

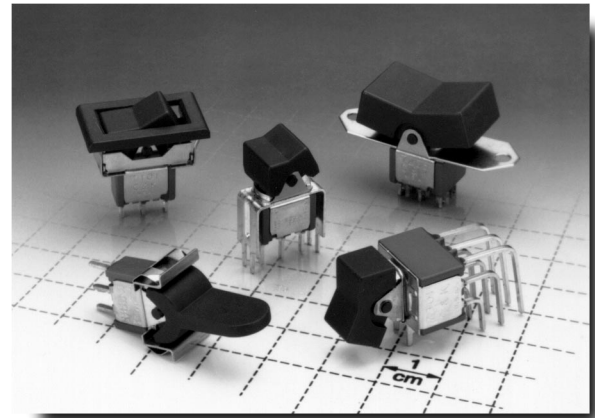


Features/Benefits

- Multi-pole and multi-position
- Wide variety of actuator and termination options
- Epoxy sealed terminals prevent contamination during soldering

Typical Applications

- Telecommunications
- Instrumentation
- Medical equipment



Build-A-Switch

Our easy Build-A-Switch concept allows you to mix and match options to create the switch you need. Below is a complete listing of options shown in catalog. To order, simply select desired option from each category and place in the appropriate box. Switches with standard options are shown on pages F-4 and F-5. Available options are shown and described on pages F-6 thru F-22. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.

Typical Example: 7 1 0 1 — J 1 — Z — Q — E — 2 —

Switch Function

7101 (STD.) SP On-None-On
7103 (STD.) SP On-Off-On
7201 (STD.) DP On-None-On
7301 (STD.) 3P On-None-On
7401 (STD.) 4P On-None-On
7105 SP Mom.-Off-Mom.
7107 SP On-Off-Mom.
7108 SP On-None-Mom.
7109 SP None-On-Mom.
7203 DP On-Off-On
7205 DP Mom.-Off-Mom.
7207 DP On-Off-Mom.
7208 DP On-None-Mom.
7209 DP None-On-Mom.
7211 DP On-On-On
7213 DP On-On-Mom.
7215 DP Mom.-On-Mom.
7303 3P On-Off-On
7305 3P Mom.-Off-Mom.
7307 3P On-Off-Mom.
7308 3P On-None-Mom.
7309 3P None-On-Mom.
7403 4P On-Off-On
7405 4P Mom.-Off-Mom.
7407 4P On-Off-Mom.
7408 4P On-None-Mom.
7409 4P None-On-Mom.
7411 4P On-On-On
7413 4P On-On-Mom.
7415 4P Mom.-On-Mom.

Actuator

J1 (STD.) Rocker
J2 Lever
J3 Rocker
J8 Rocker
J10 Rocker
J11 Rocker with frame
J15 Rocker with frame, snap-in
J16 Rocker, snap-in
J19 Rocker with frame
J21 Lever with frame
J25 Lever, snap-in
J26 Lever with frame, snap-in
J37 Rocker with frame
J50 Rocker
J51 Rocker with frame
J52 Rocker with frame & LED, snap-in
J53 Rocker, snap-in
J60 Lever
J61 Lever with frame, snap-in
J62 Lever with frame & LED, snap-in
J63 Lever, snap-in
J76 Rocker with frame, snap-in
J90 Lever
J91 Lever with frame, snap-in
J92 Lever with frame & LED, snap-in
J93 Lever, snap-in

Terminations

A (STD.) Right angle, PC thru-hole
AV2 (STD.) Vertical right angle, PC thru-hole
C (STD.) PC Thru-hole
Z (STD.) Solder lug
A3 Right angle, snap-in, PC thru-hole
AV3 Vertical right angle, snap-in, PC thru-hole
AW Right angle, extended, PC thru-hole
AW1 Right angle, extended, PC thru-hole
AW3 Right angle, extended, PC thru-hole
AW4 Right angle, extended, PC thru-hole
V2 .555" high, V-bracket
V3 .460" high, V-bracket
V4 .630" high, V-bracket
V5 Vertical right angle, PC thru-hole
V6 .460" high, V-bracket
V7 .630" high, V-bracket
V8 .953" high, V-bracket
V9 1.150" high, V-bracket
V21 .555" high, V-bracket, snap-in
V31 .460" high, V-bracket, snap-in
V41 .630" high, V-bracket, snap-in
V51 Vertical right angle, snap-in
V54 Vertical right angle, extended
V55 Vertical right angle, extended
V61 .460" high, V-bracket, snap-in
V71 .630" high, V-bracket, snap-in
V81 .953" high, V-bracket, snap-in
V91 1.150" high, V-bracket, snap-in

Contact Material

B (STD.) Gold
Q (STD.) Silver
K Gold
M Silver
G Gold over silver
L Gold over silver

Seal

E (STD.) Epoxy
I Epoxy potted base

Actuator Color

2 (STD.) Black
1 White
3 Red

Frame Color

2 (STD.) Black
NONE No frame color required
1 White
3 Red

Metal Frame Color

(J11, J19, J21, J37 Actuators)
2 (STD.) Black
1 White
C Bright chrome
S Satin chrome

W .750" long, wire wrap
W1 .964" long, wire wrap
W3 .425" long, wire wrap
W4 1.062" long, wire wrap
W5 1.305" long, wire wrap
Z3 Quick connect

Note: UL/CSA models available, see page F-6.

7000 Series Rocker and Lever Handle Switches



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-22 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 milliohms typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10^9 ohms min.

DIELECTRIC STRENGTH: 1000 V RMS 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).

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

Materials

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

ACTUATOR: Nylon, black.

FRAME (FRONT MOUNT): Nylon, black.

FRAME (REAR MOUNT): Spring steel, black.

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-22 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 page F-22 for additional contact materials.

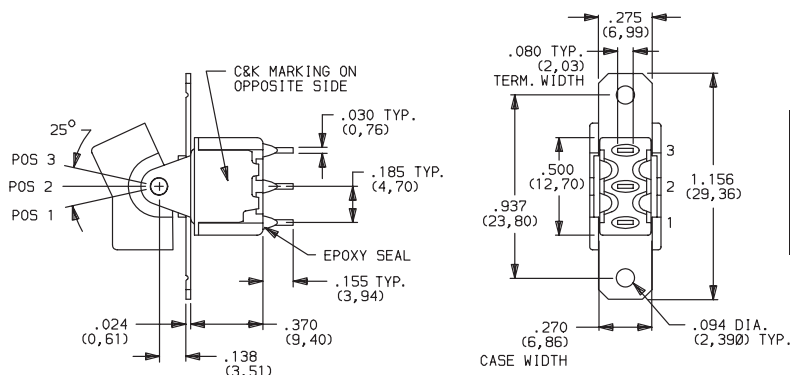
TERMINAL SEAL: Epoxy.

HARDWARE: Mounting nuts & screws: Brass. Lockwasher: Stainless steel. Standoff: Nylon standard, aluminum available, consult Customer Service Center.

SWITCHES WITH STANDARD OPTIONS

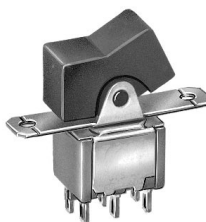


7101J1ZQE2
SPDT

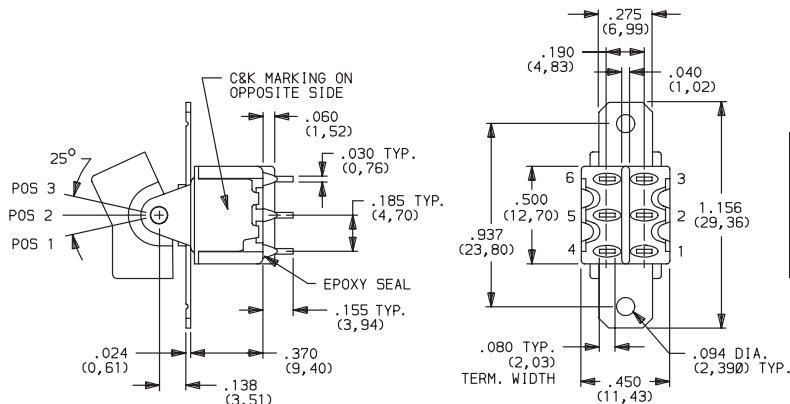


	POS. 1	POS. 2	POS. 3
PART NUMBER			
7101J1ZQE2	ON	NONE	ON

NOTE: For PC termination, replace 'Z' with 'C'. For panel mounting information, see page F-7.



7201J1ZQE2
DPDT



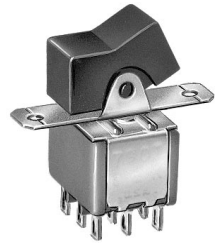
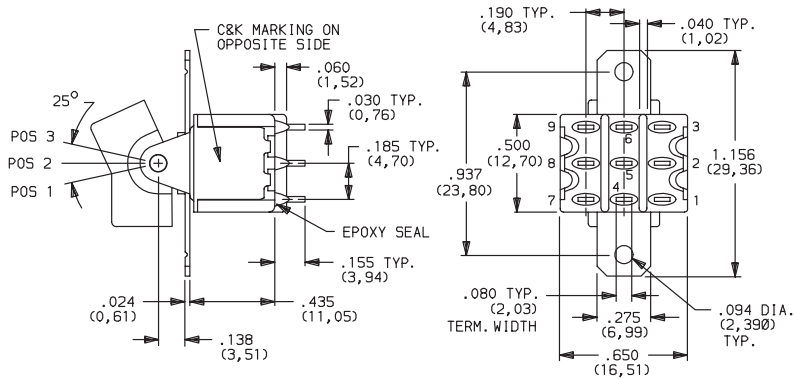
	POS. 1	POS. 2	POS. 3
PART NUMBER			
7201J1ZQE2	ON	NONE	ON

NOTE: For PC termination, replace 'Z' with 'C'. For panel mounting information, see page F-7.

