

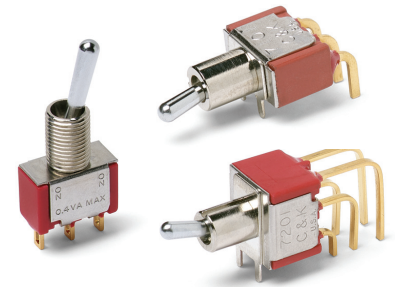
7000 Series Miniature Toggle Switches

Features/Benefits

- Multi-pole and multi-position
- Wide variety of actuator and termination options
- Epoxy terminal-seal compatible with bottom wash cleaning
- RoHS complaint models available

Typical Applications

- Telecommunications
- Instrumentation
- Medical equipment



Specifications

CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material: 5 AMPS @ 120 V AC or 28 V DC; 2 AMPS @ 250 V AC. See page F-15 for additional ratings.

ELECTRICAL LIFE: 7X01 and UX1 models: 100,000 make-and-break cycles at full load. All other models: 40,000 cycles.

CONTACT RESISTANCE: Below 10 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10⁹ Ω min.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to 85°C.

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

For materials see page F-4.

NOTE: Any models supplied with P, S, R, Q, B or G contact material are RoHS compliant and compatible.

NOTE: Specifications listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Build-A-Switch

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages F-4 thru F-16. For additional options not shown in catalog, consult our Customer Service Center.

Switch Function	Actuator	Bushing	Contact Material	Seal	Actuator Color/Finish	KXX Actuator Color/Finish	Bushing Finish
7101 SP On-None-On	M .200" high	D .280 high, keyway	B Gold	E Epoxy	NONE Bright chrome	NONE Natural aluminum	NONE Nickel on all bushings (except D8, satin chrome)
7103 SP On-Off-On	P3 Flatted, anti-rotation, .450" high	H .296 high, flat	P Gold, matte-tin	I Epoxy potted base	2 Black	2 Black anodized aluminum	2 Black
7105 SP Mom.-Off-Mom.	S .420" high	Y .350 high, keyway	Q Silver		3 Red	3 Red anodized aluminum	
7107 SP On-Off-Mom.	T .687" high, 15/32 bushing	NONE No bushing choice required	S Silver, matte-tin		S Satin chrome	7 Blue anodized aluminum	
7108 SP On-None-Mom.	K2 Locking lever, .704" high	CW Splashproof	G Gold over silver				
7109 SP None-On-Mom.	K9 Locking lever, .704" high	D8 .280" high, flat	R Gold over silver, matte-tin				
7201 DP On-None-On	K12 Locking lever, .732" high	D9 .280" high, keyway					
7203 DP On-Off-On	K19 Locking lever, .732" high	H3 .315" high, keyway					
7205 DP Mom.-Off-Mom.	L .840" high	H4 8mm high, keyway					
7207 DP On-Off-Mom.	L1 .640" high	Y1 .378" high, keyway					
7208 DP On-None-Mom.	L1P Anti-rotation, .640" high	Y3 8.9mm high, keyway					
7211 DP On-On-On	L2 .550" high	Y4 .378" high, flat					
7213 DP On-On-Mom.	L2P Anti-rotation, .550" high	Y9 .350" high, keyway					
7215 DP Mom.-On-Mom.	L3 Plastic .940" inch						
7301 3P On-None-On	L40 Lever handle without cap						
7303 3P On-Off-On	L41 .531" high lever handle with cap						
7305 3P Mom.-Off-Mom.	L42 .838" high lever handle with cap						
7308 3P On-None-Mom.	MP Anti-rotation, .200" high						
7401 4P On-None-On	P1 Flatted, anti-rotation, .840" high						
7403 4P On-Off-On	P4 Flatted, anti-rotation, .250" high						
7405 4P Mom.-Off-Mom.	SP Anti-rotation, .420" high						
7408 4P On-None-Mom.	T1 .487" high, 15/32 bushing						
7411 4P On-On-On	T1P Anti-rotation, .487" high, 15/32 bushing						
7413 4P On-On-Mom.	T2P Flatted, anti-rotation, .610" high, 15/32 bushing						
7415 4P Mom.-On-Mom.	TP Anti-rotation, .687" high, 15/32 bushing						

Note: UL models available, see pages F-4 & F-5.

Terminations

A Right angle, PC thru-hole	W .750" long, wire wrap
AV2 Vert. right angle, PC thru-hole	W1 .964" long, wire wrap
C PC Thru-hole	W3 .425" long, wire wrap
V3 .460 high, V-bracket	W4 1.062" long, wire wrap
Z Solder lug	W5 1.305" long, wire wrap
A2 Right angle, PC thru-hole	Z3 Quick connect
A3 Right angle, PC thru-hole	
A4 Right angle, PC thru-hole	
AW1 Right angle, extended, PC thru-hole	
AW4 Right angle, extended, PC thru-hole	
V2 .555" high, V-bracket	
V4 .630" high, V-bracket	
V6 .460" high, V-bracket	
V7 .630" high, V-bracket	
V8 .953" high, V-bracket	
V9 1.150" high, V-bracket	
V21 .555" high, snap-in V-bracket	
V31 .460" high, snap-in V-bracket	
V41 .630" high, snap-in V-bracket	
V71 .630" high, snap-in V-bracket	
V81 .953" high, snap-in V-bracket	



F

Toggle

7000 Series Miniature Toggle Switches

Materials

CASE: Glass filled nylon 6/6, flame retardant, heat stabilized, or diallyl phthalate (DAP) (UL 94V-0).

ACTUATOR: Brass, chrome plated.

BUSHING: Brass or zinc, nickel plated.

HOUSING: Stainless steel.

SWITCH SUPPORT: Brass or steel, tin plated.

END CONTACTS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See page F-15 for additional contact materials.

CENTER CONTACTS & ALL TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See above for additional contact materials.

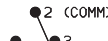
TERMINAL SEAL: Epoxy.

HARDWARE: Nut & Locking Ring: Brass, nickel plated.
Lockwasher: Steel, nickel plated.

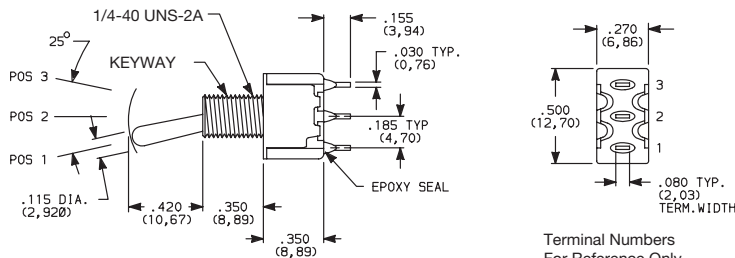
NOTE: Materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

SWITCH FUNCTION



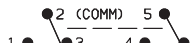
NO. POLES	MODEL NO.	UL** MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS			SCHEMATIC
			POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	
			KEYWAY 	KEYWAY 	KEYWAY 	KEYWAY 	KEYWAY 	KEYWAY 	
SP	7101	U11	ON	NONE	ON	2-3	N/A	2-1	
	7103	U13	ON	OFF	ON	2-3	OPEN	2-1	
	7105	U15	MOM.	OFF	MOM.				
	7107	U17	ON	OFF	MOM.				
	7108	U18	ON	NONE	MOM.	2-3	N/A	2-1	
	7109	U19	NONE	ON	MOM.	N/A	2-3	2-1	

SPDT



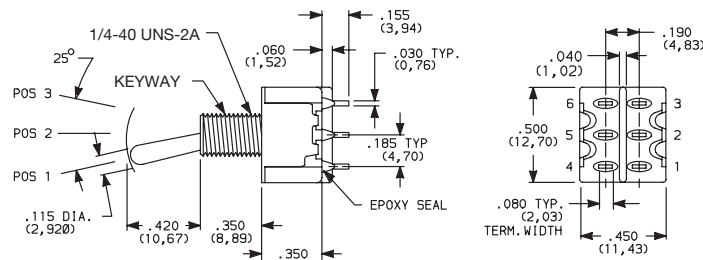
Part number shown: 7101SYZBE

Terminal Numbers
For Reference Only

DP	7201	U21	ON	NONE	ON	2-3,5-6	N/A	2-1,5-4	
	7203	U23	ON	OFF	ON	2-3,5-6	OPEN	2-1,5-4	
	7205	U25	MOM.	OFF	MOM.				
	7207	U27	ON	OFF	MOM.				
	7208	U28	ON	NONE	MOM.	2-3,5-6	N/A	2-1,5-4	
	7211 *	U211*	ON	ON	ON	2-3,5-6	2-3,5-4	2-1,5-4	
	7213*	U213*	ON	ON	MOM.				
	7215*	U215*	MOM.	ON	MOM.				

