Sealed Miniature Rocker and Lever Handle Switches

Features/Benefits
- Sealed against solder and cleaning process contaminants
- ESD Resistance—all actuator options
- Rocker, case & bushing UL 94V-0
- RoHS compliant

Specifications
CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material (E1XX & E2XX Models): 7.5 AMPS @ 125 V AC or 28 V DC; 3 AMPS @ 250 V AC. (E3XX Models): 5 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC. See page G-36 for additional ratings.

ELECTRICAL LIFE: E1XX and E2XX models: 40,000 make-and-break cycles at full load. E3XX models: 30,000 cycles.

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

INSULATION RESISTANCE: 10^{9} Ω min.

ELECTROSTATIC DISCHARGE (ESD) OPTION: All actuator options: 15,000 V DC max. @ sea level, actuator to terminals.

DIELECTRIC STRENGTH: 1000 Vrms min. @ sea level.

OPERATING TEMPERATURE: –30ºC to 85ºC.

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

Materials
CASE & BUSHING: Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0).

ACTUATOR: Nylon, black standard, internal o-ring seal standard with all actuators.

FRAME: Spring steel, black standard.

SWITCH SUPPORT: Brass or steel, matte-tin plated.

ACTUATOR PIVOT & MOUNTING BRACKET: Nylon.

ACTUATOR PIVOT RETAINER: Stainless steel.

CONTACTS & TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page G-36 for additional contact materials.

TERMINAL SEAL: Epoxy.


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

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

Build-A-Switch
To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages G-26 through G-38. For additional options not shown in catalog, consult Customer Service Center. All models are process sealed to withstand machine soldering temperatures and pressure wash cleaning methods.

Switch Function
E101 SP On-None-On
E103 SP On-Off-On
E105 SP Mom.-Off-Mom.
E107 SP On-Off-Mom.
E108 SP On-None-Mom.
E201 DP On-None-Mom.
E203 DP On-Off-On
E205 DP Mom.-Off-Mom.
E207 DP On-Off-Mom.
E208 DP On-None-Mom.
E211 DP On-On-On
E213 DP On-On-Mom.
E215 DP Mom.-On-Mom.
E301 3P On-None-On

Actuator
J1 .531 long rocker
J2 Lever
J3 90° long rocker
J11 Rocker with frame
J21 Lever with frame
J50 .362° long rocker
J60 Lever
J90 Lever

Terminations
A Right angle, PC thru-hole
AV2 Vertical right angle, PC thru-hole
C PC Thru-hole
Z Solder lug
A3 Right angle, snap-in, PC thru-hole
AV3 Vertical right angle, snap-in, PC thru-hole
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
V21 .555" high, V-bracket, snap-in
V31 .460" high, V-bracket, snap-in

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

Seal
E Epoxy

Actuator Color
2 Black
3 Red

Frame Color
2 Black
NONE No frame color required

Metal Frame Color
(J11, J21 Actuators)
2 Black

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

**SWITCH FUNCTION**

<table>
<thead>
<tr>
<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>SWITCH FUNCTION</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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<tbody>
<tr>
<td>SP</td>
<td>E101</td>
<td>ON</td>
<td>NONE</td>
<td>ON</td>
</tr>
<tr>
<td></td>
<td>E103</td>
<td>ON</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td></td>
<td>E105</td>
<td>MOM.</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td></td>
<td>E107</td>
<td>ON</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td></td>
<td>E108</td>
<td>ON</td>
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**SPDT**

<table>
<thead>
<tr>
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<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>POS. 1</td>
<td>POS. 2</td>
<td>POS. 3</td>
</tr>
<tr>
<td>E201</td>
<td>ON</td>
<td>NONE</td>
<td>ON</td>
</tr>
<tr>
<td>E203</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>E205</td>
<td>MOM.</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td>E207</td>
<td>ON</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td>E208</td>
<td>ON</td>
<td>NONE</td>
<td>MOM.</td>
</tr>
<tr>
<td>E211**</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>E213**</td>
<td>ON</td>
<td>ON</td>
<td>MOM.</td>
</tr>
<tr>
<td>E215**</td>
<td>MOM.</td>
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<td>MOM.</td>
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**DP**

