

## SPECIFICATIONS:

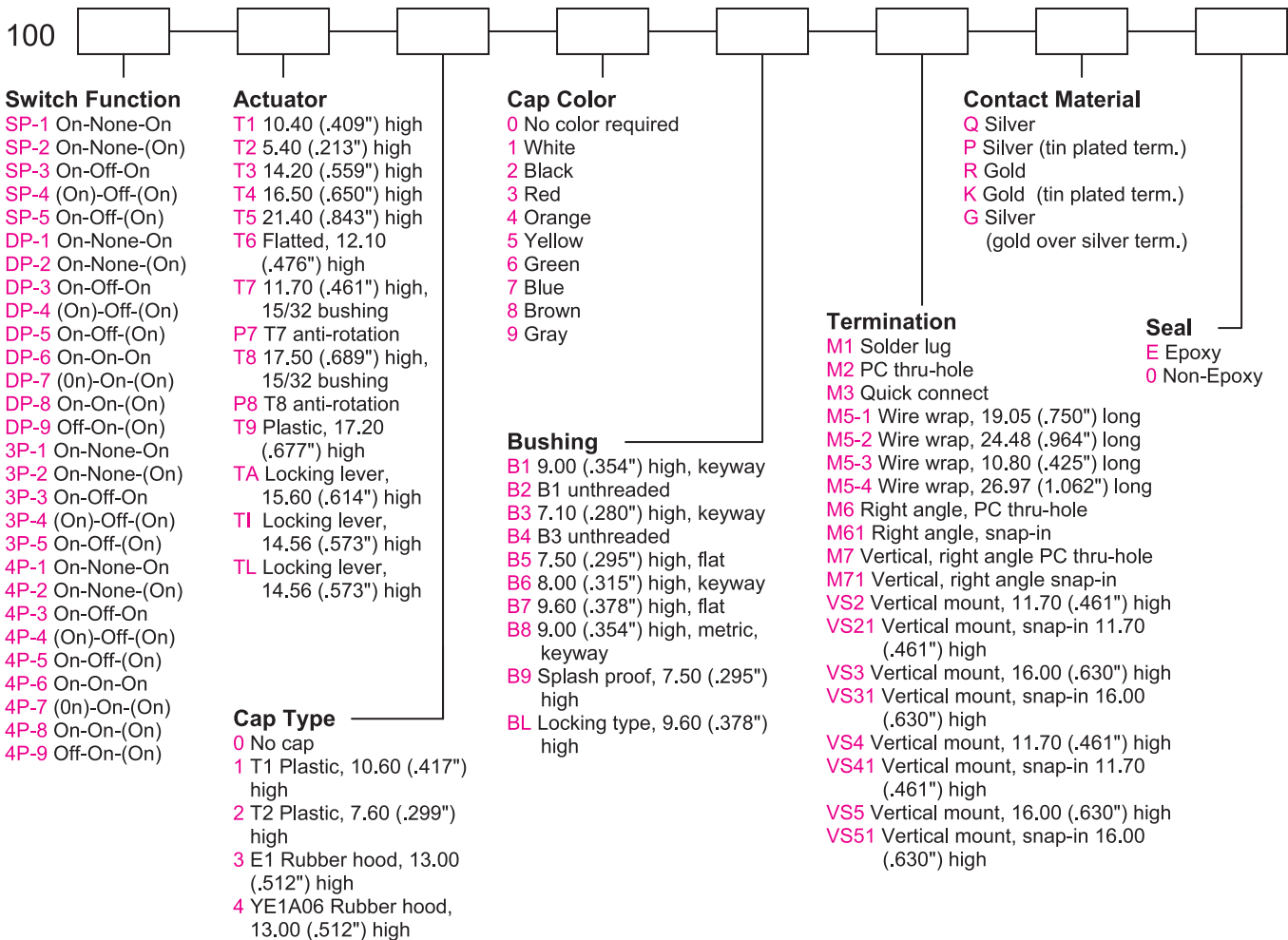
CONTACT RATING: Refer to "Contact Material Options" for more info.  
 ELECTRICAL LIFE: 50,000 make-and-break cycles at full load.  
 CONTACT RESISTANCE: 10mΩmax. initial @2-4VDC  
 100mA for both silver and gold plated contacts.  
 INSULATION RESISTANCE: 1,000MΩmin.  
 DIELECTRIC STRENGTH: 1,500V RMS @ sea level.  
 OPERATING TEMPERATURE: -30°C to +85°C

## MATERIALS:

CASE: Diallyl phthalate(DAP)(UL 94V-0)  
 TOGGLE HANDLE: Brass, chrome plated.  
 BUSHING: Brass, nickel plated.  
 HOUSING: Stainless Steel.  
 TERMINAL SEAL: Epoxy.

