

**SPECIFICATIONS**

Electrical Ratings	5A @ 120 VAC, 28VDC 2A @ 250VAC
Electrical Life	30,000 cycles typical
Contact Resistance	< 20 mΩ max initial @ 2-4VDC, 100mA
Dielectric Strength	1500Vrms min
Insulation Resistance	> 100MΩ min
Operating Temperature	-40°C to 85°C
Storage Temperature	-40°C to 85°C



Process Sealed

**UL** US - E222871



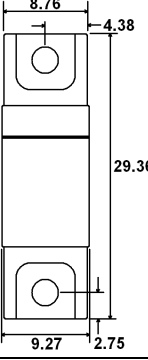
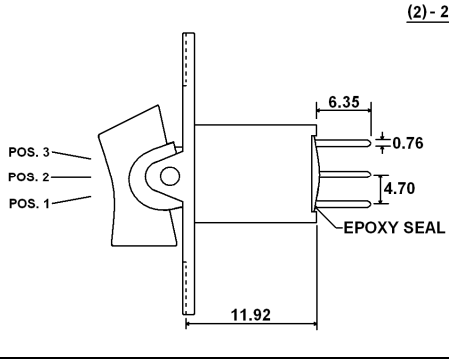
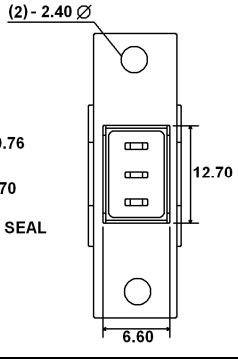
**MATERIALS ←RoHS COMPLIANT**


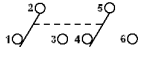
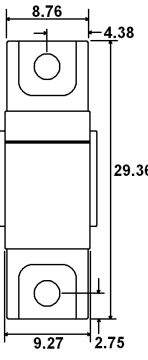
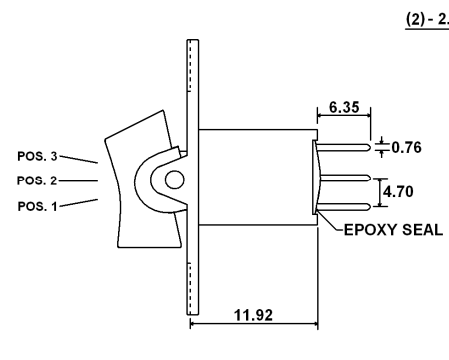
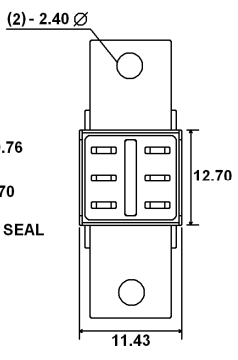
Actuator	6/6 Nylon, Glass Filled, Flame Retardant Heat Stabilized, UL94V-0
Housing	6/6 Nylon, Glass Filled, Flame Retardant Heat Stabilized, UL94V-0
Support Bracket	Brass, Tin Plated
Contacts	Copper Alloy, Silver or Gold Plated
Terminals	Copper Alloy, Silver or Gold Plated


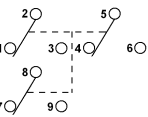
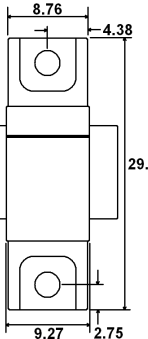
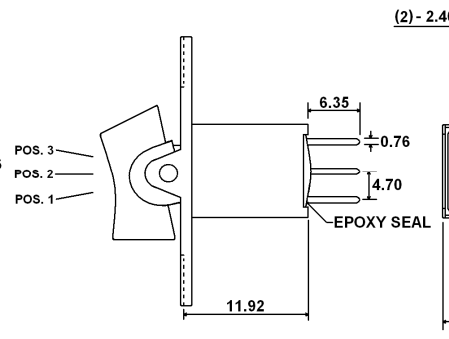
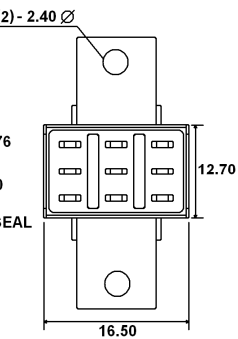
**ORDERING INFORMATION**

