

SPECIFICATIONS:

CONTACT RATING: Refer to "Contact Material Options" for more info.
ELECTRICAL LIFE: 50,000 make-and-break cycles at full load.
CONTACT RESISTANCE: 10mΩ max. initial @2-4VDC
100mA for both silver and gold plated contacts.
INSULATION RESISTANCE: 1,000MΩ min.
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.

Specifications and Dimensions subject to change

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

HOW TO ORDER SYSTEM

100	[]	[]	[]	[]	[]	[]	[]	[]
Switch Function	Actuator	Cap Color	Contact Material	Termination	Seal			
SP-1 On-None-On	T1 10.40 (.409") high	0 No color required	Q Silver	M1 Solder lug	E Epoxy			
SP-2 On-None-(On)	T2 5.40 (.213") high	1 White	P Silver (tin plated term.)	M2 PC thru-hole	0 W/O Epoxy			
SP-3 On-Off-On	T3 14.20 (.559") high	2 Black	R Gold	M3 Quick connect				
SP-4 (On)-Off-(On)	T4 16.50 (.650") high	3 Red	K Gold (tin plated term.)	M5-1 Wire wrap, 19.05 (.750") long				
SP-5 On-Off-(On)	T5 21.40 (.843") high	4 Orange	G Silver (gold over silver term.)	M5-2 Wire wrap, 24.48 (.964") long				
DP-1 On-None-On	T6 Flatted, 12.10 (.476") high	5 Yellow		M5-3 Wire wrap, 10.80 (.425") long				
DP-2 On-None-(On)		6 Green		M5-4 Wire wrap, 26.97 (1.062") long				
DP-3 On-Off-On	T7 11.70 (.461") high, 15/32 bushing	7 Blue		M6 Right angle, PC thru-hole				
DP-4 (On)-Off-(On)	P7 T7 anti-rotation	8 Brown		M61 Right angle, snap-in				
DP-5 On-Off-(On)	T8 17.50 (.689") high, 15/32 bushing	9 Gray		M7 Vertical, right angle PC thru-hole				
DP-6 On-On-On	P8 T8 anti-rotation			M71 Vertical, right angle snap-in				
DP-7 (On)-On-(On)	T9 Plastic, 17.20 (.677") high			VS2 Vertical mount, 11.70 (.461") high				
DP-8 On-On-(On)				VS21 Vertical mount, snap-in 11.70 (.461") high				
DP-9 None-On-(On)	T10 Round, 10.60 (.417") high			VS3 Vertical mount, 16.00 (.630") high				
3P-1 On-None-On	TA Locking lever, 15.60 (.614") high			VS31 Vertical mount, snap-in 16.00 (.630") high				
3P-2 On-None-(On)	T11 Locking lever, 14.56 (.573") high			VS4 Vertical mount, 11.70 (.461") high				
3P-3 On-Off-(On)	TL Locking lever, 14.56 (.573") high			VS41 Vertical mount, snap-in 11.70 (.461") high				
3P-4 (On)-Off-(On)				VS5 Vertical mount, 16.00 (.630") high				
3P-5 On-Off-(On)				VS51 Vertical mount, snap-in 16.00 (.630") high				
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)								
4P-6 On-On-On								
4P-7 (On)-On-(On)								
4P-8 On-On-(On)								
	Cap Type	Note:						
	0 No Cap	No cap type required for						
	1 T1 Plastic, 10.60 (.417") high	T9 actuator						
	2 T2 Plastic, 7.60 (.299")							
	3 E1 Rubber hood, 13.00 (.512") high							
	4 YE1A Rubber hood, 24.50, (.965") high							

Series 100

Miniature Toggle Switches

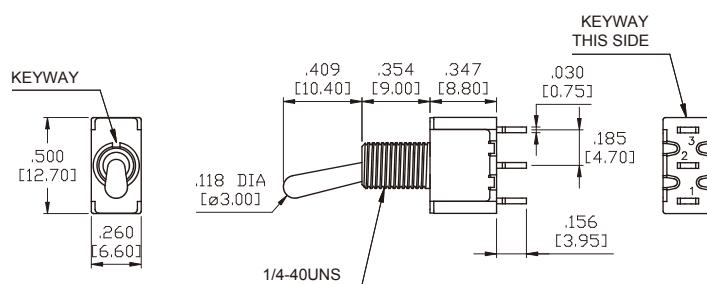
SPDT



Model No.	Switching Position		
	ON	NONE	ON
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

2Comm.



