Features/Benefits

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

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: 109 Ω min.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

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

TERMINAL SEAL: Epoxy. Refer to Soldering and Cleaning in Technical Data Section.

Epoxy terminal-seal compatible and are RoHS compliant.

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, matte-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. Refer to Soldering and Cleaning in Technical Data Section.


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 through G-24. 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 Applications

- Telecommunications
- Instrumentation
- Medical equipment

Typical Applications

- Medical equipment
## 7000 Series
### Miniature Rocker & Lever Handle Switches

#### SWITCH FUNCTION

<table>
<thead>
<tr>
<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>UL** MODEL NO.</th>
<th>CONNECTED TERMINALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP</td>
<td>7201</td>
<td>U21</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7203</td>
<td>U23</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7205</td>
<td>U25</td>
<td>N/A</td>
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<tr>
<td></td>
<td>7207</td>
<td>U27</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7208</td>
<td>U28</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7211*</td>
<td>U211*</td>
<td>2-3-5-6</td>
</tr>
<tr>
<td></td>
<td>7213*</td>
<td>U213*</td>
<td>2-3-5-4</td>
</tr>
<tr>
<td></td>
<td>7215*</td>
<td>U215*</td>
<td>2-3-5-6</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>UL** MODEL NO.</th>
<th>CONNECTED TERMINALS</th>
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</thead>
<tbody>
<tr>
<td>SP</td>
<td>7101</td>
<td>U11</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7103</td>
<td>U13</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7105</td>
<td>U15</td>
<td>N/A</td>
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<td>7107</td>
<td>U17</td>
<td>N/A</td>
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<td>7108</td>
<td>U18</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7109</td>
<td>U19</td>
<td>N/A</td>
</tr>
</tbody>
</table>

** SP**

- 25°
- POS 1, 2, 3
- C&K marking on opposite side
- Terminal Nos. For Reference Only
- Wiring for 3-way switch, see Section N

** SPDT**

- 27°
- POS 1, 2, 3
- C&K marking on opposite side
- Terminal Nos. For Reference Only
- Wiring for 3-way switch, see Section N

** DP**

- 27°
- POS 1, 2, 3
- C&K marking on opposite side
- Terminal Nos. For Reference Only
- Wiring for 3-way switch, see Section N

** DPDT**

- 27°
- POS 1, 2, 3
- C&K marking on opposite side
- Terminal Nos. For Reference Only
- Wiring for 3-way switch, see Section N

MOM. = Momentary

* U11 through U413 model nos. with all options when ordered with G, Q, R or S contact material.

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

Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change
### 7000 Series

**Miniature Rocker & Lever Handle Switches**

#### SWITCH FUNCTION

<table>
<thead>
<tr>
<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>UL** MODEL NO.</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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</thead>
<tbody>
<tr>
<td>3P</td>
<td>7301</td>
<td>U31</td>
<td>ON</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>7303</td>
<td>U33</td>
<td>OFF</td>
<td>OPEN</td>
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**3PDT**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>UL** MODEL NO.</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>7401</td>
<td>U41</td>
<td>ON</td>
<td>N/A</td>
</tr>
<tr>
<td>7405</td>
<td>U45</td>
<td>MOM.</td>
<td>OPEN</td>
</tr>
<tr>
<td>7411*</td>
<td>U411*</td>
<td>ON</td>
<td>2-3,5-4,8-9,11-10</td>
</tr>
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</table>

**4PDT**

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>UL** MODEL NO.</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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<tbody>
<tr>
<td>7401</td>
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<td>ON</td>
<td>N/A</td>
</tr>
<tr>
<td>7405</td>
<td>U45</td>
<td>MOM.</td>
<td>OPEN</td>
</tr>
<tr>
<td>7411*</td>
<td>U411*</td>
<td>ON</td>
<td>2-3,5-4,8-9,11-10</td>
</tr>
</tbody>
</table>

**Wiring for 3-way switch:** See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

---

**Notes:**
- MOM. = Momentary
- **U11 through U411 model nos.** with all options when ordered with G, Q, R or S contact material.
- Dimensions are shown: Inches (mm)
- Specifications and dimensions subject to change
- **Third Angle Projection**
7000 Series
Miniature Rocker & Lever Handle Switches

**ACTUATOR-PANEL REAR MOUNT**

<table>
<thead>
<tr>
<th>ACTUATOR</th>
<th>PANEL MOUNTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1</td>
<td>ACTUATOR–PANEL REAR MOUNT</td>
</tr>
<tr>
<td>J2</td>
<td>DIMPLES</td>
</tr>
<tr>
<td>J3</td>
<td>DIMPLES</td>
</tr>
<tr>
<td>J10</td>
<td>DIMPLES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>ACTUATOR COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>BLACK</td>
</tr>
<tr>
<td>1</td>
<td>WHITE</td>
</tr>
<tr>
<td>3</td>
<td>RED</td>
</tr>
</tbody>
</table>

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-21 through G-22. Hardware is available see Technical Data section of this catalog.

