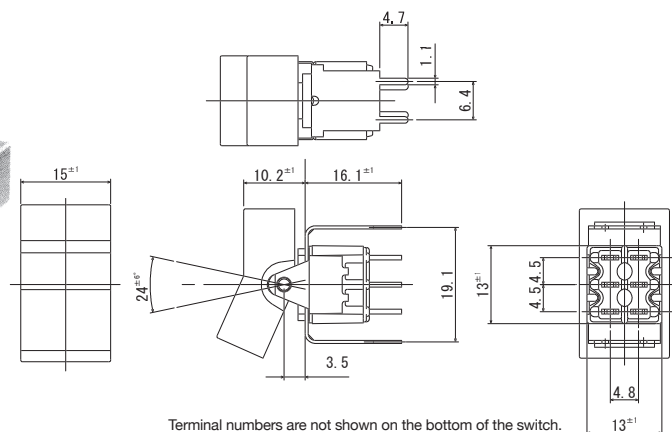
Terminal numbers are not shown on the bottom of the switch.

Switching function Part No.	Viewed from rating marking side		
★8V1012-Q-Z	ON	—	ON
▲8V1022-Q-Z	ON	OFF	ON
★8V1042-Q-Z	(ON)	OFF	(ON)
▲8V1052-Q-Z	ON	OFF	(ON)
★8V1062-Q-Z	ON	—	(ON)
Connecting terminals	2-3	—	2-1

DPDT



Mount with **Rocker**

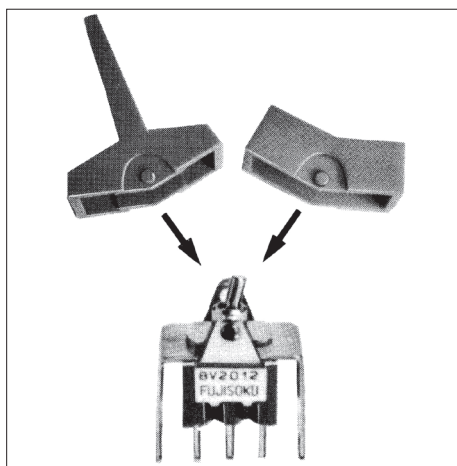


Terminal numbers are not shown on the bottom of the switch.

Switching function Part No.	Viewed from rating marking side		
★8V2012-Q-Z	ON	—	ON
★8V2022-Q-Z	ON	OFF	ON
★8V2042-Q-Z	(ON)	OFF	(ON)
Connecting terminals	2-3 5-6	—	2-1 5-4

Some products in the Table of UL and CSA Approved Products are not registered yet. Before placing the order, check with our Sales Department.

■ Lever & Rocker Installation Procedure



- Insert the lever or the rocker provided onto the switch from the above.

■ Standard Accessories

《Supplied separately》

Lever		Rocker	
Matte finish		Matte finish	
Color	Part No.	Color	Part No.
White	140000050441	White	140000480524
Red	140000050442	Red	140000480525
Black	140000050443	Black	140000480526
Gray	140000050444	Gray	140000480527

- Specify accessory part number in your order.

■ Handling Precautions(EIGHT switch series)

1. Soldering Specifications

(1) Soldering Specifications

Device : Soldering iron

① 420°C, Max.; 3 sec., Max.

(2) Auto Soldering

② 275°C ± 10°C, Max.; 5 seconds, Max.

Note that the above-stated soldering conditions should be applied to the PC terminal type only.

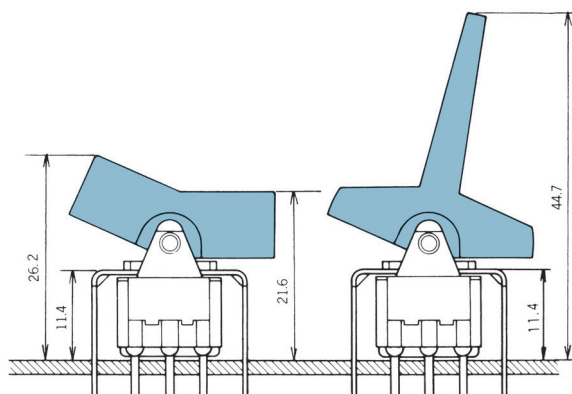
2. Flux Cleaning

(1) For the solvent, use the fluorine- or alcohol-based solvent.

