

# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## 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



Models Available

## 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 G-20 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 mΩ typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

**INSULATION RESISTANCE:** 10<sup>9</sup> 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).

**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 G-20 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 G-20 for additional contact materials.

**TERMINAL SEAL:** Epoxy.

**HARDWARE:** Mounting nuts & screws: Brass. Lockwasher: Stainless steel. Standoff: Nylon standard.

## 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 G-4 thru G-20. 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.



### Switch Function

- 7101 (STD.) SP On-None-On
- 7103 (STD.) SP On-Off-On
- 7105 SP Mom.-Off-Mom.
- 7107 SP On-Off-Mom.
- 7108 SP On-None-Mom.
- 7109 SP None-On-Mom.
- 7201 (STD.) DP On-None-On
- 7203 DP On-Off-On
- 7205 DP Mom.-Off-Mom.
- 7207 DP On-Off-Mom.
- 7208 DP On-None-Mom.
- 7211 DP On-On-On
- 7213 DP On-On-Mom.
- 7215 DP Mom.-On-Mom.
- 7301 (STD.) 3P On-None-On
- 7303 3P On-Off-On
- 7305 3P Mom.-Off-Mom.
- 7401 (STD.) 4P On-None-On
- 7403 4P On-Off-On
- 7405 4P Mom.-Off-Mom.
- 7411 4P On-On-On

**Note:** UL/CSA models available, see pages G-4 and G-5.

- Actuator**
- J1 (STD.) .531" long rocker
  - J2 Lever
  - J3 .906" long rocker
  - J8 .699" long rocker
  - J10 1.318" long rocker
  - J11 Rocker with frame
  - J15 Rocker, snap-in
  - J16 Rocker with frame, 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 for LED, snap-in
  - J60 Lever
  - J61 Lever with frame, snap-in
  - J62 Lever with frame for LED, snap-in
  - J90 Lever
  - J91 Lever with frame, 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
- AW3 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
- V61 .460" high, V-bracket, snap-in

### Contact Material

- B (STD.) Gold
- Q (STD.) Silver
- K Gold, tin-lead
- M Silver, tin-lead
- G Gold over silver
- L Gold over silver, tin-lead

### 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

### Metal Frame Color

- J11, J19, J21 & J37 Actuators)
- 2 (STD.) Black
- 1 White

- 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

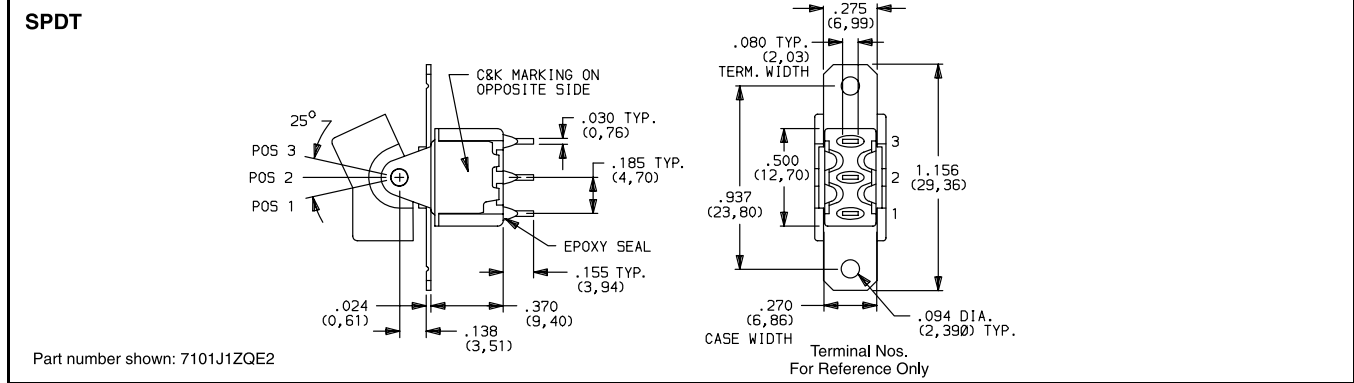
Rocker



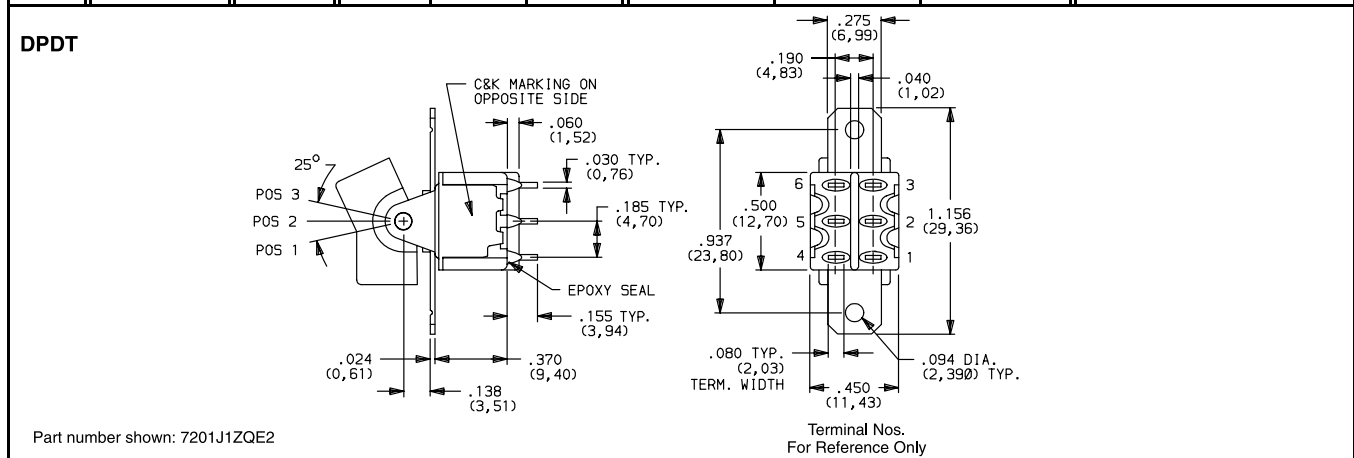
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## 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	
	<b>7101 (STD.)</b>	<b>U11</b>	ON	NONE	ON		N/A		
	<b>7103 (STD.)</b>	<b>U13</b>	ON	OFF	ON				
	<b>7105</b>	<b>U15</b>	MOM.	OFF	MOM.	2-3	OPEN	2-1	
	<b>7107</b>	<b>U17</b>	ON	OFF	MOM.				
	<b>7108</b>	<b>U18</b>	ON	NONE	MOM.		N/A		
	<b>7109</b>	<b>U19</b>	NONE	ON	MOM.	N/A	2-3	2-1	



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

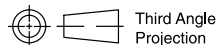


Rocker

MOM. = Momentary

\*\*U11 through U413 model nos. with all options when ordered with G, L, M or Q contact material.

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



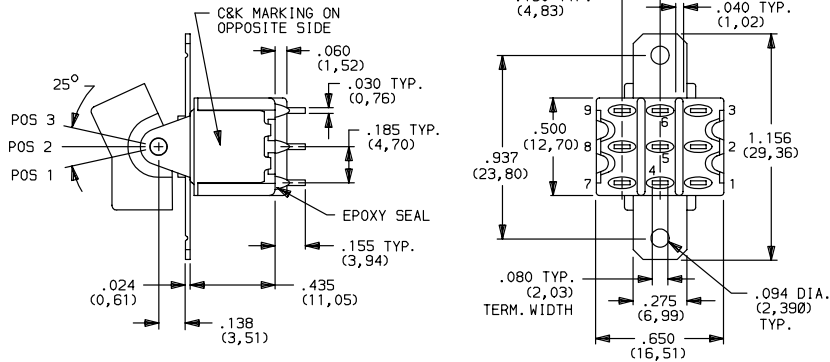
Dimensions are shown: IN (mm)  
Dimensions subject to change

# C&K 7000 Series Miniature Rocker & 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	
3P	<b>7301 (STD.)</b>	<b>U31</b>	ON	NONE	ON	2-3,5-6,8-9	N/A	2-1,5-4,8-7	 3PDT
	<b>7303</b>	<b>U33</b>	ON	OFF	ON		OPEN		
	<b>7305</b>	<b>U35</b>	MOM.	OFF	MOM.				

### 3PDT

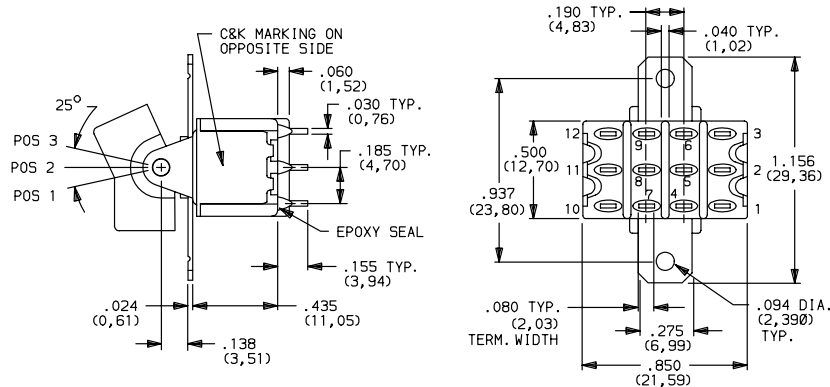


Part number shown: 7301J1ZQE2

Terminal Nos.  
For Reference Only

4P	<b>7401 (STD.)</b>	<b>U41</b>	ON	NONE	ON	2-3,5-6,8-9,11-12	N/A	2-1,5-4,8-7,11-10	 4PDT
	<b>7403</b>	<b>U43</b>	ON	OFF	ON		OPEN		
	<b>7405</b>	<b>U45</b>	MOM.	OFF	MOM.				
	<b>7411*</b>	<b>U411*</b>	ON	ON	ON		2-3,5-4,8-9,11-10		

### 4PDT



Part number shown: 7401J1ZQE2

Terminal Nos.  
For Reference Only

MOM. = Momentary

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

\*\*U11 through U411 model nos. with all options when ordered with G, L, M or Q contact material.

