

- 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 seven functions available
- Anti-rotation feature on flat toggles .
- High torgue bushing prevents separation from frame during installation
- Wide variety of terminal options



- E222871

SPECIFICATIONS

Electrical Ratings	5A @ 120VAC, 28VDC; 2A @ 250VAC
	See Contact Options
Electrical Life	50,000 cycles typical
Contact Resistance	< 20 m Ω 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	Brass, Chrome Plated
Housing	DAP – Diallyl Phthalate
Cover	Stainless Steel
Bushing	Brass, Nickel Plated
Bracket	Brass, Tin Plated
Contacts	Phosphor Bronze, Silver Plated
Terminals	Brass, Silver Plated





TOGGLE SWITCH ORDERING INFORMATION

TUGGLE 3W			ING INFORM						
Series:	ANT	2	3	Т	E	В	Q	E	
ANT		_	-						
Number of Poles:									
1 = SPDT									
2 = DPDT					-				
3 = 3PDT					X III				
4 = 4PDT									
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 ** Se	e Three V	Nav Wiring S	Section for Details						
Actuator:	100	,							
T = 5.08mm, Std									
S = 10.41mm, Std									
X = 13.97mm, Std									
V = 16.26mm, Std									
W = 21.34mm, Std									
Y = 6.35mm, Flat To	paale **on	lv available v	with AR1/AR2/AN1/A	AN2 bushings					
F = 12.30mm, Flat T									
G = 21.00mm, Flat T									
K = 13.50mm, Flat T									
Z = 12.37mm, Large									
Z1 = 17.45mm, Large									
LK = 14.73mm, Lock									
LK1 = 14.73mm, Loc									
P(color) = 21.34mm,									
PX = 26.30mm, Plas	tic Flat To	agle **only	available with BZ/B	ZR bushings					
Bushing:	tio, i lat i v			Litbuoningo					
E / E1 = 8.89mm, ¹ / ₄ -	40NS / N	on-Threader	Keyway						
F / F1 = 7.10mm, ¹ / ₄ -									
J = 8.89mm, ¹ / ₄ -40NS			, iteyway						
W = 8.89mm, M6P-0		ic) Keyway							
H = 8.00mm, High Te			av						
G = 7.52mm, High T			uy						
AR1 / AR2 = 7.55mn	n Anti-Ro	tation 1/4-40	NS / Non-Threaded	Keyway					
AN1 / AN2 = 7.55mn									
BZ = 11.38mm, 15/3				1 Idi					
BZR = 11.38mm, 15/			ith support insert						
$L = 7.55 \text{mm}, \frac{1}{4} - 40 \text{NS}$									
$K/K1 = 8.00$ mm, $\frac{1}{4}$			Keyway						
**See Actuator Option				is actuators					
Terminals:		or odorning d							
B = Solder Lug, C =	PC Pin	**W	ire wrap terminals av	vailable in various le	enaths, cor	tact factory			
D = Quick Connect									
H = Horizontal Moun	t. Right Ai	nale PC Pin:	HS = Snap-in						
V = Vertical Mount,						<		°C	
S20 or S25 = PC Pin				-in Support Bracket	۰				
S35 or S40 = PC Pin									
Contacts:									
Q = Silver Plated									
R = Gold Plated									
G = Gold over Silver	Plated								
Epoxy Seal: E = Epo									
Actuator Cover:	,	-7	Actuator Cov	er Colors:					
Blank = No Cover			1 = White						
S = for $S, T, X, V, & Y$	W actuato	rs	2 = Black						
F = for F F I & G b	ushings		3 = Bea						
E = for E, F, J, & G b Z = for BZ & BZR bu			3 = Red ** Color choic	es only available w	ith S togale	cover			





