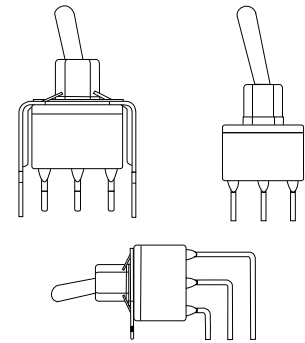


SW-NE80T Series Miniature Toggle Switches, sealed

Specifications	
Contact rating	6 A @ 125 VAC or 28 VDC (for contact plating: silver)
Durability	50000 cycles at full load
Contact resistance	10 mΩ max. initial @ 3 VDC, 100 mA
Insulator resistance	1000 MΩ min.
Dielectrical withstanding	1500 VAC
Operation temperature	-30 °C to +85 °C
Materials	
Case and bushing	Glass filled nylon 6/6 or nylon 4/6, UL94V-0
Actuator	Copper alloy, Plating: chrome
Contact and terminal	Copper alloy, plating: see order code and table (page 4)
Switch support	Copper alloy or steel, plating: tin
Terminal seal	Epoxy



UL
UL 61058



Straight type - part numbering guide

S **W** - **N** **E** **8** **0** **1** **3** - **S** **E** **C** **Q** - **S** **2** **0** - **T** **1** - **2** - **H**

Switch Function	Actuator	Bushing	Contact Plating	Actuator Cap	O-Ring
NE8013 SP on-none-on	S 12.43	N (std.) non-thd. 6.15	Q silver (std.)	(none)	(none)
NE8013A SP on-none-(on)	T 7.30	E thd. 8.89	R gold	T1 10.58 (for actuator S)	E6 for inch thd
NE8014 SP on-off-on			G gold over silver	T2 7.56 (for actuator T)	
NE8014A SP (on)-off-(on)			K tin		
NE8014B SP on-off-(on)					
NE8011 DP on-none-on					
NE8011A DP on-none-(on)					
NE8012 DP on-off-on					
NE8012A DP (on)-off-(on)					
NE8012B DP on-off-(on)					
3-way Position Switches	ESD Protection Actuator	Termination	Vertical Support Bracket	Cap Color	RoHS Code
NE812 DP on-on-on	P1 (black) 12.43	B solder lug	(none)	0 transparent	H = RoHS Compliant
	P11 (white) 12.43	C printed circuit	S20 11.68	1 white	
	P19 (silver) 12.43	D quick connect	S25 16.00	2 black	
	P2 (black) 7.30	D1 wire wrap	S35 11.68	3 red	
	P21 (white) 7.30	D3 wire wrap	S40 16.00	4 orange	
	P29 (silver) 7.30		V20 snap-in 11.68	5 yellow	
			V25 snap-in 16.00	6 green	
			V35 snap-in 11.68	7 blue	
			V40 snap-in 16.00		

Right angle type - part numbering guide

S **W** - **N** **E** **8** **0** **1** **9** **L** - **T** **N** **Q** - **T** **2** - **2** - **H**

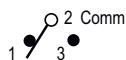
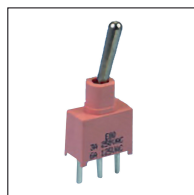
Right Angle Horizontal	Right Angle Vertical	Switches Function	Actuator	Bushing	Cap Color	RoHS Code
NE8019	NE8019L	SP on-none-on	S 12.43	N (std) non-thd 6.15	0 transparent	H = RoHS Compliant
NE8019A	NE8019LA	SP on-none-(on)	T 7.30		1 white	
NE8020	NE8020L	SP on-off-on			2 black	
NE8020A	NE8020LA	SP (on)-off-(on)			3 red	
NE8020B	NE8020LB	SP on-off-(on)			4 orange	
NE8021	NE8021L	DP on-none-on			5 yellow	
NE8021A	NE8021LA	DP on-none-(on)			6 green	
NE8022	NE8022L	DP on-off-on			7 blue	
NE8022A	NE8022LA	DP (on)-off-(on)				
NE8022B	NE8022LB	DP on-off-(on)				
3-way Position Switches	ESD Protection Actuator	Contact Plating	Actuator Cap			
NE822	P1 (black) 12.43	Q silver (std.)	(none)			
NE822L	P11 (white) 12.43	R gold	T1 10.58 (actuator S)			
	P19 (silver) 12.43	G gold over silver	T2 7.56 (actuator T)			
	P2 (black) 7.30	K tin				
	P21 (white) 7.30					
	P29 (silver) 7.30					



