

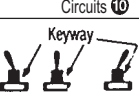
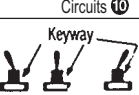
Ordering Table — Standard Toggle Switches

HOW TO ORDER YOUR DESIGN (Bold Face Type indicates items normally in Distributor Stock)

Following the table from left to right, the designer is able to specify the options wanted. The options are described and illustrated on pages 24-31. Refer to page 57 for mounting hardware.

To determine a part number select the options desired and fill in the boxes in the selection guides illustrated below.

Toggle Switch Selection Guide

Toggle Switch Series	Poles and Throw		Circuit		Lever Options		Lever Finish	Bushing Options		Terminal Type		Contact Material		Other																	
Series	No.	Code				Code	Type	Code	Finish	Code	Type	Code	Type	Code	Type	Code															
A	SPDT	1		POS. "C"		Lever Lock K Bushing Only .840 Bat .640 Bat .550 Bat Long Mod Cap Short Mod Cap .200 Bat .840 Flat .450 Flat .250 Flat .410 Bat .468 Large 15 .687 Large 13	K1	Bright Chrome 14	1	Splashproof Lever 3 & Bushing Seal	CW	Right Angle PC 1	A	Gold/Nickel/Brass	B	Epoxy Sealed Terminals 7	P														
	DPDT	2		ON	OFF		ON	21	L0	Stain Chrome	2	Splashproof 3	CX	Vertical PC .100 Spacing	AV	Gold/Nickel/Silver		G	Anti-Rotation												
	3PDT	3		ON	NONE		ON	23	L1	Black 1	3	Lever Seal Only	D	Vertical PC .150 Spacing	AV2	Coin Silver		Q	Anti-Jam												
	4PDT	4		ON	NONE		ON*	26	L2	Black Nylon 8	4	.280 Threaded 2	D9	Printed Circuit Terminals	C	15		M													
																				ON*	OFF	ON*	27	P1	Red Nylon 8	5	.350 Flatted With Shoulder	H3	Right Angle 9 Same Throw	R	
																				ON	OFF	ON*	31	P3	White Nylon 8	6	.350 Keyway With Shoulder	K	Right Angle 9 Opposite Throw	R2	
																				ON	ON	ON	32	S			Locking K1 Lever Only	T	PC & Support 6	V30	
																				ON	ON	ON*	33	T1			15/32 Dia. 12	TW	PC & Support 6	V40	
																				NONE	ON	ON*	34 5				Splashproof Lever 12 15/32 & Panel Seal	TX	PC & Support 6	V60	
																				ON*	ON	ON*	35				15/32 Splashproof 12 Lever Seal Only	Y	PC & Support 6	V70	
																				NONE	ON	ON	53 5				.350 Threaded	Y5	.750 Wire Wrap	W	
																											.437 Threaded (With P3 Only)		.964 Wire Wrap	W1	
																											.350 Smooth	Y9	.425 Wire Wrap	W3	
												1.062 Wire Wrap	W4																		
												Solder Lugs	Z																		
										Quick Connect	Z3																				

*Momentary Contact

1 Available on S, M and P3 only.

2 Add .070 to lever length when using these bushings.

3 Available with S, M, L0, L1, L2, L3, L4 lever options. Consult factory for availability.

4 Standard on P1, P3, P4 and K1 lever options. Available on all other levers except T & T1.

5 These circuits are NOT available with the following 3 and 4 pole options: A, AV, AV2, V30, V40, V60 and V70.

6 1 and 2 pole only.

7 Epoxy seal standard on all terminal options.

EXAMPLES:

A232L01YW1B = DPDT toggle switch with an ON-ON-ON circuit, .840" long lever in a bright chrome finish, .350 threaded bushing, .964" long wire wrap terminals, gold/brass contacts and epoxy sealed terminals.

SPECIFICATIONS:

Contact Ratings —

Letter codes G and Q — 6 amp at 125 VAC, 3 amp @ 250 VAC (U.L. recognized, CSA certified) or 6 amp at 28 VDC resistive.