SWITCHES WITH STANDARD OPTIONS

	POS. 1	POS. 2	POS. 3
PART NUMBER			
7301J1ZQE2	ON	NONE	ON

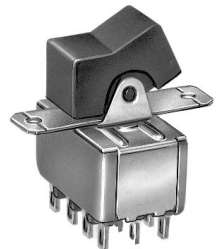
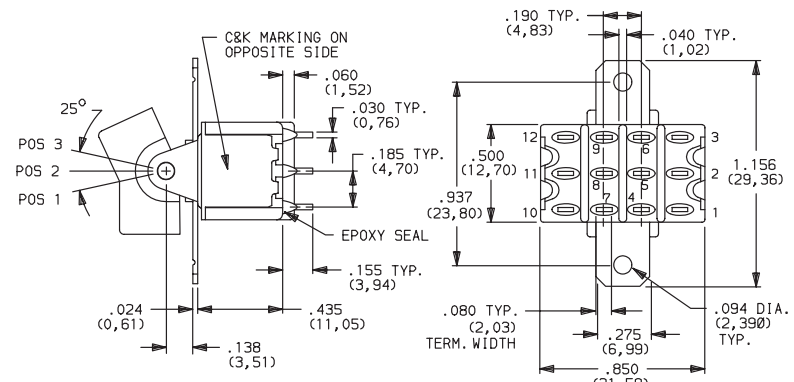
NOTE: For PC termination, replace 'Z' with 'C'.
For panel mounting information, see page F-7.



7301J1ZQE2
3PDT

	POS. 1	POS. 2	POS. 3
PART NUMBER			
7401J1ZQE2	ON	NONE	ON

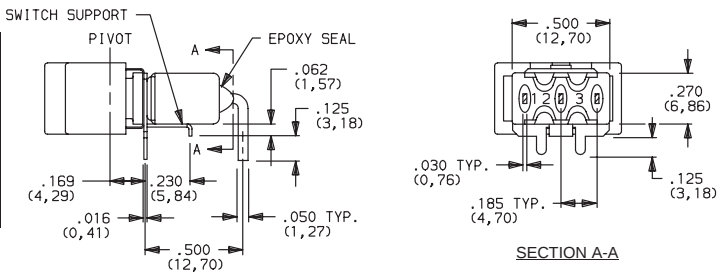
NOTE: For PC termination, replace 'Z' with 'C'.
For panel mounting information, see page F-7.



7401J1ZQE2
4PDT

	POS. 1	POS. 2	POS. 3
PART NUMBER			
7101J1ABE2	ON	NONE	ON
7101J1AQE2	ON	NONE	ON
7103J1ABE2	ON	OFF	ON

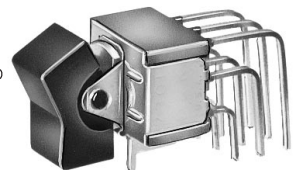
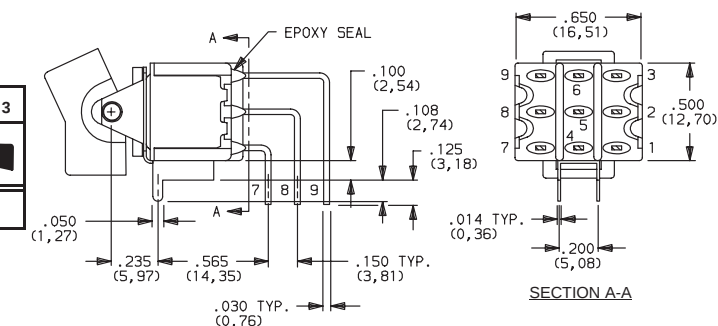
NOTE: For PC mounting information, see page F-15.



7101J1ABE2
Horizontal Actuation
SPDT

	POS. 1	POS. 2	POS. 3
PART NUMBER			
7301J1AV2QE2	ON	NONE	ON

NOTE: For PC mounting information, see page F-17.

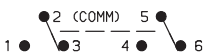
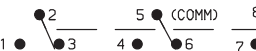


7301J1AV2QE2
Vertical Actuation
3PDT

7000 Series Rocker and Lever Handle Switches



SWITCH FUNCTION

NO. POLES	MODEL NO.	UL/CSA** MODEL NO.	SWITCH FUNCTION			CONNECTED TERMINALS			SCHEMATIC
			POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3	
									
SP	7101 (STD.)	U11	ON	NONE	ON	2-3	OPEN	2-1	
	7103 (STD.)	U13	ON	OFF	ON				
	7105	U15	MOM.	OFF	MOM.				
	7107	U17	ON	OFF	MOM.				
	7108	U18	ON	NONE	MOM.				
	7109	U19	NONE	ON	MOM.	N/A	2-3	2-1	SPDT
DP	7201 (STD.)	U21	ON	NONE	ON	2-3, 5-6	OPEN	2-1, 5-4	
	7203	U23	ON	OFF	ON				
	7205	U25	MOM.	OFF	MOM.				
	7207	U27	ON	OFF	MOM.				
	7208	U28	ON	NONE	MOM.	2-3, 5-6	2-3, 5-4	2-1, 5-4	DPDT
	7209	U29	NONE	ON	MOM.				
	7211*	U211*	ON	ON	ON				
	7213*	U213*	ON	ON	MOM.				
7215*	U215*	MOM.	ON	MOM.					
3P	7301 (STD.)	U31	ON	NONE	ON	2-3, 5-6, 8-9	OPEN	2-1, 5-4, 8-7	
	7303	U33	ON	OFF	ON				
	7305	U35	MOM.	OFF	MOM.				
	7307	U37	ON	OFF	MOM.				
	7308	U38	ON	NONE	MOM.				
	7309	U39	NONE	ON	MOM.	N/A	2-3, 5-6, 8-9	2-1, 5-4, 8-7	3PDT
4P	7401 (STD.)	U41	ON	NONE	ON	2-3, 5-6, 8-9, 11-12	OPEN	2-1, 5-4, 8-7, 11-10	
	7403	U43	ON	OFF	ON				
	7405	U45	MOM.	OFF	MOM.				
	7407	U47	ON	OFF	MOM.				
	7408	U48	ON	NONE	MOM.	2-3, 5-6, 8-9, 11-12	2-3, 5-4, 8-9, 11-10	2-1, 5-4, 8-7, 11-10	4PDT
	7409	U49	NONE	ON	MOM.				
	7411*	U411*	ON	ON	ON				
	7413*	U413*	ON	ON	MOM.				
	7415*	U415*	MOM.	ON	MOM.				

MOM. = Momentary

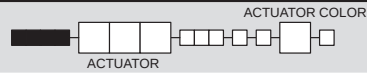
**U11 - U415 model nos. with all options when ordered with G, L, M or Q contact material.

* Wiring for 3-way switch, see page L-29.



Rocker

ACTUATOR—PANEL REAR MOUNT



OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

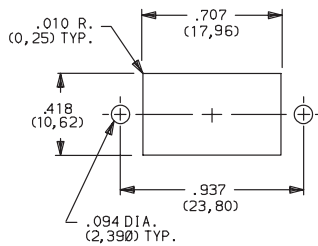
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Hardware: two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on all switches with panel mounting brackets. Hardware is available separately, see section L.

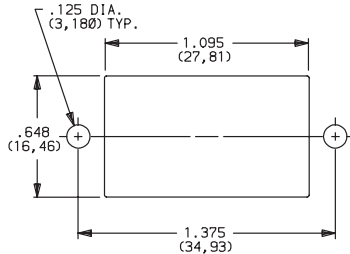
J1, J2, J3, J8 & J10 Actuators available with C, W-W5, Z or Z3 terminations.