Rocker



Third Angle  
Projection

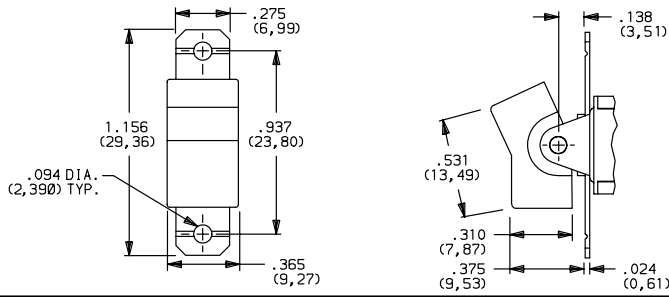
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## ACTUATOR—PANEL REAR MOUNT

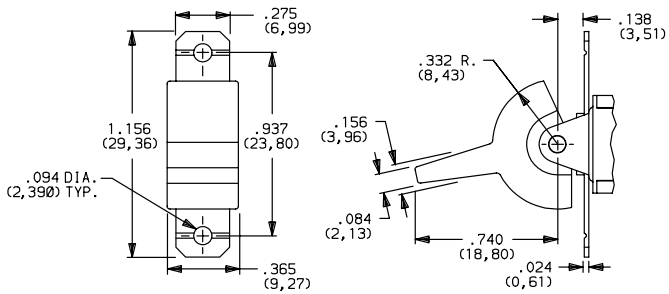
ACTUATOR COLOR



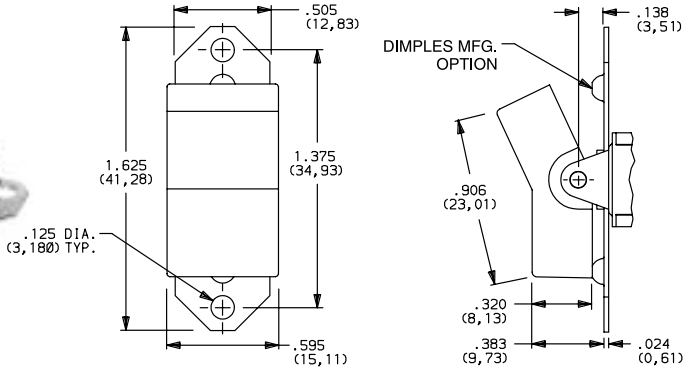
**J1 (STD.) ROCKER**



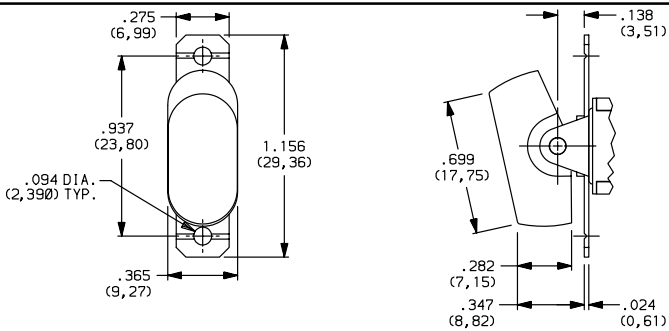
**J2 LEVER**



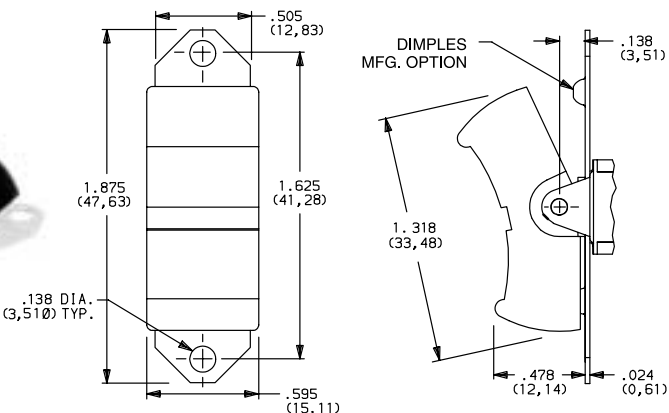
**J3 ROCKER**



**J8 ROCKER**



**J10 ROCKER**



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

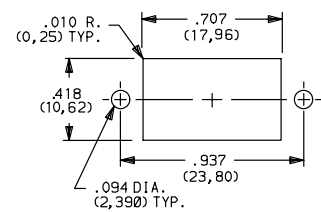
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

**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. Actuators available separately, see page G-22. Hardware is available separately, see section N.

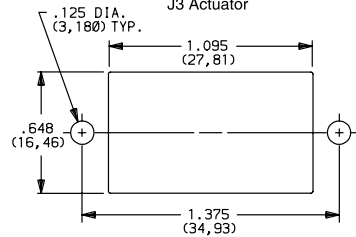
J1, J2, J3, J8 & J10 Actuators available with C, W-W5, Z or Z3 terminations.

### PANEL MOUNTING

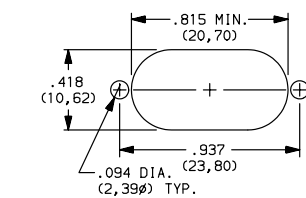
J1 & J2 Actuators



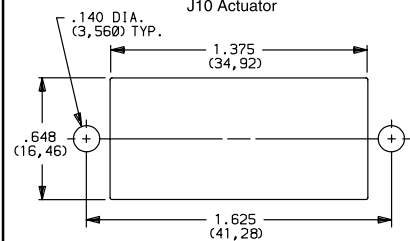
J3 Actuator



J8 Actuator



J10 Actuator



Dimensions are shown: IN (mm)  
 Dimensions subject to change

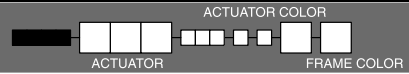
Rocker



G

# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## ACTUATOR—SNAP-IN FRONT MOUNT



OPTION CODE	ACTUATOR COLOR
<b>2</b>	(STD.) BLACK
<b>1</b>	WHITE
<b>3</b>	RED

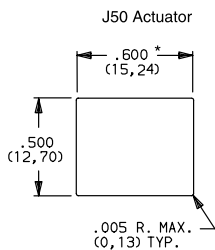
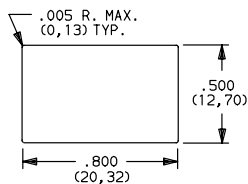
OPTION CODE	FRAME COLOR
<b>2</b>	(STD.) BLACK
<b>NONE</b>	No Frame Color (J15 or J25 options)
<b>1</b>	WHITE

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

**NOTE:** Actuators & frames available separately, see pages G-22 and G-23. J15, J16, J25, J26, J50 & J51 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

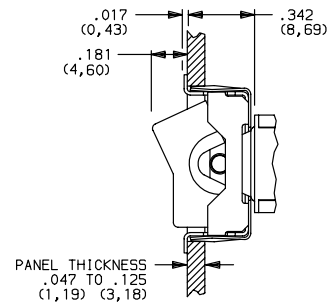
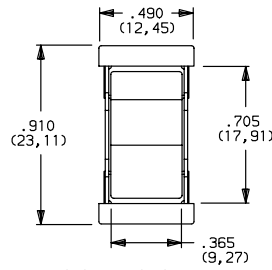
### PANEL MOUNTING

J15, J16, J25 & J26 Actuators



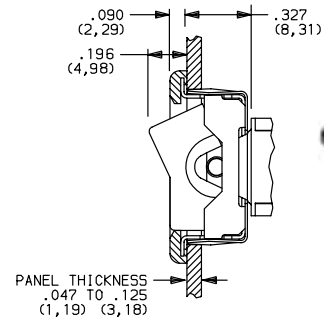
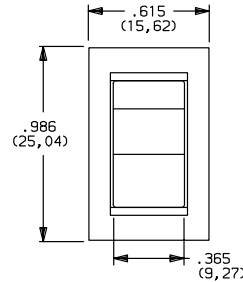
\* For J50: Increase this dimension to .620/.625 (15,75/15,88) for .091/.125 (2,31/3,18) thk. panels.

### J15 ROCKER, SNAP-IN

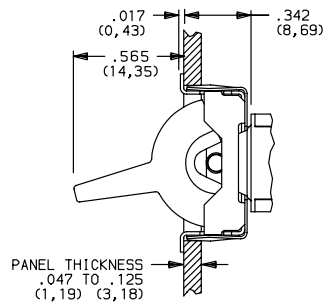
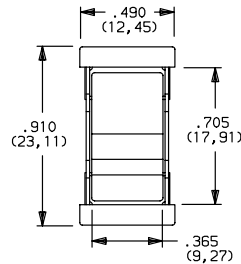


No frame color choice required.

### J16 ROCKER WITH FRAME, SNAP-IN

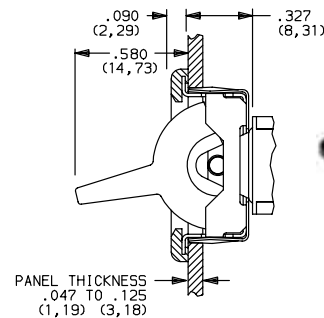
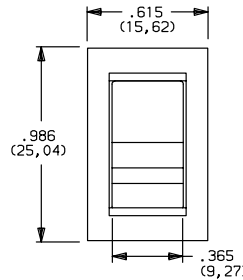


### J25 LEVER, SNAP-IN

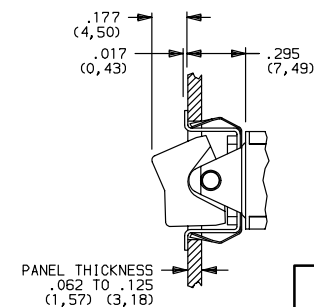
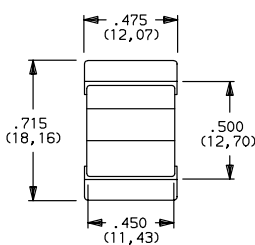


No frame color choice required.

