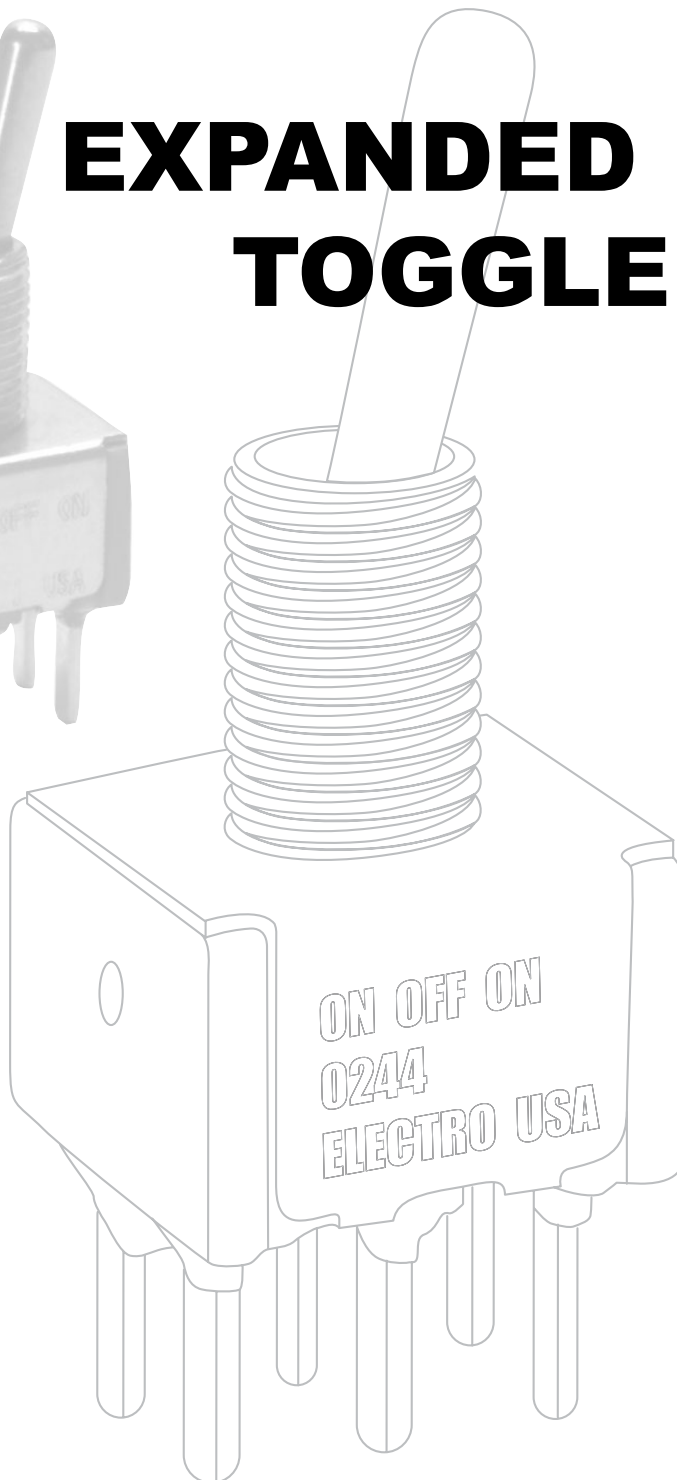




ELECTROSWITCH
• **ELECTRONIC PRODUCTS**

UNIT OF ELECTRO SWITCH CORP.

EXPANDED "A SERIES" TOGGLE SWITCHES



ISO 9001 Registered

Phone: 888-768-2797 or 919-833-0707

Fax: 800-909-9171 or 919-833-8016

Web site: <http://www.electro-nc.com>

E-mail: sales@electro-nc.com

Electroswitch Offers New Toggle Combinations to Cross Competition.

