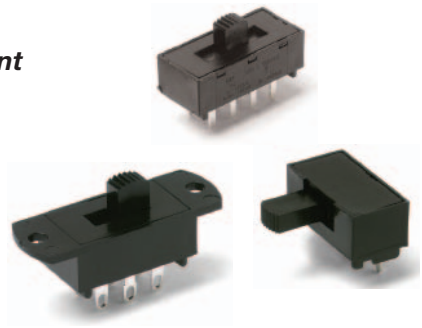
## Features/Benefits

- *Positive detent*
- *Enclosed housing*
- *Maintained and momentary functions*
- *PC and panel mounting*
- *RoHS compliant*

cULus
Models Available

## Typical Applications

- *Communications equipment*
- *Lighting devices*





## Specifications

CONTACT RATING: Q contact material (LX0X, LX1X Models): 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC; 0.5 AMP @ 125 V DC (UL). See page I-23 for additional ratings.

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

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

INSULATION RESISTANCE: $10^9$ Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to +65°C

STORAGE TEMPERATURE: -30°C to +85°C

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

## Materials

HOUSING: 6/6 nylon (UL94V-2), black.

ACTUATOR: 6/6 nylon (UL94V-2), black. '13' actuator, natural (standard).

CONTACTS: Q contact material: Copper, silver plated. See page I-23 for additional contact materials.

TERMINALS: Q contact material: Copper, silver plated. See page I-23 for additional contact materials.

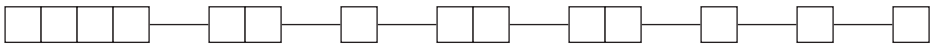
CONTACT SPRING: Music wire or stainless steel.

TERMINAL SEAL: Epoxy.

**NOTE:** Any models supplied with Q, B or G contact material are RoHS compliant.

## 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 I-20 through I-24. For additional options not shown in catalog, consult Customer Service Center.



**Switch Function**
- L202 DPDT
- L203 DP3T
- L101 SPST
- L102 SPDT
- L103 SP3T
- L104 SP4T
- L112 SPDT, mom.
- L113 SP3T, mom. to one end
- L123 SP3T, mom. to both ends
- L201 DPST
- L204 DP4T
- L212 DPDT, mom.

**Actuator**
- 01 .200" high
- 02 .335" high
- 03 .375" high
- 05 .312" high
- 11 .100" high
- 12 Screwdriver slot
- 13 Plunger without cap
- 14 Plunger with .200" dia. cap
- 15 Plunger with .310" dia. cap
- 17 Plunger with .458" dia. cap
- 19 Plunger with .590" dia. cap

**Detent**
- 1 With detent
- 2 Without detent

**Mounting Style**
- MS PC Thru-hole
- MA Right angle, PC thru-hole
- ML Right angle, PC thru-hole
- MV Right angle, PC thru-hole
- SS Panel with mounting ears
- TS Panel with integral mounting ears

**Terminations**
- 02 PC Thru-hole
- 01 Solder lug with notch
- 03 Solder lug with hole
- 04 PC Thru-hole
- 10 PC Thru-hole
- 06 Wire wrap
- 12 PC Thru-hole

**Contact Material**
- Q Silver
- B Gold
- G Gold over silver

**Seal**
- NONE No seal
- E Epoxy seal

**Cap Color**
- 2 Black
- NONE No cap

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

# L Series
# Miniature Slide Switches



## SWITCH AND LOCK FUNCTION

| NO. POLES | MODEL NO. | SWITCH FUNCTION | SCHEMATIC | AVAILABLE MOUNTING STYLES |
|---|---|---|---|---|
| SP | L101 | SPST | 1 2 | ML, MS, SS |
| | L102 | SPDT | 1 2 3 | ML, MS, SS |
| | L112 | SPDT-MOM. | 1 2 3 | ML, MS,MV, SS |
| | L103 | SP3T | 1 2 3 4 | MA, MS, TS |
| | L113 | SP3T-MOM. to one end | 1 2 3 4 | MA, MS, TS |
| | L123 | SP3T-MOM. to both ends | 1 2 3 4 | MA, MS, TS |
| | L104 | SP4T | 1 2 3 4 5 | MS |