### J26 LEVER WITH FRAME, SNAP-IN



### J50 ROCKER, SNAP-IN



No frame color choice required.



Rocker



# C&K 7000 Series Miniature Rocker & Lever Handle Switches

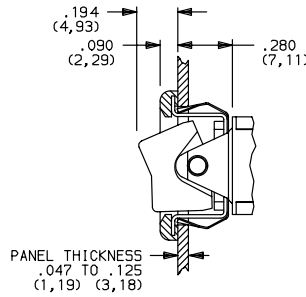
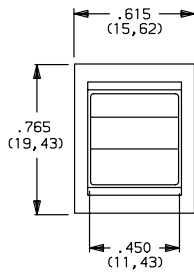
## ACTUATOR—SNAP-IN FRONT MOUNT

ACTUATOR COLOR

ACTUATOR

FRAME COLOR

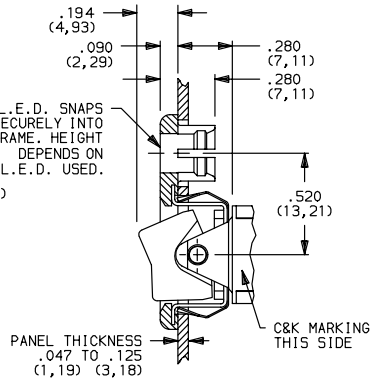
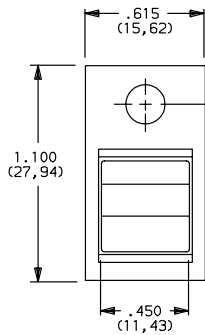
### J51 ROCKER WITH FRAME, SNAP-IN



OPTION CODE	ACTUATOR COLOR
<b>2</b>	(STD.) BLACK
<b>1</b>	WHITE
<b>3</b>	RED

OPTION CODE	FRAME COLOR
<b>2</b>	(STD.) BLACK
<b>NONE</b>	No Frame Color (J15 or J25 options)
<b>1</b>	WHITE

### J52 ROCKER WITH FRAME FOR LED, SNAP-IN

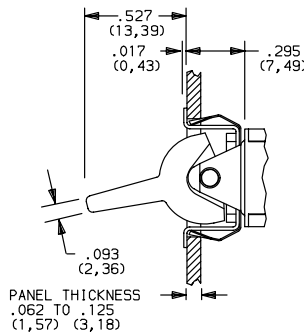
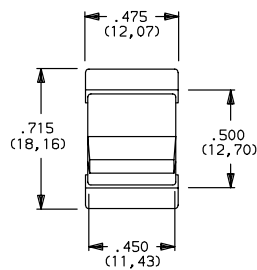


LED not included.  
For LED information, see page G-24.

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

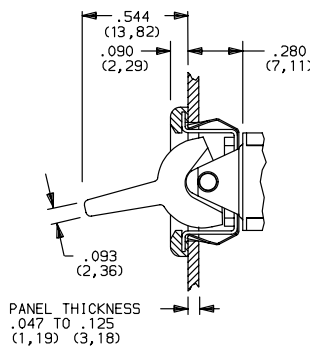
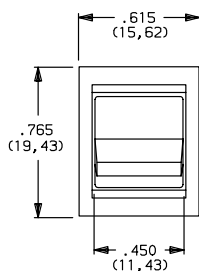
**NOTE:** Actuators & frames available separately, see pages G-22 and G-23. J51, J52, J60 & J61 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

### J60 LEVER, SNAP-IN



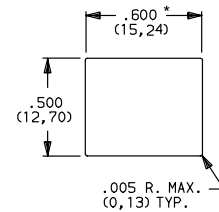
No frame color choice required.

### J61 LEVER WITH FRAME, SNAP-IN

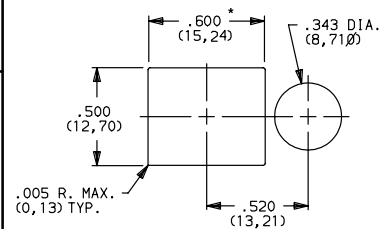


### PANEL MOUNTING

J51, J60 & J61 Actuators



J52 Actuator



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



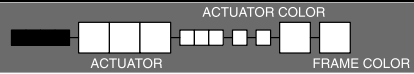
Dimensions are shown: IN (mm)  
Dimensions subject to change

Rocker

G

# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## ACTUATOR—SNAP-IN FRONT MOUNT



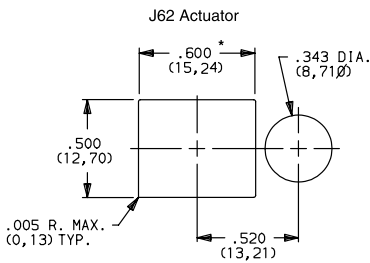
OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

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

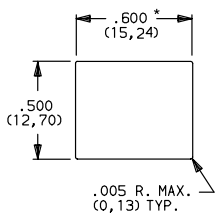
Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.

**NOTE:** Actuators & frames available separately, see pages G-22 and G-23. J62, J90, J91 & J93 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

### PANEL MOUNTING

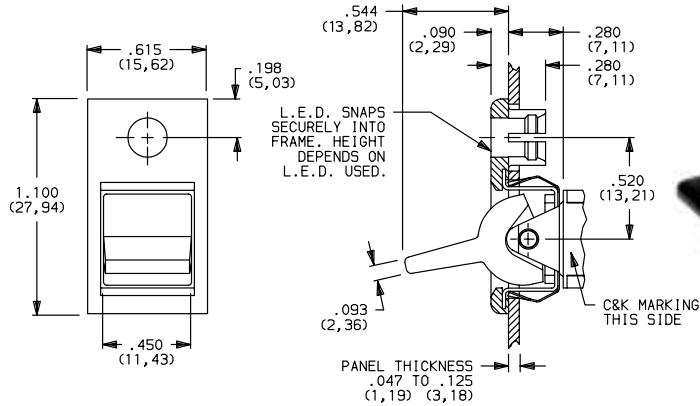


### J90, J91 & J93 Actuators



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

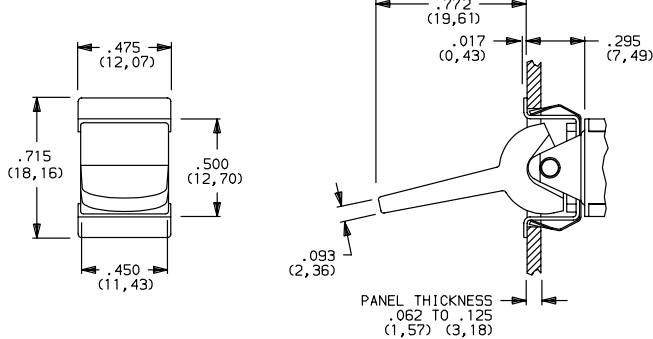
### J62 LEVER WITH FRAME FOR LED, SNAP-IN



**LED not included.**  
For LED information, see page G-24.



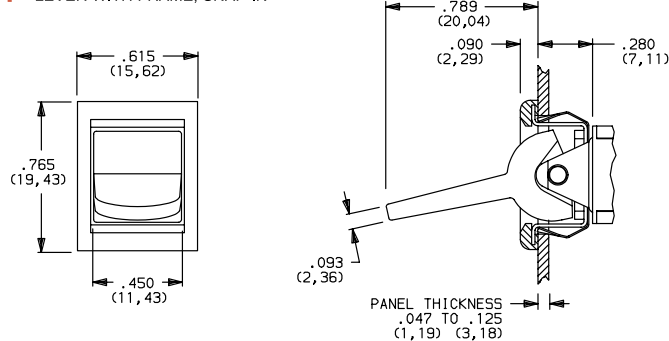
### J90 LEVER, SNAP-IN



No frame color choice required.



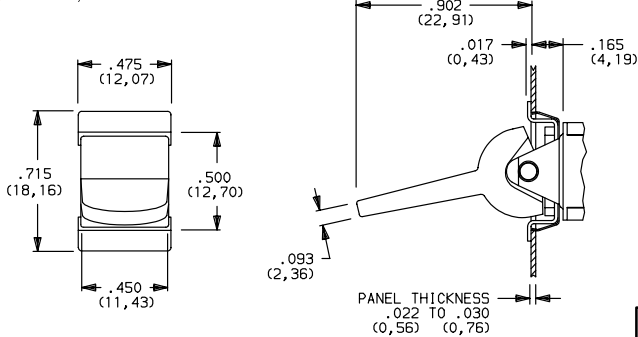
### J91 LEVER WITH FRAME, SNAP-IN



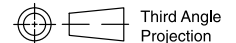
No frame color choice required.



### J93 LEVER, SNAP-IN



No frame color choice required.