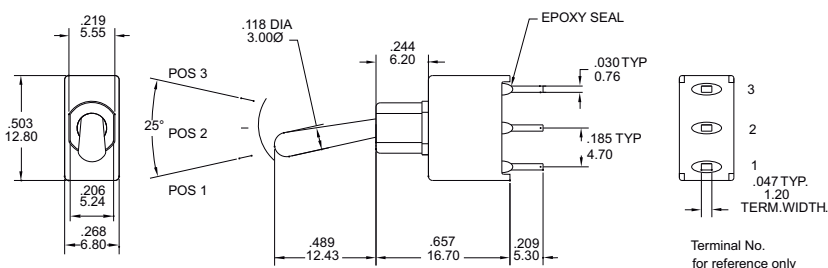
SW-NE80T Series Miniature Toggle Switches, sealed

Straight type

SPDT

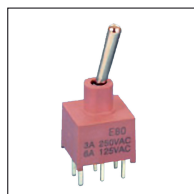


Model No.	Switching position		
NE8013	ON	none	ON
NE8013A	ON	none	(ON)
NE8014	ON	OFF	ON
NE8014A	(ON)	OFF	(ON)
NE8014B	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

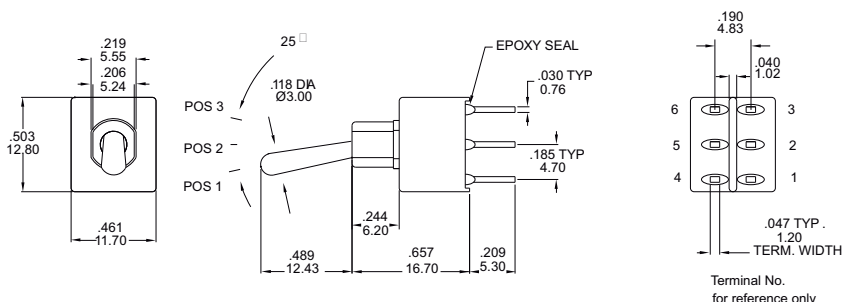


SW-NE8013-SNCQ

DPDT



Model No.	Switching position		
NE8011	ON	none	ON
NE8011A	ON	none	(ON)
NE8012	ON	OFF	ON
NE8012A	(ON)	OFF	(ON)
NE8012B	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3-way switches			
NE812	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4

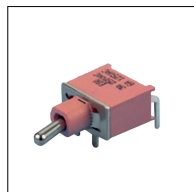


SW-NE8011-SNCQ

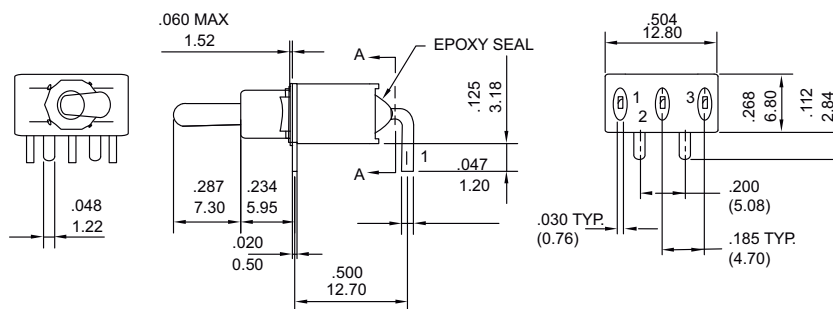
Please refer to page 6 for more info about 3-way switches

Right angle horizontal

SPDT

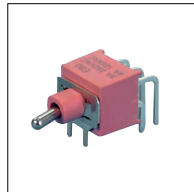


Model No.	Switching position		
NE8019	ON	none	ON
NE8019A	ON	none	(ON)
NE8020	ON	OFF	ON
NE8020A	(ON)	OFF	(ON)
NE8020B	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