DPDT

DPDT



Part number shown: 7201SYZQE

Terminal Numbers
For Reference Only

MOM. = Momentary

** U11-U415 model nos.



with all options when ordered with G, R, Q or S contact material.

* Wiring for 3-way switch, see Section N.



Dimensions are shown: Inches (mm)

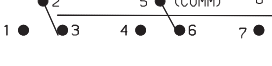
Specifications and dimensions subject to change



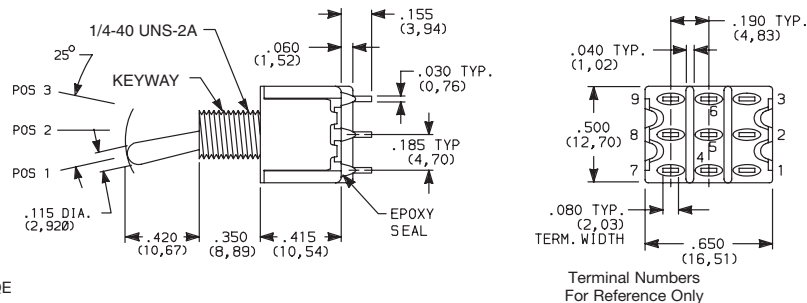
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7000 Series Miniature Toggle Switches

SWITCH FUNCTION

NO. POLES	MODEL NO.	UL** MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS			SCHEMATIC
			POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	
			KEYWAY 	KEYWAY 	KEYWAY 	KEYWAY 	KEYWAY 	KEYWAY 	
3P	7301	U31	ON	NONE	ON	2-3,5-6,8-9	N/A	2-1,5-4,8-7	
	7303	U33	ON	OFF	ON	2-3,5-6,8-9	OPEN	2-1,5-4,8-7	
	7305	U35	MOM.	OFF	MOM.				
	7307	U37	ON	OFF	MOM.				
	7308	U38	ON	NONE	MOM.	2-3,5-6,8-9	N/A	2-1,5-4,8-7	

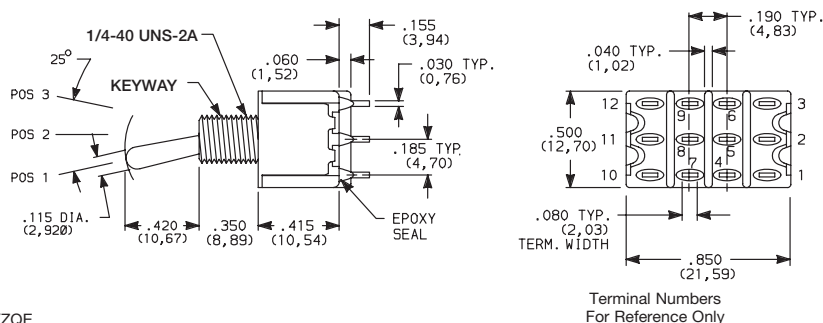
3PDT



Part number shown: 7301SYZQE

4P	7401	U41	ON	NONE	ON	2-3,5-6,8-9,11-12	N/A	2-1,5-4,8-7,11-10		
	7403	U43	ON	OFF	ON		2-3,5-6,8-9,11-12	OPEN		2-1,5-4,8-7,11-10
	7405	U45	MOM.	OFF	MOM.					
	7408	U48	ON	NONE	MOM.	2-3,5-6,8-9,11-12				
	7411*	U411*	ON	ON	ON	2-3,5-6,8-9,11-12	2-3,5-4,8-9,11-10	2-1,5-4,8-7,11-10		
	7413*	U413*	ON	ON	MOM.					
	7415*	U415*	MOM.	ON	MOM.					

4PDT



Part number shown: 7401SYZQE

AOM. = Momentary

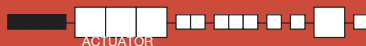
Wiring for 3-way switch, see Section N.

** U11-U415 model nos. with all options when ordered with G, Q, R or S contact material.

7000 Series Miniature Toggle Switches

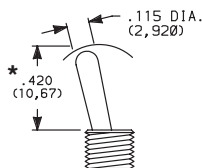
ACTUATOR

ACTUATOR FINISH



S .4206" HIGH ¹

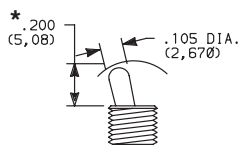
SP ANTIROTATION, .4206" HIGH ^{2,3}



S actuator standard when ordered with C, W-W5, Z & Z3 terminations.
Caps are available separately, see page F-16.

M .2006" HIGH ¹

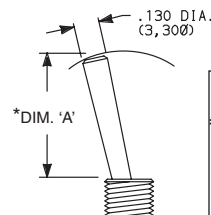
MP ANTIROTATION, .2006" HIGH ^{2,3}



M actuator standard when ordered with all terminations except C, W-W5, Z & Z3.
Caps are available separately, see page F-16.

L, L1, L2 .8406", .6406", .5506" HIGH ¹

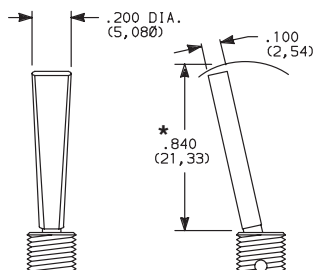
L1P, L2P ANTIROTATION, .8406", .6406", .5506" HIGH ^{2,3}



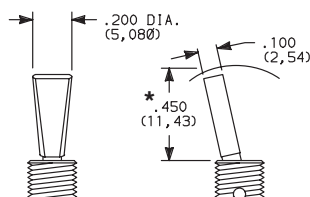
OPTION CODE	DIM 'A'
L	.840 (21,34)
L1, L1P	.640 (16,26)
L2, L2P	.550 (13,97)

Caps are available separately, see page F-16.

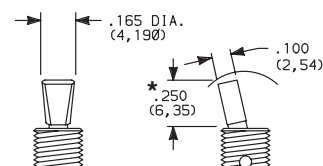
***P1** FLATTED WITH ANTIROTATION, .8406" HIGH ^{2,3}



***P3** FLATTED WITH ANTIROTATION, .4506" HIGH ^{2,3}



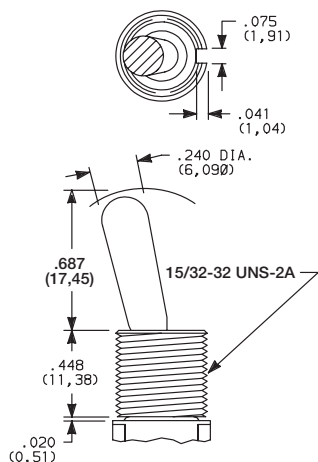
***P4** FLATTED WITH ANTIROTATION, .2506" HIGH ^{2,3}



*Dress nut part number 709901201 supplied standard with threaded bushing. (Part number 709903201 with metric threaded bushings.)

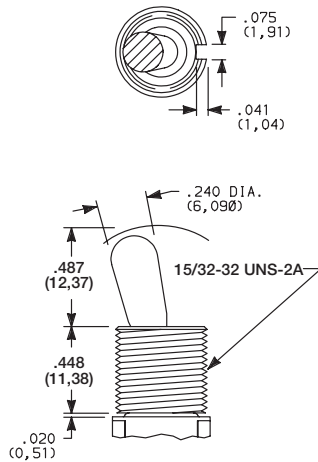
T .687 (17,45) HIGH ^{1,2}

TP ANTIROTATION, .687 (17,45) HIGH, 15/32 BUSHING ^{1,2,3}

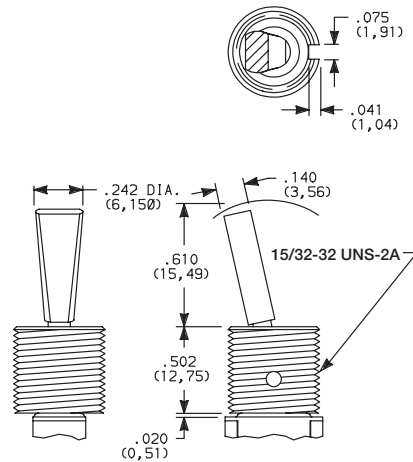


T1 .487 (12,37) HIGH ^{1,2}

T1P ANTIROTATION, .487 (12,37) HIGH, 15/32 BUSHING ^{1,2,3}



T2P FLATTED, ANTIROTATION, .6106" HIGH, 15/32 BUSHING ^{1,2,3}



Bushing option code not required unless CW splashproof bushing ordered. TP & T1P actuators not available with CW splashproof bushing. All TXX actuators not available on single pole models with A-A4, AW1-AW4 terminations.

