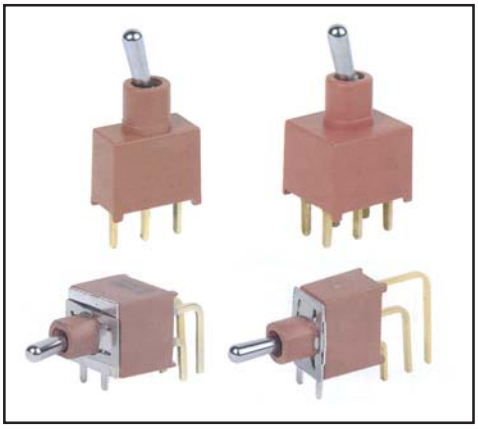
T8000E Series

Miniature Seal Toggle Switches

A
9



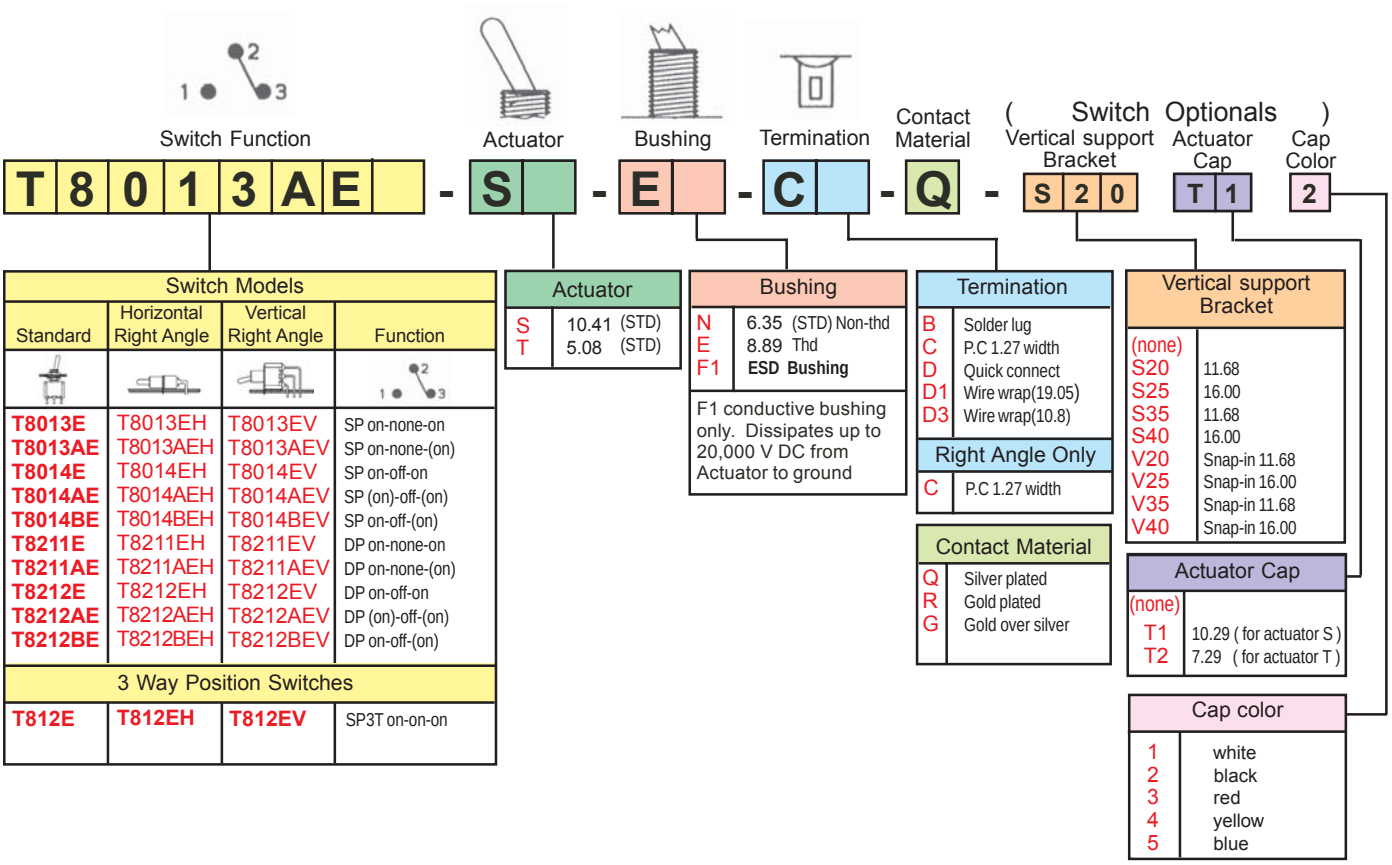
SPECIFICATIONS

CONTACT RATING:	5A@120 VAC or 28 VDC (Q contact)
ELECTRICAL LIFE:	50,000 make-and-break cycles at full load
CONTACT RESISTANCE:	10 milliohmsmax. initial @2-4 VDC,100mA
INSULATION RESISTANCE:	1,000 MΩ min.
DIELECTRIC STRENGTH:	1,000 V RMS min. @ sea level.
OPERATING TEMPERATURE:	-30° C to 85° C

MATERIALS

CASE:	Glass filled nylon 6/6 (UL94V-0)
ACTUATOR:	Brass, chrome plated with internal o-ring seal - standard
SWITCH SUPPORT:	Brass or Steel, Tin plated
CONTACT AND TERMINAL:	Silver or gold plated copper alloy
TERMINAL SEAL:	Epoxy

Build the switches you need!!