PANEL MOUNTING

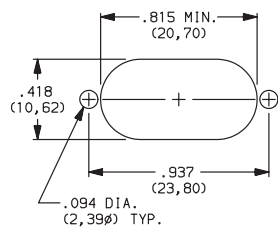
J1 & J2 Actuators



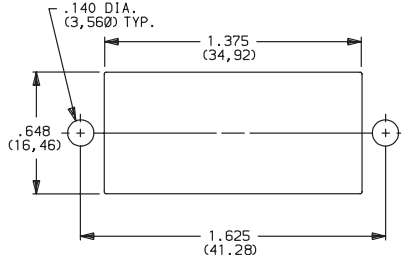
J3 Actuator



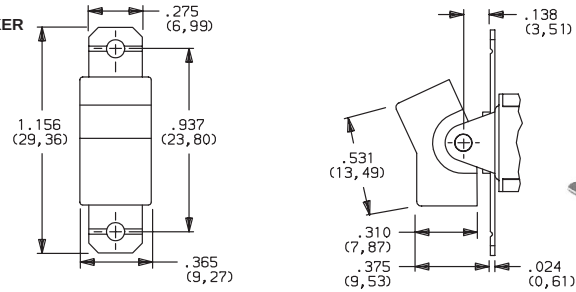
J8 Actuator



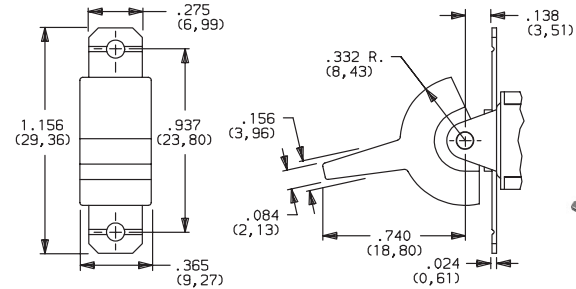
J10 Actuator



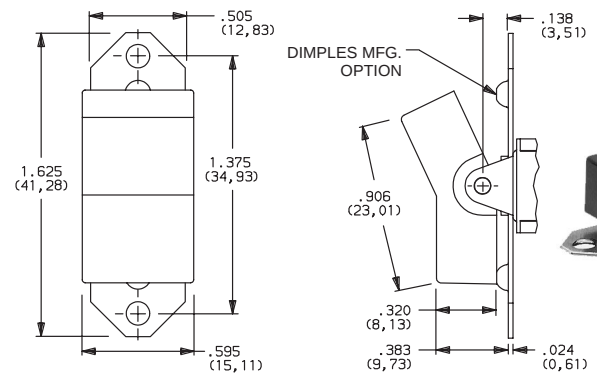
J1 (STD.) ROCKER



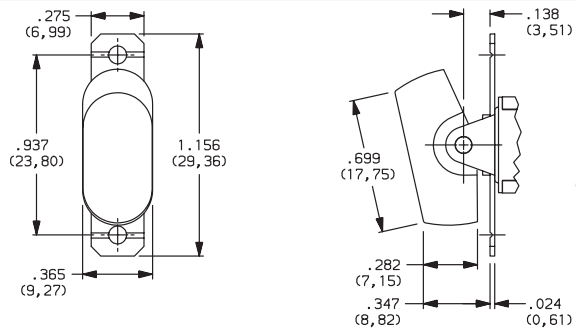
J2 LEVER



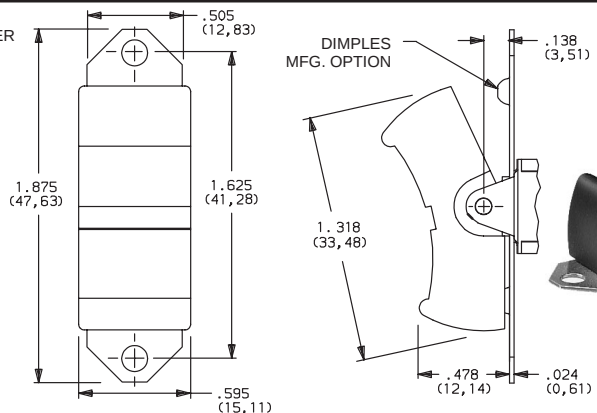
J3 ROCKER



J8 ROCKER



J10 ROCKER



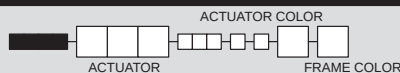
F

Rocker

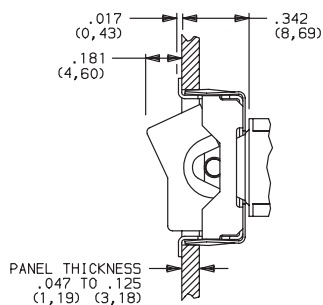
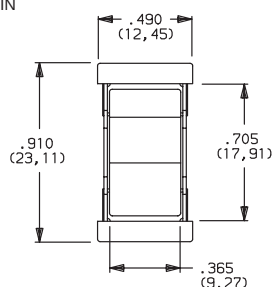
7000 Series Rocker and Lever Handle Switches



ACTUATOR — SNAP-IN FRONT MOUNT

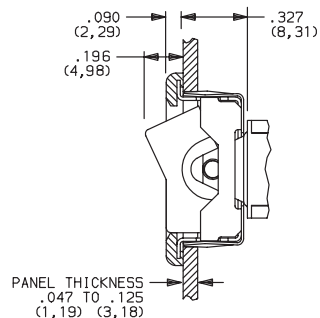
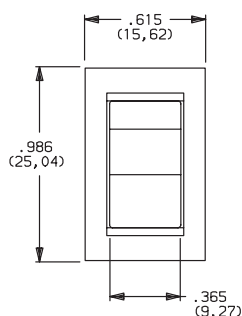


J15 ROCKER WITH FRAME, SNAP-IN



No frame color choice required.

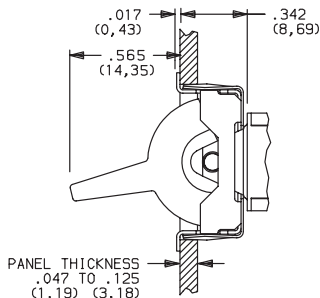
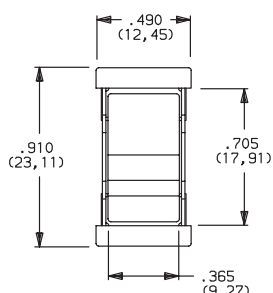
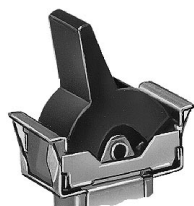
J16 ROCKER, SNAP-IN



OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

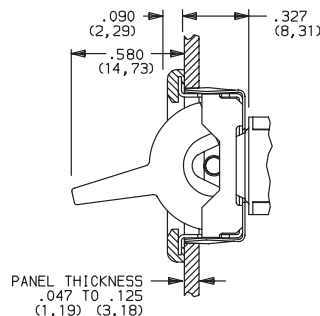
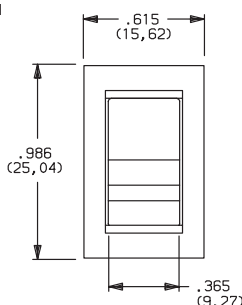
OPTION CODE	FRAME COLOR
2	(STD.) BLACK
NONE	No Frame Color (J15 or J25 options)
1	WHITE
3	RED

J25 LEVER, SNAP-IN

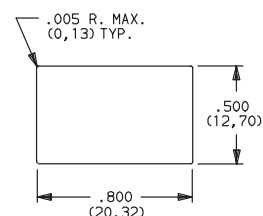


No frame color choice required.

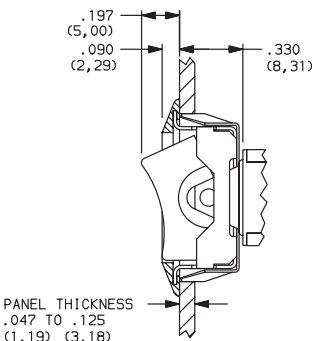
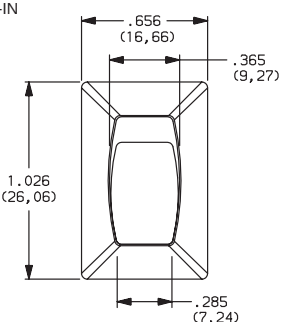
J26 LEVER WITH FRAME, SNAP-IN



PANEL MOUNTING

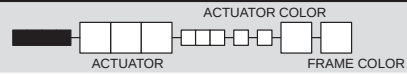


J76 ROCKER WITH FRAME, SNAP-IN



Rocker

ACTUATOR—SNAP-IN FRONT MOUNT



OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

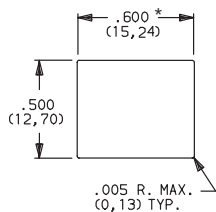
OPTION CODE	FRAME COLOR
2	(STD.) BLACK
NONE	No Frame Color (J50 or J53 options)
1	WHITE
3	RED

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

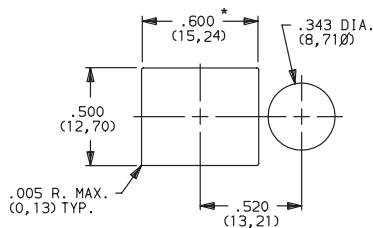
NOTE: Frames are available separately, see section L. J50, J51, J52 & J53 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

PANEL MOUNTING

J50, J51 & J53 Actuators

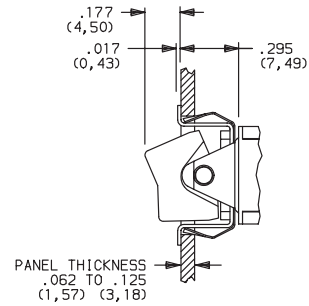
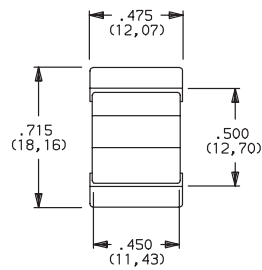


J52 Actuator



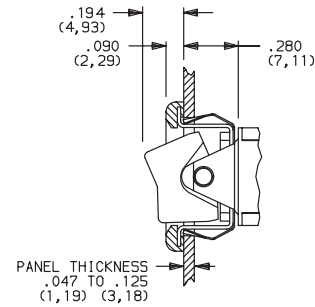
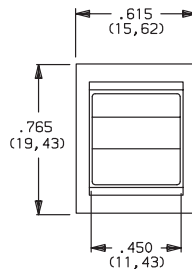
* For J50: Increase this dimension to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels. For J51, J52: Increase this dimension to .620/.625 (15,75/15,88) for .060/.125 (1,52/3,18) thk. panels.

J50 ROCKER, SNAP-IN

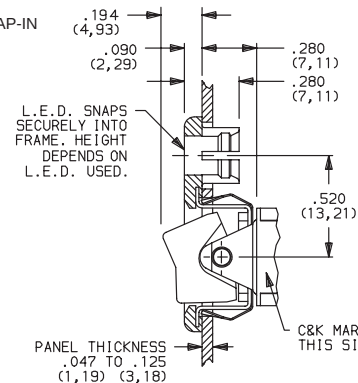
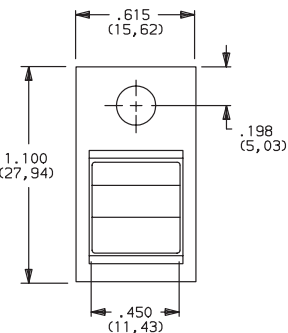


No frame color choice required.

J51 ROCKER WITH FRAME, SNAP-IN

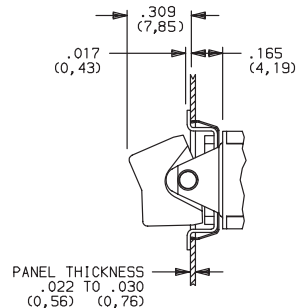
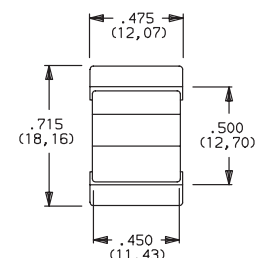


J52 ROCKER WITH FRAME & LED, SNAP-IN



LED not included.
For LED information, see page L-30.

J53 ROCKER, SNAP-IN

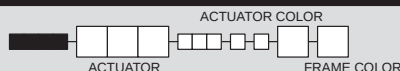


No frame color choice required.

