

E222871

Miniature Rocker

## Specifications

Electrical Ratings	5A @ 120VAC, 28VDC 2A @ 250VAC See Contact Options	Dielectric Strength	1500Vrms min
Electrical Life	50,000 cycles typical	Insulation Resistance	>100MΩ min
Contact Resistance	<20mΩ initial @ 2-4VDC, 100mA	Operating Temperature	-40°C to 85°C
		Storage Temperature	-40°C to 85°C

## Materials

Actuator	ABS
Housing	Diallyl Phthalate (DAP)
Frame	6/6 Nylon
Bushing	Brass or Zinc, Nickel Plated
Contacts	Copper Alloy, Silver Plated
Terminals	Brass, Silver Plated

## Features

- Wide variety of applications from consumer electronics to commercial
- Standard epoxy sealed terminations
- Gold contacts available for low power applications
- Available support brackets for greater stability
- Up to four poles with five functions available
- Many rocker and paddle styles to choose from
- Wide variety of terminal options

## Ordering Information

1. Series	ANR	1	1	R11	2				B	Q	E
ANR											
2. Number of Poles 1 = SPDT 2 = DPDT 3 = 3PDT 4 = 4PDT											
3. Switch Function 1 = ON-NONE-ON 2 = ON-NONE-(ON) 3 = ON-OFF-ON 4 = (ON)-OFF-(ON) 5 = ON-OFF-(ON) 6 = ON-ON-ON **See 3-way wiring section for details											
4. Actuator R11P / R11 = Rocker, PC mount / Panel mount R15P / R15 = Rocker, PC mount / Panel mount R19P / R19 = Rocker, PC mount / Panel mount R21P / R21 = Rocker, PC mount / Panel mount P13P / P13 = Paddle, PC mount / Panel mount P23P / P23 = Paddle, PC mount / Panel mount P43P / P43 = Paddle, PC mount / Panel mount P47P / P47 = Paddle, PC mount / Panel mount P48P / P48 = Paddle, PC mount / Panel mount R12 / R22 = Rocker, snap-in panel mount w/frame / snap-in panel mount w/o frame P14 / P24 = Paddle, snap-in panel mount w/frame / snap-in panel mount w/o frame P17 / P27 = Paddle, snap-in panel mount w/frame / snap-in panel mount w/o frame P18 / P28 = Paddle, snap-in panel mount w/frame / snap-in panel mount w/o frame R51R = Rocker, snap-in panel mount w/frame and LED (Red LED standard) R53R = Rocker, snap-in panel mount w/frame and LED (Red LED standard)											
5. Actuator Color 1 = White                      4 = Yellow                      7 = Blue 2 = Black                      5 = Green                      8 = Brown 3 = Red                        6 = Orange                      9 = Gray											
6. Frame Color 1 = White                      4 = Yellow                      7 = Blue                      Blank = No Frame 2 = Black                      5 = Green                      8 = Brown 3 = Red                        6 = Orange                      9 = Gray											
7. Actuator Marking Style Blank = No marking A, B, C, D, E, F, G											
8. Actuator Marking Color Blank = No marking W = White, standard B = Black											
9. Terminals B = Solder lug C = PC pin D = Quick Connect H = Horizontal mount, right angle PC Pin; HS = Snap-in V = Vertical mount, right angle PC pin S20 / S25 = PC pin with support bracket; V20 / V25 = Snap-in support bracket S35 / S40 = PC pin with support bracket											
10. Contacts Q = Silver plated R = Gold plated G = Gold over Silver plated											
11. Epoxy Seal E = Epoxy Seal											

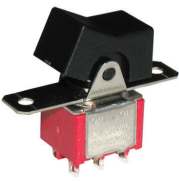
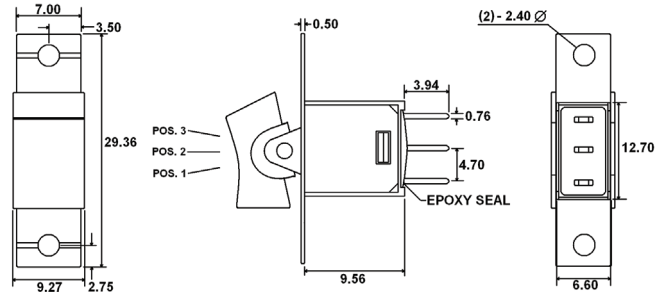
### Switch Function



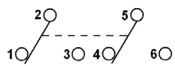
**SPDT**



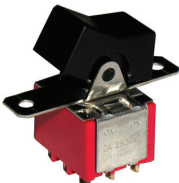
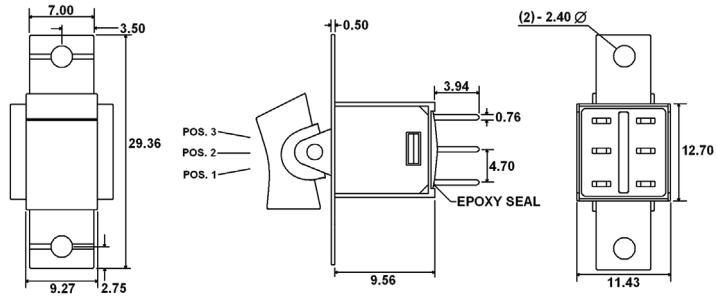
Function	Rocker Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3	-	2-1