Dimensions are shown: IN (mm)  
Dimensions subject to change



# C&K 7000 Series Miniature Rocker & Lever Handle Switches

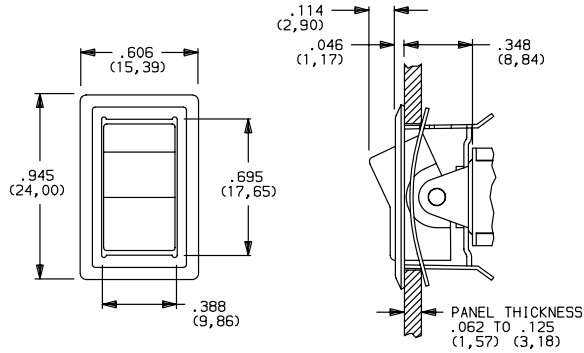
## ACTUATOR—REAR MOUNT

ACTUATOR COLOR

ACTUATOR

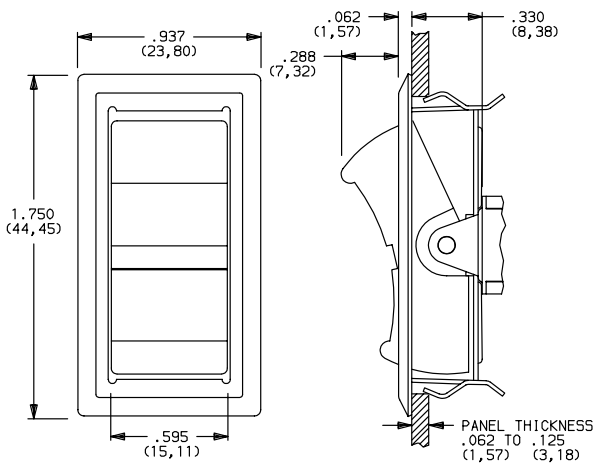
FRAME COLOR

### J11 ROCKER WITH FRAME



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

### J19 ROCKER WITH FRAME

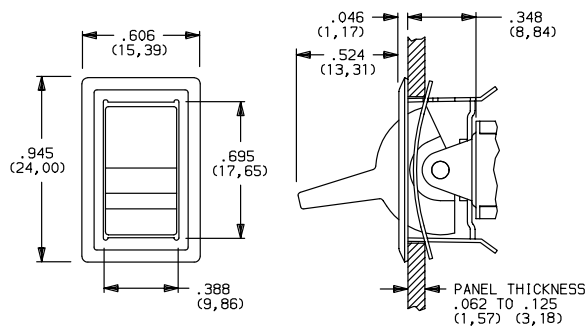


OPTION CODE	FRAME COLOR
2	(STD.) BLACK
1	WHITE

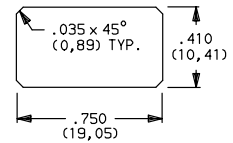
Actuator finish: Matte. Frame finish: Gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

**NOTE:** Actuators & frames available separately, see pages G-22 and G-23. J11, J19, J21 & J37 Actuators available with C, W-W5, Z & Z3 terminations.

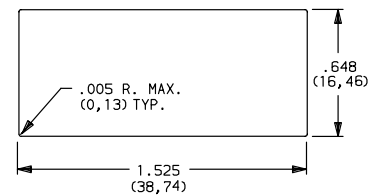
### J21 LEVER WITH FRAME



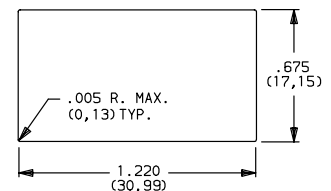
#### J11 & J21 Actuators



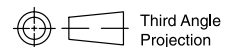
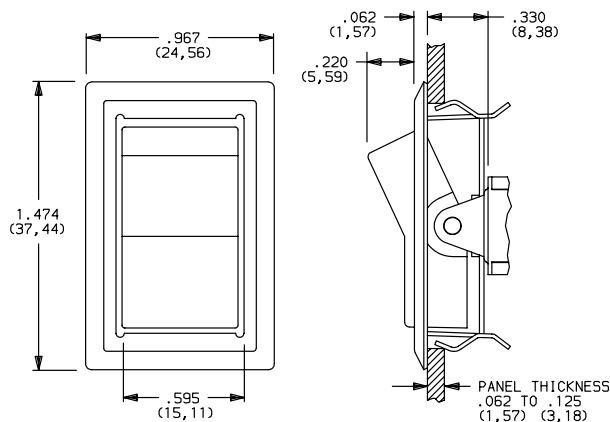
#### J19 Actuator



#### J37 Actuator



### J37 ROCKER WITH FRAME



Dimensions are shown: IN (mm)  
 Dimensions subject to change

Rocker

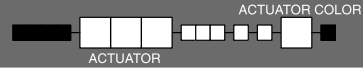


G



# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## ACTUATOR—PC MOUNT



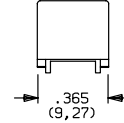
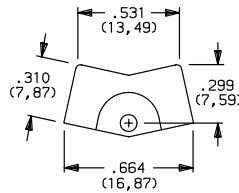
OPTION CODE	ACTUATOR COLOR
2	(STD.) BLACK
1	WHITE
3	RED

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

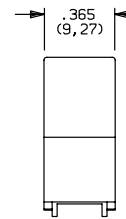
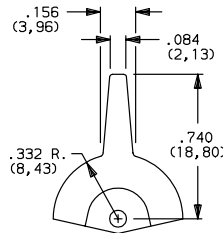
**NOTE:** Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

Actuators available separately, see page G-22. J1, J2 & J8 actuators available with A, A3, AV2, AV3, AW3 & V2-V71 terminations. J3 actuators available with AV2, AV3 & V2-V61 terminations. J50 actuators available with A (DP, 3P models only), A3 (DP, 3P models only), AV2, AV3, AW3 (DP, 3P models only) & V2-V61 terminations.

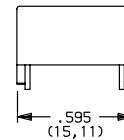
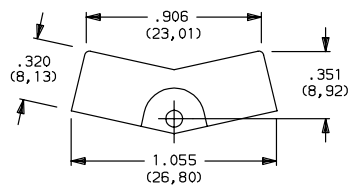
### J1 (STD.) ROCKER



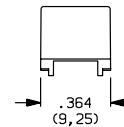
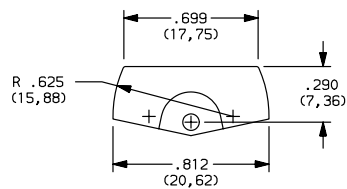
### J2 LEVER



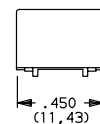
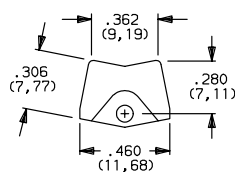
### J3 ROCKER



### J8 ROCKER



### J50 ROCKER



Third Angle  
Projection



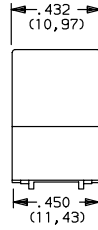
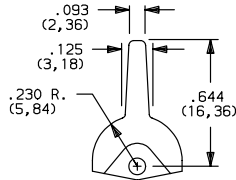
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## ACTUATOR—PC MOUNT

ACTUATOR COLOR

ACTUATOR

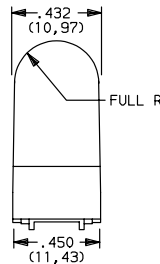
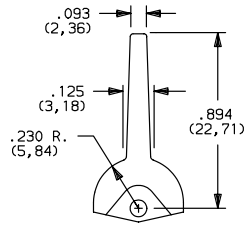
### J60 LEVER



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.

### J90 LEVER

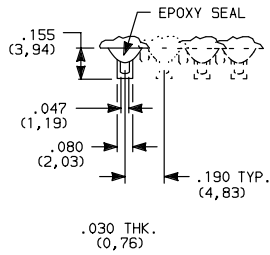


**NOTE:** Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

Actuators available separately, see page G-22. J60 & J90 actuators available with A (DP, 3P models only), A3 (DP, 3P models only), AV2, AV3, AW3 (DP, 3P models only) & V2-V61 terminations.

## TERMINATIONS

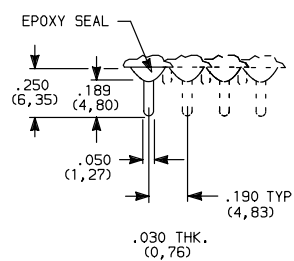
### Z (STD.) SOLDER LUG



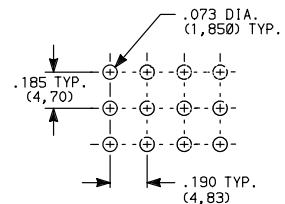
Not available with K, L or M contact materials. Available actuators, see pages G-6 thru G-12.

### SPDT thru 4PDT

### C (STD.) PC THRU-HOLE



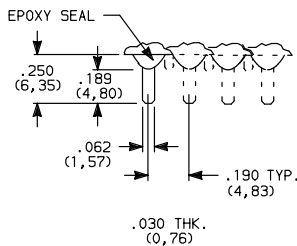
### PC MOUNTING



### SPDT thru 4PDT

**NOTE:** Available actuators, see pages G-6 thru G-12.

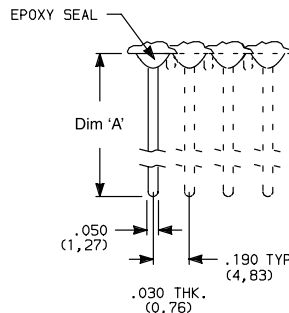
### Z3 QUICK CONNECT



Not available with K, L or M contact materials. Available actuators, see pages G-6 thru G-12. Mating quick connector available; order part number 530100000, page G-22.