Electroswitch is pleased to present this new expanded toggle brochure created to provide many additional crosses against competition:

C&K 7000 and E Series

Alco A and MTA Series

NKK M2T and M Series

Apem ST and 5000 Series

E-Switch 100 and 100A Series

All the new toggle switch combinations are produced at our plant in Raleigh, NC and you get the value of over 55 years of Electroswitch quality.

In the coming months we plan to further expand our miniature switch line to include competitive crosses for rockers and washables.

For information on all of our miniature and rotary switches, please check our web site at www.electro-nc.com

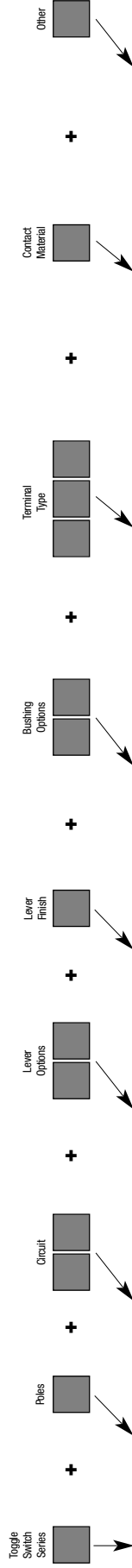


MINIATURE SWITCHES

Ordering Table – Standard Toggle Switches

Following the table from left to right, the designer is able to specify the options wanted. The options are described and illustrated. To determine a part number select the options desired and fill in the boxes in the selection guides illustrated below.

Toggle Switch Selection Guide



Series	Poles		Circuits		Lever Options		Finishes		Bushing Options		Terminal/Mounting Options		Contact Material		Other Options	
	No.	Code	Keyway	Code	Type	Code	Finish	Type	Code	Type	Type	Code	Type	Code	Type	Code
A	1 Pole	1	 *Momentary Contact	21	.410 Bat (Std.)	S	Bright Chrome	1	.350 Threaded (Std.)	Y	Solder Lugs (Std.)	Z	Gold/Nickel/Brass			
	2 Pole	2		23	.200 Bat (Std.)	M	Satin Chrome	2	.370 Threaded High Torque	Y1	Quick Connect	Z3	Gold/Nickel/Silver			
	3 Pole	3		26	Flattened Bats	P1	Black	3	.437 Threaded	Y5	Right Angle PC (Std.)	A3	Coin Silver			
	4 Pole	4		27	.840 Flat	P3		Y91	.350 Smooth with Keyway	Y9	Right Angle PC .156	A2				
				31	.450 (Std.)	P4		D	.280 Threaded (Std.)	D	Right Angle PC .200	A7				
				33	.250 Flat			D91	.280 Smooth with Keyway	D	Right Angle PC .100 Spacing	AV	Optional Platings			
				34	Longer Bats	L0		D9	.280 Smooth	D9	Vertical PC .150 Spacing (Std.)	AV3	Same as B, G, Q, respectively			
				35	.840 Bat	L1		D8	.280 Smooth with Flat	D8	Vertical PC .150 Snap-in	AW	Terminals tin-lead alloy			
				53	.640 Bat	L2		H	.350 Flatted with Shoulder (Std.)	H	Right Angle extended PC	AW1	Terminals tin-lead alloy			
					.840 Plastic	L3	L3 and L4 Colors	H31	.350 Keyway with Shoulder	H31	Right Angle extended PC	AW3	Terminals tin-lead alloy			
					.571 Plastic	L4	Black Nylon	H4	8mm Threaded High Torque	H4	Right Angle extended PC	AW4	K, L, M not available with Z&Z3			
					Large Bats	L3	Red Nylon	CW	Splashproof lever & Bushing Seal	CW	Printed Circuit Terminals (Std.)					
					15/32" Bushing	L4	White Nylon		Splashproof lever Seal Only CX		Right Angle Same Throw					
					.468 Large	T1					Right Angle Opposite Throw					
					.687 Large	T					.555 PC Support Bracket					
					.610 Flatted	T2					.555 PC Support Bracket HD					
					Lever Locking Actuators						460 PC Support Bracket (Std.)					
					Std. taper threaded	K1					460 PC Support Bracket					
					Dome threaded	K2					.460 PC Snap-In Bracket					
			Dome unthreaded	K9					.630 PC Support Bracket							
			Taper threaded	K12					.630 PC Support Bracket							
			Taper unthreaded	K19					.630 PC Support Bracket HD							

