

# KSD-LCS Series Small Size Sealed Snap-acting Switches



UL61058-1



## Features/Benefits

- Compact design
- Long life and high electrical capacity
- Quick connect, solder terminals, PC terminals, wire leads
- Wide variety of actuator styles
- RoHS compatible, RoHS compliant
- IP67 for standalone switch except the metal terminal part; Full IP67 protection when potted with wire version

## Typical Applications

- Motorized equipment
- Sump pump
- Thermostatic controls
- Computers
- Air conditioners
- Automotive: door latch, seat position detection, EV charging

## Specifications

CONTACT RATING: from low level to 5 Amp  
 ELECTRICAL LIFE: 10,000 cycles for 5A; 1M cycles for 0.1A  
 INSULATION RESISTANCE: 100 M ohm min.  
 DIELECTRIC STRENGTH: 1,000 VAC  
 OPERATING TEMPERATURE:  
 -40°C to +120°C (without wire)  
 -40°C to +85°C (with UL1007 wire)  
 -40°C to +105°C (with UL1015 wire)  
 -40°C to +105°C (with UL1430 wire)  
 -40°C to +80°C (with UL1061 wire)  
 -40°C to +120°C (with UL1330 wire)  
 OPERATING FORCE: (see ACTUATOR'S option sections).  
 MOUNTING: 2-56 screws, torque 2.3 in/lbs max.

## 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: Option "01" Gold plating over silver alloy  
 Option "05" Silver alloy  
 STATIONARY CONTACTS: Option "01" Gold plating over silver alloy  
 Option "05" Silver alloy  
 TERMINALS: Copper alloy.  
 ACTUATOR LEVEL: Stainless steel.

**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. For additional options not shown in catalog, consult Customer Service Center.

L

C

S

**Series**  
LCS

**Electrical Rating**

| Option Code | UL 61058-1         | UL 61058-1   |
|-------------|--------------------|--------------|
| 01          | 0.1 A 125/250 V AC | NA           |
| 05          | 5 A 125/250 V AC   | 6 A 250 V AC |

**Operating Force**  
2 203 grams

**Actuator \***

- P00 Pin plunger
- T00 11.9 mm short lever
- T05 17.4 mm short lever
- T07 19.4 mm short lever
- T13 25.5 mm lever
- T19 33.3 mm lever
- T28 40.7 mm lever
- T43 55.9 mm lever
- S26 18.6 mm simulated lever
- A05 17.2 mm lever roller

**Terminations**

- S Solder
- Q 0.110 Quick Connect
- P PC Thru Hole
- W Wire leads potted
- Z Wire leads non-potted

**Wire Type AWG (when required)**

- 20 20 AWG
- 22 22 AWG
- 24 24 AWG
- 26 26 AWG

**Wire UL # (when required)**

- A UL1007
- B UL1015
- C UL1430
- D UL1061

**Circuitry**

- C SPDT
- W SPST N.C.
- Y SPST N.O.