### 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 G-6 thru G-12.



Dimensions are shown: IN (mm)  
Dimensions subject to change

Rocker

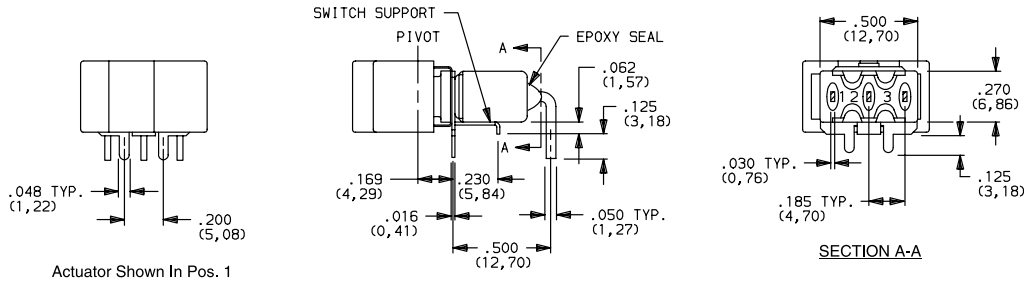


G

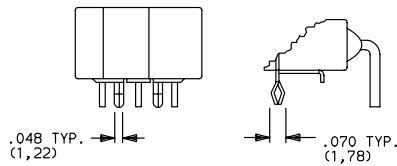
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## TERMINATIONS

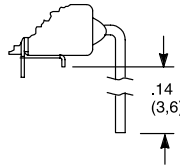
### A (STD.) RIGHT ANGLE, PC THRU-HOLE



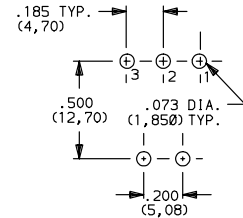
### A3 RIGHT ANGLE, SNAP-IN, PC THRU-HOLE



### AW3 RIGHT ANGLE, EXTENDED, PC THRU-HOLE



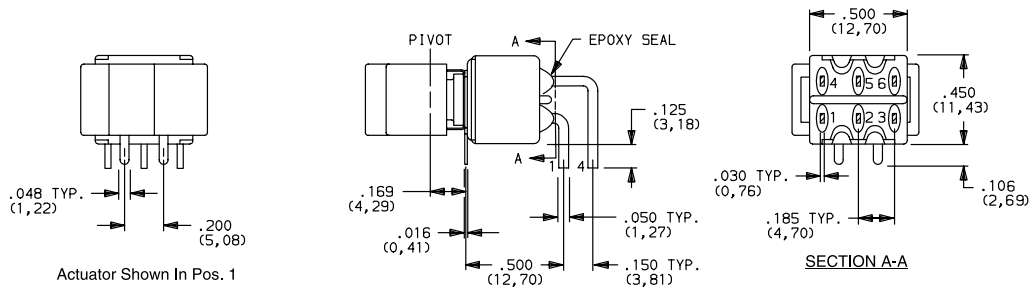
### PC MOUNTING



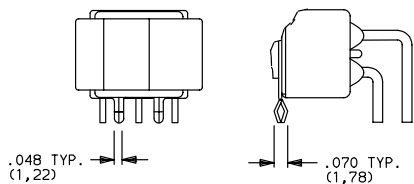
Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.

NOTE: PC pattern must clear switch support leg.

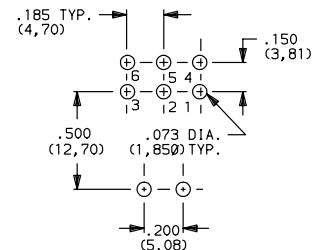
### A (STD.) RIGHT ANGLE, PC THRU-HOLE



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



### PC MOUNTING



Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.

Third Angle Projection



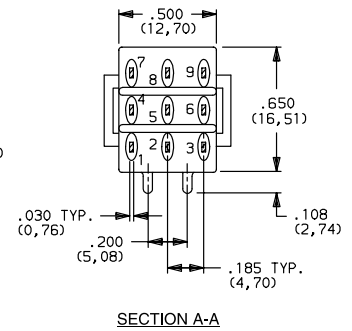
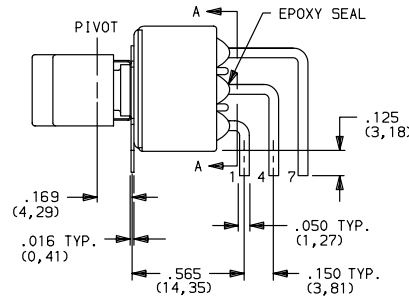
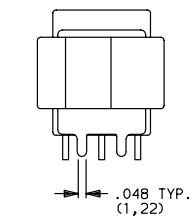
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## TERMINATIONS

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



**7301J1ABE2**  
Horizontal Actuation  
**3PDT**

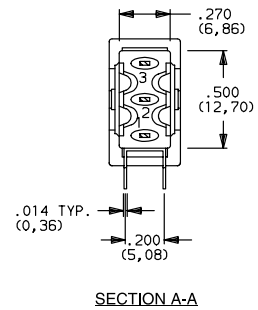
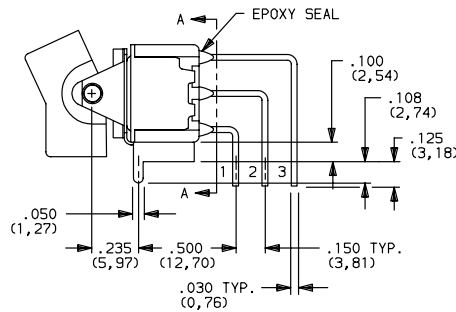
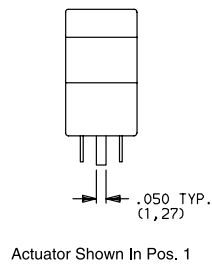


Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.

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

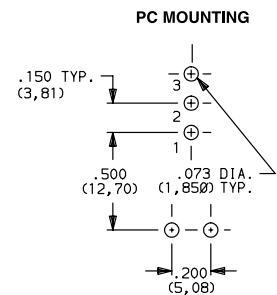
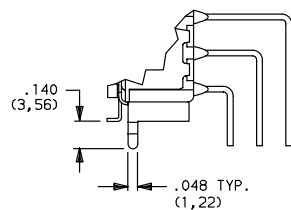
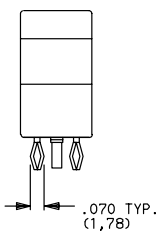


**7101J1AV2BE2**  
Vertical Actuation  
**SPDT**

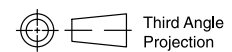


### AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH

Rocker



Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.

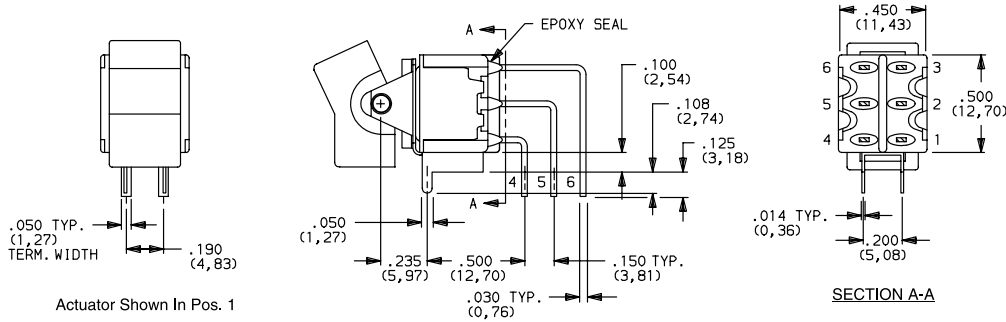


Dimensions are shown: IN (mm)  
Dimensions subject to change

# C&K 7000 Series Miniature Rocker & Lever Handle Switches

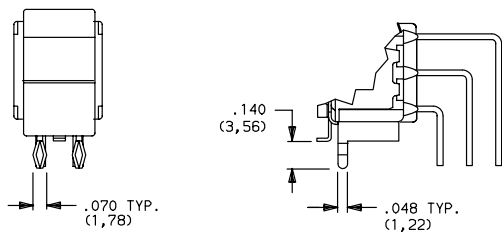
## TERMINATIONS

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

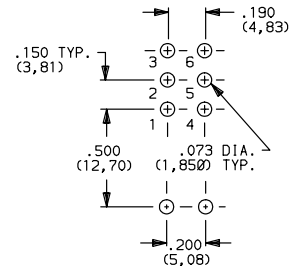


**7201J1AV2BE2**  
Vertical Actuation  
**DPDT**

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

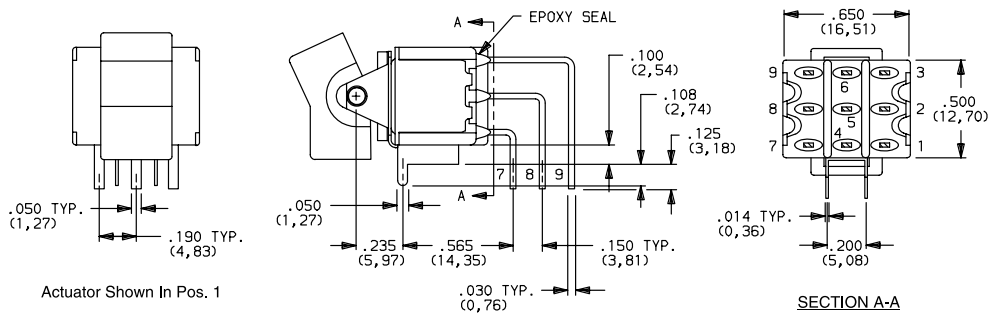


### PC MOUNTING



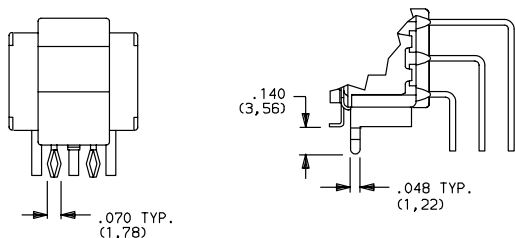
Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.