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

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

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27 mar 17

G-7

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

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


* For J50: Increase this dimension to .620/.625 (15.75/15.88) for .091/.125 (2.31/3.18) thk. panels.
7000 Series
Miniature Rocker & Lever Handle Switches

ACTUATOR–SNAP-IN FRONT MOUNT

**J51**  **ROCKER WITH FRAME, SNAP-IN**

- ACTUATOR COLOR
  - Option Code: 2  **BLACK**
  - Option Code: 1  **WHITE**
  - Option Code: 3  **RED**

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

- ACTUATOR COLOR
  - Option Code: 2  **BLACK**
  - Frame Color: **NONE**  No Frame Color
  - Option Code: 1  **WHITE**

**J60**  **LEVER, SNAP-IN**

- Option Code: 1  **WHITE**  **NONE**  No Frame Color

**J61**  **LEVER WITH FRAME, SNAP-IN**

- Option Code: 1  **WHITE**  **NONE**  No Frame Color

---

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-21 through G-22. J51, J52, J60 & J61 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

---

**OPTION CODE**  **ACTUATOR COLOR**

<table>
<thead>
<tr>
<th>Option Code</th>
<th>ACTUATOR COLOR</th>
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<tbody>
<tr>
<td>2</td>
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<tr>
<td>1</td>
<td>WHITE</td>
</tr>
<tr>
<td>3</td>
<td>RED</td>
</tr>
</tbody>
</table>

**OPTION CODE**  **FRAME COLOR**

- Option Code: 2  **BLACK**
- Option Code: 1  **WHITE**

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

**NOTE:** Actuators & frames available separately, see pages G-21 through G-22. J51, J52, J60 & J61 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

---

**PANEL MOUNTING**

**J51, J60 & J61 Actuators**

- Frame Color: **NONE**  No Frame Color

**J52 Actuator**

- Frame Color: **NONE**  No Frame Color

For J51, J52: Increase this dimension to .620/.625 (15.75/15.88) for .060/.125 (1.52/3.18) thk. panels.
### 7000 Series

#### Miniature Rocker & Lever Handle Switches

**ACTUATOR–SNAP-IN FRONT MOUNT**

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>ACTUATOR COLOR</th>
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<td>2</td>
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<tr>
<td>1</td>
<td>WHITE</td>
</tr>
<tr>
<td>3</td>
<td>RED</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>FRAME COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>BLACK</td>
</tr>
<tr>
<td>NONE</td>
<td>No Frame Color (J90 options)</td>
</tr>
<tr>
<td>1</td>
<td>WHITE</td>
</tr>
</tbody>
</table>

**ACTUATOR COLOR**

- 2 BLACK
- 1 WHITE
- 3 RED

**FRAME COLOR**

- 2 BLACK
- 1 WHITE


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

**OPTION CODE**

- **ACTUATOR COLOR**
  - 2 BLACK
  - 1 WHITE
  - 3 RED

- **FRAME COLOR**
  - 2 BLACK
  - 1 WHITE

**LED not included.**

For LED information, see page H-25.

**FINISH**

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

**NOTE:** Actuators & frames available separately, see pages G-21 through G-22. J62, J90 & J91 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

**OPTION CODE**

- **ACTUATOR COLOR**
  - 2 BLACK
  - 1 WHITE
  - 3 RED

- **FRAME COLOR**
  - 2 BLACK
  - 1 WHITE

*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.*

---

**ACTUATOR–SNAP-IN FRONT MOUNT**

**LED not included.**

For LED information, see page H-25.

