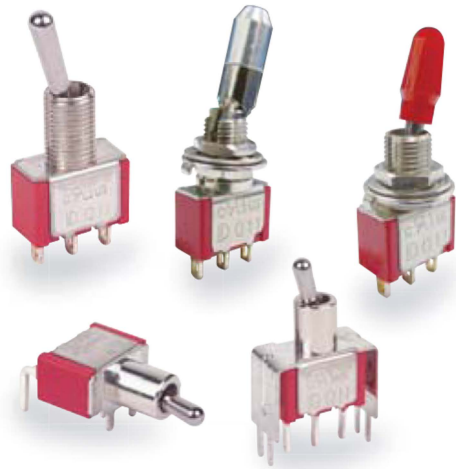
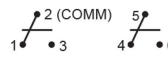
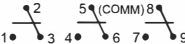
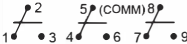
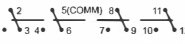
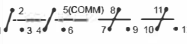


**SPECIFICATIONS****CONTACT RATING:** Dependent upon contact material**MECHANICAL LIFE:** 40,000 make-and-break cycles.**CONTACT RESISTANCE:** 10mΩ max. initial @ 2-4VDC
100mA for both silver and gold plated contacts.**INSULATION RESISTANCE:** 1,000 MΩ min.**DIELECTRIC STRENGTH:** 1,000 Vrms min.@sea level.**OPERATING TEMPERATURE:** -40°C to 85°C.**MATERIALS****CASE:** Diallyl phthalate (DAP) (UL94v-0).**ACTUATOR:** Brass,chrome plated.**BUSHING:** Brass, nickel plated.**HOUSING:** Stainless steel.**SWITCH SUPPORT:** Brass, tin plated.**CONTACT / TERMINALS:** Copper alloy, Silver or gold plated.**SWITCH FUNCTION**

NO. POLES	UL/CSA MODEL NO.	MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
			POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
								
SP	Q1111	1MS1	ON	NONE	ON		N/A	2-1
	Q1112	1MS2	ON	NONE	MOM			
	Q1113	1MS3	ON	OFF	ON		OPEN	
	Q1114	1MS4	MOM	OFF	MOM			
	Q1115	1MS5	ON	OFF	MOM			
DP ▲ ▲	Q1121	1MD1	ON	NONE	ON		N/A	2-1,5-4
	Q1122	1MD2	ON	NONE	MOM			
	Q1123	1MD3	ON	OFF	ON		OPEN	
	Q1124	1MD4	MOM	OFF	MOM			
	Q1125	1MD5	ON	OFF	MOM			
	Q1126	1MD6	ON	ON	ON	2-3,5-6	2-3,5-4	2-1,5-4
	Q1127	1MD7	MOM	ON	MOM			
	Q1128	1MD8	ON	ON	MOM			

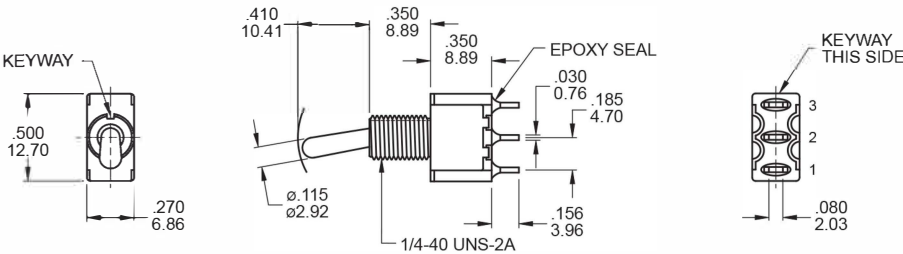
SWITCH FUNCTION

3P	Q1131	1M31	ON	NONE	ON	2-3,5-6,8-9 	N/A	2-1,5-4,8-7 
	Q1132	1M32	ON	NONE	MOM		OPEN	
	Q1133	1M33	ON	OFF	ON			
	Q1134	1M34	MOM	OFF	MOM			
	Q1135	1M35	ON	OFF	MOM			
4P	Q1141	1M41	ON	NONE	ON	2-3,5-6,8-9,11-12 	N/A	2-1,5-4,8-7,11-10 
	Q1142	1M42	ON	NONE	MOM			
	Q1143	1M43	ON	OFF	ON			
	Q1144	1M44	MOM	OFF	MOM			
	Q1145	1M45	ON	OFF	MOM			
	Q1146	1M46	ON	ON	ON	2-3,5-6,8-9,11-12	2-3,5-4,8-9,11-10	2-1,5-4,8-7,11-10
	▲ Q1147	1M47	MOM	ON	MOM			
	▲ Q1148	1M48	ON	ON	MOM			