If your preferred product configuration is not shown, please contact our sales representative for custom design.

## HOW TO ORDER SYSTEM



**Note:**  
 No cap type required for T9 actuator

# Series 100

# Miniature Toggle Switches

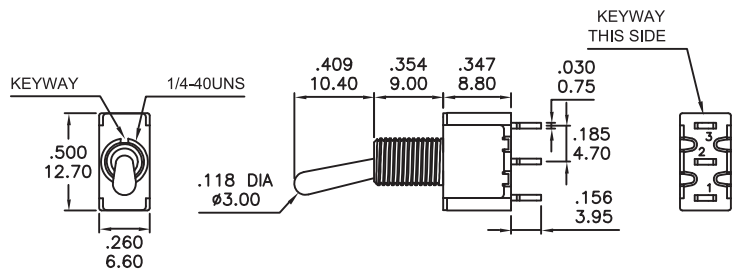
## SPDT



Model No.	Switching Position		
SP-1	ON	NONE	ON
SP-2	ON	NONE	(ON)
SP-3	ON	OFF	ON
SP-4	(ON)	OFF	(ON)
SP-5	ON	OFF	(ON)
Term. Comm.	2-3	OPEN	2-1

Schematic

O2Comm.



## DPDT

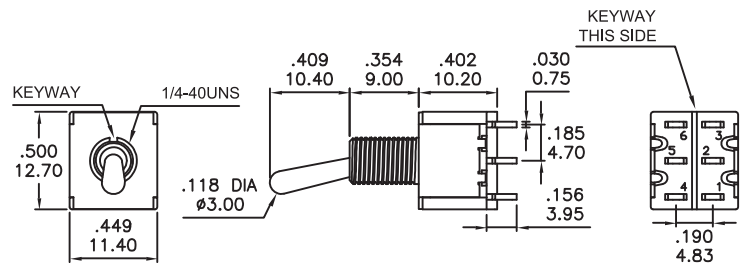


Model No.	Switching Position		
DP-1	ON	NONE	ON
DP-2	ON	NONE	(ON)
DP-3	ON	OFF	ON
DP-4	(ON)	OFF	(ON)
DP-5	ON	OFF	(ON)
Term. Comm.	2-3,5-6	OPEN	2-1,5-4

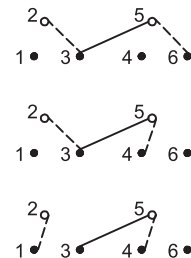
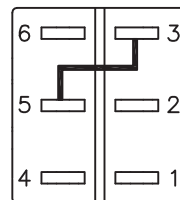
Schematic

O2Comm.

O5Comm.



### WIRING FOR ON-ON-ON (3-WAY) FUNCTION



## 3PDT



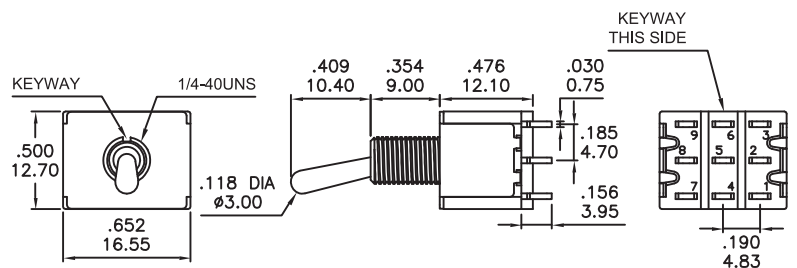
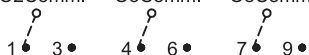
Model No.	Switching Position		
3P-1	ON	NONE	ON
3P-2	ON	NONE	(ON)
3P-3	ON	OFF	ON
3P-4	(ON)	OFF	(ON)
3P-5	ON	OFF	(ON)
Term. Comm.	2-3,5-6 8-9	OPEN	2-1,5-4 8-7

Schematic

O2Comm.

O5Comm.

O8Comm.