<b>1. Series:</b> ASR	<b>ASR</b>	<b>1</b>	<b>3</b>	<b>R11</b>	<b>2</b>		<b>C</b>	<b>Q</b>
<b>2. Number of Poles:</b> 1 = SPDT 2 = DPDT 3 = 3PDT								
<b>3. Switch Function:</b> 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 Three Way Wiring Section for Details								
<b>4. Actuator:</b> R11P / R11 = 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 R15P = Rocker, PC Mount P43P = Paddle, PC Mount P47P = Paddle, PC Mount P48P = Paddle, PC Mount								
<b>5. Actuator Color:</b> 1 = White      4 = Orange      7 = Blue 2 = Black      5 = Yellow      8 = Brown 3 = Red      6 = Green      9 = Gray								
<b>6. Actuator Marking Style:</b> Blank = No Marking A, B, C, D, E, F, G								
<b>7. Actuator Marking Color:</b> Blank = No Marking, W = White (Standard), B = Black								
<b>8. Terminals:</b> 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 = PC Pin with Support Bracket; V20 = Snap-in Support Bracket S25 = PC Pin with Support Bracket; V25 = Snap-in Support Bracket								
<b>9. Contacts:</b> Q = Silver Plated R = Gold Plated G = Gold over Silver Plated								

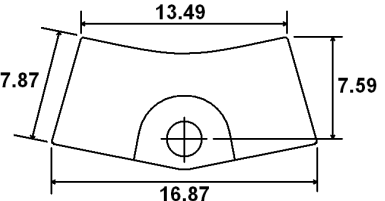
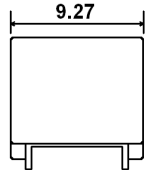
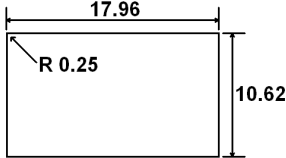
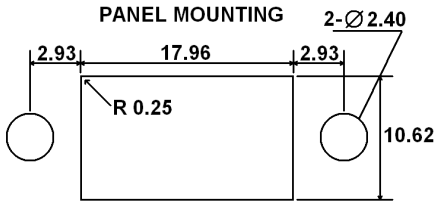
**SWITCH FUNCTION**

 <b>SPDT</b>	<table border="1"> <thead> <tr> <th rowspan="2">Function</th> <th colspan="3">Toggle Position</th> </tr> <tr> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ON</td> <td>NONE</td> <td>ON</td> </tr> <tr> <td>2</td> <td>ON</td> <td>NONE</td> <td>(ON)</td> </tr> <tr> <td>3</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>4</td> <td>(ON)</td> <td>OFF</td> <td>(ON)</td> </tr> <tr> <td>5</td> <td>ON</td> <td>OFF</td> <td>(ON)</td> </tr> </tbody> </table>	Function	Toggle Position						1	ON	NONE	ON	2	ON	NONE	(ON)	3	ON	OFF	ON	4	(ON)	OFF	(ON)	5	ON	OFF	(ON)				<table border="1"> <thead> <tr> <th>Terminals</th> <th>2-3</th> <th>---</th> <th>2-1</th> </tr> </thead> </table>	Terminals	2-3	---	2-1			
			Function	Toggle 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																																				

 <b>DPDT</b>	<table border="1"> <thead> <tr> <th rowspan="2">Function</th> <th colspan="3">Toggle Position</th> </tr> <tr> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ON</td> <td>NONE</td> <td>ON</td> </tr> <tr> <td>2</td> <td>ON</td> <td>NONE</td> <td>(ON)</td> </tr> <tr> <td>3</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>4</td> <td>(ON)</td> <td>OFF</td> <td>(ON)</td> </tr> <tr> <td>5</td> <td>ON</td> <td>OFF</td> <td>(ON)</td> </tr> </tbody> </table>	Function	Toggle Position						1	ON	NONE	ON	2	ON	NONE	(ON)	3	ON	OFF	ON	4	(ON)	OFF	(ON)	5	ON	OFF	(ON)				<table border="1"> <thead> <tr> <th>Terminals</th> <th>2-3</th> <th>---</th> <th>2-1</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>ON</td> <td>ON</td> <td>ON</td> </tr> <tr> <td>Terminals</td> <td>2-3</td> <td>2-3</td> <td>2-1</td> </tr> <tr> <td></td> <td>5-6</td> <td>5-4</td> <td>5-4</td> </tr> </tbody> </table>	Terminals	2-3	---	2-1	6	ON	ON	ON	Terminals	2-3	2-3	2-1		5-6	5-4	5-4			
			Function	Toggle 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																																																
6	ON	ON	ON																																																
Terminals	2-3	2-3	2-1																																																
	5-6	5-4	5-4																																																