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

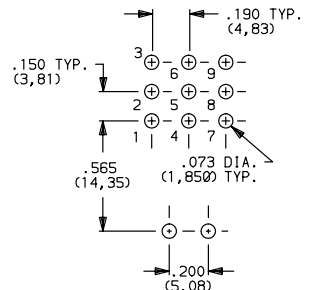


**7301J1AV2BE2**  
Vertical Actuation  
**3PDT**

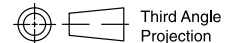
**AV3 VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH**



### PC MOUNTING



Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.



Third Angle  
Projection



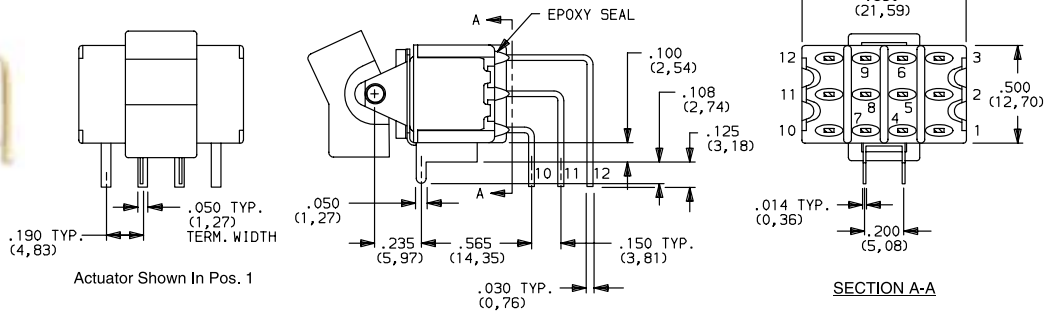
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## TERMINATIONS

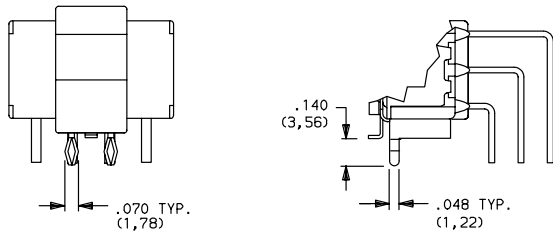
**AV2** (STD.) VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



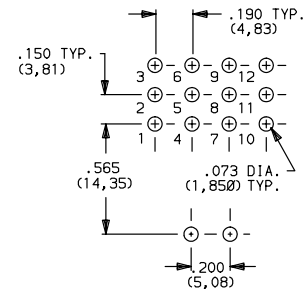
7401J1AV2BE2  
Vertical Actuation  
4PDT



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



### PC MOUNTING

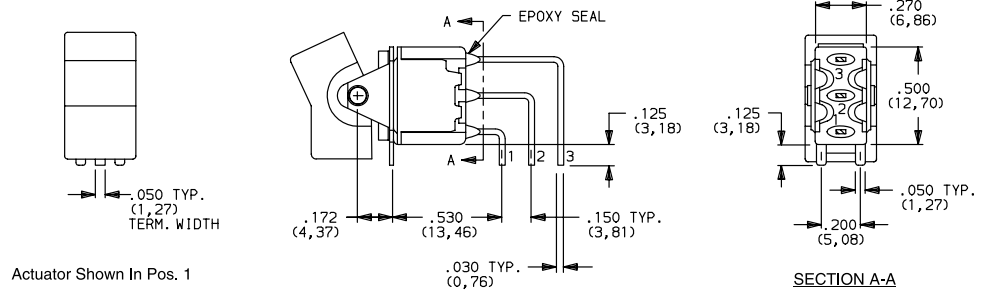


Not available with I seal option. Available actuators, see pages G-11 and G-12. Terminal bend radii and lead-in manufacturing option.

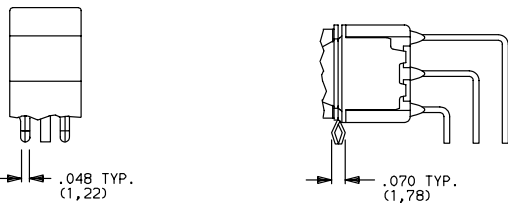
**V5** VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



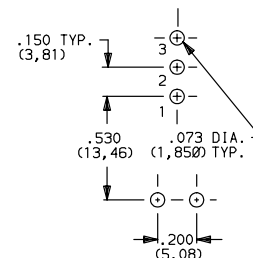
7101J1V5BE2  
Vertical Actuation  
SPDT



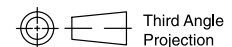
**V51** VERTICAL RIGHT ANGLE, SNAP-IN, PC THRU-HOLE, .150" PITCH



### PC MOUNTING



Not available with I seal option. Available actuators, see pages G-11 and G-12. Terminal bend radii and lead-in manufacturing option.



Rocker

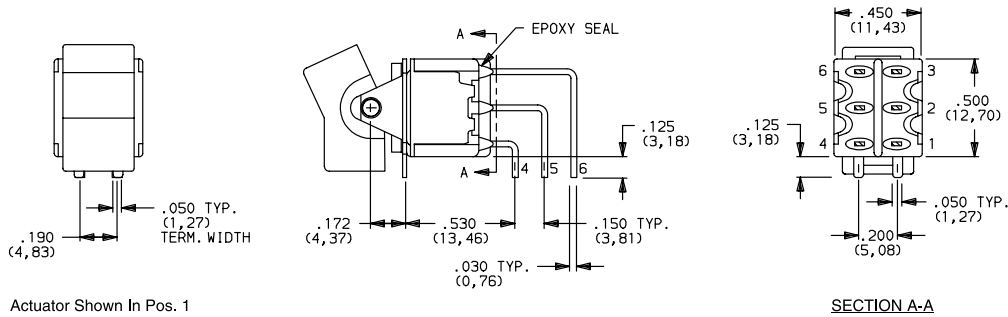


G

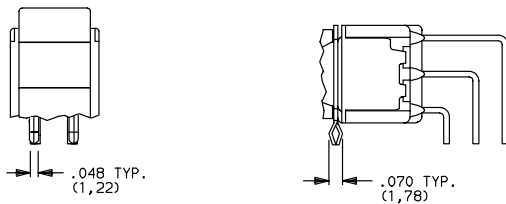
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## TERMINATIONS

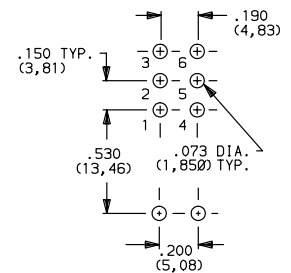
**V5** VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



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



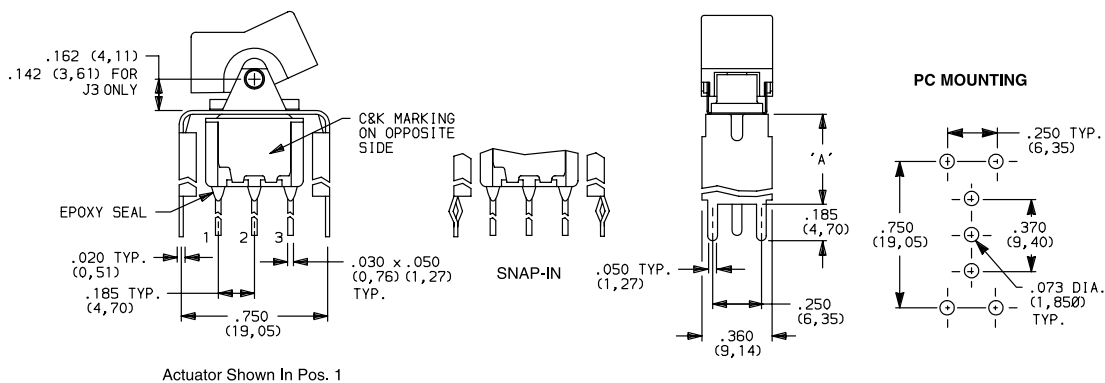
### PC MOUNTING



Not available with I seal option. Available actuators, see pages G-11 and G-12.  
Terminal bend radii and lead-in manufacturing option.

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

**V21, V61** VERTICAL MOUNT, V-BRACKET, SNAP-IN



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

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.



# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## TERMINATIONS

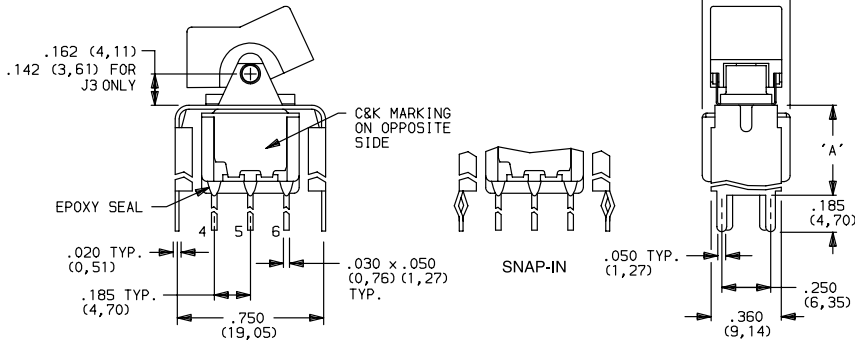
**V2, V6, V7, V8** VERTICAL MOUNT, V-BRACKET

**V21, V61** VERTICAL MOUNT, V-BRACKET, SNAP-IN



7201J1\_\_BE2

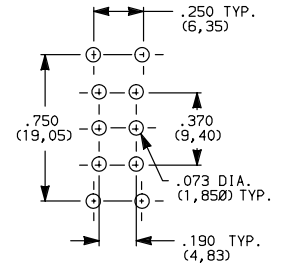
**DPDT**



Actuator Shown In Pos. 1

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.