# Series 100

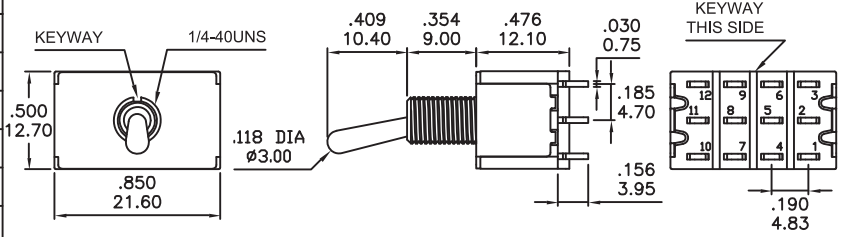
# Miniature Toggle Switches

4PDT



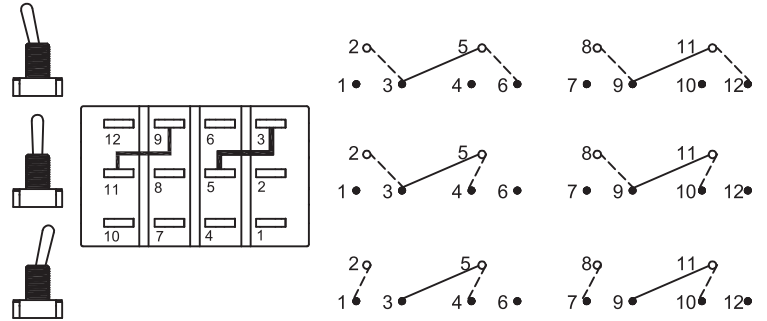
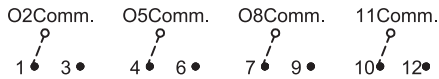
Model No.	Switching Position		
4P-1	ON	NONE	ON
4P-2	ON	NONE	(ON)
4P-3	ON	OFF	ON
4P-4	(ON)	OFF	(ON)
4P-5	ON	OFF	(ON)
Term. Comm.	2-3,5-6 8-9 11-12	OPEN	2-1,5-4 8-7 11-10

Model No.	Switching Position		
4P-6	ON	ON	ON
4P-7	(ON)	ON	(ON)
4P-8	ON	ON	(ON)
4P-9	OFF	ON	(ON)
Term. Comm.	2-3,5-6 8-9 11-12	2-3,5-4 8-9 11-10	2-1,5-4 8-7 11-10

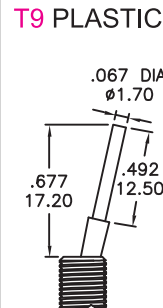
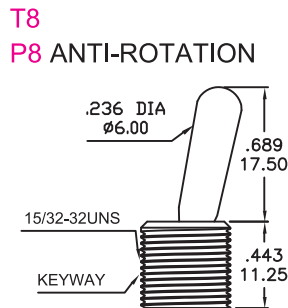
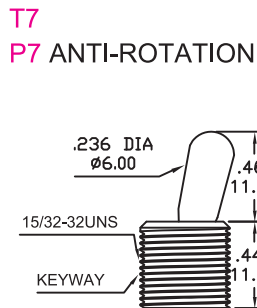
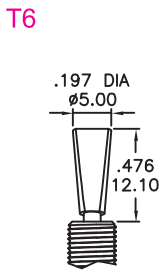
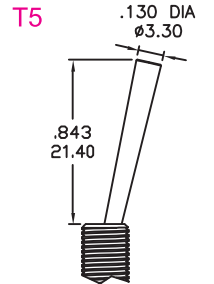
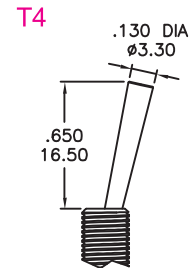
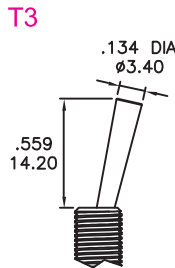
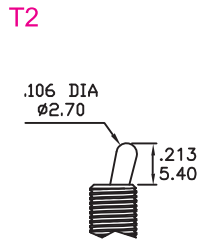
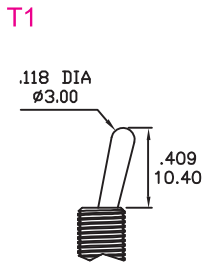


## WIRING FOR ON-ON-ON (3-WAY) FUNCTION

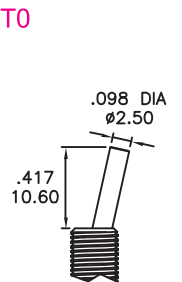
Schematic



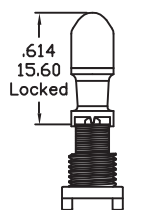
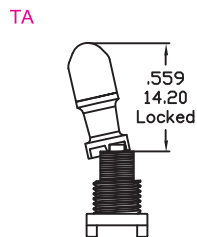
## ACTUATOR OPTIONS



NO.	COLOR
1	White
2	Black(std.)
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Brown
9	Gray



