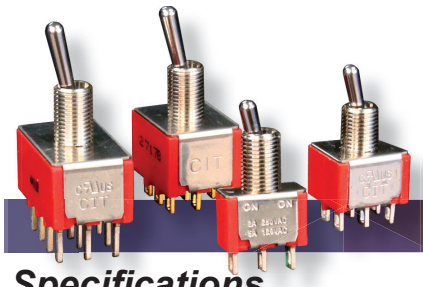


E222871

ROHS COMPLIANT

CIT Relay & Switch ANT

Miniature Toggle

Specifications

Electrical Ratings	5A @ 120VAC, 28VDC 2A @ 250VAC See Contact Options
Electrical Life	40,000 cycles typical
Contact Resistance	≤10mΩ initial @ 2-4VDC, 100mA

Dielectric Strength	1500Vrms min
Insulation Resistance	>1000MΩ min
Operating Temperature	-40ºC to 85ºC
Storage Temperature	-40ºC to 85ºC

Materials

Actuator	Brass, Chrome Plated
Housing	Diallyl Phthalate (DAP)
Cover	Stainless Steel
Bushing	Brass, Nickel Plated
Bracket	Brass, Tin Plated
Contacts	Copper Alloy, Silver or Gold Plated
Terminals	Copper Alloy, Silver or Gold Plated

Features

- Wide variety of applications from consumer electronics to commercial
- Standard epoxy sealed terminations
- Gold contacts available for low power applications
- Available support brackets for greater stability
- Up to four poles with seven fuctions available
- Anti-rotation feature on flat toggles
- High torque bushing preventing separation from frame during installation
- Wide variety of terminal options

Ordering Information

1. Series	ANT	2	3	T	E	B	Q	E

1. Series
ANT

2. Number of Poles
1 = SPDT
2 = DPDT
3 = 3PDT
4 = 4PDT

3. Switch Function
1 = ON-NONE-ON
2 = ON-NONE-(ON)
3 = ON-OFF-ON
4 = (ON)-OFF-(ON)
5 = ON-OFF-(ON)
6 = ON-ON-ON **See 3-way wiring section for details

4. Actuator
T = 5.08mm, standard
S = 10.67mm, standard
X = 13.97mm, standard
V = 16.26mm, standard
W = 21.34mm, standard
Y = 6.35mm, flat toggle *only available with AR1, AR2, AN1, AN2 bushing
F = 11.43mm, flat toggle *only available with AR1, AR2, AN1, AN2 bushing
G = 21.33mm, flat toggle *only available with AR1, AR2, AN1, AN2 bushing
K = 13.49mm, flat toggle *only available with AR1, AR2, AN1, AN2 bushing
Z = 12.37mm, large toggle *only available with BZ, BZR bushing
Z1 = 17.45mm, large toggle *only available with BZ, BZR bushing
LK = 16.10mm / 17.88mm, locking toggle, round top *only available with K, K1 bushing
LK1 = 16.81mm / 18.59mm, locking toggle, flat top *only available with K, K1 bushing

5. Bushing
E / E1 = 8.89mm, ¼-40NS / non-threaded, keyway
F / F1 = 7.11mm, ¼-40NS / non-threaded, keyway
J = 8.89mm, ¼-40NS, flat
W = 8.90mm, M6P-0.75 (metric) keyway
H = 8.00mm, high torque, ¼-40NS, keyway
G = 7.52mm, high tourque, ¼-40NS, flat
AR1 / AR2 = 7.55mm, anti-rotation, ¼-40NS / non-threaded, keyway
AN1 / AN2 = 7.55mm, anti-rotation, ¼-40NS / non-threaded, flat
BZ = 11.38mm, 15/32-32NS, keyway
BZR = 11.38mm, 15/32-32NS, keyway with support insert
L = 7.47mm, ¼-40NS, keyway, splash proof
K / K1 = 8.00mm, ¼-40NS, non-threaded, keyway
** See actuator option section for bushing availability with various actuators

6. Terminals
B = Solder Lug ** Wire wrap terminals available in various lengths, contact factory
C = PC Pin
D = Quick Connect
H = Horizontal Mount, right angle PC pin, *HS = Snap-In*
V = Vertical Mount, right angle PC pin, *VS = Snap-In*
W = Wire Wrap**
S20 or S25 = PC pin with support bracket, *V20 or V25 = Snap-In support bracket*
S35 or S40 = PC pin with support bracket, *V35 or V40 = Snap-In support bracket*

7. Contacts
Q = Silver plated
R = Gold plated
G = Gold over Silver plated

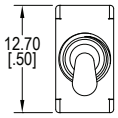
8. Epoxy Seal
E = Epoxy Seal

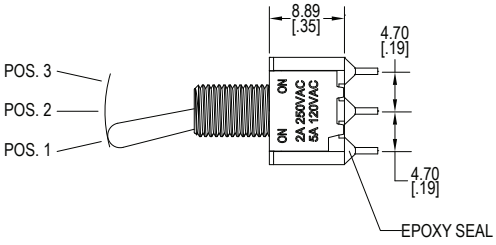
9. Actuator Cover
Blank = No cover
S = for S, T, X, V & W actuators
E = for E, F, J, & G bushings
Z = for BZ & BZR bushings

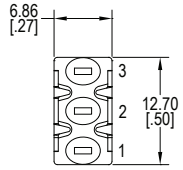
Actuator Cover Colors
1 = White
2 = Black
3 = Red
** Color choices only available with S toggle cover

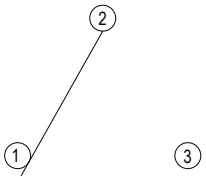
Switch Function

SPDT



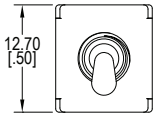


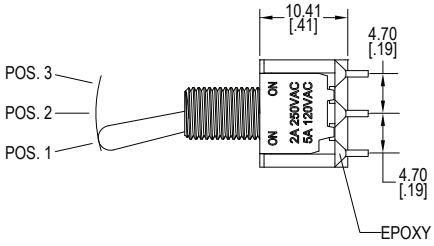


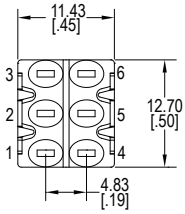


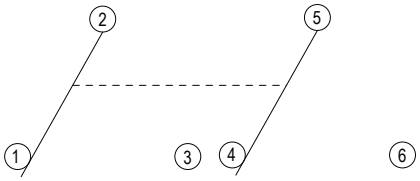
Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3	-	2-1

DPDT





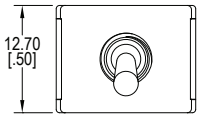


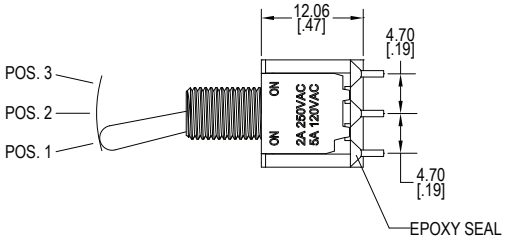


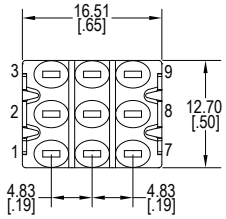
Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3	-	2-1
6	ON	ON	ON
Terminals	2-3 5-6	2-3 5-4	2-1 5-4