SPECIFICATIONS:

Contact Ratings -

Letter codes G,L and Q,M - 6 amp at 125 VAC, 3 amp @ 250 VAC (U.L. recognized, CSA certified) or 6 amp at 28 VDC resistive. Letter codes B,K and G,L - 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 initial at 3 VDC, 100 ma for both silver and gold plated contacts.

Insulation Resistance - 1,000 megohms, min.

Dielectric Strength - 1,000 volts RMS minimum at sea level.

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

STANDARD MATERIALS:

Base (body) - Diallyl Phthalate (DAP).

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,K - gold/nickel/brass

Letter Code G,L - gold/nickel/silver

Letter Code Q,M - Coin silver

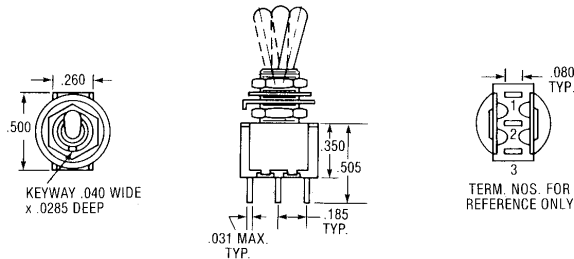
Center Terminal

Letter Codes B,K, G,L - Gold flash/nickel/brass

Letter Code Q,M - Silver plated brass.

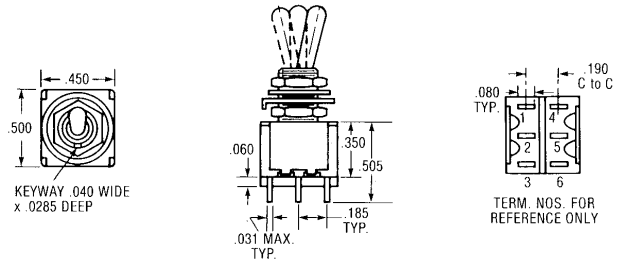
Epoxy sealed terminals are supplied as standard

STANDARD DIMENSIONS & PART NUMBERS



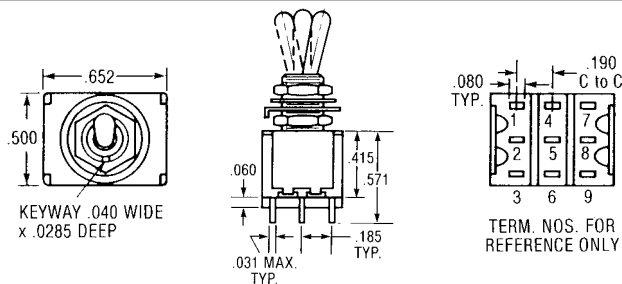
ONE POLE

Keyway			Code	Part Number
ON	OFF	POS. "C"		
ON	OFF	ON	21	A121S1YZQ
ON	NONE	ON	23	A123S1YZQ
ON	NONE	ON*	26	A126S1YZQ
ON*	OFF	ON*	27	A127S1YZQ