Bushing option code not required. T2P actuator not available with CW splashproof bushing or single pole models with A-A4, AW1-AW4 terminations.

¹ L, L1, L2, M, S & TXX actuators not available with Y1 bushing.

² L1P, L2P, MP, P1, P3, P4, SP & TXX actuators not available with D8 & H4 bushing.

³ Antirotation: Provides anti-'push-in' feature on actuator.

* Add .070 (1,78) for D, D8 & D9 bushings, subtract .020 (0,51) for H3 bushing.

OPTION CODE	ACTUATOR FINISH
NONE	BRIGHT CHROME-With Nickel Plated Bushing
2	BLACK
S	SATIN CHROME

NOTE: Black hardware is supplied when either black actuators or bushings are specified. For additional hardware, see Section N.



Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change

www.ckswitches.com

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7000 Series Miniature Toggle Switches

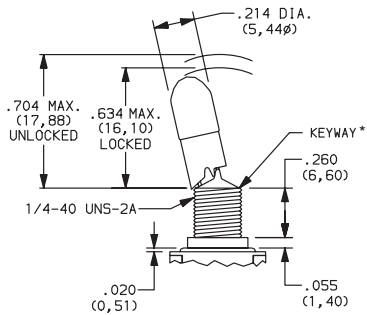
ACTUATOR

ACTUATOR FINISH/COLOR

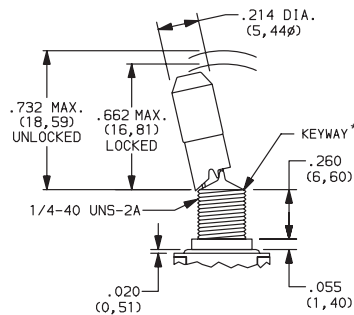


- K2** LOCKING LEVER, .704" HIGH
(threaded)
- K9** LOCKING LEVER, .704" HIGH
(unthreaded)

- K12** LOCKING LEVER, .732" HIGH
(threaded)
- K19** LOCKING LEVER, .732" HIGH
(unthreaded)



Replaces K, K8



Replaces K1, K18

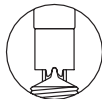
OPTION CODE	ACTUATOR CAP FINISH
NONE	NATURAL ALUMINUM—With Nickle Plated Bushing
2	BLACK ANODIZED ALUMINUM
3	RED ANODIZED ALUMINUM
7	BLUE ANODIZED ALUMINUM

* All KXX models including KXXCW have a keyway

Locking Positions



-01 Models
2 Position lock



-03 & -11 Models
3 Position lock



-05, -09 & -15 Models
1 Position lock



-07 & -13 Models
2 Position lock



-08 Models
1 Position lock

NOTE: To prevent accidental actuation, toggle must be lifted before being actuated. When released, toggle will lock in place. Overtightening mounting nut may cause actuator to bind.

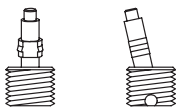
Locking levers supplied with bushing shown.

Bushing option code not required unless CW splashproof bushing ordered.

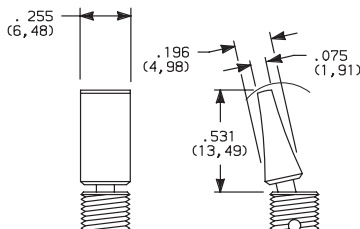
- L40** LEVER HANDLE WITHOUT CAP

- L41** PLASTIC LEVER HANDLE WITH
ANTIROTATION AND CAP, P/N 4810

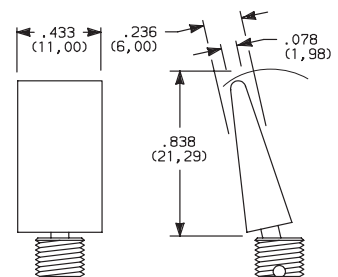
- L42** PLASTIC LEVER HANDLE WITH
ANTIROTATION AND CAP, P/N 4811



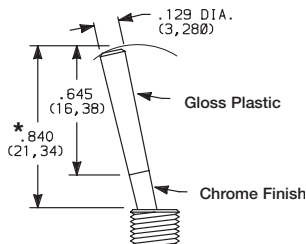
No color choice required



Finish: Matte (L41 & L42).



- L3** PLASTIC .940" HIGH



OPTION CODE	PLASTIC ACTUATOR COLORS
NONE	No Actuator Color (L40 option)
2	BLACK
3	RED

* Add .070 (1,78) for D, D8 & D9 bushings, subtract .020 (0,51) for H3 bushing.

NOTE: Lever handle for L41 & L42 actuators supplied, but not installed. For interchangeability, order L40 actuator option and lever handles separately, see page F-16. L4X actuators not available with H4, Y1, Y4 bushings. Antirotation: Provides anti-'push-in' feature on actuator.



Third Angle
Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

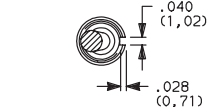
7000 Series Miniature Toggle Switches

BUSHING

BUSHING FINISH

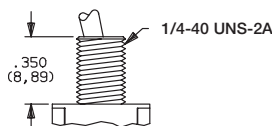
BUSHING

Y .350" HIGH, THREADED, KEYWAY
Y9 .350" HIGH, UNTHREADED, KEYWAY



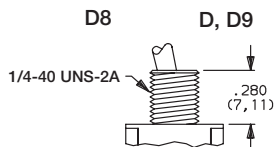
NONE NO BUSHING

No bushing choice required with KXX, TXX actuators. (exception: Specify CW if splashproof bushing desired).



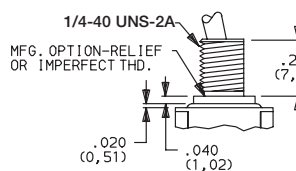
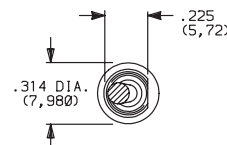
Y bushing standard with C, W-W5, Z or Z3 terminations.

D .280" HIGH, THREADED, KEYWAY
D8 .280" HIGH, UNTHREADED, FLAT³
D9 .280" HIGH, UNTHREADED, KEYWAY

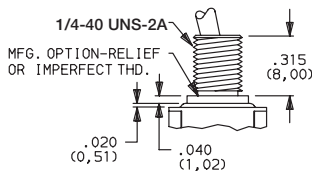
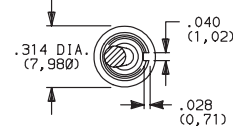


D9 bushing standard with all terminations except C, W-W5, Z or Z3. Add .070 (1,78) to all actuators lengths with D, D8 & D9 bushings.

H .296" HIGH, FLAT THREADED, HIGH TORQUE^{1,2}

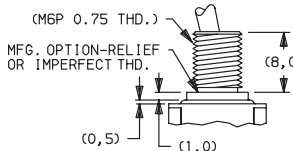
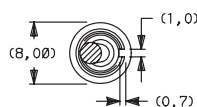


H3 .315" HIGH, KEYWAY THREADED, HIGH TORQUE^{1,2}

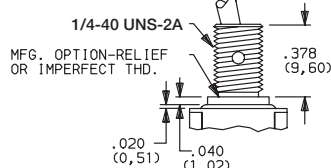
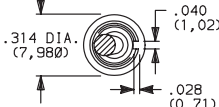


Subtract .020 (0,51) from all actuator lengths for H3 bushing.