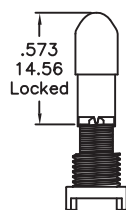
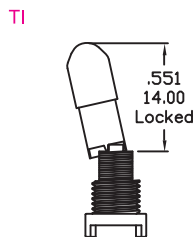
## LOCKING LEVER



FOR SP-1, DP-1  
3P-1, 4P-1 ONLY

FOR SP-3, DP-3  
3P-3, 4P-3 ONLY

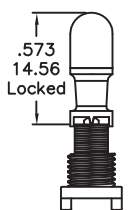
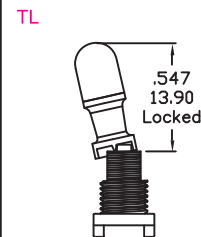
## LOCKING LEVER



FOR SP-1, DP-1  
3P-1, 4P-1 ONLY

FOR SP-3, DP-3  
3P-3, 4P-3 ONLY

## LOCKING LEVER



FOR SP-1, DP-1  
3P-1, 4P-1 ONLY

FOR SP-3, DP-3  
3P-3, 4P-3 ONLY

\* T6 must configure with a stand-off bushing.

\* For T7, P7, T8, P8 bushing code is not required.

\* Actuator length shown for T1 ~ T5 and T9 ~ T0 is with B1 bushing.

( )=MOMENTARY

## BUSHING OPTIONS

<p><b>B1 THD</b> <b>B2 NON-THD</b></p>	<p><b>B3 THD</b> <b>B4 NON-THD</b></p>	<p><b>B5 HIGH TORQUE</b></p>	<p><b>B6 HIGH TORQUE</b></p>
<p><b>B7 LONG</b></p>	<p><b>B8 METRIC</b></p>	<p><b>B9 SPLASH-PROOF</b></p>	<p><b>BL LOCKING LEVER</b></p>
<p><b>BA THD For T6</b></p>	<p><b>BB NON-THD For T6</b></p>	<p><b>BE HIGH TORQUE For T6</b></p>	

## PANEL MOUNTING

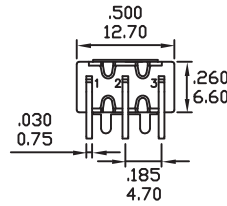
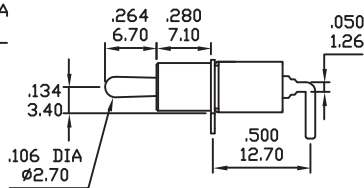
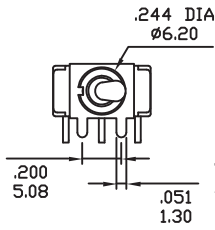
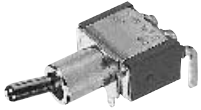
<p><b>1/4 INCH BUSHING</b></p>	<p><b>15/32 INCH BUSHING</b></p>
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## TERMINATION OPTIONS

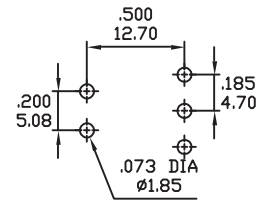
<p><b>M1 STD. SOLDER LUG</b></p>	<p><b>M2 PC THRU-HOLE</b></p>	<p><b>M3 QUICK CONNECT</b></p>	<p><b>M5 WIRE WRAP</b></p> <table border="1"> <thead> <tr> <th>OPTION CODE</th> <th>DIM.'A'</th> </tr> </thead> <tbody> <tr> <td>M5-1</td> <td>.750(19.05)</td> </tr> <tr> <td>M5-2</td> <td>.964(24.48)</td> </tr> <tr> <td>M5-3</td> <td>.425(10.80)</td> </tr> <tr> <td>M5-4</td> <td>1.062(26.97)</td> </tr> </tbody> </table>	OPTION CODE	DIM.'A'	M5-1	.750(19.05)	M5-2	.964(24.48)	M5-3	.425(10.80)	M5-4	1.062(26.97)
OPTION CODE	DIM.'A'												
M5-1	.750(19.05)												
M5-2	.964(24.48)												
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M5-4	1.062(26.97)												

## TERMINATION OPTIONS

M6

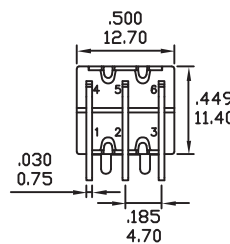
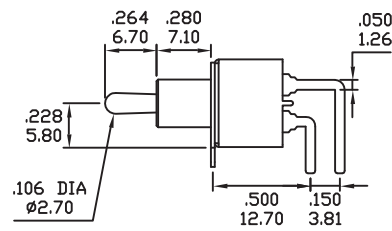
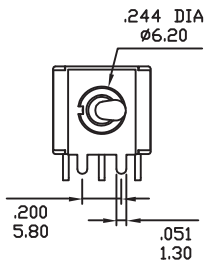
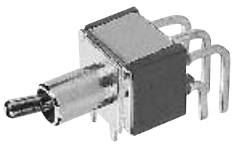


