











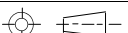


Product Specification

Miniature Toggle Switches

Part Number:
SWT-M-XX-AX-BX-TX-XX-X

	1	2	3	4	5	6	7	8	9																																			
A	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   </div> <div style="text-align: center;"> <p>SPECIFICATIONS</p> <p>Contact Rating: Dependant upon contact material (see specs)</p> <p>Mechanical Life: 40,000 make-and-break cycles</p> <p>Contact Resistance: 10mΩmax. Initial @ 2-4VDC 100mA for both silver and gold plated contacts</p> <p>Insulation Resistance: 1,000 MΩ min.</p> <p>Withstanding: 1,000 Vrms min. @ sea level</p> <p>Operating Temp: -30C to 85C</p> <p>Case: Diallyl phthalate (DAP) UL94V-0</p> <p>Actuator: Brass, chrome plated</p> <p>Bushing: Brass, nickel plated</p> <p>Housing: Stainless Steel</p> <p>Switch Support: Brass, tin plated</p> <p>Contact/Terminals: Brass, Silver or Gold plated</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>																																											
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G	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">Rev.</th> <th style="width: 25%;">Description</th> <th style="width: 10%;">Date</th> <th style="width: 10%;">Approved</th> <th style="width: 10%;">Drawing</th> <th style="width: 10%;">Name</th> <th style="width: 10%;">Date</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td>Approved</td> <td>Howard</td> <td>08/30/10</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Checked</td> <td>Lizzy</td> <td>08/30/10</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Drawn</td> <td>Tina</td> <td>08/30/10</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>0.0 ± 0.35</td> <td>0.00 ± 0.20</td> <td>Angles ± 3'</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">  </td> <td style="text-align: center;">  </td> <td style="text-align: center;">UNIT: mm</td> </tr> </tbody> </table>	Rev.	Description	Date	Approved	Drawing	Name	Date					Approved	Howard	08/30/10					Checked	Lizzy	08/30/10					Drawn	Tina	08/30/10					0.0 ± 0.35	0.00 ± 0.20	Angles ± 3'							UNIT: mm	<p>Central Components Manufacturing</p> <p>440 Lincoln Blvd., Middlesex, New Jersey 08846 Phone 732 469-5720 888 288-5152 Fax 732 469-1919</p> <p>Part No.: SWT-M-XX-AX-BX-TX-XX-X</p> <p>Description: Miniature toggle switches</p>
Rev.	Description	Date	Approved	Drawing	Name	Date																																						
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1	2	3	4	5	6	7	8	9
A	Series	Type	Version	Actuator	Bushing	Terminal	Contact/Terminal Plating	Options
	SWT	M	XX	AX	BX	TX	XX	X
B	Switch	Miniature Toggle	11=SP On-None-On 12=SP On-None-Mom 13=SP On-Off-On 14=SP Mom-Off-Mom 15=DP On-Off-Mom 21=DP On-None-On 22=DP On-None-Mom 23=DP On-Off-On 24=DP Mom-Off-Mom 25=DP On-Off-Mom 26=DP On-On-On 27=DP Mom-On-Mom 28=3P On-On-Mom 31=3P On-None-On 32=3P On-None-Mom 33=3P On-Off-On 34=3P Mom-Off-Mom. 35=3P On-Off-Mom 41=4P On-None-On 42=4P On-None-Mom 43=4P On-Off-On 44=4P Mom-Off-Mom 45=4P On-Off-Mom 46=4P On-On-On 47=4P Mom-On-Mom 48=4P On-On-Mom	A1=10.41 high A2=5.08 high A3=13.97 high A4=16.26 high A5=21.34 high A6=Flatted, anti-rotation 12.30 high A61=Flatted, anti-rotation 21.0 high A62=Lever handle with cap 13.49 high A63=Flatted, anti-rotation 6.35 high A7=12.37 high, 15/32 bushing A8=17.56 high, 15/32 bushing A9=Plastic, 21.3 high A10=26.30 high lever handle with cap, 15/32 bushing A11=Plastic, 12.2 high AL1=Locking lever, 16.00 high AL2=Locking lever 16.26 high AL3=Locking lever 17.28 high	B1=8.89 high.keyway (thd std) B2=8.89 high.keyway (non-thd) B3=7.10 high.keyway (thd) B4=7.10 high.keyway (non-thd) B5=7.52 high.flat (torque) B6=8.00 high.keyway (torque) B7=8.89 high.flat (thd std) B8=8.89 high.keyway (metric thd) B9=7.52 high.flat (splash proof) B11=7.55 high.keyway (thd std) B12=7.55 high.keyway (non-thd) B13=11.38 high.keyway (15/32 bushing) B14=11.90 high.flat (splash proof) B15=7.55 high.flat (thd std) B16=7.55 high.flat (non-thd) B17=3.50 high.keyway B18=11.38 high.keyway (15/32 bushing) B20=11.38 high.keyway (15/32 bushing) B25=8.00 high.keyway. (locking lever (thd) B26=8.00 high. (keyway.locking lever (non-thd)	T1=Solder Lug T2=PC thru-hole T3=Quick Connect T51=18.70 high, wire wrap T52=24.20 high, wire wrap T53=10.55 high, wire wrap T54=26.97 high, wire wrap T6=Right angle, PC thru-hole T6S=Right angle, snap-in, PC thru-hole T7=Vertical right angle, PC thru-hole TS1=11.68 high, V-bracket TS2=11.68 high, snap-in V-bracket TS3=16.00 high, V-bracket TS4=11.68 high, V-bracket TS5=16.00 high, V-bracket	SS=Silver/Silver ST=Silver/Tin GS=Gold/Silver GG=Gold/Gold GGT=Gold/GoldTin GSGS=GoldSilver/ GoldSilver GSGT=GoldSilver/ GoldTin	Blank=None E=Epoxy Seal (Std) H=Halogen Free HW= With Hardware HWXX=Hardware (ordered separately)
C	RoHS compliant							
D	Rev.	Description	Date	Approved	Drawing	Name	Date	
E					Approved	Howard	08/30/10	
F					Checked	Lizzy	08/30/10	
G					Drawn	Tina	08/30/10	
					0.0 ± 0.35	0.00 ± 0.20	Angles ± 3'	
						UNIT: mm		