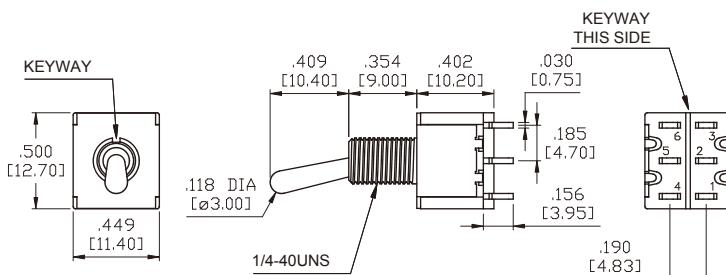
DPDT



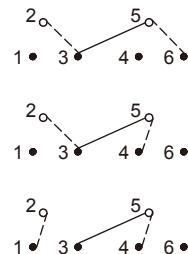
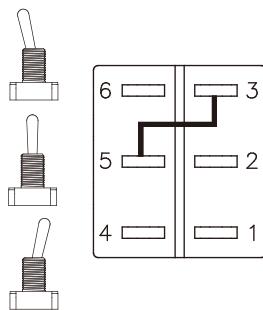
Model No.	Switching Position		
	ON	NONE	ON
DP-1	ON	NONE	ON
DP-2	ON	NONE	(ON)
DP-3	ON	OFF	ON
DP-4	(ON)	OFF	(ON)
DP-5	ON	OFF	(ON)
Term. Comm.	2-3,5-6	OPEN	2-1,5-4

Schematic

2Comm. 5Comm.



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



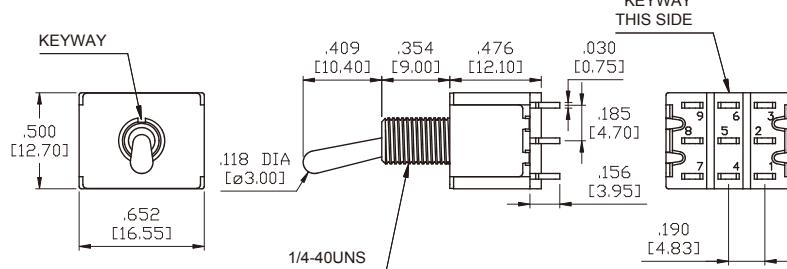
3PDT



Model No.	Switching Position		
	ON	NONE	ON
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

2Comm. 5Comm. 8Comm.



Series 100

Miniature Toggle Switches

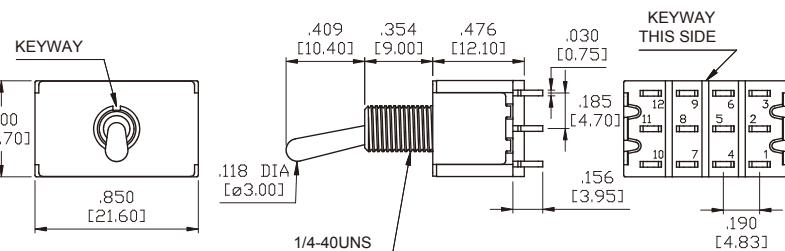


4PDT

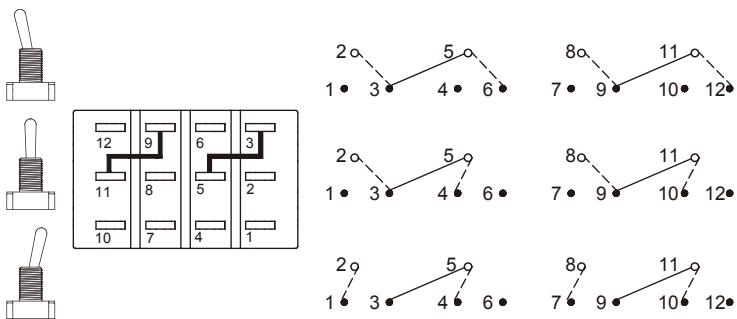
Model No.	Switching Position		
4P-1	ON	NONE	ON
4P-2	ON	NONE	(ON)
4P-3	ON	OFF	ON
4P-4	(ON)	OFF	(ON)
4P-5	ON	OFF	(ON)
Term. Comm.	2-3,5-6 8-9 11-12	OPEN	2-1,5-4 8-7 11-10