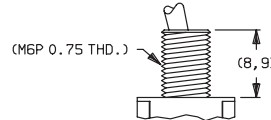
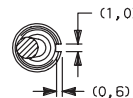
H4 8mm HIGH, KEYWAY, THREADED, METRIC HIGH TORQUE^{1,2,3}



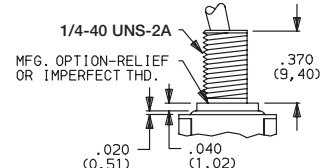
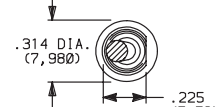
Y1 .378" HIGH, KEYWAY, THREADED, HIGH TORQUE^{1,2,4}



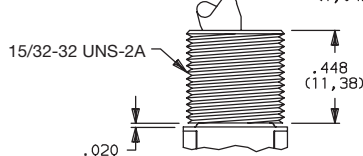
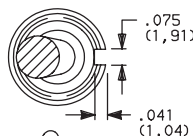
Y3 8.9mm HIGH, KEYWAY, THREADED, METRIC



Y4 .378" HIGH, FLAT, THREADED, HIGH TORQUE^{1,2,5}

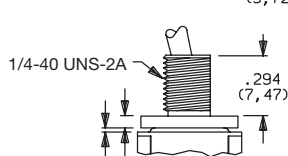
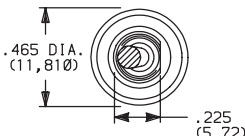


CW THREADED, SPLASHPROOF^{1,2}
For T & T1 actuators.



IP67 Degree of protection, totally protected against dust, full-scale voltage protection, temporary immersion. Internal actuator seal standard. External bushing seal available separately from APM Hexseal, part # MFS-60064.

For actuators other than T and T1.



IP67 Degree of protection, totally protected against dust, full-scale voltage protection, temporary immersion. Internal actuator seal and external bushing seal washer standard. IP65 degree of protection for LXP, MP, PX or SP with CW option.

OPTION CODE	BUSHING FINISH
NONE	NICKEL on all bushings except 'D8' satin chrome.
2	BLACK

¹ Will withstand 12 in.-lbs. of torque with no distortion.

² CW, H, H3, H4, Y1 & Y4 bushings not available on single pole models with A4 terminations.

³ D8 & H4 bushings available only with L, L1, L2, M & S actuators.

⁴ Y1 bushing available only with LXP, MP, PX & SP actuators.

⁵ Y4 bushing not available with L4X actuators.

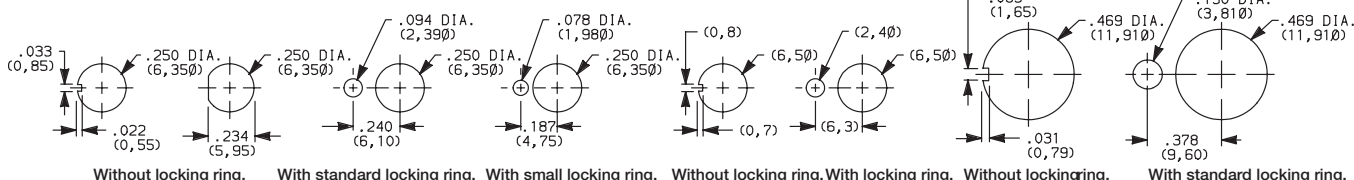
NOTE: Two mounting nuts, locking ring and lockwasher supplied standard with threaded bushings. Black hardware is supplied when either black bushings or actuators are specified. Optional mounting nut and locking ring styles and finishes available, see Section N.

PANEL MOUNTING

1/4 INCH BUSHING

METRIC BUSHING

15/32 INCH BUSHING



Without locking ring.

With standard locking ring.

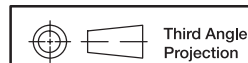
With small locking ring.

Without locking ring.

With locking ring.

Without locking ring.

With standard locking ring.



Third Angle Projection

Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change

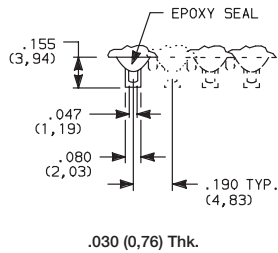
C&K

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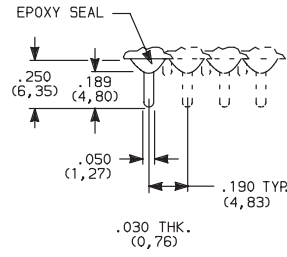
7000 Series Miniature Toggle Switches

TERMINATIONS

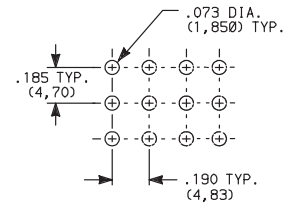
Z SOLDER LUG



C PC THRU-HOLE



PC MOUNTING

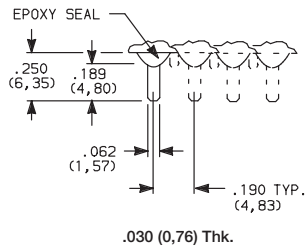


SPDT thru 4PDT

Not available with P, R or S contact materials.

SPDT thru 4PDT

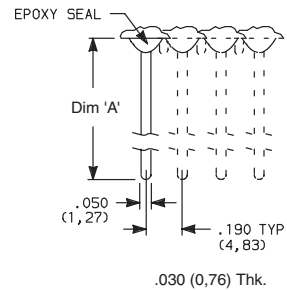
Z3 QUICK CONNECT



Not available with P, R or S contact materials.
Mating quick connector available, order part number 530100000, page F-16.

SPDT thru 4PDT

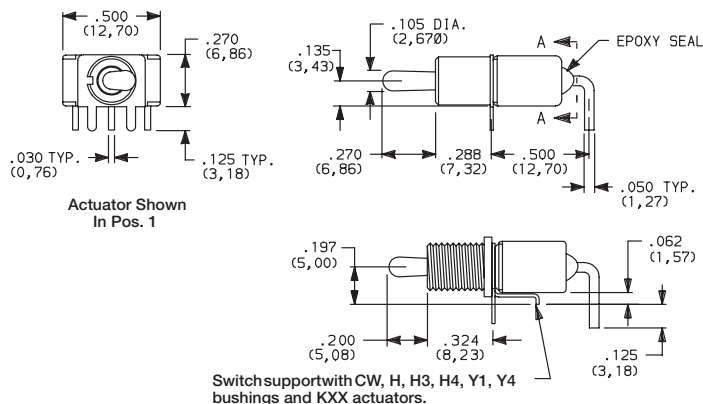
W, W1, W3, W4, W5 WIRE WRAP



OPTION CODE	DIM 'A'
W	.750 (19,05)
W1	.964 (24,48)
W3	.425 (10,80)
W4	1.062 (26,97)
W5	1.305 (33,15)

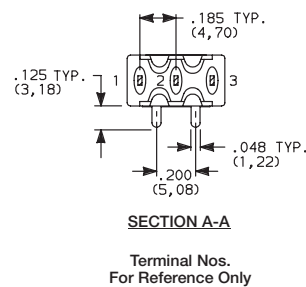
SPDT thru 4PDT

A RIGHT ANGLE, PC THRU-HOLE



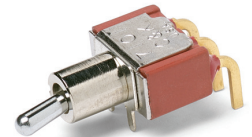
Switch support with CW, H, H3, H4, Y1, Y4 bushings and KXX actuators.

Part No. Shown: 7101MHABE



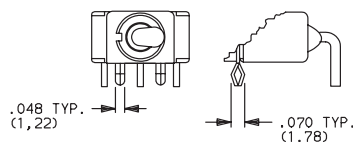
SECTION A-A

Terminal Nos.
For Reference Only

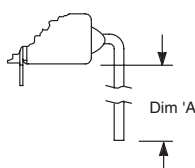


7101MD9ABE
Horizontal Actuation
SPDT

A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE



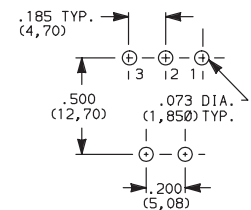
AW1, AW4 RIGHT ANGLE, EXTENDED, PC THRU-HOLE



OPTION CODE	DIM 'A'
AW1	.72 (18,3)
AW4	.83 (21,1)

Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.