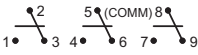
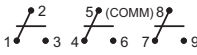
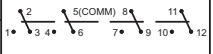
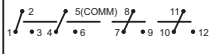
Central Components Manufacturing

440 Lincoln Blvd., Middlesex, New Jersey 08846
 Phone 732 469-5720 888 288-5152 Fax 732 469-1919

Part No.: **SWT-M-XX-AX-BX-TX-XX-X**

Description: Miniature toggle switches

SWITCH FUNCTION

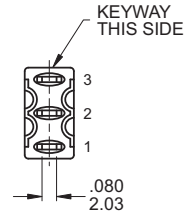
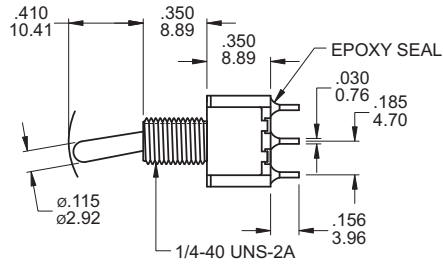
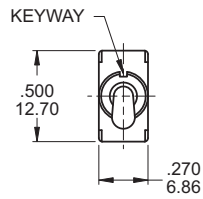
NO. POLES	VERSION	SWITCH FUNCTION			CONNECTED TERMINALS / SCHEMATIC		
		POS.1	POS.2	POS.3	POS.1	POS.2	POS.3
							
SP	11	ON	NONE	ON		N/A	
	12	ON	NONE	MOM			
	13	ON	OFF	ON			
	14	MOM	OFF	MOM			
	15	ON	OFF	MOM			
DP	21	ON	NONE	ON		N/A	
	22	ON	NONE	MOM			
	23	ON	OFF	ON			
	24	MOM	OFF	MOM			
	25	ON	OFF	MOM			
	26	ON	ON	ON			
	▲ 27	MOM	ON	MOM			
	▲ 28	ON	ON	MOM			
3P	31	ON	NONE	ON		N/A	
	32	ON	NONE	MOM			
	33	ON	OFF	ON			
	34	MOM	OFF	MOM			
	35	ON	OFF	MOM			
4P	41	ON	NONE	ON		N/A	
	42	ON	NONE	MOM			
	43	ON	OFF	ON			
	44	MOM	OFF	MOM			
	45	ON	OFF	MOM			
	46	ON	ON	ON			
	▲ 47	MOM	ON	MOM			
	▲ 48	ON	ON	MOM			

MOM=MOMENTARY

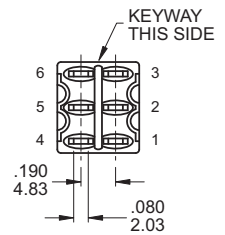
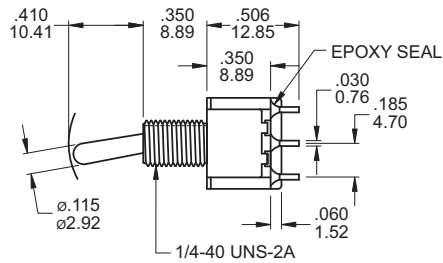
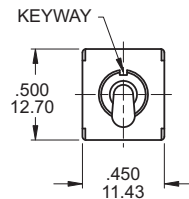
▲ Please check the availability in advance before order

POLE OPTIONS

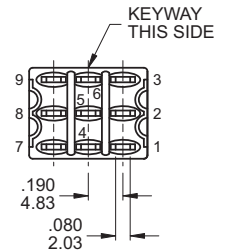
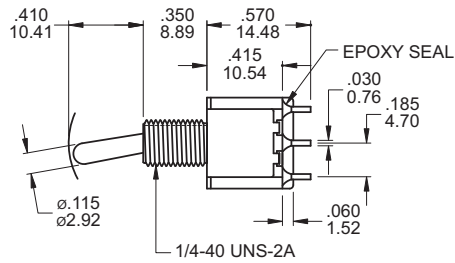
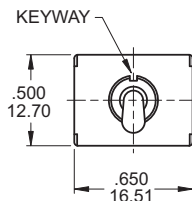
1X SPDT



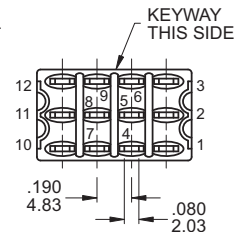
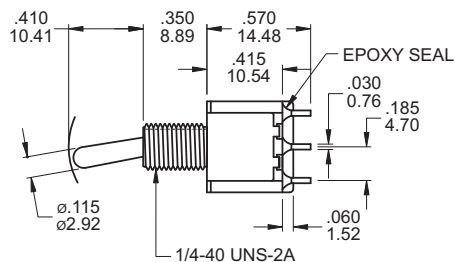
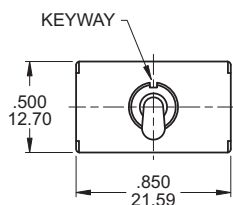
2X DPDT