| NO. POLES | MODEL NO. | SWITCH FUNCTION | SCHEMATIC | AVAILABLE MOUNTING STYLES |
|---|---|---|---|---|
| DP | L201 | DPST | 1 2<br>4 5 | MA, MS, SS |
| | L202 | DPDT | 1 2 3<br>4 5 6 | MA, MS, SS |
| | L212 | DPDT-MOM. | 1 2 3<br>4 5 6 | MV |
| | L203 | DP3T | 1 2 3 4<br>5 6 7 8 | MS, TS |
| | L204 | DP4T | 1 2 3 4 5<br>6 7 8 9 10 | MS |

**NOTE:** ▨ and MOM. in table indicates momentary action.

All models cULus with all options when ordered with 'G' or 'Q' contact material.

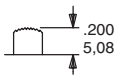
Contacts make on side actuator thrown.

## ACTUATOR

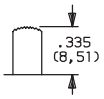
CAP COLOR / ACTUATOR

### ACTUATOR OPTIONS FOR 'MS, MA, ML, SS, & TS' MOUNTING STYLES

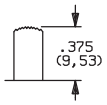
**01** .200" HIGH



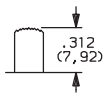

**02** .335" HIGH




**03** .375" HIGH



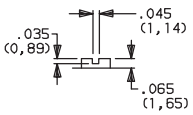

**05** .312" HIGH




**11** .100" HIGH



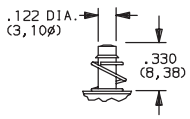

**12** SCREWDRIVER SLOT



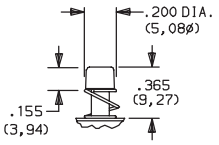

**NOTE:** No actuator color option code is required. Standard actuator color is black, other colors and heights available, consult Customer Service Center. See pages I-20 and I-22 for available mounting styles.

### ACTUATOR OPTIONS FOR 'MV' MOUNTING STYLE

**13** PLUNGER WITHOUT CAP

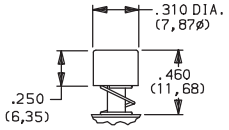



**14** PLUNGER WITH CAP



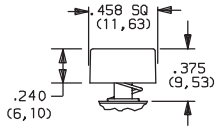

Cap part number 7089

**15** PLUNGER WITH CAP



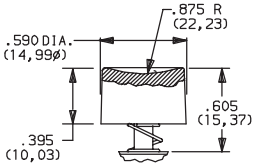

Cap part number 8018

**17** PLUNGER WITH CAP




Cap part number 7982

**19** PLUNGER WITH CAP




Cap part number 8940

| OPTION CODE | ACTUATOR CAP COLORS |
|---|---|
| 2 | BLACK |
| NONE | 01-13 ACTUATORS |

Other colors available, consult Customer Service Center.

### ACTUATOR CAPS

Caps supplied are not installed standard. To order actuator options '14 thru 19,' select desired cap color from chart and place option code in last box of ordering format. Leave box empty for all other actuator options. Caps may also be ordered separately and user installed, see pages I-23 and I-24. Specify the four digit part number and desired cap color. For switches without caps, order '13' or '23' actuator option. Cap finish: gloss (excluding square cap part number 7982, finish: matte).

### SPLASH CAPS

New protective splash caps for PC mounted slide switches are available separately and reusable. They provide splash protection during soldering and cleaning processes. To order specify correct part number, see page I-24.

Third Angle Projection

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

## DETENT

**1** WITH DETENT

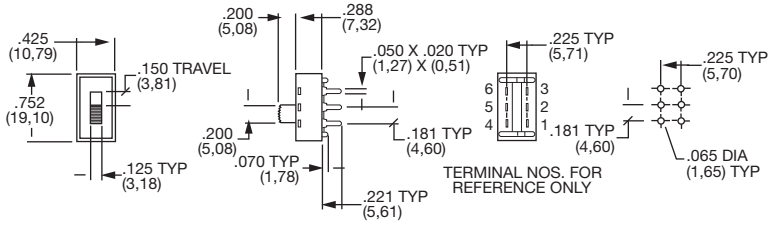
Standard with all maintained models: L101, L102, L103, L104, L113, L201, L202, L203 and L204.