PC MOUNTING



Third Angle
Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change



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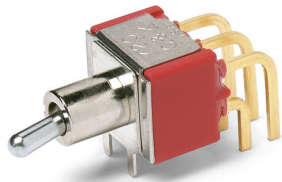
F

Toggle

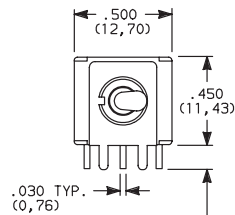
7000 Series Miniature Toggle Switches

TERMINATIONS

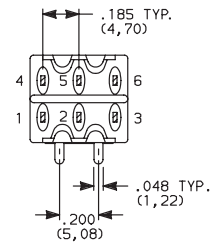
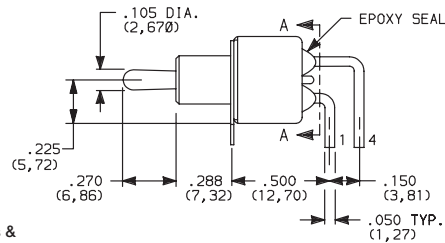
A RIGHT ANGLE, PC THRU-HOLE



7201MD9ABE
Horizontal Actuation
DPDT



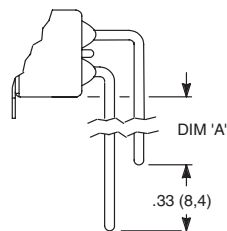
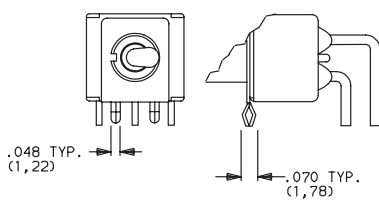
Actuator Shown
In Pos. 1
Terminals &
Support



SECTION A-A

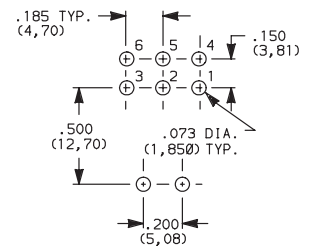
A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE

AW1, AW4 RIGHT ANGLE, EXTENDED, PC THRU-HOLE



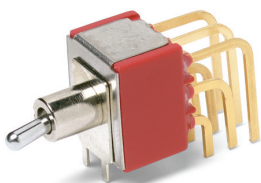
OPTION CODE	DIM 'A'
AW1	.40 (10,2)
AW4	.50 (12,7)

PC MOUNTING

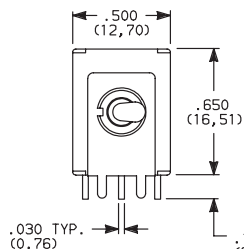


Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.

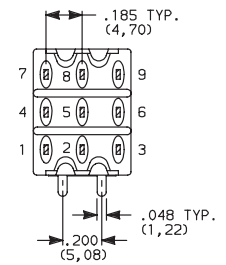
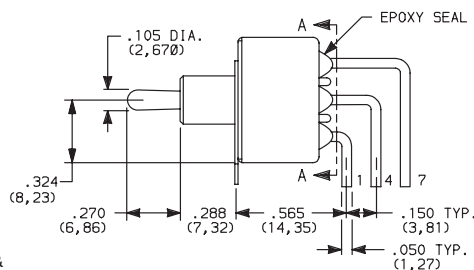
A RIGHT ANGLE, PC THRU-HOLE



7301MD9ABE
Horizontal Actuation
3PDT

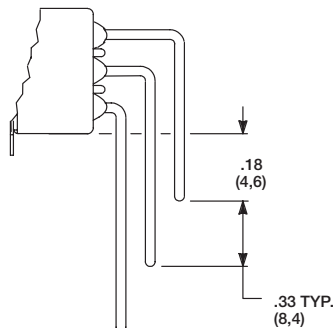


Actuator Shown
In Pos. 1
Terminals &
Support

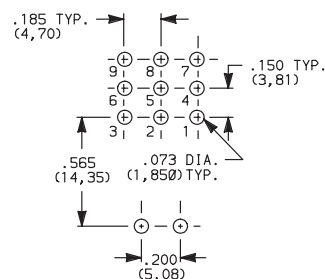


SECTION A-A

AW4 RIGHT ANGLE, EXTENDED, PC THRU-HOLE



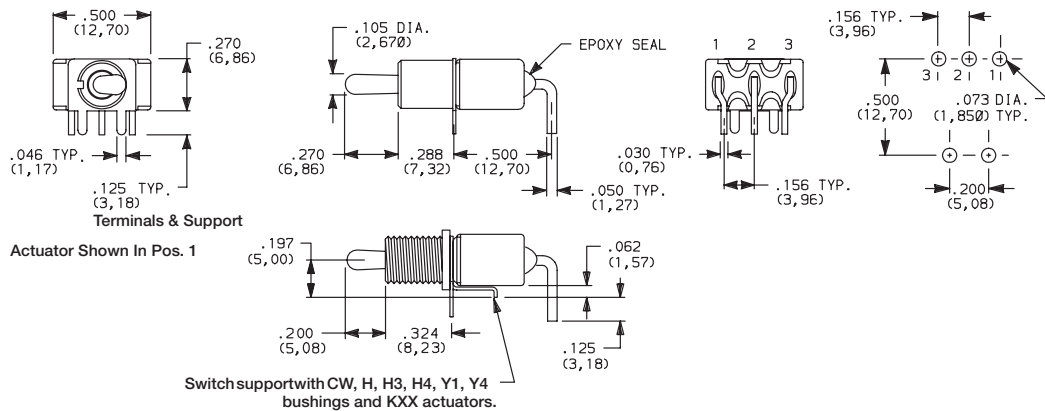
PC MOUNTING



Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.

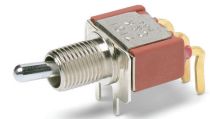
TERMINATIONS

A2 RIGHT ANGLE, PC THRU-HOLE,
.156" PITCH



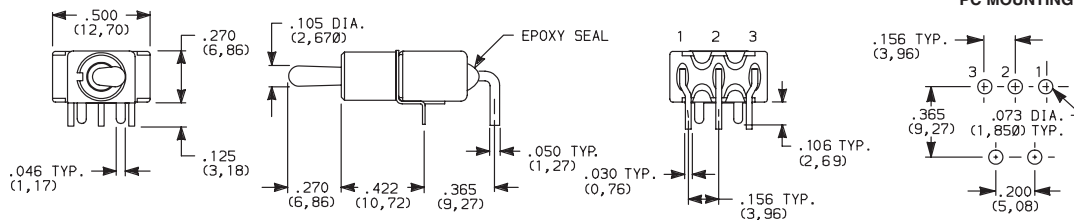
Not available with TXX actuators and I seal.
Terminal bend radii and lead-in manufacturing option.

Part No. Shown: 7101MHA2BE



7101MHA2BE
Horizontal Actuation
SPDT

A4 RIGHT ANGLE, PC THRU-HOLE
.156" PITCH



Actuator Shown In Pos. 1

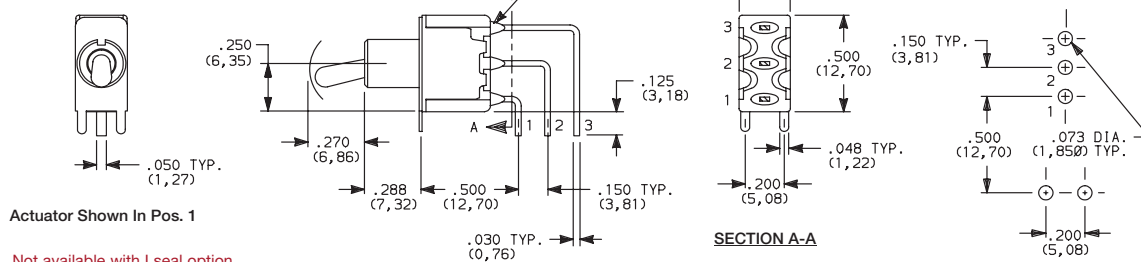
Not available with KXX & TXX actuators, CW, H, H3, H4, Y1 & Y4 bushings, and I seal. Terminal bend radii and lead-in manufacturing option.

NOTE: The A4 option is available with any contact material and can be UL recognized and CSA certified. The PC pattern must clear switch support legs.