3X 3PDT



4X 4PDT

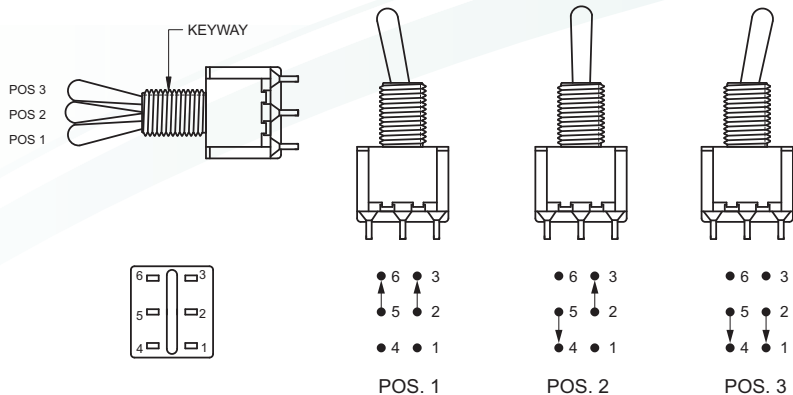


3-WAY SWITCH

3-Way Wiring Diagram Schematics

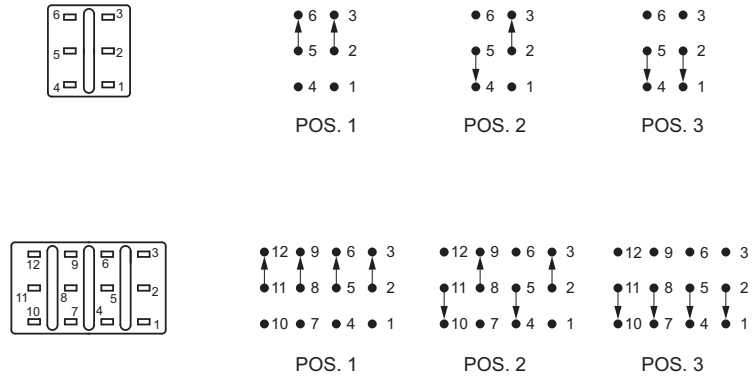
SINGLE POLE, 3 POSITION

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



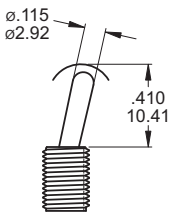
DOUBLE POLE, 3 POSITION

Model No.	POS 1	POS 2	POS 3
46	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

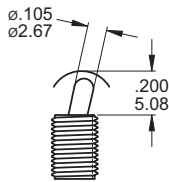


ACTUATOR OPTIONS

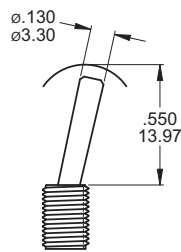
A1 STD



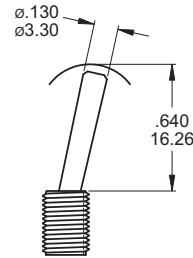
A2



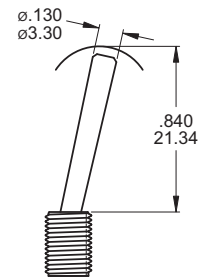
A3



A4

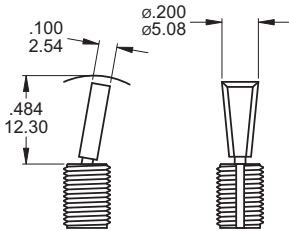


A5



NOTE A1 ~ A5 Actuator shown with standard B1 Bushing ;
 Add .070 (1.78) for B3 Bushing ;
 Subtract .020 (0.51) for B6 Bushing ;
 Std for T1 , T2 Terminal sub .016 (0.40) for T6 , T7 , TSX

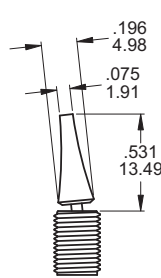
A6 FLATTED WITH ANTIROTATION



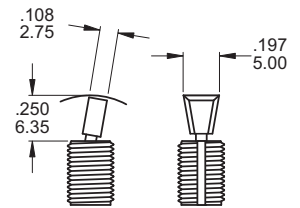
A61



A62



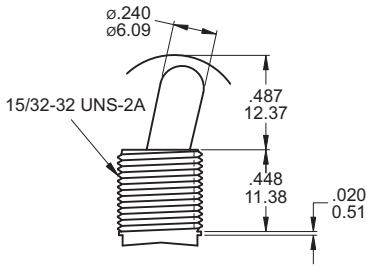
A63



NOTE A6,A61,A62 ,A63 use with B11, B12, B15, B16 bushing only.

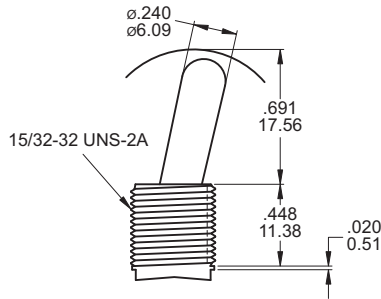
ACTUATOR OPTIONS (CONT)

A7



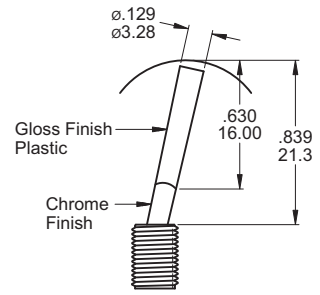
Use with B13 bushing
Use with B18,B20 the lever is antirotation and the size of lever is 13.00mm

A8



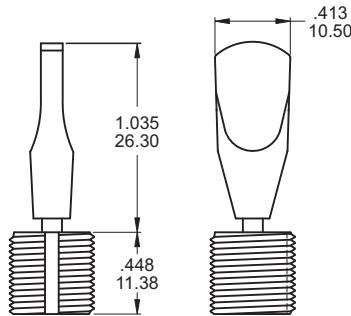
Use with B13 bushing
Use with B18,B20 the lever is antirotation and the size of lever is 18.00mm

A9



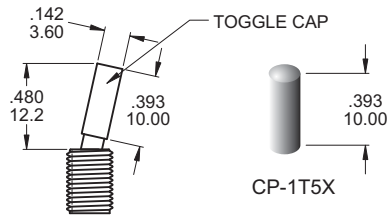
B1 / B2 bushing std with black and red color only (std.)

