

- 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 torque bushing prevents separation from frame during installation
- Wide variety of terminal options



cRU 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

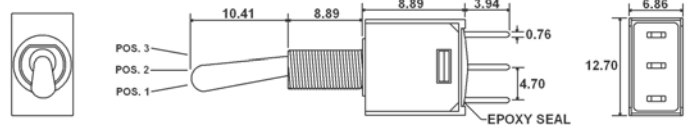
Actuator	Brass, Chrome Plated
Housing	DAP – Diallyl Phthalate
Cover	Stainless Steel
Bushing	Brass, Nickel Plated
Bracket	Brass, Tin Plated
Contacts	Phosphor Bronze, Silver Plated
Terminals	Brass, Silver Plated





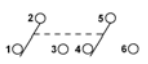
TOGGLE SWITCH ORDERING INFORMATION

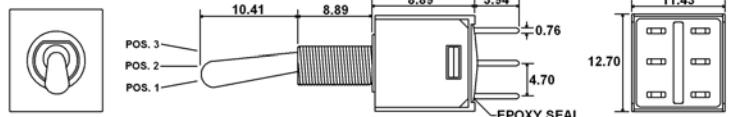
Series:	ANT	2	3	T	M	B	Q	E
Number of Poles:								
1 = SPDT								
2 = DPDT								
3 = 3PDT								
4 = 4PDT								
Switch Function:								
1 = ON-NONE-ON								
2 = ON-NONE-(ON)								
3 = ON-OFF-ON								
4 = (ON)-OFF-(ON)								
5 = ON-OFF-(ON)								
6 = ON-ON-ON ** See Three Way Wiring Section for Details								
Actuator:								
T = 5.08mm, Std								
S = 10.41mm, Std								
X = 13.97mm, Std								
V = 16.26mm, Std								
W = 21.34mm, Std								
F = 12.30mm, Flat Toggle **only available with AR1/AR2/AN1/AN2 bushings								
G = 21.00mm, Flat Toggle **only available with AR1/AR2/AN1/AN2 bushings								
K = 13.50mm, Flat Toggle **only available with AR1/AR2/AN1/AN2 bushings								
Z = 12.37mm, Large Toggle **only available with BZ/BZR bushings								
Z1 = 17.45mm, Large Toggle **only available with BZ/BZR bushings								
LK = 14.73mm, Locking Toggle, Round Top **only available with K/K1 bushings								
LK1 = 14.73mm, Locking Toggle, Flat Top **only available with K/K1 bushings								
P(color) = 21.34mm, Plastic **See color choices in Actuator Option section								
PX = 26.30mm, Plastic, Flat Toggle **only available with BZ/BZR bushings								
Bushing:								
E / E1 = 8.89mm, ¼-40NS / Non-Threaded, Keyway								
F / F1 = 7.10mm, ¼-40NS / Non-Threaded, Keyway								
J = 8.89mm, ¼-40NS, Flat								
W = 8.89mm, M6P-0.75 (Metric), Keyway								
H = 8.00mm, High Torque, ¼-40NS, Keyway								
G = 7.52mm, High Torque, ¼-40NS, Flat								
AR1 / AR2 = 7.55mm, Anti-Rotation, ¼-40NS / Non-Threaded, Keyway								
AN1 / AN2 = 7.55mm, Anti-Rotation, ¼-40NS / Non-Threaded, Flat								
BZ = 11.38mm, 15/32 -32NS, Keyway								
BZR = 11.38mm, 15/32 -32NS, Keyway, with support insert								
L = 7.55mm, ¼-40NS, Keyway, Splash proof								
K / K1 = 8.00mm, ¼-40NS / Non-Threaded, Keyway								
**See Actuator Option section for bushing availability with various actuators								
Terminals:								
B = Solder Lug, C = PC Pin								
D = Quick Connect								
H = Horizontal Mount, Right Angle PC Pin; <i>HS = Snap-in</i>								
V = Vertical Mount, Right Angle PC Pin; <i>VS = Snap-in</i>								
S20 = PC Pin with Support Bracket; <i>V20 = Snap-in Support Bracket</i>								
S25 = PC Pin with Support Bracket; <i>V25 = Snap-in Support Bracket</i>								
S40 = PC Pin with Support Bracket; <i>V40 = Snap-in Support Bracket</i>								
Contacts:								
Q = Silver Plated								
R = Gold Plated								
G = Gold over Silver Plated								
Epoxy Seal:								
E = Epoxy Seal								
Actuator Cover:								
Blank = No Cover								
S = for S, T, X, V, & W actuators								
E = for E, F, J, & G bushings								
Z = for BZ & BZR bushings								
Actuator Cover Colors:								
1 = White								
2 = Black								
3 = Red								
** Color choices only available with S toggle cover								