<table>
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<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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<td></td>
<td>POS. 1</td>
<td>POS. 2</td>
<td>POS. 3</td>
</tr>
<tr>
<td>E101</td>
<td>ON</td>
<td>NONE</td>
<td>ON</td>
</tr>
<tr>
<td>E103</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>E105</td>
<td>MOM.</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td>E107</td>
<td>ON</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td>E108</td>
<td>ON</td>
<td>NONE</td>
<td>MOM.</td>
</tr>
<tr>
<td>E211**</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>E213**</td>
<td>ON</td>
<td>ON</td>
<td>MOM.</td>
</tr>
<tr>
<td>E215**</td>
<td>MOM.</td>
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<td>MOM.</td>
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</table>

**DPDT**

<table>
<thead>
<tr>
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<th>SWITCH FUNCTION</th>
<th>CONNECTED TERMINALS</th>
<th>SCHEMATIC</th>
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</thead>
<tbody>
<tr>
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<td>POS. 1</td>
<td>POS. 2</td>
<td>POS. 3</td>
</tr>
<tr>
<td>E201</td>
<td>ON</td>
<td>NONE</td>
<td>ON</td>
</tr>
<tr>
<td>E203</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td>E205</td>
<td>MOM.</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td>E207</td>
<td>ON</td>
<td>OFF</td>
<td>MOM.</td>
</tr>
<tr>
<td>E208</td>
<td>ON</td>
<td>NONE</td>
<td>MOM.</td>
</tr>
<tr>
<td>E211**</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>E213**</td>
<td>ON</td>
<td>ON</td>
<td>MOM.</td>
</tr>
<tr>
<td>E215**</td>
<td>MOM.</td>
<td>ON</td>
<td>MOM.</td>
</tr>
</tbody>
</table>

**General Notes:**
- **Wiring for 3-way switch:** Hardware available separately, see Technical Data section of this catalog.
- All models with all options when ordered with G, Q, R or S contact material.

---

**C&K** 15 Jan 21

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Sealed Miniature Rocker and Lever Handle Switches

### SWITCH FUNCTION

<table>
<thead>
<tr>
<th>NO. POLES</th>
<th>MODEL NO.</th>
<th>ACTUATOR--PANEL REAR MOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3P</td>
<td>E301</td>
<td></td>
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</table>

#### CONNECTED TERMINALS

<table>
<thead>
<tr>
<th>ACTUATOR--PANEL REAR MOUNT</th>
<th>POS. 1</th>
<th>POS. 2</th>
<th>POS. 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;K marking on opposite side</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C&amp;K marking on opposite side</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### SCHEMATIC

3PDT

Part number shown: E301J1ZBE2

**Wiring for 3-way switch**, see Technical Data section of this catalog.

All models with all options when ordered with G, Q, R and S contact material.

### OPTION CODE

<table>
<thead>
<tr>
<th>CODE</th>
<th>ACTUATOR COLOR</th>
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<tbody>
<tr>
<td>2</td>
<td>BLACK</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 switches with panel mounting bracket. Internal o-ring actuator seal standard. Actuators available separately, see page G-36. Hardware available separately, see Technical Data section of this catalog. J1, J2 actuators available with C, 2 or Z3 terminations.

---

**J1 LEVER**

- Lebel: 0.060 (1.500)
- Base plate: 0.060 (1.500)
- Actuator: 0.100 (2.500)
- Lever: 0.078 (1.98)
- Epoxy Seal: 0.125 (3.18)
- Terminal Nos.:
  - 1: 0.78 (1.98) 131 (3.33)
  - 2: 0.094 (2.39)
  - 3: 0.094 (2.39)

---

**J2 LEVER**

- Lebel: 0.060 (1.500)
- Base plate: 0.060 (1.500)
- Actuator: 0.100 (2.500)
- Lever: 0.078 (1.98)
- Epoxy Seal: 0.125 (3.18)
- Terminal Nos.:
  - 1: 0.78 (1.98) 131 (3.33)
  - 2: 0.094 (2.39)
  - 3: 0.094 (2.39)

---

**PANEL MOUNTING**

- J1 & J2 Actuators
  - 0.100 (2.50)
  - 0.094 (2.39)
  - 0.937 (23.90)
  - 0.937 (23.90)
  - 0.365 (9.27)
- J1 & J2 Actuators
  - 0.100 (2.50)
  - 0.094 (2.39)
  - 0.937 (23.90)
  - 0.937 (23.90)
  - 0.365 (9.27)
## E Series
Sealed Miniature Rocker and Lever Handle Switches

### ACTUATOR–REAR MOUNT

**J11**  ROCKER WITH FRAME

![Image of J11 Rocker with Frame]

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

### ACTUATOR–PC MOUNT

**J1**  ROCKER

![Image of J1 Rocker]

**J2**  LEVER

![Image of J2 Lever]

### Actuator Finish
Matte. Matte frame finish: gloss. Other colors, custom actuator markings and legends available, consult Customer Service Center.

