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

INSULATION RESISTANCE: 109 Ω min.

ELECTRICAL STRENGTH: 1000 Vrms min. @ sea level.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30ºC to 85ºC.

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

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


Contact Material

- B Gold
- P Gold, matte tin
- S Silver
- Q Silver, matte-tin
- G Gold over silver
- R Gold over silver, matte-tin

Seal

- E Epoxy
- P Epoxy potted base

Actuator Color

- 2 Black
- 1 White
- 3 Red
- Frame Color

- 2 Black
- 1 White

Metal Frame Color

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

Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change

www.ckswitches.com

G-4
## 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>SWITCH FUNCTION</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>POS. 1</td>
<td>POS. 2</td>
<td>POS. 3</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>SP</td>
<td>7101</td>
<td>U11</td>
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<td>U211*</td>
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<tr>
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#### DPDT

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<td>7203*</td>
<td>U213*</td>
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<td>ON</td>
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<tr>
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<td>U215*</td>
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<tr>
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<td>U217*</td>
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<td>U2131*</td>
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<td>U2151*</td>
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</table>

**UL** = Underwriters Laboratories

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

Dimensions are shown: Inches (mm)

Specifications and dimensions subject to change

www.ckswitches.com
## 7000 Series

### Miniature Rocker & Lever Handle Switches

<table>
<thead>
<tr>
<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>MODEL NO.</th>
<th>SWITCH FUNCTION</th>
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<td>7301</td>
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<tr>
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<td>OFF</td>
<td>OPEN</td>
</tr>
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</table>

**3PDT**

![3PDT Diagram](image)

Part number shown: 7301J1ZQE2

<table>
<thead>
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<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>MODEL NO.</th>
<th>SWITCH FUNCTION</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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</thead>
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<td>7401</td>
<td>U41</td>
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<td>OPEN</td>
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<td>7411*</td>
<td>U411*</td>
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<td>ON</td>
<td>2-3,5-6,8-9-11-12</td>
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</table>

**4PDT**

![4PDT Diagram](image)

Part number shown: 7401J1ZQE2

MOM. = Momentary

** U11 through U411 model nos. with all options when ordered with G, Q, R or S contact material.

* Wiring for 3-way switch: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.
7000 Series
Miniature Rocker & Lever Handle Switches

ACTUATOR–PANEL REAR MOUNT

J1 ROCKER

J2 LEVER

J3 ROCKER

J10 ROCKER

OPTION CODE | ACTUATOR COLOR
---|---
2 | 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-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.

Panel Mounting

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

### ACTUATOR–SNAP-IN FRONT MOUNT

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>ACTUATOR COLOR</th>
</tr>
</thead>
<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>

<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</td>
</tr>
<tr>
<td>1</td>
<td>WHITE</td>
</tr>
</tbody>
</table>

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. J15, J16, J25, J26, J50 & J51 Actuators available with 71XX, 72XX, U1XX & U2XX models and C, W-W5, Z and Z3 terminations.

### J15 ROCKER, SNAP-IN

<table>
<thead>
<tr>
<th>ACTUATOR COLOR</th>
<th>FRAME COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLACK</td>
<td>BLACK</td>
</tr>
<tr>
<td>WHITE</td>
<td>WHITE</td>
</tr>
<tr>
<td>RED</td>
<td>RED</td>
</tr>
</tbody>
</table>

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

### PANEL MOUNTING

- J15, J16, J25 & J26 Actuators
- J50 Actuator

### OPTION CODE

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

### J16 ROCKER WITH FRAME, SNAP-IN

**NOTE:** No frame color choice required.

### J25 LEVER, SNAP-IN

**NOTE:** No frame color choice required.

### J26 LEVER WITH FRAME, SNAP-IN

**NOTE:** No frame color choice required.

### J50 ROCKER, SNAP-IN

**NOTE:** No frame color choice required.

---

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

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7000 Series
Miniature Rocker & Lever Handle Switches

ACTUATOR–SNAP-IN FRONT MOUNT

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

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

**J60** LEVER, SNAP-IN

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

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


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

No frame color choice required

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

**OPTION CODE**

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

**OPTION CODE**

<table>
<thead>
<tr>
<th>FRAME COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 BLACK</td>
</tr>
<tr>
<td>NONE</td>
</tr>
</tbody>
</table>