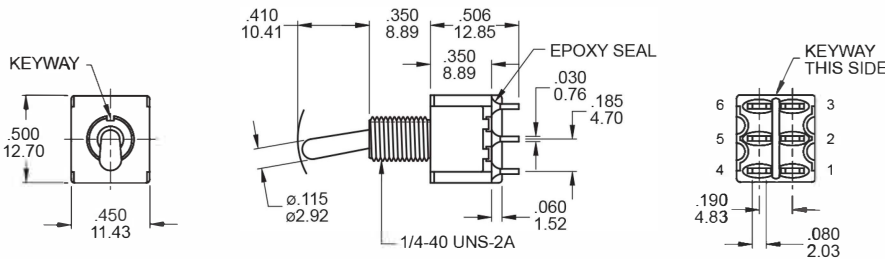
MOM= MOMENTARY

▲ Please check the availability in advance before order

POLE OPTIONS



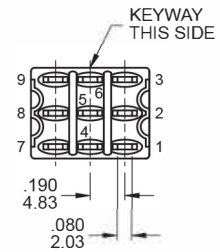
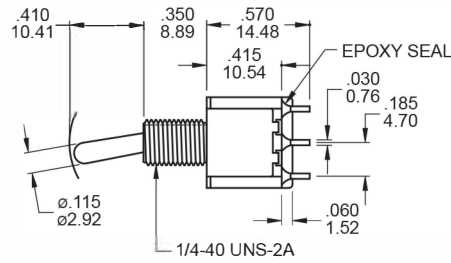
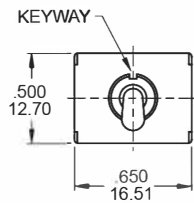
SPDT



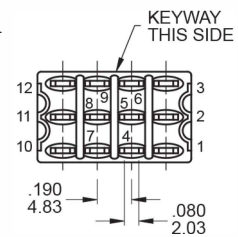
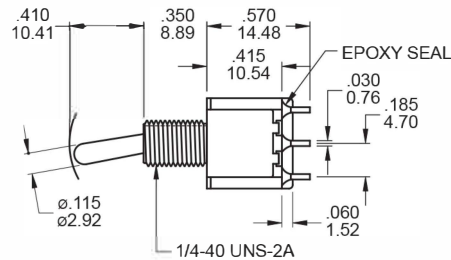
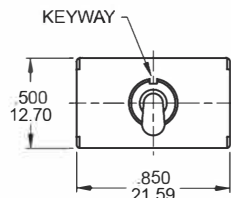
DPDT



POLE OPTIONS



3PDT



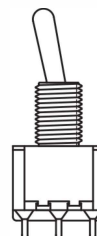
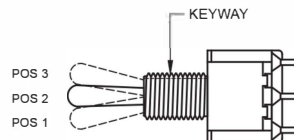
4PDT

3-WAY SWITCH

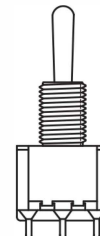
3-Way Wiring Diagram Schematics

SINGLE POLE, 3 POSITION

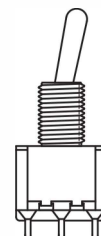
Model No.	POS 1	POS 2	POS 3
1MD6	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4



POS. 1



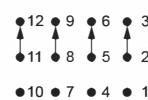
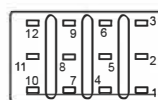
POS. 2



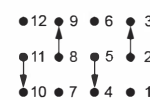
POS. 3

DOUBLE POLE, 3 POSITION

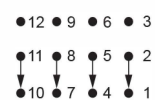
Model No.	POS 1	POS 2	POS 3
1M46	ON	ON	ON
Term. Comm.	2-3,5-6 8-9,11-12	2-3,5-4 8-9,11-10	2-1,5-4 8-7,11-10



POS. 1



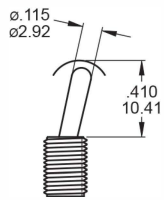
POS. 2



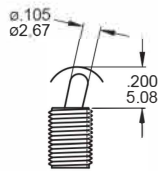
POS. 3

ACTUATOR OPTIONS

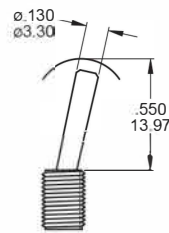
T1 STD



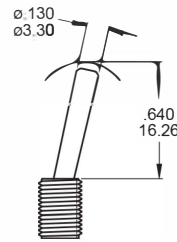
T2



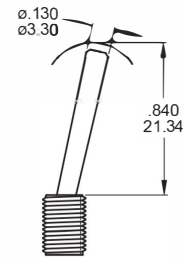
T3



T4



T5

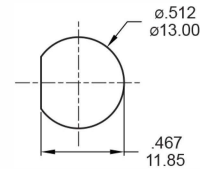
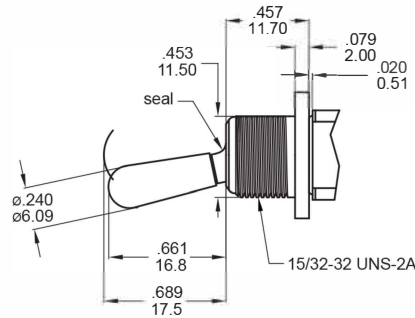
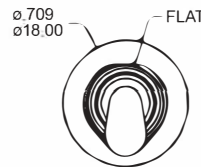


NOTE : T1 ~ T5 Actuator shown with standard B1 Bushing ;
Add .070 (1.78) for B3 Bushing ;
Subtract .020 (0.51) for B6 Bushing ;
Std for M1 , M2 Terminal sub .016 (0.40) for M6 , M7 , VSX (Exclude B1/B2 bushing)