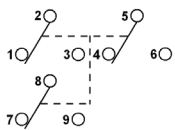
**DPDT**



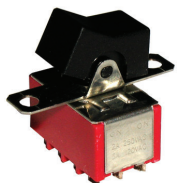
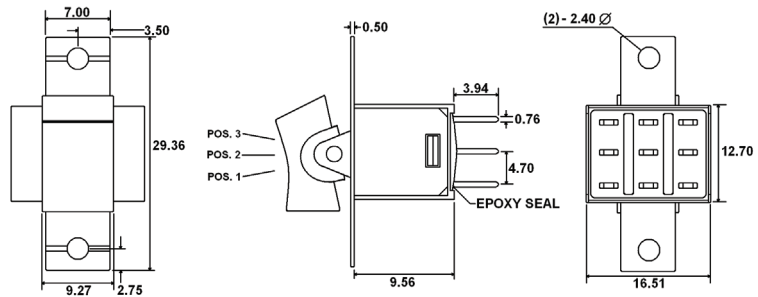
Function	Rocker Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3 5-6	-	2-1 5-4
6	ON	ON	ON
Terminals	2-3 5-6	2-3 5-4	2-1 5-4



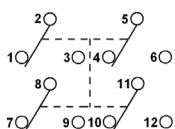
**3PDT**



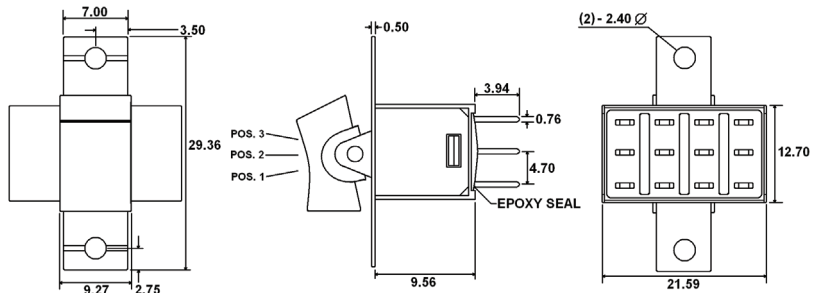
Function	Rocker Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3 5-6 8-9	-	2-1 5-4 8-7



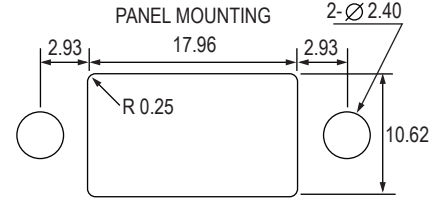
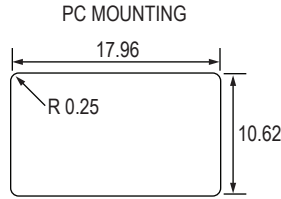
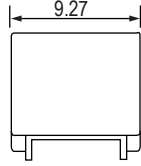
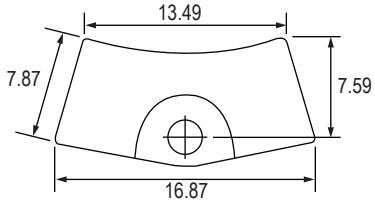
**4PDT**



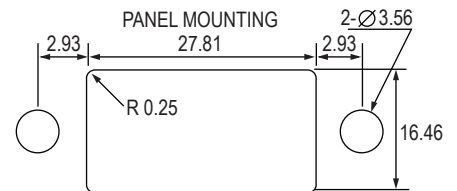
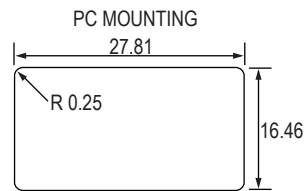
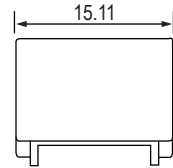
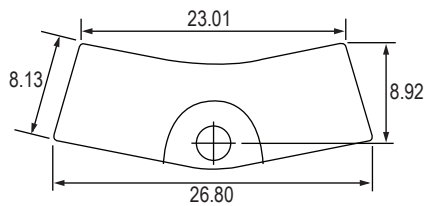
Function	Rocker Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3 5-6 8-9 11-12	-	2-1 5-4 8-7 11-10
6	ON	ON	ON
Terminals	2-3 5-6 8-9 11-12	2-3 5-4 8-9 11-10	2-1 5-4 8-7 11-10



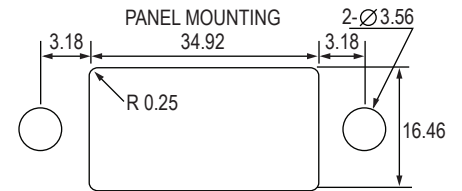
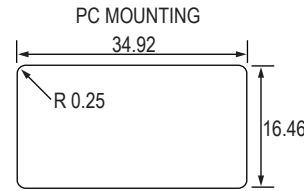
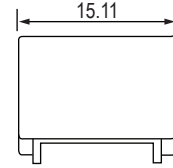
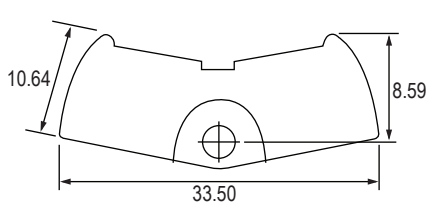
**Actuator Options - PC mount & Panel mount**