Schematic

2Comm.
1 • 3 •
5Comm.
4 • 6 •
8Comm.
7 • 9 •
Comm.
10 • 12 •

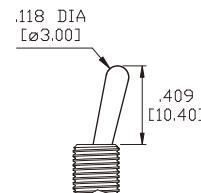


WIRING FOR ON-ON-ON (3-WAY) FUNCTION

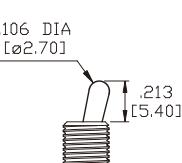


ACTUATOR OPTIONS

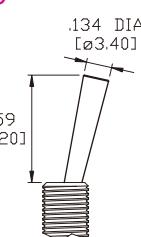
T1



T2



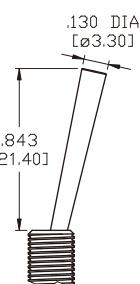
T3



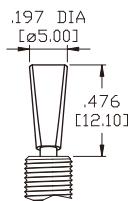
T4



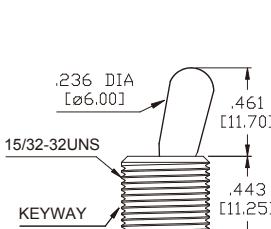
T5



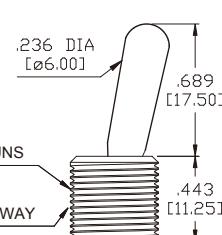
T6



T7
P7 ANTI-ROTATION



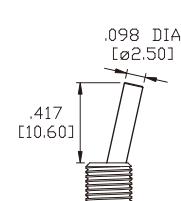
T8
P8 ANTI-ROTATION



T9 PLASTIC

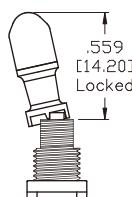
NO.	COLOR
1	White
2	Black(std.)
3	Red
4	Orange
5	Yellow
6	Green
7	Blue
8	Brown
9	Gray

T0

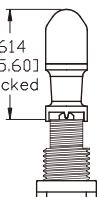


LOCKING LEVER

TA



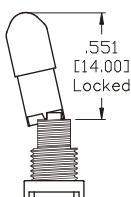
FOR SP-1,DP-1
3P-1,4P-1 ONLY



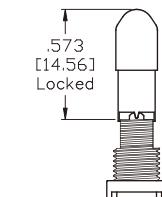
FOR SP-3,DP-3
3P-3,4P-3 ONLY

LOCKING LEVER

TI



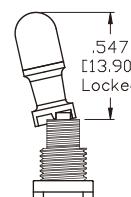
FOR SP-1,DP-1
3P-1,4P-1 ONLY



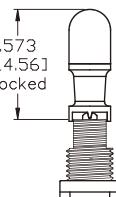
FOR SP-3,DP-3
3P-3,4P-3 ONLY

LOCKING LEVER

TL



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



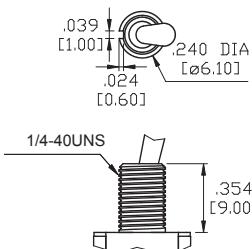
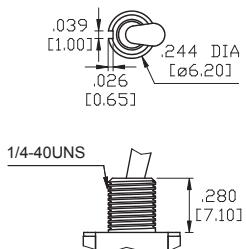
FOR SP-3,DP-3
3P-3,4P-3 ONLY

* T6 must configure with a stand-off bushing.

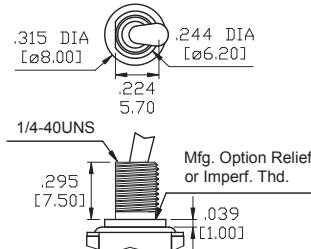
* For T7,P7,T8,P8 bushing code is not required.