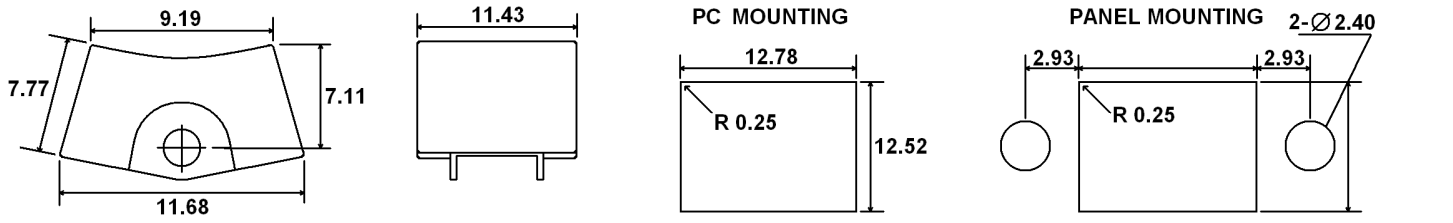
 <b>3PDT</b>	<table border="1"> <thead> <tr> <th rowspan="2">Function</th> <th colspan="3">Toggle Position</th> </tr> <tr> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ON</td> <td>NONE</td> <td>ON</td> </tr> <tr> <td>2</td> <td>ON</td> <td>NONE</td> <td>(ON)</td> </tr> <tr> <td>3</td> <td>ON</td> <td>OFF</td> <td>ON</td> </tr> <tr> <td>4</td> <td>(ON)</td> <td>OFF</td> <td>(ON)</td> </tr> <tr> <td>5</td> <td>ON</td> <td>OFF</td> <td>(ON)</td> </tr> </tbody> </table>	Function	Toggle Position						1	ON	NONE	ON	2	ON	NONE	(ON)	3	ON	OFF	ON	4	(ON)	OFF	(ON)	5	ON	OFF	(ON)				<table border="1"> <thead> <tr> <th>Terminals</th> <th>2-3</th> <th>---</th> <th>2-1</th> </tr> </thead> <tbody> <tr> <td></td> <td>5-6</td> <td></td> <td>5-4</td> </tr> <tr> <td></td> <td>8-9</td> <td></td> <td>8-7</td> </tr> </tbody> </table>	Terminals	2-3	---	2-1		5-6		5-4		8-9		8-7			
			Function	Toggle 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																																												
	5-6		5-4																																												
	8-9		8-7																																												

**ACTUATOR OPTIONS (PC MOUNT / PANEL MOUNT)**  
**R11P / R11**

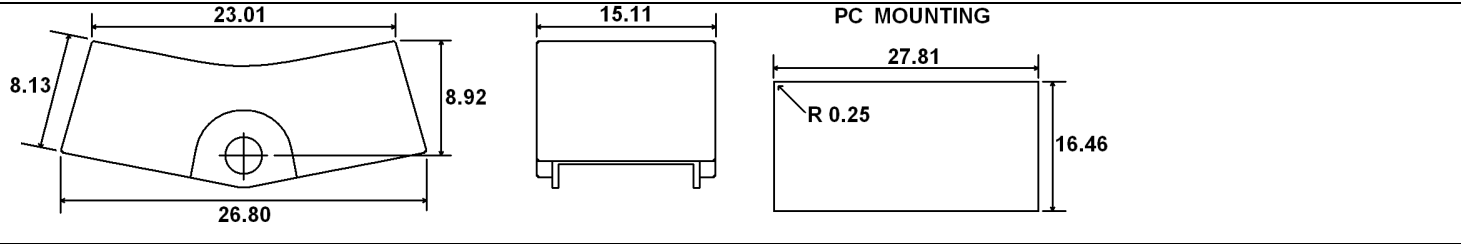
		<p><b>PC MOUNTING</b></p> 	<p><b>PANEL MOUNTING</b></p> 
---	---	--	--

