

- 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



c **RU** **us** - E222871

SPECIFICATIONS

Electrical Ratings	5A @ 120VAC, 28VDC; 2A @ 250VAC See Contact Options
Electrical Life	50,000 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

MATERIALS ←RoHS COMPLIANT

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

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
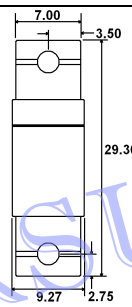
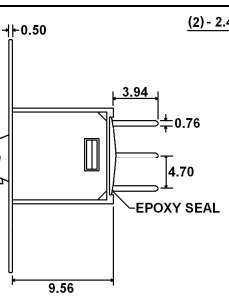
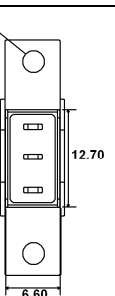


ORDERING INFORMATION

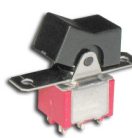
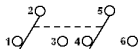
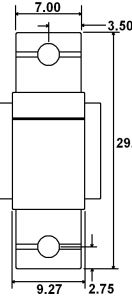
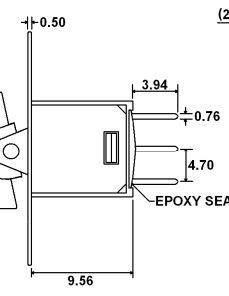
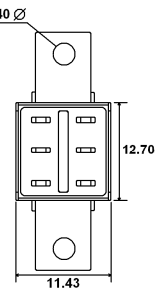


1. Series:	ANR	1	1	R11	2		B	Q	E
ANR									
2. Number of Poles:									
1 = SPDT									
2 = DPDT									
3 = 3PDT									
4 = 4PDT									
3. Switch Function:									
1 = ON-NONE-ON									
2 = ON-NONE-(ON)									
3 = ON-OFF-ON									
4 = (ON)-OFF-(ON)									
5 = ON-OFF-(ON)									
6 = ON-ON-ON ** See Three 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)									
P53R = 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 or S25 = PC Pin with Support Bracket; V20 or V25 = Snap-in Support Bracket									
S35 or S40 = PC Pin with Support Bracket; S35 or V40 = Snap-in Support Bracket									
10. Contacts:									
Q = Silver Plated									
R = Gold Plated									
G = Gold over Silver Plated									
11. Epoxy Seal:									
E = Epoxy Seal									


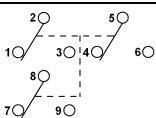
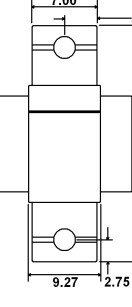
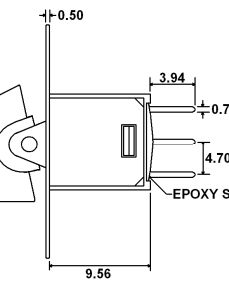
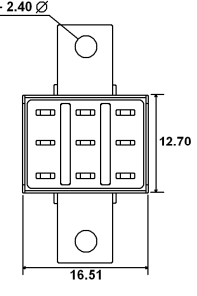


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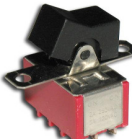
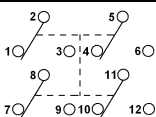

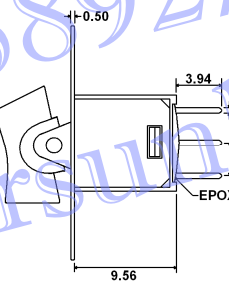
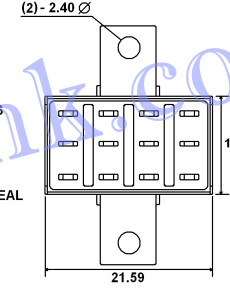


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SWITCH FUNCTION

 SPDT 	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				

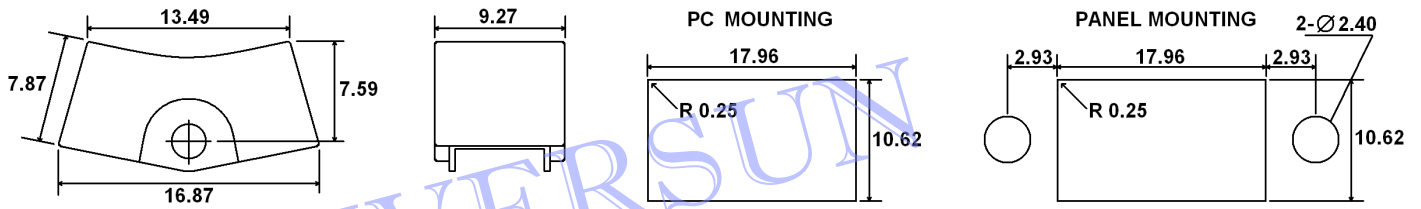
 DPDT 	Function	Toggle Position					
							
	1	ON	NONE	ON			
	2	ON	NONE	(ON)			
	3	ON	OFF	ON			
	4	(ON)	OFF	(ON)			
	5	ON	OFF	(ON)			
Terminals	2-3 5-6	---	2-1 5-4				
6	ON	ON	ON				
Terminals	2-3 5-6	2-3 5-4	2-1 5-4				

 3PDT 	Function	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 5-6 8-9	---	2-1 5-4 8-7				

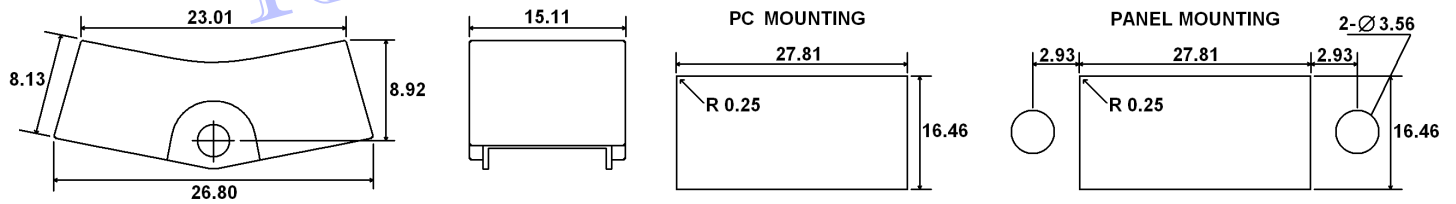
 4PDT 	Function	Toggle Position					
							
	1	ON	NONE	ON			
	2	ON	NONE	(ON)			
	3	ON	OFF	ON			
	4	(ON)	OFF	(ON)			
	5	ON	OFF	(ON)			
	Terminals	2-3 5-6 8-9 11-12	---	2-1 5-4 8-7 11-10			
	6	ON	ON	ON			
	Terminals	2-3 5-6 8-9 11-12	2-3 5-4 8-9 11-10	2-1 5-4 8-7 11-10			