**2** WITHOUT DETENT

Standard with all momentary models: L112, L123, and L212.

## MOUNTING STYLE

### MS PC THRU-HOLE, 2 POSITION MODELS



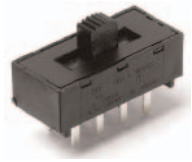

**AVAILABLE WITH:**

**Models:** L101, L102, L112, L103, L113 L123, L201, L202, L203, L104 and L204
**Terminations:** 02, 06, 10 and 12
**Actuators:** 01, 02, 03, 05, 11 and 12

**PC MOUNTING**

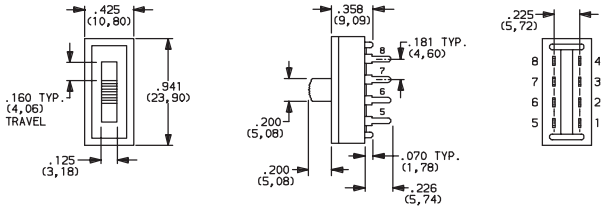
For mounting information, see TERMINATIONS section, page I-23.

Splash caps are available separately and reusable, see page I-24.

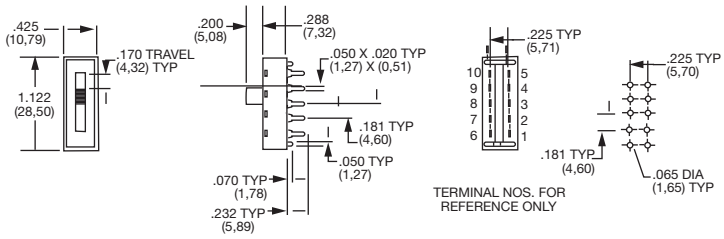


L203011MS02Q
**DP3T**

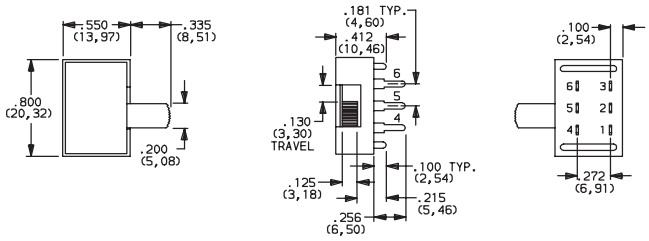
PC THRU-HOLE, 3 POSITION MODELS




PC THRU HOLE, 4 POSITION MODELS




### MA RIGHT ANGLE, PC THRU-HOLE



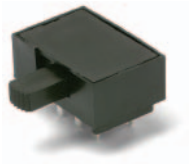

**AVAILABLE WITH:**

**Models:** L103, L201, L202, L113 and L123
**Terminations:** 04
**Actuators:** 02 and 12

**PC MOUNTING**

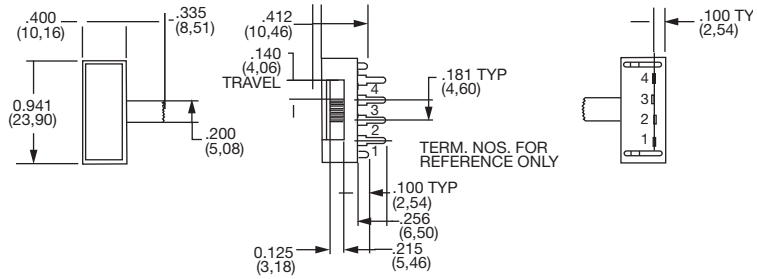
For mounting information, see TERMINATIONS section, page I-23.

Splash caps are available separately and reusable, see page I-24.