**FINISH**

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

**NOTE:** Actuators & frames available separately, see pages G-21 through G-22. J62, J90 & J91 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

**OPTION CODE**

- **ACTUATOR COLOR**
  - 2 BLACK
  - 1 WHITE
  - 3 RED

- **FRAME COLOR**
  - 2 BLACK
  - 1 WHITE

*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.*

---

**ACTUATOR–SNAP-IN FRONT MOUNT**

**LED not included.**

For LED information, see page H-25.

**FINISH**

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

**NOTE:** Actuators & frames available separately, see pages G-21 through G-22. J62, J90 & J91 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z & Z3 terminations.

**OPTION CODE**

- **ACTUATOR COLOR**
  - 2 BLACK
  - 1 WHITE
  - 3 RED

- **FRAME COLOR**
  - 2 BLACK
  - 1 WHITE

*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.*
7000 Series
Miniature Rocker & Lever Handle Switches

ACTUATOR–REAR MOUNT

J11  ROCKER WITH FRAME

J19  ROCKER WITH FRAME

J21  LEVER WITH FRAME

J37  ROCKER WITH FRAME


Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change
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**7000 Series**

Miniature Rocker & Lever Handle Switches

---

**ACTUATOR–PC MOUNT**

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>ACTUATOR COLOR</th>
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<td>1</td>
<td>WHITE</td>
</tr>
<tr>
<td>3</td>
<td>RED</td>
</tr>
</tbody>
</table>

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.

7000 Series
Miniature Rocker & Lever Handle Switches

ACTUATOR–PC MOUNT

J60 LEVER

J90 LEVER

TERMINATIONS

Z SOLDER LUG

C PC THRU-HOLE

SPDT thru 4PDT

Not available with P, R or S contact materials. Available actuators, see pages G-7 through G-13.

W, W3, W5 WIRE WRAP

Option Code Dim 'A'

W .750 (19.05)
W3 .425 (10.80)
W5 1.305 (33.15)

SPDT thru 4PDT

NOTE: Available actuators, see pages G-7 through G-13.

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-21 through 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.

NOTES:

Available actuators, see pages G-7 through G-13.

Available actuators, see page G-22.

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

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**7000 Series**

**Miniature Rocker & Lever Handle Switches**

**TERMINATIONS**

A  **RIGHT ANGLE, PC THRU-HOLE**

- Actuator Shown In Pos. 1
- Dimensions shown: Inches (mm)

<table>
<thead>
<tr>
<th>TERMINATION</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>RIGHT ANGLE, SNAP-IN, PC THRU-HOLE</td>
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</tr>
<tr>
<td>AW3</td>
<td>RIGHT ANGLE, EXTENDED, PC THRU-HOLE</td>
<td></td>
</tr>
</tbody>
</table>

**PC MOUNTING**

- Terminal bend radii and lead-in manufacturing option.

**NOTE:** PC pattern must clear switch support leg.

A  **RIGHT ANGLE, PC THRU-HOLE**

- Actuator Shown In Pos. 1

**PC MOUNTING**

- Terminal bend radii and lead-in manufacturing option.

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

- Not available with I seal option. Available actuators, see pages G-6 and G-12.

**NOTE:** PC pattern must clear switch support leg.
7000 Series
Miniature Rocker & Lever Handle Switches

TERMINATIONS

A  RIGHT ANGLE, PC THRU-HOLE

7301J1ABE2  
Horizontal Actuation  
3PDT

Actuator Shown In Pos. 1

Specifications and dimensions subject to change

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TERMINATIONS

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

7101J1AV2BE2  
Vertical Actuation  
SPDT

Actuator Shown In Pos. 1

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

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

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

PC MOUNTING

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

7000 Series  
Miniature Rocker & Lever Handle Switches

TERMINATIONS  

A  RIGHT ANGLE, PC THRU-HOLE

7301J1ABE2  
Horizontal Actuation  
3PDT

Actuator Shown In Pos. 1

Specifications and dimensions subject to change

www.ckswitches.com

TERMINATIONS

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

7101J1AV2BE2  
Vertical Actuation  
SPDT

Actuator Shown In Pos. 1

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

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

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

PC MOUNTING

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

7000 Series  
Miniature Rocker & Lever Handle Switches

TERMINATIONS  

A  RIGHT ANGLE, PC THRU-HOLE

7301J1ABE2  
Horizontal Actuation  
3PDT

Actuator Shown In Pos. 1

Specifications and dimensions subject to change

www.ckswitches.com

TERMINATIONS

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

7101J1AV2BE2  
Vertical Actuation  
SPDT

Actuator Shown In Pos. 1

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

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

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

PC MOUNTING

Dimensions are shown: Inches (mm)  
Specifications and dimensions subject to change
7000 Series
Miniature Rocker & Lever Handle Switches