### Internal O-Ring Actuator Seal
Standard. Actuators & frames available separately, see page G-36. Hardware available separately, see Technical Data section of this catalog.

### J11 & J21 Actuators
Available with C, Z & Z3 terminations.

### Option Code

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

### Frame Color

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>FRAME COLOR</th>
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<tbody>
<tr>
<td>2</td>
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</tr>
</tbody>
</table>

**NOTE:** This option has reduced anti-static capability.

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

### Hardware
Two each—mounting screws, nuts, lockwashers and standoffs for 1/8 inch thick panel are supplied standard on switches with panel mounting bracket. Internal o-ring actuator seal standard. Actuators available separately, see page G-36. Hardware available separately, see Technical Data section of this catalog. J1 & J2 actuators available with A, A3, AV2, AV3, V2-V61 terminations.

---

**NOTE:** This option has reduced anti-static capability.

---

**NOTE:** Internal o-ring actuator seal standard. Actuators & frames available separately, see page G-36. Hardware available separately, see Technical Data section of this catalog. J11 & J21 actuators available with C, Z & Z3 terminations.

---

**NOTE:** This option has reduced anti-static capability.

---

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

E Series

ACTUATOR–PC MOUNT

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>ACTUATOR COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>BLACK</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 switches with panel mounting bracket. Internal o-ring actuator seal standard. Actuators available separately, see page G-36. Hardware available separately, see Technical Data section of this catalog.

J3 actuators available with AV2, AV3 & V2-V61 terminations. Some permissible actuator/termination combinations may lack clearance between actuator and PC board, and care must be exercised to accommodate this condition.

J50, J60 & J90 actuators available with A, AV2, AV3, V2 – V61 terminations.

TERMINATIONS

Z SOLDER LUG

SPDT thru 3PDT


C PC THRU-HOLE

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

TERMINATIONS

Z3 QUICK CONNECT

SPDT thru 3PDT

A RIGHT ANGLE, PC THRU-HOLE

E101J1ABE2
Horizontal Actuation

SPDT

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


A RIGHT ANGLE, PC THRU-HOLE

E201J1ABE2
Horizontal Actuation

DPDT

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


Dimensions are shown: Inches (mm)
Specifications and dimensions subject to change
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NOTE: PC mounting pattern must clear switch support leg.
E Series
Sealed Miniature Rocker and Lever Handle Switches

TERMINATIONS

A  RIGHT ANGLE, PC THRU-HOLE


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


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

E Series
Sealed Miniature Rocker and Lever Handle Switches

TERMINATIONS

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

![AV2 Diagram]

- **E021J1AV2BE2**
  - Vertical Actuation
  - DPDT

**Actuator Shown In Pos. 1**

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

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

![AV3 Diagram]

- **E301J1AV2BE2**
  - Vertical Actuation
  - 3PDT

**Actuator Shown In Pos. 1**

**NOTE:** Terminal bend radii and lead-in manufacturing option. Available actuators, see pages G-27 thru G-29.

---

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

![AV2 Diagram]

- **E021J1AV2BE2**
  - Vertical Actuation
  - DPDT

**Actuator Shown In Pos. 1**

**PC MOUNTING**

**SECTION A-A**

**NOTE:** Terminal bend radii and lead-in manufacturing option. Available actuators, see pages G-27 thru G-29.
### Terminations

**V5**  
**E Series**  
Sealed Miniature Rocker and Lever Handle Switches

#### V5 TERMINATIONS

**TERMINATIONS**

**Epoxy Seal**

<table>
<thead>
<tr>
<th>Section A-A</th>
<th>Epoxy Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

**PC Mounting**

<table>
<thead>
<tr>
<th>Section A-A</th>
<th>PC Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Actuator Shown In Pos. 1**

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

**Available Actuators**

- **E101J1V5BE2**  
  Vertical Actuation  
  SPDT

- **E201J1V5BE2**  
  Vertical Actuation  
  DPDT

**NOTE:** Terminal bend radii and lead-in manufacturing option.  
Available actuators, see pages G-27 thru G-29.

---

**V5 TERMINATIONS**

**TERMINATIONS**

**Epoxy Seal**

<table>
<thead>
<tr>
<th>Section A-A</th>
<th>Epoxy Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
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<tr>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

**PC Mounting**

<table>
<thead>
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<th>Section A-A</th>
<th>PC Mounting</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Actuator Shown In Pos. 1**

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

**Available Actuators**

- **E101J1V5BE2**  
  Vertical Actuation  
  SPDT

- **E201J1V5BE2**  
  Vertical Actuation  
  DPDT

**NOTE:** Terminal bend radii and lead-in manufacturing option.  
Available actuators, see pages G-27 thru G-29.
E Series
Sealed Miniature Rocker and Lever Handle Switches

TERMINATIONS

V6, V7, V8
VERTICAL MOUNT, V-BRACKET
V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN

NOTE: Available actuators, see pages G-27 thru G-29.