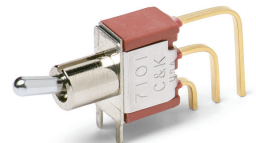
7101MD9A4BE
Horizontal Actuation
SPDT

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE,
.150" PITCH



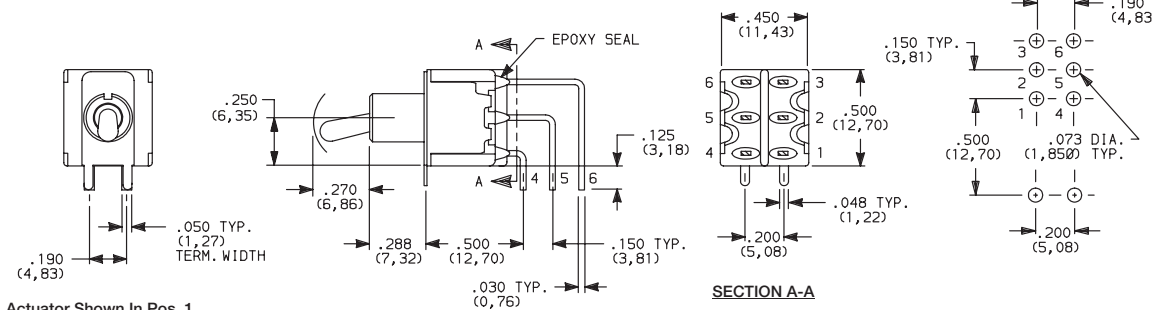
Actuator Shown In Pos. 1

Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.



7101MD9AV2BE
Horizontal Actuation
SPDT

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE,
.150" PITCH



Actuator Shown In Pos. 1

Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.



7201MD9AV2BE
Vertical Actuation
DPDT



Toggle



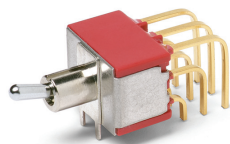
Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

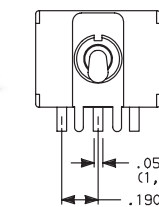
7000 Series Miniature Toggle Switches

TERMINATIONS

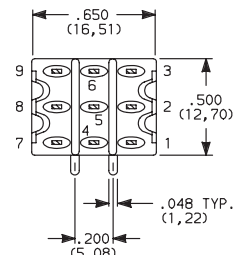
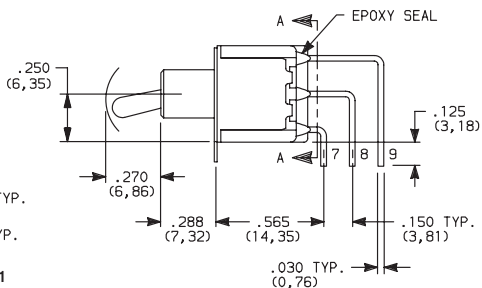
AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



7301MD9AV2BE
Vertical Actuation
3PDT

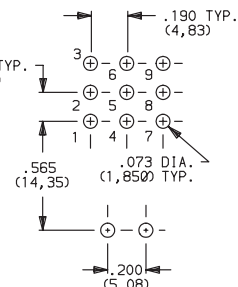


Actuator Shown In Pos. 1



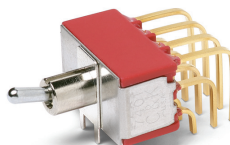
SECTION A-A

PC MOUNTING

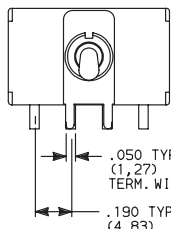


Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.

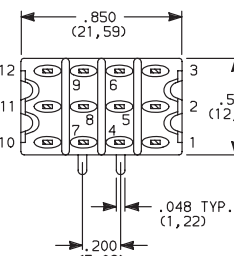
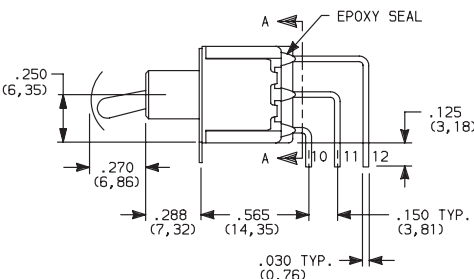
AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



7401MD9AV2BE
Vertical Actuation
4PDT

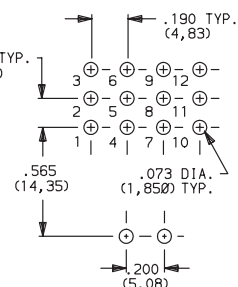


Actuator Shown In Pos. 1



SECTION A-A

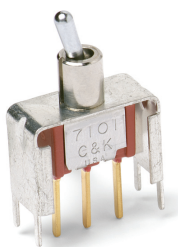
PC MOUNTING



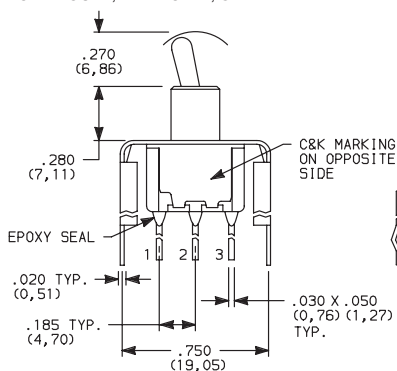
Not available with I seal option.
Terminal bend radii and lead-in manufacturing option.

V2, V6, V7, V8 VERTICAL MOUNT, V-BRACKET

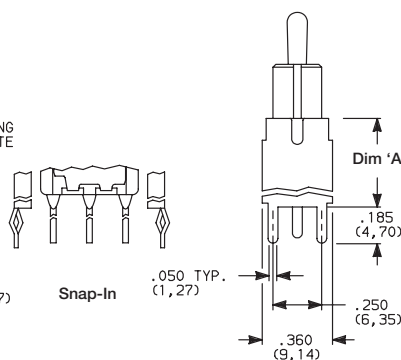
V21, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN



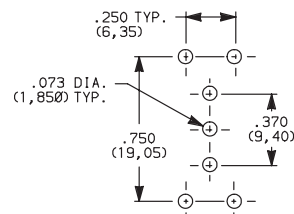
7101MD9_BE
SPDT



Actuator Shown In Pos. 1



PC MOUNTING



OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V6	.460 (11,68)
V7, V71	.630 (16,00)
V8, V81	.953 (24,21)

Not available with I seal option.



F

Toggle



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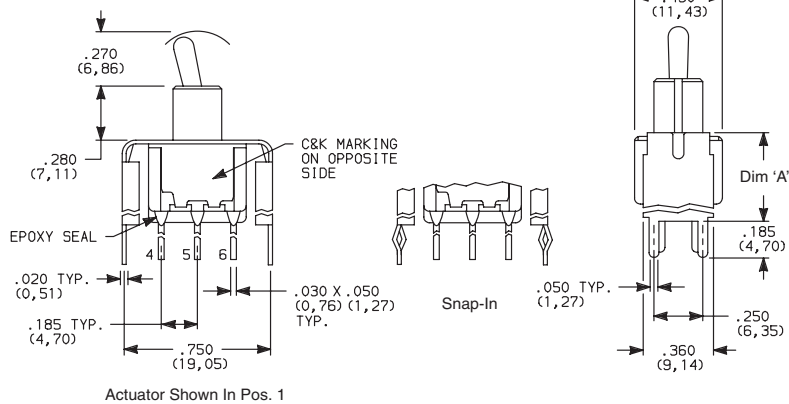


Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

TERMINATIONS

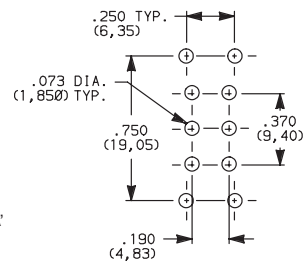
V2, V6, V7, V8 VERTICAL MOUNT, V-BRACKET

V21, V61, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN

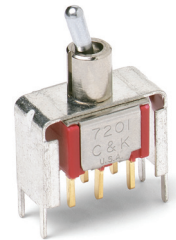


Not available with I seal option.