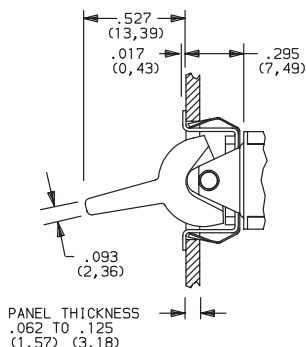
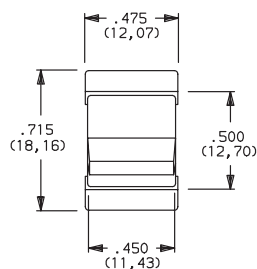
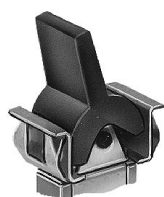
7000 Series Rocker and Lever Handle Switches



ACTUATOR — SNAP-IN FRONT MOUNT



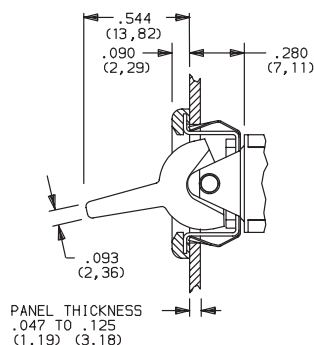
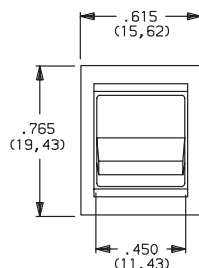
J60 LEVER, SNAP-IN



No frame color choice required.

OPTION CODE	ACTUATOR COLORS
2	(STD.) BLACK
1	WHITE
3	RED

J61 LEVER WITH FRAME, SNAP-IN

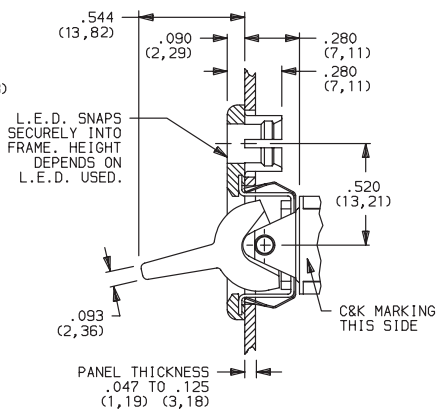
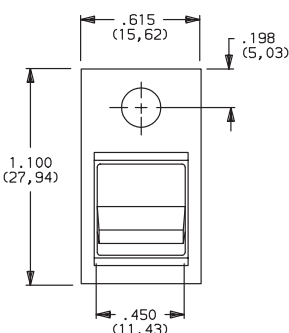


OPTION CODE	FRAME COLORS
2	(STD.) BLACK
NONE	No Frame Color (J60 or J63 options)
1	WHITE
3	RED

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

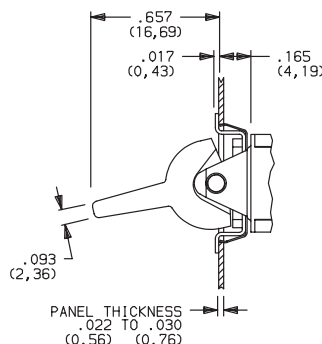
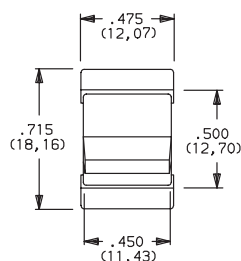
NOTE: Frames are available separately, see section L. J60, J61, J62 & J63 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

J62 LEVER WITH FRAME & LED, SNAP-IN



LED not included.
For LED information, see page L-30.

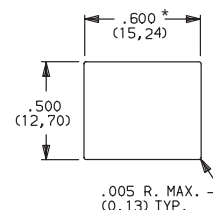
J63 LEVER, SNAP-IN



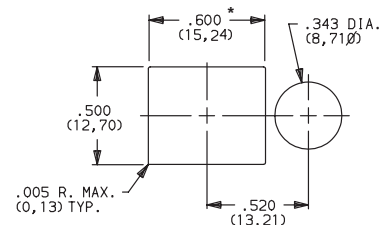
No frame color choice required.

PANEL MOUNTING

J60, J61 & J63 Actuators



J62 Actuator

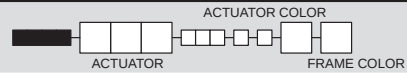


* For J60: Increase this dimension to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels. For J61, J62: Increase this dimension to .620/.625 (15,75/15,88) for .060/.125 (1,52/3,18) thk. panels.



Rocker

ACTUATOR—SNAP-IN FRONT MOUNT



OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

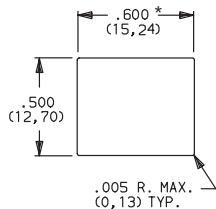
OPTION CODE	FRAME COLOR
2	(STD.) BLACK
NONE	No Frame Color (J90 or J93 options)
1	WHITE
3	RED

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

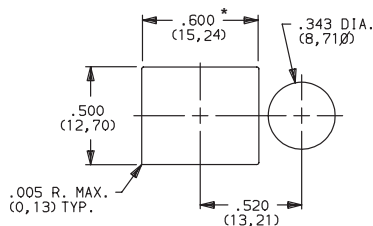
NOTE: Frames are available separately, see section L. J90, J91, J92 & J93 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

PANEL MOUNTING

J90, J91 & J93 Actuators

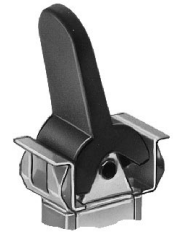
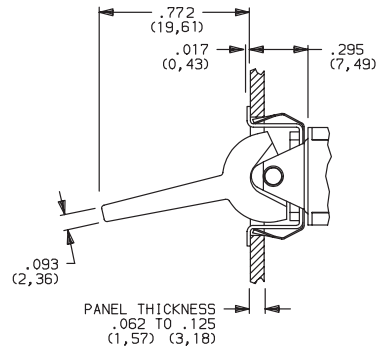
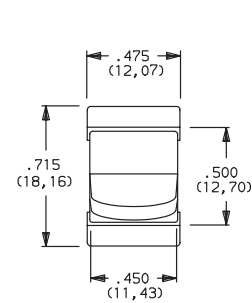


J92 Actuator



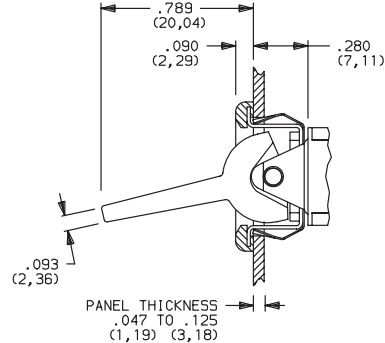
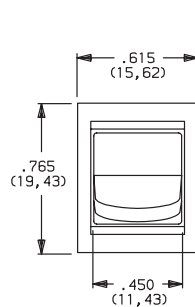
* For J90: Increase this dimension to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels. For J91, J92: Increase this dimension to .620/.625 (15,75/15,88) for .060/.125 (1,52/3,18) thk. panels.

J90 LEVER, SNAP-IN

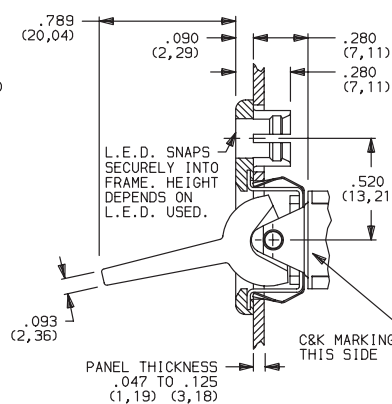
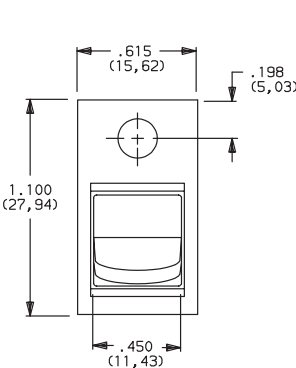


No frame color choice required.

J91 LEVER WITH FRAME, SNAP-IN

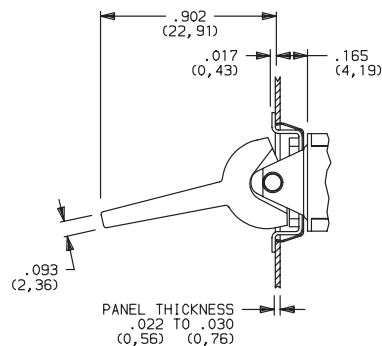
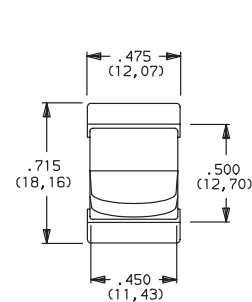


J92 LEVER WITH FRAME & LED, SNAP-IN



LED not included.
For LED information, see page L-30.

J93 LEVER, SNAP-IN



No frame color choice required.



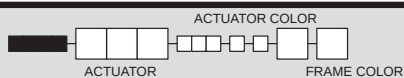
F

Rocker

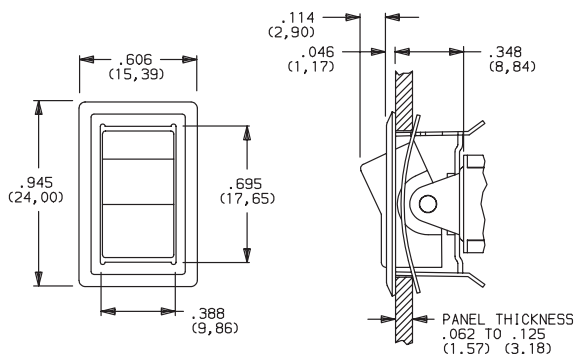
7000 Series Rocker and Lever Handle Switches



ACTUATOR—REAR MOUNT

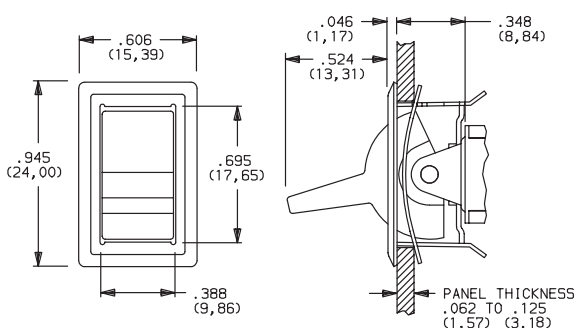


J11 ROCKER WITH FRAME



OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

J21 LEVER WITH FRAME

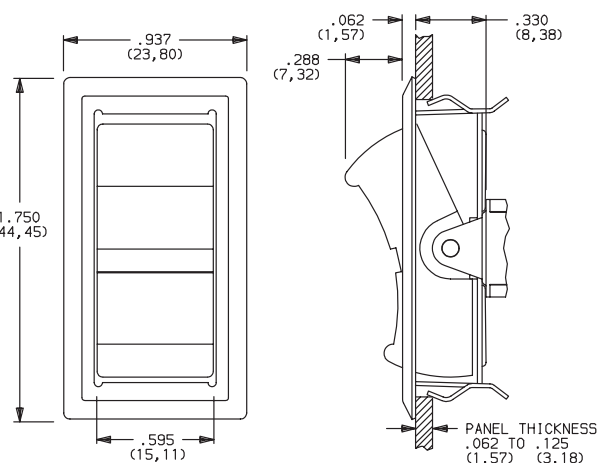
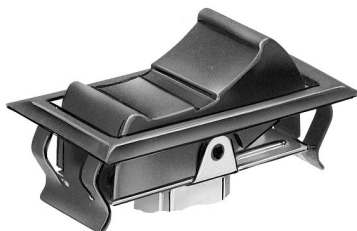


OPTION CODE	FRAME COLOR
2	(STD.) BLACK
1	WHITE
C	BRIGHT CHROME
S	SATIN CHROME

Actuator finish: Matte. Frame finish: Gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

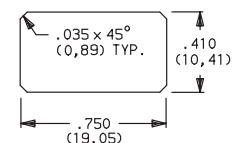
NOTE: Frames are available separately, see section L. J11, J19, J21 & J37 Actuators available with C, W-W5, Z & Z3 terminations.