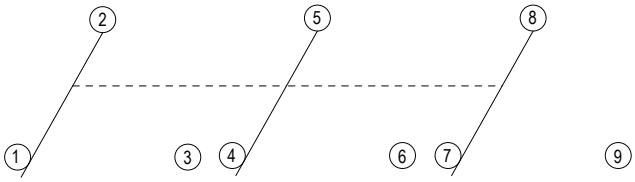
Switch Function

3PDT



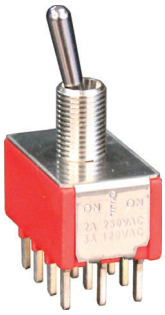


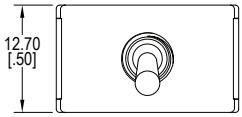


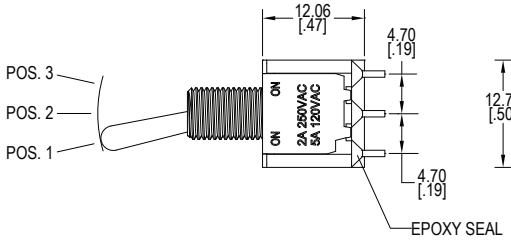


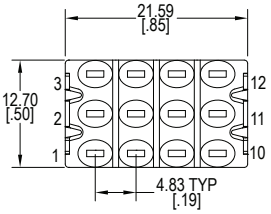
Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3 5-6 8-9	-	2-1 5-4 8-7

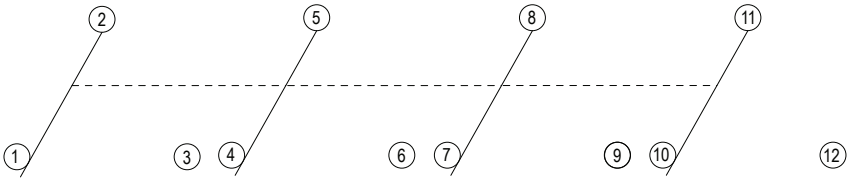
4PDT







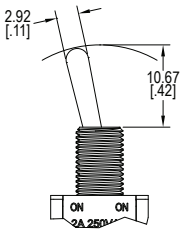




Function	Toggle Position		
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)
Terminals	2-3 5-6 8-9 11-12	-	2-1 5-4 8-7 11--10
6	ON	ON	ON
Terminals	2-3 5-6 8-9 11-12	2-3 5-4 8-9 11-10	2-1 5-4 8-7 11-10

Actuator Options

Actuator lengths shown with E bushing, subtract 1.78mm for F/F1 bushing, subtract 0.51mm for M bushing



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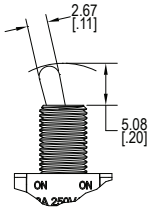

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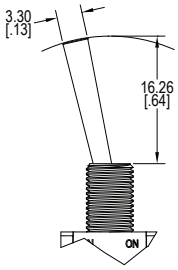
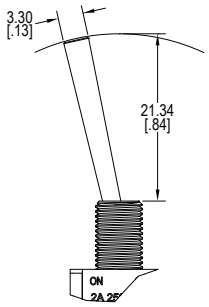
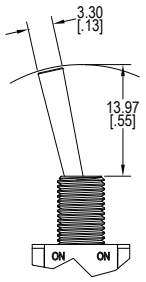


V

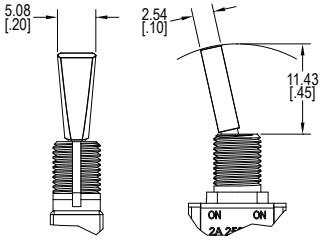


W

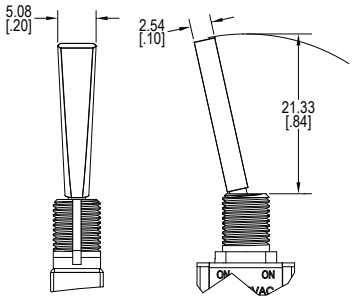


X

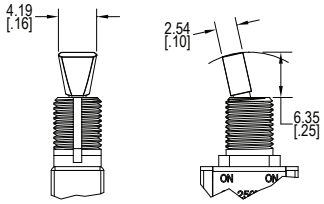
Below Actuators only available with AR1, AR2 & AN1/AN2 bushing



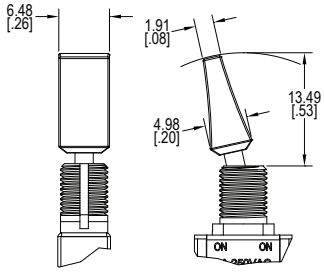
F



G

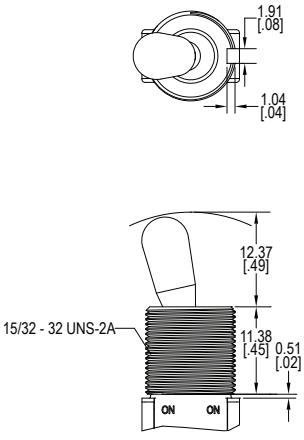


Y

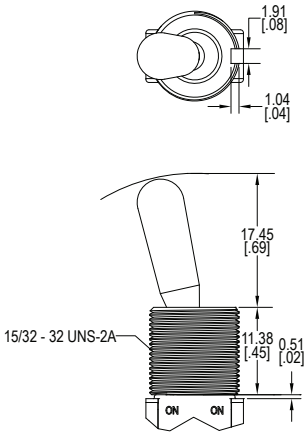


K - Plastic

Below Actuators only available with BZ & BZR bushing

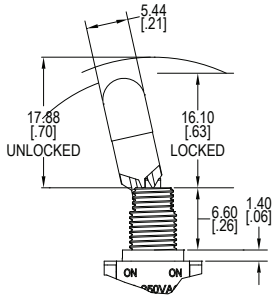


Z

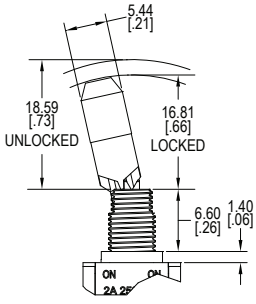


Z1

Below Actuators only available with K & K1 Bushing. LK & LK1 are not available with momentary functions.