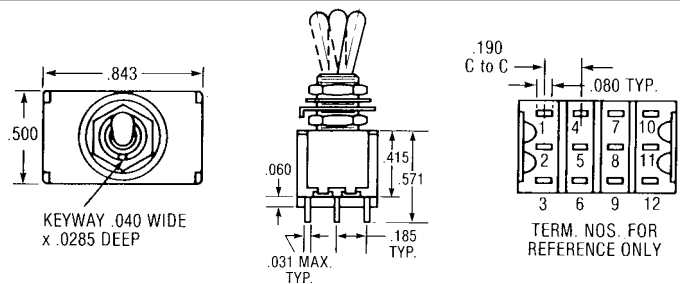
TWO POLE

Keyway			Code	Part Number
ON	OFF	POS. "C"		
ON	OFF	ON	21	A221S1YZQ
ON	NONE	ON	23	A223S1YZQ
ON	NONE	ON*	26	A226S1YZQ
ON*	OFF	ON*	27	A227S1YZQ



THREE POLE

Keyway			Code	Part Number
ON	OFF	POS. "C"		
ON	OFF	ON	21	A321S1YZQ
ON	NONE	ON	23	A323S1YZQ
ON	NONE	ON*	26	A326S1YZQ
ON*	OFF	ON*	27	A327S1YZQ



FOUR POLE

Keyway			Code	Part Number
ON	OFF	POS. "C"		
ON	OFF	ON	21	A421S1YZQ
ON	NONE	ON	23	A423S1YZQ
ON	NONE	ON*	26	A426S1YZQ
ON*	OFF	ON*	27	A427S1YZQ

TOGGLE LEVER OPTIONS

<p>S Std. Bat (.410")</p>	<p>T Large Toggle</p>	<p>T1 Large Toggle</p>	<p>T2</p> <p>NEW</p>
<p>M Short (.200")</p>	<p>P1 Flatted (.840")</p> <p>Not available with lever seal</p>	<p>P3 Flatted (.448")</p> <p>Not available with lever seal</p>	<p>P4 Flatted (.250")</p> <p>Not available with lever seal</p>
<p>L0 Long (.840")</p> <p>Lever shown with dimensions for .352 long bushings</p>	<p>L1 Long (.640")</p> <p>Lever shown with dimensions for .352 long bushings</p>	<p>L2 Long (.550")</p> <p>Lever shown with dimensions for .352 long bushings</p>	<p>L3 Plastic (.840")</p> <p>Lever shown with dimensions for .352 long bushings</p>
<p>L4 Plastic (.571")</p> <p>Lever shown with dimensions for .352 long bushings</p>	<p>K1 Locking Lever</p> <p>Lever cap supplied with anodized finish only. No lever seals.</p>	<p>K12 Threaded K19 Unthreaded</p> <p>NEW</p> <p>Lever cap supplied with anodized finish only. No lever seals.</p>	<p>K2 Threaded K9 Unthreaded</p> <p>NEW</p> <p>Lever cap supplied with anodized finish only. No lever seals.</p>

LEVER LOCK BUSHING STYLES

<p>STYLE 1</p> <p>ON-OFF-ON</p> <p>Locked In Three Positions</p>	<p>STYLE 2</p> <p>ON-NONE-ON</p> <p>Locked Out Of Center Positions</p>	<p>STYLE 3</p> <p>ON-NONE-ON*</p> <p>Locked Into Side Opposite Keyway – Momentary Keyway Side</p>	<p>STYLE 4</p> <p>ON*-OFF-ON*</p> <p>Locked In Center Position – Momentary Either Side</p>	<p>STYLE 5</p> <p>ON-OFF-ON*</p> <p>Locked In Center Position – Momentary Keyway Side</p>
---	---	--	---	--

BUSHING OPTIONS

CX	Threaded with Lever Seal
Y	Threaded
Y9	Smooth (No Keyway)
Y91	Smooth w / Keyway

NEW

D	Threaded
D9	Smooth (No Keyway)
D91	Smooth w / Keyway
D8	Smooth w / Flat

NEW

Add 0.070 to actuator length when using a .280 long bushing.