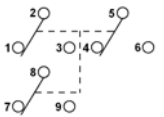
SWITCH FUNCTION

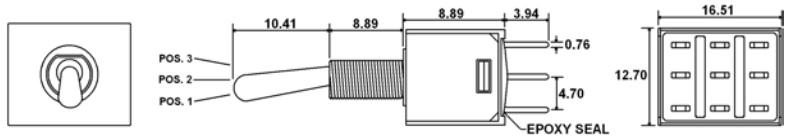
	Function	Toggle Position		
				
	1	ON	NONE	ON
	2	ON	NONE	(ON)
	3	ON	OFF	ON
SPDT	4	(ON)	OFF	(ON)
	5	ON	OFF	(ON)
	Terminals	2-3	---	2-1





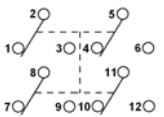


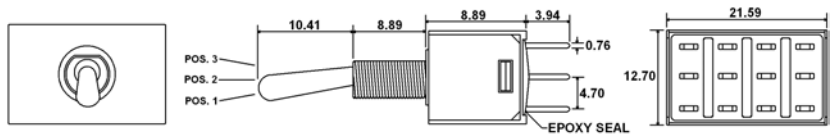
	Function	Toggle Position		
				
	1	ON	NONE	ON
	2	ON	NONE	(ON)
	3	ON	OFF	ON
DPDT	4	(ON)	OFF	(ON)
	5	ON	OFF	(ON)
	Terminals	2-3 5-6	---	2-1 5-4
	6	ON	ON	ON
Terminals	2-3 5-6	2-3 5-4	2-1 5-4	



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

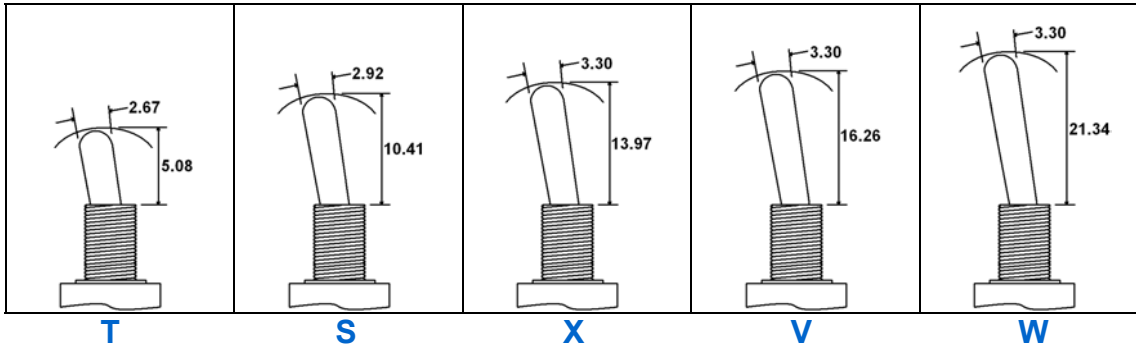


	Function	Toggle Position		
				
	1	ON	NONE	ON
	2	ON	NONE	(ON)
	3	ON	OFF	ON
4PDT	4	(ON)	OFF	(ON)
	5	ON	OFF	(ON)
	Terminals	2-3 5-6 8-9 11-12	---	2-1 5-4 8-7 11-10
	6	ON	ON	ON
Terminals	2-3 5-6 8-9 11-12	2-3 5-4 8-9 11-10	2-1 5-4 8-7 11-10	