ACTUATOR OPTIONS (PC MOUNT / PANEL MOUNT)

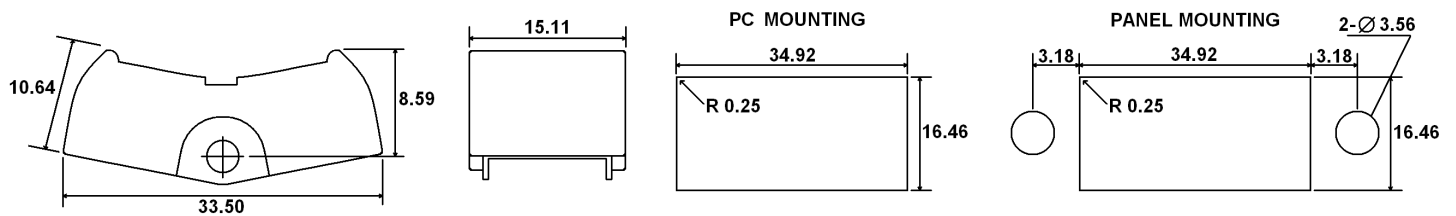
R11P / R11



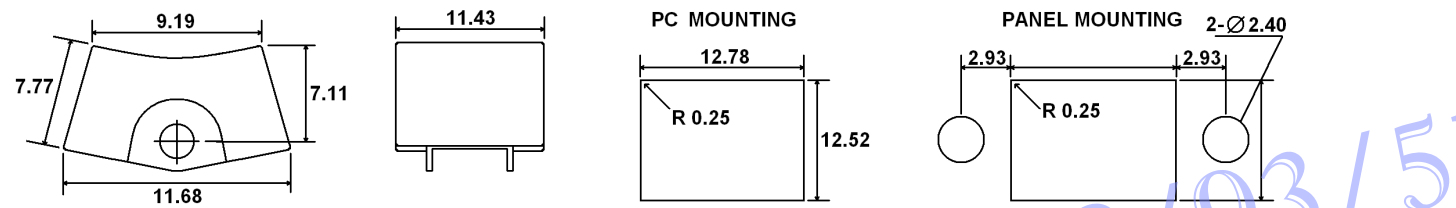
R15P / R15



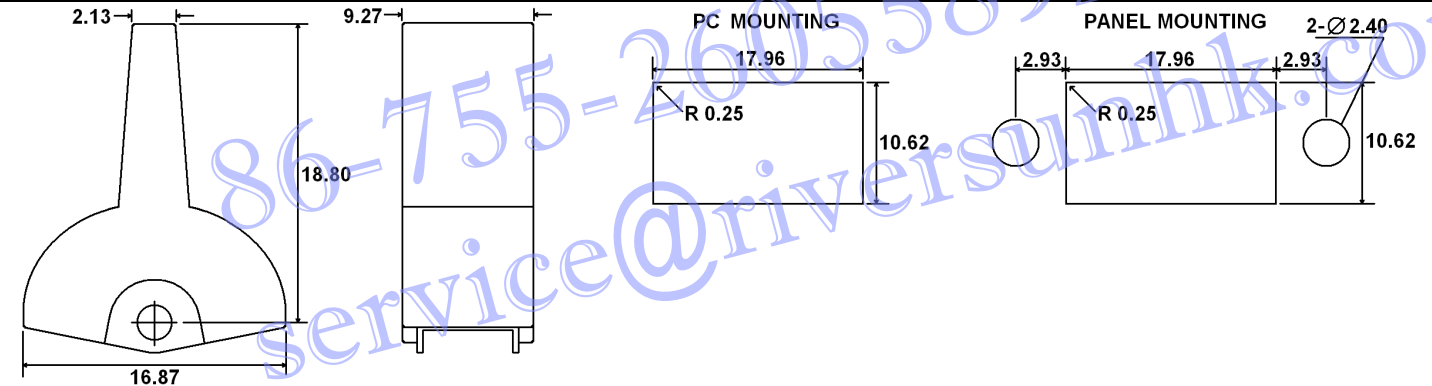
R19P / R19



R21P / R21

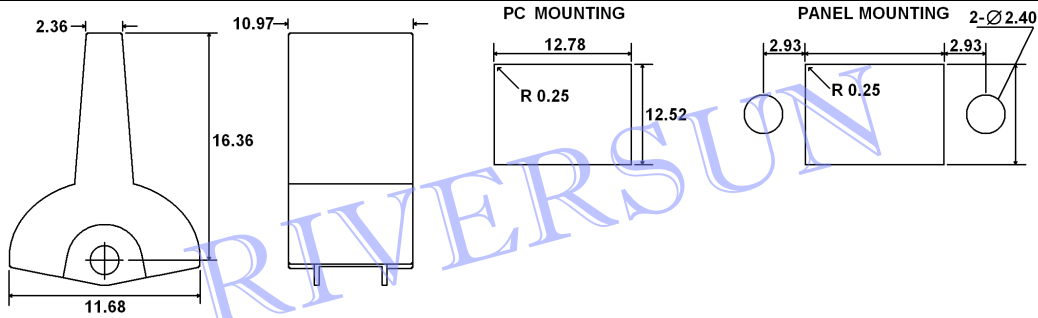


P13P / P13

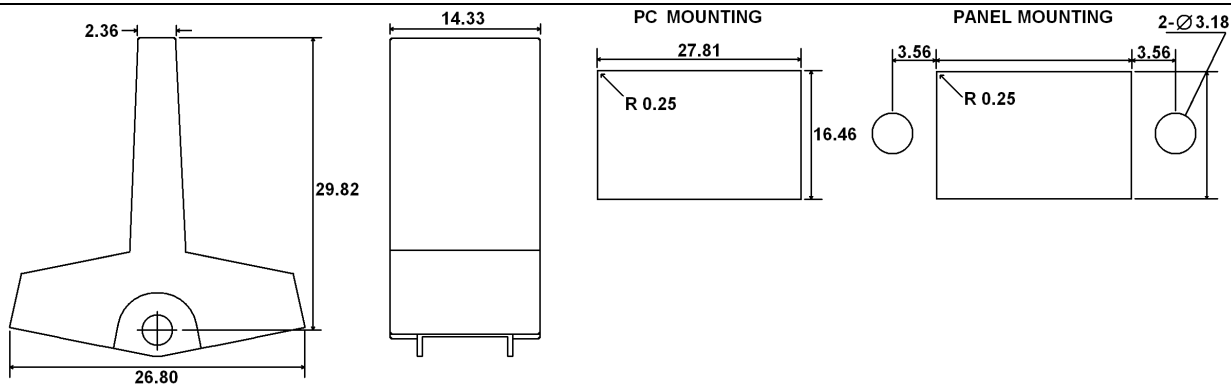


ACTUATOR OPTIONS (PC MOUNT / PANEL MOUNT)