A10 PLASTIC BLACK



Use with B18 bushing only

A11



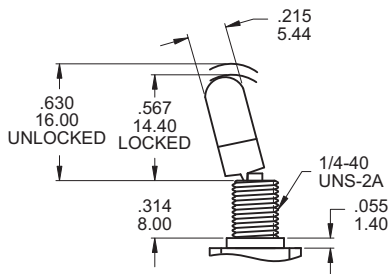
NOTE A11 Actuator shown with standard B1 Bushing ;
Add .070 (1.78) for B3 Bushing ;
Subtract .020 (0.51) for B6 Bushing.
Std for T1.T2 Terminal sub .016 (0.40) for T6.T7 TSX

Plastic No.Color :

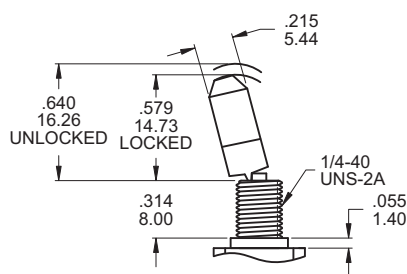
ITEM NO	COLOR
WT	White
BK	Black (Std)
RD	Red
OR	Orange
YL	Yellow
GN	Green
BL	Blue
BR	Brown
GY	Gray

A62 , A9 , A10 , A11 ACTUATOR ONLY

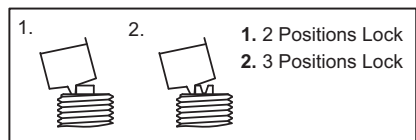
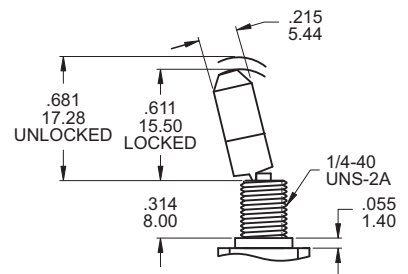
AL1-B25



AL2-B25

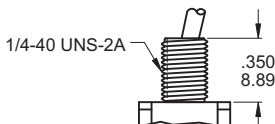
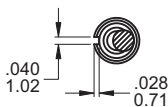


AL3-B25

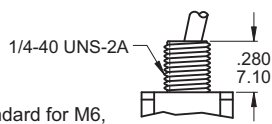
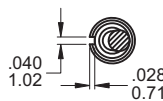


BUSHING OPTIONS

B1 THD (Std)
B2 NON-THD

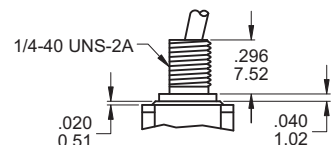
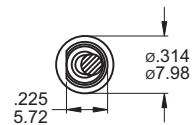


B3 THD
B4 NON-THD



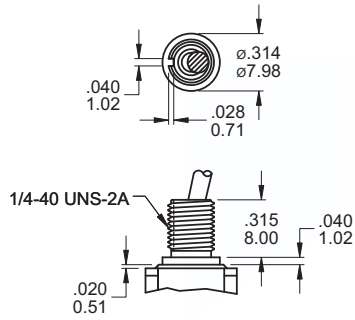
B4 is standard for M6, M7 and VS2-5 termination options.

B5 HIGH TORQUE

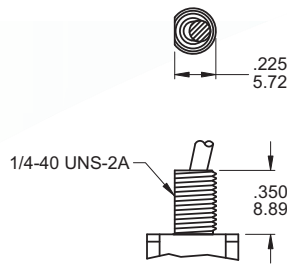


BUSHING OPTIONS (CONT)

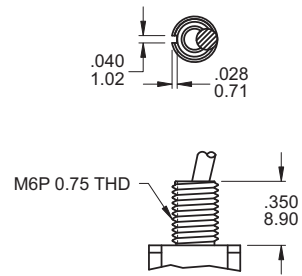
B6 HIGH TORQUE



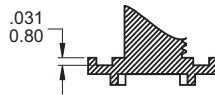
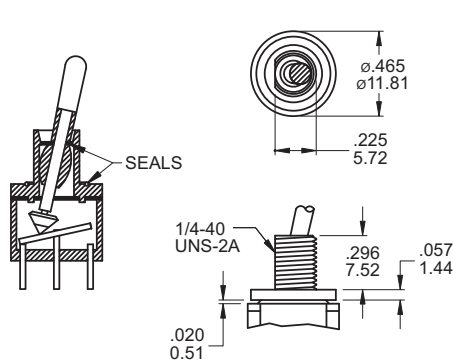
B7 THD STD