T88B52

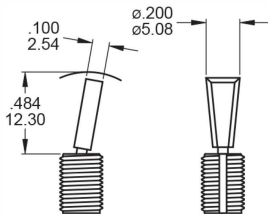
SPLASH PROOF

Std SPDT for M1.M2 Terminal

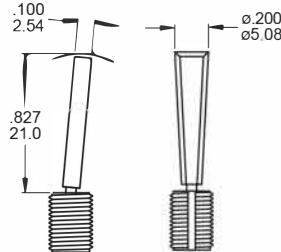


PANEL MOUNTING
Without locking ring (Flat)

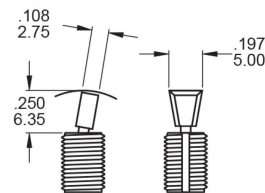
T6 FLATTED WITH ANTIROTATION



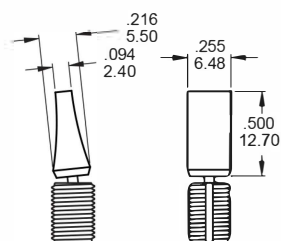
T61



T63



T62



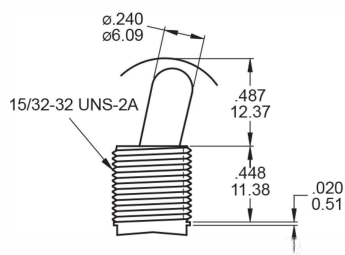
Plastic No.Color :

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

* Besides standard color,
other colors need to check
stocks available.

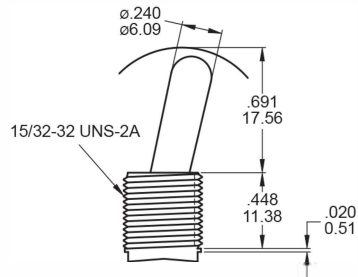
NOTE: T6,T61,T62 ,T63 use with B11, B12, B15,
B16 bushing only.

T7



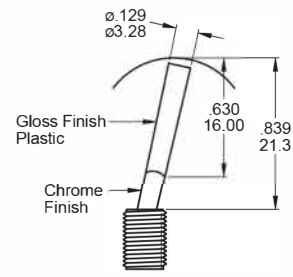
Use with B13 bushing
Use with B18,B20 the lever is antirotation
and the size of lever is 13.00mm

T8



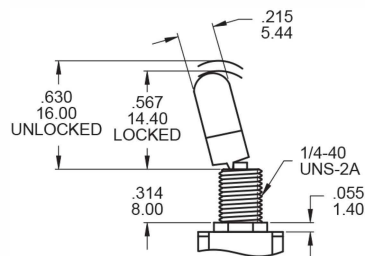
Use with B13 bushing
Use with B18,B20 the lever is antirotation
and the size of lever is 18.00mm

T9

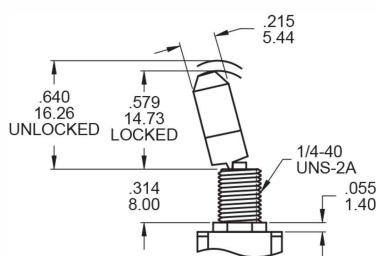


B1 / B2 bushing std
with black(T92) and red(T93) color
only(std.)

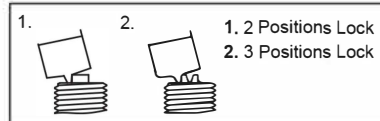
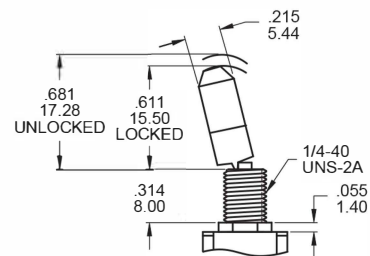
TL1B25 THD STD
B26 NON-THD



TL2B25 THD STD
B26 NON-THD

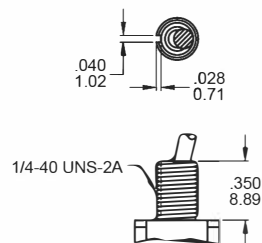


TL3B25 THD STD
B26 NON-THD



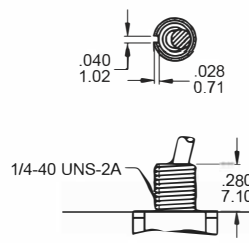
BUSHING OPTIONS

B1 THD STD
B2 NON-THD



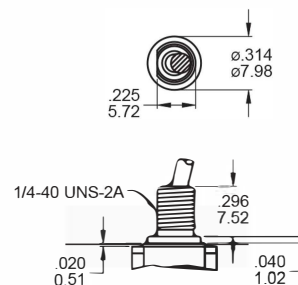
Subtract .016 (0.40) for M6,
M7 and VS2~5 termination options.

B3 THD
B4 NON-THD

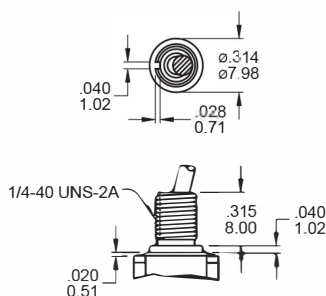


B4 is standard for M6,
M7 and VS2~5 termination options.