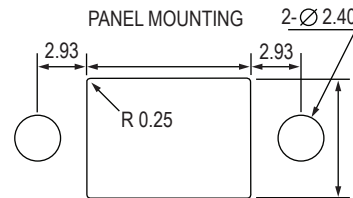
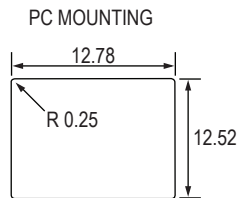
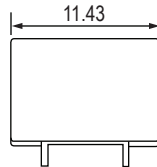
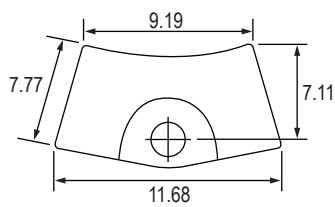
**R11P / R11**



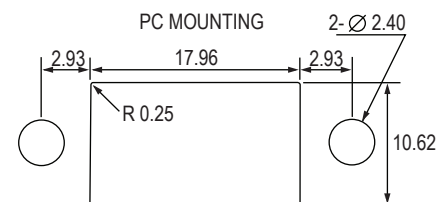
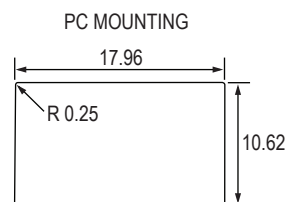
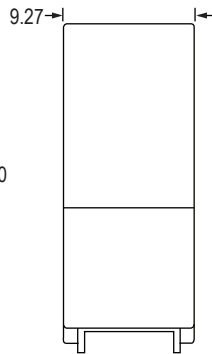
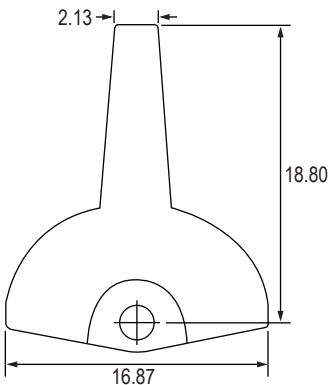
**R15P / R15**



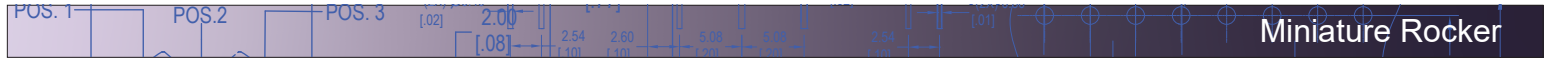
**R19P / R19**



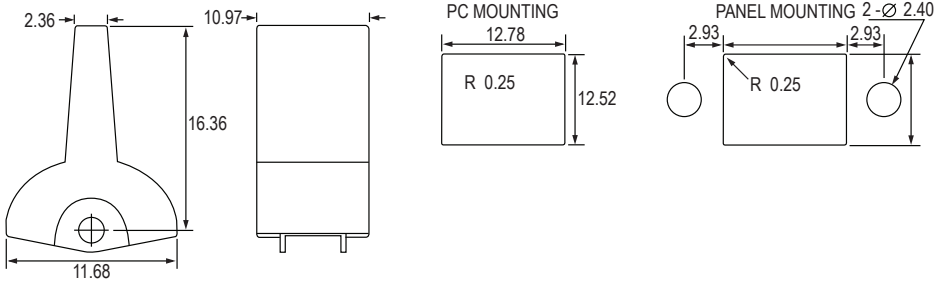
**R21P / R21**



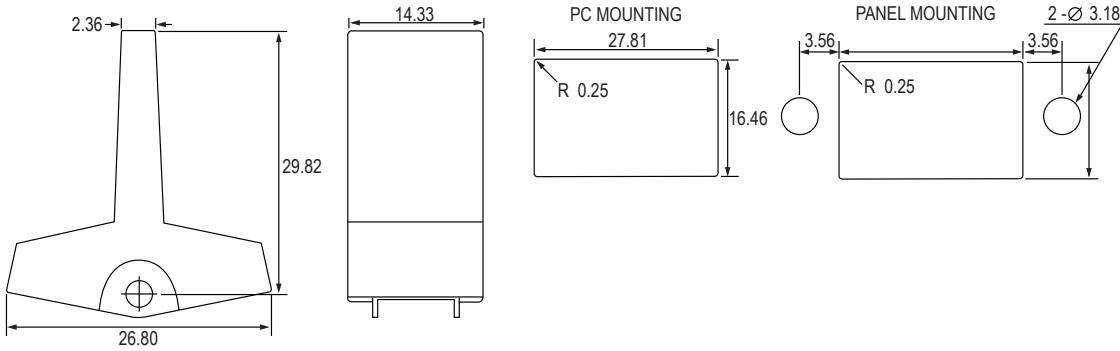
**P13P / P13**



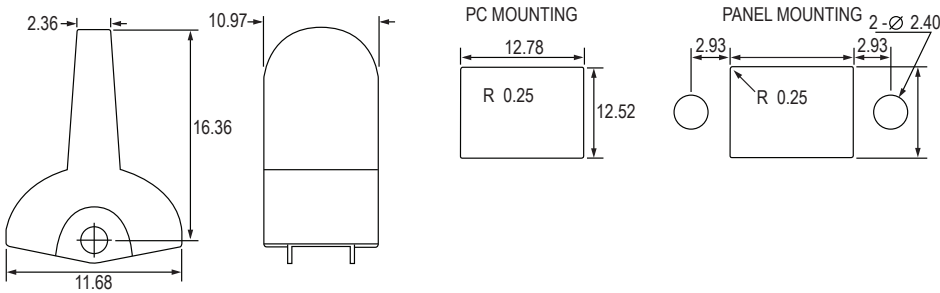
**Actuator Options - PC mount & Panel mount**