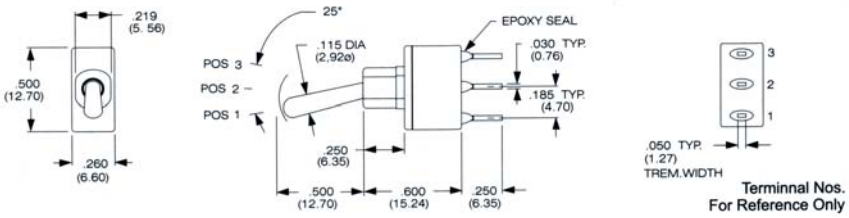
T8000E Series

Miniature Seal Toggle Switches

Switch Function

SPDT

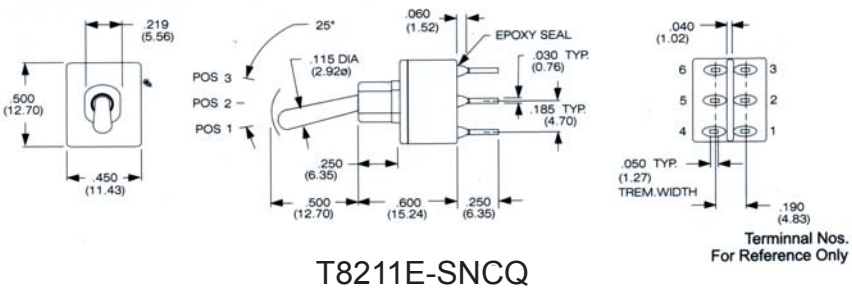
Model No.	Switching Position		
T8013E	ON	NONE	ON
T8013AE	ON	NONE	(ON)
T8014E	ON	OFF	ON
T8014AE	(ON)	OFF	(ON)
T8014BE	ON	OFF	(ON)
Term. Comm.	2-3	OPEN	2-1



T8013E-SNCQ

DPDT

Model No.	Switching Position		
T8211E	ON	NONE	ON
T8211AE	ON	NONE	(ON)
T8212E	ON	OFF	ON
T8212AE	(ON)	OFF	(ON)
T8212BE	ON	OFF	(ON)
Term. Comm.	2-3,5-6	OPEN	2-1,5-4
3-Way Switches (SP3T)			
T812E	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4



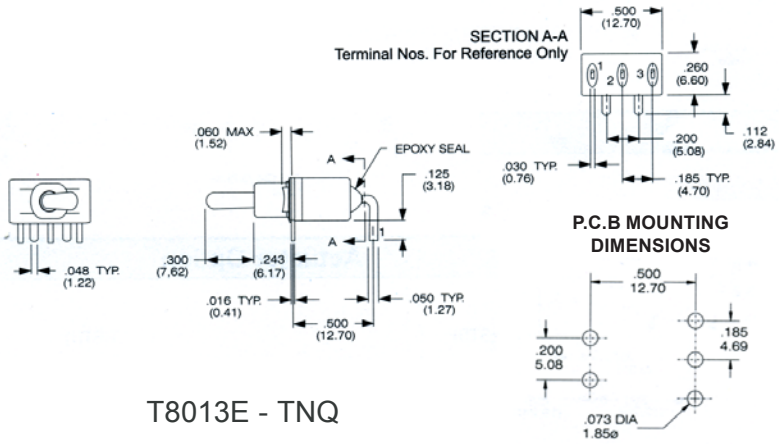
T8211E-SNCQ

Please see page A8 for more about T812E (3-way Switches)