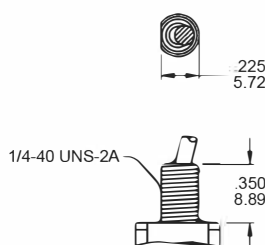
B5 HIGH TORQUE



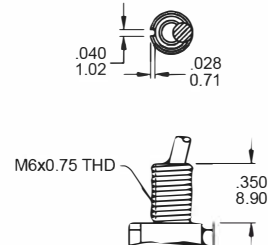
B6 HIGH TORQUE



B7 THD STD

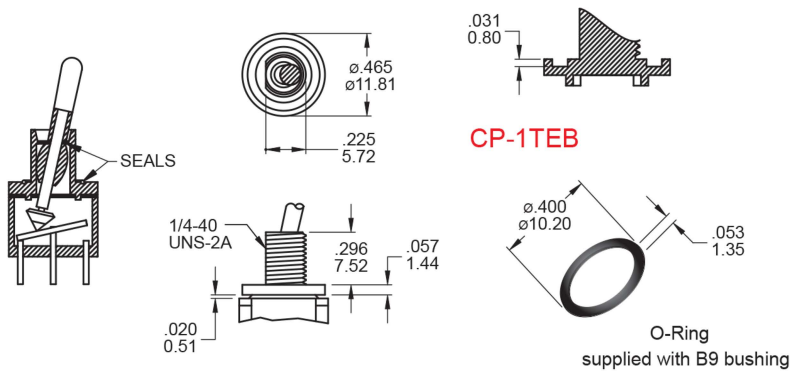


B8 METRIC THD

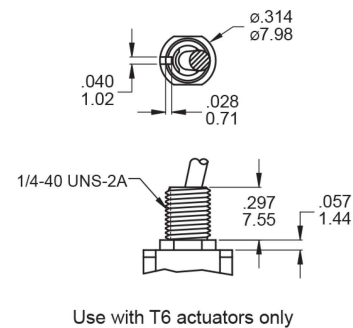


BUSHING OPTIONS

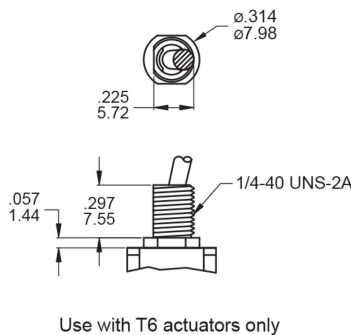
B9 SPLASH PROOF



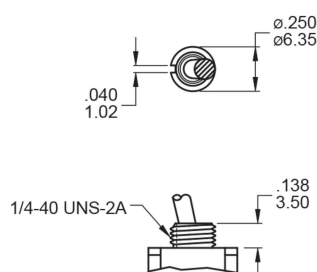
B11 THD STD B12 NON-THD



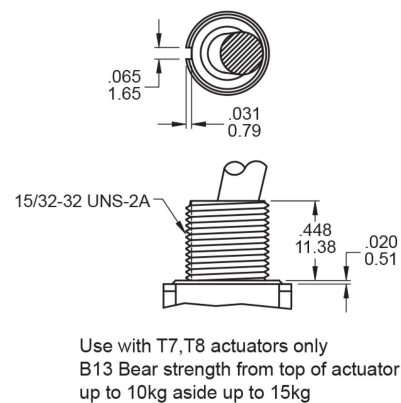
B15 THD STD B16 NON-THD



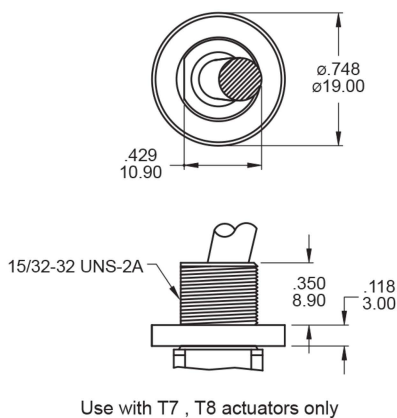
B17



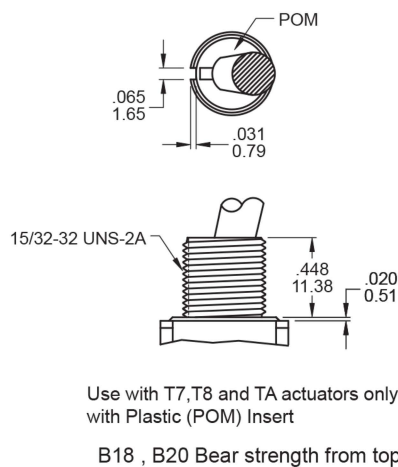
B13



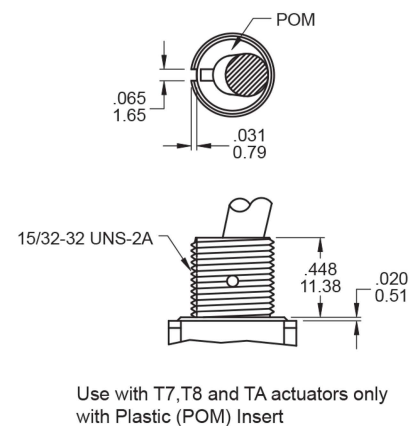
B14 SPLASH PROOF



B18



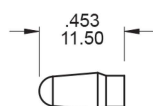
B20



B18 , B20 Bear strength from top of actuator up to 20kg aside up to 15kg

OPTIONAL TOGGLE CAP

CP-T1XX



Use with T1 actuator

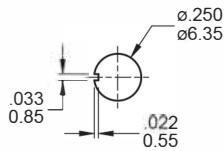
CAP Color :