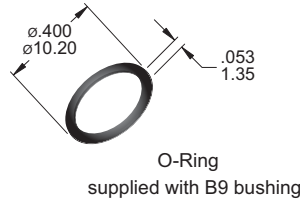
B8 METRIC THD



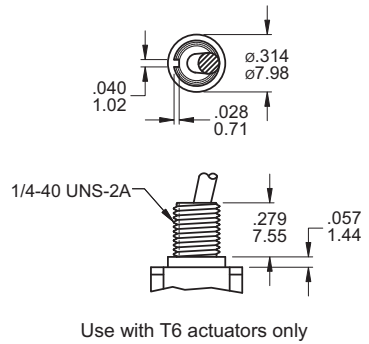
B9 SPLASH PROOF



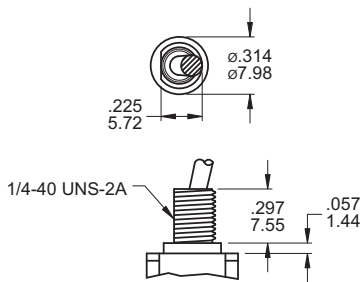
CP-1TEB



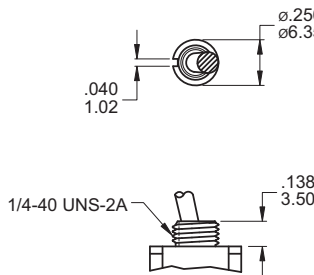
B11 THD STD B12 NON-THD



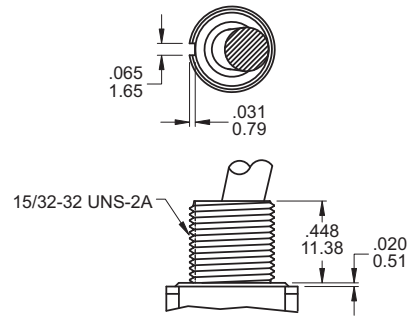
B15 THD STD B16 NON-THD



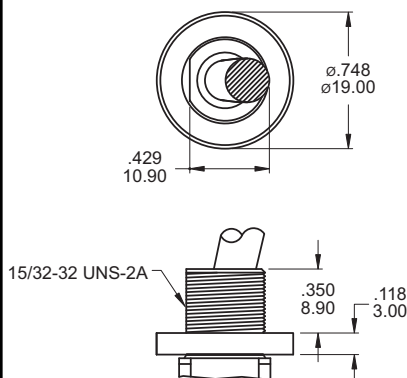
B17



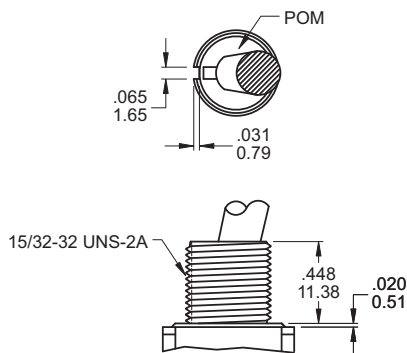
B13



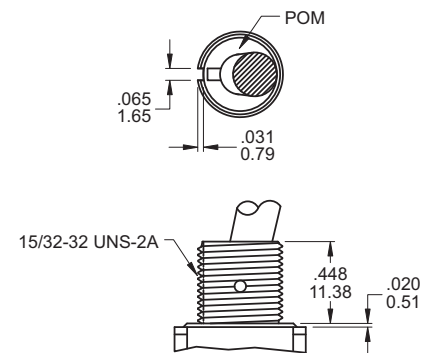
B14 SPLASH PROOF



B18



B20



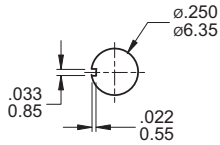
Use with T7, T8 and T10 actuators only with Plastic (POM) Insert

Use with T7, T8 and T10 actuators only with Plastic (POM) Insert

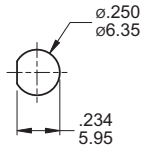
B18, B20 Bear strength from top of actuator up to 20kg aside up to 15kg

PANEL MOUNTING

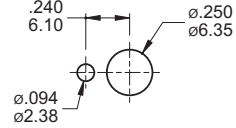
BX 1/4 IN BUSHING



Without locking ring (Keyway)

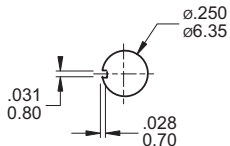


Without locking ring (Flat)

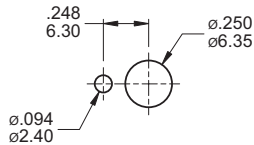


With standard locking ring.

BX METRIC BUSHING

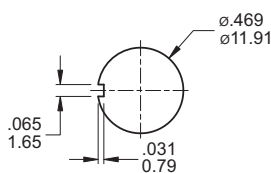


Without locking ring (Keyway)

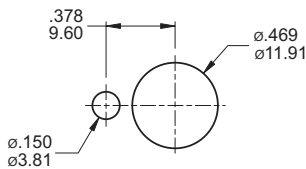


With standard locking ring.

BX 15/32 IN BUSHING

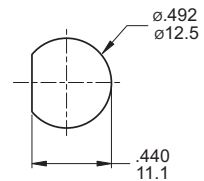


Without locking ring (Keyway)



With standard locking ring.

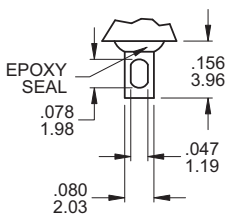
SPLASH PROOF BUSHING



Without locking ring (Flat)

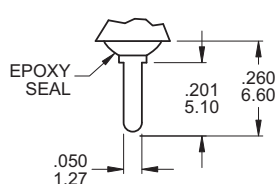
TERMINATION OPTIONS

T1 Solder lug



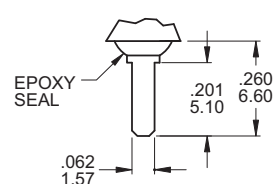
.030(0.76) THK.

T2 PC Thru-hole



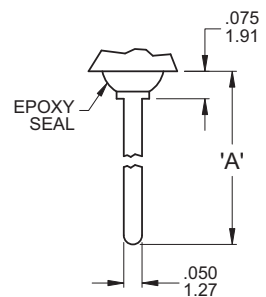
.030(0.76) THK.

T3 Quick connect



.030(0.76) THK.

T5 Wire Wrap



.030(0.76) THK.

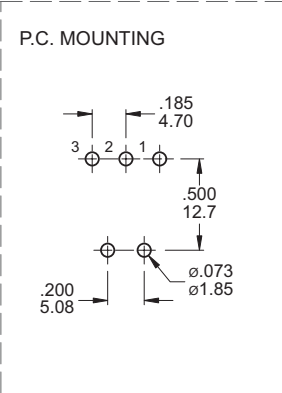
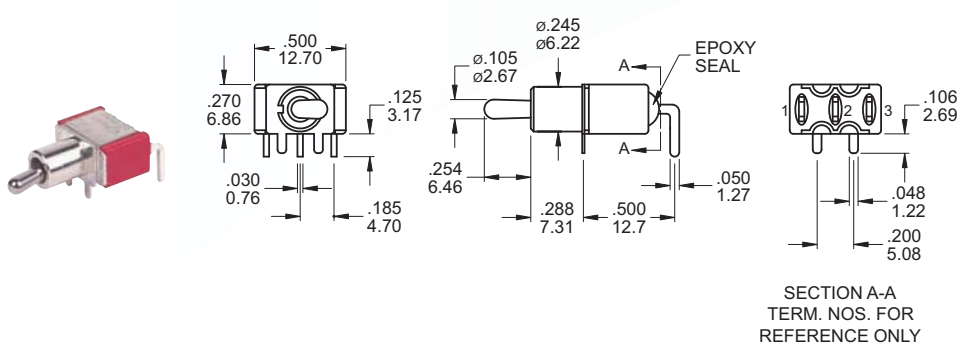
OTHER TERMINATION OPTIONS