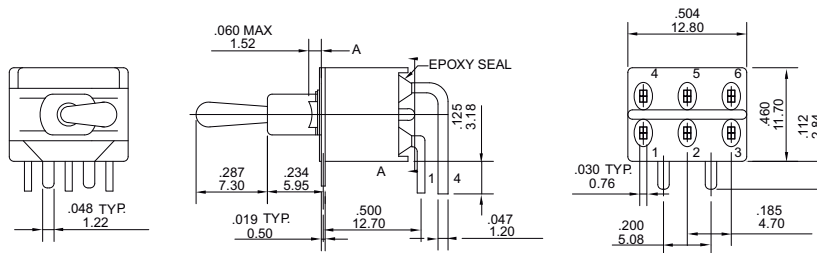


SW-NE8019-TNQ

DPDT



Model No.	Switching position		
NE8021	ON	none	ON
NE8021A	ON	none	(ON)
NE8022	ON	OFF	ON
NE8022A	(ON)	OFF	(ON)
NE8022B	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3-way switches			
NE822	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4



SW-NE8021-TNQ

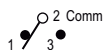
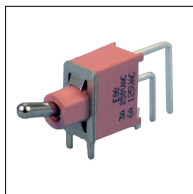
Please refer to page 6 for more info about 3-way switches



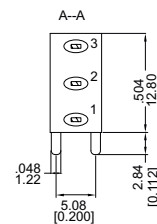
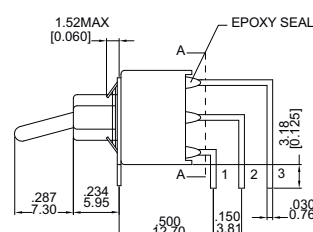
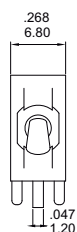
SW-NE80T Series Miniature Toggle Switches, sealed

Right angle vertical

SPDT

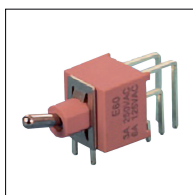


Model No.	Switching position		
	ON	none	OFF
NE8019L	ON	none	ON
NE8019LA	ON	none	(ON)
NE8020L	ON	OFF	ON
NE8020LA	(ON)	OFF	(ON)
NE8020LB	ON	OFF	(ON)
Term. Comm.	2-3	open	2-1

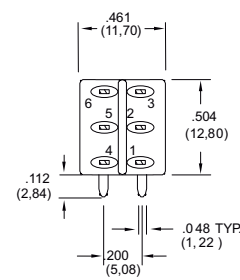
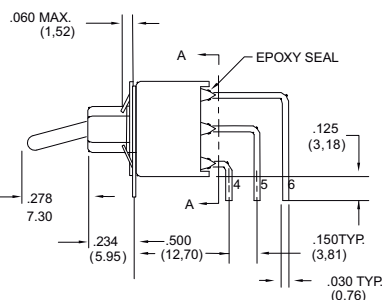
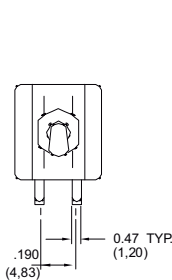


SW-NE8019L-TNQ

DPDT



Model No.	Switching position		
	ON	none	OFF
NE8021L	ON	none	ON
NE8021LA	ON	none	(ON)
NE8022L	ON	OFF	ON
NE8022LA	(ON)	OFF	(ON)
NE8022LB	ON	OFF	(ON)
Term. Comm.	2-3,5-6	open	2-1,5-4
3 way switches			
NE822L	ON	ON	ON
Term. Comm.	2-3,5-6	2-3,5-4	2-1,5-4