J19 ROCKER WITH FRAME

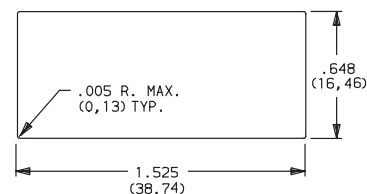


PANEL MOUNTING

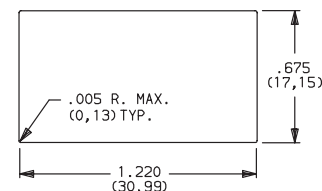
J11 & J21 Actuators



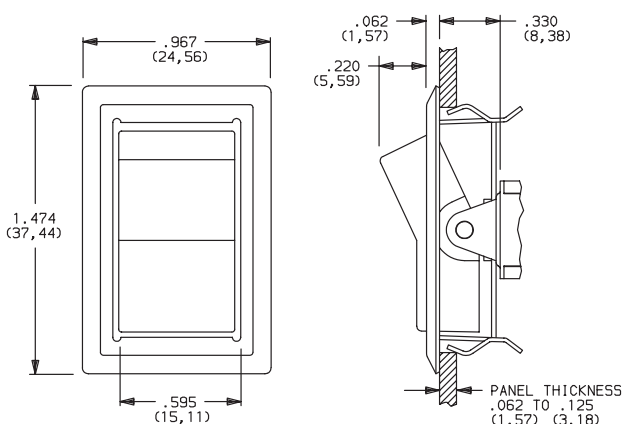
J19 Actuator



J37 Actuator

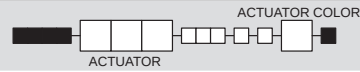


J37 ROCKER WITH FRAME



Rocker

ACTUATOR—PC MOUNT



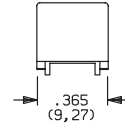
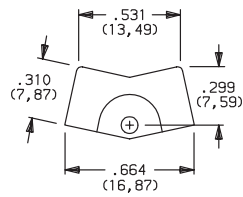
OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

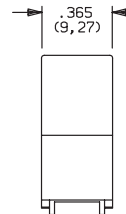
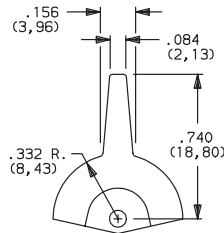
NOTE: Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

Actuators are available separately, see section L. J1, J2 & J8 actuators available with A, A3, AV2, AV3, AW-AW4 & V2-V91 terminations. J3 actuators available with AV2, AV3 & V2-V91 terminations. J50 actuators available with A (DP, 3P models only), A3 (DP, 3P models only), AV2, AV3, AW-AW4 (DP, 3P models only) & V2-V91 terminations.

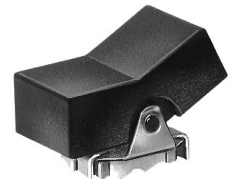
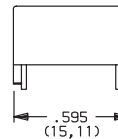
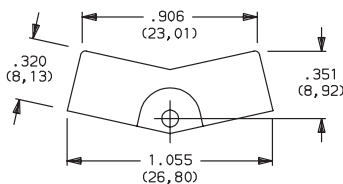
J1 (STD.) ROCKER



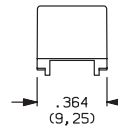
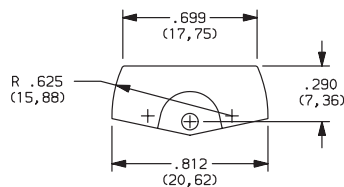
J2 LEVER



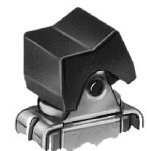
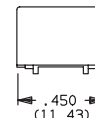
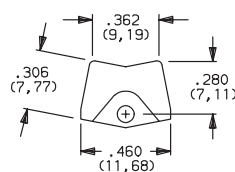
J3 ROCKER



J8 ROCKER



J50 ROCKER



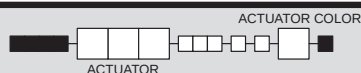
F

Rocker

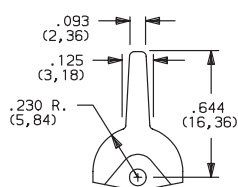
7000 Series Rocker and Lever Handle Switches



ACTUATOR—PC MOUNT



J60 LEVER



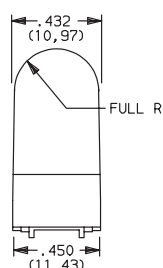
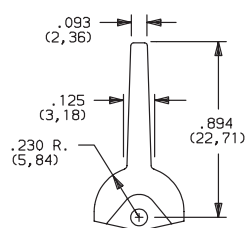
OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

NOTE: Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

Actuators are available separately, see section L. J60 & J90 actuators available with A (DP, 3P models only), A3 (DP, 3P models only), AV2, AV3, AW-AW4 (DP, 3P models only) & V2-V91 terminations.

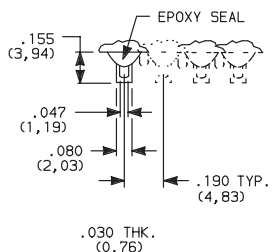
J90 LEVER



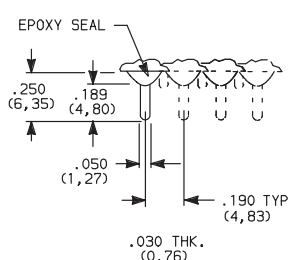
TERMINATIONS



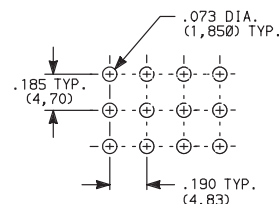
Z (STD.) SOLDER LUG



C (STD.) PC THRU-HOLE



PC MOUNTING



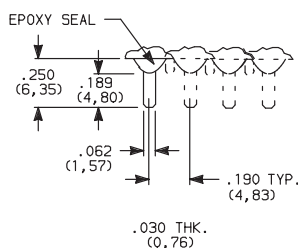
SPDT thru 4PDT

Not available with K, L or M contact materials. Available actuators, see pages F-7 thru F-14.

SPDT thru 4PDT

NOTE: Available actuators, see pages F-7 thru F-14.

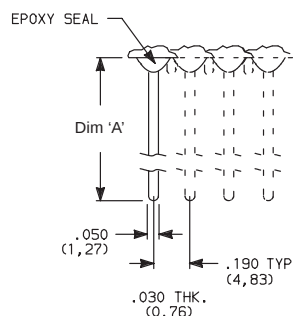
Z3 QUICK CONNECT



Not available with K, L or M contact materials. Available actuators, see pages F-7 thru F-14. Mating quick connector available; order part number 530100000.

SPDT thru 4PDT

W, W1, W3, W4, W5 WIRE WRAP



OPTION CODE	DIM 'A'
W	.750 (19,05)
W1	.964 (24,49)
W3	.425 (10,80)
W4	1.062 (26,97)
W5	1.305 (33,15)

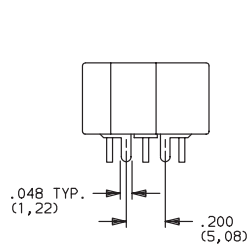
SPDT thru 4PDT

NOTE: Available actuators, see pages F-7 thru F-14.

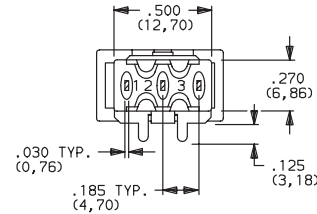
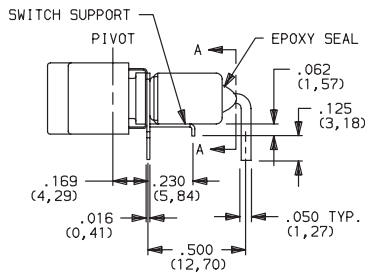
TERMINATIONS



A (STD.) RIGHT ANGLE, PC THRU-HOLE



Actuator Shown In Pos. 1

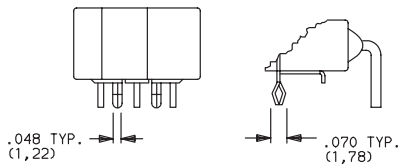


SECTION A-A



7101J1ABE2
Horizontal Actuation
SPDT

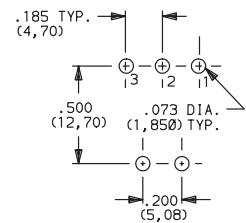
A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE



AW, AW1, AW3, AW4, AW5 RIGHT ANGLE, EXTENDED, PC THRU-HOLE

OPTION CODE	DIM 'A'
AW	.44 (11,2)
AW1	.66 (16,8)
AW3	.14 (3,6)
AW4	.77 (19,6)
AW5	1.02 (25,9)

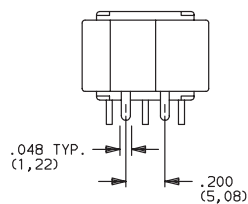
PC MOUNTING



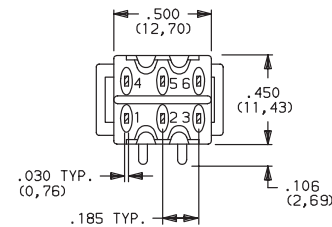
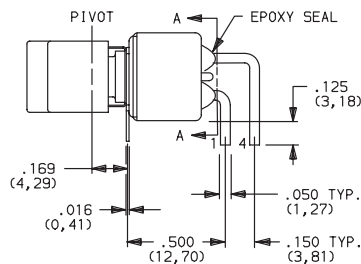
Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

NOTE: PC pattern must clear switch support leg.