- T6 RIGHT ANGLE P.C. MOUNT
- T7 RIGHT ANGLE P.C. MOUNT
- TS2 VERTICAL BRACKET P.C. MOUNT
- TS3 VERTICAL BRACKET P.C. MOUNT
- TS5 VERTICAL BRACKET P.C. MOUNT

OPTION CODE	DIM. 'A'
T51	.736 (18.70)
T52	.953 (24.20)
T53	.415 (10.55)
T54	1.062 (26.97)

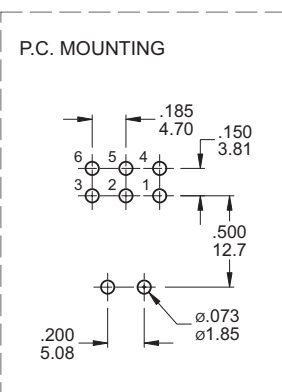
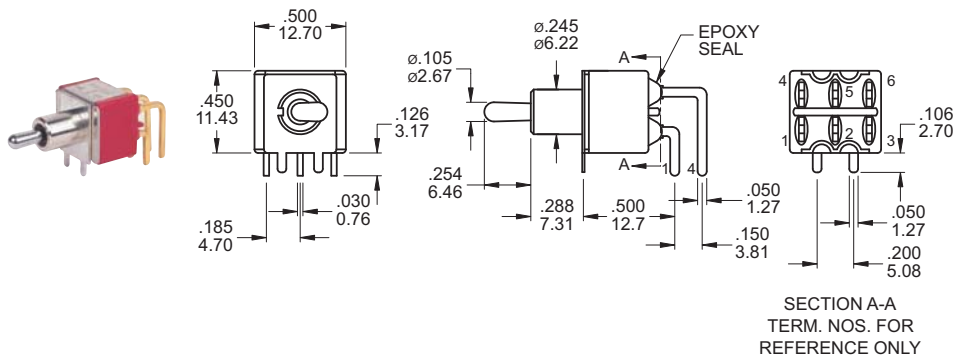
TERMINATION OPTIONS (CONT)

T6 SPDT



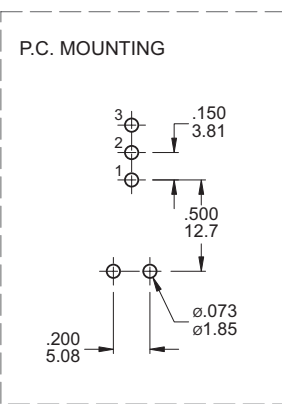
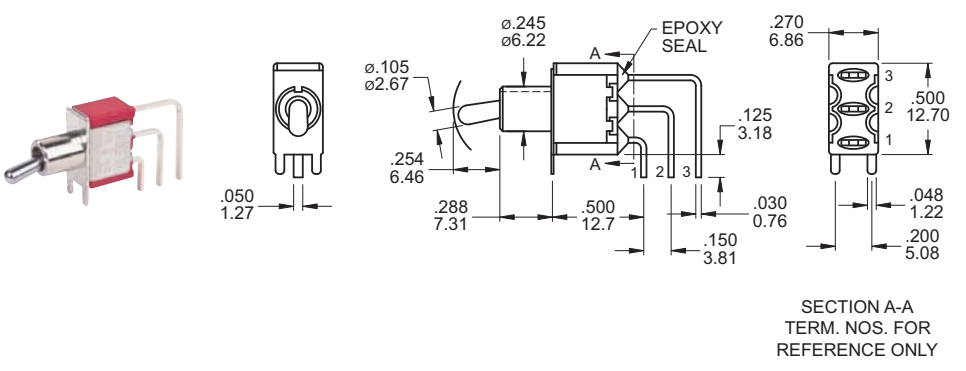
SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

T6 DPDT



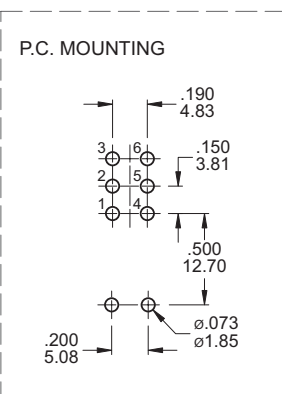
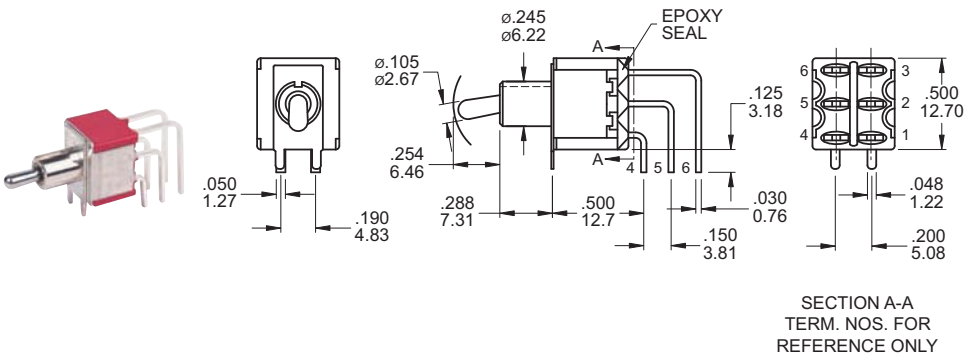
SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