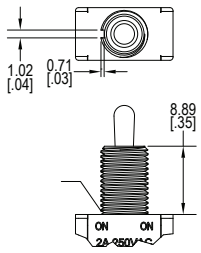


LK

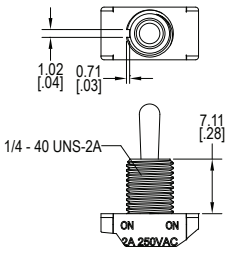


LK1

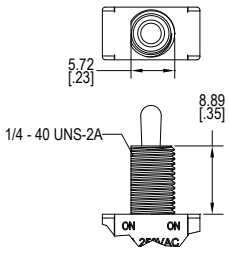
Bushing Options



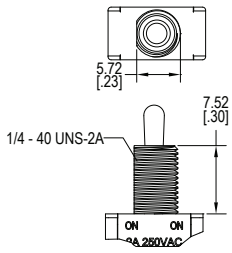
E - Threaded
E1 - Non-Treaded



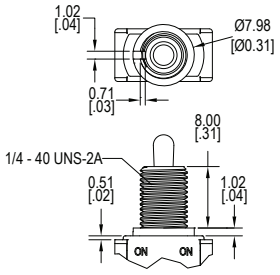
F - Threaded
F1 - Non-Threaded



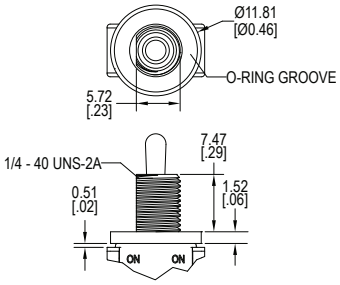
J - Threaded



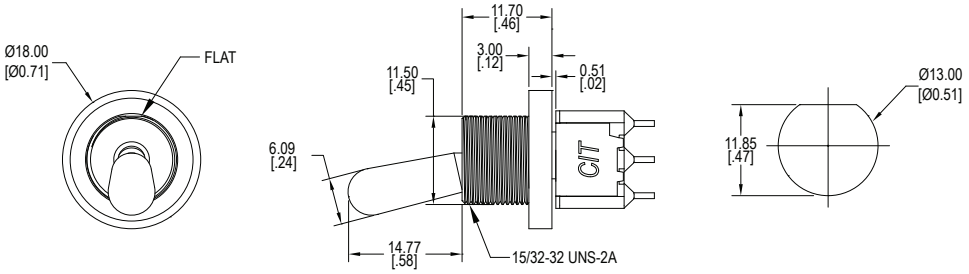
G - Threaded
High Torque



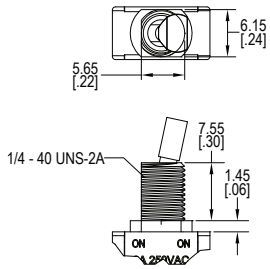
H - Threaded
High Torque



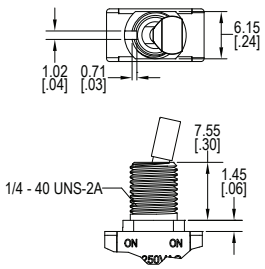
L - Threaded
Splash Proof



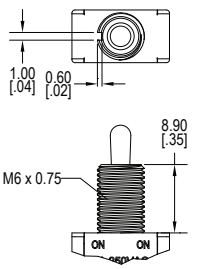
LZ - Threaded



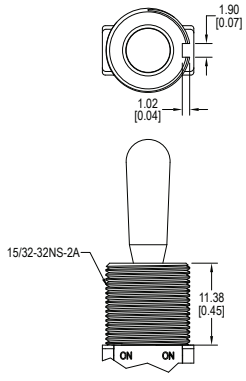
AN1 - Threaded
Anti-Rotation



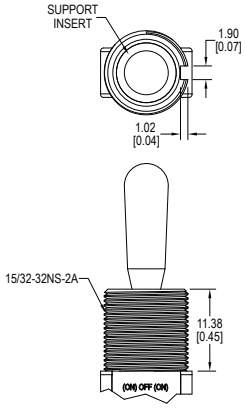
AR1 - Threaded
Anti-Rotation



W - Threaded
Metric

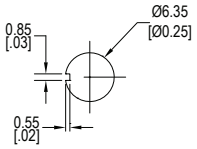


BZ - Keyway

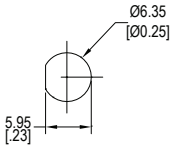


BZR - Keyway with Support Insert

Panel Cutouts

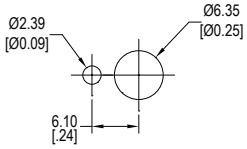


Keyway

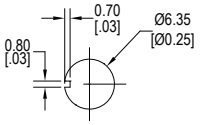


Flat

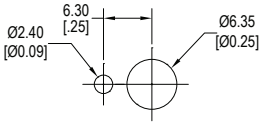
1/4 Inch Bushing without Locking Ring



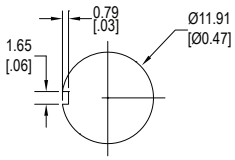
1/4 Inch Bushing with Standard Locking Ring