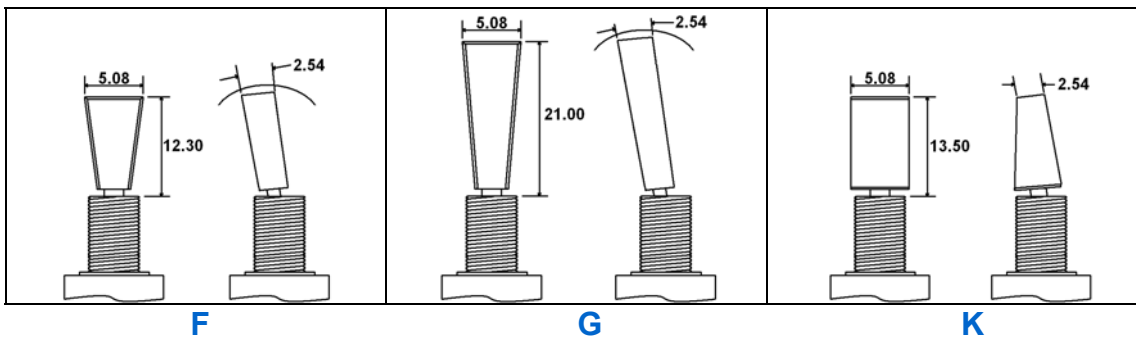


ACTUATOR OPTIONS

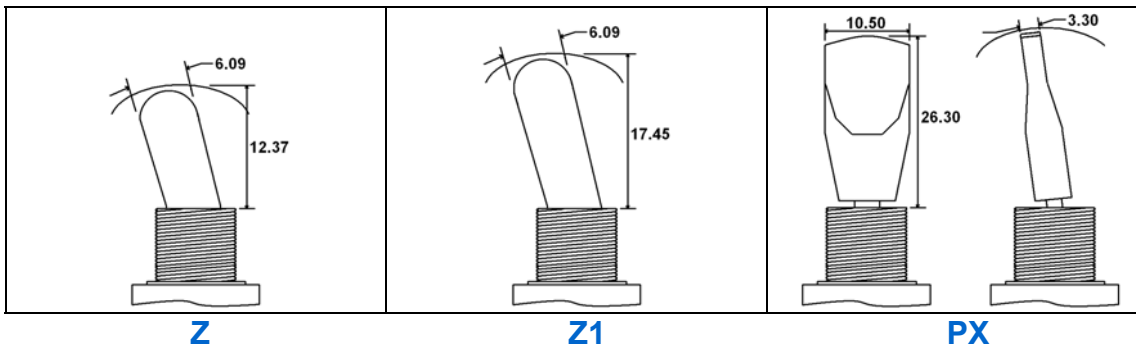
**** Actuator lengths shown with E bushing, subtract 1.78mm for F/F1 bushing, subtract 0.51mm for M bushing**



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

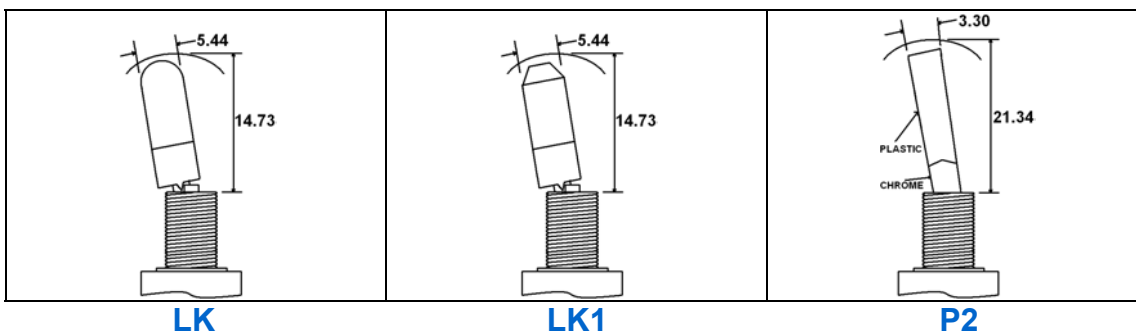


**** Only available with BZ & BZR bushings.**



**** PX actuator is plastic (Black)**

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



**** P actuator is plastic
P2 = Black, std
P1 = White
P3 = Red**

Contact factory for other color options

BUSHING OPTIONS

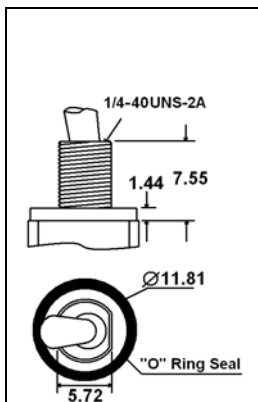
E (Threaded) E1 (Non-Threaded)	F (Threaded) F1 (Non-Threaded)	J (Threaded)	H (Threaded) High Torque	G (Threaded) High Torque	W (Threaded) Metric

AR1 (Threaded) AR2 (Non-Threaded) Anti-Rotation	AN1 (Threaded) AN2 (Non-Threaded) Anti-Rotation	BZ (Threaded)	BZR (Threaded) Impact Resistant	K (Threaded) K1 (Non-Threaded)