**ACTUATOR OPTIONS (PC MOUNT / PANEL MOUNT)**

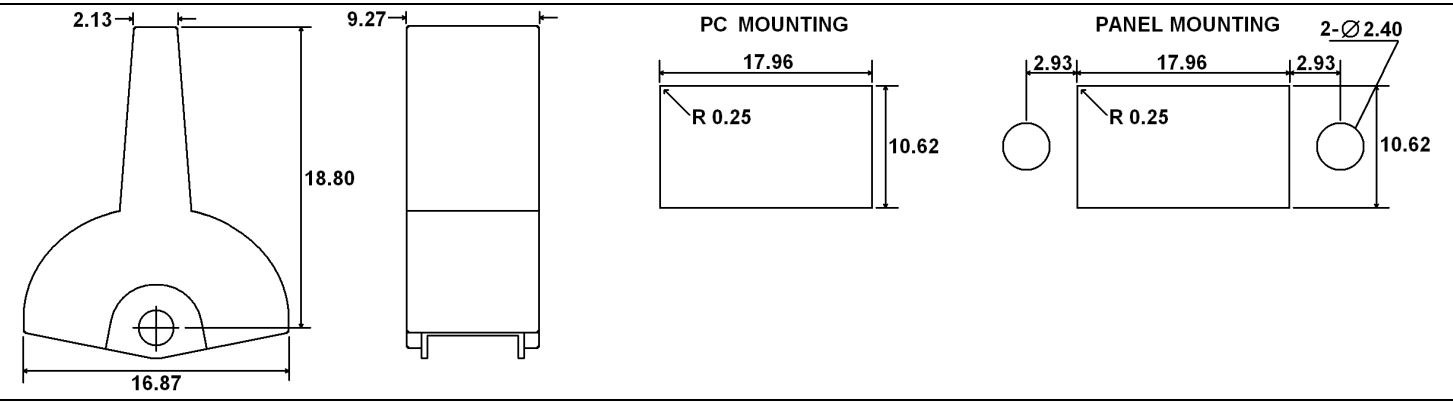
**R21P / R21**



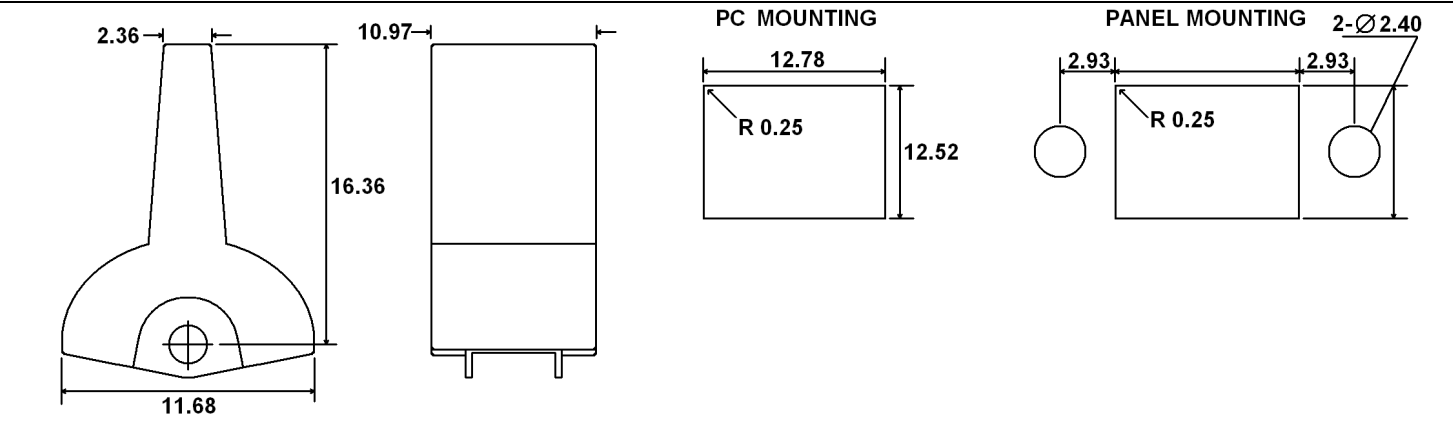
**R15P**



**P13P / P13**