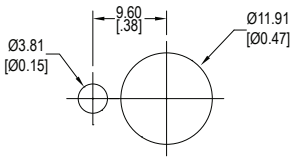
Metric Bushing without Locking Ring



Metric Bushing with Locking Ring

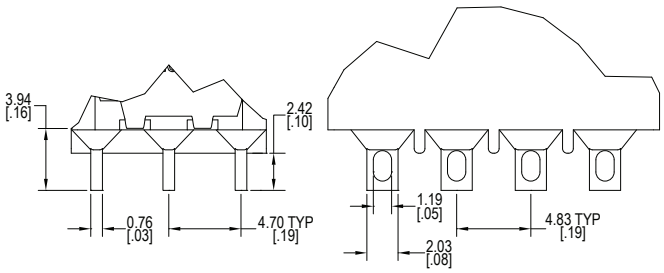


15/32 Inch Bushing without Locking Ring

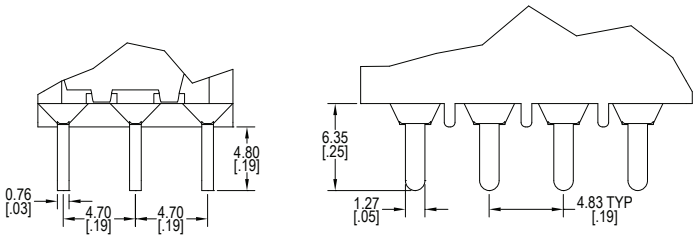


15/32 Inch Bushing with Standard Locking Ring

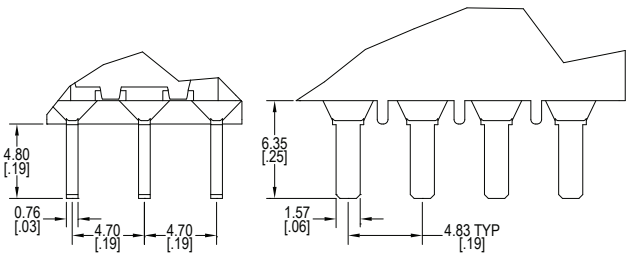
Terminal Options



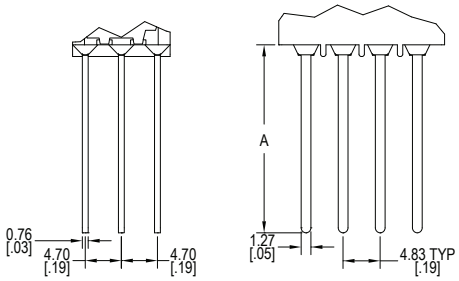
B - Solder Lug



C - PC Pin



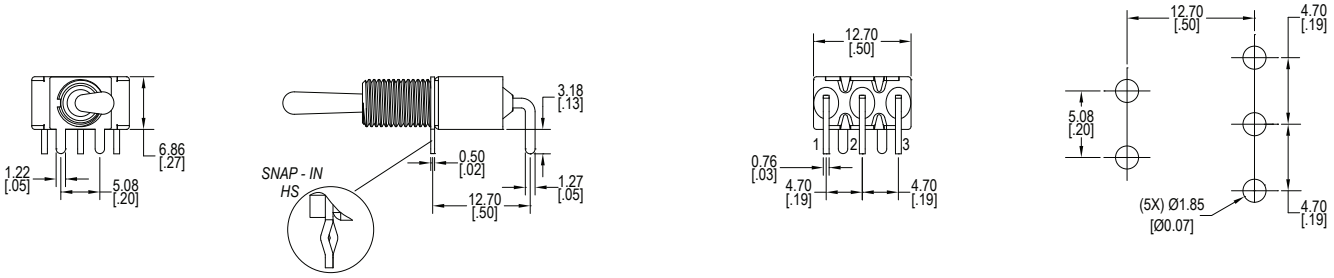
D - Quick Connect



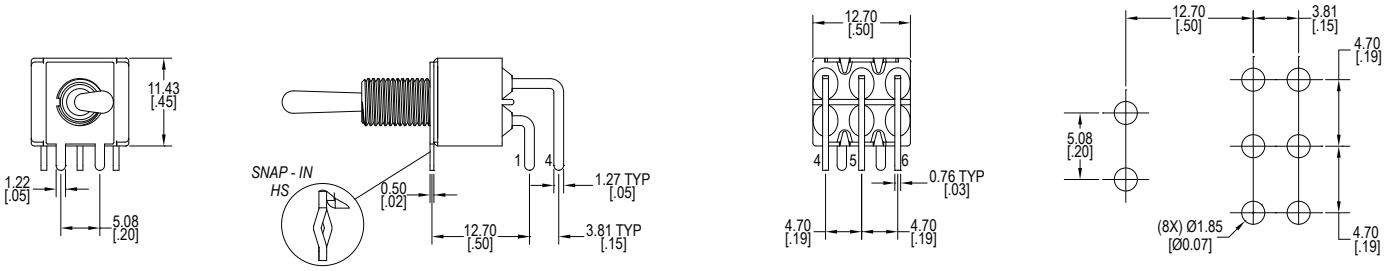
W - Wire Wrap

Terminal Length	
Option Code	"A" Dimension
W1	18.70
W2	24.20
W3	10.55
W4	26.97

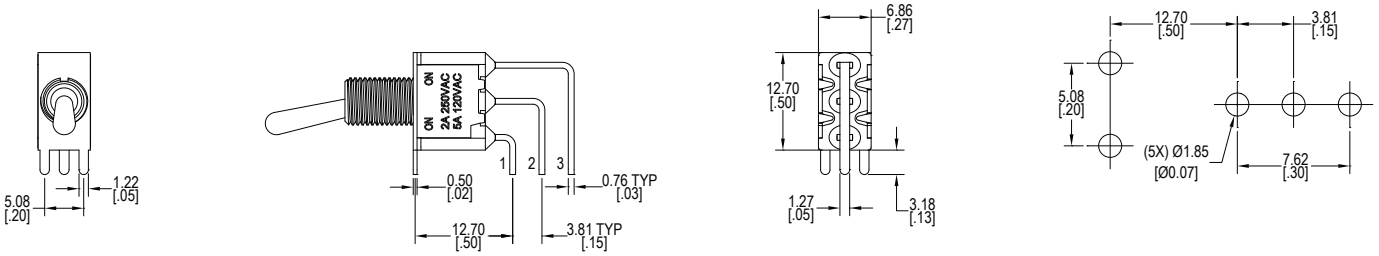
Terminal Options



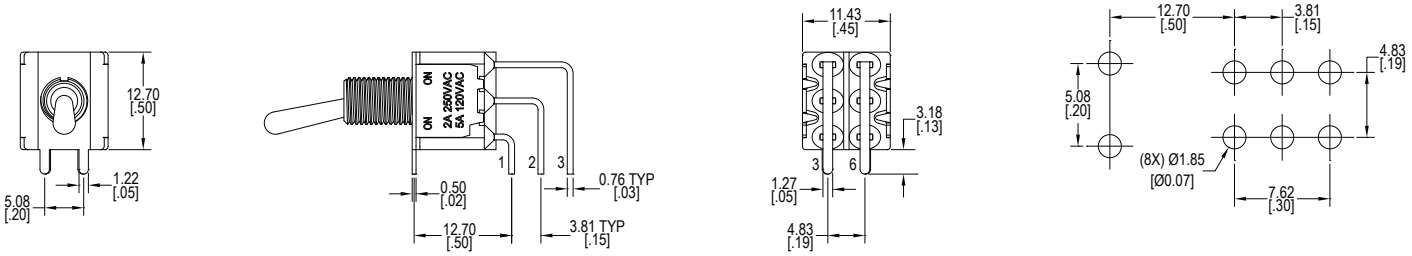
H (HS - Snap-in) = Horizontal mount, right angle PC pins, single pole