ITEM NO	COLOR
1	White
2	Black (Std)
3	Red
5	Yellow
6	Green
7	Blue
9	Gray

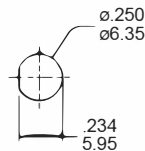
* Besides standard color,
other colors need to check stocks available.

PANEL MOUNTING

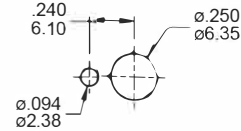
1/4 IN BUSHING



Without locking ring (Keyway)

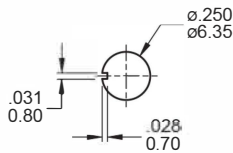


Without locking ring (Flat)

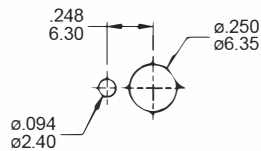


With standard locking ring.

METRIC BUSHING

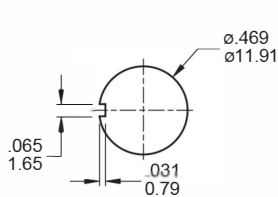


Without locking ring (Keyway)

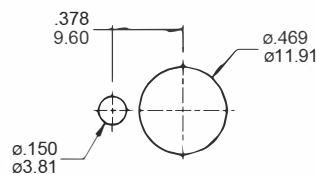


With standard locking ring.

15/32 IN BUSHING

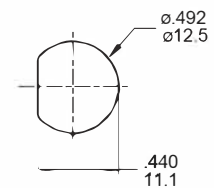


Without locking ring (Keyway)



With standard locking ring.

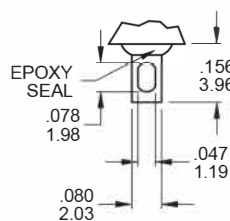
SPLASH PROOF BUSHING



Without locking ring (Flat)

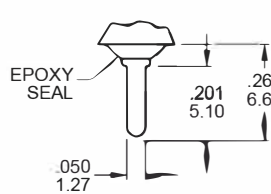
TERMINATION OPTIONS

M1 Solder lug



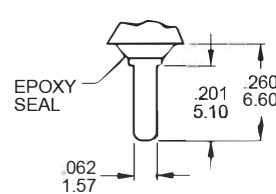
.030(0.76) THK.

M2 PC Thru-hole



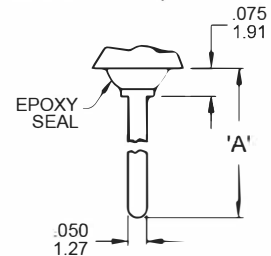
.030(0.76) THK.

M3 Quick connect



.030(0.76) THK.

M5 Wire Wrap



.030(0.76) THK.

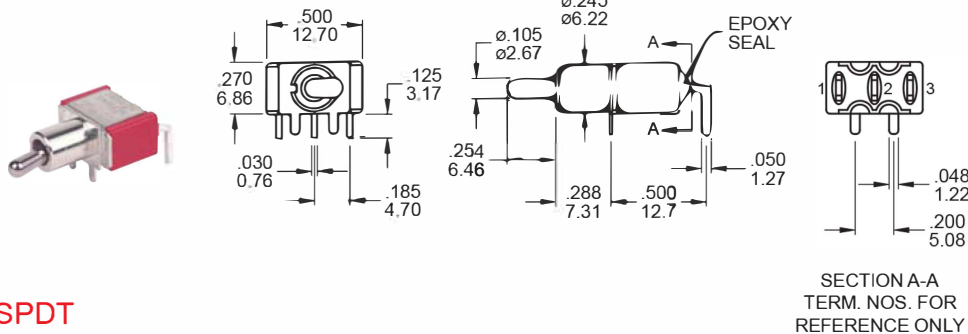
OTHER TERMINATION OPTIONS

- M6** Right angle P.C. Mount
- M7** Vertical right angle P.C. Mount
- VS2** Vertical bracket P.C. Mount
- VS3** Vertical bracket P.C. Mount
- VS5** Vertical bracket P.C. Mount

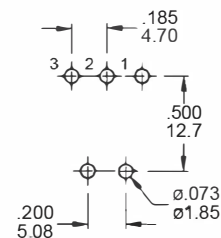
- M6N** Right angle P.C. Mount with snap-in bracket
- V2N** Vertical bracket P.C. Mount with snap-in bracket

OPTION CODE	DIM. 'A'
M51	.736 (18.70)
M52	.953 (24.20)
M53	.415 (10.55)
M54	1.062 (26.97)