Letter codes B and G — 0.5. volt-amp (VA) maximum @ 28 V maximum (AC or DC).

Life Under Load — 60,000 make-and-break cycles — resistive load only.

Initial Contact Resistance — 10 milliohms maximum 3 VDC, 100 ma for both silver and gold plated contacts.

Insulation Resistance — 1 & 2 pole —1,000 megohms, min.
3 & 4 pole —1,000 megohms, min.

Dielectric Strength — 1,000 volts rms at sea level.

Bushing Strength — 12 pound-inches without physical damage to switch.

Weight (including hardware) — SP 0.19 oz.; DP 0.23 oz.; 3-pole 0.28 oz.; 4-pole 0.32 oz.

MATERIALS:

Base (body) — 1- and 2-pole —Diallyl Phthalate (DAP).
3- and 4-pole — high strength phenolic.

Lever (toggle) — Brass, chrome plated.

Flat Lever — Brass, satin chrome finish.

Locking lever cap — Anodized aluminum.

Bushing — Brass, nickel plated.

Clamp (frame) — Stainless steel.

Support brackets — Steel, tin plated.

Switching Contacts and Rockers —

Letter Code B — gold/nickel/brass

Letter Code G — gold/nickel/silver

Letter Code Q — Coin silver

Center Terminal

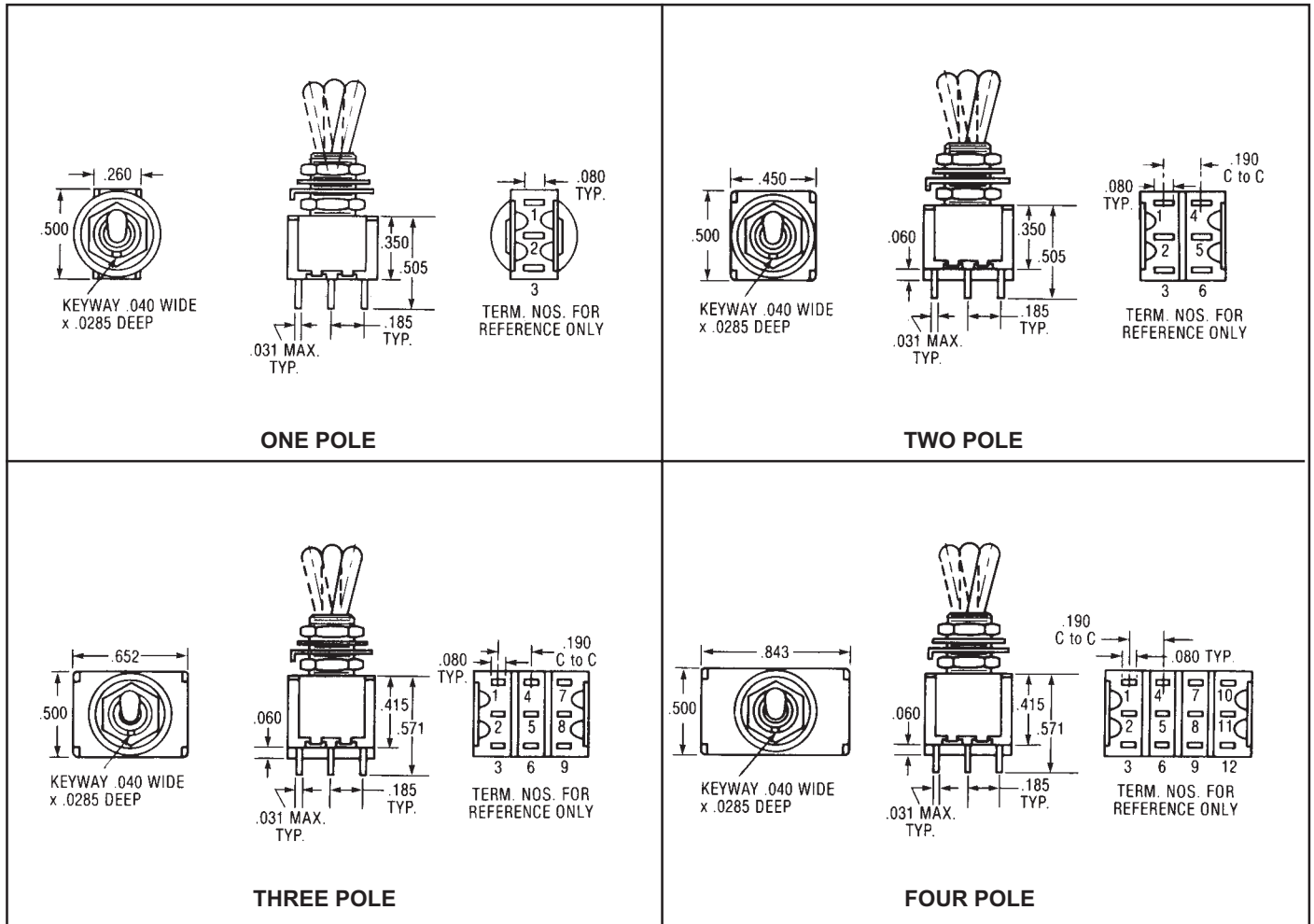
Letter Codes B, G — Gold flash/nickel/brass