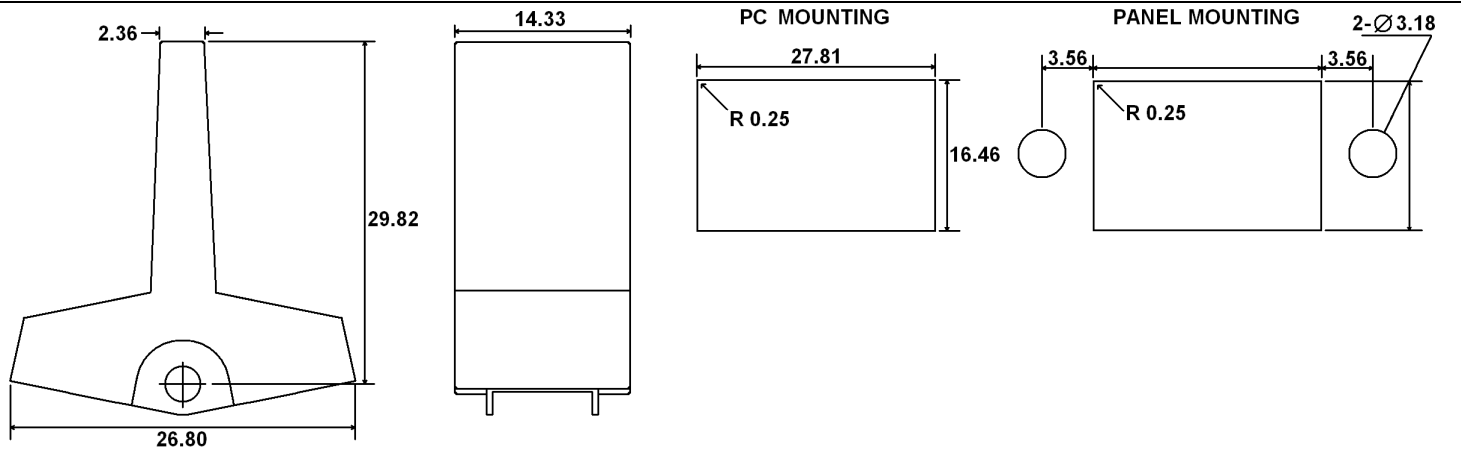


**P23P / P23**

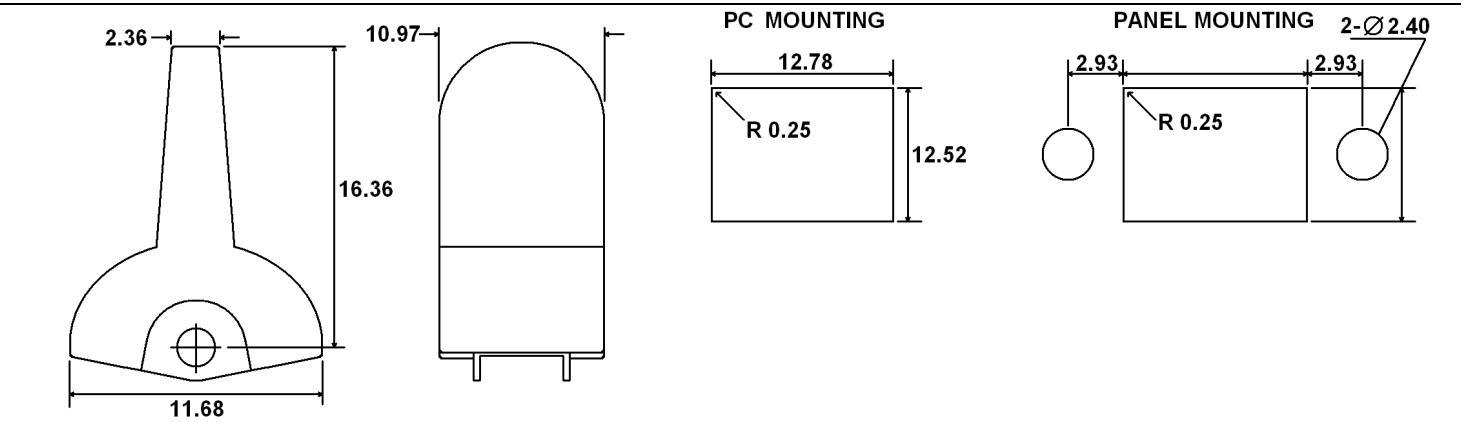


**ACTUATOR OPTIONS (PANEL MOUNT / PC MOUNT)**

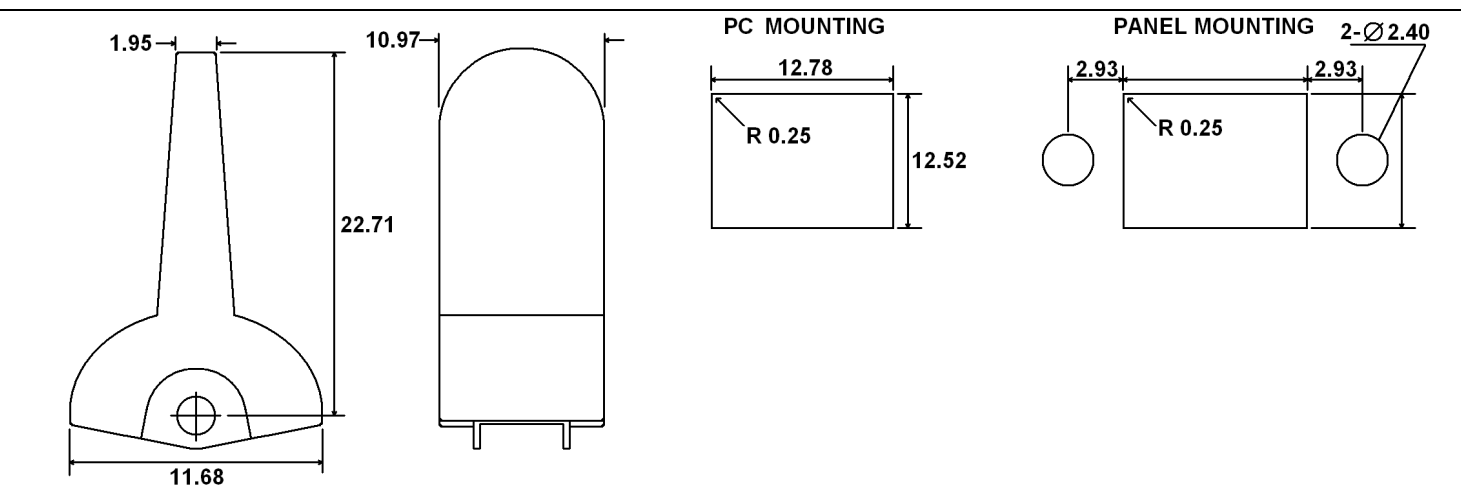