SWITCH FUNCTION

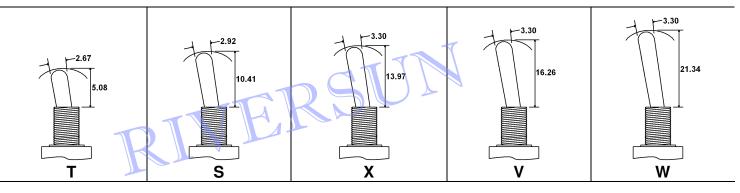
50010111					
		Тос	gle Posi	tion	
1	Function				
	1	ON	NONE	ON	
	2	ON	NONE	(ON)	
	3	ON	OFF	ON	
SPDT	4	(ON)	OFF	(ON) -	
20	5	ON	OFF	(ON)	
10 30	Terminals	2-3	لر ک	2-1	
		—		4 1 a sa	
			gle Posi		
S.	Function				
	1	ON	NONE	ON	
	2	ON	NONE	(ON)	
	3	ON	OFF	ON	
	4	(ON)	OFF	(ON)	
	5	ON	OFF	(ON)	
DPDT	Terminals	2-3 5-6		2-1 5-4	
20 50	6	ON	ON	ON	
² 10 ³ 30 ⁴ 0 ⁶	Terminals	2-3 5-6	2-3 5-4	2-1 5-4	
		Too	gle Posi	tion	
	Function				
	Function				
	- 1	ON	NONE	ON	
	1 2	ON	NONE	(ON)	
and the second s	3	ON	OFF	ON	
3PDT	4	(ON)	OFF	(ON)	
2 5	5	ON	OFF	(ON)	
10 30 40 60		2-3		2-1	
80	Terminals	5-6		5-4	
70/ 90		8-9		8-7	
		Too	gle Posi	tion	
9	Function				
	T unction				
	1	ON	NONE	ON	$\sim (1550)^{-1}$
	2	ON	NONE		1 - C(1)
man and a start of the start of	3	ON	OFF	ON	8.89 3.94
	4	(ON)	OFF	(ON)	
	5	ON	OFF	(ON)	
		2-3 5-6		2-1 5-4	
4PDT	Terminals	8-9		8-7	
		11-12	0	11-10	
20 50 	6	ON 2-3	ON 2-3	ON 2-1	
10 30 ¹ 40 60 80 110	Termin	5-6	2-3 5-4	5-4	
70 90100 120	Terminals	8-9	8-9	8-7	
10, 90100, 120		11-12	11-10	11-10	



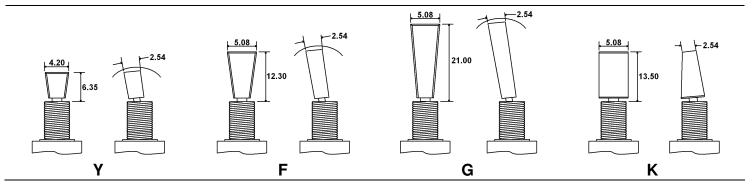


ACTUATOR OPTIONS

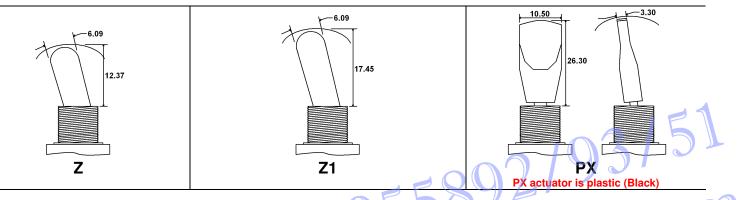
** Actuator lengths shown with E bushing, subtract 1.78mm for F/F1 bushing, subtract 0.51mm for M bushing



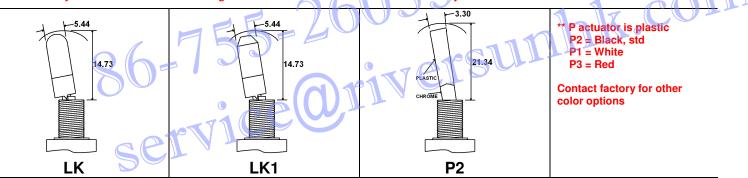
** Only available with AR1/AR2 & AN1/AN2 bushings.