E Series
Sealed Miniature Rocker and Lever Handle Switches

TERMINATIONS

V6, V7, V8
VERTICAL MOUNT, V-BRACKET
V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN

NOTE: Available actuators, see pages G-27 thru G-29.

E Series
Sealed Miniature Rocker and Lever Handle Switches

TERMINATIONS

V7, V8
VERTICAL MOUNT, V-BRACKET
V21 VERTICAL MOUNT, V-BRACKET, SNAP-IN

NOTE: Available actuators, see pages G-27 thru G-29.

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

**TERMINATIONS**

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

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

![Diagram of V3, V4, V31 switch terminations]

**NOTE:** Available actuators, see pages G-27 thru G-29.

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

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

![Diagram of V3, V4, V31 switch terminations]

**NOTE:** Available actuators, see pages G-27 thru G-29.

**V4**  VERTICAL MOUNT, V-BRACKET

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

![Diagram of V4 switch terminations]

**NOTE:** Available actuators, see pages G-27 thru G-29.

---

**OPTION CODE** | **DIM ‘A’**
--- | ---

V3, V31 | .460 (11.68)

V4 | .630 (16.00)

---

**OPTION CODE** | **DIM ‘A’**
--- | ---

V3, V31 | .460 (11.68)

V4 | .630 (16.00)

---

**OPTION CODE** | **DIM ‘A’**
--- | ---

V41 | .630 (16.00)
E Series
Sealed Miniature Rocker and Lever Handle Switches

CONTACT MATERIAL

<table>
<thead>
<tr>
<th>OPTION CODE</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
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</thead>
<tbody>
<tr>
<td>B</td>
<td>GOLD 1</td>
<td>MATTE-TIN 2</td>
<td>LOW LEVEL/DRY CIRCUIT 0.4 VA MAX. @ 20 V AC OR DC MAX.</td>
</tr>
<tr>
<td>P</td>
<td>SILVER 4.5</td>
<td>SILVER 5</td>
<td>POWER E1XX &amp; E2XX MODELS: 7.5 AMPS @125 V AC OR 28 V DC; 3 AMPS @250 V AC. E3XX MODELS: 5 AMPS @ 125 V AC OR 28 V DC; 2 AMPS @ 250 V AC.</td>
</tr>
<tr>
<td>Q</td>
<td>GOLDS OVER 2</td>
<td>MATTE-TIN 6</td>
<td>LOW LEVEL/DRY CIRCUIT OR POWER E1XX AND E2XX MODELS: 0.4 VA MAX @20 V AC OR DC MAX. OR 7.5 AMPS @125 V AC OR 28 V DC; 3 AMPS @ 250 V AC. E3XX MODELS: 0.4 VA MAX. @ 20 V AC OR DC MAX. OR 5 AMPS @ 125 V AC OR 28 V DC; 2 AMPS @ 250 V AC.</td>
</tr>
<tr>
<td>S</td>
<td>MATTE-TIN 6</td>
<td>POWER</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>BLACK</td>
<td>RED</td>
<td>NOTE: Any models supplied with Q, B, G, S P &amp; R contact material are RoHS compliant. All models with all options when ordered with G, Q, S &amp; R contact material. B contact material standard with all terminations. P R &amp; S contact materials not available with Z terminations.</td>
</tr>
</tbody>
</table>

SEAL

EPOXY SEAL

AVAILABLE HARDWARE

J2, J21 Actuators

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>760502263</td>
<td>BLACK</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>760503000</td>
<td>RED</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

J3 Actuator

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>766602263</td>
<td>BLACK</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>766603000</td>
<td>RED</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

J1, J11 Actuators

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7760A02263</td>
<td>BLACK</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>7760A03000</td>
<td>RED</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
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<td></td>
</tr>
</tbody>
</table>

J50 Actuator

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>775A02263</td>
<td>BLACK</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>775A03000</td>
<td>RED</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

J60 Actuator

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>613802263</td>
<td>BLACK</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>598103000</td>
<td>RED</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

J90 Actuator

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>CONTACT MATERIAL</th>
<th>TERMINAL PLATING</th>
<th>RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>598002263</td>
<td>BLACK</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>598003000</td>
<td>RED</td>
<td>MATTE-TIN</td>
<td>POWER</td>
</tr>
<tr>
<td>Material: Nylon</td>
<td>Finish: Matte</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Any models supplied with Q, B, G, S P & R contact material are RoHS compliant. All models with all options when ordered with G, Q, S & R contact material. B contact material standard with all terminations. P R & S contact materials not available with Z terminations.