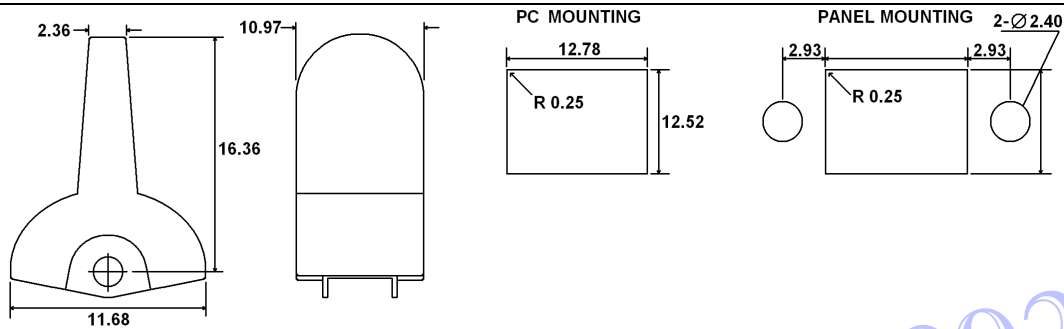
P23P / P23



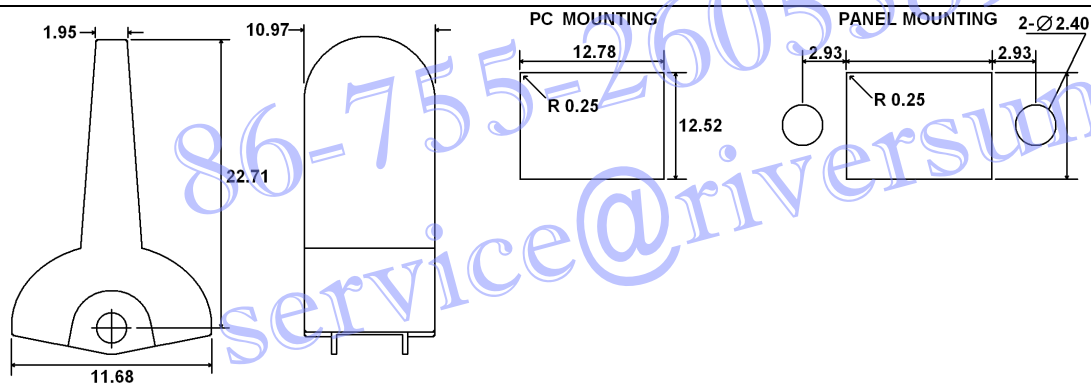
P43P / P43



P47P / P47



P48P / P48

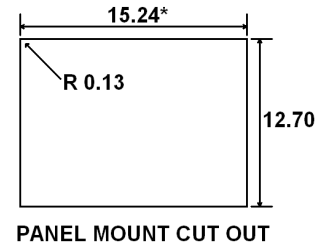
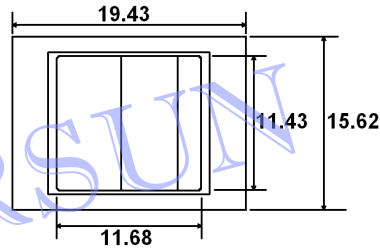
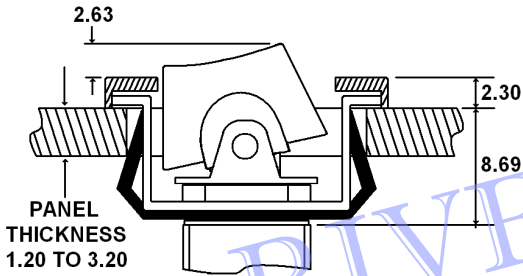


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ACTUATOR OPTIONS (SNAP-IN PANEL MOUNT)

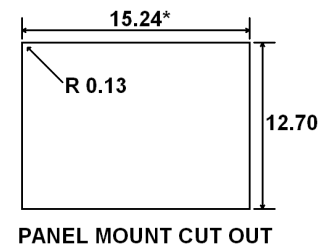
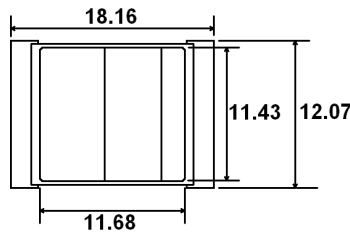
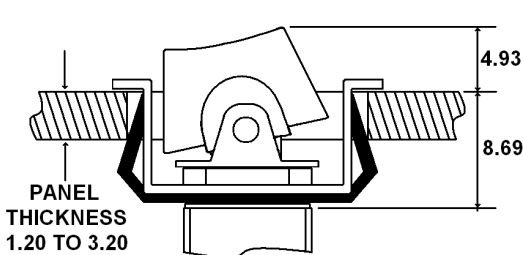
R12

**** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



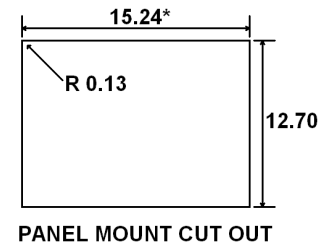
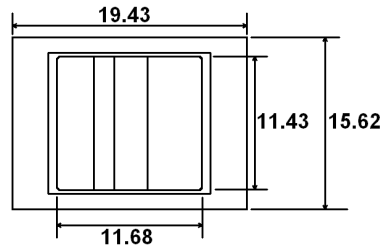
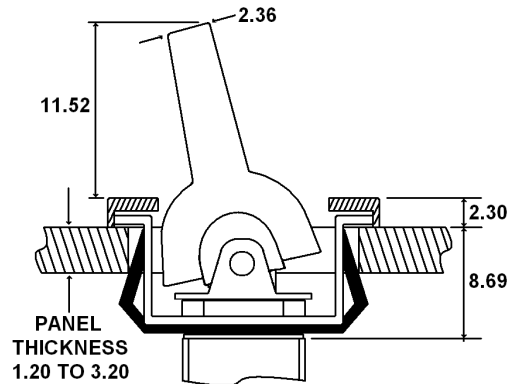
R22

**** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



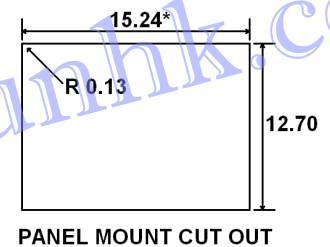
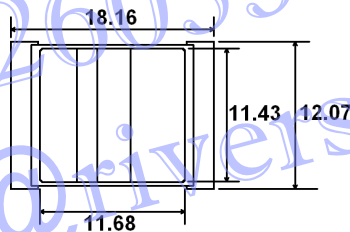
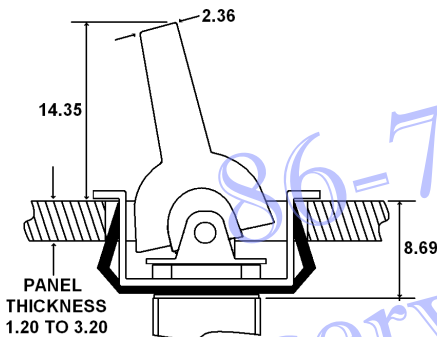
P14

**** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



P24

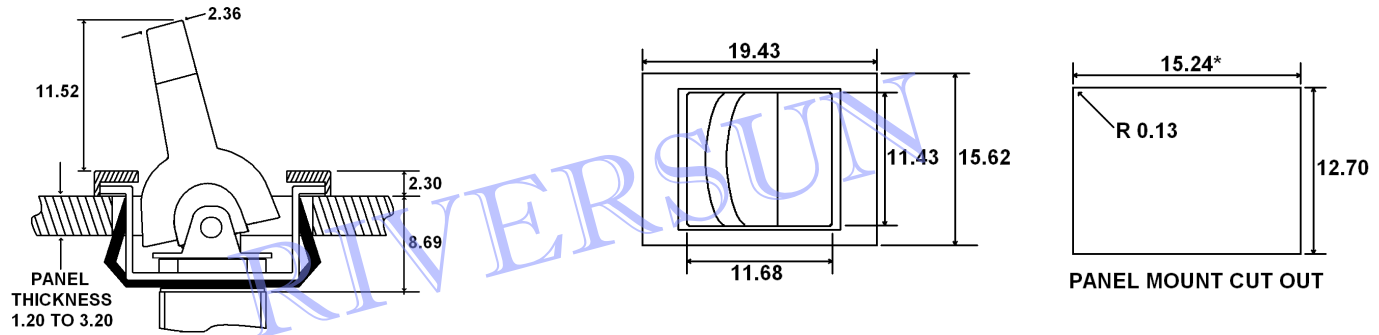
**** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels**



ACTUATOR OPTIONS (SNAP-IN PANEL MOUNT)