** Only available with BZ & BZR bushings.

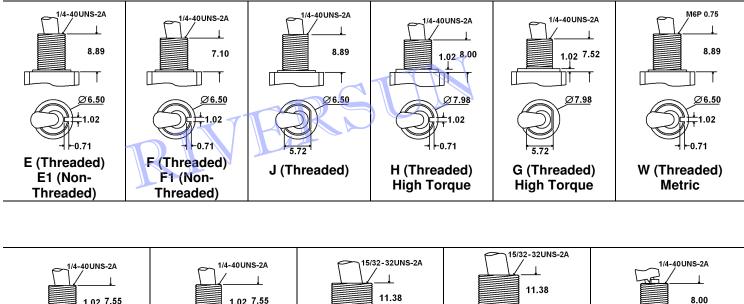


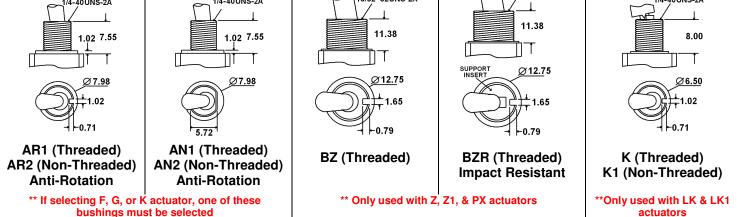
** LK & LK1 only available with K & K1 bushings. LK & LK1 are not available with momentary functions



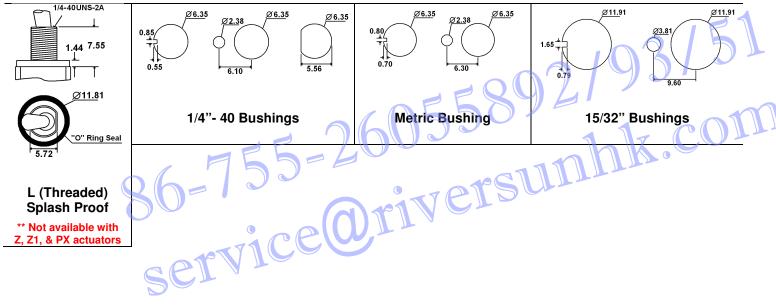


BUSHING OPTIONS



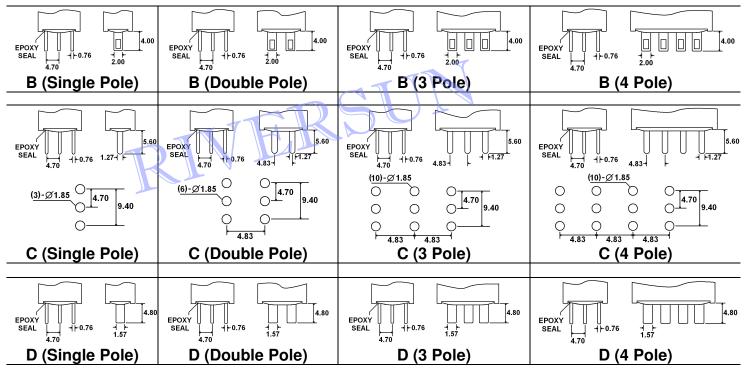


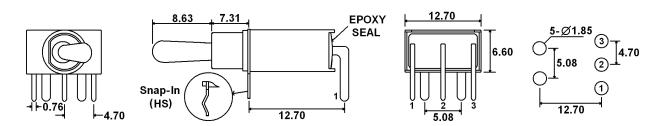
PANEL MOUNTING



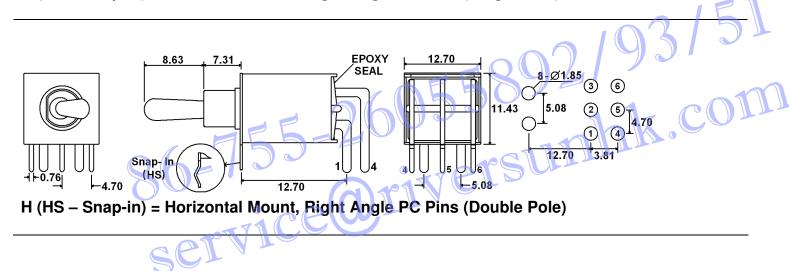




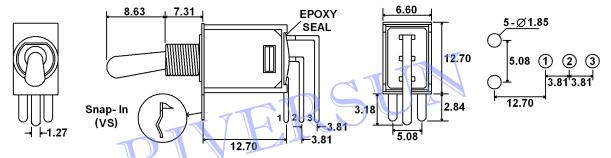




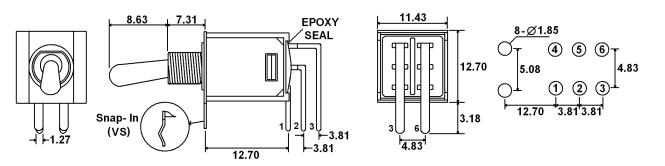
H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Single Pole)