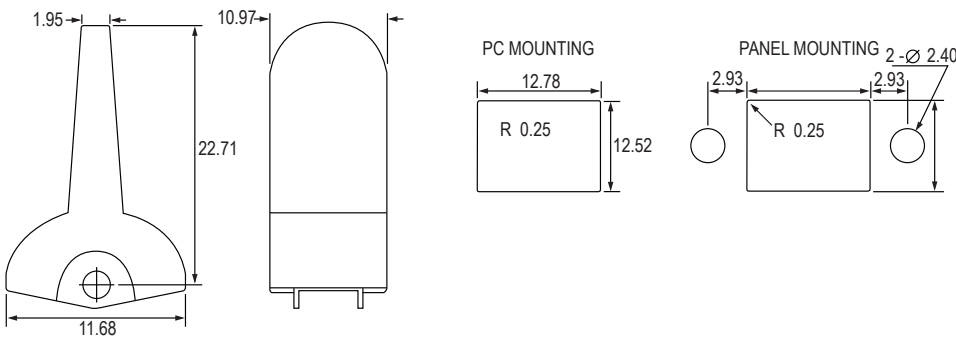
**P23P / P23**



**P43P / P43**

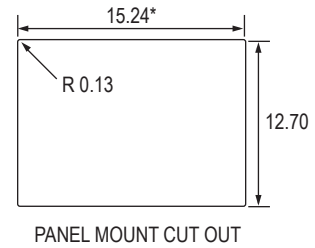
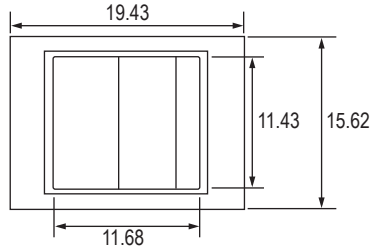
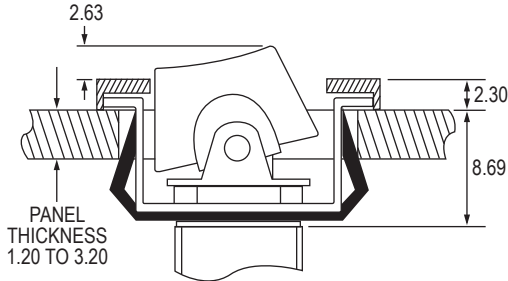


**P47P / P47**

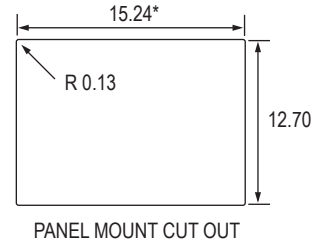
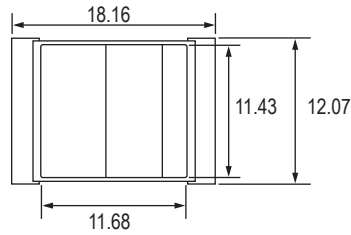


**P48P / P48**

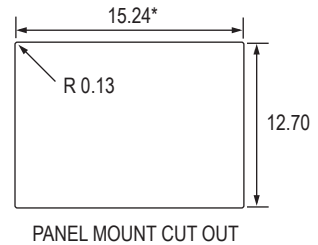
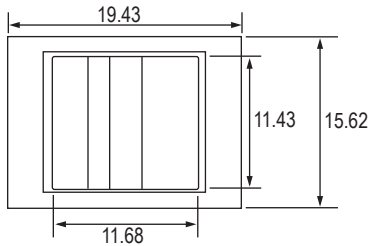
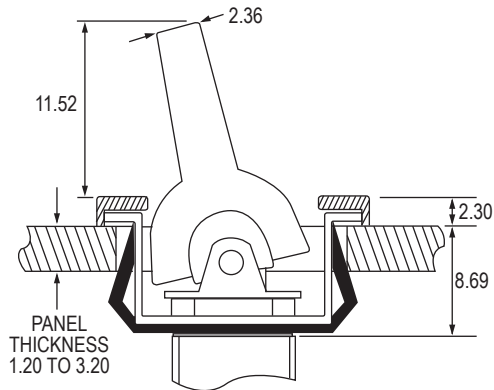
**Actuator Options - Snap-In Panel mount**



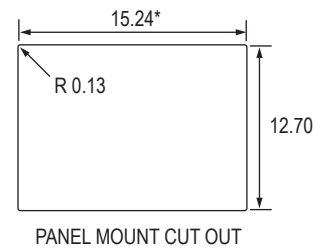
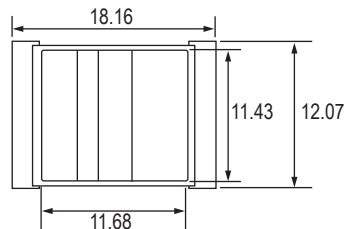
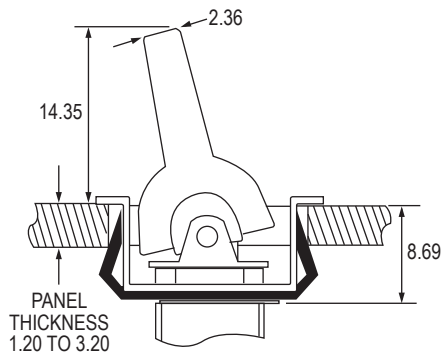
**R12 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**