T7 SPDT



SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

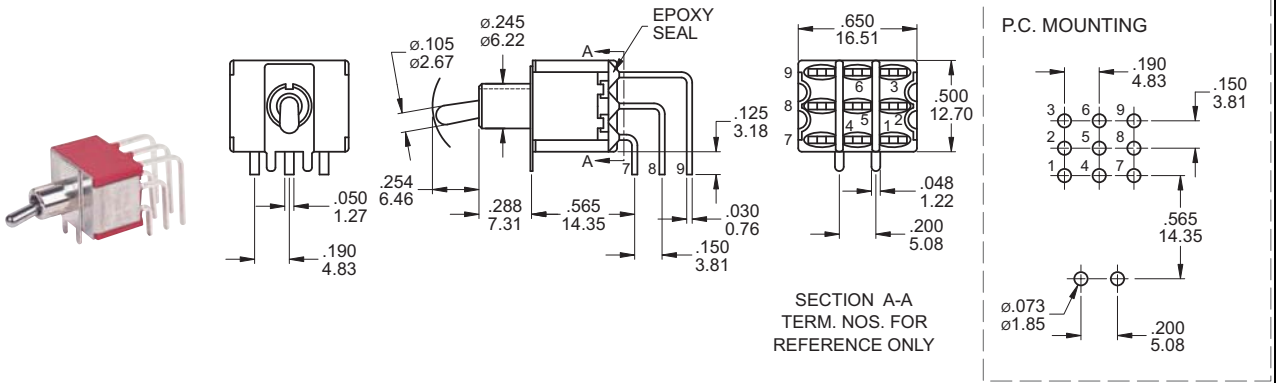
T7 DPDT



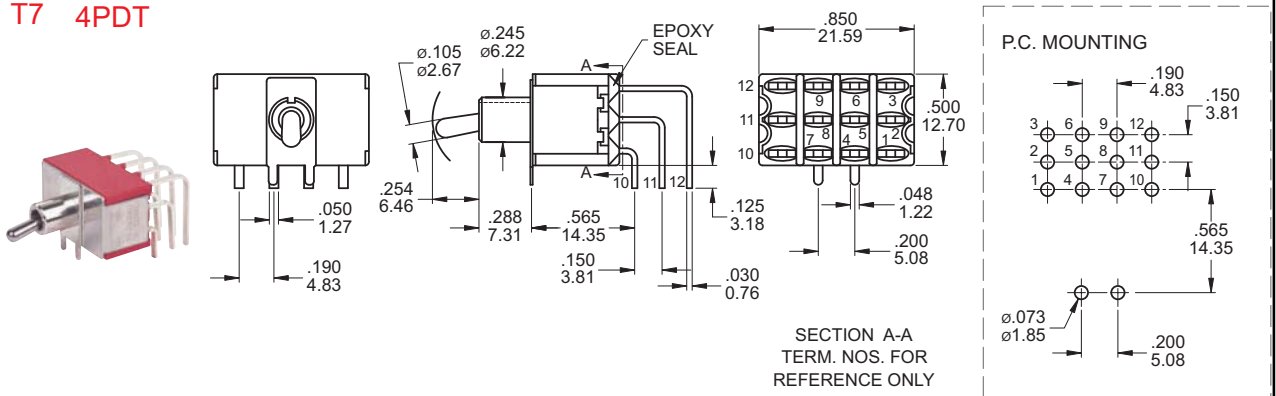
SECTION A-A
TERM. NOS. FOR
REFERENCE ONLY

TERMINATION OPTIONS (CONT)