TERMINATIONS

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

Actuator Shown In Pos. 1

TERMINATIONS

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

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

TERMINATIONS

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

Actuator Shown In Pos. 1

TERMINATIONS

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

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

PC MOUNTING

PC MOUNTING
7000 Series
Miniature Rocker & Lever Handle Switches

TERMINATIONS

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

7401J1AV2BE2
Vertical Actuation
4PDT

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

7101J1V5BE2
Vertical Actuation
SPDT

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

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

---

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.
# 7000 Series

## Miniature Rocker & Lever Handle Switches

### TERMINATIONS

#### V5

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

**TERMINATIONS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V5</td>
<td>Vertical Right Angle, PC Thru-Hole, .150” Pitch</td>
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</tbody>
</table>

#### V51

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

**TERMINATIONS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>V51</td>
<td>Vertical Right Angle, Snap-In, PC Thru-Hole, .150” Pitch</td>
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</tbody>
</table>

Not available with I seal option. Available actuators, see pages G-6 and G-12. Terminal bend radii and lead-in manufacturing option.

#### V2, V6, V7, V8

**VERTICAL MOUNT, V-BRACKET**

#### V61

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

**TERMINATIONS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>V61</td>
<td>Vertical Mount, V-Bracket, Snap-In</td>
</tr>
</tbody>
</table>

Not available with I seal option. Available actuators, see pages G-6 and G-12.

---

**Dimensions are shown: Inches (mm)**

Specifications and dimensions subject to change.
## 7000 Series
### Miniature Rocker & Lever Handle Switches

#### TERMINATIONS

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

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

### Actuator Shown In Pos. 1

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

www.ckswitches.com

Not available with I seal option.  
Available actuators, see pages G-6 and G-12.

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

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

#### Not available with I seal option.  
Available actuators, see pages G-6 and G-12.

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

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

#### Not available with I seal option.  
Available actuators, see pages G-6 and G-12.

---

**7201J1__BE2**  
DPDT

**7301J1__BE2**  
3PDT

**7401J1__BE2**  
4PDT

---

**OPTION CODE**  
**DIM 'A'**

- **V2, V21**  
.555 (14.10)

- **V6, V61**  
.460 (11.68)

- **V7**  
.630 (16.00)

- **V8**  
.953 (24.21)

---

**OPTION CODE**  
**DIM 'A'**

- **V2, V21**  
.555 (14.10)

- **V7**  
.630 (16.00)

- **V8**  
.953 (24.21)

---

**OPTION CODE**  
**DIM 'A'**

- **V2, V21**  
.555 (14.10)

- **V7**  
.630 (16.00)

- **V8**  
.953 (24.21)

---

**Dimensions are shown: Inches (mm)**

Specifications and dimensions subject to change
7000 Series
Miniature Rocker & Lever Handle Switches

V3, V4, V9 VERTICAL MOUNT, V-BRACKET
V31 VERTICAL MOUNT, V-BRACKET, SNAP-IN

V3, V4, V9 VERTICAL MOUNT, V-BRACKET
V31 VERTICAL MOUNT, V-BRACKET, SNAP-IN

V4, V9 VERTICAL MOUNT, V-BRACKET

Not available with I seal option.
Available actuators, see pages G-6 and G-12.

Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change
www.ckswitches.com
TERMINATIONS

V4, V9 VERTICAL MOUNT, V-BRACKET

CONTACT MATERIAL

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>GOLD 1</td>
<td>GOLD 1</td>
<td>LOW LEVEL/DRY CIRCUIT</td>
</tr>
<tr>
<td>P</td>
<td>SILVER 4,5</td>
<td>SILVER 5</td>
<td>POWER</td>
</tr>
<tr>
<td>Q</td>
<td>SILVER 5</td>
<td>MATTE-TIN 6</td>
<td>5 AMPS @ 120 V AC OR 28 V DC; 2 AMPS @ 250 V AC.</td>
</tr>
<tr>
<td>S</td>
<td>SILVER 5</td>
<td>MATTE-TIN 6</td>
<td>0.4 VA MAX @ 20 V AC OR DC MAX.</td>
</tr>
<tr>
<td>G</td>
<td>GOLD OVER SILVER 2,3</td>
<td>MATTE-TIN 6</td>
<td>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.</td>
</tr>
<tr>
<td>R</td>
<td>SILVER 5</td>
<td>MATTE-TIN 6</td>
<td>LOW LEVEL/DRY CIRCUIT OR POWER</td>
</tr>
</tbody>
</table>

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

1 CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
2 END CONTACTS: Coin silver, with gold plate over nickel plate.
3 CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
4 END CONTACTS: Coin silver, silver plated.
5 CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
6 TERMINALS: Copper alloy, with matte-tin over nickel plate.