**P43P**



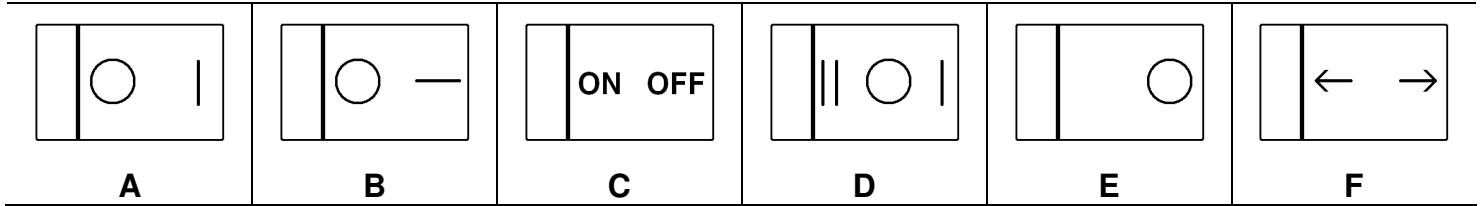
**P47P**



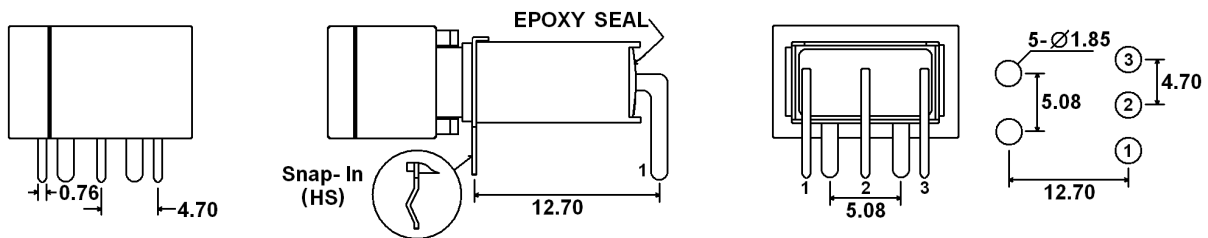
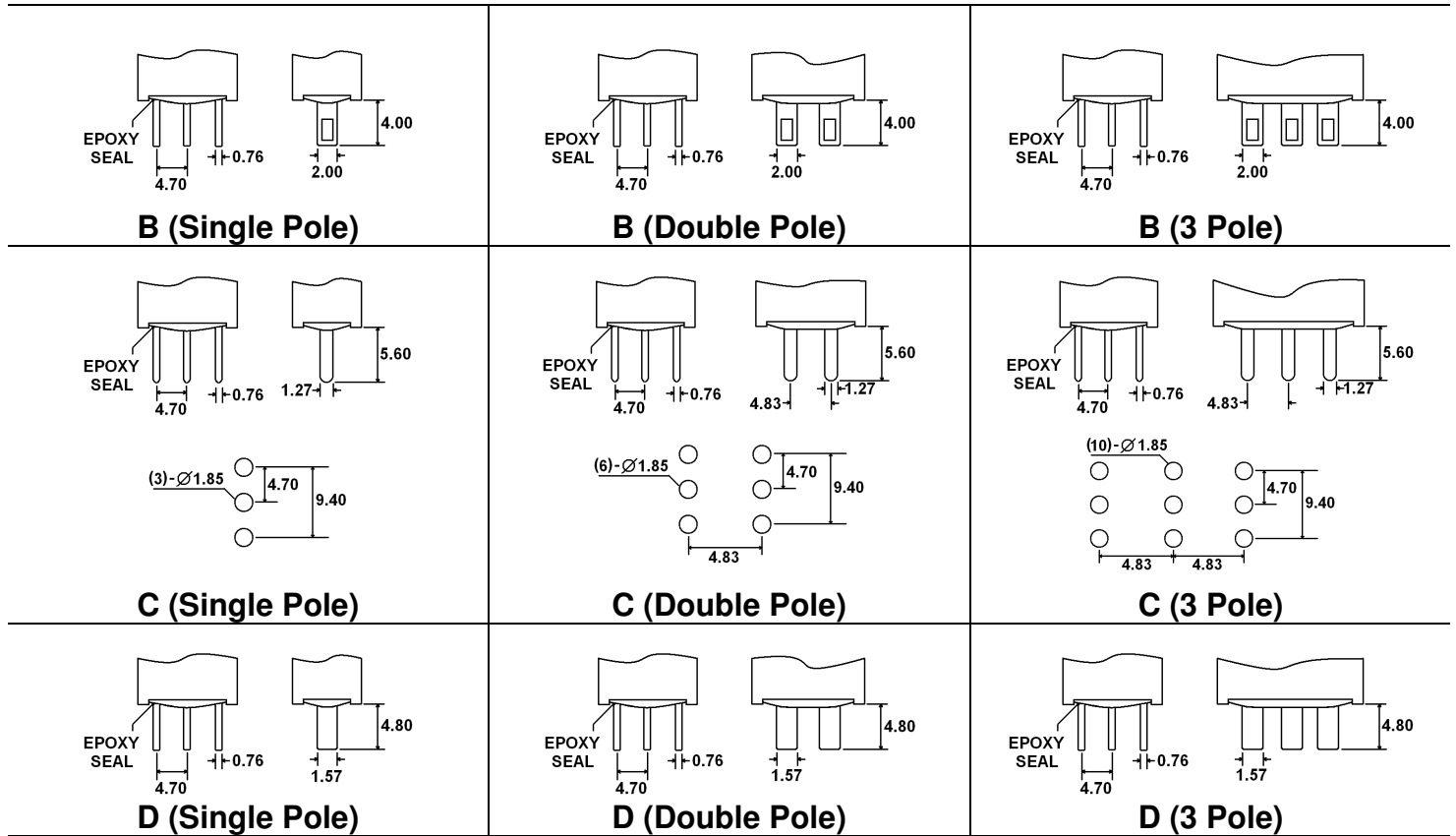
**P48P**



