

# LCA Series Subminiature Snap-acting Switches



## Features/Benefits

- **Compact design**
- **Long life and high electrical capacity**
- **Quick connect, solder terminals, PC terminals**
- **Wide variety of actuator styles**
- **RoHS compatible**

## Typical Applications

- **Motorized equipment**
- **Sump pump**
- **Thermostatic controls**



## Specifications

CONTACT RATING: From low level to 10 AMPS @ 125 V AC  
 ELECTRICAL LIFE: 50,000 cycles at 10 AMPS @ 125 V AC  
 INSULATION RESISTANCE: 100 M ohm min.  
 DIELECTRIC STRENGTH: 1,500 Vrms min. @ sea level.  
 OPERATING TEMPERATURE: -10°C to +125°C  
 OPERATING FORCE: 140 grams at actuator button MAX.  
 Forces are less at free end of lever actuators; (see ACTUATOR'S option sections).  
 MOUNTING: 2-56 screws, torque 2.3 in/lbs max.

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

## Materials

SWITCH HOUSING: Thermoplastic polyester or high temperature thermoplastic (PTS) (UL 94V-0).  
 ACTUATOR BUTTON: Thermoplastic polyester.  
 SPRING: Copper alloy.  
 PIVOT: Copper alloy.  
 MOVABLE CONTACTS: Silver nickel 8 and 10 amp with gold plate for .1 AMP.  
 STATIONARY CONTACTS: Silver nickel on copper alloy.  
 TERMINALS: Copper alloy.  
 ACTUATOR LEVER: Stainless steel.

## 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 K-22 thru K-24. For additional options not shown in catalog, consult Customer Service Center.

|                                                                                                 |  |                                                                                                                                            |  |                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                                                                  |  |                                                                               |  |
|-------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------|--|
| <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <b>L C A</b> </div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <b>1 4 0</b> </div>                                            |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div> |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>                                                                                                                                                                                                                                                                                                                                                                                    |  | <div style="border: 1px solid black; padding: 2px; display: inline-block;"> </div>                                                                                               |  |                                                                               |  |
| <b>Series</b><br><b>LCA</b> SP, Mom.                                                            |  | <b>Contact Rating</b><br><b>10A</b> 10A, 125 VAC 5A 250 VAC<br>8 (2)A, 250 VAC<br>3 (1)A, 250 VAC T125μ<br><b>00A*</b> .1A, 125 VAC, 28VDC |  | <b>Operating Force</b><br><b>140</b> 4.94 oz. / 140 grams                          |  | <b>Actuator</b><br><b>P00</b> Pin plunger<br><b>B00</b> Button Plunger<br><b>LS2</b> 0.06 (1,5) short lever<br><b>L02</b> 0.09 (2,2) lever<br><b>L05</b> 0.20 (5,1) lever<br><b>L09</b> 0.36 (9,1) lever<br><b>L16</b> 0.63 (16,1) lever<br><b>L18</b> 0.72 (18,2) lever<br><b>L21</b> 0.82 (20,9) lever<br><b>L36</b> 1.42 (36,1) lever<br><b>M02</b> 0.07 (1,7) modified lever<br><b>S06</b> 0.24 (6,1) simulated roller<br><b>S12</b> 0.47 (11,9) simulated roller |  | <b>Terminations</b><br><b>S</b> Solder<br><b>Q</b> .110 Quick Connect<br><b>N</b> .093 Quick Connect<br><b>P</b> PC Thru Hole<br><b>L</b> Left Form PC<br><b>R</b> Right Form PC |  | <b>Circuitry</b><br><b>C</b> SPDT<br><b>W</b> SPST N.C.<br><b>Y</b> SPST N.O. |  |