M6

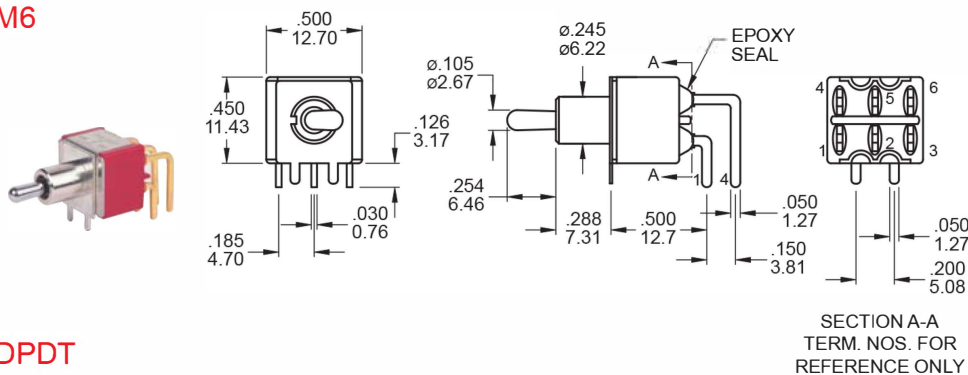


P.C. MOUNTING

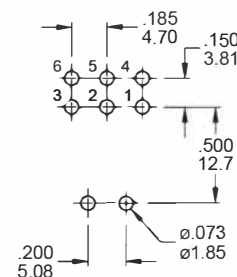


SPDT

M6

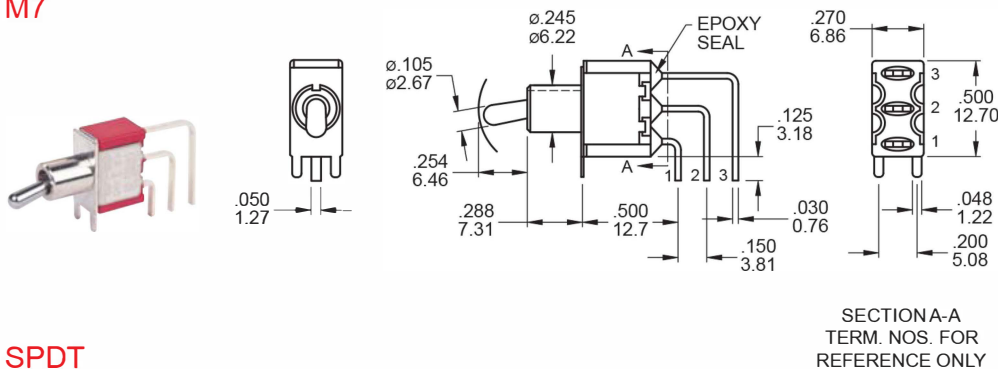


P.C. MOUNTING

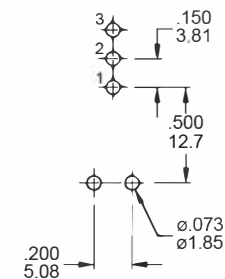


DPDT

M7

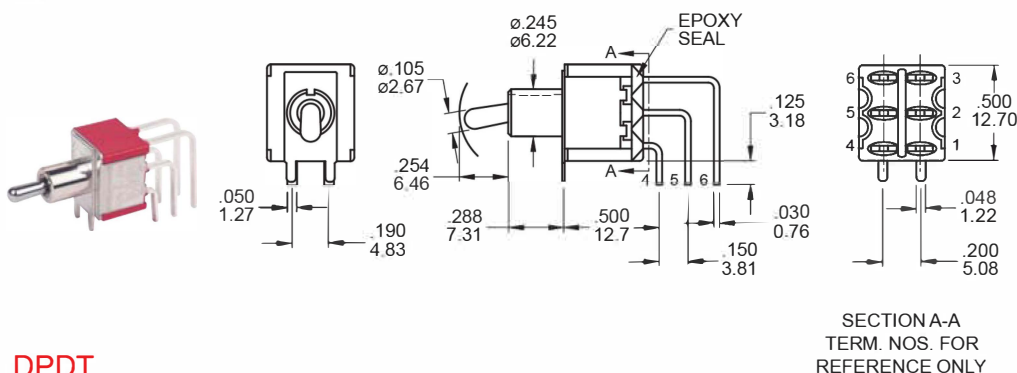


P.C. MOUNTING

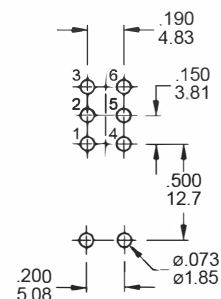


SPDT

M7

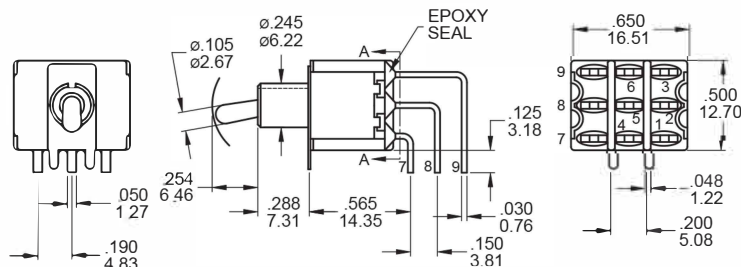


P.C. MOUNTING

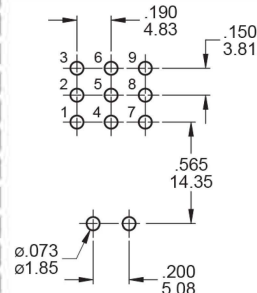


DPDT

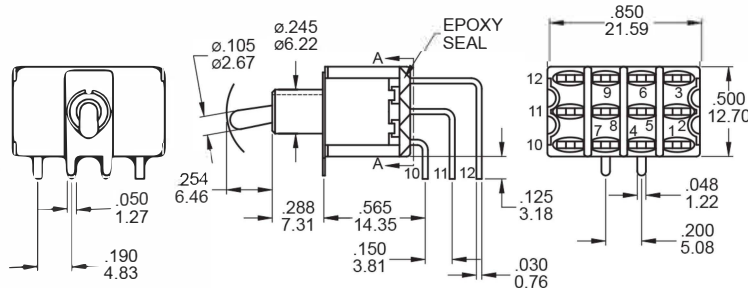