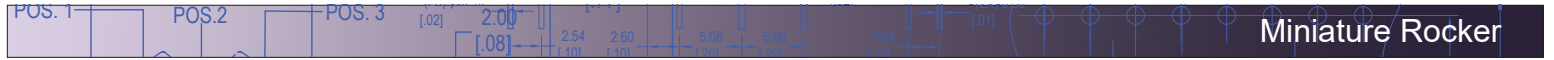
**R22 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**



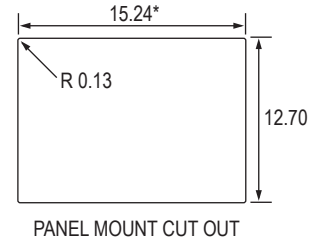
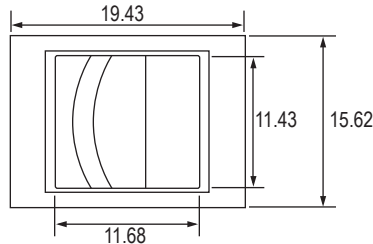
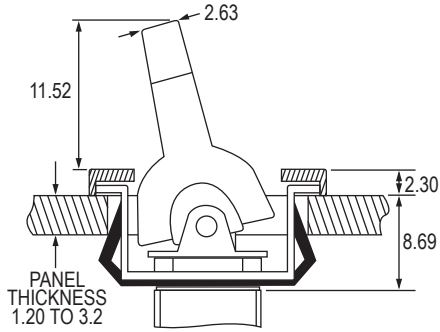
**P14 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**



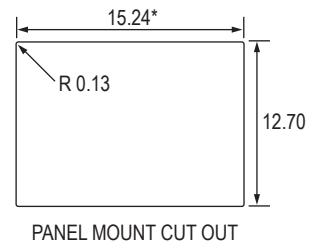
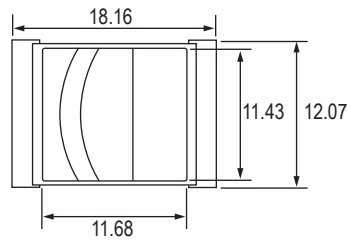
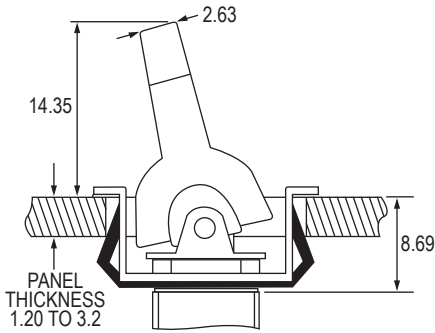
**P24 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**



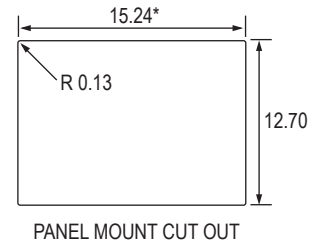
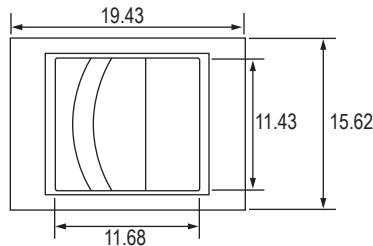
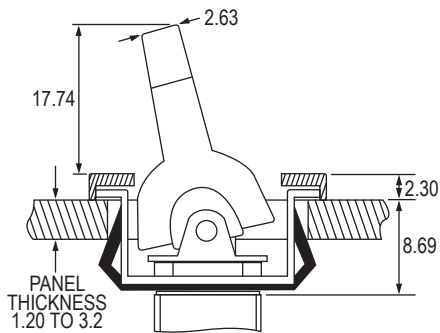
**Actuator Options - Snap-In Panel mount**



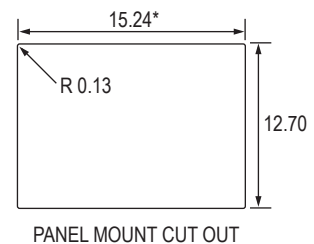
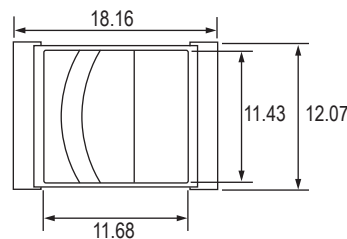
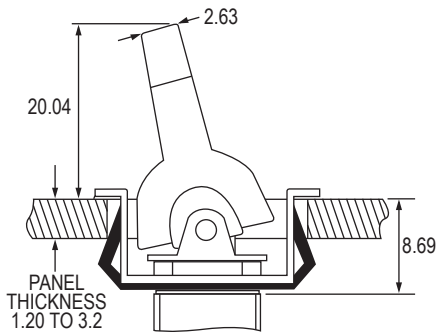
**P17 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**



**P27 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**

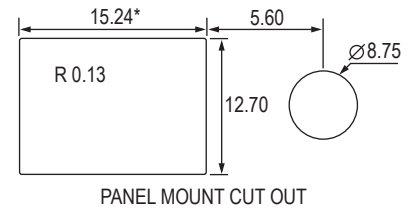
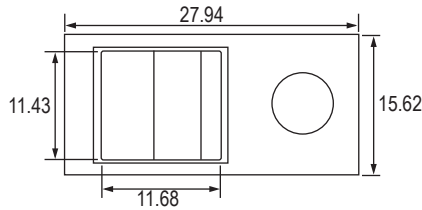
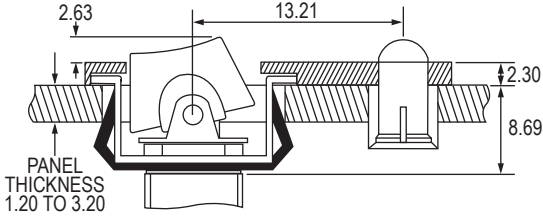