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

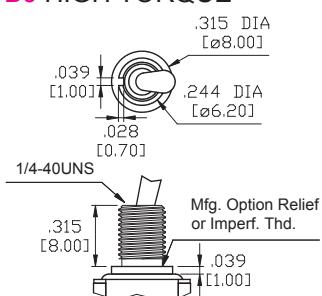
BUSHING OPTIONS

B1 THD
B2 NON-THDB3 THD
B4 NON-THD

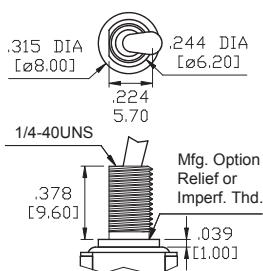
B5 HIGH TORQUE



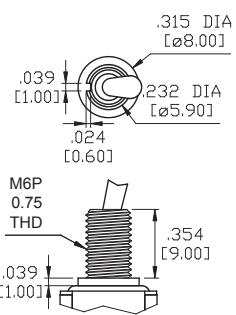
B6 HIGH TORQUE



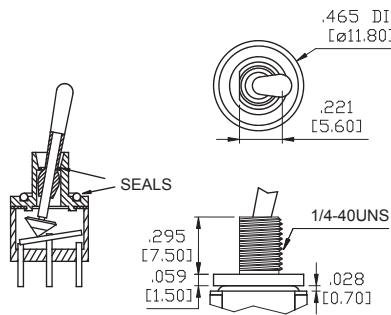
B7 LONG



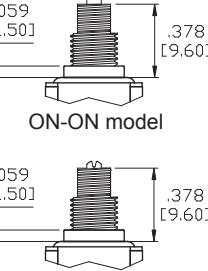
B8 METRIC



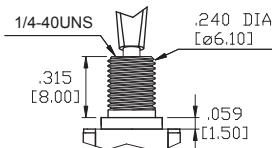
B9 SPLASH-PROOF



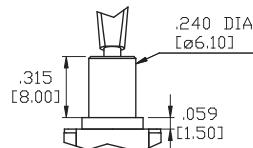
BL LOCKING LEVER



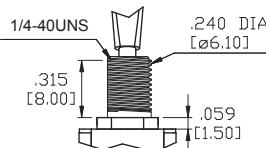
BA THD For T6



BB NON-THD For T6

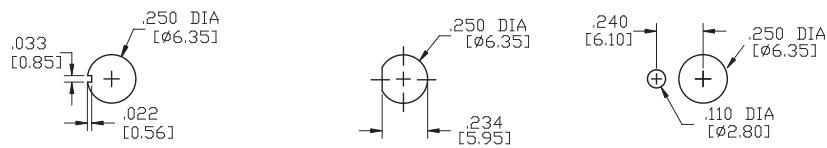


BE HIGH TORQUE For T6

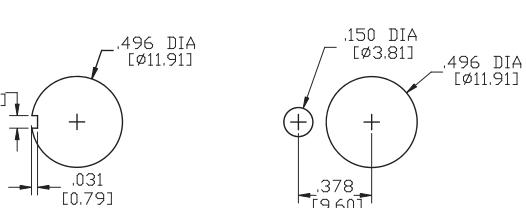


PANEL MOUNTING

1/4 INCH BUSHING

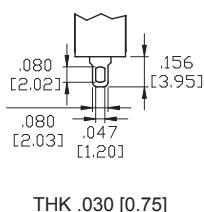


15/32 INCH BUSHING

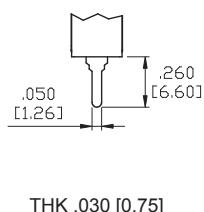


TERMINATION OPTIONS

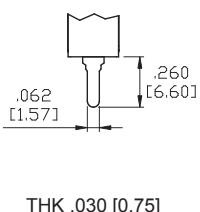
M1 STD. SOLDER LUG



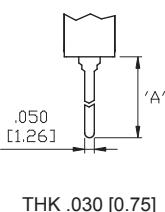
M2 PC THRU-HOLE



M3 QUICK CONNECT



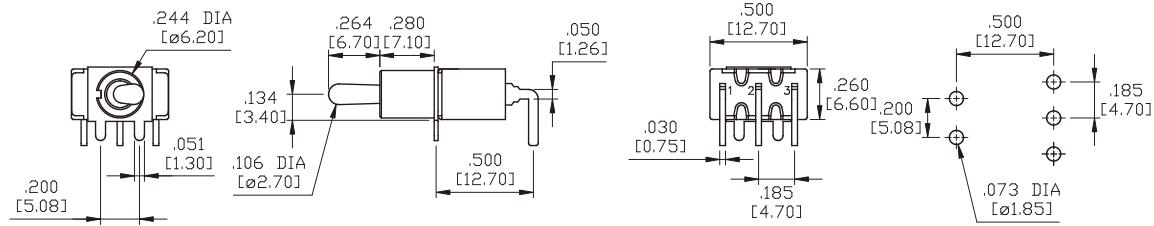
M5 WIRE WRAP



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]