HORIZONAL RIGHT ANGLE

SPDT

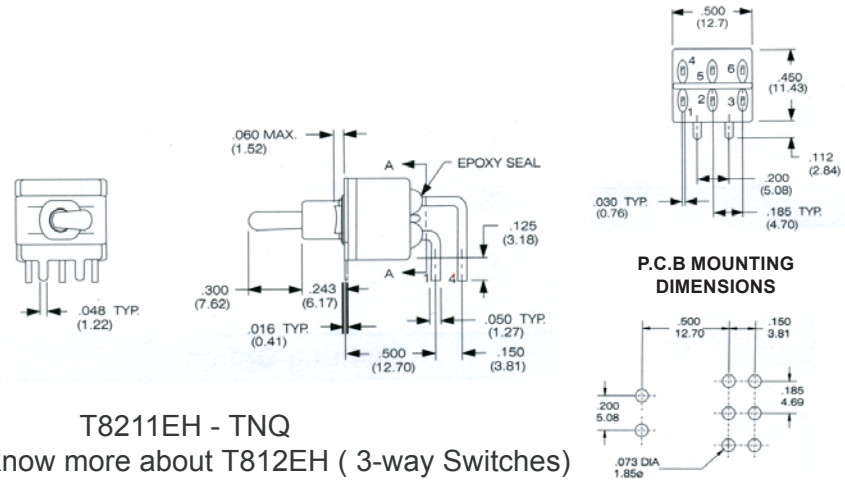
Model No.	Switching Position		
T8013EH	ON	NONE	ON
T8013AEH	ON	NONE	(ON)
T8014EH	ON	OFF	ON
T8014AEH	(ON)	OFF	(ON)
T8014BEH	ON	OFF	(ON)
Term. Comm.	2-3	OPEN	2-1



T8013E - TNQ

DPDT

Model No.	Switching Position		
T8211EH	ON	NONE	ON
T8211AEH	ON	NONE	(ON)
T8212EH	ON	OFF	ON
T8212AEH	(ON)	OFF	(ON)
T8212BEH	ON	OFF	(ON)
Term. Comm.	2-3,5-6	OPEN	2-1,5-4
3-Way Switches (SP3T)			
T812EH	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4



T8211EH - TNQ

Please see page A8 to know more about T812EH (3-way Switches)

T8000E Series

Miniature Seal Toggle Switches

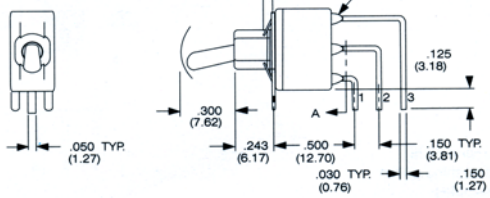
Switch Function ☐☐☐☐☐☐☐ - ▬ - ▬ - ▬ - ▪ - ▬ ▬ ▪

A
11

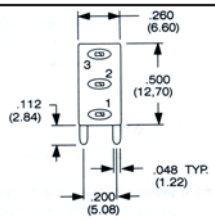
VERTICAL RIGHT ANGLE

SPDT

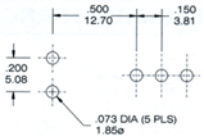
Model No.	Switching Position		
T8013V	ON	NONE	ON
T8013AEV	ON	NONE	(ON)
T8014V	ON	OFF	ON
T8014AEV	(ON)	OFF	(ON)
T8014BEV	ON	OFF	(ON)
Term. Comm.	2-3	OPEN	2-1