** If selecting F, G, or K actuator, one of these bushings must be selected

** Only used with Z, Z1, & PX actuators

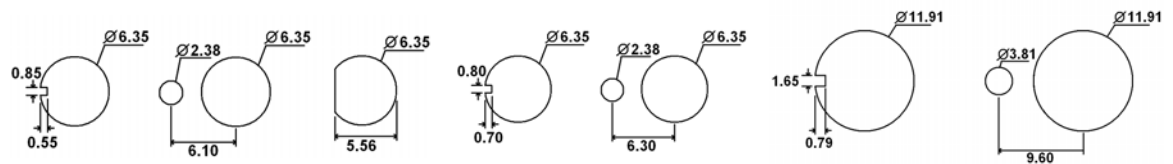
** Only used with LK & LK1 actuators



**L (Threaded)
Splash Proof**

** Not available with Z, Z1, & PX actuators

PANEL MOUNTING

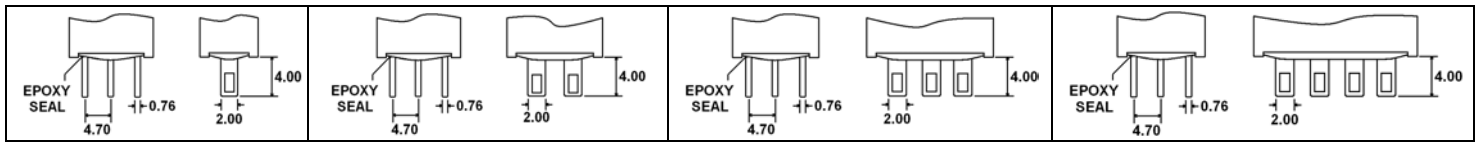


1/4"- 40 Bushings

Metric Bushing

15/32" Bushings

TERMINAL OPTIONS

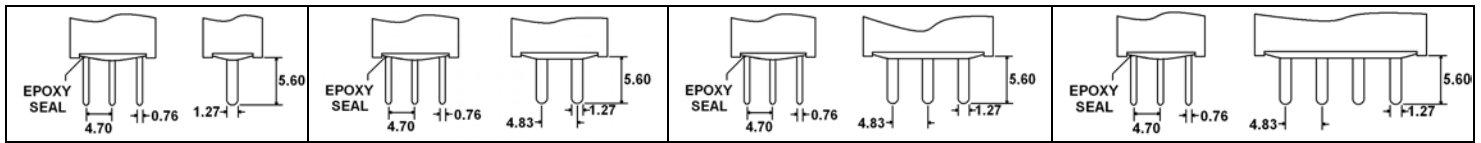


B (Single Pole)

B (Double Pole)

B (3 Pole)

B (4 Pole)

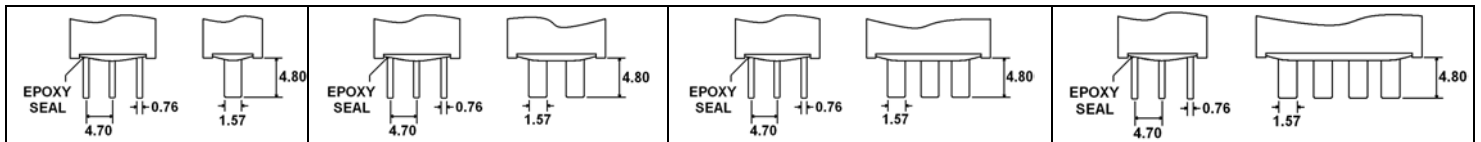


C (Single Pole)

C (Double Pole)

C (3 Pole)

C (4 Pole)

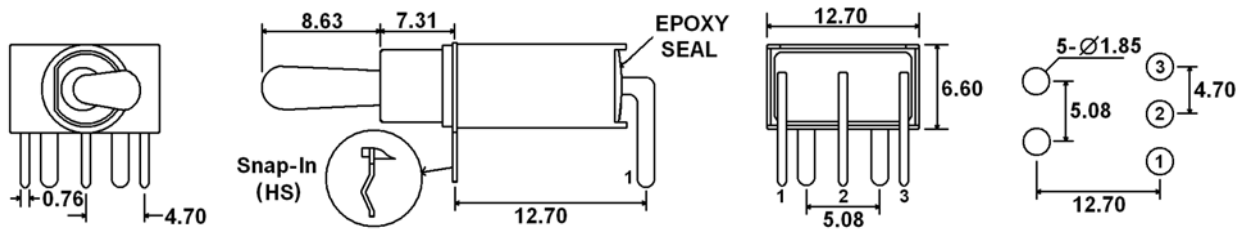


D (Single Pole)

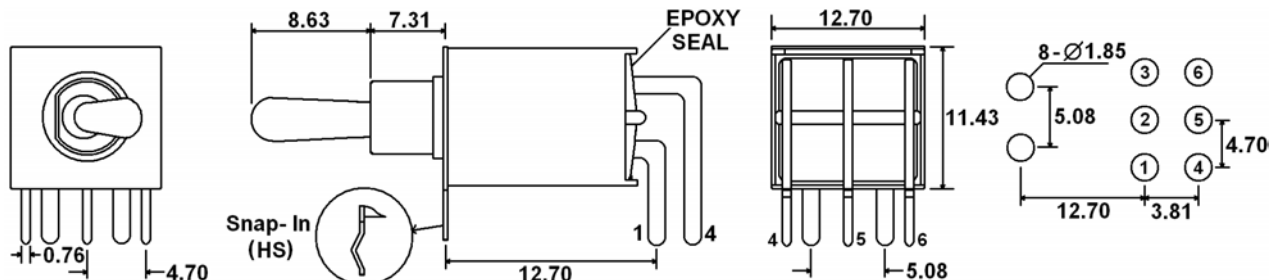
D (Double Pole)

D (3 Pole)

D (4 Pole)