No Frame Color

(J15 or J25 options)

(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**

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

**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

**OPTION CODE** | **FRAME COLOR**
--- | ---
2 | BLACK
NONE | No Frame Color (J90 options)
1 | WHITE

**LED not included.**
For LED information, see page H-25.

* 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

---

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


---

**OPTION CODE** | **ACTUATOR COLOR**
---|---
2 | BLACK
1 | WHITE
3 | RED

**OPTION CODE** | **FRAME COLOR**
---|---
2 | BLACK
1 | WHITE

---

**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.

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

- **SPDT thru 4PDT**
  - Not available with P, R or S contact materials. Available actuators, see pages G-7 through G-13.

**J90** LEVER

- **SPDT thru 4PDT**
  - Not available with P, R or S contact materials. Available actuators, see pages G-7 through G-13.

#### TERMINATIONS

**Z** SOLDER LUG

**C** PC THRU-HOLE

**W, W3, W5** WIRE WRAP

**SPDT thru 4PDT**

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


**SPDT thru 4PDT**

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

**SPDT thru 4PDT**

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

**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.

Finish: Matte. Other colors, custom actuator markings and legends available, consult Customer Service Center.
7000 Series
Miniature Rocker & Lever Handle Switches

TERMINATIONS

A  RIGHT ANGLE, PC THRU-HOLE

Actuator Shown in Pos. 1

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-6 and G-12. 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

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

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

A  RIGHT ANGLE, PC THRU-HOLE

7301J1ABE2
Horizontal Actuation
3PDT

Actuator Shown In Pos. 1

TERMINATIONS

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

7101J1AV2BE2
Vertical Actuation
SPDT

Actuator Shown In Pos. 1

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.
### 7000 Series

**Miniature Rocker & Lever Handle Switches**

**TERMINATIONS**

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

```
ACTUATOR SHOWN IN POS. 1
```