T8013V-TNQ

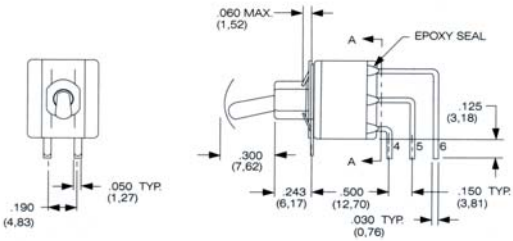


P.C.B MOUNTING DIMENSIONS

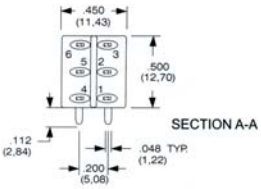


DPDT

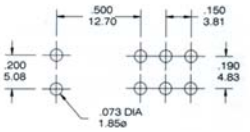
Model No.	Switching Position		
T8211EV	ON	NONE	ON
T8211AEV	ON	NONE	(ON)
T8212EV	ON	OFF	ON
T8212AEV	(ON)	OFF	(ON)
T8212BEV	ON	OFF	(ON)
Term. Comm.	2-3,5-6	OPEN	2-1,5-4
3-Way Switches (SP3T)			
T812EV	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4



T8211V-TNQ



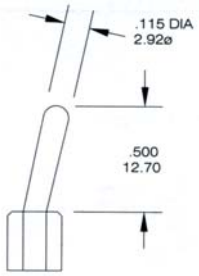
P.C.B MOUNTING DIMENSIONS



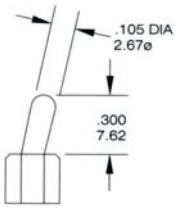
Actuator ▬▬▬ - ☐☐ - ▬ - ▬ - ▪ - ▬ ▭ ▫

Actuator Option

S (STD)



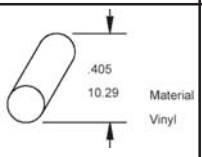
T (STD)



Toggle Cap Option

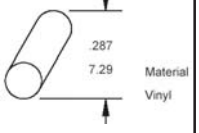
T1

Use with Actuator ìSî only



T2

Use with Actuator ìTî only



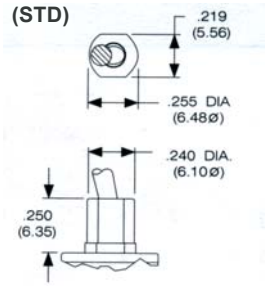
Toggle Cap Color Option

Code	Color
1	white
2	black
3	red
4	yellow
5	blue

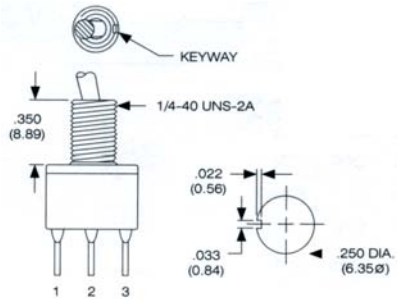
Bushing ▬▬▬ - ▬ - ☐☐ - ▬ - ▪ - ▬ ▬ ▪

Bushing Option

N (STD)

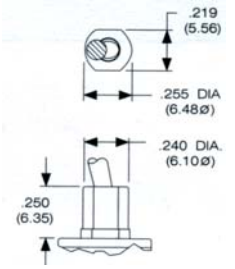


E



F1 ESD Resistant Conductive Bushing

ESD protection depends on proper grounding of switch support bracket. F1 conductive bushing option is impregnated with carbon fibers; dissipates electrostatic discharge (ESD) up to 20,000 V from actuator to ground.



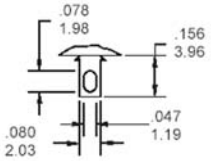
T8000E Series

Miniature Seal Toggle Switches

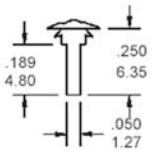
Termination

TERMINAL OPTION (ONLY FOR THE STRAIGHT TYPE T8013E~T8401E)

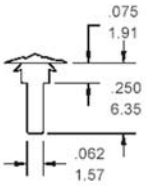
B SOLDER LUG



C PRINTED CIRCUIT



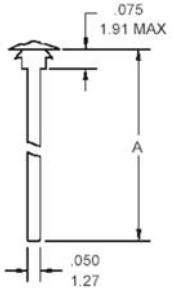
D QUICK CONNECT



D1 WIREWRAP LONG

D3 WIREWRAP

CODE	iAîdimension
D1	.750 (19.05)
D3	.425 (10.8)