TERMINATION OPTIONS

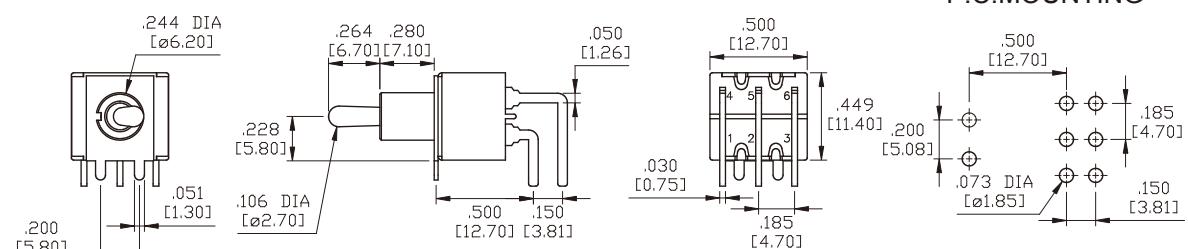
M6



SPDT

P.C.MOUNTING

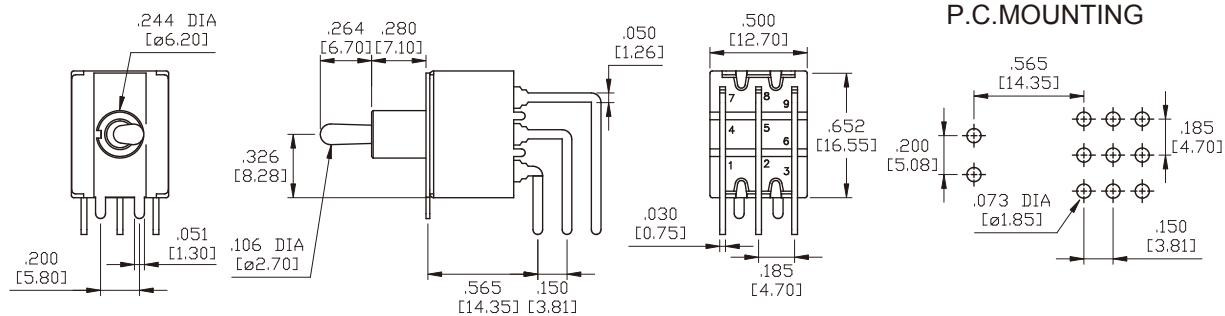
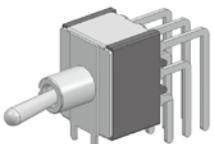
M6