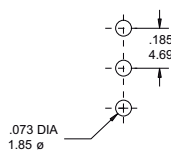


Please refer to page 6 for more info about 3-way switches

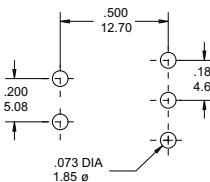
SW-NE8021L-TNQ

Recommended P.C.B. layout

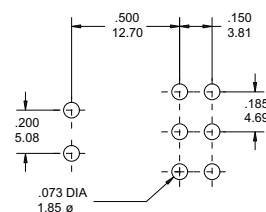
SW-NE8013 to SW-NE8014B



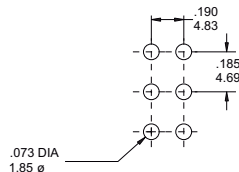
SW-NE8019 to SW-NE8020B



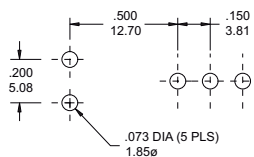
SW-NE8021 to SW-NE8022B



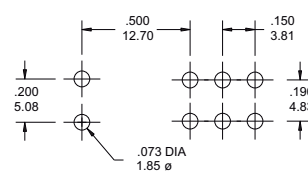
SW-NE8011 to SW-NE8012B



SW-NE8019L to SW-NE8020LB

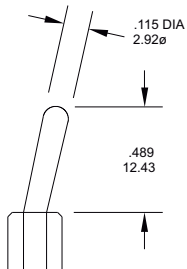


SW-NE8021L to SW-NE8022LB

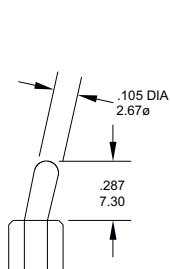


Actuator option

S (STD)

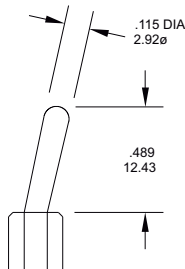


T (STD)

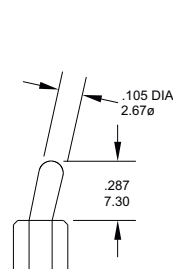


Plastic toggle

P1



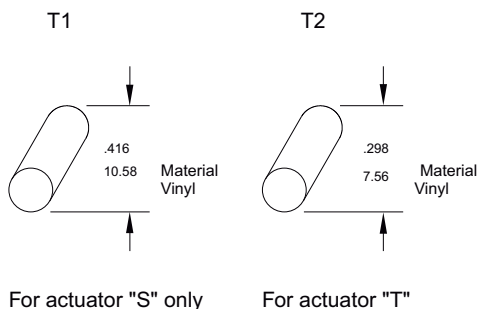
P2



Code	Description
P1/P2	black (std.)
P11/P21	white
P19/P29	silver

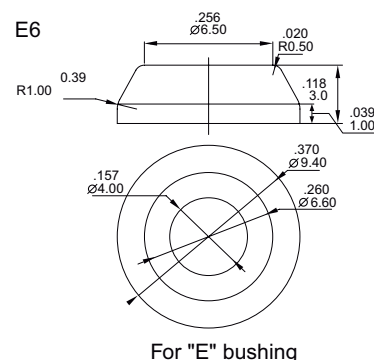


Toggle cap option

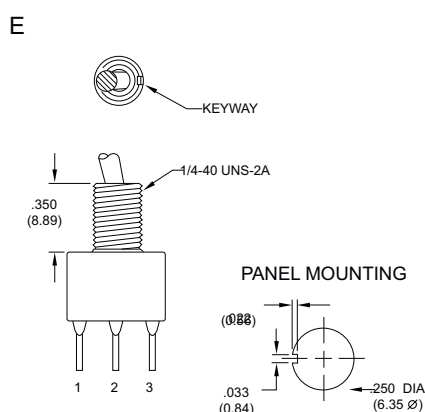
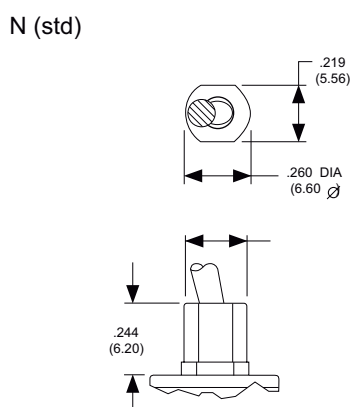


Code	Color
0	transparent
1	white
2	black
3	red
4	orange
5	yellow
6	green
7	blue

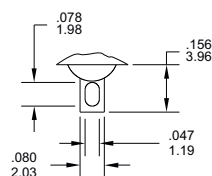
O ring (used for sealing)