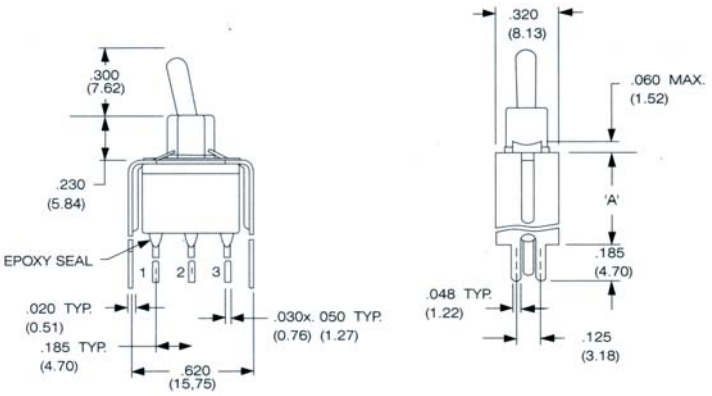


VERTICAL SUPPORT BRACKET OPTION

Only for Straight PC Type Termination (Use with option ìCî terminal)

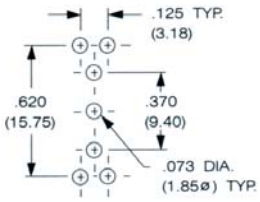
S20 / S25 / V20 / V25 (SPDT)

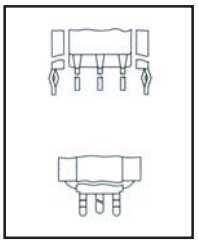
Option Code	A Dimension
S20 / V20	.460 11.68
S25 / V25	.630 16.00
V20 / V25 : the snap-in type	



T8013 - TNCQ-S20(S25)

P.C. MOUNTING

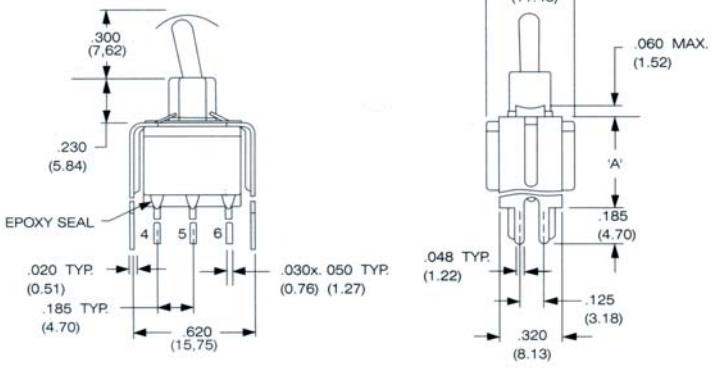




SNAP-IN V20/ V25

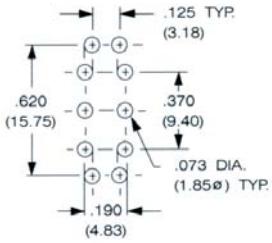
S20 / S25 / V20 / V25 (DPDT)

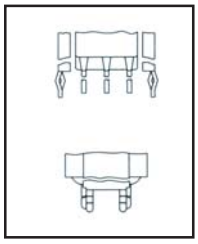
Option Code	A Dimension
S20 / V20	.460 11.68
S25 / V25	.630 16.00
V20 / V25 : the snap-in type	



T8211 - TNCQ-S20(S25)

P.C. MOUNTING





SNAP-IN V20/ V25

T8000E Series

Miniature Seal Toggle Switches

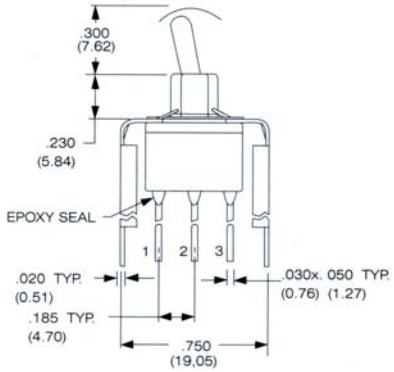
Termination ▬▬ - ▬ - ▬ - ▬ - ■ - ▭ ▬ ■

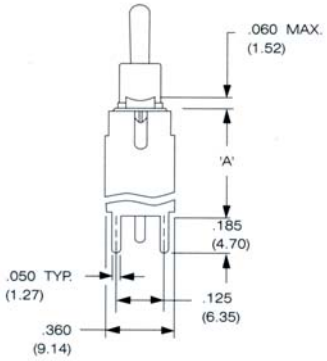
VERTICAL SUPPORT BRACKET OPTION

Only for Straight PC Type Termination (Use with option ìCî terminal)