**ACTUATOR MARKINGS**

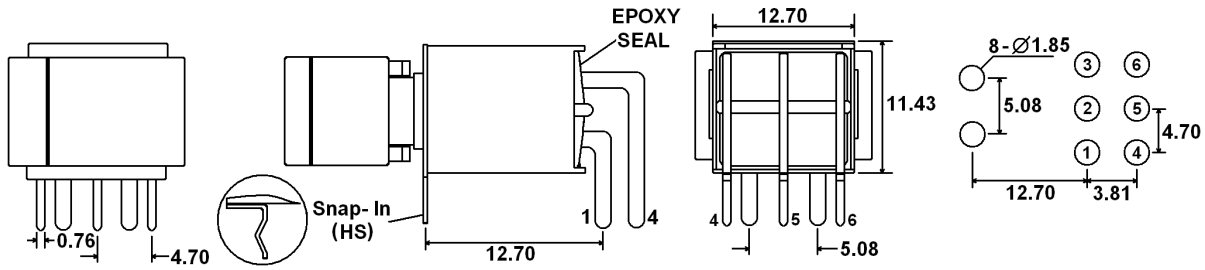


**TERMINAL OPTIONS**

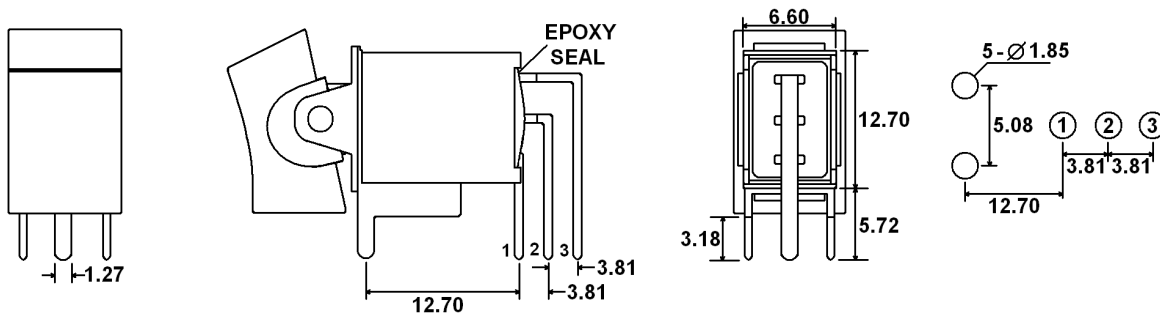


**H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Single Pole)**

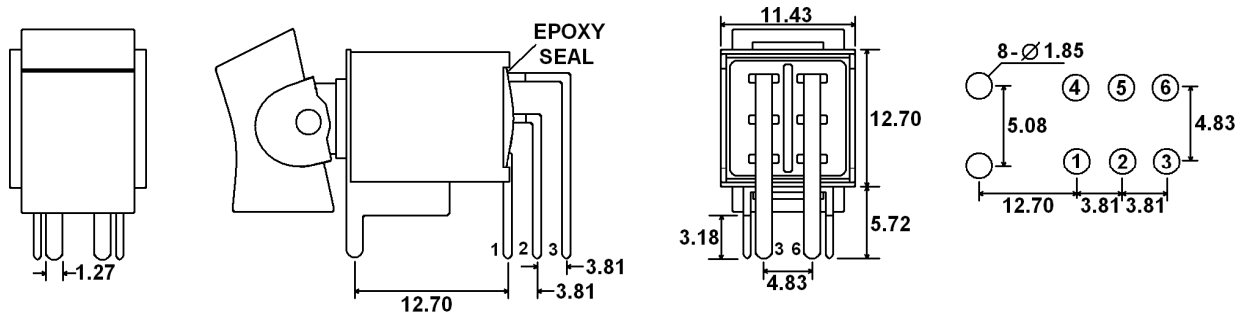
**TERMINAL OPTIONS**



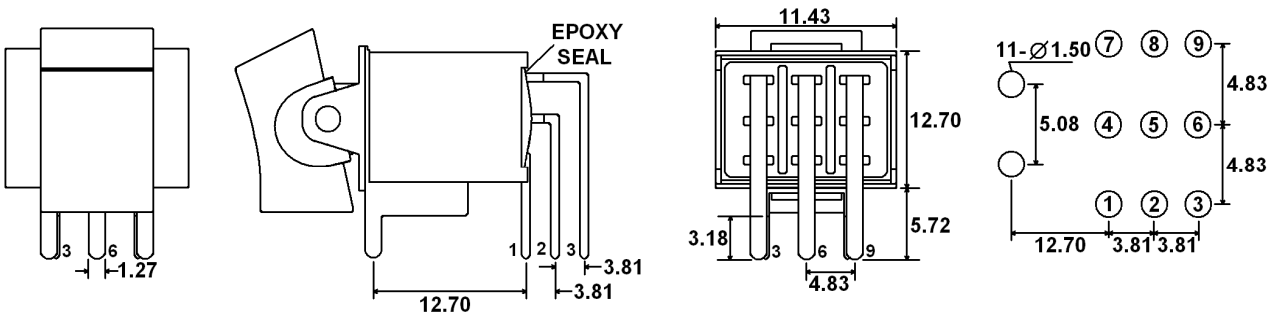
**H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Double Pole)**



**V = Vertical Mount, Right Angle PC Pins (Single Pole)**

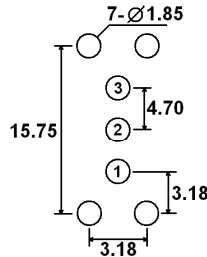
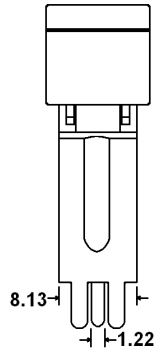
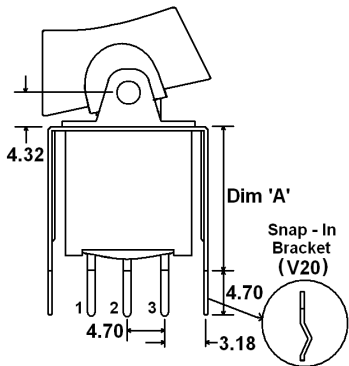


**V = Vertical Mount, Right Angle PC Pins (Double Pole)**



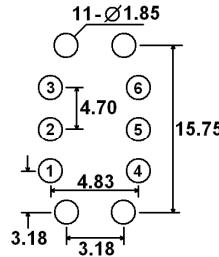
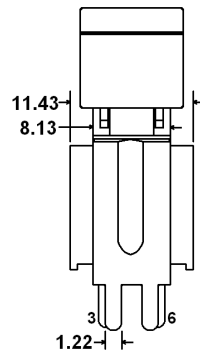
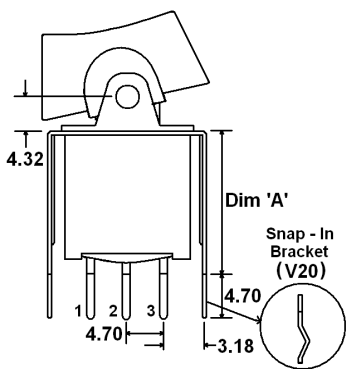