**P18 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**

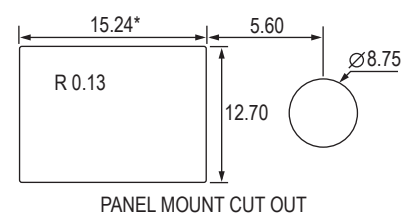
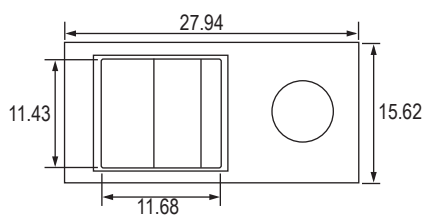
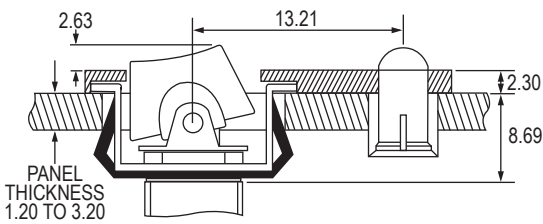


**P28 - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**

### Actuator Options - Snap-In Panel mount

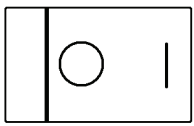


**R51R - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**

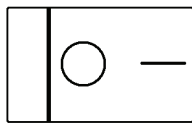


**P53R - Increase the length dimension to 15.75/15.88 for 1.5/3.20 thick panels**

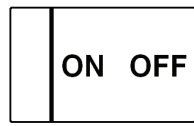
### Actuator Markings



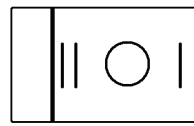
**A**



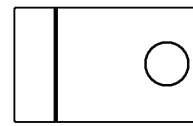
**B**



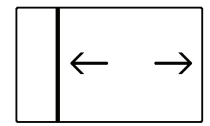
**C**



**D**

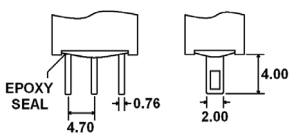


**E**

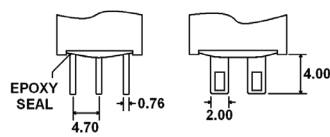


**F**

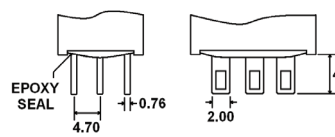
### Terminal Options



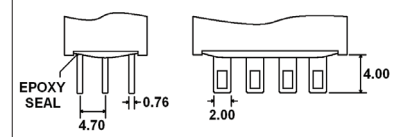
**B Single Pole**



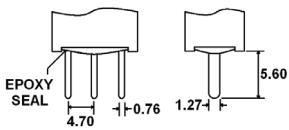