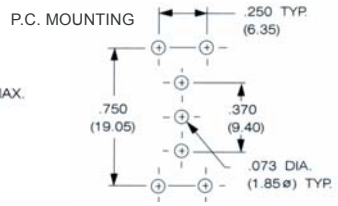
S35 / S40 / V35 / V40 (SPDT)

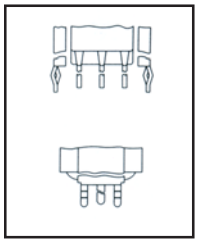
Option Code	A Dimension
S35 / V35	.460 11.68
S40 / V40 .	.630 16.00
V35 / V40 : the snap-in type	





T8013 - TNCQ-S35(S40)

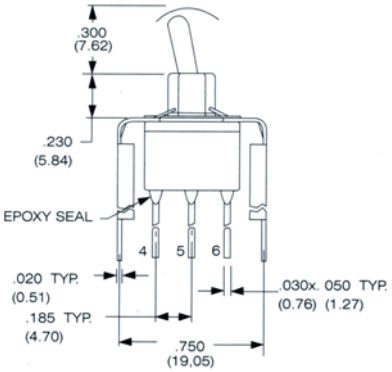


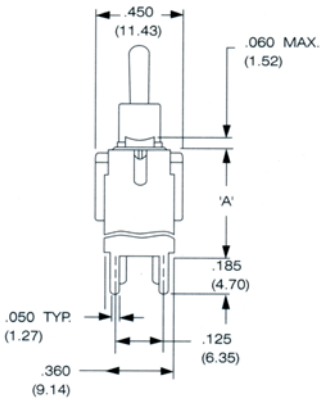


SNAP-IN V35/ V40

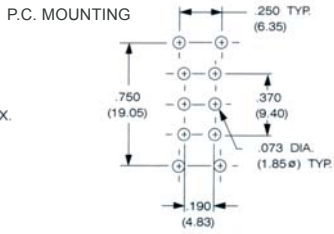
S35 / S40 / V35 / V40 (DPDT)

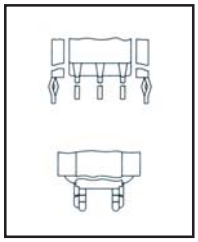
Option Code	A Dimension
S35 / V35	.460 11.68
S40 / V40 .	.630 16.00
V35 / V40 : the snap-in type	





T8211 - TNCQ-S35(S40)





SNAP-IN V35/ V40

Contact Material ▬▬ - ▬ - ▬ - ▬ - □ - ▬ ▬ ■

CONTACT MATERIAL OPTIONS

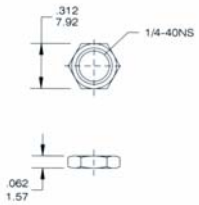
CODE	CONTACT MATERIAL	TERMINAL MATERIAL	RATING	
Q	Silver plated	Silver plated	Power	5 A@120V AC or 28 V DC; 2 A@250 VAC
R	Gold plated over nickel plated	Gold plated over nickel plated	Low Level / Dry Circuit	0.4VA MAX @ 20 V AC or DC MAX
G	Gold plated over silver plated	Gold plated over silver plated	Low Level / Dry Circuit or Power	0.4 VAMAX@20 VAC or DCMAX or 5A@120VAC or 28 V DC; 2A@250 VAC

Option: Other contact / terminal plating is available.

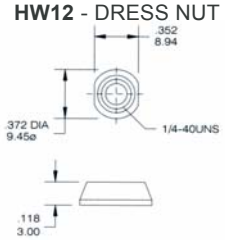
The Hardware of T8000E Toggle Switches (Use with E1 Bushing Only)

NUT

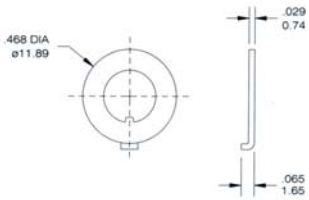
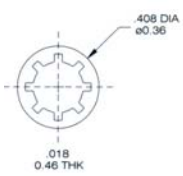
HW11 - STD.



HW12 - DRESS NUT



LOCKING RING



LOCK WASHER