Snap-acting

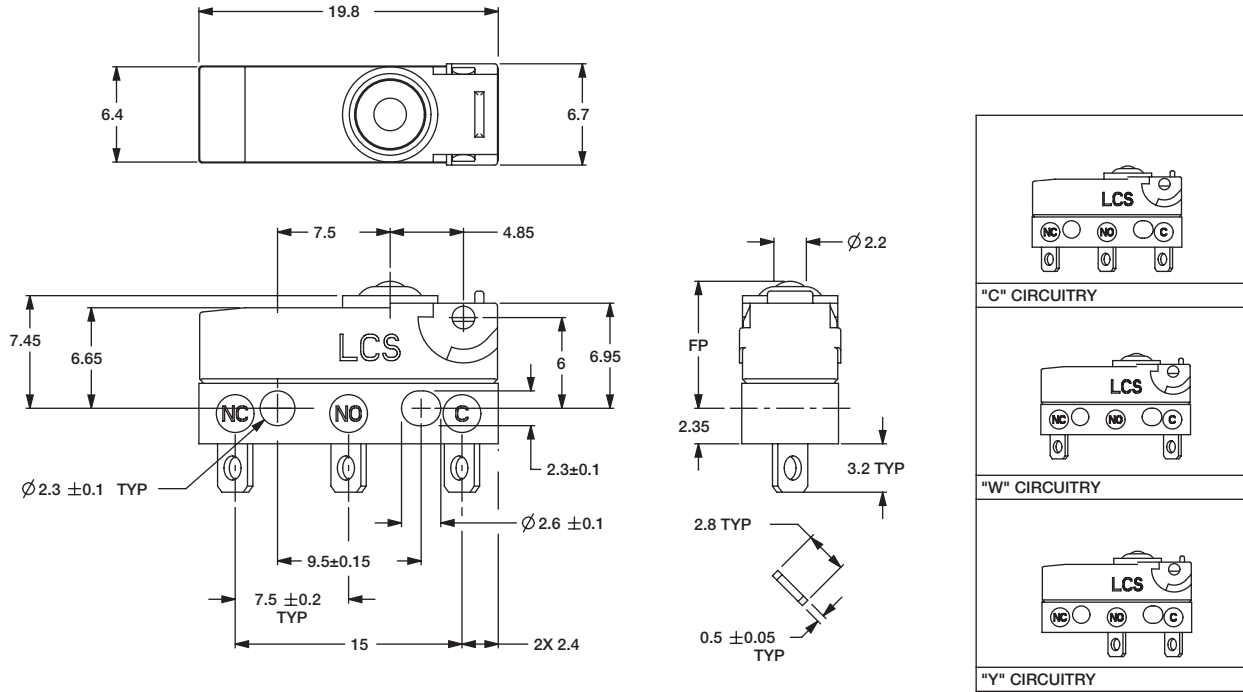
### Wire Side (when required)

- A Wire out the bottom
- B Wire out the right side
- C Wire out the left side
- D None

Dimensions are shown: mm  
 Specifications and dimensions subject to change

**SERIES**

**LCS**



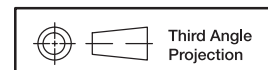
Snap-acting

**ELECTRICAL RATING**

| RoHS COMPLIANT * | RoHS COMPATIBLE * | OPTION CODE | ELECTRICAL RATING     |
|------------------|-------------------|-------------|-----------------------|
| YES              | YES               | <b>05</b>   | 5 AMP, 125/250 V AC   |
| YES              | YES               | <b>01</b>   | 0.1 AMP, 125/250 V AC |

**OPERATING FORCE**

| OPTION CODE | OPERATING FORCES (grams) |
|-------------|--------------------------|
| <b>2</b>    | 203 g. max.              |



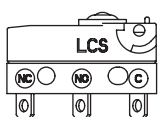
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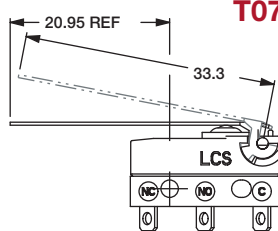