### PC MOUNTING



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

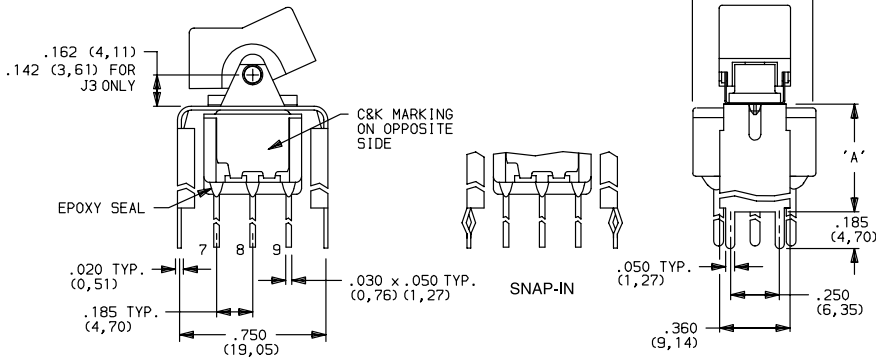
**V2, V7, V8** VERTICAL MOUNT, V-BRACKET

**V21** VERTICAL MOUNT, V-BRACKET, SNAP-IN



7301J1\_\_BE2

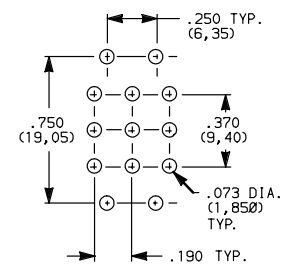
**3PDT**



Actuator Shown In Pos. 1

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.

### PC MOUNTING



OPTION CODE	DIM 'A'
<b>V2, V21</b>	.555 (14,10)
<b>V7</b>	.630 (16,00)
<b>V8</b>	.953 (24,21)

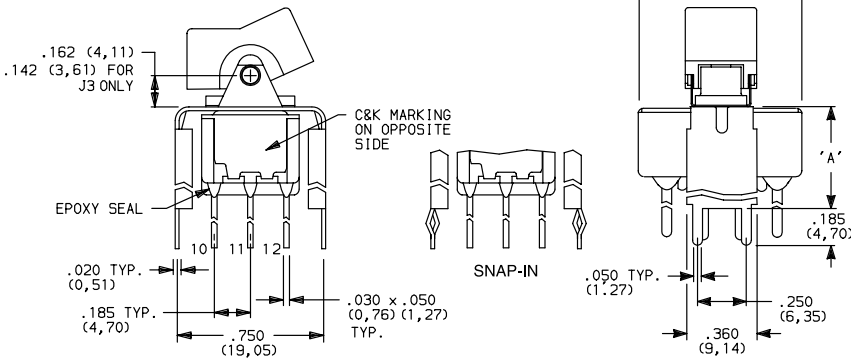
**V2, V7, V8** VERTICAL MOUNT, V-BRACKET

**V21** VERTICAL MOUNT, V-BRACKET, SNAP-IN



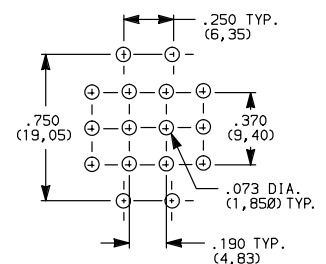
7401J1\_\_BE2

**4PDT**



Actuator Shown In Pos. 1

### PC MOUNTING



OPTION CODE	DIM 'A'
<b>V2, V21</b>	.555 (14,10)
<b>V7</b>	.630 (16,00)
<b>V8</b>	.953 (24,21)

Rocker



G

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.



Dimensions are shown: IN (mm)  
Dimensions subject to change

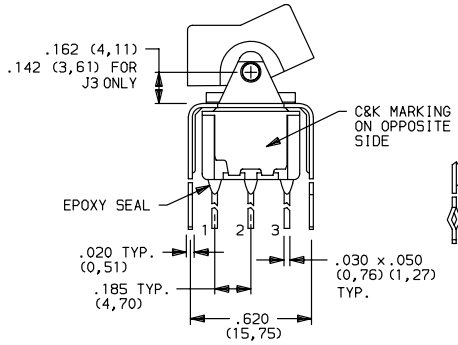


# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## TERMINATIONS

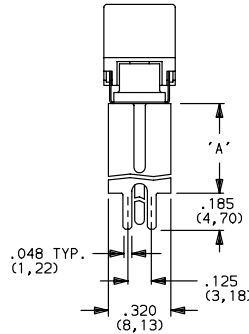
**V3, V4, V9** VERTICAL MOUNT, V-BRACKET

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

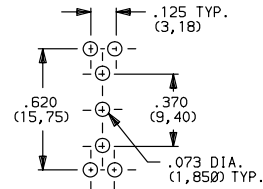


Actuator Shown In Pos. 1

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.



### PC MOUNTING

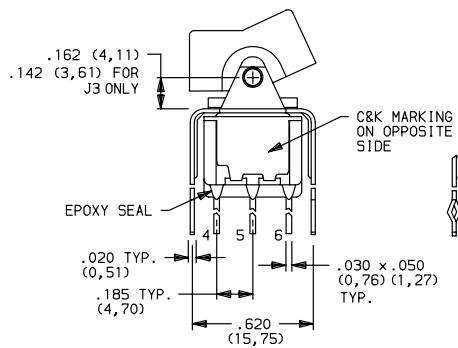


7101J1\_BE2  
SPDT

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

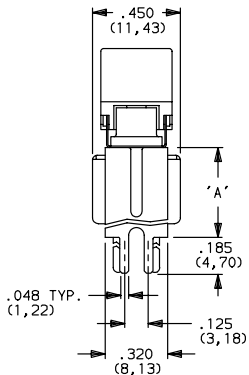
**V3, V4, V9** VERTICAL MOUNT, V-BRACKET

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

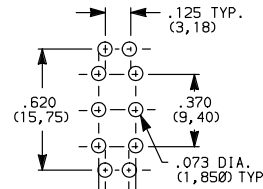


Actuator Shown In Pos. 1

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.



### PC MOUNTING

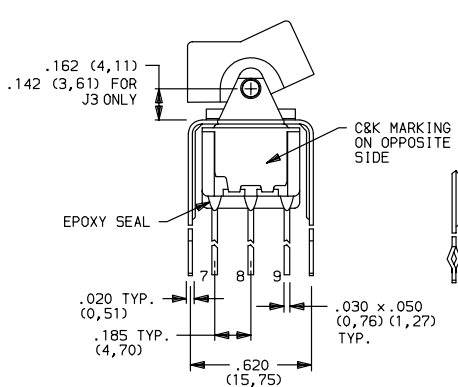


7201J1\_BE2  
DPDT

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

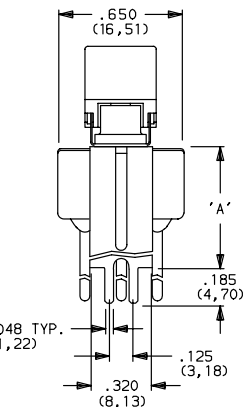
**V4, V9** VERTICAL MOUNT, V-BRACKET

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

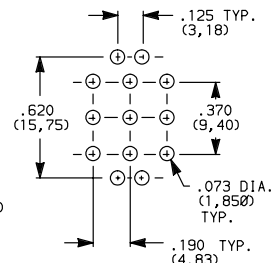


Actuator Shown In Pos. 1

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.

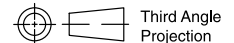


### PC MOUNTING



7301J1\_BE2  
3PDT

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



Dimensions are shown: IN (mm)  
Dimensions subject to change

Rocker



# C&K 7000 Series Miniature Rocker & Lever Handle Switches

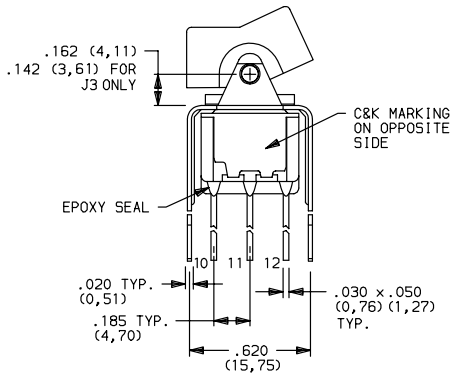
## TERMINATIONS

**V4, V9** VERTICAL MOUNT, V-BRACKET

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

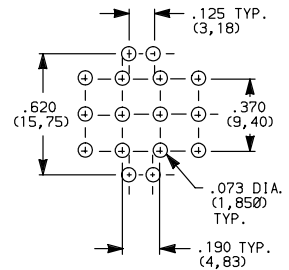


7401J1\_BE2  
4PDT



Actuator Shown In Pos. 1

### PC MOUNTING



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

Not available with I seal option.  
Available actuators, see pages G-11 and G-12.

## CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS	
<b>B (STD.)</b>	GOLD <sup>1</sup>	GOLD <sup>1</sup>	LOW LEVEL/ DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.
<b>K</b>		TIN-LEAD <sup>6</sup>		
<b>Q (STD.)</b>	SILVER <sup>4,5</sup>	SILVER <sup>5</sup>	POWER	5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.
<b>M</b>		TIN-LEAD <sup>6</sup>		
<b>G</b>	GOLD OVER SILVER <sup>2,3</sup>	GOLD <sup>3</sup>	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.
<b>L</b>		TIN-LEAD <sup>6</sup>		

CONTACT MATERIAL/APPLICATION RECOMMENDATIONS—SEE SECTION N.

- CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
- END CONTACTS: Coin silver, with gold plate over nickel plate.
- CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
- END CONTACTS: Coin silver, silver plated.
- CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
- 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.