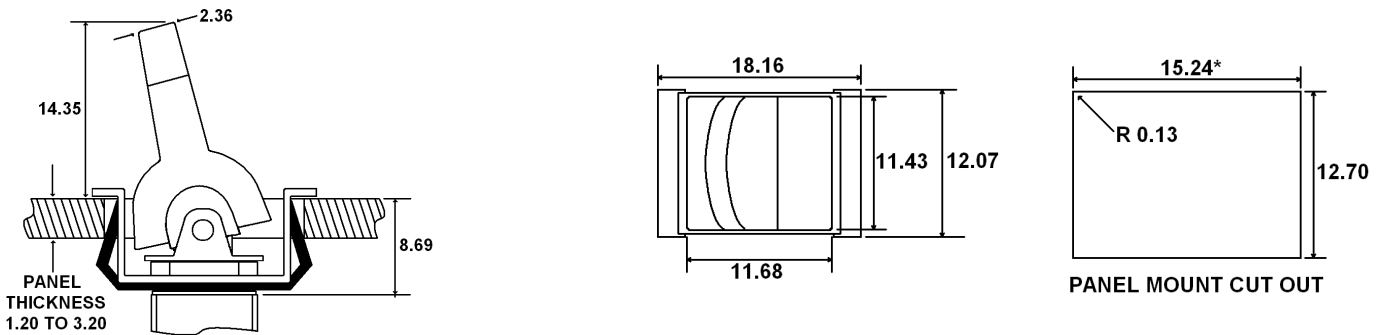
P17

** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



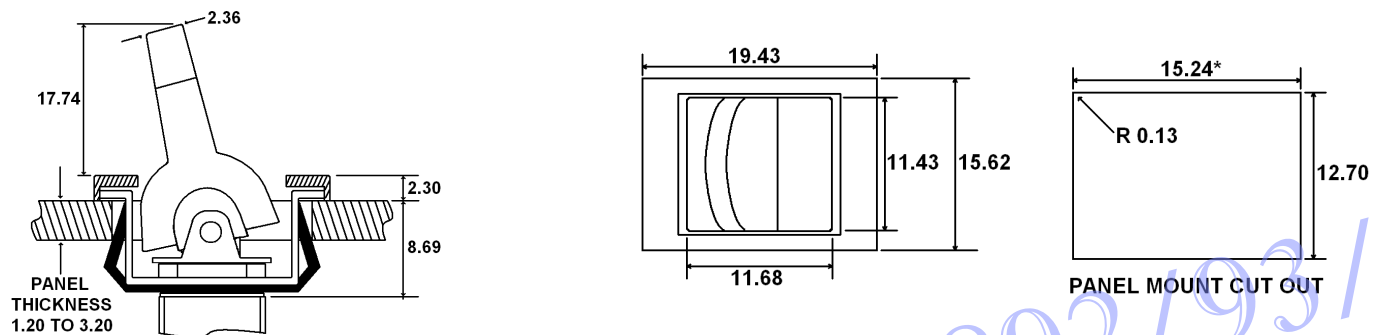
P27

** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



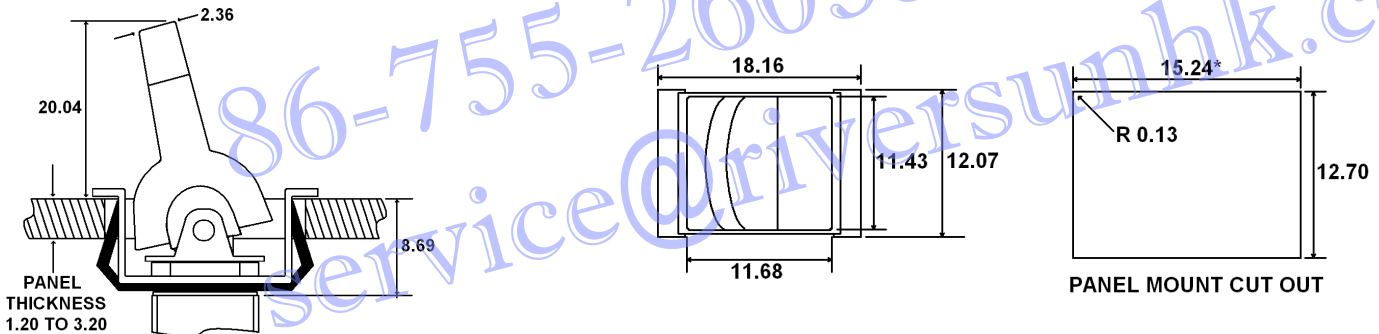
P18

** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



P28

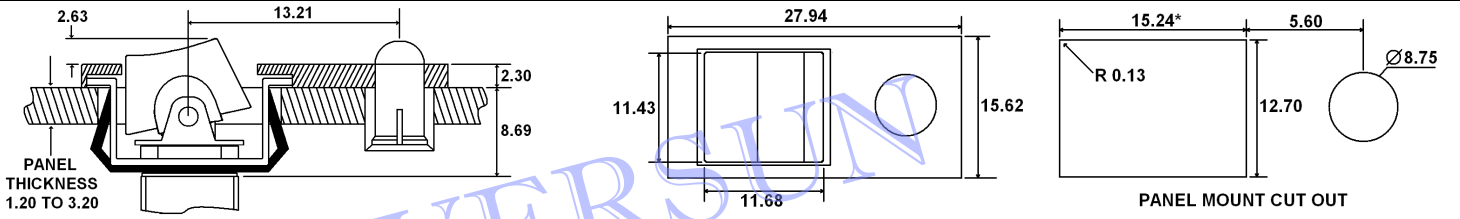
** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



ACTUATOR OPTIONS (SNAP-IN PANEL MOUNT)

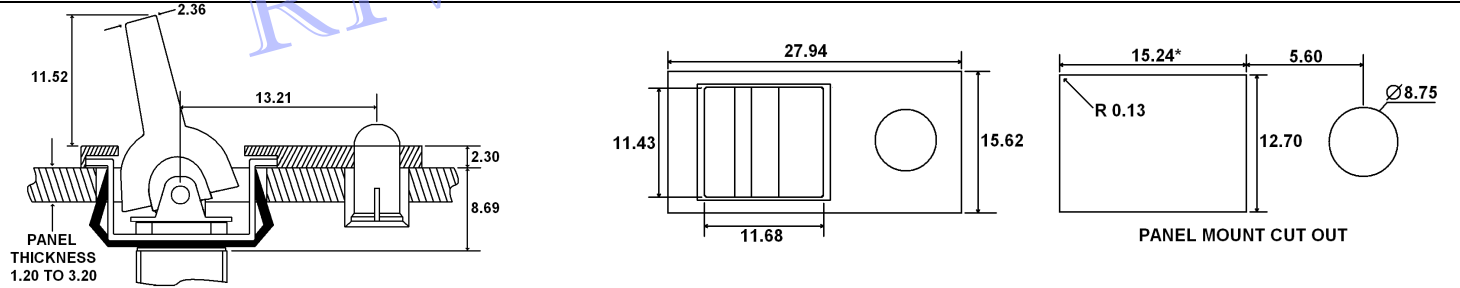
R51R

** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels

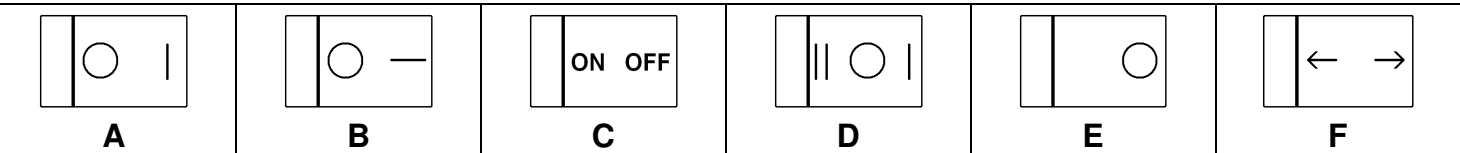


P53R

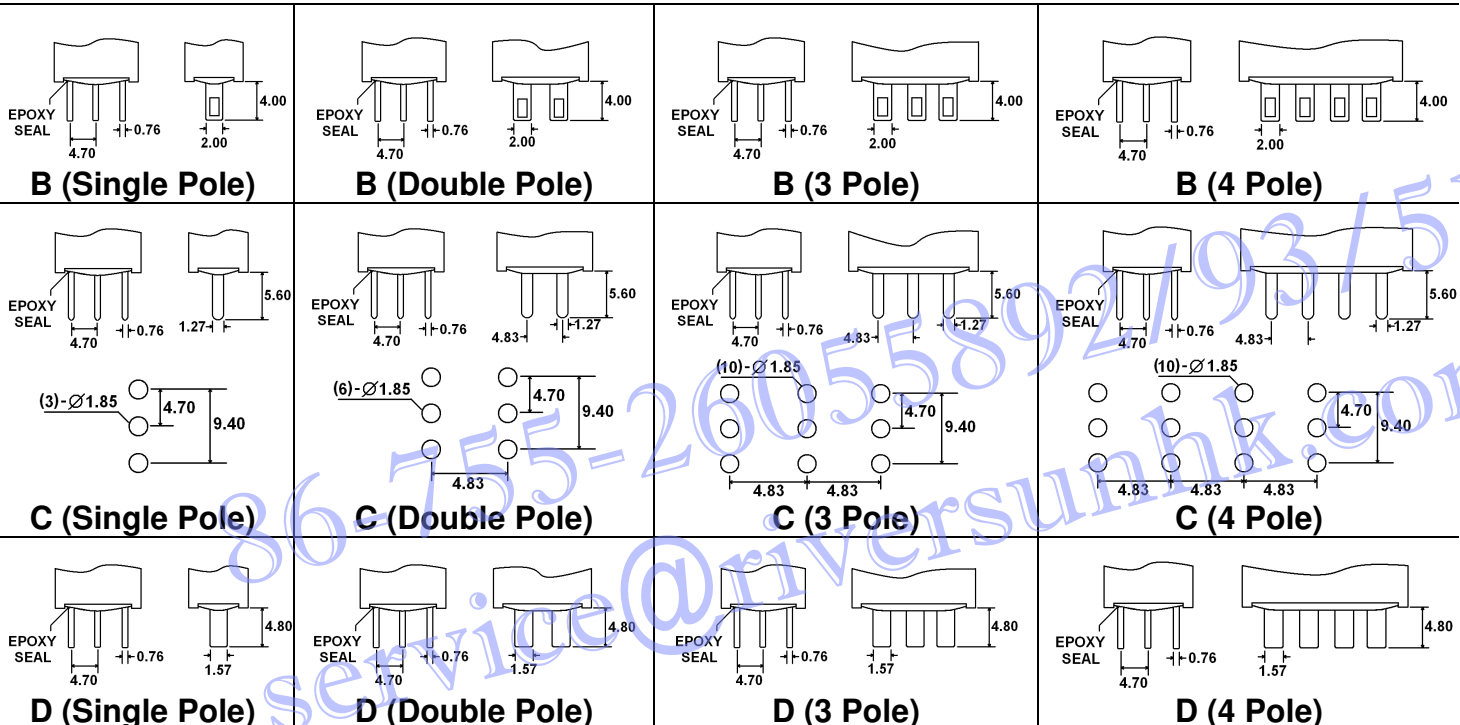
** Increase the length dimension to 15.75/15.88 for 1.50/3.20 thick panels