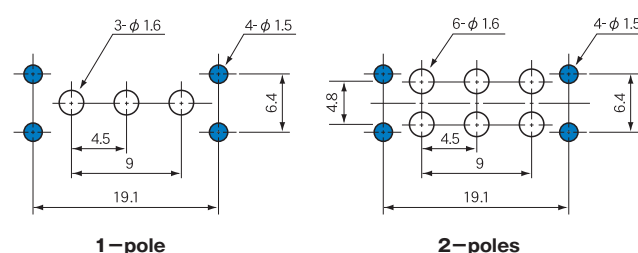
Solvent: Fluorine or Alcohol type

(2) Since the 8 Switch Series switches are not waterproof-structured, if the PC board is to be cleaned, clean the soldering surface of substrate with a brush so that the switch is not exposed to the cleaning solution.

■ PC Board Mounting



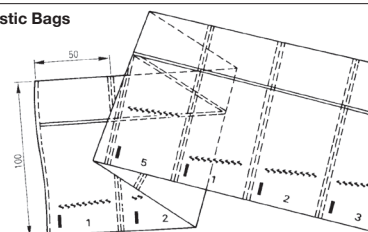
■ PC Hole Layouts



■ Packaging Specification

Perforated Plastic Bags

25 pcs/pack



3. 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 the knob of the switch.
- To fix the PC terminal type, solder it on the PC board after fixing the switch body on the panel with the screw.

UL、CSA認定品一覧表 (Lever・Rocker Type Only)

UL and CSA listed

■8Switch Series

Poles	Switching function			UL (File No.E43275)						CSA (File No.LR38341)					
				8H	8HD	8M	8V-M	8Q	8V-Q	8H	8HD	8M	8V-M	8Q	8V-Q
1-pole	101□	ON	—	ON	○	○	○	○	○	○	○	○	○	○	○
	102□	ON	—	OFF	—	ON	○	○	○	○	○	○	○	○	○
	104□	(ON)	—	OFF	—	(ON)	○	○	○	○	○	○	○	○	○
	105□	ON	—	OFF	—	(ON)	○	○	○	○	○	○	○	○	○
	106□	ON	—	(ON)	○	○	○	○	○	○	○	○	○	○	○
2-poles	201□	ON	—	ON	○	○	○	○	○	○	○	○	○	○	○
	202□	ON	—	OFF	—	ON	○	○	○	○	○	○	○	○	○
	204□	(ON)	—	OFF	—	(ON)	○	○	○	○	○	○	○	○	○
	205□	ON	—	OFF	—	(ON)	○	○	○	○	○	○	○	○	○
	206□	ON	—	(ON)	○	○	○	○	○	○	○	○	○	○	○
3-poles	301□	ON	—	ON	○	○	○	○	○	○	○	○	○	○	○
	302□	ON	—	OFF	—	ON	○	○	○	○	○	○	○	○	○
4-poles	401□	ON	—	ON	○	○	○	○	○	○	○	○	○	○	○
	401□	ON	—	OFF	—	ON	○	○	○	○	○	○	○	○	○

- (1) □ shows the terminal type of ① : Solder terminal; ② : PC terminal.
- (2) Some products in the Table of UL and CSA Listed are not registered yet. Before placing the order, check with our Sales Department.
- (3) For the registered products, refer to Table of Part Numbers of respective Series products.
- (4) When the UL and CSA approved products are required, specify "UL /CSA approved Product" when placing the order. The products will be delivered with the UL or CSA marking.

A series

Poles	Part number	Switching function	UL (※1)
1 pole	ALE1D-2M4-10-Z	ON -OFF- ON	○
	ALE1D-5M4-10-Z		○
	ALE1E-2M4-10-Z	ON -OFF- ON	○
	ALE1E-5M4-10-Z		○
	ALE1F-2M4-10-Z	ON - (ON)	○
	ALE1F-5M4-10-Z		○
	ALE1G-2M4-10-Z	(ON) -OFF- (ON)	○
	ALE1G-5M4-10-Z		○
	ALE1H-2M4-10-Z	ON -OFF- (ON)	○
	ALE1H-5M4-10-Z		○
2 poles	ALE2D-2M4-10-Z	ON - ON	○
	ALE2D-5M4-10-Z		○
	ALE2N-2M4-10-Z		○
	ALE2E-2M4-10-Z	ON -OFF- ON	○
	ALE2E-5M4-10-Z		○
	ALE2P-2M4-10-Z		○
	ALE2F-2M4-10-Z	ON - (ON)	○
	ALE2F-5M4-10-Z		○
	ALE2R-2M4-10-Z		○
	ALE2G-2M4-10-Z	(ON) -OFF- (ON)	○
	ALE2G-5M4-10-Z		○
	ALE2S-2M4-10-Z		○
	ALE2H-2M4-10-Z	ON -OFF- (ON)	○
	ALE2H-5M4-10-Z		○
	ALE2T-2M4-10-Z		○