**B Double Pole**



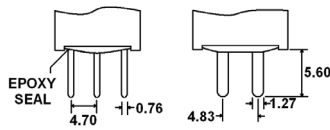
**B 3Pole**



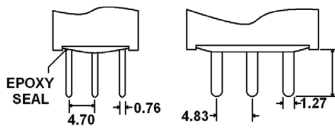
**B 4Pole**



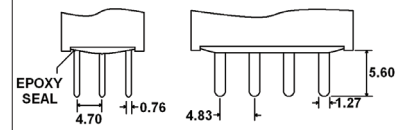
**C Single Pole**



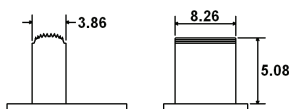
**C Double Pole**



**C 3Pole**



**C 4Pole**



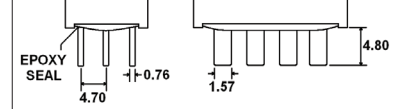
**D Single Pole**



**D Double Pole**



**D 3Pole**

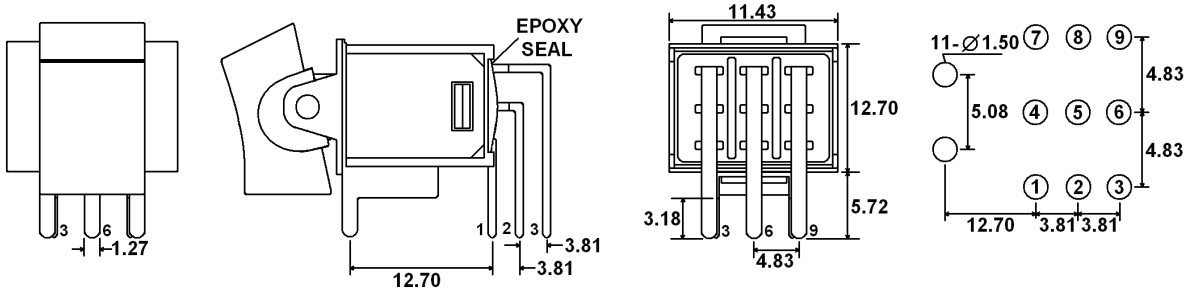


**D 4Pole**

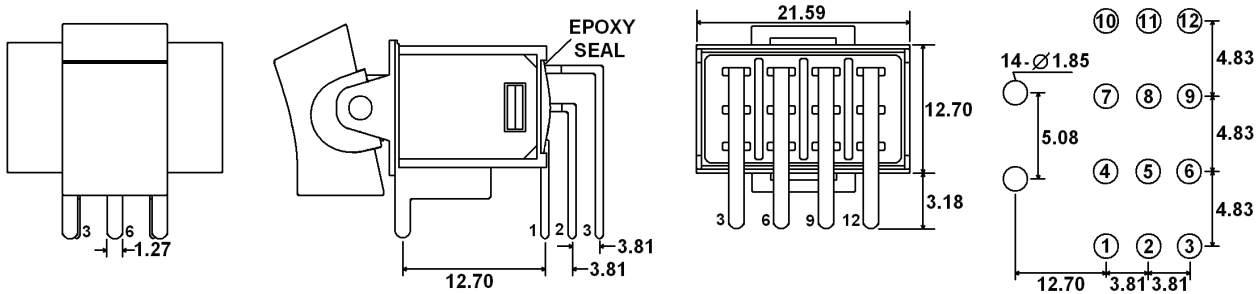




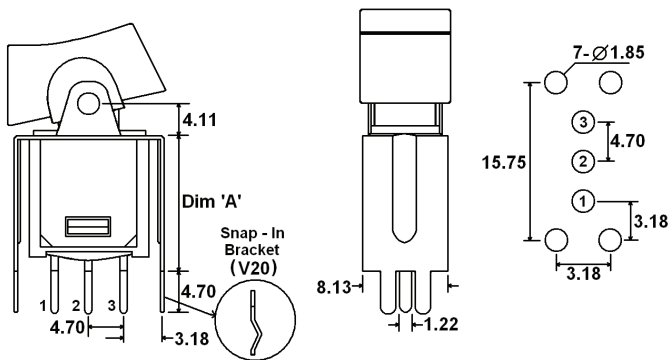
## Terminal Options



**V = Vertical mount, right angle PC pins, three pole**

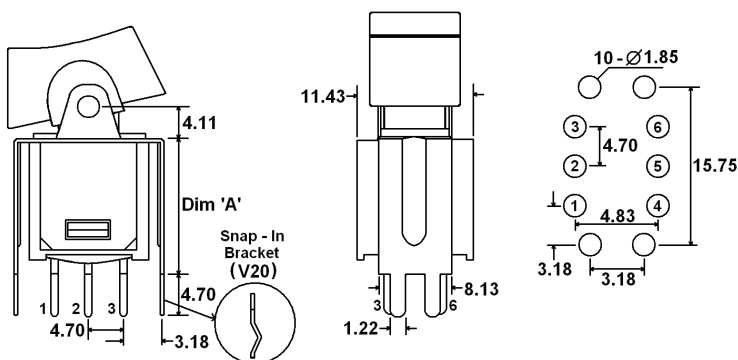


**V = Vertical mount, right angle PC pins, four pole**



Terminal Option	"A" Dimension
S20 / V20	11.68
S25 / V25	16.00

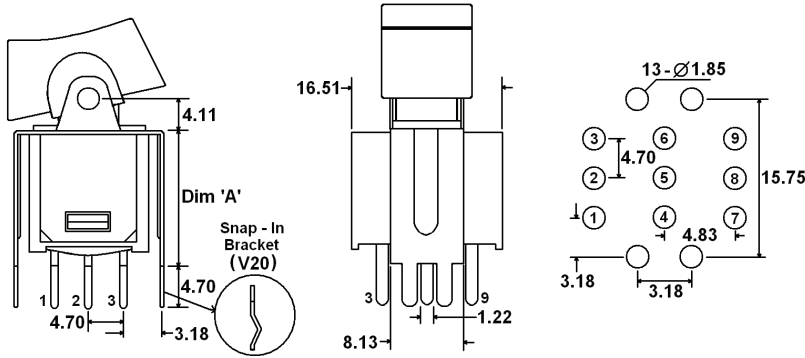
**S20/25 (V20/25 - Snap In) = PC pins with support bracket, single pole**



Terminal Option	"A" Dimension
S20 / V20	11.68
S25 / V25	16.00

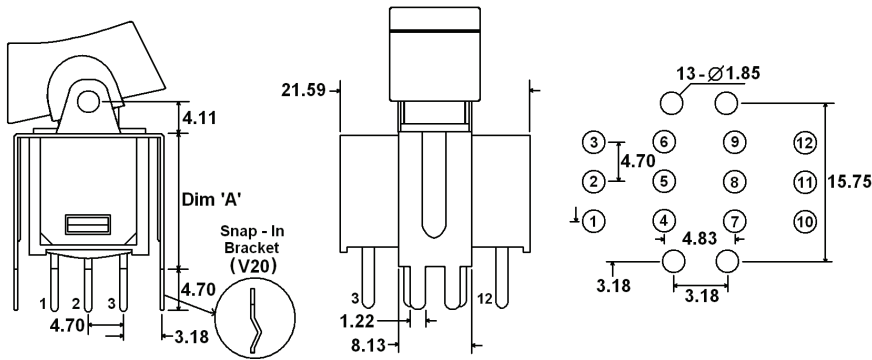
**S20/25 (V20/25 - Snap In) = PC pins with support bracket, double pole**