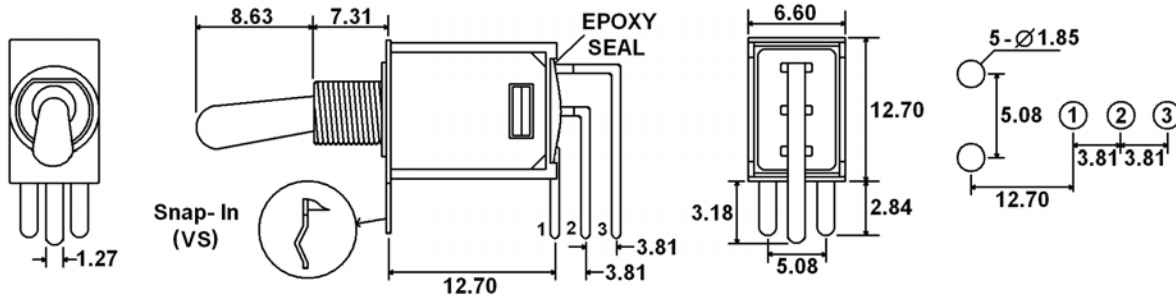


H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Single Pole)

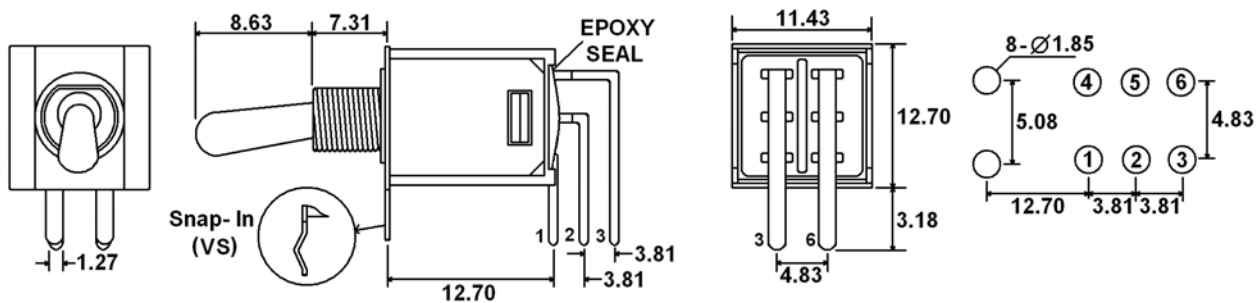


H (HS – Snap-in) = Horizontal Mount, Right Angle PC Pins (Double Pole)

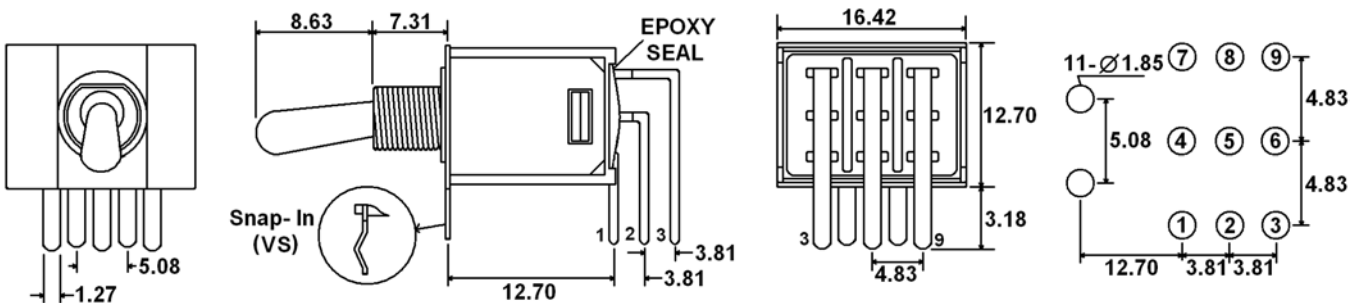
TERMINAL OPTIONS



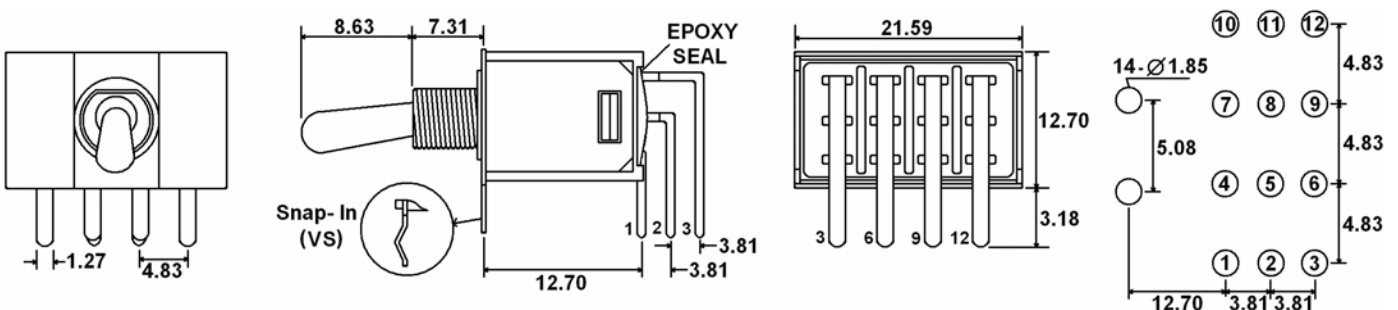
V (VS – Snap-in) = Vertical Mount, Right Angle PC Pins (Single Pole)