Letter Code Q — Silver plated brass.

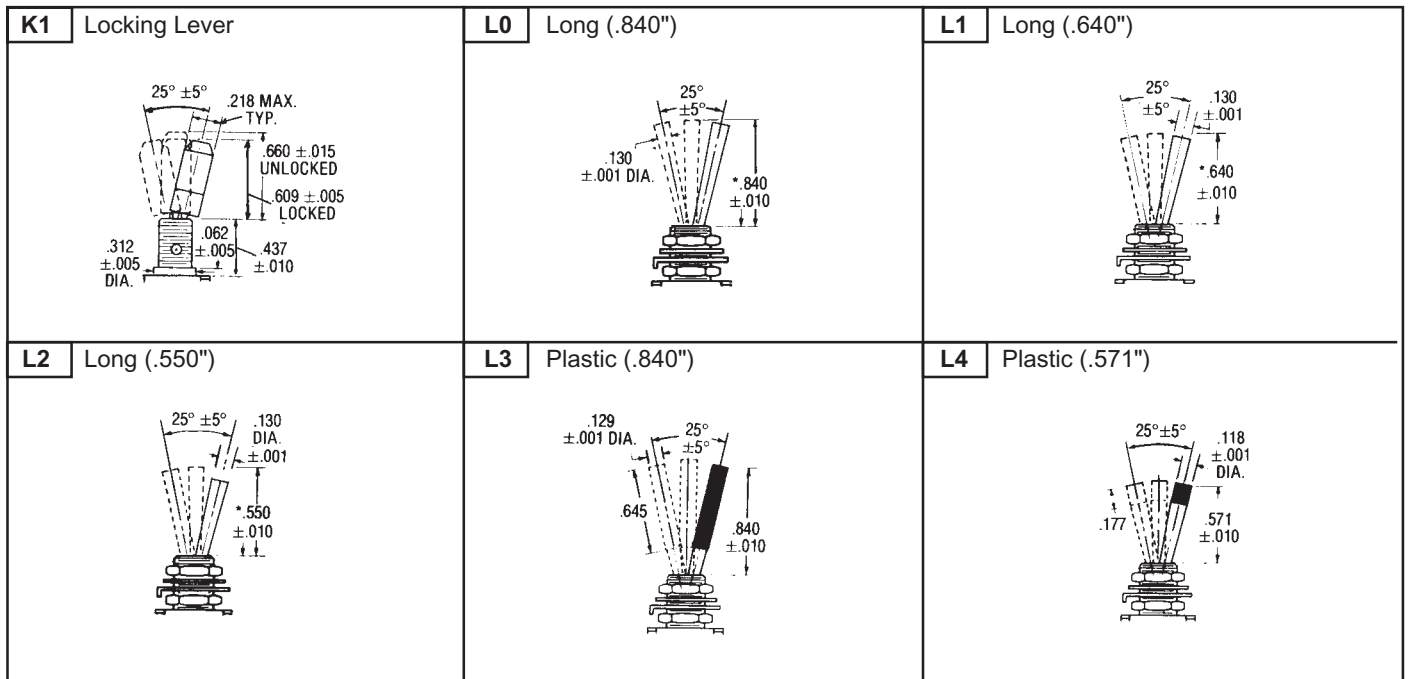
Hardware — See page 55-57.