H	High Torque Flatted with Shoulder
----------	-----------------------------------

WILL WITHSTAND 12 IN.-LBS. OF TORQUE WITH NO DISTORTION

H4	8mm Threaded High Torque
-----------	--------------------------

NEW

Will withstand 12 in-lbs of torque with no distortion.

H3	High Torque
-----------	-------------

WILL WITHSTAND 12 IN.-LB of TORQUE WITH NO DISTORTION. FOR H3 OPTION SUBTRACT .020 FROM ALL TOGGLE LENGTHS.

H31	(.315") Threaded High Torque
------------	------------------------------

NEW

Will withstand 12 in-lbs of torque with no distortion.

Y1	(.370") Threaded High Torque
Y4	(.370") Flat Threaded High Torque

NEW

Y5	Long Bushing (.437")
-----------	----------------------

T&TX	Bushing for T, T1 and T2 Bats
-----------------	-------------------------------

CW	Splashproof Sealed Lever and Panel Seal
-----------	---

TW	Splashproof Sealed Lever and Panel Seal
-----------	---

P	Anti-Rotation
----------	---------------

Anti rotation for 15/32" bushing not done w/pin.

TERMINATION SWITCHES

C Printed Circuit	W Wire-Wrap	W1 Wire-Wrap	W3 Wire-Wrap	W4 Wire-Wrap	Z Standard	Z3 Quick Connect
					Not available in K,L, and M contact materials.	

TERMINATION / MOUNTING SWITCHES

A Right Angle PC A3 Std. Right Angle Snap in		
ONE POLE	Terminal bend radii manufacturing option.	Snap in
A Right Angle PC A3 Std. Right Angle Snap in		
TWO POLE	Terminal bend radii manufacturing option.	Snap in
A Right Angle PC A3 Std. Right Angle Snap in		
THREE POLE	Terminal bend radii manufacturing option.	Snap in

EXTENDED TERMINAL OPTIONS (Right Angle PC Terminals)

AW AW1 AW3 AW4 Right Angle, Extended PC Thru-Hole	AW AW1 AW4 Right Angle, Extended PC Thru-Hole	AW4 Right Angle, Extended PC Thru-Hole																		
NEW	NEW	NEW																		
ONE POLE	TWO POLE	THREE POLE																		
<table border="1"> <thead> <tr> <th>OPTION CODE</th> <th>DIM "A"</th> </tr> </thead> <tbody> <tr> <td>AW</td> <td>.50</td> </tr> <tr> <td>AW1</td> <td>.72</td> </tr> <tr> <td>AW3</td> <td>.20</td> </tr> <tr> <td>AW4</td> <td>.83</td> </tr> </tbody> </table>	OPTION CODE	DIM "A"	AW	.50	AW1	.72	AW3	.20	AW4	.83	<table border="1"> <thead> <tr> <th>OPTION CODE</th> <th>DIM "A"</th> </tr> </thead> <tbody> <tr> <td>AW</td> <td>.19</td> </tr> <tr> <td>AW1</td> <td>.40</td> </tr> <tr> <td>AW4</td> <td>.50</td> </tr> </tbody> </table>	OPTION CODE	DIM "A"	AW	.19	AW1	.40	AW4	.50	
OPTION CODE	DIM "A"																			
AW	.50																			
AW1	.72																			
AW3	.20																			
AW4	.83																			
OPTION CODE	DIM "A"																			
AW	.19																			
AW1	.40																			
AW4	.50																			

TERMINATION / MOUNTING OPTIONS

A2 Right Angle PC .156" Spacing

NEW

Not available w/ CW, H, H3, T, TX, TW, T1, K2, K9, K19, H4, Y1, & Y4. Large bushing and shoulders interfere with printed circuit board.

A4 Right Angle PC .156" Spacing

NEW

Not available w/ CW, H, H3, T, TX, TW, T1, K2, K9, K19, H4, Y1, & Y4. Large bushing and shoulders interfere with printed circuit board.