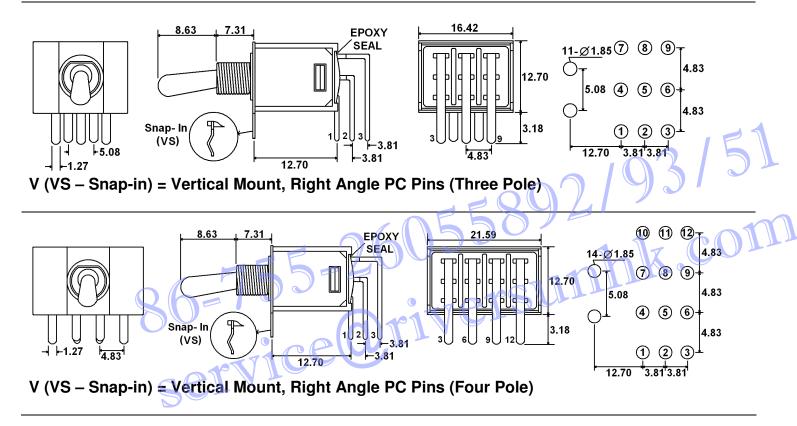




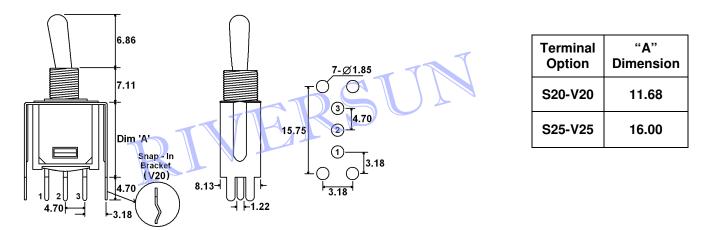
V (VS – Snap-in) = Vertical Mount, Right Angle PC Pins (Single Pole)



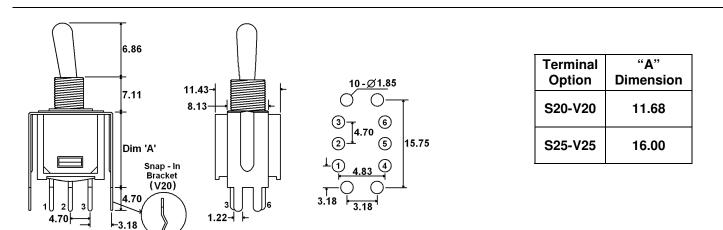
V (VS – Snap-in) = Vertical Mount, Right Angle PC Pins (Double Pole)



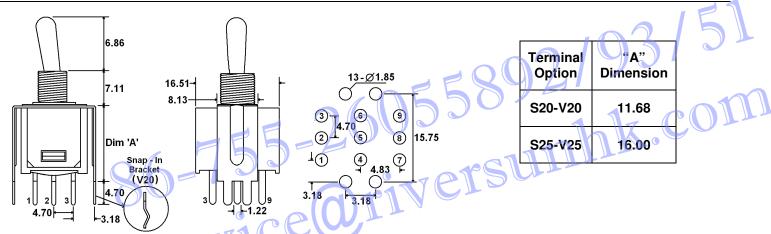




S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)



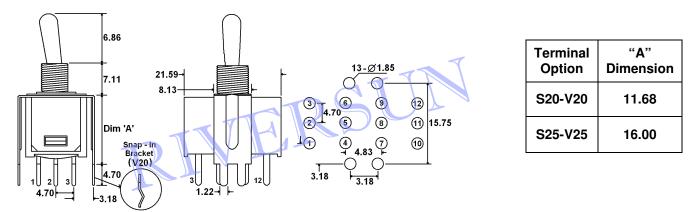
S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)