NOTICE: Any models supplied with G, B, G, S, P & R contact material are RoHS compliant.

SEAL

E EPOXY SEAL

I EPOXY POTTED BASE

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

<table>
<thead>
<tr>
<th>Qty</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>761103000</td>
<td>Standoffs</td>
</tr>
<tr>
<td>2</td>
<td>764100000</td>
<td>Mounting screws</td>
</tr>
<tr>
<td>2</td>
<td>764200000</td>
<td>Lock washers</td>
</tr>
<tr>
<td>2</td>
<td>764300000</td>
<td>Hex nuts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J1 &amp; J2 actuators</th>
<th>J3 actuators</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NO.</td>
<td>PANEL THK.</td>
</tr>
<tr>
<td>761103000</td>
<td>1/8 IN. (3,18)</td>
</tr>
<tr>
<td>770603000</td>
<td>1/8 IN. (3,18)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J10 actuators</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NO.</td>
</tr>
<tr>
<td>770703000</td>
</tr>
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</table>

**MATERIAL**


<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>PART NO.</td>
<td>PART NO.</td>
<td>PART NO.</td>
</tr>
<tr>
<td>776A01000 WHITE</td>
<td>426D01000 WHITE</td>
<td>431D01000 WHITE</td>
</tr>
<tr>
<td>776A02263 BLACK</td>
<td>426D02263 BLACK</td>
<td>431D02263 BLACK</td>
</tr>
<tr>
<td>776A03000 RED</td>
<td>426D03000 RED</td>
<td>431D03000 RED</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
</tr>
<tr>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>J50, J51 &amp; J52 Actuators</th>
<th>J60, J61 &amp; J62 Actuators</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NO.</td>
<td>PART NO.</td>
</tr>
<tr>
<td>775A01000 WHITE</td>
<td>598101000 WHITE</td>
</tr>
<tr>
<td>775A02263 BLACK</td>
<td>598103000 RED</td>
</tr>
<tr>
<td>775A03000 RED</td>
<td>Material: Nylon</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
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<td>Finish: Matte</td>
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</table>
7000 Series
Miniature Rocker & Lever Handle Switches

AVAILABLE HARDWARE

<table>
<thead>
<tr>
<th>J90 &amp; J91 Actuators</th>
<th>J10 &amp; J19 Actuators</th>
<th>Fits Z3 Termination female connector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
</tr>
<tr>
<td>598001000 WHITE</td>
<td>769501000 WHITE</td>
<td>530100000</td>
</tr>
<tr>
<td>598002263 BLACK</td>
<td>769502263 BLACK</td>
<td></td>
</tr>
<tr>
<td>598003000 RED</td>
<td>769503000 RED</td>
<td></td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
<td>Available in loose pieces.</td>
</tr>
<tr>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
<td></td>
</tr>
</tbody>
</table>

Frame for J11 & J21 Actuators

Frame for J19 Actuator

Frame for J16 & J26 Actuators

Frame for J57 Actuator

Frame for J37 Actuator

Frame for J51, J61 & J91 Actuators

Frame for J62 & J62 Actuators

Frame for J16 & J26 Actuators

Frame for J19 Actuator

Frame for J57 Actuator

Frame for J37 Actuator

Frame for J51, J61 & J91 Actuators

Frame for J62 & J62 Actuators

<table>
<thead>
<tr>
<th>AVAILABLE HARDWARE</th>
<th>AVAILABLE HARDWARE</th>
<th>AVAILABLE HARDWARE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
</tr>
<tr>
<td>764500746 BLACK ENAMEL</td>
<td>459101000 WHITE</td>
<td>615601000 WHITE</td>
</tr>
<tr>
<td>764500747 WHITE ENAMEL</td>
<td>459102000 BLACK</td>
<td>615602263 BLACK</td>
</tr>
<tr>
<td>764601106 RETAINING SPRING</td>
<td>459103000 RED</td>
<td>615603000 RED</td>
</tr>
<tr>
<td>Material: Spring Steel</td>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
</tr>
<tr>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
</tr>
</tbody>
</table>