DPDT

P.C.MOUNTING

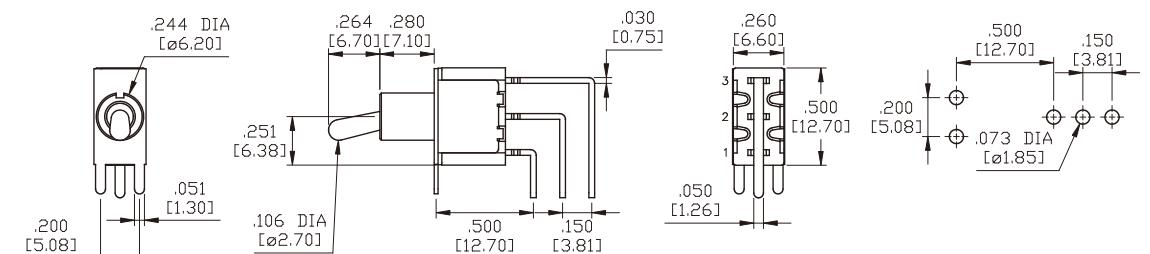
M6



3PDT

P.C.MOUNTING

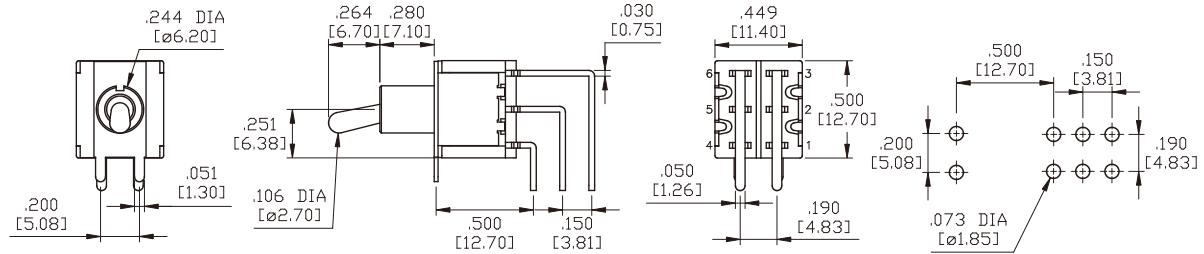
M7



SPDT

P.C.MOUNTING

M7



DPDT

Toggle

Rocker

Slide

Pushbutton

AV

Rotary

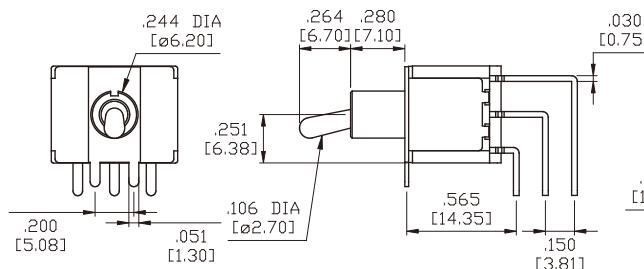
Tact

Touch Key

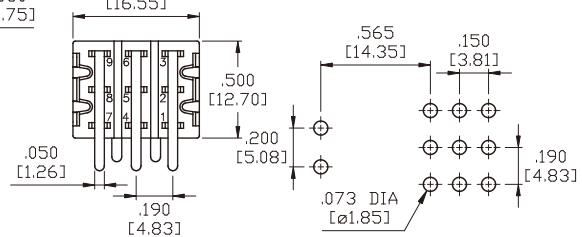
Miscellaneous

TERMINATION OPTIONS

M7

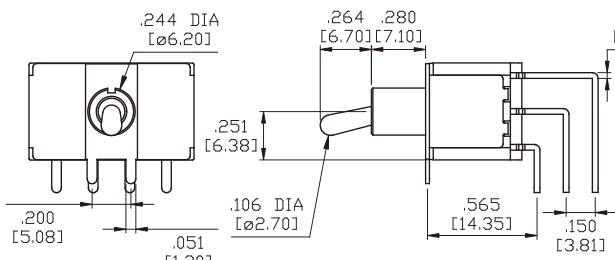


P.C.MOUNTING

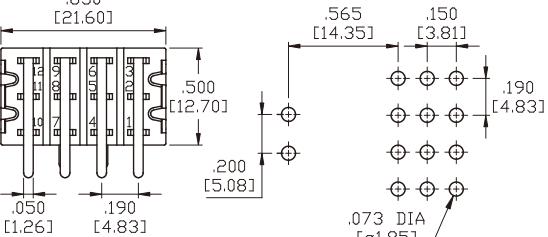


3PDT

M7

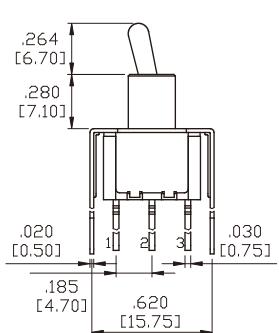
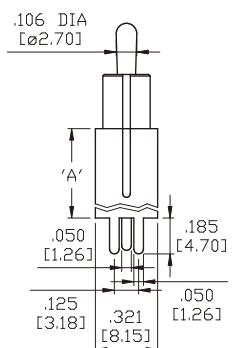