Toggle Switches — Base Dimensions and Lever Options

APPROXIMATE BASE DIMENSIONS



TOGGLE LEVER OPTIONS



Toggle Lever Options — Contd.

M Short (.200") 	P1 Flatted (.840") 	P3 Flatted (.448") 	P4 Flatted (.250")
S Std. Bat (.410") 	T Large Toggle 	T1 Large Toggle 	

BUSHING OPTIONS

CW	Splashproof Sealed Lever and Panel Seal	D D9	Threaded Smooth (No Keyway)
CW = Flatted bushing 1/4-40 UNS-2A PANEL SEAL (PACKED LOOSE) SHOWN IN PLACE .352 ± .010 .052		1/4-40 UNS-2A .280 ± .005 .240 .245 DIA. .280 ± .005	
H	High Torque Flatted with Shoulder	H3	High Torque
1/4-40 N0 MFG. OPTION RELIEF OR IMPERF. THD. .288 ± .010 .062		1/4-40 UNS-2A .350 ± .010 .312 .062	
		P	Anti-Rotation
		1/4-40 UNS-2A .352 ± .010	
TW	Splashproof Sealed Lever and Panel Seal	OX Y Y9	Threaded with Lever Seal Threaded Smooth (No Keyway)
15/32-32 UNS-2A .562 DIA. KNURLED NUT PANEL SEAL .050 .040 .035 .388 .080 .468 ± .016 .468 .066 .230 DIA. .687 DIA. SEAL .425 FLAT 1/4-40 UNS-2A .352 ± .010 .240 .245 DIA. .352 ± .010		1/4-40 UNS-2A .240 .245 DIA. .352 ± .010	
		Y5	Long Bushing (.437")
		1/4-40 UNS-2A .437 ± .010	

K Refer to K1 lever drawing for dimensions.

T&TX Refer to T or T1 lever drawing for dimensions.

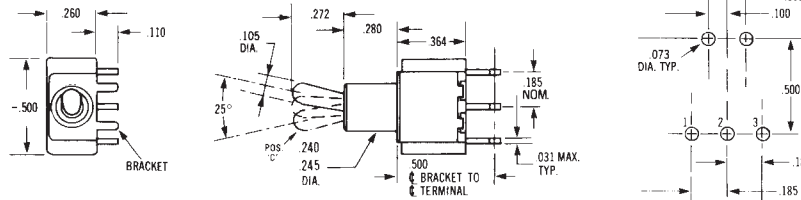
Note: For hardware refer to pages 55-57.

C Printed CIRCUIT	W Wire-Wrap	W1 Wire-Wrap	W3 Wire-Wrap	W4 Wire-Wrap	Z STANDARD	Z3 Quick CONNECT
NOTE: Wire-Wrap is a registered trademark of the Gardner-Denver Company.						