L202021MA04Q
Horizontal Actuation
**DPDT**

RIGHT ANGLE, PC, SP-3 POSITION MODELS



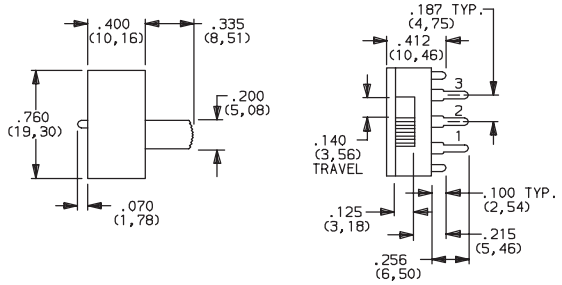

Third Angle Projection

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

# L Series
# Miniature Slide Switches

## MOUNTING STYLE

### ML RIGHT ANGLE, PC THRU-HOLE




**AVAILABLE WITH:**

**Models:** L101, L102, L112
**Terminations:** 04
**Actuators:** 01, 02, 05, 11 and 12
**PC MOUNTING**

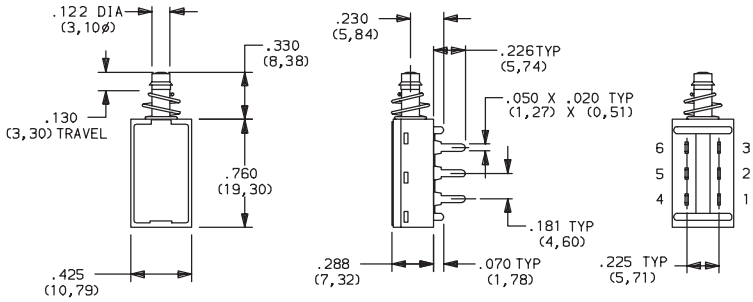
For mounting information, see TERMINATIONS section, page I-23.

Splash caps are available separately and reusable, see page I-24.



L102021ML04Q
Horizontal Actuation
**SPDT**

### MV RIGHT ANGLE, PC THRU-HOLE




**AVAILABLE WITH:**

**Models:** L112 and L212
**Terminations:** 02, 06, 10 and 12
Actuators: 13 thru 19

**PC MOUNTING**

For mounting information, see TERMINATIONS section, page I-23.

Splash caps are available separately and reusable, see page I-24.

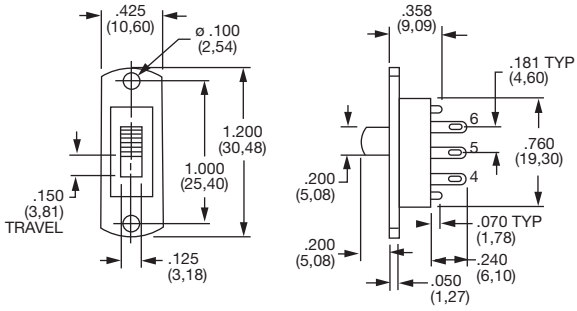


L212132MV02Q
**DPDT**

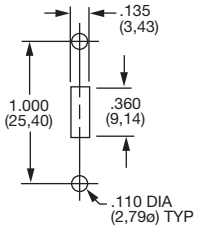
### SS PANEL WITH MOUNTING EARS



L202011SS03Q
**DPDT**




**PANEL MOUNTING**



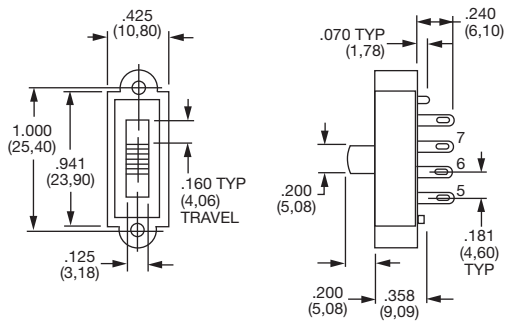

**AVAILABLE WITH:**

**Models:** L101, L102, L112, L201 and L202
**Terminations:** 01, 02, 03, 06, 10, 12
**Actuators:** 01, 02, 03, 05, 11 and 12