\* for electrical rating below .1 Amp contact customer service



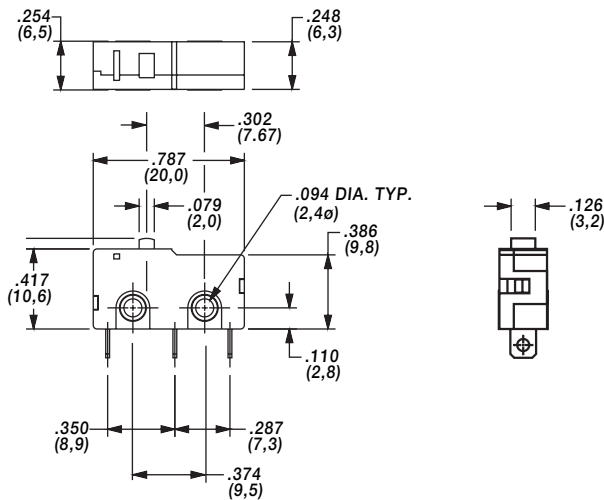
Dimensions are shown: Inch (mm)  
 Specifications and dimensions subject to change



LCA Series  
Subminiature Snap-acting Switches

SERIES

LCA



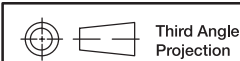
ELECTRICAL RATING

| RoHS COMPLIANT * | RoHS COMPATIBLE * | OPTION CODE | ELECTRICAL RATING                                                   |                                                                                       |
|------------------|-------------------|-------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| YES              | YES               | 10A         | 10A, 125 VAC 5A 250 VAC<br>8 (2)A, 250 VAC<br>3 (1)A, 250 VAC T125μ |  |
| YES              | YES               | 00A**       | .1A, 125, VAC, 28 V DC                                              |                                                                                       |

\* Note: See Technical Data section of this catalog for RoHS compliant and compatible definition and specifications.  
\*\* For electrical rating below .1 Amp, contact customer service.

OPERATING FORCE

| OPTION CODE | OPERATING FORCES (oz/grams) |
|-------------|-----------------------------|
| 140         | 4.94 / 140 grams max.       |



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

# LCA Series Subminiature Snap-acting Switches

ACTUATOR ■■■■■■

|      |                                  |      |                                |                                                                                                       |                                   |
|------|----------------------------------|------|--------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------|
| P00  | SEE PAGE K-22 FOR DIMENSIONS     |      |                                |                                                                                                       |                                   |
| B00  | 0.205<br>(5.2)                   | M02* | .069<br>(1.7)<br>.220<br>(5.6) | L36*                                                                                                  | 1.424<br>(36.1)                   |
| L05* | 0.200<br>(5.08)<br>.382<br>(9.7) | L09* | .361<br>(9.1)                  | L18*                                                                                                  | .715<br>(18.16)                   |
| L16* | .634<br>(16.1)                   | L02* | .089<br>(2.2)                  | S12*                                                                                                  | .467<br>(11.86)<br>.075<br>(1.90) |
| LS2* | .057<br>(1.44)                   |      |                                | * Lever and simulated roller width is 0.158" +/- .003" (Does not apply to P00 and B00 actuator codes) |                                   |
| S06* | .243<br>(6.1)<br>.075<br>(1.90)  | L21* | .825<br>(20.9)                 |                                                                                                       |                                   |

| ACTUATOR CODE | Max Operate Force |      |
|---------------|-------------------|------|
|               | Grams             | oz   |
| P00           | 140               | 4.94 |
| B00           | 140               | 4.94 |
| LS2           | 56                | 1.98 |
| L02           | 41                | 1.45 |
| L05           | 34                | 1.20 |
| L09           | 28                | 0.99 |
| L16           | 21                | 0.74 |
| L18           | 20                | 0.71 |
| L21           | 18                | 0.63 |
| L36           | 13                | 0.46 |
| M02           | 42                | 1.48 |
| S06           | 32                | 1.13 |
| S12           | 24                | 0.85 |



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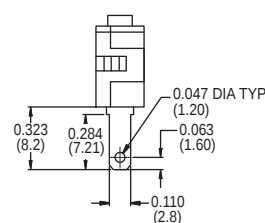
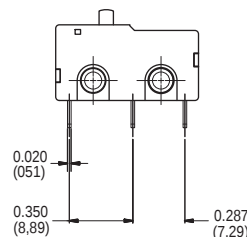
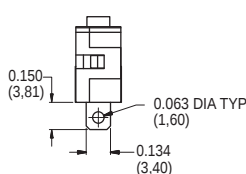
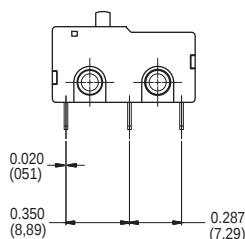