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

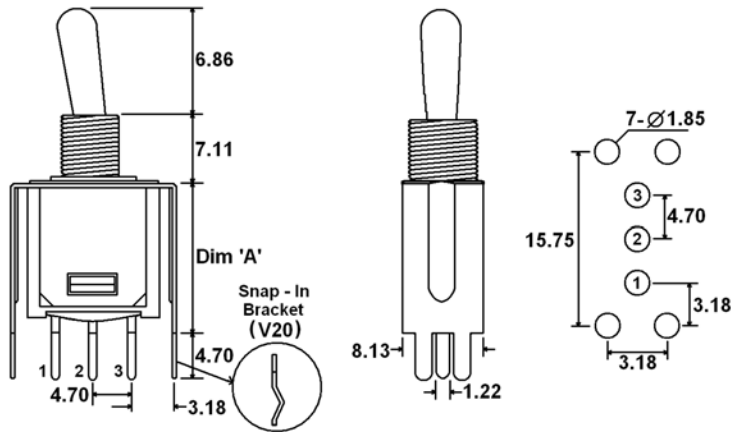


V (VS – Snap-in) = Vertical Mount, Right Angle PC Pins (Three Pole)



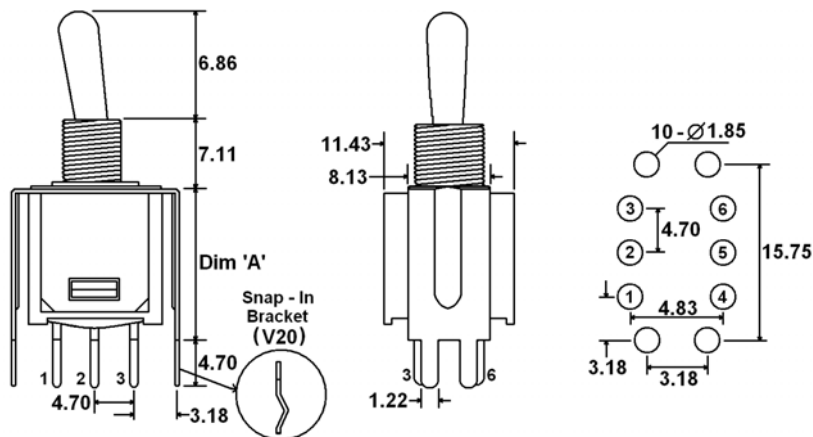
V (VS – Snap-in) = Vertical Mount, Right Angle PC Pins (Four Pole)

TERMINAL OPTIONS



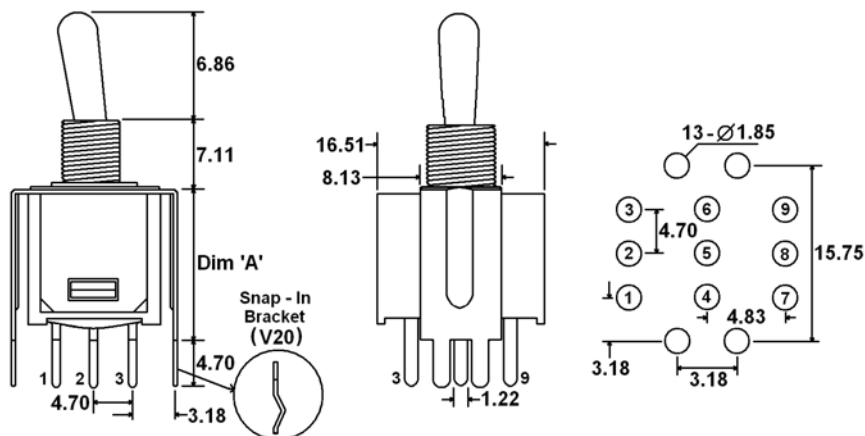
Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