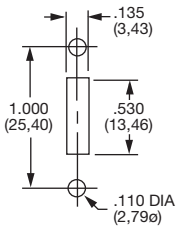
### TS PANEL WITH INTEGRAL MOUNTING EARS



L203011TS03Q
**DP3T**




**PANEL MOUNTING**




**AVAILABLE WITH:**

**Models:** L103, L113, L123 and L203
**Terminations:** 01, 02, 03, 06, 10, 12
**Actuators:** 01, 02, 03, 05, 11 and 12

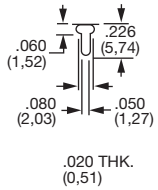
Third Angle Projection

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

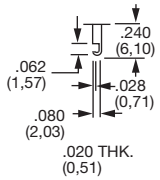
## TERMINATIONS

**'MS, MV, SS & TS' Mounting Styles Only**

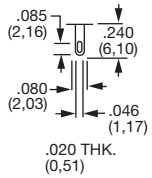
**02** PC THRU-HOLE



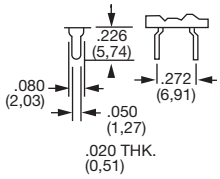

**01** SOLDER LUG WITH NOTCH



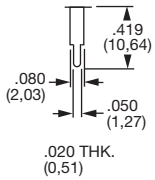

**03** SOLDER LUG WITH HOLE



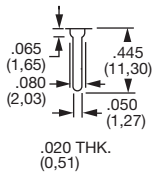

**10** PC THRU-HOLE




**12** PC THRU-HOLE

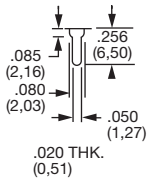


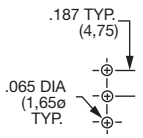

**06** WIRE WRAP



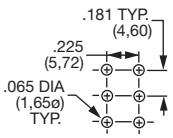

**'MA & ML' Mounting Styles Only**

**04** PC THRU-HOLE

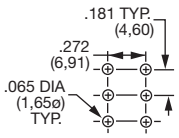


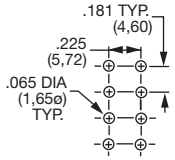

All models with '04' terminations and 'ML' mounting style.



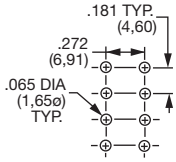

All 2 position models, except '04' and '10' terminations.



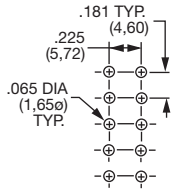

All 2 position models with '04' and '10' terminations.



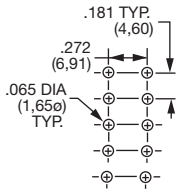

All 3 position models except '04' and '10' terminations.




All 3 position models, with '10' termination.




All 4 position models, except '04' and '10' terminations.




All 4 position models, with '10' terminations.

## CONTACT MATERIAL

| OPTION CODE | CONTACT MATERIAL | RATINGS | |
|---|---|---|---|
| Q | SILVER [2] | LOW LEVEL/DRY CIRCUIT | LX0X, LX1X MODELS: 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC; 0.5 AMP @ 125 V DC (UL). LX6X MODELS: 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC (UL). |
| B | GOLD [1] | POWER | 0.4 VA MAX. @20 V AC OR DC max. |
| G | GOLD OVER SILVER [3] | LOW LEVEL/DRY CIRCUIT OR POWER | LX0X, LX1X MODELS: 0.4 VA MAX. @ 20 V AC or DC MAX. or 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC; 0.5 AMP @ 125 V DC (UL). LX6X MODELS: 0.4 VA MAX. @ 20 V AC or DC MAX. or 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC (UL). |

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

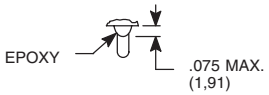
[1] CONTACTS & TERMINALS: Copper, with gold plate over nickel plate.
[2] CONTACTS & TERMINALS: Copper, silver plated (standard with all termination options).
[3] CONTACTS & TERMINALS: Copper, with gold plate over nickel plate over silver plate.