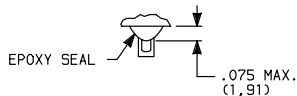
B contact material standard with all terminations except C, Z & Z3.

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

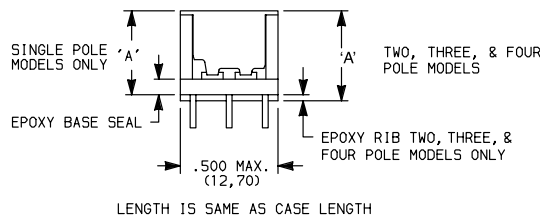
K, L & M contact materials not available with Z & Z3 terminations.

## SEAL

**E (STD.) EPOXY SEAL**

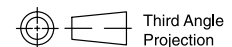


**I EPOXY POTTED BASE**



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

Available with C, W through W5, Z & Z3 terminations.



Dimensions are shown: IN (mm)  
Dimensions subject to change

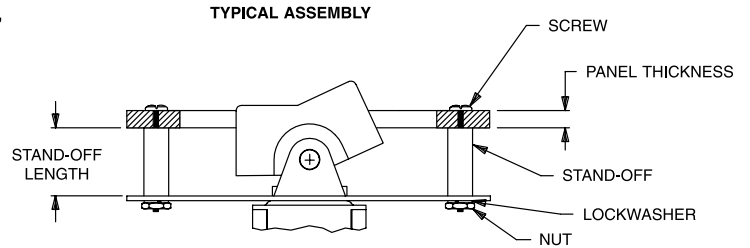
Rocker

G

# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## AVAILABLE HARDWARE

Panel mounting hardware for rocker and lever handle switches is available separately. Mounting hardware consists of two screws, two nuts, two standoffs and two lockwashers per switch, and is available for panel thicknesses of 1/16, 3/32 and 1/8 inch. See part numbers below.



### J1 & J2 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
761101000	1/16 IN. (1,59)	.295 (7,49)
761102000	3/32 IN (2,38)	.264 (6,71)
761103000	1/8 IN. (3,18)	.233 (5,92)

### J3 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
770601000	1/16 IN. (1,59)	.295 (7,49)
770602000	3/32 IN (2,38)	.264 (6,71)
770603000	1/8 IN. (3,18)	.233 (5,92)

### J10 actuators

PART NO.	PANEL THK.	STANDOFF LENGTH
770701000	1/16 IN. (1,59)	.295 (7,49)
770702000	3/32 IN (2,38)	.264 (6,71)
770703000	1/8 IN. (3,18)	.233 (5,92)

### MATERIAL

Screws, nuts, lockwashers: Stainless steel. Standoffs: Nylon, standard.

### J1, J11, J15 & J16 Actuators



#### PART NO.

760201000 WHITE  
760202263 BLACK  
760203000 RED

Material: Nylon  
Finish: Matte

### J2, J21, J25 & J26 Actuators



#### PART NO.

760501000 WHITE  
760502263 BLACK  
760503000 RED

Material: Nylon  
Finish: Matte

### J3 & J37 Actuators



#### PART NO.

766601000 WHITE  
766602263 BLACK  
766603000 RED

Material: Nylon  
Finish: Matte

### J50, J51 & J52 Actuators



#### PART NO.

628301000 WHITE  
628302263 BLACK  
628303000 RED

Material: Nylon  
Finish: Matte

### J60, J61 & J62 Actuators



#### PART NO.

598101000 WHITE  
613802263 BLACK  
598103000 RED

Material: Nylon  
Finish: Matte

### J8 Actuator

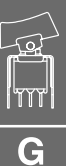


#### PART NO.

488701000 WHITE  
488702263 BLACK  
488703000 RED

Material: Nylon  
Finish: Matte

Rocker



# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## AVAILABLE HARDWARE

J90, J91 & J93 Actuators



**PART NO.**

598001000 WHITE  
598002263 BLACK  
598003000 RED

Material: Nylon  
Finish: Matte

J10 & J19 Actuators



**PART NO.**

769501000 WHITE  
769502263 BLACK  
769503000 RED

Material: Nylon  
Finish: Matte

Fits Z3 Termination  
female connector



**PART NO.**

530100000

Available in loose pieces.

Frame for J11 & J21 Actuators



**PART NO.**

764500746 BLACK ENAMEL  
764500747 WHITE ENAMEL  
764601106 RETAINING SPRING

Material: Spring Steel

Frame for J16 & J26 Actuators



**PART NO.**

459101000 WHITE  
459102000 BLACK  
459103000 RED

Material: Nylon  
Finish: Matte

Frame for J51, J61 & J91 Actuators



**PART NO.**

615601000 WHITE  
615602263 BLACK  
615603000 RED

Material: Nylon  
Finish: Matte

Frame for J19 Actuator



**PART NO.**

781000746 BLACK ENAMEL  
781000747 WHITE ENAMEL

Material: Spring Steel

Frame for J37 Actuator



**PART NO.**

445400746 BLACK ENAMEL  
445400747 WHITE ENAMEL

Material: Spring Steel

Frame for J52 & J62 Actuators



**PART NO.**

613301000 WHITE  
613302263 BLACK  
613303000 RED

Material: Nylon  
Finish: Matte

Rocker



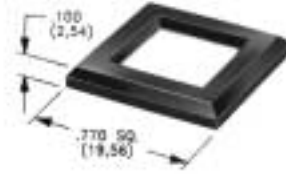
**NOTE:** Other colors available, consult Customer Service Center.

Dimensions are shown: IN (mm)  
Dimensions subject to change

# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## AVAILABLE HARDWARE

Frame for J50, J60 & J90 Actuators



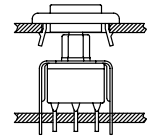
MATTE	GLOSS	
PART NO.	PART NO.	
486701000	486801000	WHITE
486702000	486802000	BLACK
486703000	486803000	RED

Material: Nylon

**NOTE:** Other colors available, consult Customer Service Center.

Frames snap into panel opening and are independent from switch mounting. Accurate positioning of the PC mounted switch relative to the panel opening is necessary to provide proper clearance between actuator and frame. Available in two basic styles and four panel thicknesses .047-.125 in. Material: Nylon. Finish: Matte.

### TYPICAL APPLICATION



### J1 & J2 Actuators



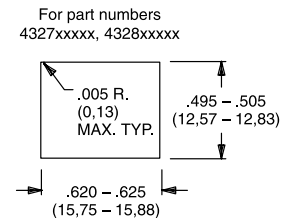
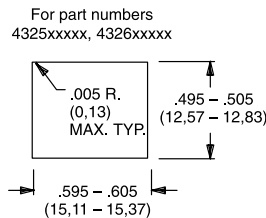
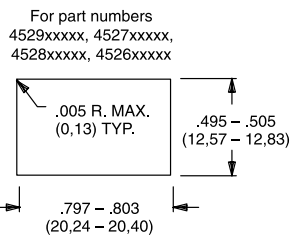
.047" (1,19) PANEL THK.	.062" (1,57) PANEL THK.	.090" (2,29) PANEL THK.	.125" (3,18) PANEL THK.
PART NO.	PART NO.	PART NO.	PART NO.
452901000	452701000	452801000	452601000
452902263	452702263	452802263	452602263
452903000	452703000	452803000	452603000
			WHITE
			BLACK
			RED

### J50, J60 & J90 Actuators



.047" (1,19) PANEL THK.	.062" (1,57) PANEL THK.	.090" (2,29) PANEL THK.	.125" (3,18) PANEL THK.
PART NO.	PART NO.	PART NO.	PART NO.
432501000	432601000	432701000	432801000
432502263	432602263	432702263	432802263
432503000	432603000	432703000	432803000
			WHITE
			BLACK
			RED

### PANEL MOUNTING



Rocker



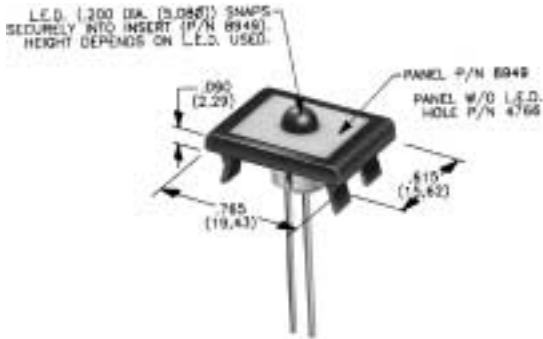
# C&K 7000 Series Miniature Rocker & Lever Handle Switches

## AVAILABLE HARDWARE

### Panel Inserts

Will fit Separate Snap-in frames for J50, J60 & J90 actuators

Above frames (part nos. 432XXXXXX) are also available with insert which accepts LED for indicator light assembly. Order insert separately from frame. Blank insert panel (without hole for LED) also available. **LED not included.**



PANEL INSERT WITH HOLE FOR LED

BLANK PANEL INSERT WITHOUT HOLE FOR LED

**PART NO.**

**PART NO.**

894901000  
894902000  
894903000

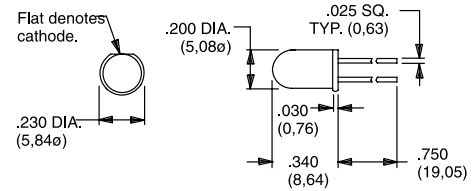
476601000 WHITE  
476602000 BLACK  
476603000 RED

**NOTE:** Special colors, custom markings available, consult Customer Service Center.

### LED INFORMATION

**Process Information:** Soldering to LED leads must be completed within 5 seconds at 500° F (260°C) maximum.

LEDs are not supplied with J52, J62 options. LED snaps into switch frame surrounding actuator and is wired externally.



Suggested LED for J52 & J62 options.  
Dimensions for reference only.

Rocker



G