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

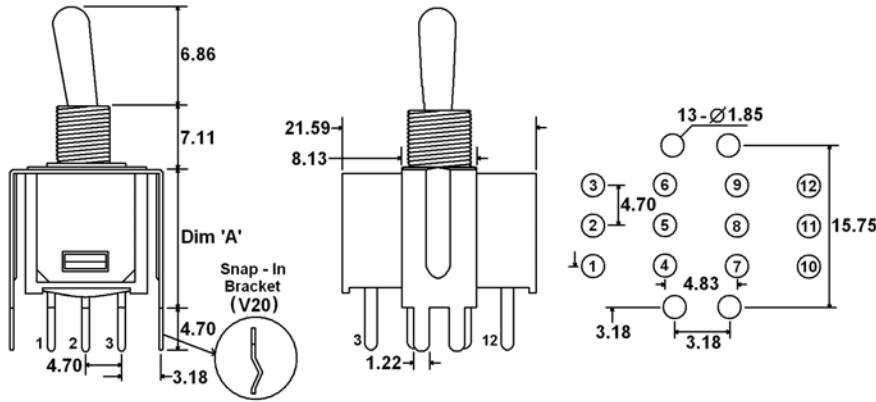
S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)



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

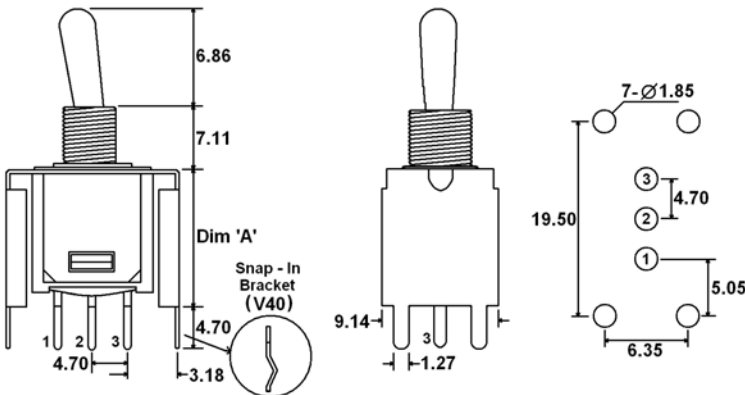
S20/S25 (V20/V25 – Snap-in Bracket) = PC Pins with Support Bracket (Three Pole)

TERMINAL OPTIONS



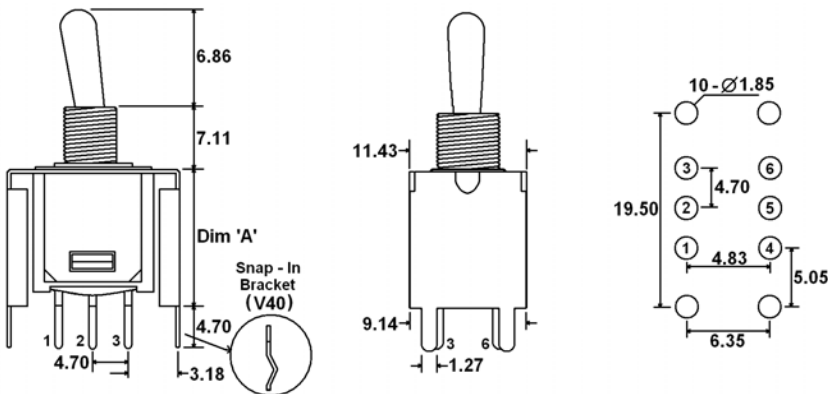
Terminal Option	"A" Dimension
S20-V20	11.68
S25-V25	16.00

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



Terminal Option	"A" Dimension
S40-V40	16.00

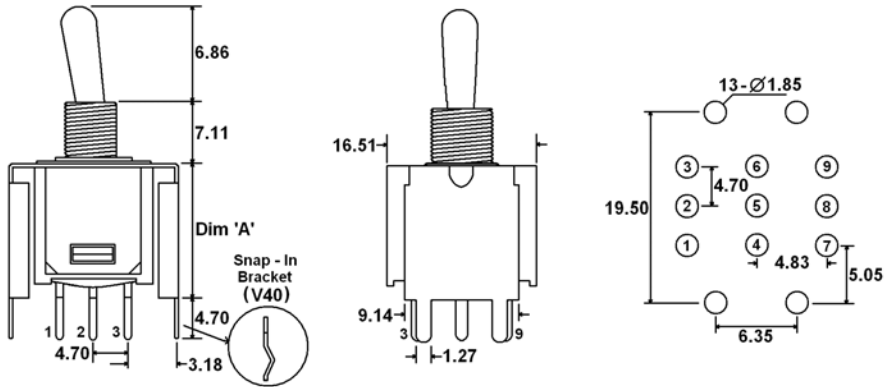
S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Single Pole)