**NOTE:** Any models supplied with Q, B or G contact material are RoHS compliant.
All models c UL us with all options when ordered with 'G' or 'Q' contact material.
**NOTE:** 'G' contact material is equivalent to both 'B' and 'Q' contact materials.

## SEAL

**NONE** NO SEAL

**E** EPOXY SEAL

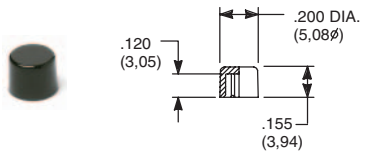



Third Angle Projection

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

## AVAILABLE HARDWARE

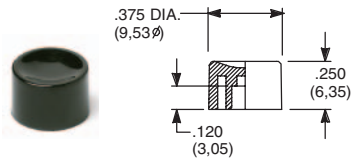
**Cap**
**Compatible with 13-19 actuators**




**PART NO.**
708902000 BLACK
708903000 RED

Material: Nylon
Finish: Gloss

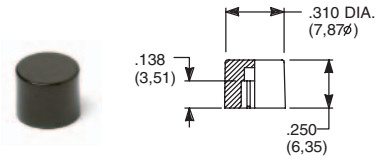
**Cap**
**Compatible with 13-19 actuators**




**PART NO.**
752702000 BLACK
752703000 RED

Material: Nylon
Finish: Gloss

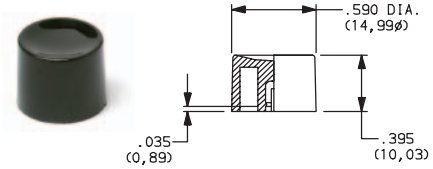
**Cap**
**Compatible with 13-19 actuators**




**PART NO.**
801802000 BLACK
801803000 RED

Material: Nylon
Finish: Gloss

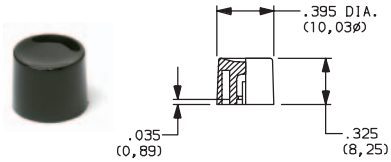
**Cap**
**Compatible with 13-19 actuators**




**PART NO.**
452D02000 BLACK
452D03000 RED

Material: Nylon
Finish: Gloss

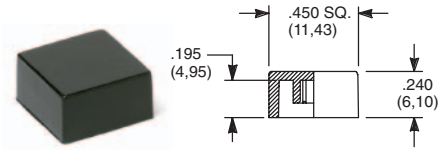
**Cap**
**Compatible with 13-19 actuators**




**PART NO.**
894102000 BLACK
894103000 RED

Material: Nylon
Finish: Gloss

**Cap**
**Compatible with 13-19 actuators**



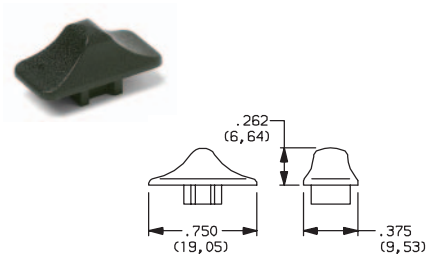

**PART NO.**
484602000 BLACK
484603000 RED

Material: Nylon
Finish: Gloss

**PART NO.**
798202263 BLACK
798203000 RED

Material: Nylon
Finish: Matte

**Cap**
**Compatible with 01-05 actuators**




**PART NO.**
120100602 BLACK

Material: Nylon
Finish: Matte

**Splash Cap**



Fits 'MS' mounting style,
LXX1 & LXX2 models only.

**PART NO.**
120100200

**Splash Cap**



Fits 'MV' mounting style,
LX1X models only.

**PART NO.**
120100300

Material: Nylon

**Splash Cap**



Fits 'MA' mounting style,
LXX3 models only.

**PART NO.**
120100400

Material: Nylon

**NOTE:** Other colors available,
consult Customer Service Center.

Third Angle
Projection

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