P.C.MOUNTING

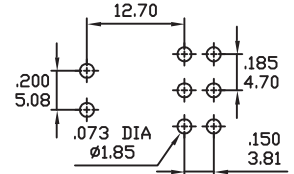


SPDT

M6

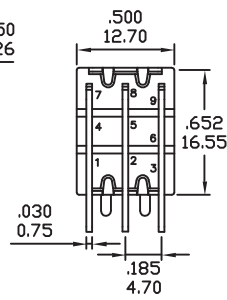
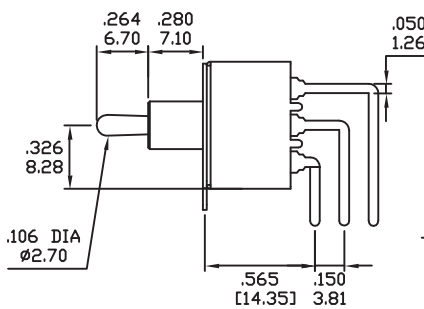
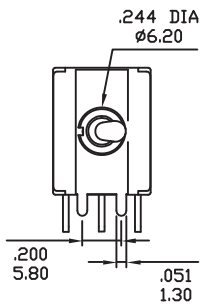


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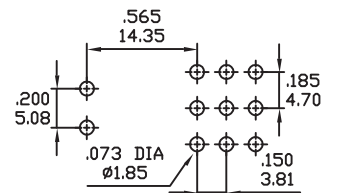


DPDT

M6

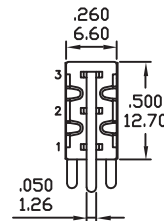
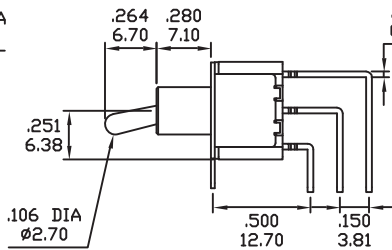
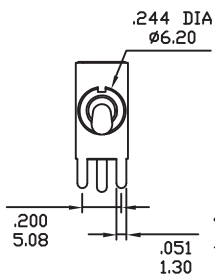
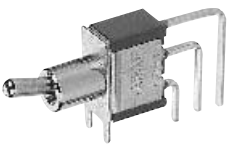


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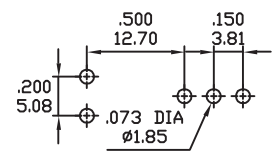


3PDT

M7

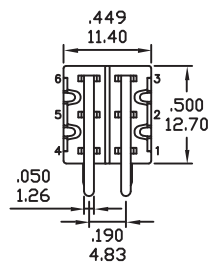
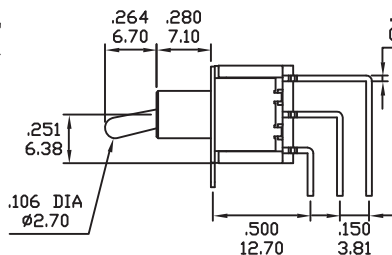
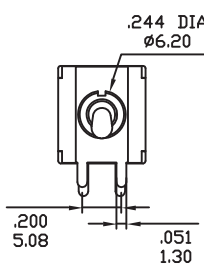
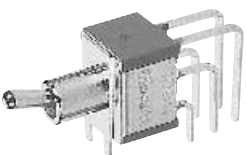


P.C.MOUNTING

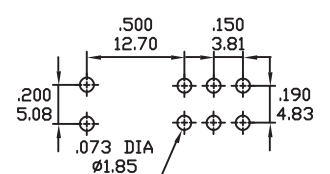


SPDT

M7



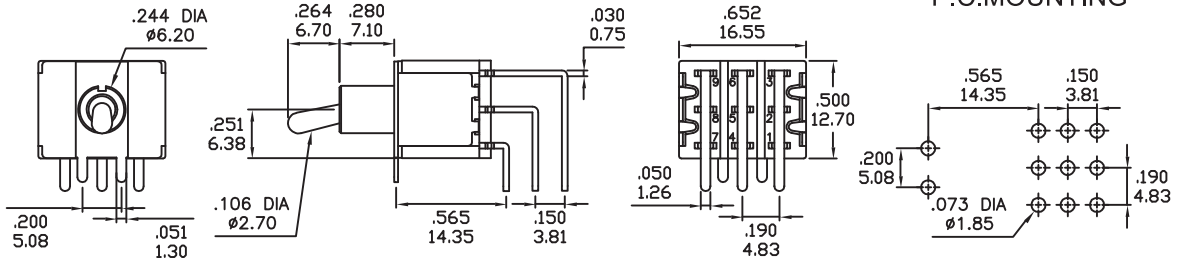
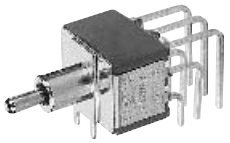
P.C.MOUNTING