M7



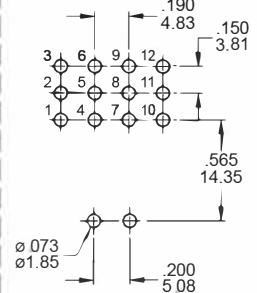
P.C. MOUNTING



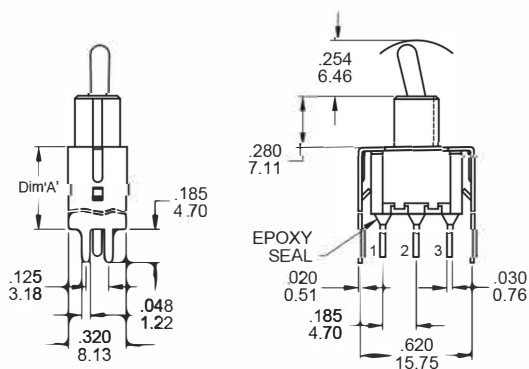
3PDT



P.C. MOUNTING

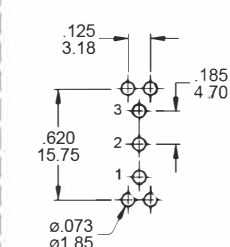


4PDT



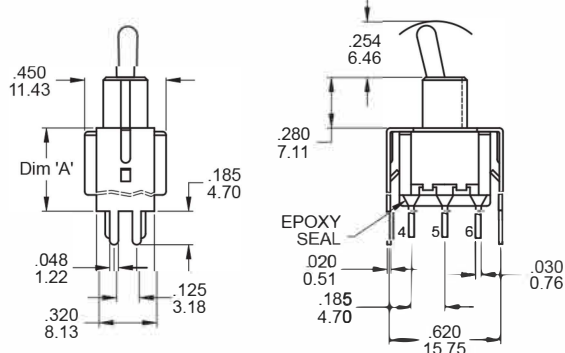
OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00

P.C. MOUNTING



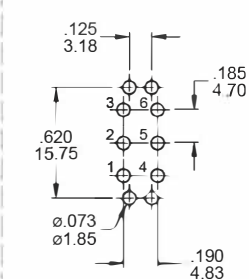
SPDT

VS2 - VS3



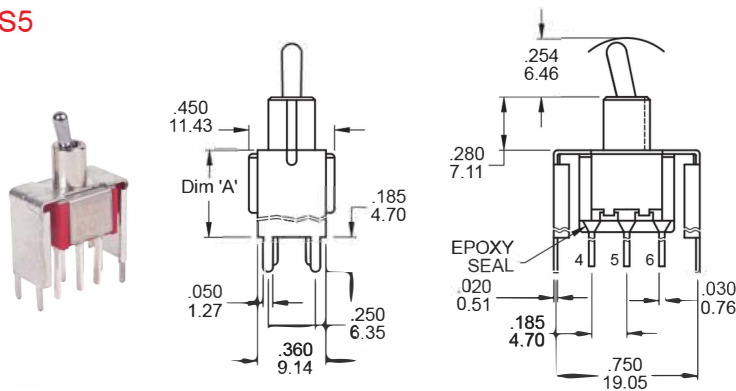
OPTION CODE	DIM. 'A'
VS2	.460 11.68
VS3	.630 16.00