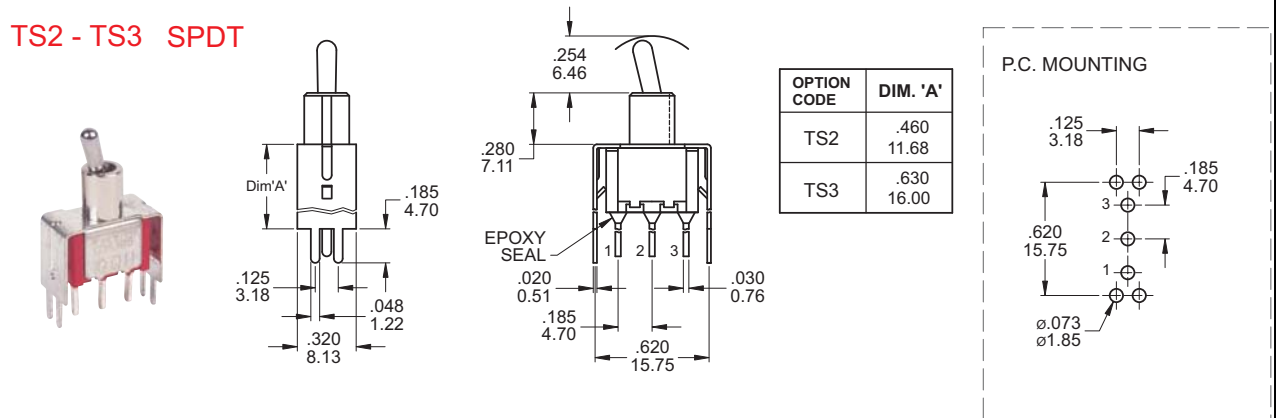
T7 3PDT



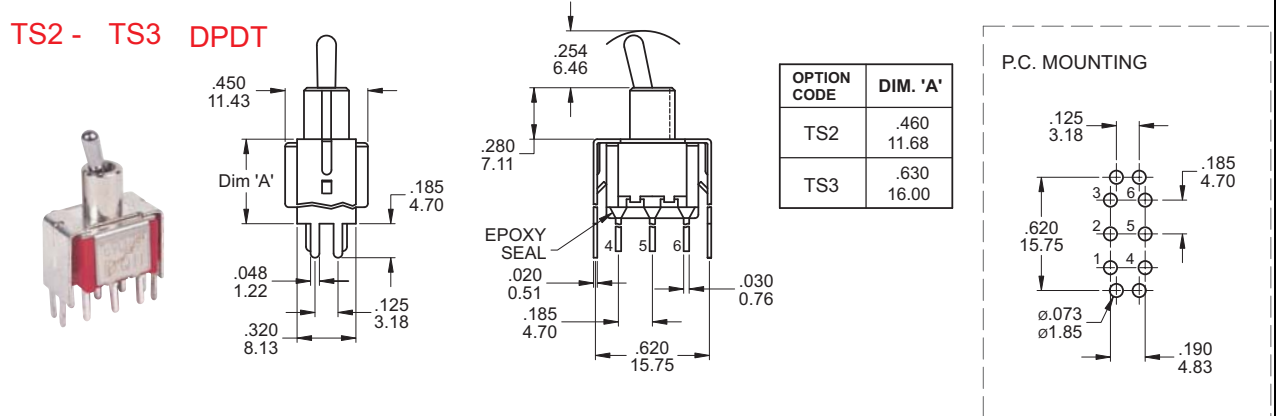
T7 4PDT



TS2 - TS3 SPDT

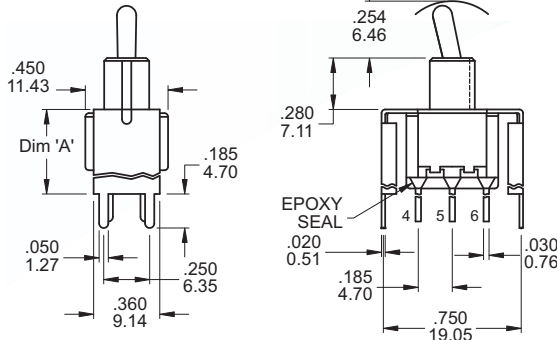


TS2 - TS3 DPDT



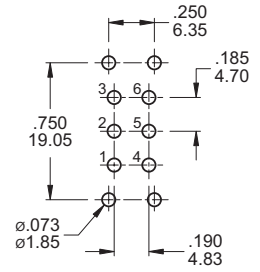
TERMINATION OPTIONS (CONT)

TS5 DPDT



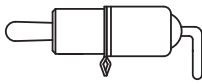
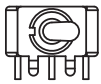
OPTION CODE	DIM. 'A'
TS4	.460 11.68
TS5	.630 16.00

P.C. MOUNTING

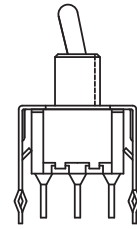


SNAP-IN TERMINATION OPTIONS

T6S

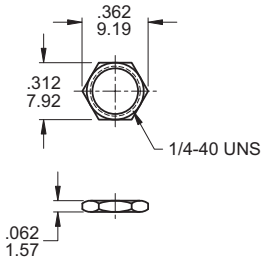


TS2



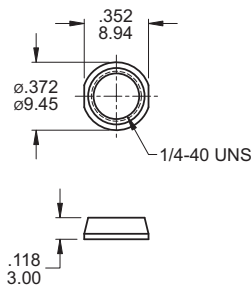
HARDWARE

1/4 NUTS HW2

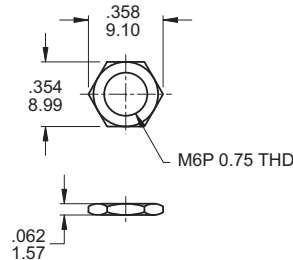


Supplied standard with B1, B3, B5, B6 and B9 options

DRESS NUT HW3

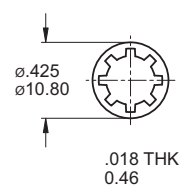


METRIC NUT HW6



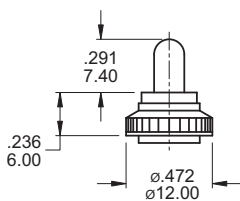
Supplied standard with B8 metric bushing

LOCK WASHER HW11



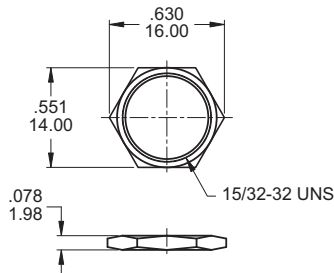
Supplied standard with B1 / B3 bushing

OPTIONAL RUBBER HOOD SEALING



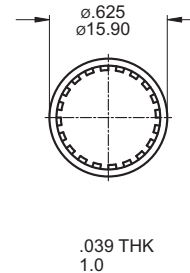
K1=Metric
E1=Inch (Std.)
for actuator T1, T2 and
B1, B3, B5, B6 Bushing only

15/32 NUTS HW4



Supplied standard with B13 bushing

LOCK WASHER HW12



Supplied standard with B13 bushing

HARDWARE (CONT)

<p>HW15</p> <p>Locking ring supplied standard</p>	<p>HW16</p> <p>Locking ring supplied with B5 bushing</p>	<p>HW17</p> <p>Locking ring supplied with B13,B18,B20 bushing</p>
<p>HW18</p> <p>Locking ring supplied with B8 bushing</p>	<p>HW19</p> <p>1/4-40 UNS Controlled Knurl NU-1M18</p>	<p>HW20</p> <p>1/4-40 UNS Controlled Knurl NU-1M24</p>

OPTIONAL TOGGLE CAP

SWT-M-T1XX

Use with T1

CAP Color :

XX=	COLOR
WT	White
BK	Black (Std)
RD	Red
YL	Yellow
GN	Green
BL	Blue
GY	Gray

CONTACT MATERIAL OPTIONS

CONTACT PLATING	TERMINAL PLATING	RATINGS
S=Silver	S = Silver	5 Amps with resistant load @ 120VAC or 28VDC 2 Amps with resistant load @ 250VAC
	T = Silver,pure - tin	
GS=Gold over Silver	GS = Gold over silver	
	GT = Gold over silver,pure - tin	
G=Gold	G = Gold	0.4 Volt - Amps (VA) max. @ 20V max. (AC or DC)
	GT = Gold,pure - tin	

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: 260 ± 5°C
Duration of Solder Immersion: Max 5 sec. (PCB is 1.6mm in thickness)