Miniature Rocker Switches

Poles	Part number	Switching function	UL (※1)	CSA (※2)
1 pole	HLA112A	ON-OFF	○	○
	HLA112A12		○	○
	HLC112A		○	○
	HLC112A12		○	○
	HLS112A		○	○
	HLS112A12		○	○
	STE115A10-Z		○	○
	STE115A12-Z		○	○
2 poles	HLA208K		○	○
	HLA208K12		○	○
	HLC208K		○	○
	HLC208K12		○	○
	HLS208K		○	○
	HLS208K12		○	○

Miniature Poewr Switches

Poles	Type	Switching function	UL (※1)	CSA (※2)
1 pole	HLA112D	ON-ON	○	○
	HLA112D12		○	○
	HLC112D		○	○
	HLC112D12		○	○
	HLS112D		○	○
	HLS112D12		○	○
	STE115D10-Z		○	○

Miniature Rocker Switches

Poles	Part number	Switching function	UL (※1)	CSA (※2)	VDE (※4)	SEMKO (※5)	Poles	Part number	Switching function	UL (※1)	CSA (※2)	VDE (※4)	SEMKO (※5)
1-pole	SLE6A	ON-OFF	○	○	○	○	1-pole	SLE10A	ON-OFF	○	○	○	○
	SLE6A-5		○	○	○	○		SLE10A-5		○	○	○	○
	SLE6A-6		○	○	○	○		SLE10A-6		○	○	○	○
	SLE6A-7		○	○	○	○		SLE10A-7		○	○	○	○
	SLE6A-8		○	○	○	○		SLE10A-8		○	○	○	○
	SLE6A2		○	○	○	○		SLE10A2		○	○	○	○
	SLE6A2-5		○	○	○	○		SLE10A2-5		○	○	○	○
	SLE6A2-6		○	○	○	○		SLE10A2-6		○	○	○	○
	SLE6A2-7		○	○	○	○		SLE10A2-7		○	○	○	○
	SLE6A2-8		○	○	○	○		SLE10A2-8		○	○	○	○
	SLE6A4		○	○	○	○		SLE10A4		○	○	○	○
	SLE6A4-5		○	○	○	○		SLE10A4-5		○	○	○	○
	SLE6A4-6		○	○	○	○		SLE10A4-6		○	○	○	○
	SLE6A4-7		○	○	○	○		SLE10A4-7		○	○	○	○
	SLE6A4-8		○	○	○	○		SLE10A4-8		○	○	○	○
	SLE6A5	ON-ON	○	○	○	○		SLE10A5	ON-ON	○	○	○	○
	SLE6A5-5		○	○	○	○		SLE10A5-5		○	○	○	○
	SLE6A5-6		○	○	○	○		SLE10A5-6		○	○	○	○
	SLE6A5-7		○	○	○	○		SLE10A5-7		○	○	○	○
	SLE6A5-8		○	○	○	○		SLE10A5-8		○	○	○	○
	SLE6D		○	○	○	○		SLE10D		○	○	○	○
	SLE6D-5		○	○	○	○		SLE10D-5		○	○	○	○
	SLE6D-6		○	○	○	○		SLE10D-6		○	○	○	○
	SLE6D-7		○	○	○	○		SLE10D-7		○	○	○	○
	SLE6D-8		○	○	○	○		SLE10D-8		○	○	○	○
	SLE6D2		○	○	○	○		SLE10D2		○	○	○	○
	SLE6D2-5		○	○	○	○		SLE10D2-5		○	○	○	○
	SLE6D2-6		○	○	○	○		SLE10D2-6		○	○	○	○
	SLE6D2-7		○	○	○	○		SLE10D2-7		○	○	○	○
	SLE6D2-8		○	○	○	○		SLE10D2-8		○	○	○	○
1-pole	SLE6D4		○	○	○	○		SLE10D4		○	○	○	○
	SLE6D4-5		○	○	○	○		SLE10D4-5		○	○	○	○
	SLE6D4-6		○	○	○	○		SLE10D4-6		○	○	○	○
	SLE6D4-7		○	○	○	○		SLE10D4-7		○	○	○	○
	SLE6D4-8		○	○	○	○		SLE10D4-8		○	○	○	○
	SLE6D5		○	○	○	○		SLE10D5		○	○	○	○
	SLE6D5-5		○	○	○	○		SLE10D5-5		○	○	○	○
	SLE6D5-6		○	○	○	○		SLE10D5-6		○	○	○	○
1-pole	SLE6D5-7		○	○	○	○	1-pole	SLE10D5-7		○	○	○	○
	SLE6D5-8		○	○	○	○		SLE10D5-8		○	○	○	○

(※1) UL File No. E43275

(※4) VDE File No. 120752

(※2) CSA File No. LR38341

(※5) SEMKO File No. 614385