A7 Right Angle PC .200" Spacing

NEW

Not available w/ CW, H, H3, T, TX, TW, T1, K2, K9, K19, H4, Y1, & Y4. Large bushing and shoulders interfere with printed circuit board.

R Right Angle Same Throw

KEYWAY .040 WIDE X .0285 DEEP

SWITCH SUPPORT

Contacts Make on Same Side Toggle Throw

ONE POLE

Not available w/ CW, H, H3, T, TX, TW, T1, K2, K9, K19, H4, Y1, & Y4. Large bushing and shoulders interfere with printed circuit board. Not UL or CSA recognized.

R2 Right Angle Opposite Throw

KEYWAY .040 WIDE X .0285 DEEP

SWITCH SUPPORT

Contacts Make on Opposite Side Toggle Throw

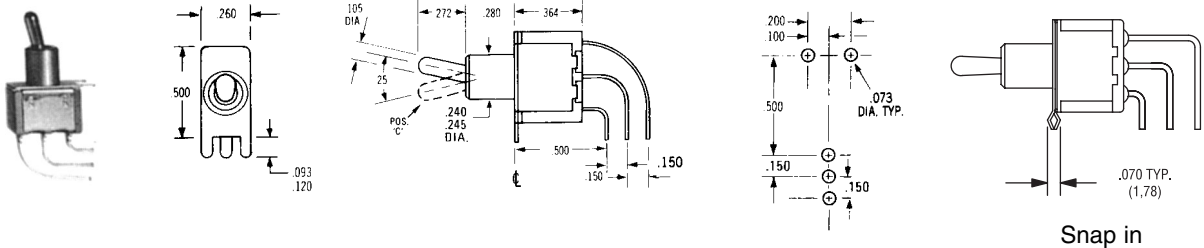
ONE POLE

Not available w/ CW, H, H3, T, TX, TW, T1, K2, K9, K19, H4, Y1, & Y4. Large bushing and shoulders interfere with printed circuit board.

TERMINATION / MOUNTING OPTIONS

- AV** w/.100" Terminal Spacing
- AV2** w/.150" Terminal Spacing (pictured below)
- AV3** w/.150" Terminal Spacing Snap in Bracket

NEW

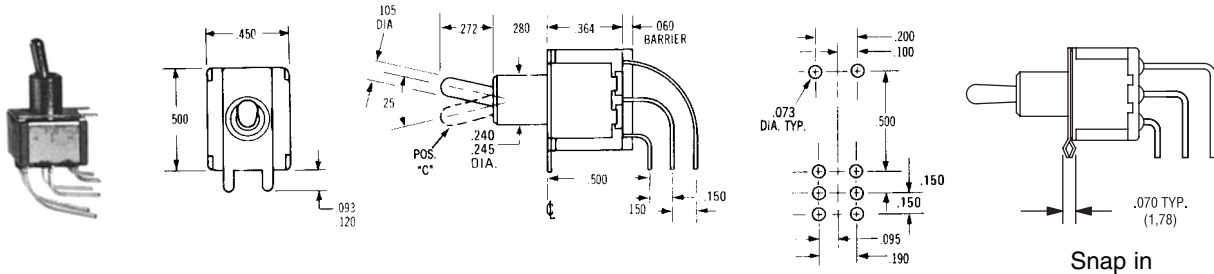


ONE POLE

Terminal bend radii manufacturing option.