DPDT

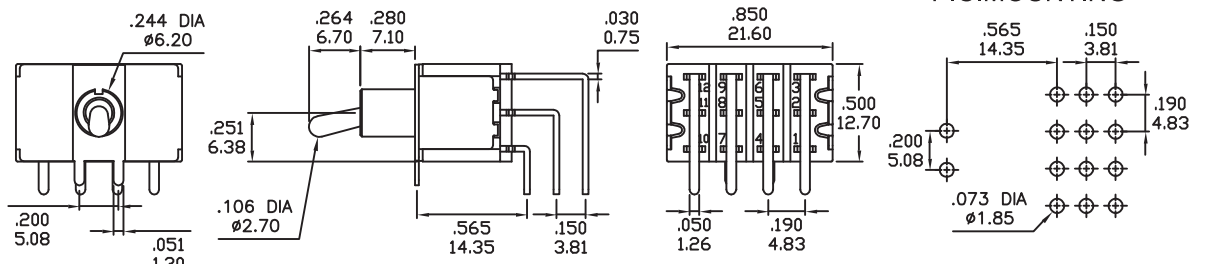
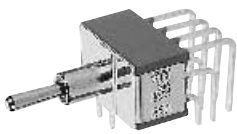
## TERMINATION OPTIONS

M7



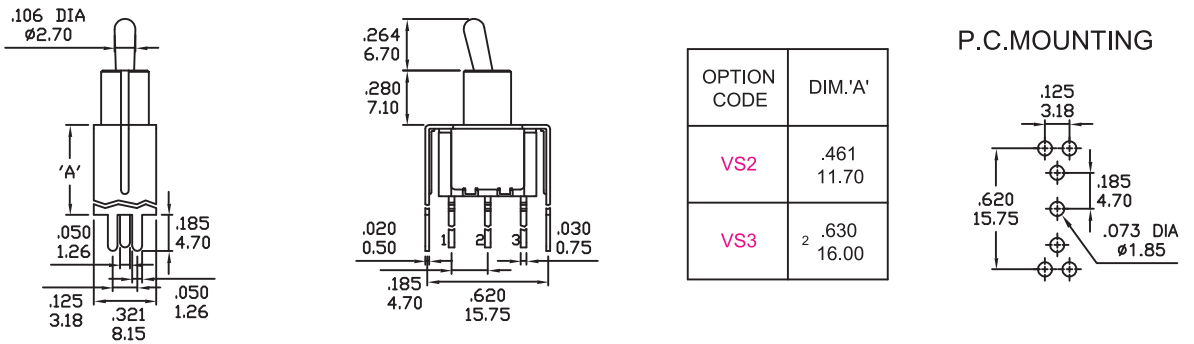
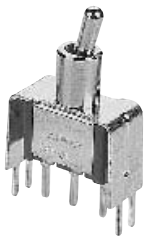
3PDT

M7



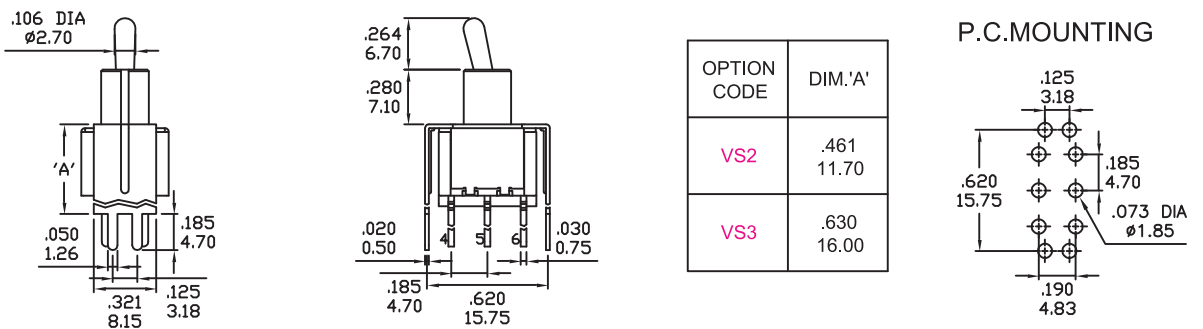
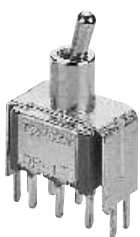
4PDT