A (STD.) RIGHT ANGLE, PC THRU-HOLE



Actuator Shown In Pos. 1

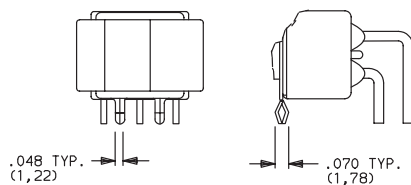


SECTION A-A



7201J1ABE2
Horizontal Actuation
DPDT

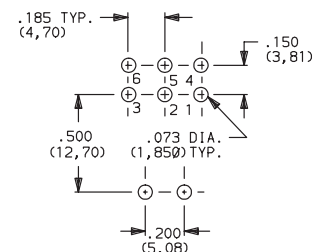
A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE



AW, AW1, AW4, AW5 RIGHT ANGLE, EXTENDED, PC THRU-HOLE

OPTION CODE	DIM 'A'
AW	.19 (4,8)
AW1	.40 (10,2)
AW4	.50 (12,7)

PC MOUNTING



Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.



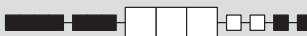
F

Rocker

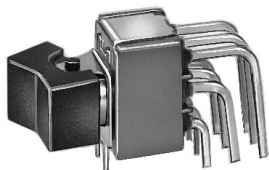
7000 Series Rocker and Lever Handle Switches



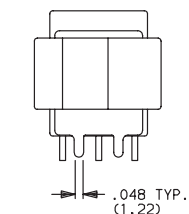
TERMINATIONS



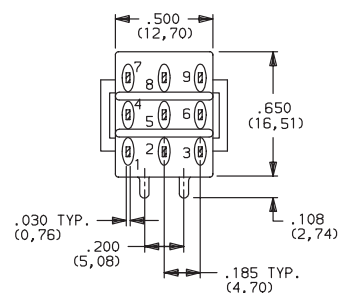
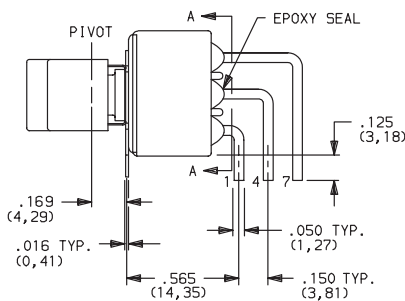
A (STD.) RIGHT ANGLE, PC THRU-HOLE



7301J1ABE2
Horizontal Actuation
3PDT

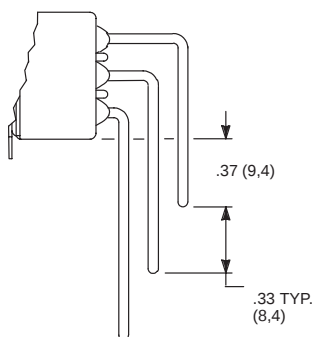


Actuator Shown In Pos. 1

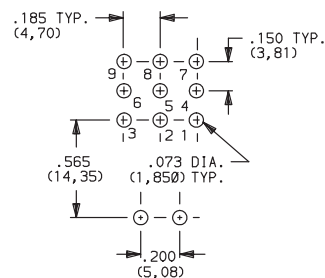


SECTION A-A

AW4 RIGHT ANGLE, EXTENDED, PC THRU-HOLE



PC MOUNTING

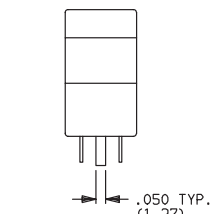


Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

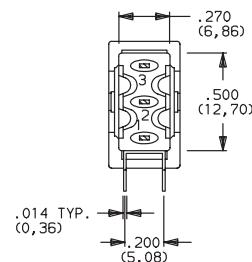
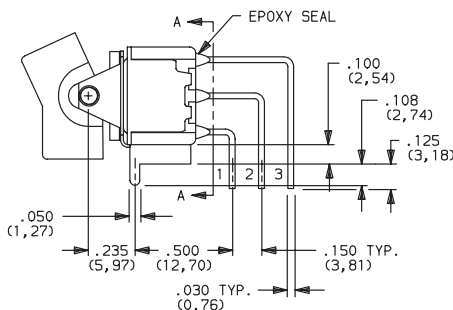
AV2 (STD.) VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



7101J1AV2BE2
Vertical Actuation
SPDT

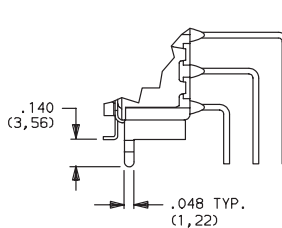
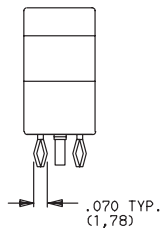


Actuator Shown In Pos. 1

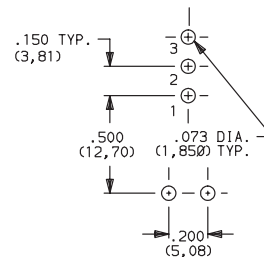


SECTION A-A

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH



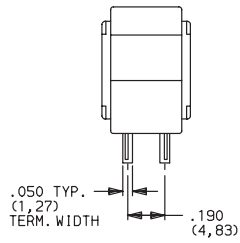
PC MOUNTING



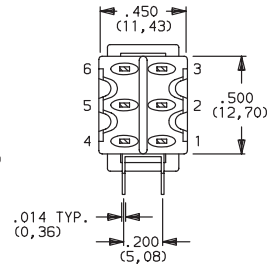
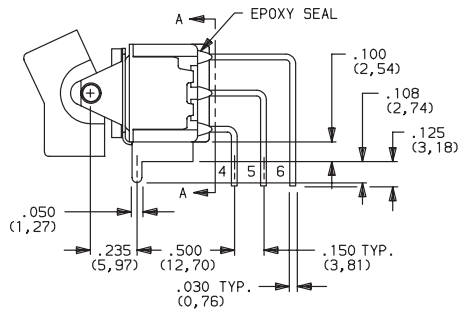
Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

TERMINATIONS

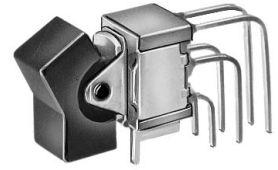
AV2 (STD.) VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



Actuator Shown In Pos. 1

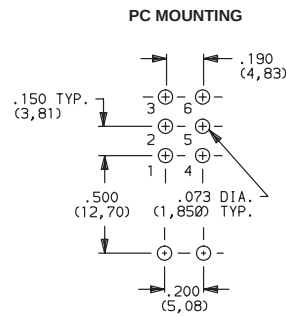
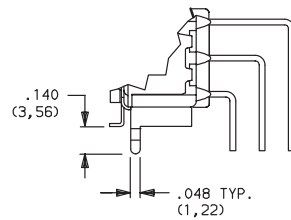
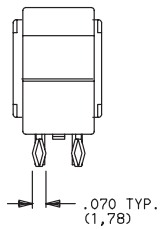


SECTION A-A



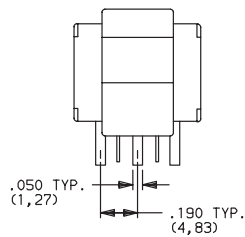
7201J1AV2BE2
Vertical Actuation
DPDT

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

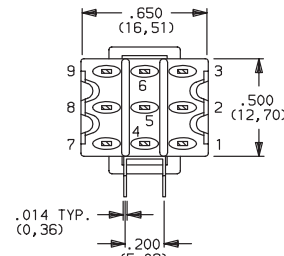
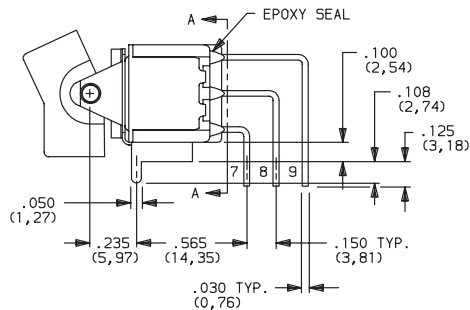


Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

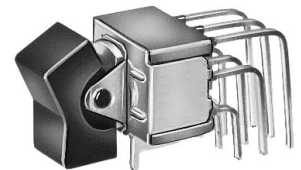
AV2 (STD.) VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



Actuator Shown In Pos. 1

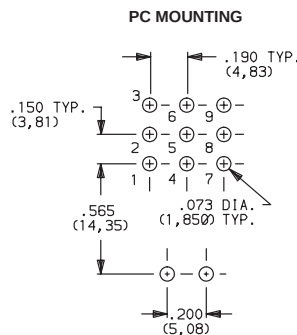
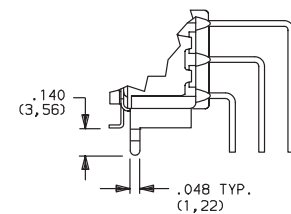
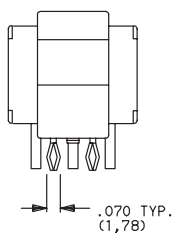


SECTION A-A



7301J1AV2BE2
Vertical Actuation
3PDT

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH



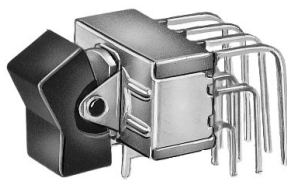
Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