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

```
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.

---

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

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

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

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

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.

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

TERMINATIONS

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

Actuator Shown In Pos. 1

**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.

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

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

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

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

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

<table>
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<tr>
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</thead>
</table>

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

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---

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

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

<table>
<thead>
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</thead>
</table>

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

www.ckswitches.com

---

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

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

<table>
<thead>
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</thead>
</table>

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

www.ckswitches.com

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

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<table>
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<th>OPTION CODE</th>
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<tr>
<td>V2, V21</td>
<td>.555 (14,10)</td>
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<tr>
<td>V7</td>
<td>.630 (16,00)</td>
</tr>
<tr>
<td>V8</td>
<td>.953 (24,21)</td>
</tr>
</tbody>
</table>

---

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

---

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

---

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
7000 Series
Miniature Rocker & Lever Handle Switches

V3, V4, V9
VERTICAL MOUNT, V-BRACKET

V31
VERTICAL MOUNT, V-BRACKET, SNAP-IN

Actuator Shown In Pos. 1

PC MOUNTING

7101J1__BE2
SPDT

OPTION CODE DIM 'A'
V3, V31 .460 (11.68)
V4 .630 (16.00)
V9 1.150 (29.21)

V3, V4, V9
VERTICAL MOUNT, V-BRACKET

V31
VERTICAL MOUNT, V-BRACKET, SNAP-IN

Actuator Shown In Pos. 1

PC MOUNTING

7201J1__BE2
DPDT

OPTION CODE DIM 'A'
V3, V31 .460 (11.68)
V4 .630 (16.00)
V9 1.150 (29.21)

V4, V9
VERTICAL MOUNT, V-BRACKET

Actuator Shown In Pos. 1

PC MOUNTING

7301J1__BE2
3PDT

OPTION CODE DIM 'A'
V4 .630 (16.00)
V9 1.150 (29.21)

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

15 Jan 21
G-20
www.ckswitches.com
7000 Series
Miniature Rocker & Lever Handle Switches

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

¹ Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.
² CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
³ END CONTACTS: Coin silver, with gold plate over nickel plate.
⁴ CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
⁵ END CONTACTS: Coin silver, silver plated.
⁶ CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.

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

EPOXY SEAL

EPOXY POTTED BASE

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

**TYPICAL ASSEMBLY**

**SCREW**

**PANEL THICKNESS**

**STAND-OFF LENGTH**

**LOCK WASHER**

**NUT**

**STAND-OFF LENGTH**

**J1 & J2 actuators**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>PANEL THK.</th>
<th>STANDOFF LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>761103000</td>
<td>1/8 IN. (3,18)</td>
<td>.233 (5.92)</td>
</tr>
</tbody>
</table>

**J3 actuators**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>PANEL THK.</th>
<th>STANDOFF LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>770603000</td>
<td>1/8 IN. (3,18)</td>
<td>.233 (5.92)</td>
</tr>
</tbody>
</table>

**J10 actuators**

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>PANEL THK.</th>
<th>STANDOFF LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>770703000</td>
<td>1/8 IN. (3,18)</td>
<td>.233 (5.92)</td>
</tr>
</tbody>
</table>

**MATERIAL**

# 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 RED</td>
</tr>
<tr>
<td>598002263 BLACK</td>
<td>769502263 BLACK</td>
<td>Available in loose pieces.</td>
</tr>
<tr>
<td>598003000 RED</td>
<td>769503000 RED</td>
<td></td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Material: Nylon</td>
<td></td>
</tr>
<tr>
<td>Finish: Matte</td>
<td>Finish: Matte</td>
<td></td>
</tr>
</tbody>
</table>

Frame for J11 & J21 Actuators

**PART NO.**
- 764500746 BLACK ENAMEL
- 764500747 WHITE ENAMEL
- 764501106 RETAINING SPRING

Material: Spring Steel

Frame for J19 Actuator

**PART NO.**
- 781000746 BLACK ENAMEL
- 781000747 WHITE ENAMEL

Material: Spring Steel

Frame for J51, J61 & J91 Actuators

**PART NO.**
- 613301000 WHITE
- 613302263 BLACK
- 613303000 RED

Material: Nylon
Finish: Matte

Frame for J16 & J26 Actuators

**PART NO.**
- 459101000 WHITE
- 459102000 BLACK
- 459103000 RED

Material: Nylon
Finish: Matte

Frame for J57 Actuator

**PART NO.**
- 445400746 BLACK ENAMEL

Material: Spring Steel

Frame for J37 Actuator

**PART NO.**
- 615601000 WHITE
- 615602263 BLACK
- 615603000 RED

Material: Nylon
Finish: Matte

Frame for J62 & J62 Actuators

**PART NO.**
- 615601000 WHITE
- 615602263 BLACK
- 615603000 RED

Material: Nylon
Finish: Matte

---

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.

### TYPICAL APPLICATION

![Typical Application Diagram](image)

### AVAILABLE HARDWARE

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. 452902263</td>
<td>PART NO. 452702263</td>
<td>PART NO. 452802263</td>
<td>PART NO. 452902263 BLACK</td>
</tr>
</tbody>
</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. 432502263</td>
<td>PART NO. 432602263</td>
<td>PART NO. 432702263</td>
<td>PART NO. 432802263 BLACK</td>
</tr>
</tbody>
</table>

### PANEL MOUNTING

- **For part numbers 4529xxxxx, 4527xxxxx, 4528xxxxx**
  - \(.005 R. MAX. (0,13) TYP.\)
  - \(.495 - .505 (12,57 - 12,83)\)
  - \(.797 - .803 (20,24 - 20,40)\)

- **For part numbers 4325xxxxx, 4326xxxxx**
  - \(.005 R. (0,13) MAX. TYP.\)
  - \(.495 - .505 (12,57 - 12,83)\)
  - \(.595 - .605 (15,11 - 15,37)\)

- **For part numbers 4327xxxxx, 4328xxxxx**
  - \(.005 R. (0,13) MAX. TYP.\)
  - \(.495 - .505 (12,57 - 12,83)\)
  - \(.620 - .625 (15,75 - 15,88)\)
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.**

**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.

**Panel Insert with hole for LED**

| PART NO. | 894902000 |

**Blank Panel Insert without hole for LED**

| PART NO. | 476602000 |

**NOTE:** Suggested LED for J52 & J62 options. Dimensions for reference only.