Terminal Option	"A" Dimension
S40-V40	16.00

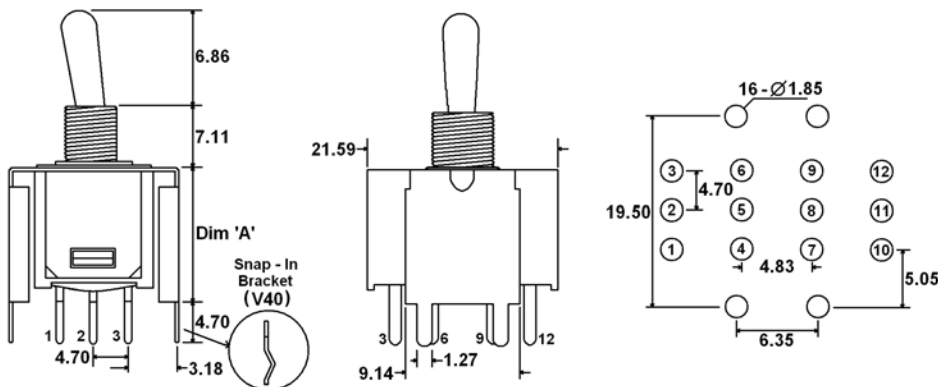
S40 (V40 – Snap-in Bracket) = PC Pins with Support Bracket (Double Pole)

TERMINAL OPTIONS



Terminal Option	"A" Dimension
S40-V40	16.00

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




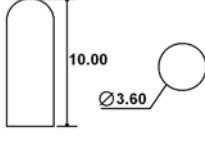

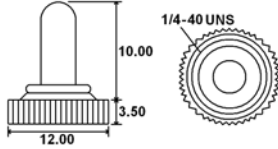

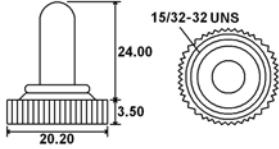
Terminal Option	"A" Dimension
S40-V40	16.00

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 VAC max
G	Gold over Silver Plating	Gold over Silver Plating	.4 VA max @ 20VAC or VAC max or 5A @ 120VAC, 28VDC; 2A @ 250VAC

CAP OPTIONS

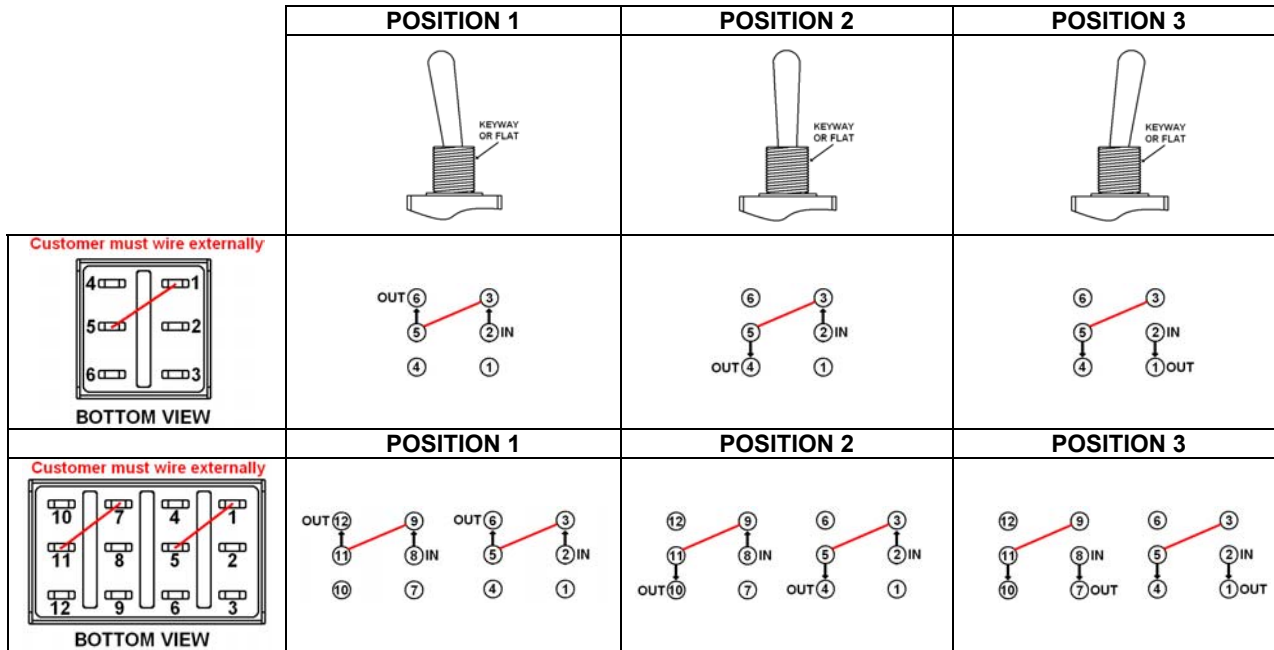
					
RUBBER TOGGLE COVER S		SEALED BOOT E		SEALED BOOT Z	

** For use with S, T, X, V, & W actuators
1 = White, 2 = Black, 3 = Red

** For use with E, F, J, & G bushings only.
Black color standard.

** For use with BZ & BZR bushings only. Black color standard.

THREE WAY WIRING DIAGRAM



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