7000 Series Rocker and Lever Handle Switches

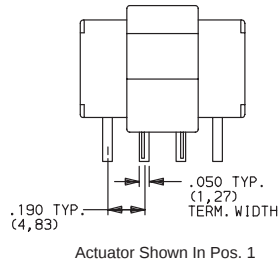


TERMINATIONS

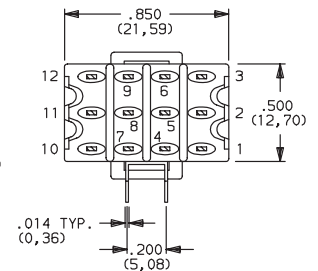
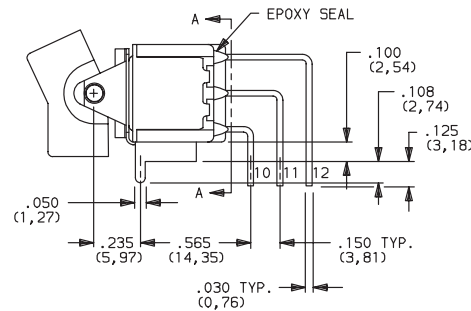
AV2 (STD.) VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



7401J1AV2BE2
Vertical Actuation
4PDT

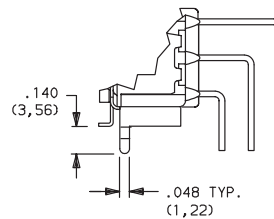
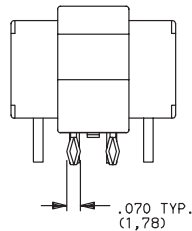


Actuator Shown In Pos. 1

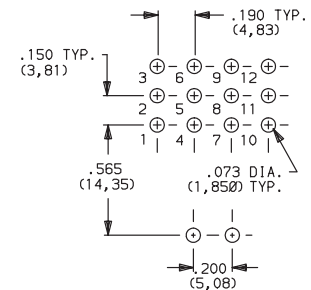


SECTION A-A

AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

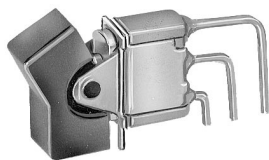


PC MOUNTING

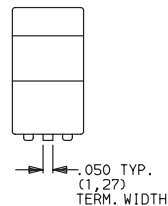


Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

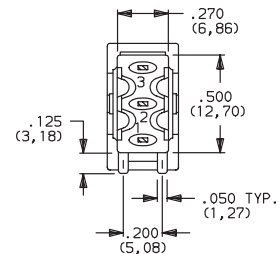
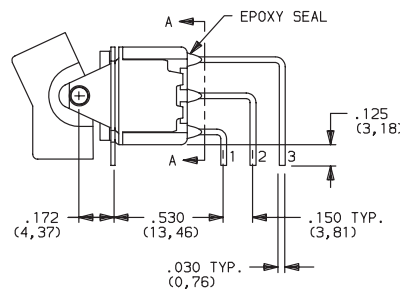
V5 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



7101J1V5BE2
Vertical Actuation
SPDT

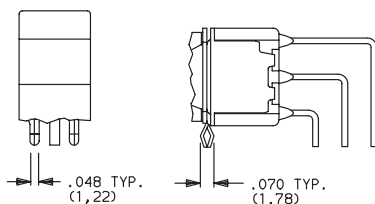


Actuator Shown In Pos. 1

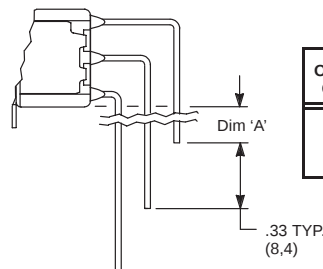


SECTION A-A

V51 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

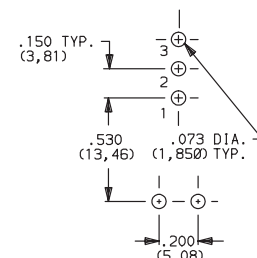


V54, V55 VERTICAL RIGHT ANGLE, EXTENDED, PC THRU-HOLE, .150" PITCH



OPTION CODE	DIM 'A'
V54	.24 (6,1)
V55	.48 (12,2)

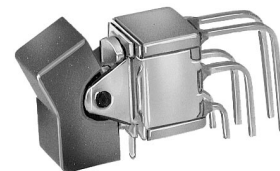
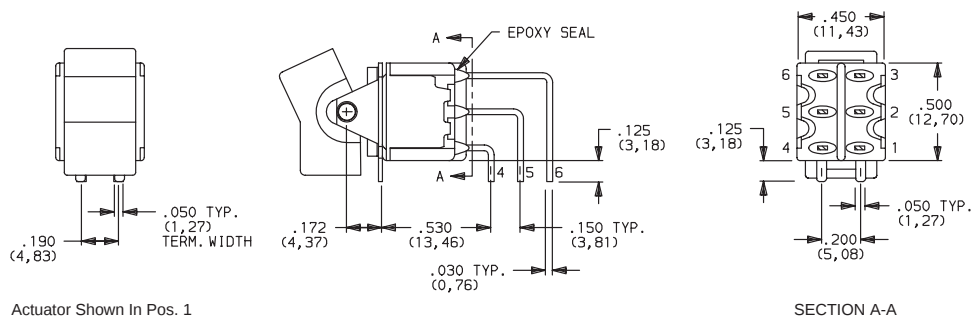
PC MOUNTING



Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

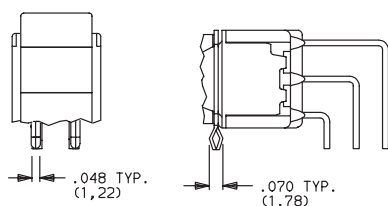
TERMINATIONS

V5 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH

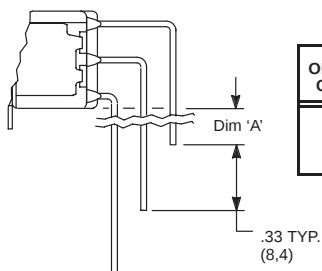


7201J1V5BE2
Vertical Actuation
DPDT

V51 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

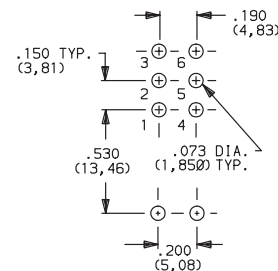


V54, V55 VERTICAL RIGHT ANGLE, EXTENDED, PC THRU-HOLE, .150" PITCH



OPTION CODE	DIM 'A'
V54	.24 (6,1)
V55	.48 (12,2)

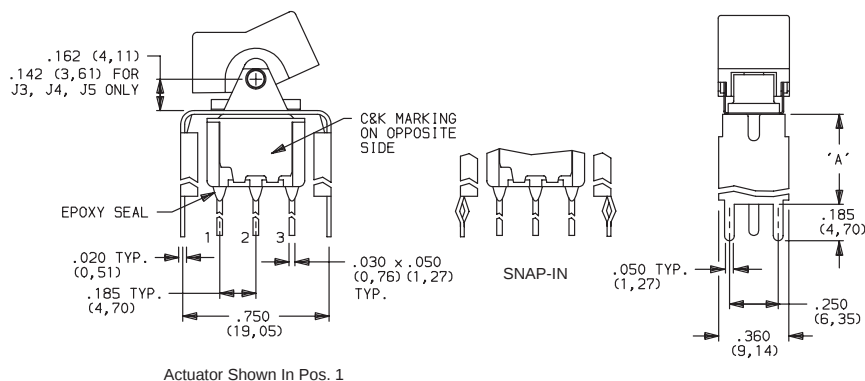
PC MOUNTING



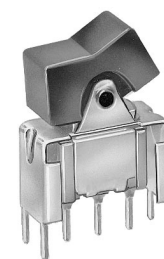
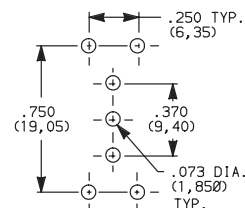
Not available with I seal option. Available actuators, see pages F-13 and F-14.
Terminal bend radii and lead-in manufacturing option.

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

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



PC MOUNTING



7101J1_BE2
SPDT

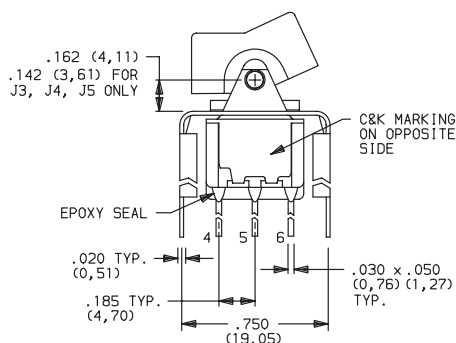
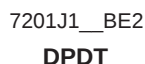
OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V6, V61	.460 (11,68)
V7, V71	.630 (16,00)
V8, V81	.953 (24,21)

Not available with I seal option.
Available actuators, see pages F-13 and F-14.

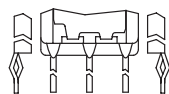


Rocker

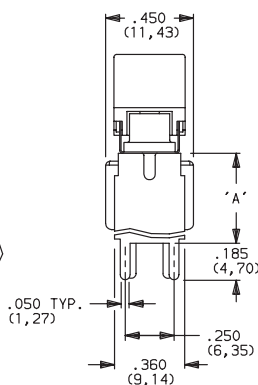
V21, V61, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN



Actuator Shown In Pos. 1



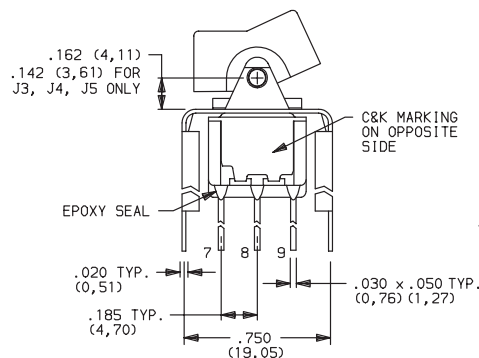
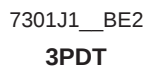
SNAP-IN



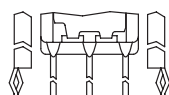
OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V6, V61	.460 (11, 68)
V7, V71	.630 (16, 00)
V8, V81	.953 (24, 21)

Not available with I seal option.
Available actuators, see pages F-13 and F-14.