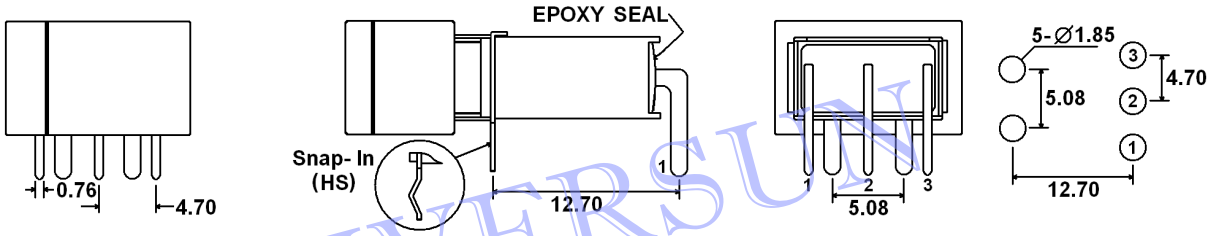
ACTUATOR MARKINGS



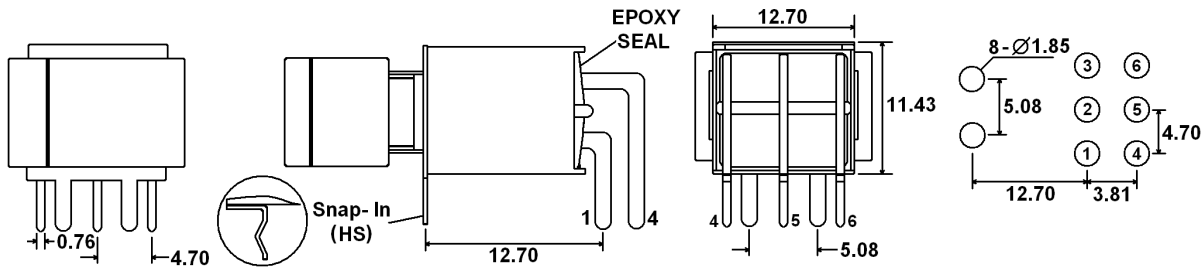
TERMINAL OPTIONS



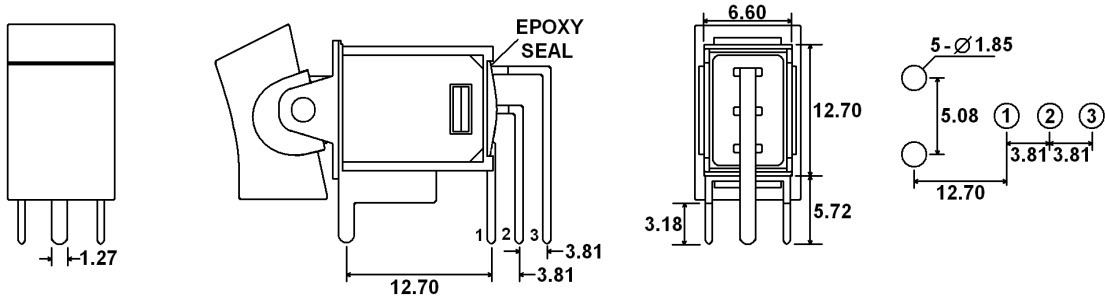
TERMINAL OPTIONS



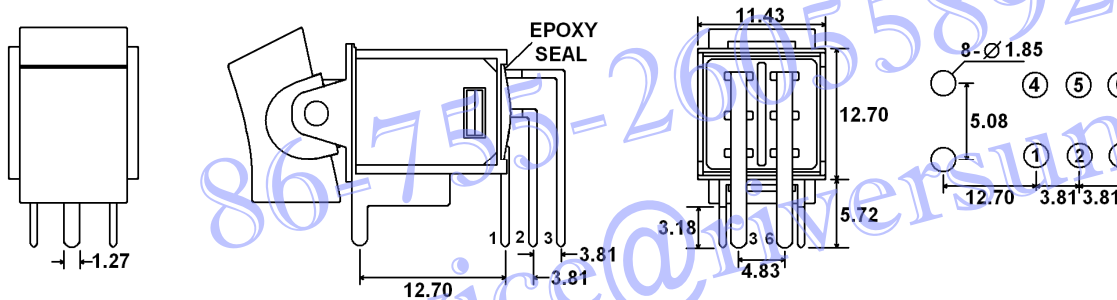
H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Single Pole)



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

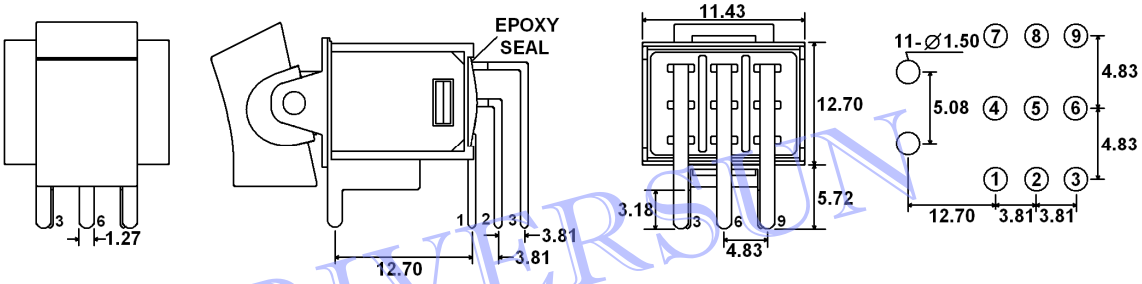


V = Vertical Mount, Right Angle PC Pins (Single Pole)