## ACTUATOR

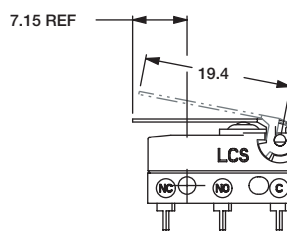
**P00**



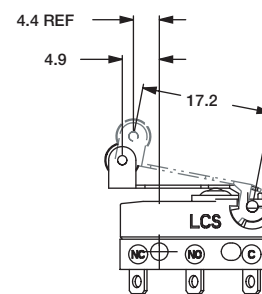
**T19**



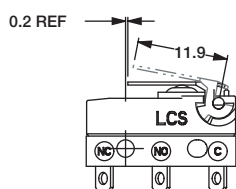
**T07**



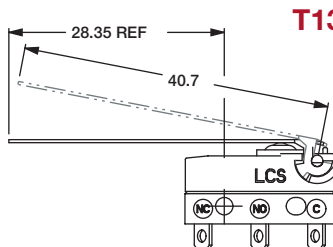
**A05**



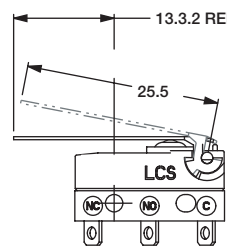
**T00**



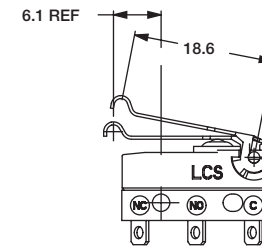
**T28**



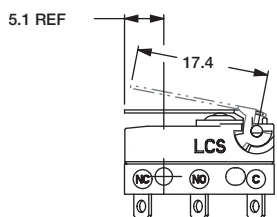
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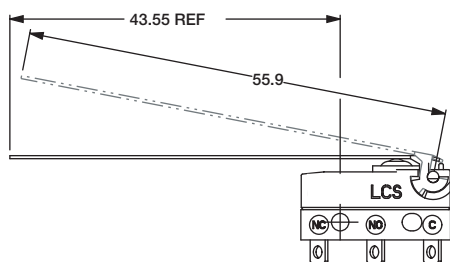
**S26**



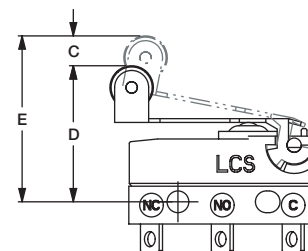
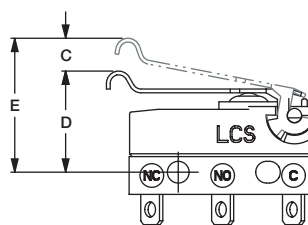
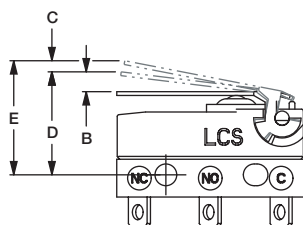
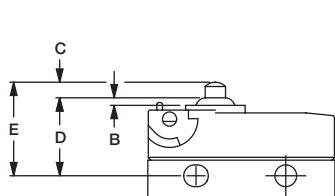
**T05**



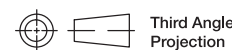
**T43**



Snap-acting



| ACTUATOR OPTION CODE | A<br>LENGTH OF LEVER | B<br>OVER TRAVEL (MIN) | C<br>PRE TRAVEL (MAX) | D<br>OPERATING POSITION | E<br>FREE POSITION (MAX) | DIFFERENTIAL MOTION (MAX) | OPERATING FORCE (MAX) | RELEASE FORCE (MIN) |
|----------------------|----------------------|------------------------|-----------------------|-------------------------|--------------------------|---------------------------|-----------------------|---------------------|
|                      |                      |                        |                       |                         |                          | 203                       | 203                   | 203                 |
| P00                  | N/A                  | 0.6                    | 1.2                   | 8.4 ± 3                 | 9.9                      | 0.2                       | 203                   | 50                  |
| T00                  | 11.9                 | 0.6                    | 3.2                   | 8.8 ± 9                 | 11.1                     | 0.5                       | 98                    | 21                  |
| T05                  | 17.40                | 0.9                    | 4.3                   | 8.8 ± 1.1               | 12                       | 0.6                       | 82                    | 16                  |
| T07                  | 19.40                | 1                      | 4.8                   | 8.8 ± 1.2               | 12.4                     | 0.7                       | 66                    | 13                  |
| T13                  | 25.5                 | 1.6                    | 6.3                   | 8.8 ± 1.6               | 13.5                     | 0.9                       | 54                    | 11                  |
| T19                  | 33.3                 | 1.95                   | 8                     | 8.8 ± 2.0               | 15                       | 1.75                      | 40                    | 5                   |
| T28                  | 40.7                 | 2.1                    | 10.1                  | 8.8 ± 2.6               | 16.3                     | 2.3                       | 39                    | 8                   |
| T43                  | 55.9                 | 2.9                    | 13.8                  | 8.8 ± 3.5               | 19.1                     | 3.6                       | 33                    | 7                   |
| S26                  | 18.6                 | 1                      | 4.6                   | 10.7 ± 1.2              | 14.1                     | 0.65                      | 68                    | 14                  |
| A05                  | 17.20                | 0.9                    | 4.3                   | 14.5 ± 1.1              | 17.7                     | 0.6                       | 72                    | 15                  |