PC MOUNTING



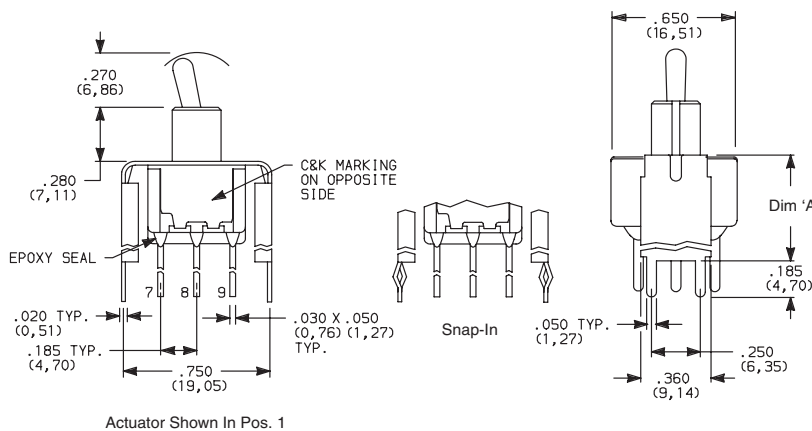
OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V6, V61	.460 (11,68)
V7, V71	.630 (16,00)
V8, V81	.953 (24,21)



7201MD9__BE
DPDT

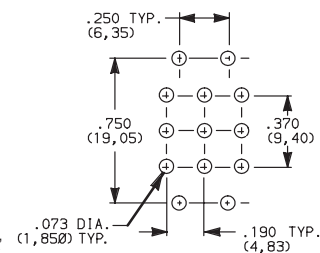
V2, V7, V8 VERTICAL MOUNT, V-BRACKET

V21, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN

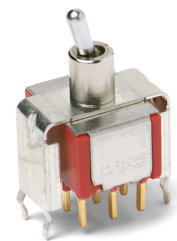


Not available with I seal option.

PC MOUNTING



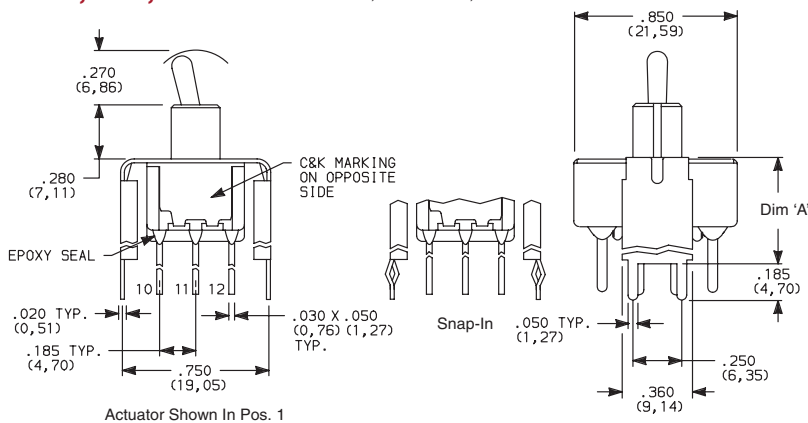
OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V7, V71	.630 (16,00)
V8, V81	.953 (24,21)



7301MD9__BE
3PDT

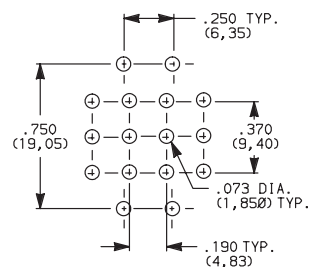
V2, V7, V8 VERTICAL MOUNT, V-BRACKET

V21, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN

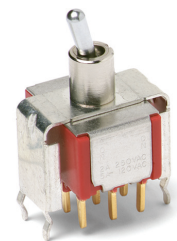


Not available with I seal option.

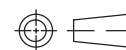
PC MOUNTING



OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V7, V71	.630 (16,00)
V8, V81	.953 (24,21)