H (HS - Snap-in) = Horizontal mount, right angle PC pins, double pole

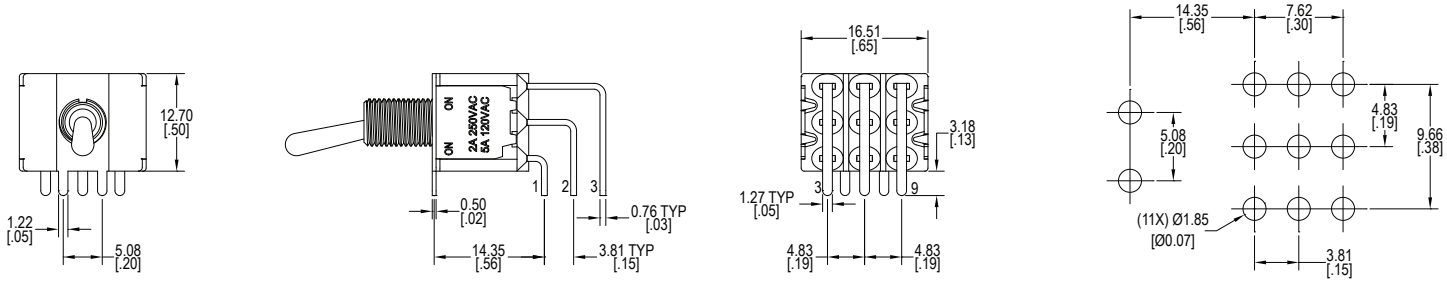


V (VS - Snap-in) = Vertical mount, right angle PC pins, single pole

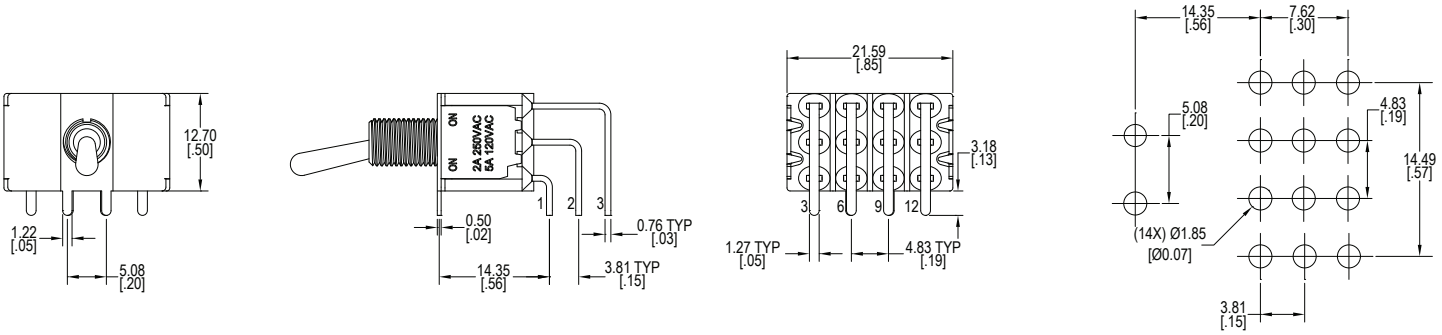


V (VS - Snap-in) = Vertical mount, right angle PC pins, double pole

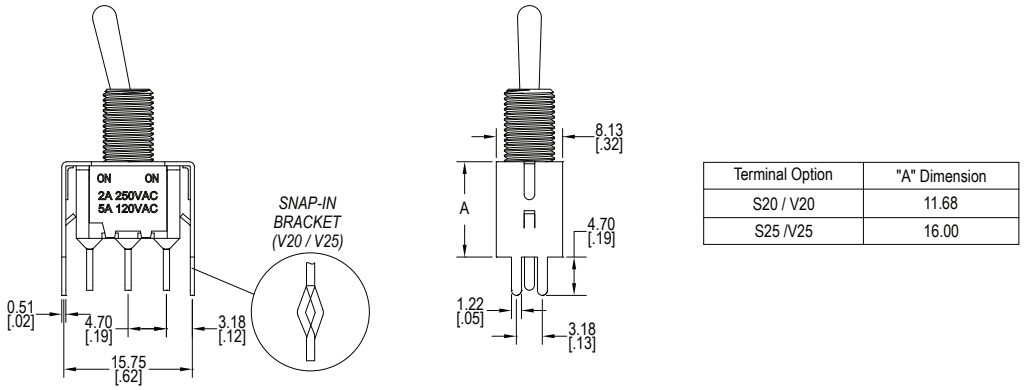
Terminal Options



V (VS - Snap-in) = Vertical mount, right angle PC pins, three pole



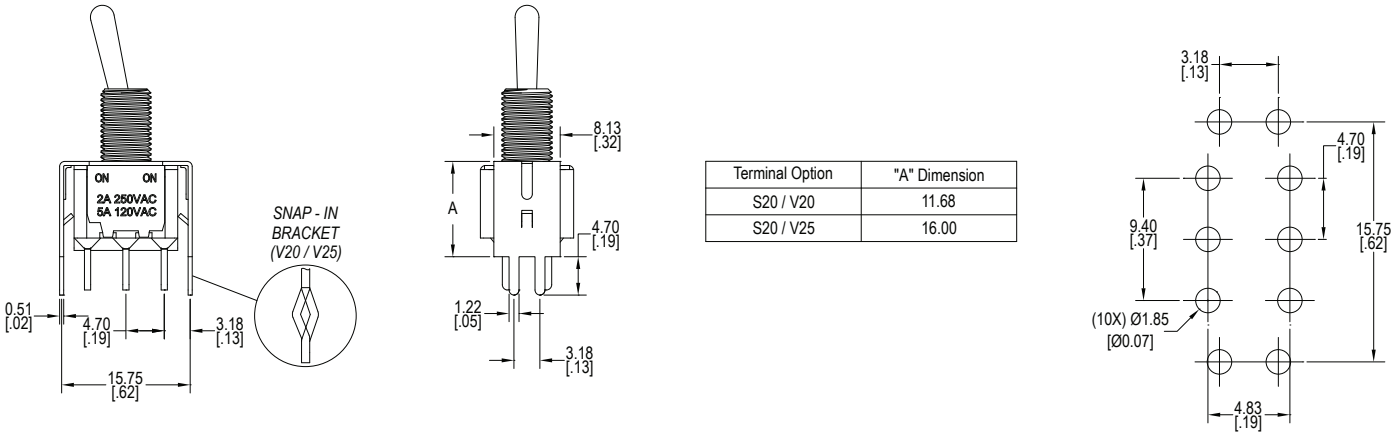
V (VS - Snap-in) = Vertical mount, right angle PC pins, four pole



Terminal Option	"A" Dimension
S20 / V20	11.68
S25 /V25	16.00

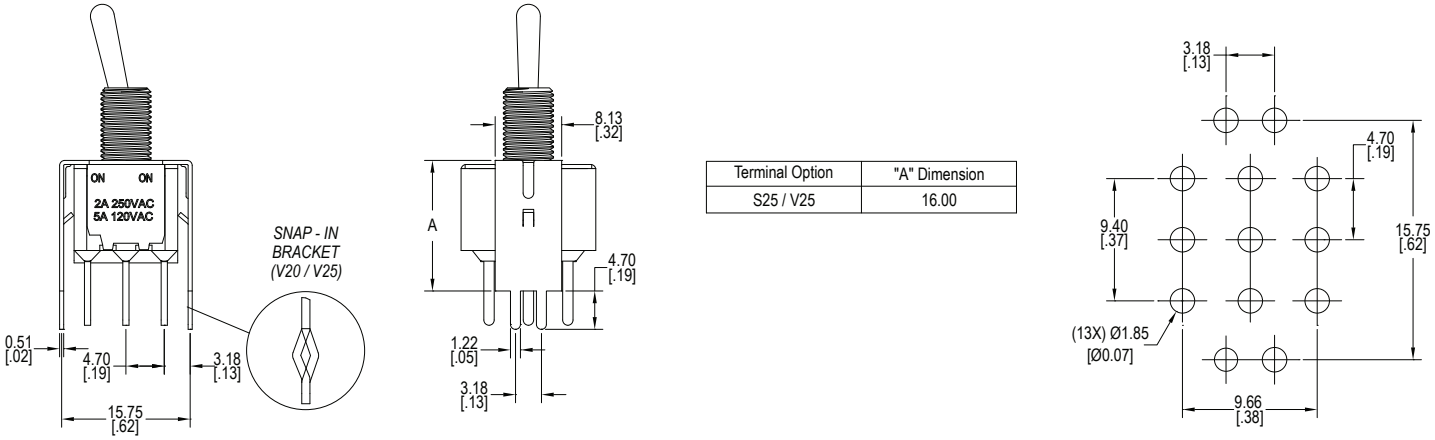
S20/S25 (V20/V25 - Snap-in) = PC pins with support bracket, single pole