NOTE: Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog. Other colors available, consult Customer Service Center.
# E Series

## Sealed Miniature Rocker and Lever Handle Switches

### AVAILABLE HARDWARE

<table>
<thead>
<tr>
<th>Description</th>
<th>PART NO.</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fits Z3 Termination female connector</td>
<td>530100000</td>
<td>Available in loose pieces.</td>
</tr>
<tr>
<td>Frame for J11, J21 Actuators</td>
<td>Part NO. 764500746, 764601106</td>
<td>BLACK ENAMEL, RETAINING SPRING</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Material: Spring Steel</td>
</tr>
<tr>
<td>J50, J60 &amp; J90 Actuators</td>
<td>MATTE PART NO. 486702000</td>
<td>Material: Nylon</td>
</tr>
<tr>
<td></td>
<td>GLOSS PART NO. 486802000</td>
<td>Finish: Matte or Gloss</td>
</tr>
</tbody>
</table>

**NOTE:** Additional nuts, screws and lockwashers available separately, see Technical Data section of this catalog. 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

![Typical Application Diagram](image)

### J1 & J2 Actuators

#### .047” (1,19) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.495 – .505</th>
</tr>
</thead>
<tbody>
<tr>
<td>452902263</td>
<td>12.57 – 12.83</td>
</tr>
</tbody>
</table>

#### .062” (1,57) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.495 – .505</th>
</tr>
</thead>
<tbody>
<tr>
<td>452903000</td>
<td>12.57 – 12.83</td>
</tr>
</tbody>
</table>

#### .090” (2,29) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.595 – .605</th>
</tr>
</thead>
<tbody>
<tr>
<td>452803000</td>
<td>15.11 – 15.37</td>
</tr>
</tbody>
</table>

#### .125” (3,18) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.495 – .505</th>
</tr>
</thead>
<tbody>
<tr>
<td>452802263</td>
<td>12.57 – 12.83</td>
</tr>
</tbody>
</table>

### J50, J60 & J90 Actuators

#### .047” (1,19) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.495 – .505</th>
</tr>
</thead>
<tbody>
<tr>
<td>432502263</td>
<td>12.57 – 12.83</td>
</tr>
</tbody>
</table>

#### .062” (1,57) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.495 – .505</th>
</tr>
</thead>
<tbody>
<tr>
<td>432503000</td>
<td>12.57 – 12.83</td>
</tr>
</tbody>
</table>

#### .090” (2,29) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.595 – .605</th>
</tr>
</thead>
<tbody>
<tr>
<td>432702263</td>
<td>15.11 – 15.37</td>
</tr>
</tbody>
</table>

#### .125” (3,18) PANEL THK.

<table>
<thead>
<tr>
<th>Part NO.</th>
<th>.495 – .505</th>
</tr>
</thead>
<tbody>
<tr>
<td>432802263</td>
<td>12.57 – 12.83</td>
</tr>
</tbody>
</table>

### PANEL MOUNTING

For part numbers 4529xxxx, 4527xxxx, 4526xxxx:

| .005 R. MAX. | .495 – .505 |
| (0.13) TYP. | 12.57 – 12.83 |

| .797 – .803 |
| (20.24 – 20.40) |

For part numbers 4325xxxx, 4326xxxx:

| .005 R. | .495 – .505 |
| (0.13) MAX. TYP. | 12.57 – 12.83 |

| .595 – .605 |
| (15.11 – 15.37) |

For part numbers 4327xxxx, 4328xxxx:

| .005 R. | .495 – .505 |
| (0.13) MAX. TYP. | 12.57 – 12.83 |

| .620 – .625 |
| (15.75 – 15.88) |
E Series
Sealed Miniature Rocker and Lever Handle Switches

AVAILABLE HARDWARE

Panel Inserts

Will fit separate snap-in frames for J50, J60, J90 actuators.

Above frames (part nos. 432XXXXX) 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.