7401MD9__BE
4PDT



Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change

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F-13



F

Toggle

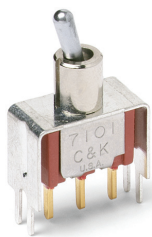
Miniature Toggle Switches

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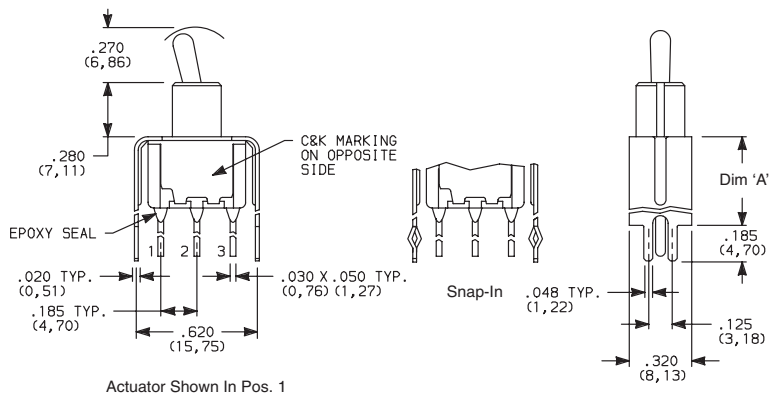
graph LR
    Node1[ ] --- Node2[ ]
    Node2 --- Node3[ ]
    Node3 --- Node4[ ]
    Node4 --- Node5[ ]
    Node5 --- Node6[ ]
    Node6 --- Node7[ ]
    Node7 --- Node8[ ]
    Node8 --- Null[ ]
    style Node1 fill:#000,stroke:#000
    style Node2 fill:#000,stroke:#000
    style Node3 fill:#000,stroke:#000
    style Node4 fill:#fff,stroke:#000
    style Node5 fill:#fff,stroke:#000
    style Node6 fill:#fff,stroke:#000
    style Node7 fill:#000,stroke:#000
    style Node8 fill:#000,stroke:#000
    style Null fill:#fff,stroke:#000
  
```

V3, V4, V9 VERTICAL MOUNT, V-BRACKET

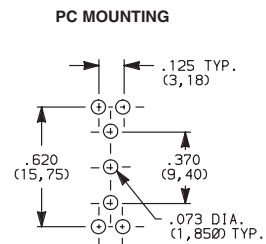
V31, V41 VERTICAL MOUNT, V-BRACKET, SNAP-IN



7101MD9__BE
SPDT



Actuator Shown In Pos. 1

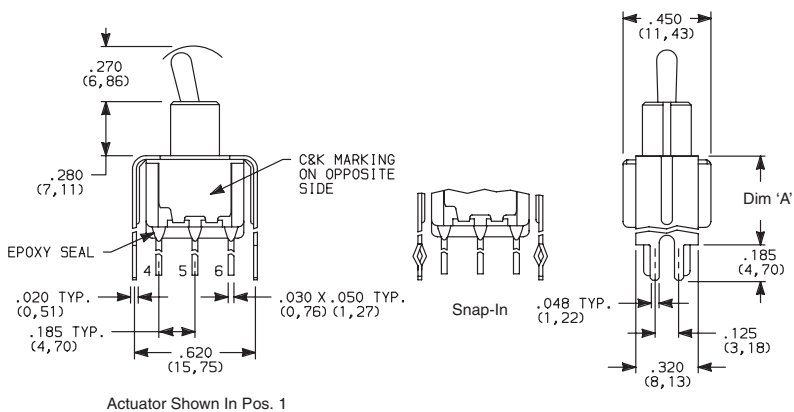


OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4, V41	.630 (16,00)
V9	1.150 (29,21)

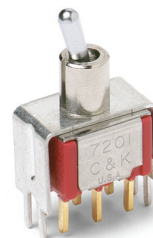
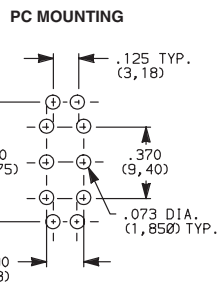
Not available with I seal option.

V3, V4, V9 VERTICAL MOUNT, V-BRACKET

V31, V41 VERTICAL MOUNT, V-BRACKET, SNAP-IN



Actuator Shown In Pos. 1



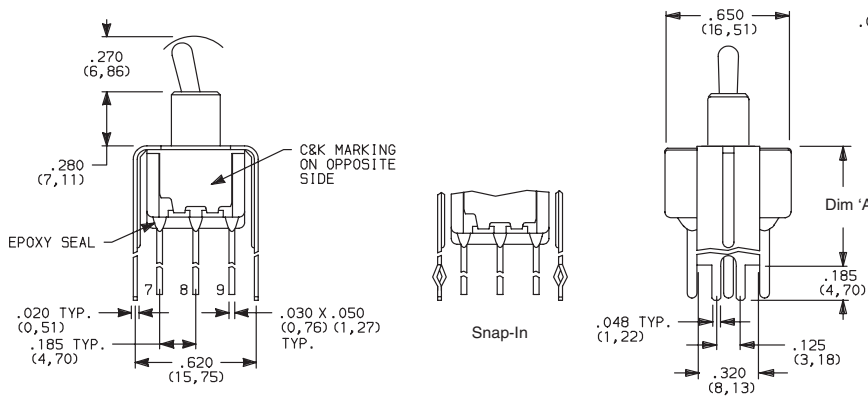
7201MD9__BE
DPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4, V41	.630 (16,00)
V9	1.150 (29,21)

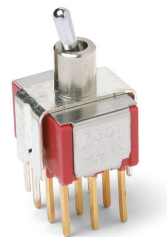
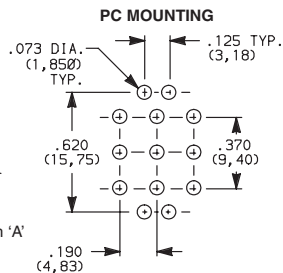
Not available with I seal option.

V4, V9 VERTICAL MOUNT, V-BRACKET

V41 VERTICAL MOUNT, V-BRACKET, SNAP-IN



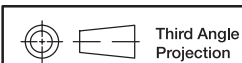
Actuator Shown In Pos. 1



7301MD9__BE
3PDT

OPTION CODE	DIM 'A'
V4, V41	.630 (16,00)
V9	1.150 (29,21)

Not available with I seal option.



Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change

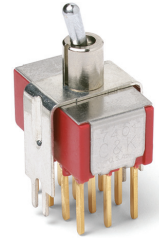
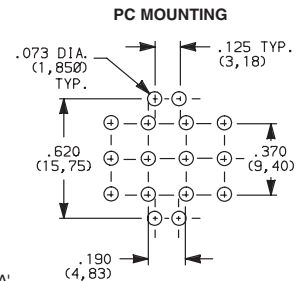
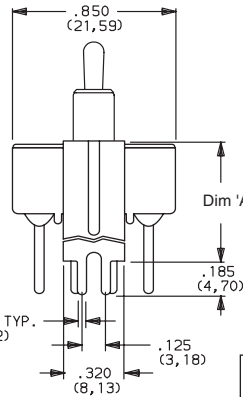
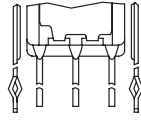
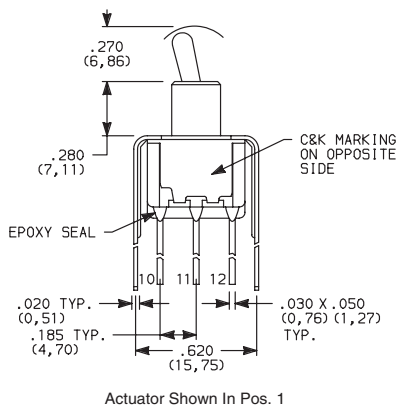
www.ckswitches.com

7000 Series Miniature Toggle Switches

TERMINATIONS

V4, V9 VERTICAL MOUNT, V-BRACKET

V41 VERTICAL MOUNT, V-BRACKET, SNAP-IN



7401MD9_BE
4PDT

OPTION CODE	DIM 'A'
V4, V41	.630 (16,00)
V9	1.150 (29,21)

Not available with I seal option.

CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B	GOLD ¹	GOLD ¹	LOW LEVEL/ DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
P		MATTE-TIN ⁶		
Q	SILVER ^{4,5}	SILVER ⁵	POWER	5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
S		MATTE-TIN ⁶		
G	GOLD OVER SILVER ^{2,3}	GOLD ³	LOW LEVEL/DRY CIRCUIT OR POWER	0.4 VA MAX @ 20 V AC OR DC MAX. OR 5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
R		MATTE-TIN ⁶		

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

¹ CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.

² END CONTACTS: Coin silver, with gold plate over nickel plate.

³ CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.

⁴ END CONTACTS: Coin silver, silver plated.

⁵ CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.

⁶ TERMINALS: Copper alloy, with matte tin alloy nickel plate.

NOTE: Any models supplied with P, S, R, Q, B or G contact material are RoHS compliant.

U11-U415 model numbers  with all options when ordered with G, S, R, or Q contact material.

B contact material standard with all terminations except C, Z & Z3.

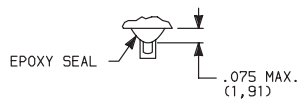
Q contact material standard with C, Z & Z3 terminations.

P, S & R contact materials not available with Z & Z3 terminations.

7000 Series Miniature Toggle Switches

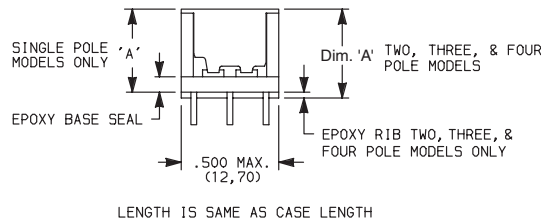
SEAL

E EPOXY SEAL



Compatible with "bottom-wash" PC board cleaning methods.

I EPOXY POTTED BASE

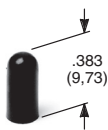


NO. POLES	DIM 'A'
SP	.410 (10,41)
DP	.440 (11,18)
3P	.505 (12,83)
4P	.505 (12,83)

Available with C, W-W5, Z & Z3 terminations only.

AVAILABLE HARDWARE

Cap

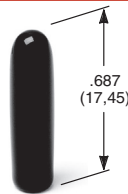


PART NO.

896801000 WHITE
896802000 BLACK
896803000 RED

Material: Polyethylene
Finish: Matte

Cap

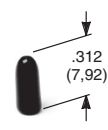


PART NO.

763701000 WHITE
763702000 BLACK
763703000 RED

Material: Vinyl
Finish: Matte

Cap

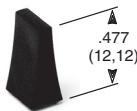


PART NO.

706201000 WHITE
706202000 BLACK
706203000 RED

Material: Vinyl
Finish: Matte

L41 Lever handle

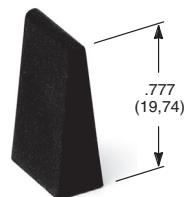


PART NO.

481001000 WHITE
481002263 BLACK
481003000 RED

Material: Nylon
Finish: Matte

L42 Lever handle



PART NO.

481101000 WHITE
481102263 BLACK
481103000 RED

Material: Nylon
Finish: Matte

Fits Z3 Termination female connector



PART NO.

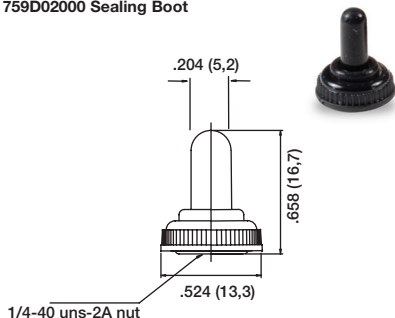
530100000

Available in loose pieces.

NOTE: Additional nuts, locking rings and lockwashers available separately, see Section N.

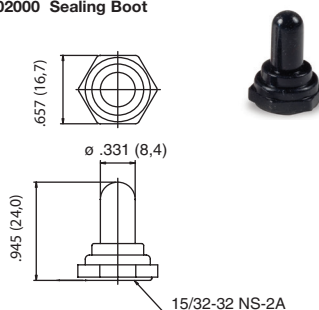
Other colors available, consult Customer Service Center.

759D02000 Sealing Boot



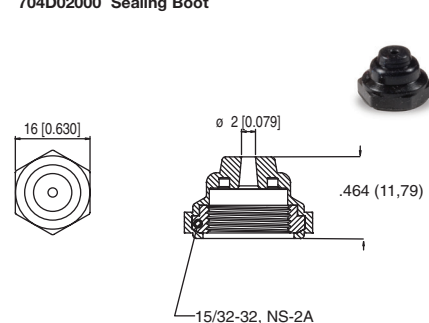
NOTE: For use with S actuator style when combined with D, H, H3, Y, and Y4 bushings

703D02000 Sealing Boot



NOTE: For use with T and TP style actuators. **Cannot be used for Switch Functions: 7103, 7203, 7303, 7403, 7107, 7207, 7307, 7407.**

704D02000 Sealing Boot



NOTE: For use with T, TP and T2P style actuators. **Cannot be used for Switch Functions: 7103, 7203, 7303, 7403, 7107, 7207, 7307, and 7407.**



Third Angle Projection

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change