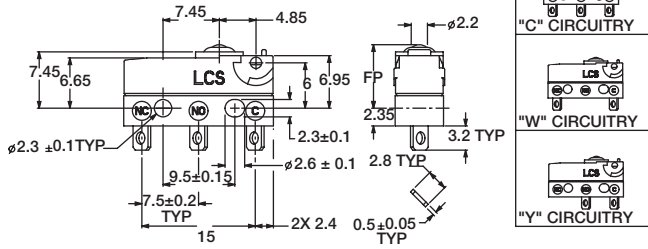


Dimensions are shown: mm

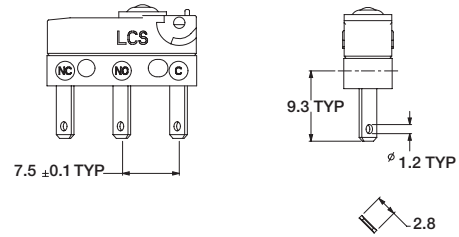
Specifications and dimensions subject to change

### TERMINATIONS

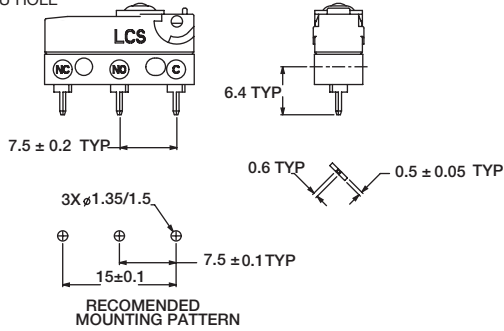
#### S SOLDER



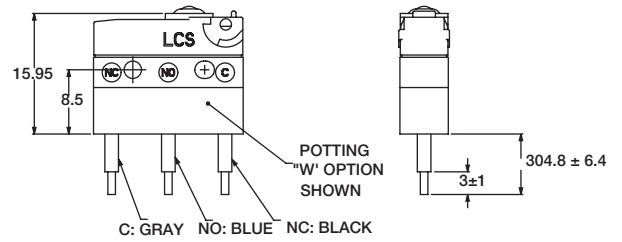
#### Q QUICK CONNECT 2.8mm / 0.110"



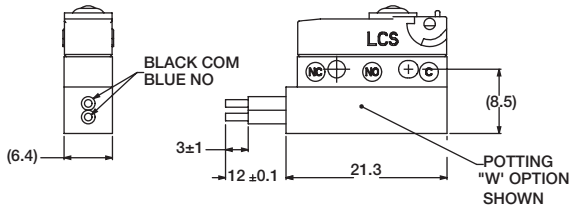
#### P PC THRU HOLE



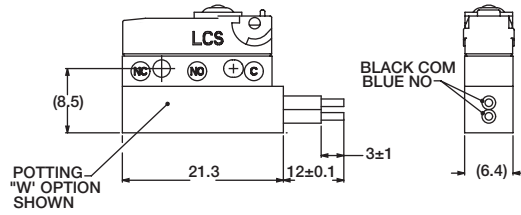
#### Z or W "A" WIRE ORIENTATION



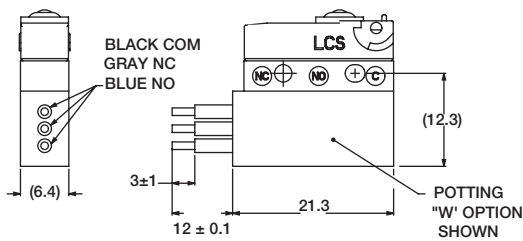
#### Z or W "B" WIRE ORIENTATION "Y" OR "W" CIRCUITRY



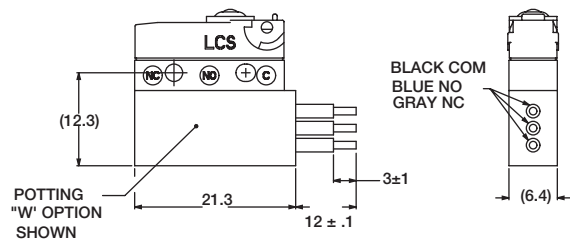
#### Z or W "C" WIRE ORIENTATION "Y" OR "W" CIRCUITRY



#### Z or W "B" WIRE ORIENTATION "C" CIRCUITRY



#### Z or W "C" WIRE ORIENTATION "C" CIRCUITRY



Snap-acting

### 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)



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