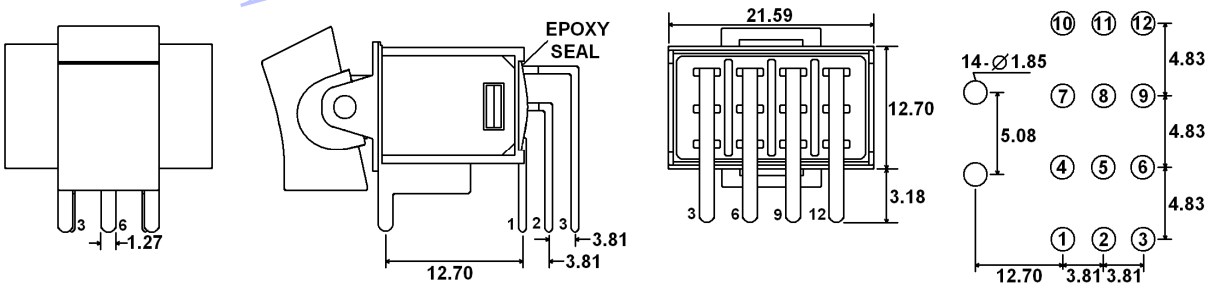


V = Vertical Mount, Right Angle PC Pins (Double Pole)

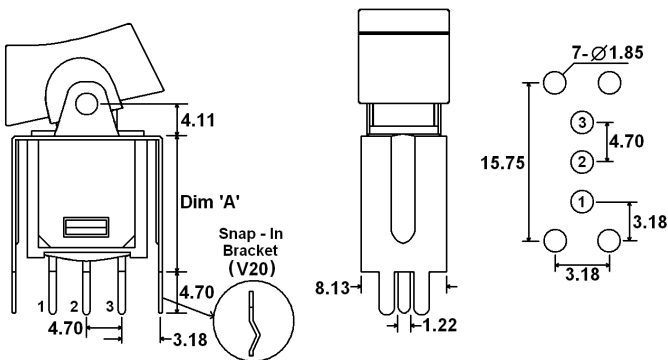
TERMINAL OPTIONS



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

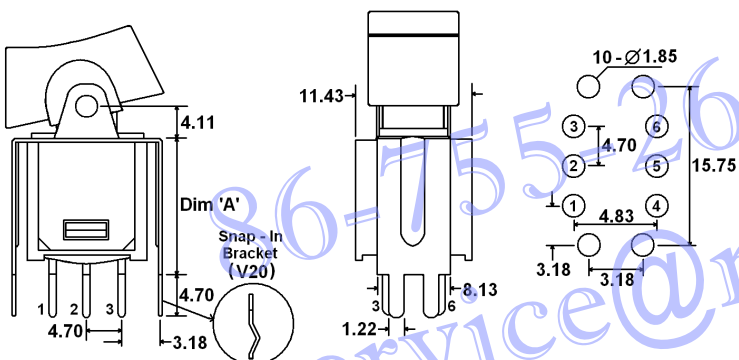


V = Vertical Mount, Right Angle PC Pins (Four Pole)



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

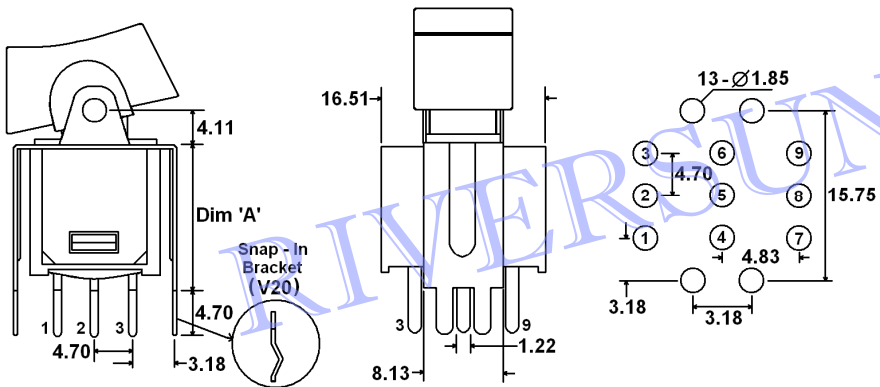
S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)



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

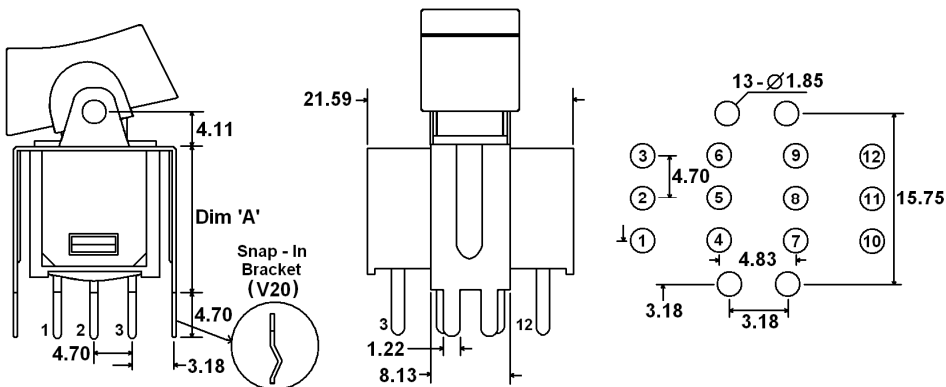
S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)

TERMINAL OPTIONS



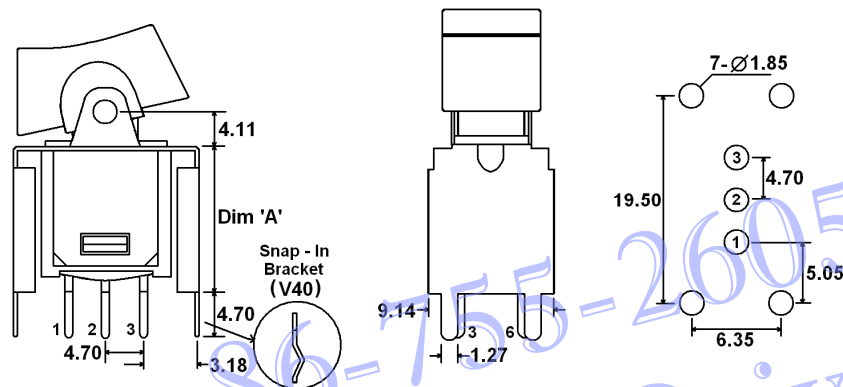
Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