# LCA Series Subminiature Snap-acting Switches

## TERMINATIONS

**S** SOLDER

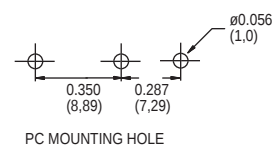
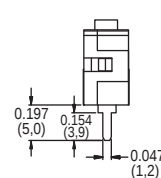
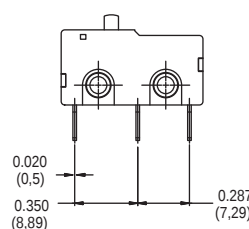
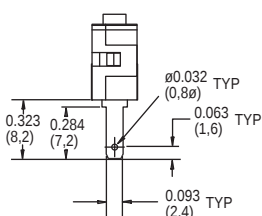
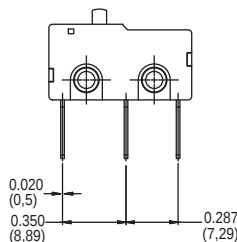
**Q** QUICK CONNECT



'Q' TERMINAL OPTION

**N** .093 QUICK CONNECT

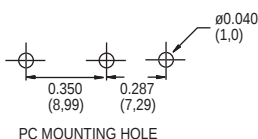
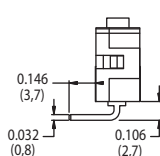
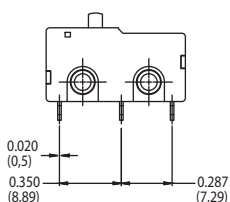
**P** PC THRU HOLE



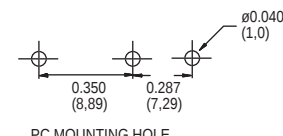
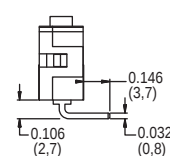
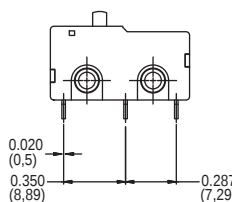
PC MOUNTING HOLE

**L** LEFT FORM PC

**R** RIGHT FORM PC



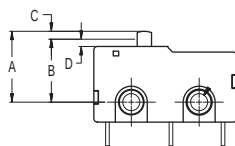
PC MOUNTING HOLE



PC MOUNTING HOLE

### P00

|          |                      |                       |                   |
|----------|----------------------|-----------------------|-------------------|
| <b>A</b> | Free position (max): | 0.382 in              | 9,7 mm            |
| <b>B</b> | Operating position:  | 0.343 in +/- 0.020 in | 8,7 mm +/- 0,5 mm |
| <b>C</b> | Pre-travel (max):    | 0.031 in              | 0,8 mm            |
| <b>D</b> | Over-travel (max):   | 0.020 in              | 0,5 mm            |



### B00

|          |                      |                       |                    |
|----------|----------------------|-----------------------|--------------------|
| <b>A</b> | Free position (max): | 0.433 in              | 11,0 mm            |
| <b>B</b> | Operating position:  | 0.394 in +/- 0.020 in | 10,0 mm +/- 0,5 mm |
| <b>C</b> | Pre-travel (max):    | 0.031 in              | 0,8 mm             |
| <b>D</b> | Over-travel (max):   | 0.004 in              | 0,1 mm             |



Third Angle  
Projection

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

**C&K**

## LCA Series Subminiature Snap-acting Switches

## CIRCUITRY

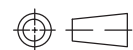


|   |                                                        |
|---|--------------------------------------------------------|
| C | SPDT (Single Pole, Double Throw)                       |
| W | SPST N.C. (Single Pole, Single Throw, Normally Closed) |
| Y | SPST N.O. (Single Pole, Single Throw, Normally Open)   |



K

## Snap-acting



### Third Angle Projection

Dimensions are shown: Inch (mm)  
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