Terminal Options



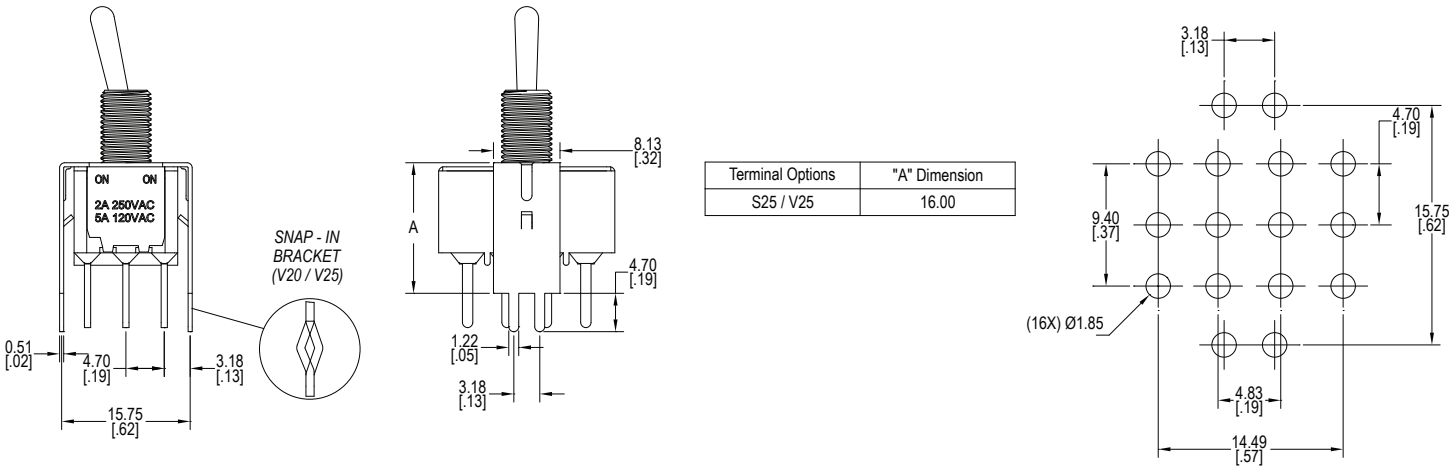
Terminal Option	"A" Dimension
S20 / V20	11.68
S20 / V25	16.00

S20/S25 (V20/V25 - Snap-in) = PC pins with support bracket, double pole



Terminal Option	"A" Dimension
S25 / V25	16.00

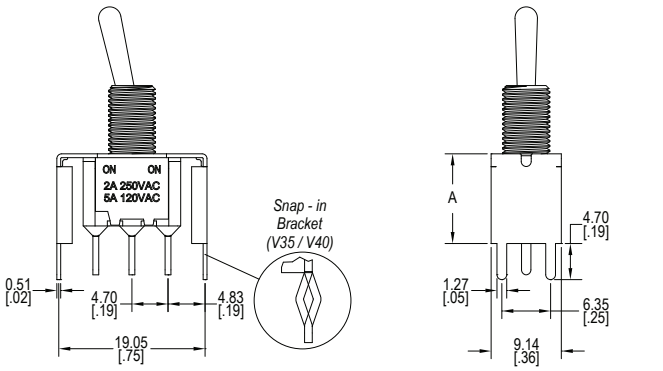
S20/S25 (V20/V25 - Snap-in) = PC pins with support bracket, three pole



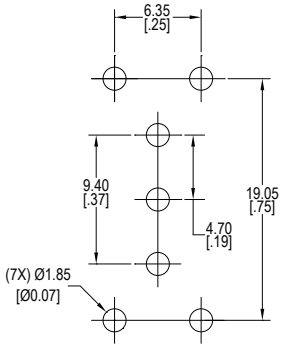
Terminal Options	"A" Dimension
S25 / V25	16.00

S20/S25 (V20/V25 - Snap-in) = PC pins with support bracket, four pole

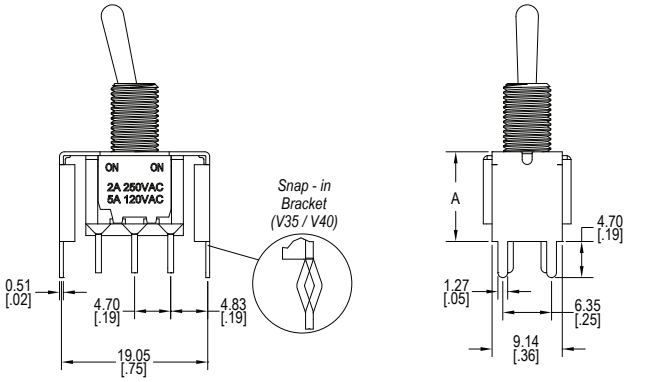
Terminal Options



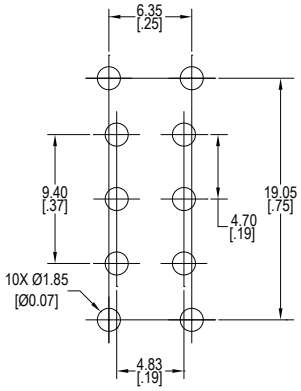
Terminal Option	"A" Dimension
S35 / V35	11.68
S40 / V40	16.00



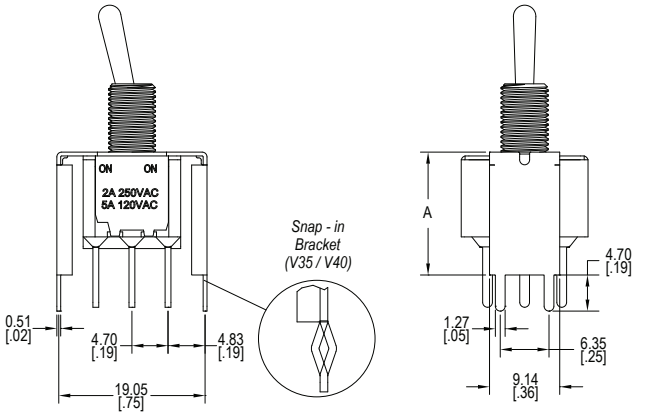
S35 (V35 - Snap-in) = PC pins with support bracket, single pole



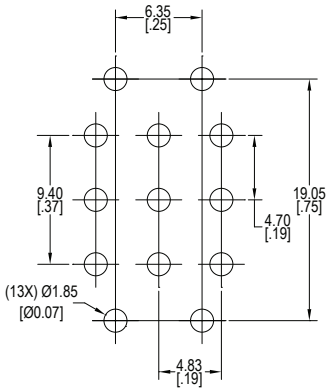
Terminal Option	"A" Dimension
S35 / V35	11.68
S40 / V40	16.00