**V = Vertical Mount, Right Angle PC Pins (Three Pole)**

**TERMINAL OPTIONS**



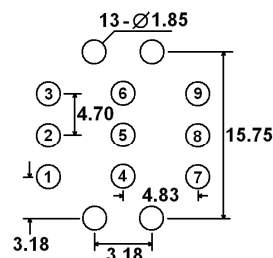
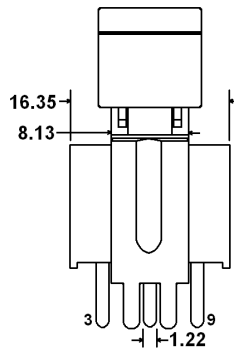
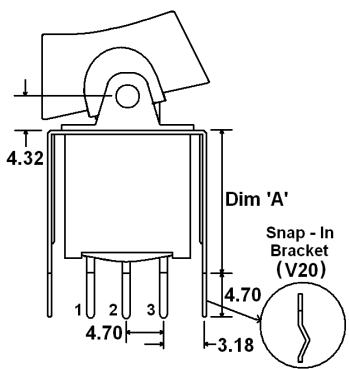
Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)**



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

**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)**



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

**S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Three 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	.4 VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plating	.4 VA max @ 20VAC or VDC max or 5A @ 120VAC, 28VDC; 2A @ 250VAC

## THREE WAY WIRING DIAGRAM