Mating Receptacle from
AMP SPECIAL IND.,
P.O. Box 984, Paoli,
Pa. 19301 Amp P/N
single piece 61454
series, strip from 60900

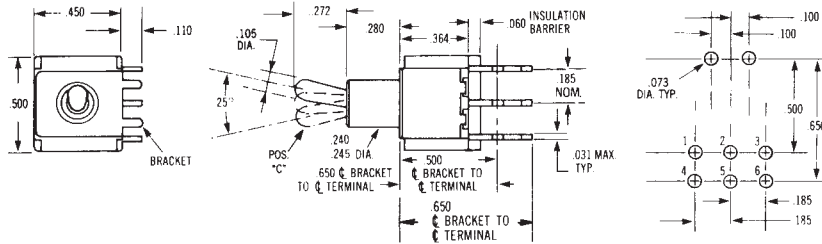
TERMINATION/MOUNTING OPTIONS

A



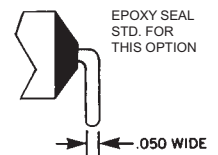
One Pole

A

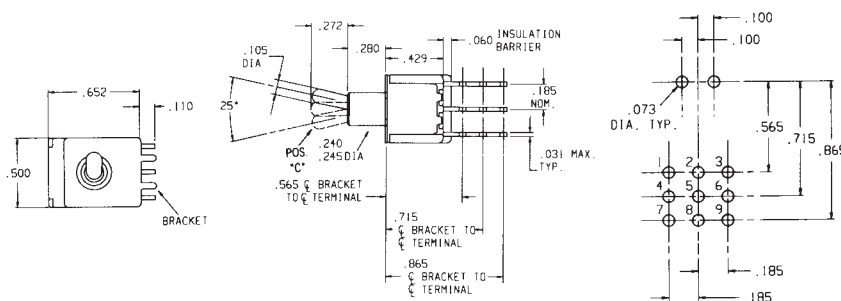


Two Pole

Right Angle P.C. Terminal

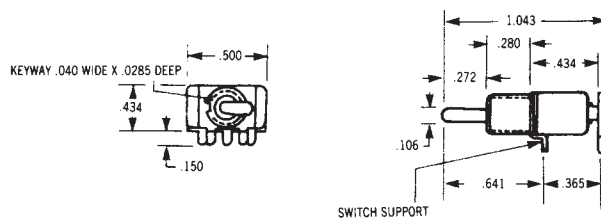


A



Three Pole

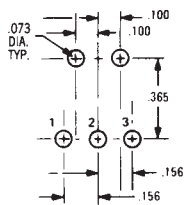
R



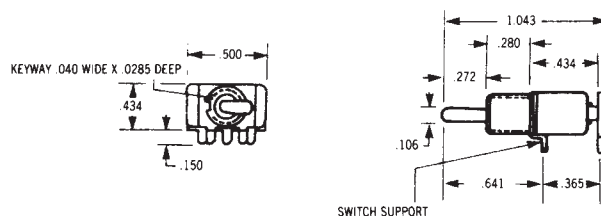
One Pole



Contacts
Make on
Opposite Side
Toggle
Thrown



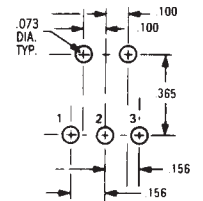
R2



One Pole

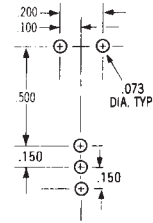
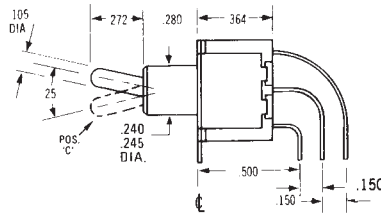
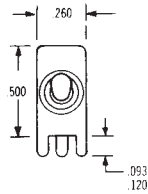