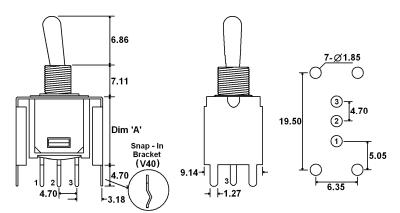
S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Three Pole)





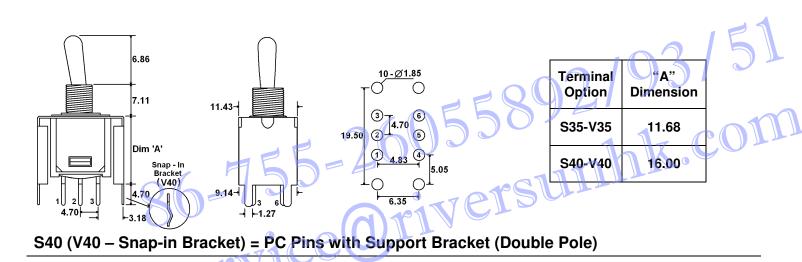


S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Four Pole)



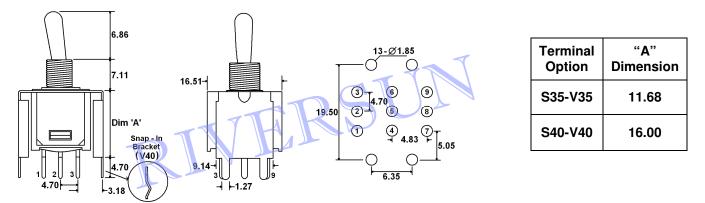
Terminal Option	"A" Dimension
S35-V35	11.68
S40-V40	16.00

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

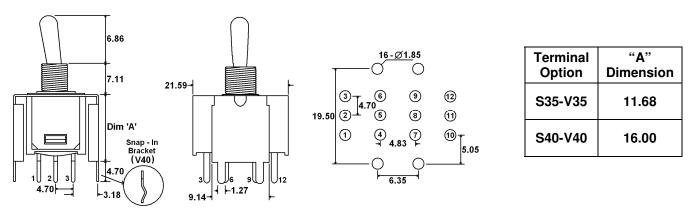








S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Three Pole)



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

CONTACT OPTIONS

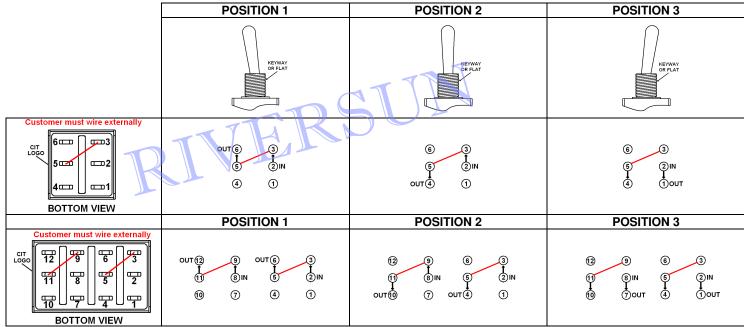
Designator	Contact Material	Terminal Material	Electrical Ratings
Q	Silver Plating	Silver Plating	5A @ 120VAC, 28VDC; 2A @ 250VAC 🚬 🗾
R	Gold over Nickel Plating	Gold over Nickel Plating	.4 VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plating	.4 VA max @ 20VAC or VDC max or
			5A @ 120VAC, 28VDC; 2A @ 250VAC

CAP OPTIONS 15/32-32 UNS 10 UN 10.00 24.00 10.00 Ø<u>3.60</u> **1**3.50 ______**3.50** 20.20 12.00 **RUBBER TOGGLE COVER** SEALED BOOT SEALED BOOT S_ Е Ζ ** For use with E, F, J, & G bushings only. For use with S, T, X, V, & W actuators ** For use with BZ & BZR bushings only. Black 1 = White, 2 = Black, 3 = Red Black color standard. color standard.





THREE WAY WIRING DIAGRAM



HARDWARE **Two hex nuts, one lock washer, & one locking ring supplied standard with threaded bushings