S35 (V35 - Snap-in) = PC pins with support bracket, double pole

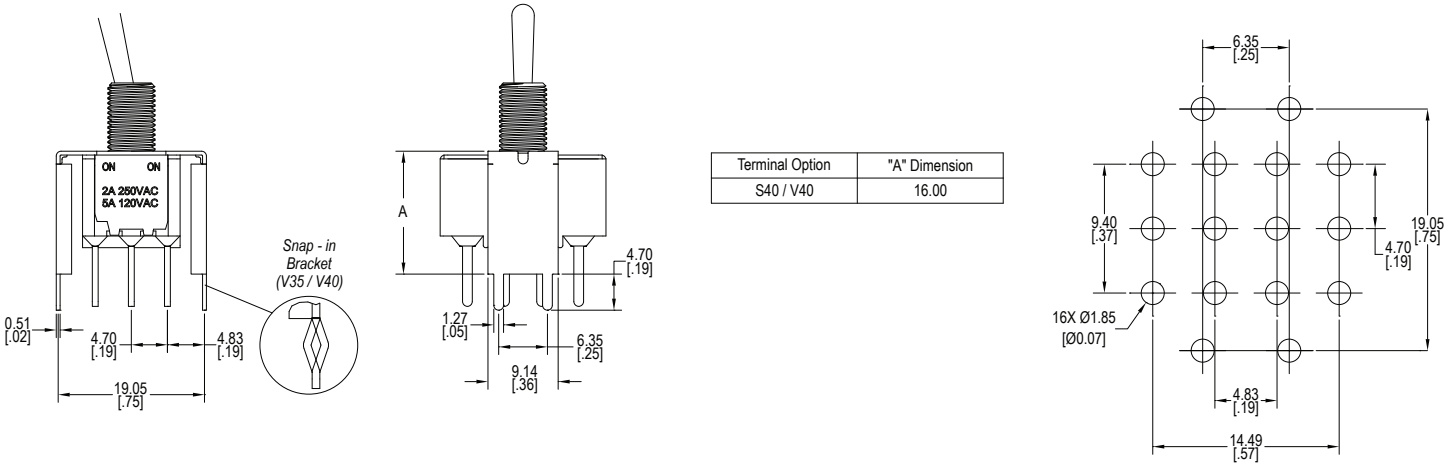


Terminal Option	"A" Dimension
S40 / V40	16.00



S40 (V40 - Snap-in) = PC pins with support bracket, three pole

Terminal Options



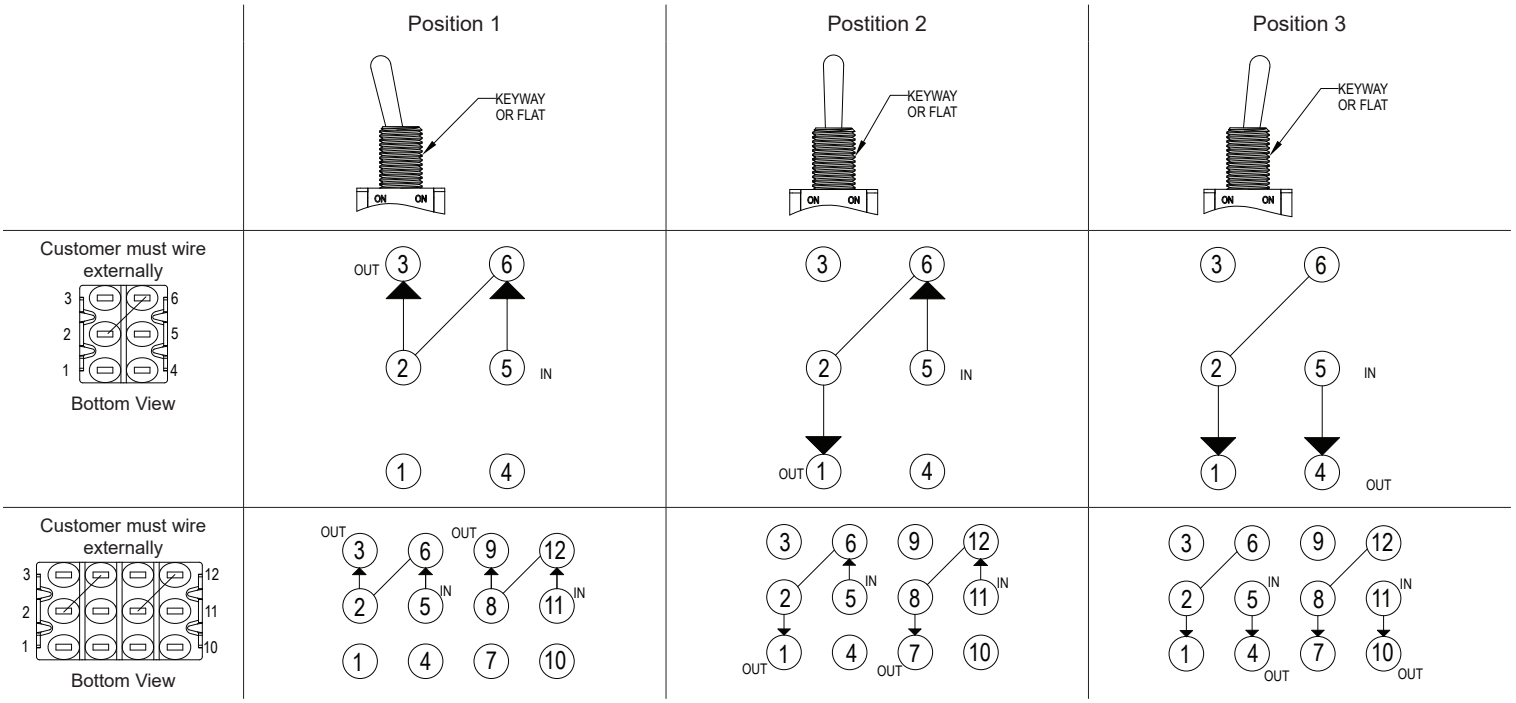
Terminal Option	"A" Dimension
S40 / V40	16.00

S40 (V40 - Snap-in) = PC pins with support bracket, four pole

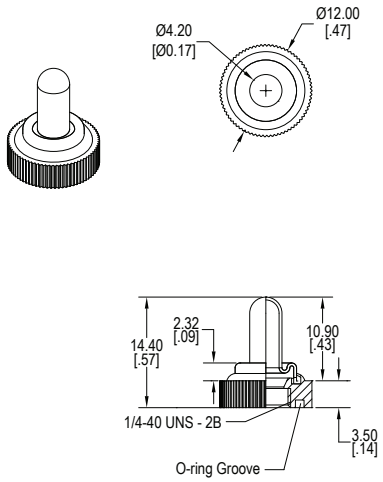
Contact Options

Designator	Contact Material	Terminal Material	Electrical Ratings
Q	Silver Plating	Silver Plating	5A @ 120VAC, 28VDC; 2A @ 250VAC
R	Gold over Nickel Plating	Gold over Nickel Plating	0.4VA max @ 20VAC or VDC max
G	Gold over Silver Plating	Gold over Silver Plateing	0.4VA max @ 20VAC or VDC max or 5A @ 120VAC, 28VDC; 2A @ 250VAC