Frame for J19 Actuator

Frame for J57 Actuator

Frame for J37 Actuator

Frame for J51, J61 & J91 Actuators

Frame for J62 & J62 Actuators

<table>
<thead>
<tr>
<th>AVAILABLE HARDWARE</th>
<th>AVAILABLE HARDWARE</th>
<th>AVAILABLE HARDWARE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
</tr>
<tr>
<td>781000746 BLACK ENAMEL</td>
<td>445400746 BLACK ENAMEL</td>
<td>613301000 WHITE</td>
</tr>
<tr>
<td>781000747 WHITE ENAMEL</td>
<td></td>
<td>613302263 BLACK</td>
</tr>
<tr>
<td>781000748 SPRING</td>
<td></td>
<td>613303000 RED</td>
</tr>
<tr>
<td>Material: Spring Steel</td>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
</tr>
<tr>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
</tr>
</tbody>
</table>

Frame for J19 Actuator

Frame for J57 Actuator

Frame for J37 Actuator

Frame for J51, J61 & J91 Actuators

Frame for J62 & J62 Actuators

<table>
<thead>
<tr>
<th>AVAILABLE HARDWARE</th>
<th>AVAILABLE HARDWARE</th>
<th>AVAILABLE HARDWARE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
<td><strong>PART NO.</strong></td>
</tr>
<tr>
<td>613301000 WHITE</td>
<td>613302263 BLACK</td>
<td>613303000 RED</td>
</tr>
<tr>
<td>613301000 WHITE</td>
<td>613302263 BLACK</td>
<td>613303000 RED</td>
</tr>
<tr>
<td>613301000 WHITE</td>
<td>613302263 BLACK</td>
<td>613303000 RED</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
</tr>
<tr>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
</tr>
</tbody>
</table>

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

www.ckswitches.com
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.

**J1 & J2 Actuators**

<table>
<thead>
<tr>
<th>.047&quot; (1,19) PANEL THK.</th>
<th>.062&quot; (1,57) PANEL THK.</th>
<th>.090&quot; (2,29) PANEL THK.</th>
<th>.125&quot; (3,18) PANEL THK.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NO.</td>
<td>PART NO.</td>
<td>PART NO.</td>
<td>PART NO.</td>
</tr>
<tr>
<td>452902263</td>
<td>452702263</td>
<td>452802263</td>
<td>452602263 BLACK</td>
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</table>

**J50, J60 & J90 Actuators**

<table>
<thead>
<tr>
<th>.047&quot; (1,19) PANEL THK.</th>
<th>.062&quot; (1,57) PANEL THK.</th>
<th>.090&quot; (2,29) PANEL THK.</th>
<th>.125&quot; (3,18) PANEL THK.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART NO.</td>
<td>PART NO.</td>
<td>PART NO.</td>
<td>PART NO.</td>
</tr>
<tr>
<td>432502263</td>
<td>432602263</td>
<td>432702263</td>
<td>432802263 BLACK</td>
</tr>
</tbody>
</table>

**TYPICAL APPLICATION**

J1 & J2 Actuators

J50, J60 & J90 Actuators

**FRAME MOUNTING**

For part numbers 4529xxxxx, 4527xxxxx, 4528xxxxx

<table>
<thead>
<tr>
<th>.05 R. MAX. (0,13) TYP.</th>
<th>.495 – .505 (12,57 – 12,83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.797 – 803 (20,24 – 20,40)</td>
<td></td>
</tr>
</tbody>
</table>

For part numbers 4328xxxxx, 4326xxxxx

<table>
<thead>
<tr>
<th>.05 R. (0,13) MAX. TYP.</th>
<th>.495 – .505 (12,57 – 12,83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.595 – 605 (15,11 – 15,37)</td>
<td></td>
</tr>
</tbody>
</table>

For part numbers 4327xxxxx, 4329xxxxx

<table>
<thead>
<tr>
<th>.05 R. (0,13) MAX. TYP.</th>
<th>.495 – .505 (12,57 – 12,83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.620 – 625 (15,75 – 15,88)</td>
<td></td>
</tr>
</tbody>
</table>
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.

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.

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