P.C.MOUNTING



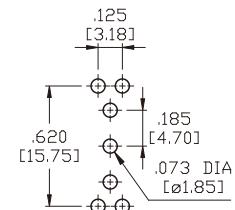
4PDT

VS2-VS3



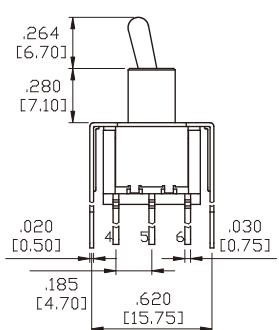
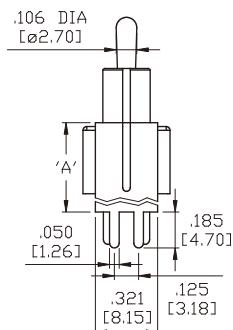
OPTION CODE	DIM.'A'
VS2	.461 [11.70]
VS3	.630 [16.00]

P.C.MOUNTING



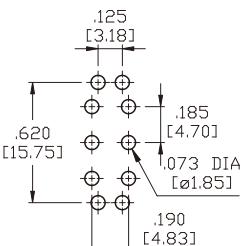
SPDT

VS2-VS3



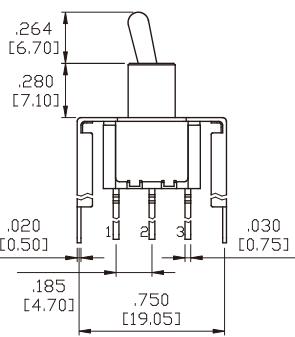
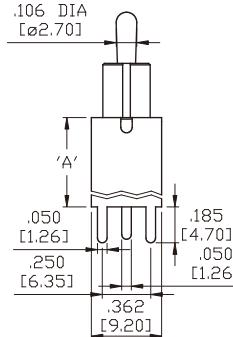
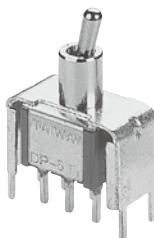
OPTION CODE	DIM.'A'
VS2	.461 [11.70]
VS3	.630 [16.00]

P.C.MOUNTING



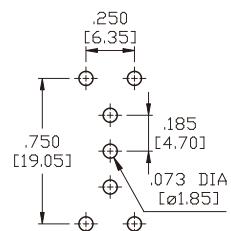
DPDT

VS4-VS5



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

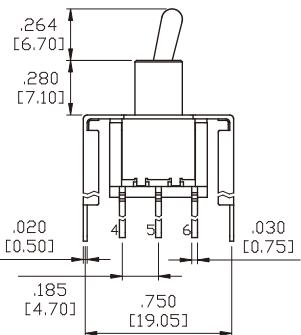
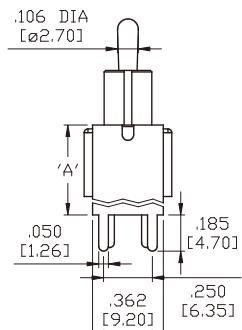
P.C.MOUNTING



SPDT

TERMINATION OPTIONS

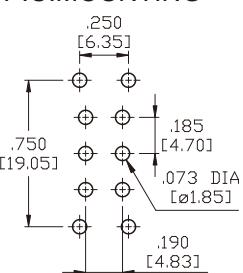
VS4-VS5



DPDT

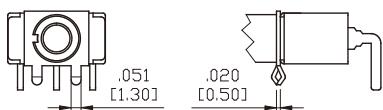
OPTION CODE	DIM.'A'
VS4	.461 [11.70]
VS5	.630 [16.00]

P.C.MOUNTING

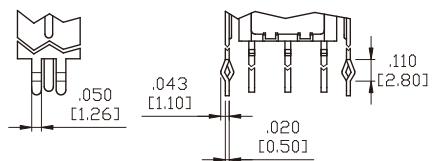


SNAP-IN TERMINATION OPTIONS

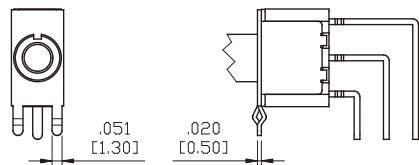
M61 (AVAILABLE WITH SPDT AND DPDT)



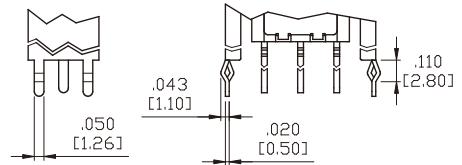
VS21,VS31



M71 (AVAILABLE WITH SPDT AND DPDT)