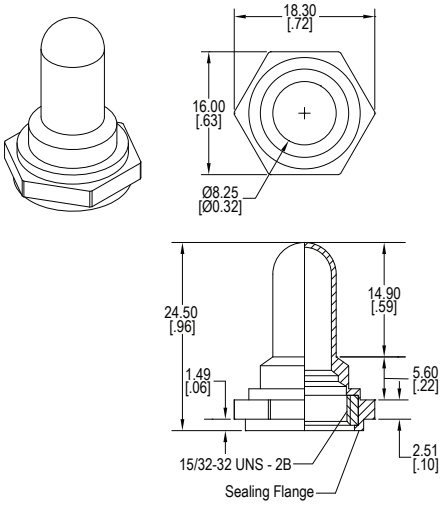
Three Way Wiring Diagram



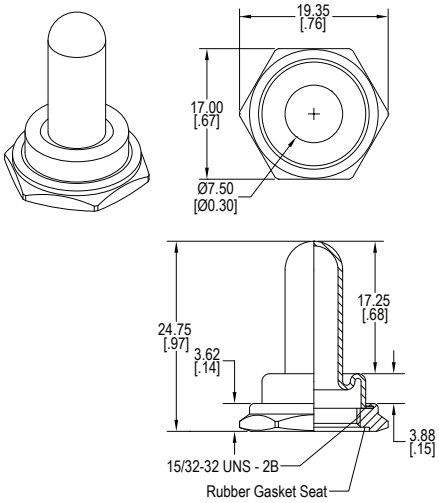
Cap Options



Sealed Boot E
Knurled Nut



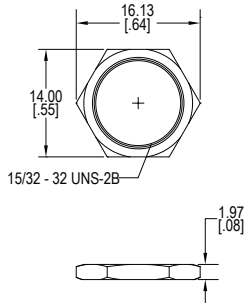
Sealed Boot Z3
Rubber Coated



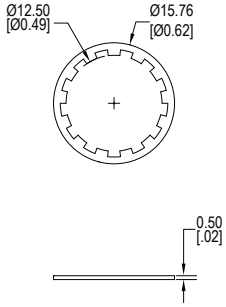
Sealed Boot Z4
Plain Hex Nut

Hardware

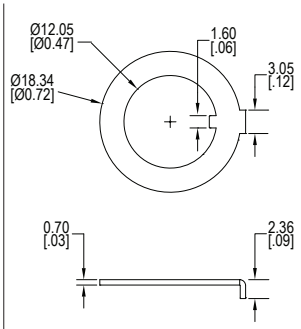
15/32 - 32 Hardware



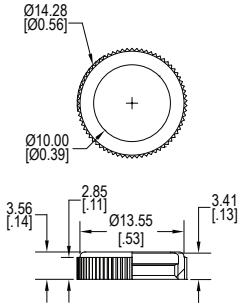
Hex Nut



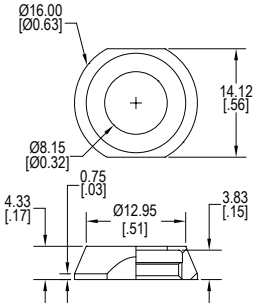
Lock Washer



Locking Ring-Keyway



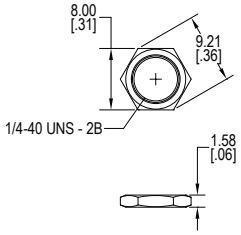
Knurled Nut



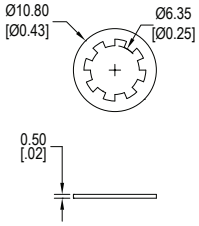
Dress Nut

Hardware

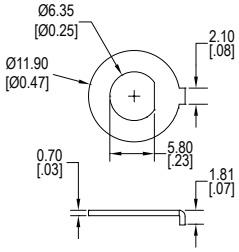
1/4 - 40 Hardware



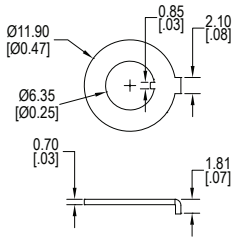
Hex Nut



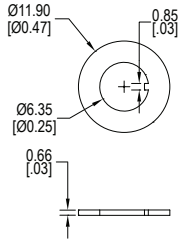
Lock Washer



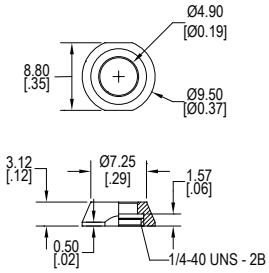
Locking Ring-Flat



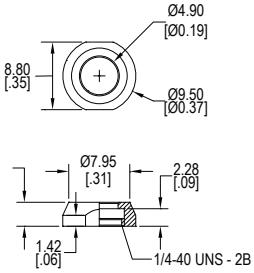
Locking Ring-Keyway



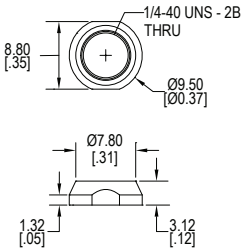
Washer-Keyway



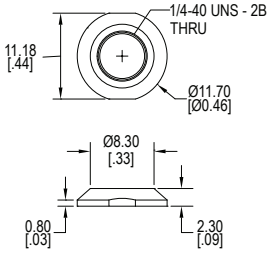
Dress Nut A



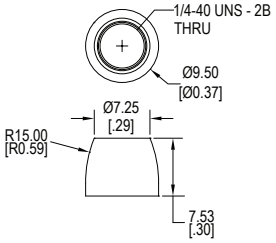
Dress Nut B



Dress Nut C

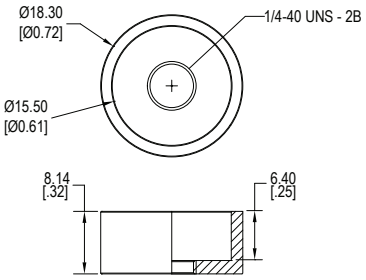


Dress Nut D

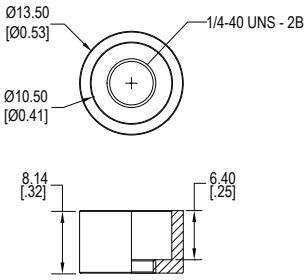


Dress Nut E

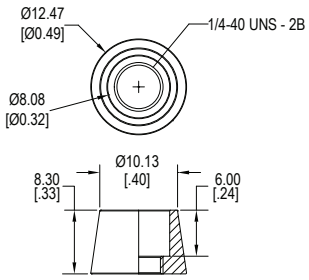
Collars



A

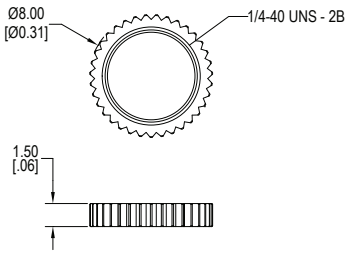


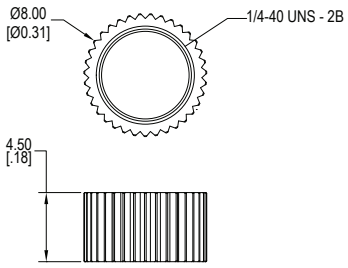
B



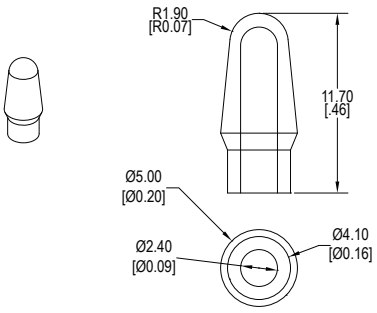
C

Knurled Nuts





Toggle Cap "S"



Dimensions are shown for reference purposes only.
Specifications and availability subject to change without notice.
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