Contacts
Make on
Opposite Side
Toggle
Thrown



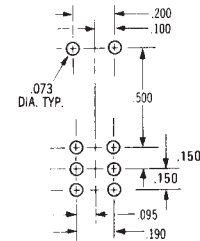
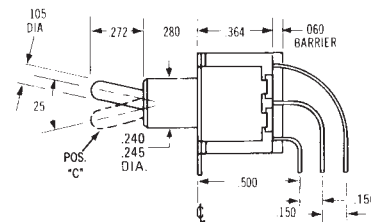
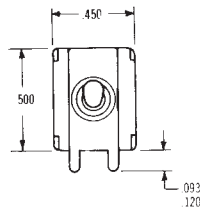
Termination/Mounting Options

AV1	w/.100" terminal spacing
AV2	w/.150" terminal spacing (pictured below)



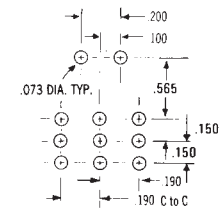
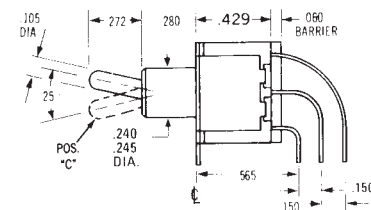
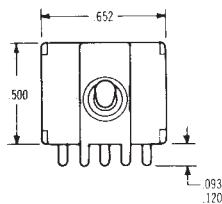
ONE POLE Epoxy sealed P.C. terminals are supplied as standard for these options.

AV1	w/.100" terminal spacing
AV2	w/.150" terminal spacing (pictured below)



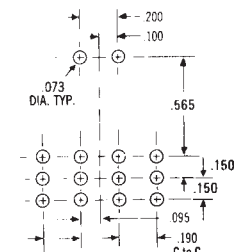
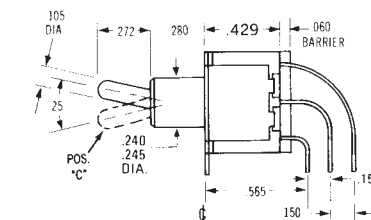
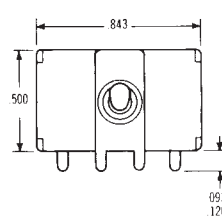
TWO POLE Epoxy sealed P.C. terminals are supplied as standard for these options.

AV	w/.100" terminal spacing
AV2	w/.150" terminal spacing (pictured below)



THREE POLE Epoxy sealed P.C. terminals are supplied as standard for these options.

AV	w/.100" terminal spacing
AV2	w/.150" terminal spacing (pictured below)



FOUR POLE Epoxy sealed P.C. terminals are supplied as standard for these options.

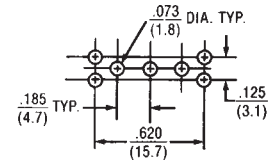
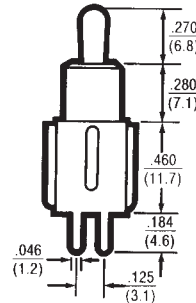
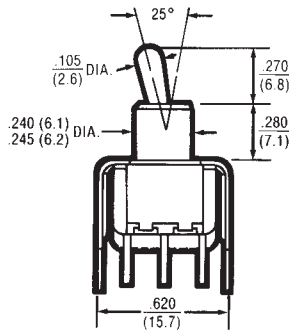
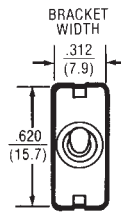
V30