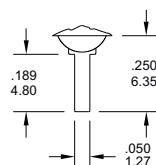
Bushing option



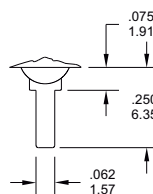
Terminal options



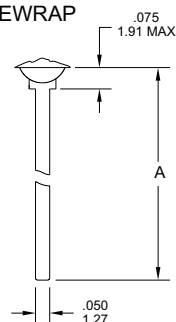
THK 0.76 (.030)



THK 0.76 (.030)



THK 0.76 (.030)



CODE	"A"dimension
D1	.750 (19.05)
D3	.425 (10.8)

THK 0.76 (.030)

Contact material option

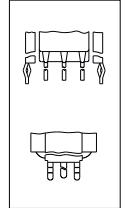
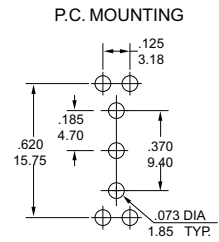
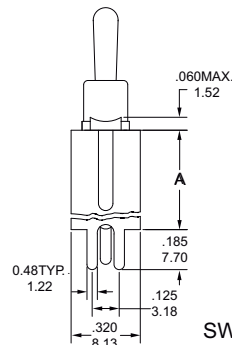
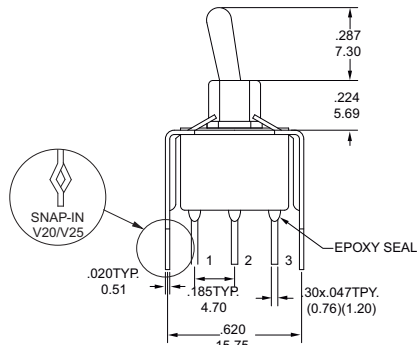
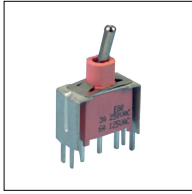
Code	Contact material	Terminal material	Rating
Q	Silver plated	Silver plated	6 A @ 125V AC or 28 V DC; 3 A @ 250 VAC
R	Gold plated over nickel plated	Gold plated over nickel plated	0.4VA MAX @ 20 V AC or DC MAX
G	Gold plated over silver plated	Gold plated over silver plated	0.4 VA MAX @ 20 V AC or DC MAX or 6 A @ 125V AC or 28 V DC; 3 A @ 250 VAC



SW-NE80T Series Miniature Toggle Switches, sealed

Vertical support bracket option (apply only on straight type, use termination option code „C“)

S20/ S25 / V20/ V25 (SPDT)

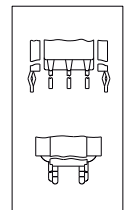
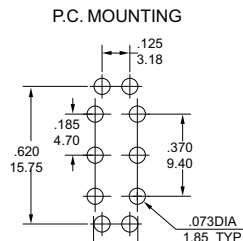
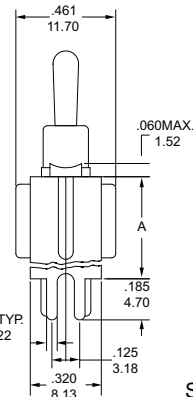
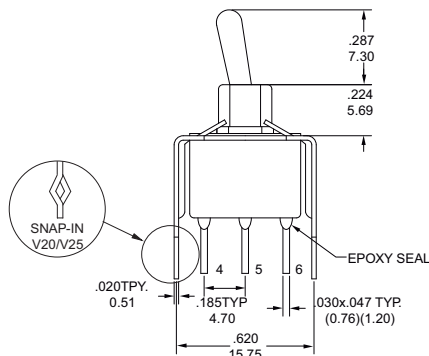
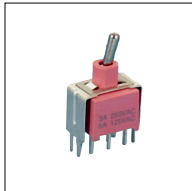


SNAP-IN
V20/ V25

SW-NE8013-TNCQ-S20(S25)