- AV** w/.100" Terminal Spacing
- AV2** w/.150" Terminal Spacing (pictured below)
- AV3** w/.150" Terminal Spacing Snap in Bracket

NEW

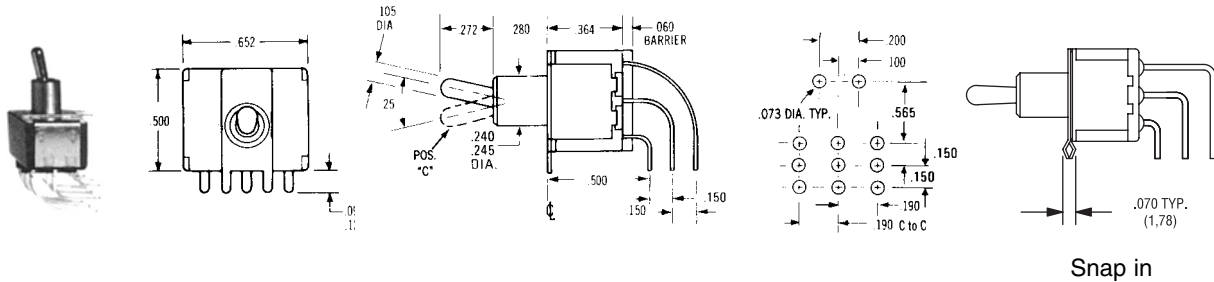


TWO POLE

Terminal bend radii manufacturing option.

- AV** w/.100" Terminal Spacing
- AV2** w/.150" Terminal Spacing (pictured below)
- AV3** w/.150" Terminal Spacing Snap in Bracket

NEW

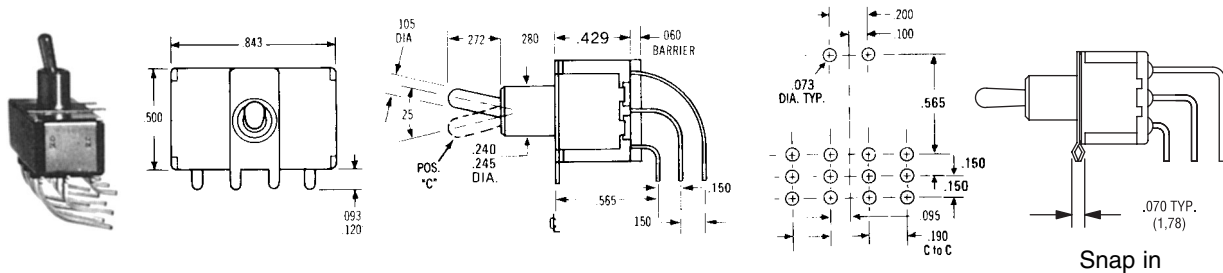


THREE POLE

Terminal bend radii manufacturing option.

- AV** w/.100" Terminal Spacing
- AV2** w/.150" Terminal Spacing (pictured below)
- AV3** w/.150" Terminal Spacing Snap in Bracket

NEW



FOUR POLE

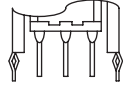
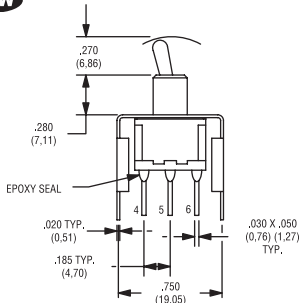
Terminal bend radii manufacturing option.

TERMINATION MOUNTING OPTIONS

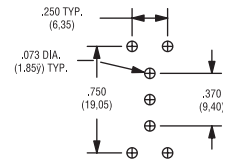
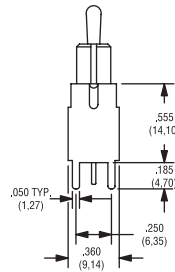
V20 .555" high bracket HD

V21 Snap In HD

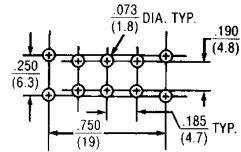
NEW



Snap in



ONE POLE

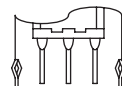
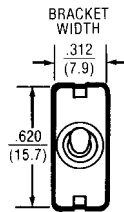
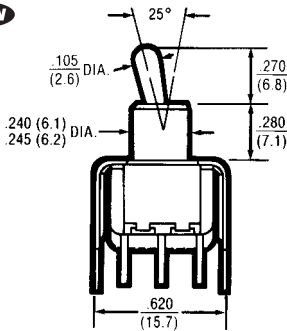