VS2-VS3



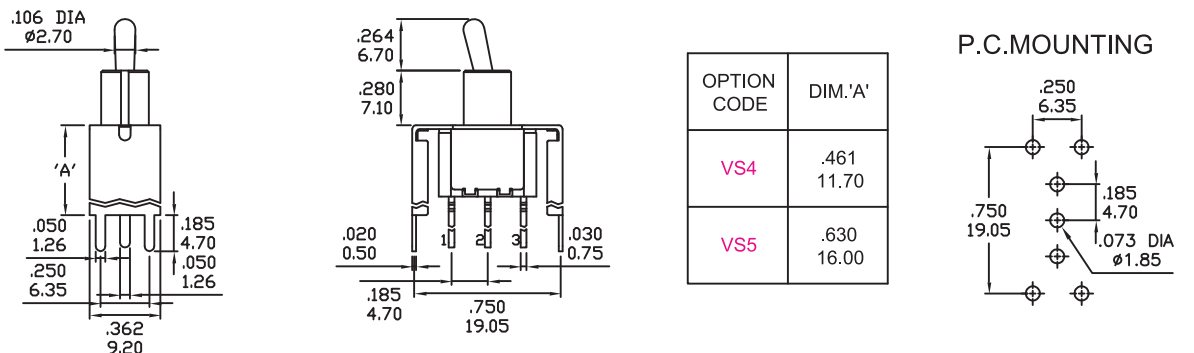
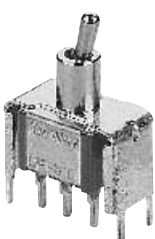
SPDT

VS2-VS3



DPDT

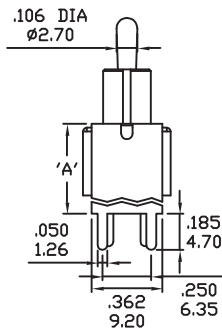
VS4-VS5



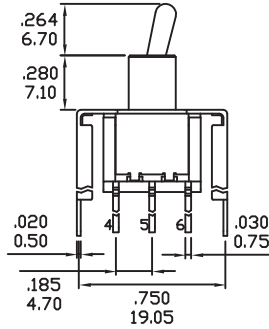
SPDT

## TERMINATION OPTIONS

VS4-VS5

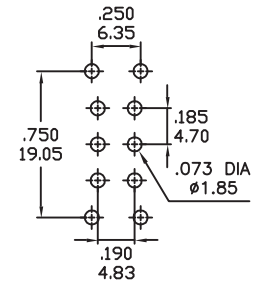


DPDT



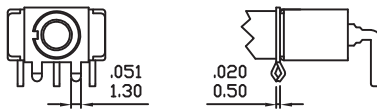
OPTION CODE	DIM.'A'
VS4	.461 11.70
VS5	.630 16.00

P.C.MOUNTING

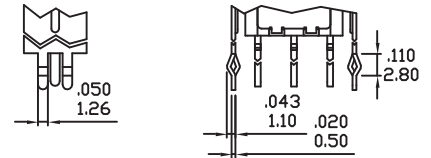


## SNAP-IN TERMINATION OPTIONS

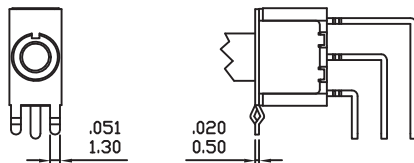
M61 (AVAILABLE WITH SPDT AND DPDT)



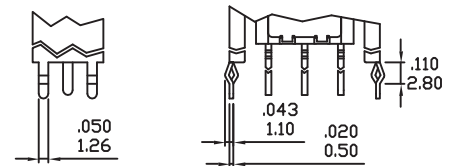
VS21,VS31



M71 (AVAILABLE WITH SPDT AND DPDT)



VS41,VS51

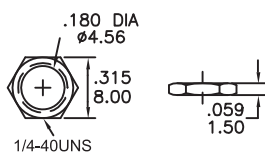


\* PC Mounting for M61,M71,VS21,VS31,VS41,VS51 refer to M6,M7,VS2,VS3,VS4,VS5 respectively.