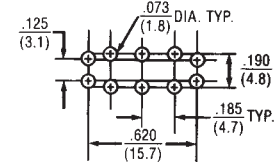
ONE POLE



TWO POLE



1 Pole P.C. Mounting



2 Pole P.C. Mounting

EPOXY SEALED P.C. TERMINALS ARE SUPPLIED AS STANDARD FOR THESE OPTIONS

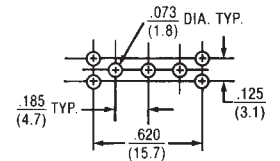
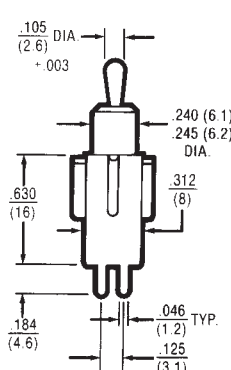
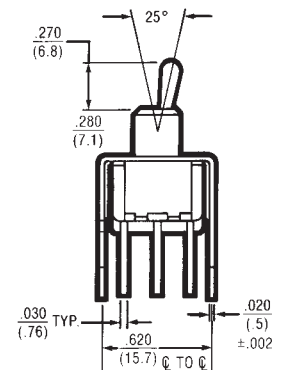
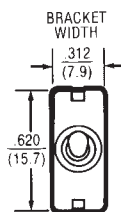
V40



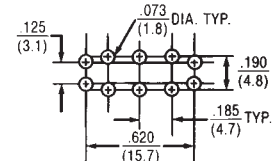
ONE POLE



TWO POLE



1 Pole P.C. Mounting



2 Pole P.C. Mounting

EPOXY SEALED P.C. TERMINALS ARE SUPPLIED AS STANDARD FOR THESE OPTIONS

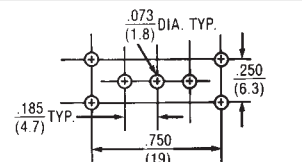
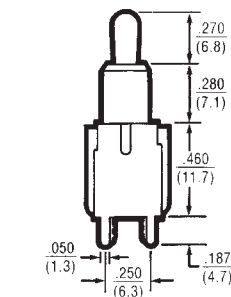
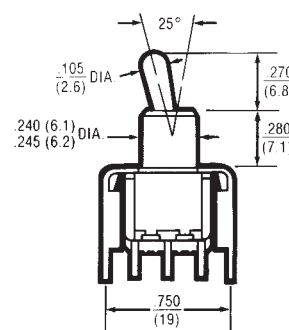
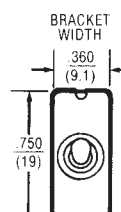
V60



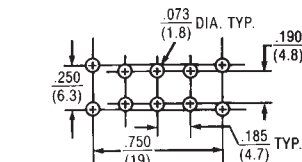
ONE POLE



TWO POLE



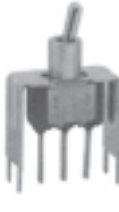
1 Pole P.C. Mounting



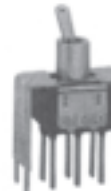
2 Pole P.C. Mounting

EPOXY SEALED P.C. TERMINALS ARE SUPPLIED AS STANDARD FOR THESE OPTIONS

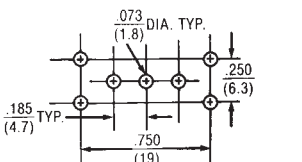
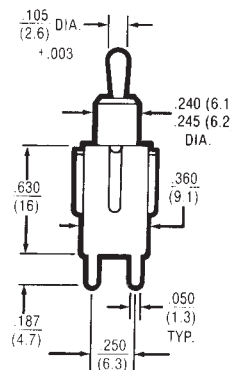
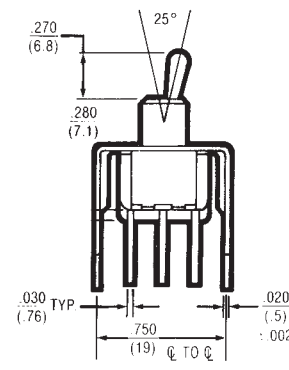
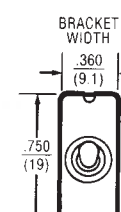
V70



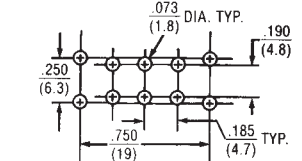
ONE POLE



TWO POLE



1 Pole P.C. Mounting



2 Pole P.C. Mounting

EPOXY SEALED P.C. TERMINALS ARE SUPPLIED AS STANDARD FOR THESE OPTIONS