P.C. MOUNTING



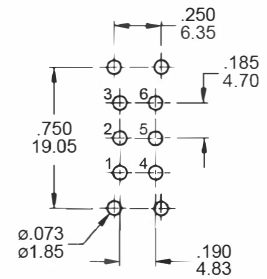
DPDT

VS5



OPTION CODE	DIM. 'A'
VS4	.460 11.68
VS5	.630 16.00

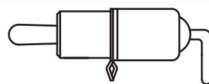
P.C. MOUNTING



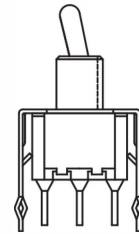
DPDT

SNAP-IN TERMINATION OPTIONS

M6N

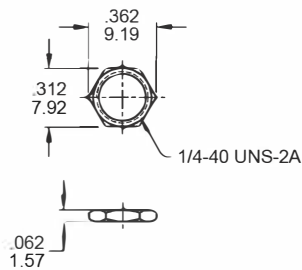


V2N



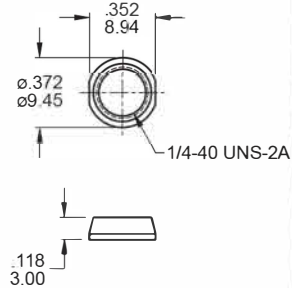
HARDWARE

1/4 NUT



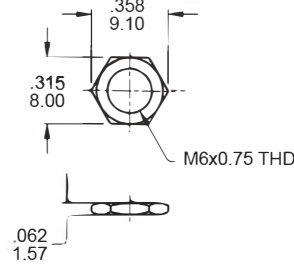
MNU-1M01A

DRESS NUT



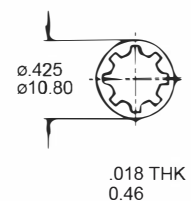
MNU-1M29

METRIC NUT



MNU-1M04

LOCKWASHER



MNU-1M03

Supplied standard with B1, B3, B5, B6 and B9 options

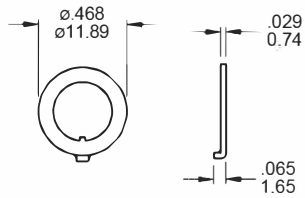
Supplied standard with B8 metric bushing

Supplied standard with B1 / B3 bushing

CONTACT MATERIAL OPTIONS

	CONTACT PLATING	TERMINAL PLATING	RATINGS
Q	Silver	Q = Silver	5 Amps with resistant load @ 120VAC or 28VDC
C	Gold over Silver	C = Gold over silver	2 Amps with resistant load @ 250VAC
R	Gold	R = Gold	0.4 Volt - Amps (VA) max. @ 20V max. (AC or DC)

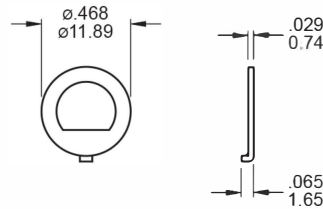
LOCKING RING



MNU-1M02

Locking ring supplied standard

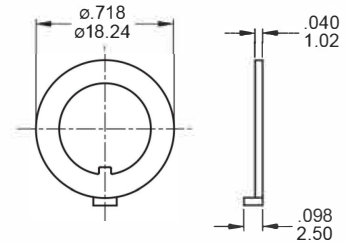
LOCKING RING



MNU-1M11

Locking ring supplied with B5 bushing

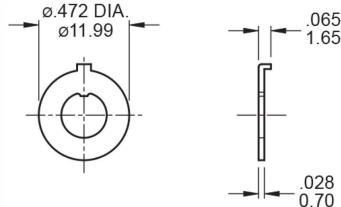
LOCKING RING



MNU-1M08

Locking ring supplied with B13,B18,B20 bushing

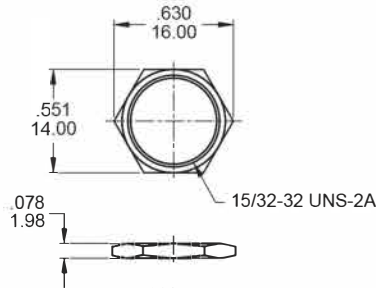
LOCKING RING



MNU-1M05

Locking ring supplied with B8 bushing

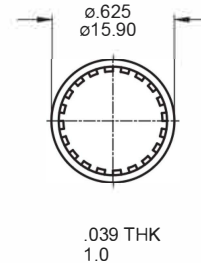
15/32 NUT



MNU1M07

Supplied standard with B13 bushing

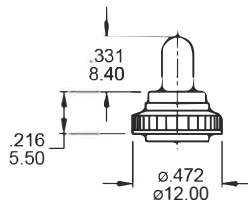
LOCKWASHER



MNU-1M09

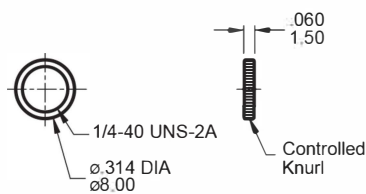
Supplied standard with B13 bushing

OPTIONAL RUBBER HOOD SEALING



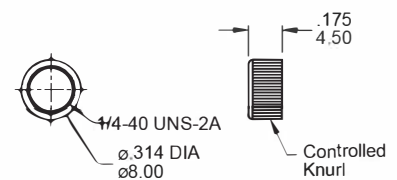
K1=Metric
E1=Inch (Std.)
for actuator T1, T2 and
B1, B3, B5, B6 Bushing only

DRESS NUT



MNU-1M18

DRESS NUT



MNU-1M24

SOLDERING PROCESSES

MANUAL SOLDERING: Use soldering iron of 30 watts, controlled at 350°C approximately 5 seconds while applying solder.

WAVE SOLDERING: Recommended Soldering Temperature: 270 ± 5°C

Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)