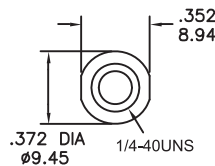
## HARDWARE

### NUT

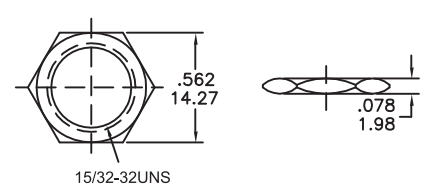
STD. HDW2



DRESS NUT HDW3

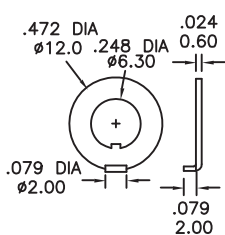


HDW4 - FOR T7,T8 ONLY

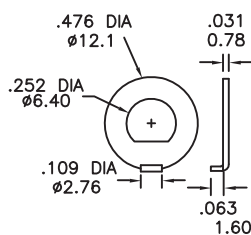


### LOCKING RING

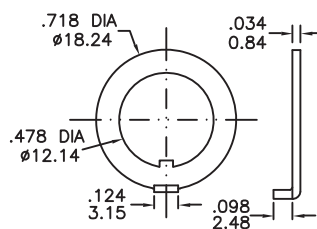
STD. HDW15



STD. HDW16

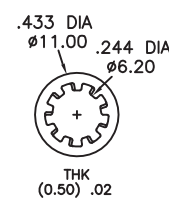


HDW17 - FOR T7,T8 ONLY

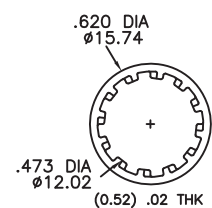


### LOCK WASHER

STD. HDW11



HDW12 - FOR T7,T8 ONLY



## TOGGLE CAPS

### T1 ACTUATOR CAP



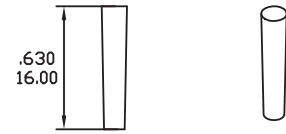
\* MATERIAL: PVC.

### T2 ACTUATOR CAP



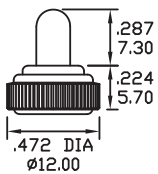
\* MATERIAL: PVC.

### T9 ACTUATOR GLOSS PLASTIC



\* MATERIAL: ABS.

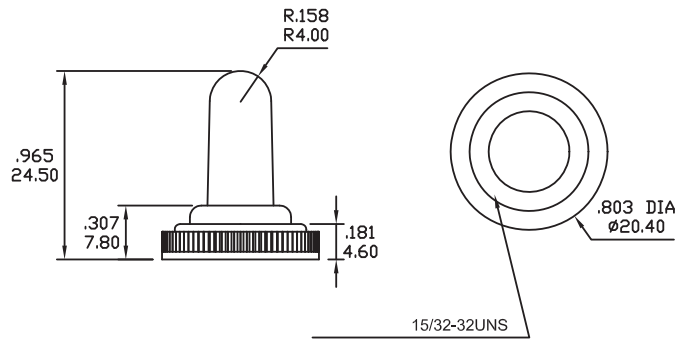
### E1 RUBBER HOOD



E1=INCH (STD.)  
E1A=INCH WITH INTERNAL-ORING SEALED  
K1=METRIC M6P0.75 THD (For B8 bushing only)

\* FOR T1 ACTUATOR ONLY.

### YE1A06 RUBBER HOOD



\* FOR T8 ACTUATOR ONLY.

## CONTACT MATERIAL OPTIONS

Coding	Contact Material	Terminal Plating	Rating	Agency Approvals
Q	Silver <sup>1</sup>	Silver plated <sup>1</sup>	5Amps @ 125VAC or 28VDC 2Amps @ 250VAC	RI® SF®
P		Tin plated <sup>5</sup> <sup>7</sup>		
R	Gold <sup>2</sup>	Gold plated <sup>4</sup>	0.4VA max @ 20V max (AC or DC)	
K		Tin plated <sup>5</sup> <sup>6</sup>		
G	Silver <sup>1</sup>	Gold over silver <sup>3</sup>	5Amps @ 125VAC or 28VDC 2Amps @ 250VAC	RI® SF®

1. Movable Contact / Terminals: Copper alloy, silver plated.
2. Movable Contact: Copper alloy with gold plated over nickel plated.
3. Terminals: Silver plated with outer layer in gold plating.
4. Terminals: Copper alloy, with gold plated over nickel plated.
5. Outer Terminals: Copper alloy with pure tin plated.
6. Terminal Contact: Gold plated over nickel plated.
7. Terminal Contact: Palladium nickel alloy (or Silver) plated.

\* P, K not available with M1 and M3 terminals

\* 6Amps (Movable Contact: coin silver, silver plated) available to model ON-NONE-ON without UL approval