**Terminal Options**



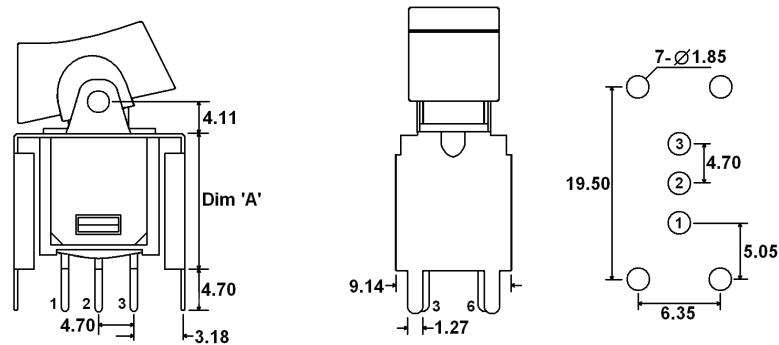
Terminal Option	"A" Dimension
S20 / V20	11.68
S25 / V25	16.00

**S20/25 (V20/25 - Snap In) = PC pins with support bracket, three pole**



Terminal Option	"A" Dimension
S20 / V20	11.68
S25 / V25	16.00

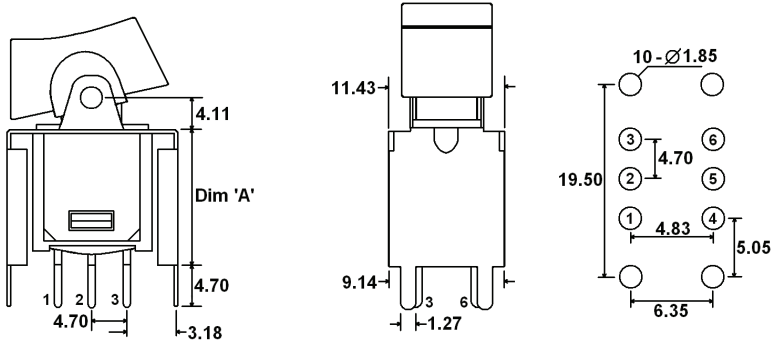
**S20/25 (V20/25 - Snap In) = PC pins with support bracket, four pole**



Terminal Option	"A" Dimension
S35	11.68
S40	16.00

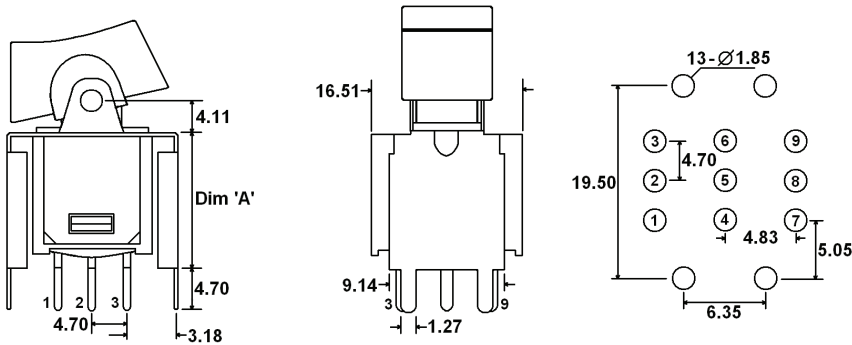
**S40 (V40 - Snap In) = PC pins with support bracket, single pole**

### Terminal Options



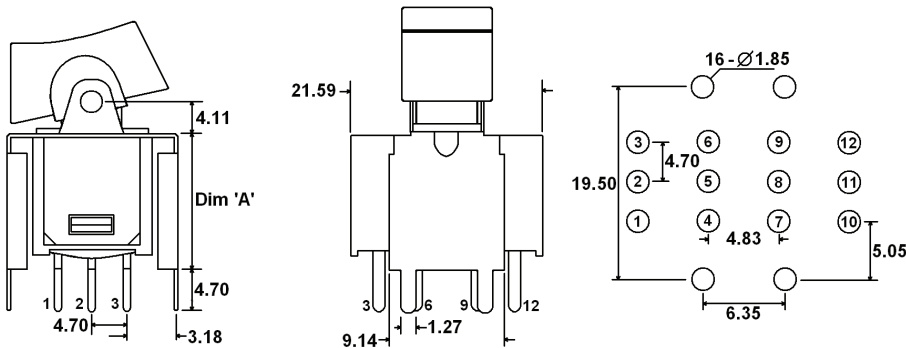
Terminal Option	"A" Dimension
S35	11.68
S40	16.00

**S40 (V40 - Snap In) = PC pins with support bracket, double pole**



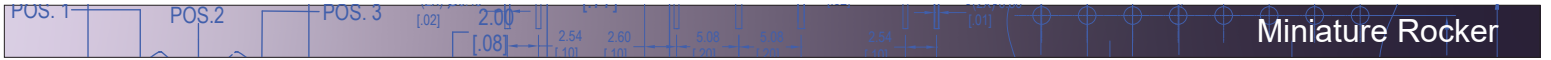
Terminal Option	"A" Dimension
S35	11.68
S40	16.00

**S40 (V40 - Snap In) = PC pins with support bracket, three pole**



Terminal Option	"A" Dimension
S35	11.68
S40	16.00

**S40 (V40 - Snap In) = PC pins with support bracket, four pole**



### Contact Options

Designator	Contact Material	Terminal Material	Electrical Ratings
Q	Silver Plating	Silver Plating	5A @ 120VAC, 28VDC; 2A @ 250VAC
R	Gold over Nickel Plating	Gold over Nickel Plating	0.4VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plateing	0.4VA max @ 20VAC or VDC max or 5A @ 120VAC, 28VDC; 2A @ 250VAC

### Three Way Wiring Diagram