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

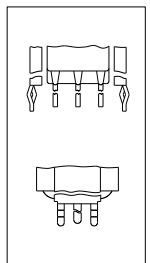
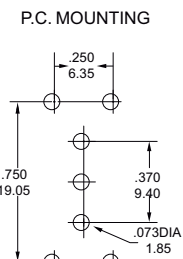
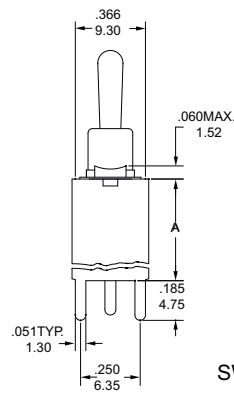
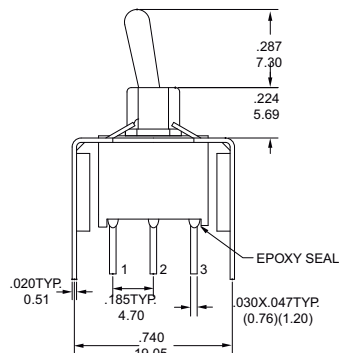
S20/ S25 / V20/ V25 (DPDT)



SNAP-IN
V20/ V25

SW-NE8011-TNCQ-S20(S25)

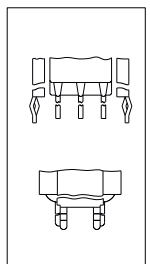
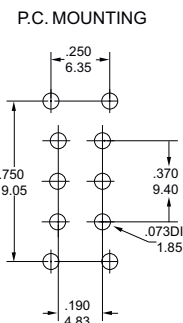
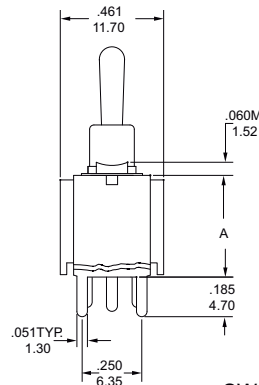
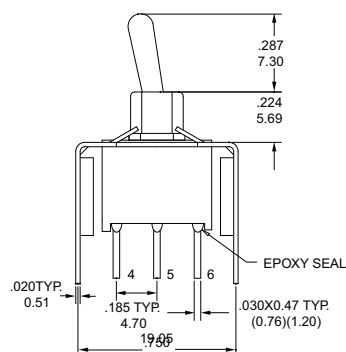
option Code	A dimension
S35/V35	.460 11.68
S40/V40	.630 16.00
V35/V40 : the snap-in type	



SNAP-IN
V35/ V40

SW-NE8013-TNCQ-S35(S40)

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

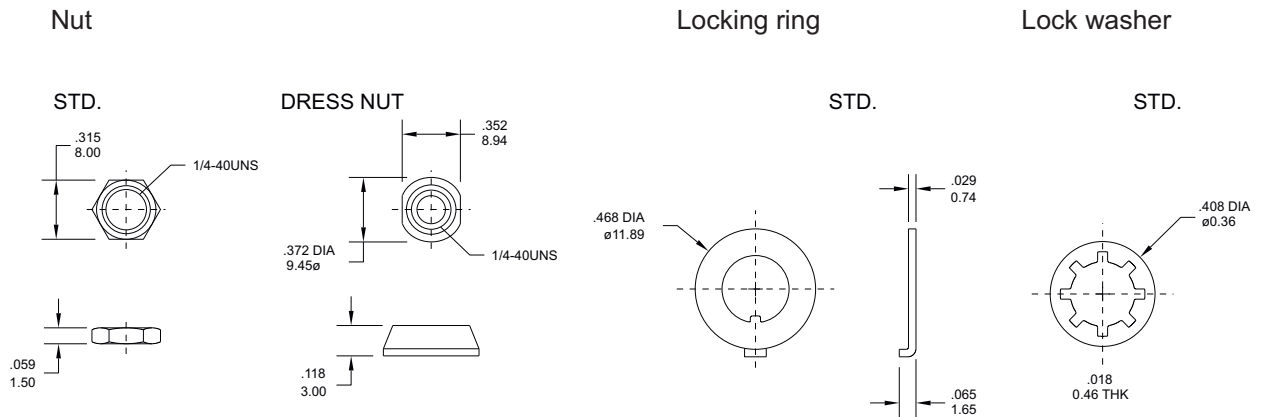


SNAP-IN
V35/ V40

SW-NE8011-TNCQ-S35(S40)



NE80T Toggle switches accessories (only for E bushing)



Information about 3-way toggle switches