TWO POLE

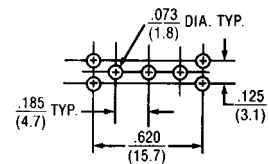
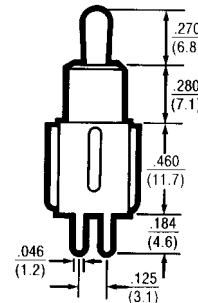
V30 .460" high bracket

V31 Snap In

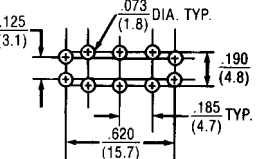
NEW



Snap in



ONE POLE

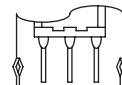
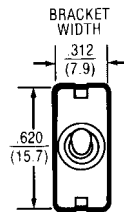
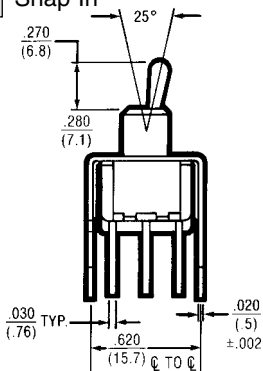


TWO POLE

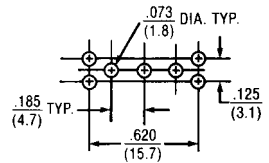
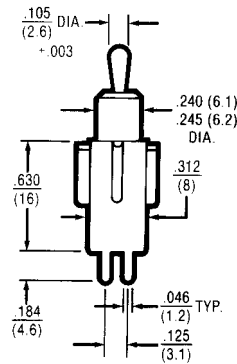
V40 .630" high bracket

V41 Snap In

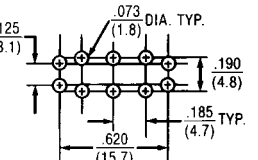
NEW



Snap in



ONE POLE

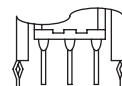
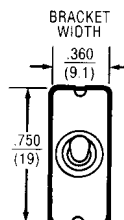
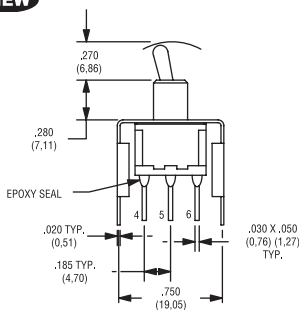


TWO POLE

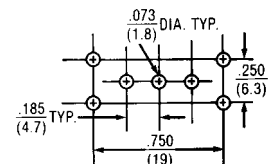
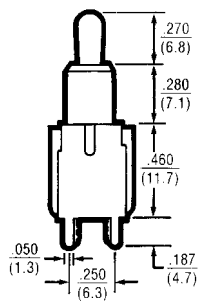
V60 .460" high bracket HD

V61 Snap In HD

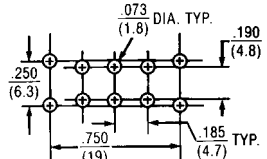
NEW



Snap in



ONE POLE



TWO POLE

TERMINATION / MOUNTING OPTIONS

V70 .630" high bracket HD
V71 Snap In HD
NEW

V80 .953" high bracket HD
V81 Snap In HD
NEW

V90 1.150" high bracket
V91 Snap In
NEW



ELECTROSWITCH
•*ELECTRONIC PRODUCTS*
UNIT OF ELECTRO SWITCH CORP.

2010 Yonkers Road

Raleigh, North Carolina 27604 USA

Phone: 888-768-2797 or 919-833-0707

Fax: 800-909-9171 or 919-833-8016

Web site: <http://www.electro-nc.com>

E-mail: sales@electro-nc.com