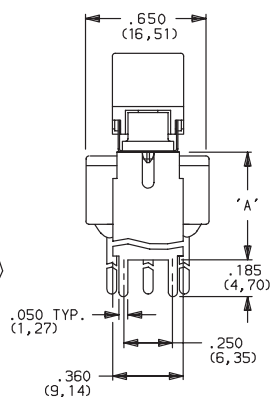
V21, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN



Actuator Shown In Pos. 1



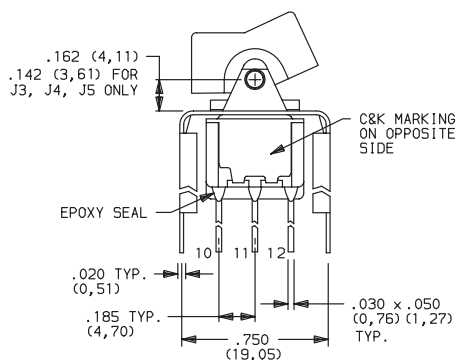
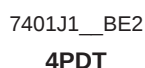
SNAP-IN



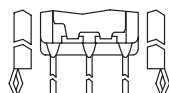
OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V7, V71	.630 (16, 00)
V8, V81	.953 (24, 21)

Not available with I seal option.
Available actuators, see pages F-13 and F-14.

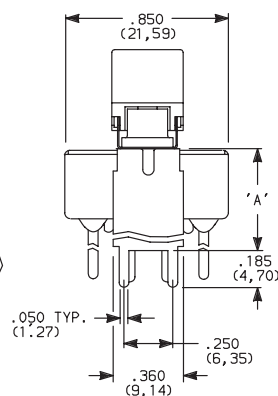
V21, V71, V81 VERTICAL MOUNT, V-BRACKET, SNAP-IN



Actuator Shown In Pos. 1



SNAP-IN



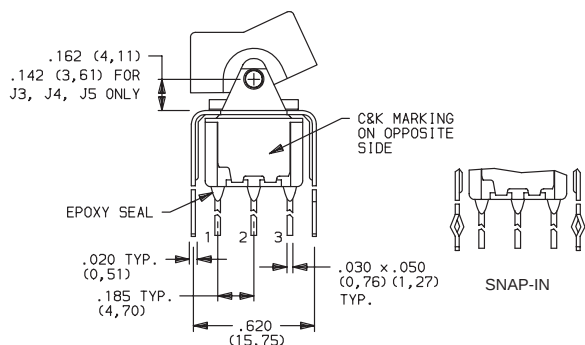
OPTION CODE	DIM 'A'
V2, V21	.555 (14,10)
V7, V71	.630 (16, 00)
V8, V81	.953 (24, 21)

Not available with I seal option.
Available actuators, see pages F-13 and F-14.

TERMINATIONS

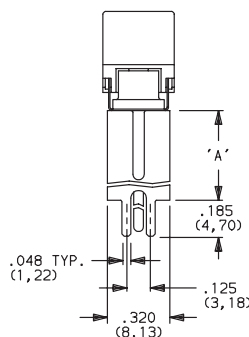
V3, V4, V9 VERTICAL MOUNT, V-BRACKET

V31, V41, V91 VERTICAL MOUNT, V-BRACKET, SNAP-IN

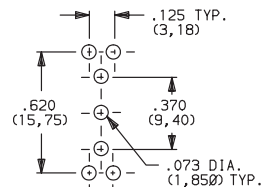


Actuator Shown In Pos. 1

Not available with I seal option.
Available actuators, see pages F-13 and F-14.



PC MOUNTING



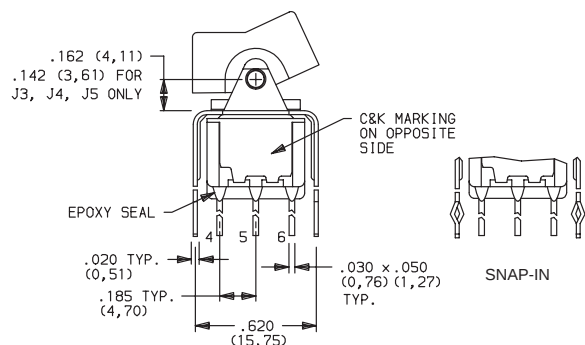
7101J1_BE2

SPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4, V41	.630 (16,00)
V9, V91	1.150 (29,21)

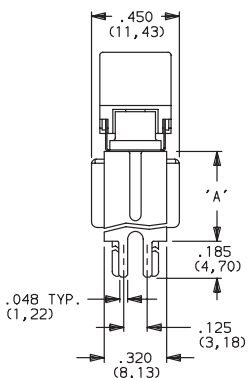
V3, V4, V9 VERTICAL MOUNT, V-BRACKET

V31, V41, V91 VERTICAL MOUNT, V-BRACKET, SNAP-IN

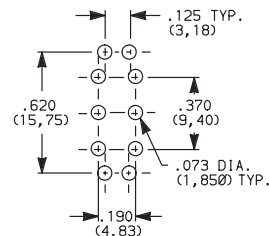


Actuator Shown In Pos. 1

Not available with I seal option.
Available actuators, see pages F-13 and F-14.



PC MOUNTING



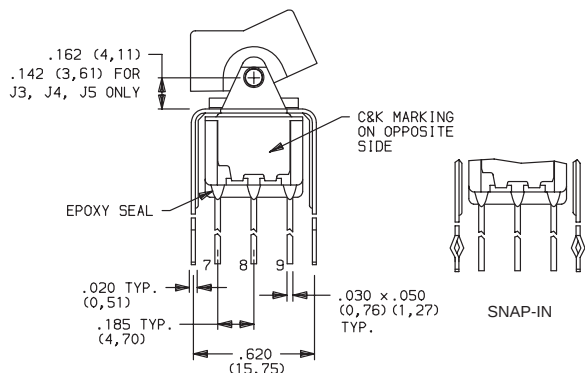
7201J1_BE2

DPDT

OPTION CODE	DIM 'A'
V3, V31	.460 (11,68)
V4, V41	.630 (16,00)
V9, V91	1.150 (29,21)

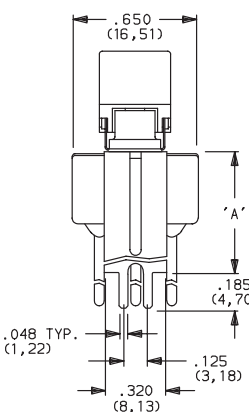
V4, V9 VERTICAL MOUNT, V-BRACKET

V41, V91 VERTICAL MOUNT, V-BRACKET, SNAP-IN

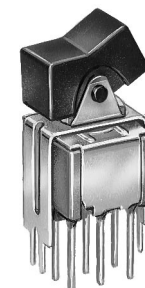
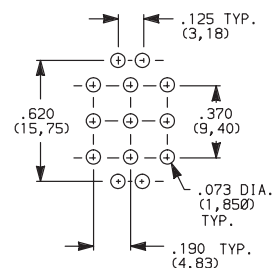


Actuator Shown In Pos. 1

Not available with I seal option.
Available actuators, see pages F-13 and F-14.



PC MOUNTING



7301J1_BE2

3PDT

OPTION CODE	DIM 'A'
V4, V41	.630 (16,00)
V9, V91	1.150 (29,21)



Rocker

7000 Series Rocker and Lever Handle Switches



TERMINATIONS

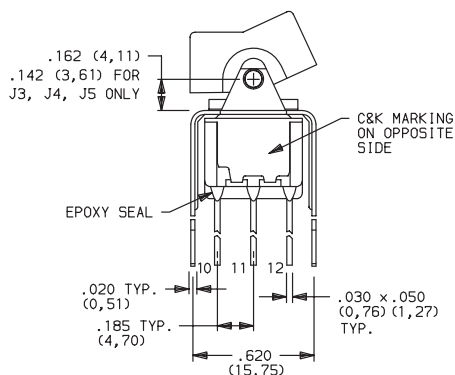


V4, V9 VERTICAL MOUNT, V-BRACKET

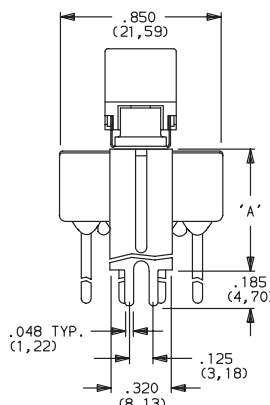
V41, V91 VERTICAL MOUNT, V-BRACKET, SNAP-IN



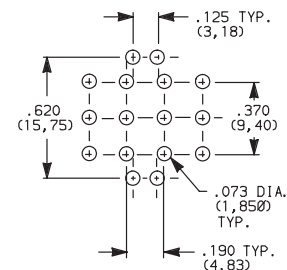
7401J1_BE2
4PDT



Actuator Shown In Pos. 1



PC MOUNTING



OPTION CODE	DIM 'A'
V4, V41	.630 (16,00)
V9, V91	1.150 (29,21)

Not available with I seal option.
Available actuators, see pages F-13 and F-14.

CONTACT MATERIAL



OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
B (STD.)	GOLD ¹	GOLD ¹	LOW LEVEL / DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
K		TIN-LEAD ⁶		
Q (STD.)	SILVER ^{4,5}	SILVER ⁵	POWER	5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
M		TIN-LEAD 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.
L		TIN-LEAD ⁶		

CONTACT MATERIAL / APPLICATION RECOMMENDATIONS – SEE CHART, PAGE L-31.

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 tin-lead alloy over nickel plate.

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

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

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

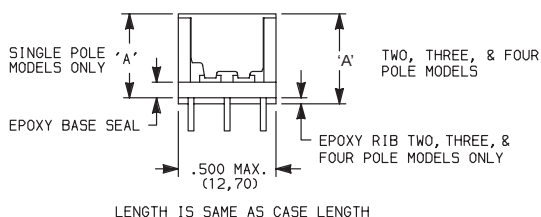
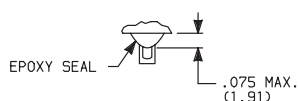
K, L & M contact materials not available with Z & Z3 terminations.

SEAL



E (STD.) EPOXY SEAL

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.



Rocker