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

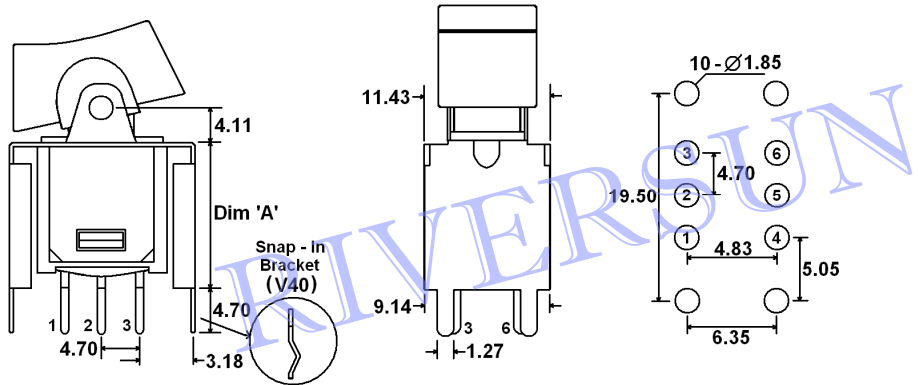


Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)

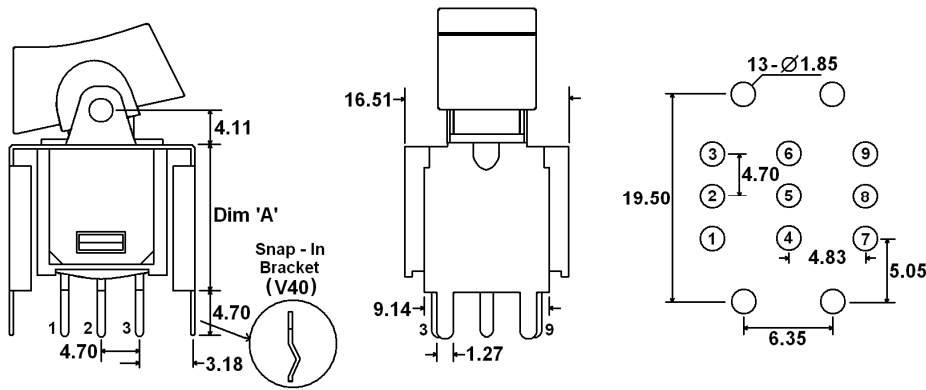
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TERMINAL OPTIONS



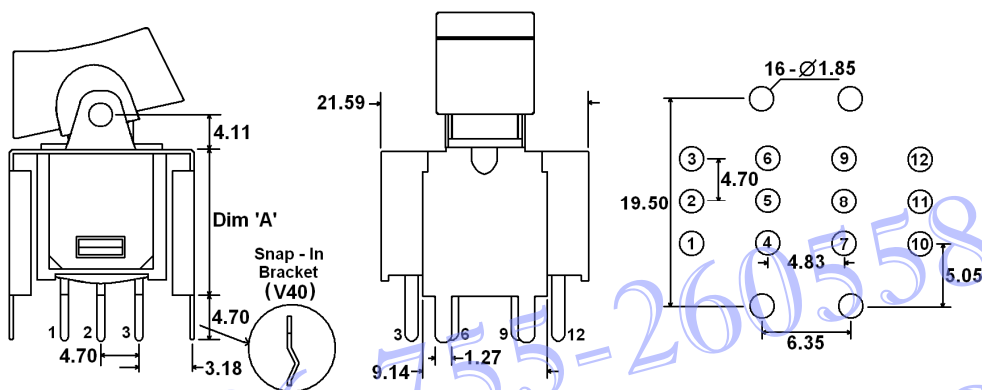
Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)



Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Three Pole)



Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

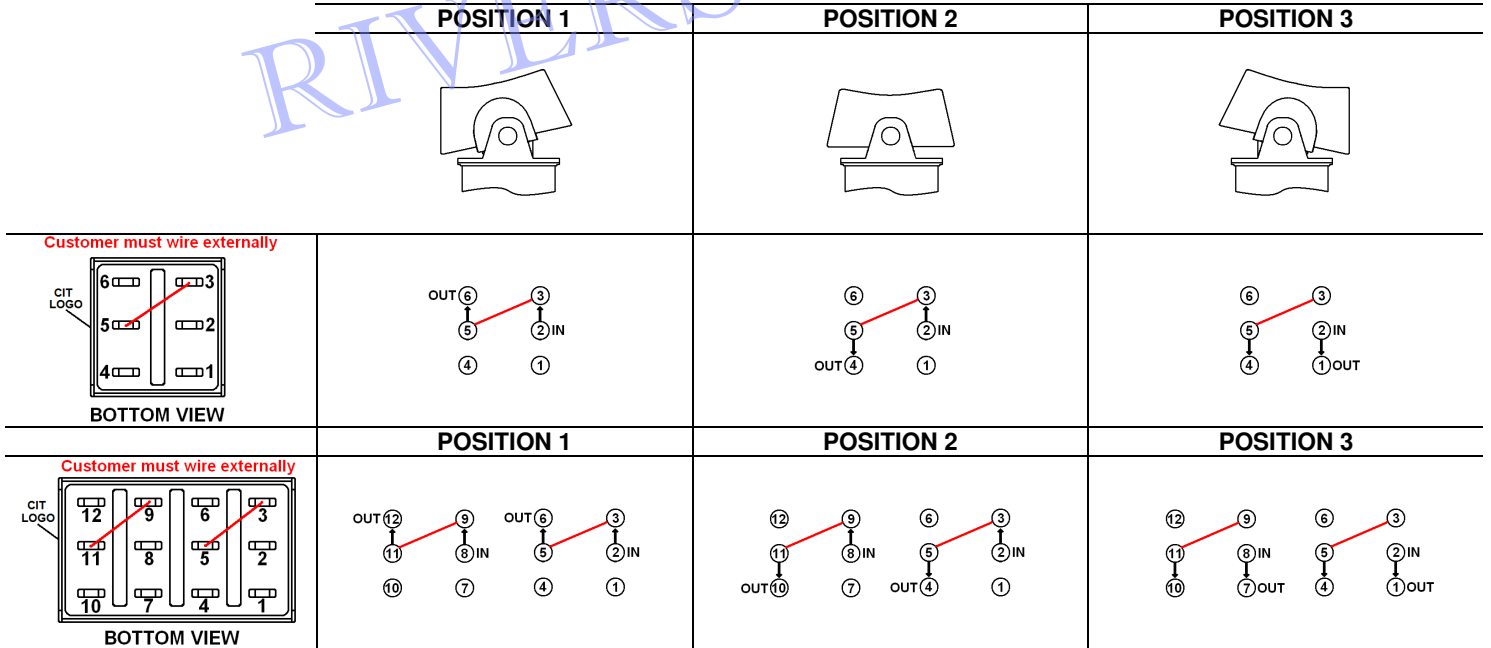
S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Four Pole)

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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



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