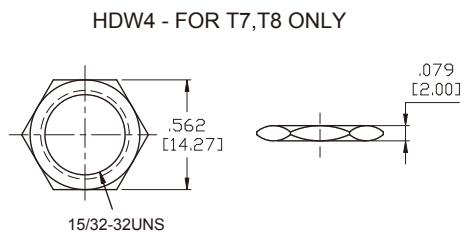
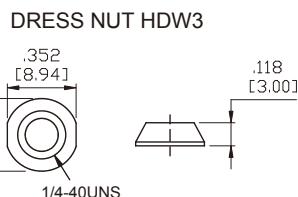
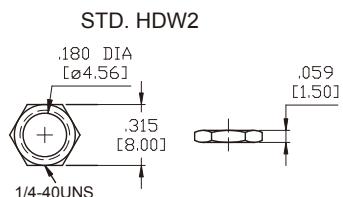
VS41,VS51



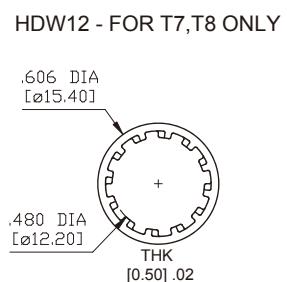
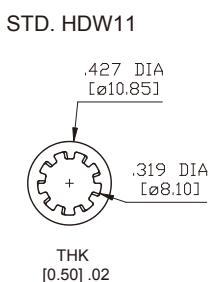
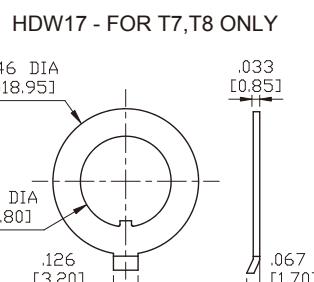
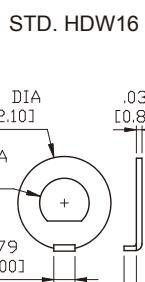
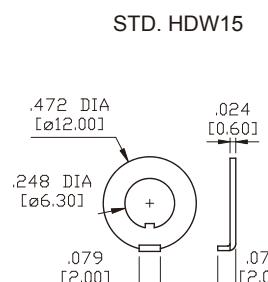
* PC Mounting for M61,M71,VS21,VS31,VS41,VS51 refer to M6,M7,VS2,VS3,VS4,VS5 respectively.

HARDWARE

NUT



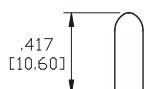
LOCKING RING



LOCK WASHER

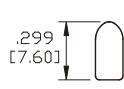
TOGGLE CAPS

T1 ACTUATOR CAP



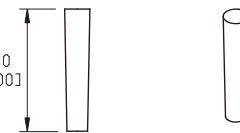
* MATERIAL: PVC.

T2 ACTUATOR CAP



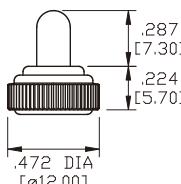
* MATERIAL: PVC.

T9 ACTUATOR GLOSS PLASTIC



* MATERIAL: ABS.

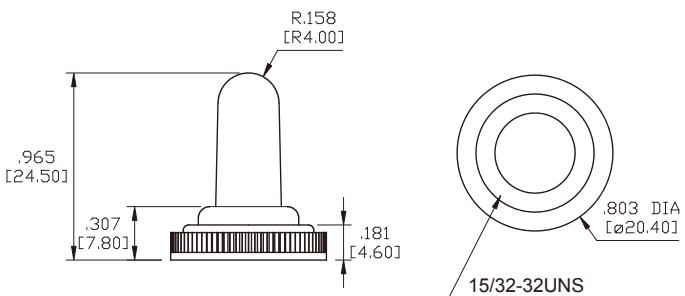
E1 RUBBER HOOD



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 ¹	Silver plated ¹	5Amps @ 125VAC or 28VDC 2Amps @ 250VAC	
P		Tin plated ⁵ ₇		
R	Gold ²	Gold plated ⁴	0.4VA max @ 20V max (AC or DC)	
K		Tin plated ⁵ ₆		
G	Silver ¹	Gold over silver ³	5Amps @ 125VAC or 28VDC 2Amps @ 250VAC	

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