# L Series Miniature Slide Switches

#### Features/Benefits

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



# **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/CSA). See page I-23 for additional ratings.

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

CONTACT RESISTANCE: Below 10 m  $\Omega$  typ. initial

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

INSULATION RESISTANCE:  $10^9 \Omega$  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 J-23 for additional contact materials.

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

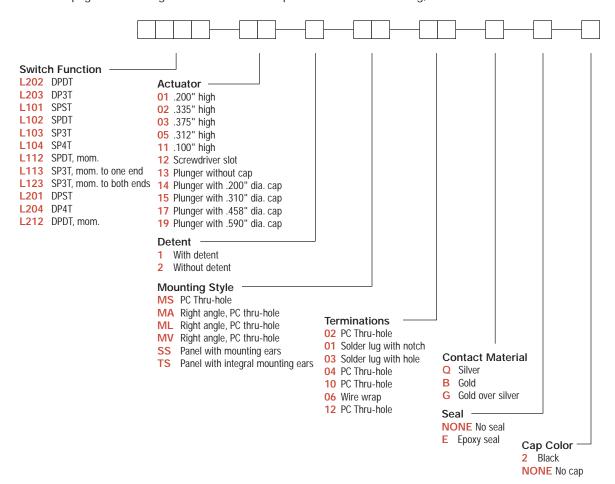
CONTACT SPRING: Music wire or stainless steel.

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





#### 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 0 0 0 0 4 5	MA, MS, SS
	L202	DPDT	1 2 3 2 2 9 4 5 6	MA, MS, SS
	L212	DPDT-MOM.	1 2 3 9,,,2 0 6,,,2 0 4 5 6	MV
	L203	DP3T	1 2 3 4 2 2 2 9 5 5 5 5 5 6 7 8	MS, TS
	L204	DP4T	1 2 3 4 5 2 2 2 2 9 6 6 7 8 9 10	MS

NOTE: and MOM. in table indicates momentary action.

All models  ${}_{\otimes}$   ${}^{\otimes}$  with all options when ordered with 'G' or 'Q' contact material.

Models with '01' termination option ® only.

Contacts make on side actuator thrown.

# ACTUATOR CAP COLOR

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

01 .200" HIGH

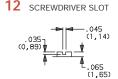
.335" HIGH



.312" HIGH

.100 (2,54)

.100" HIGH



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

#### ACTUATOR OPTIONS FOR 'MV' MOUNTING STYLE

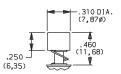
13 PLUNGER WITHOUT CAP

.365 (3,94)

PLUNGER WITH CAP

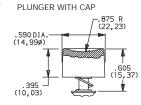
Cap part number 7089

15 PLUNGER WITH CAP



Cap part number 8018

17	PLUNG	PLUNGER WITH CAP		
	.240	.458 50 (11,63)	.375	
	Cap p	art numbe	r 7982	



Cap part number 8940

# OPTION CODE COLORS 2 BLACK NONE 01-13, 23 ACTUATORS

Other colors available, consult Customer Service Center.

#### **ACTUATOR CAPS**

Caps supplied are not installed standard. To order actuator options '14 thru 29,' 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 J-23 and J-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 J-24.





WITH DETENT

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

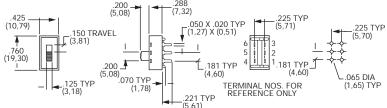
DETENT

WITHOUT DETENT

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



#### 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

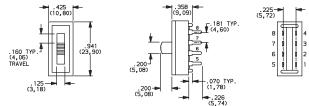
For mounting information, see TERMINATIONS section, page J-23. Splash caps are available separately

and reusable, see page J-24.

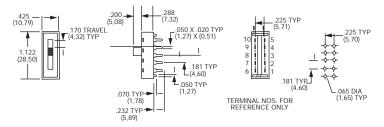


L203011MS02Q DP3T

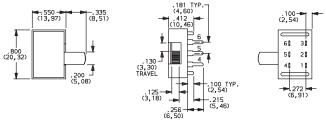
PC THRU-HOLE, 3 POSITION MODELS



PC THRU HOLE, 4 POSITION MODELS



#### MA RIGHT ANGLE, PC THRU-HOLE



RIGHT ANGLE, PC, SP-3 POSITION MODELS

#### AVAILABLE WITH:

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

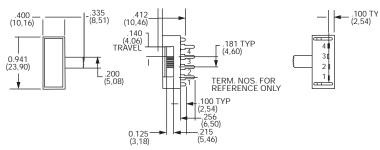
#### PC MOUNTING

For mounting information, see TERMINATIONS section, page J-23. Splash caps are available separately and reusable, see page J-24



L202021MA04Q Horizontal Actuation

**DPDT** 





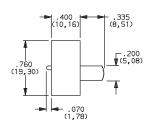


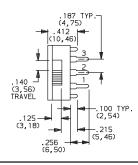
# Miniature Slide Switches

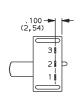
#### **MOUNTING STYLE**



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 J-23.

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



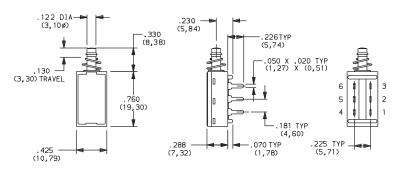
L102021ML04Q Horizontal Actuation

SPDT

MV

Slide

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 J-23.

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

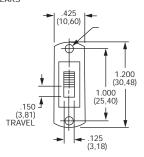


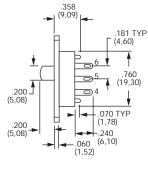
L212132MV02Q **DPDT** 

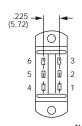
SS PANEL WITH MOUNTING EARS



DPDT







1.000 (25,40) (9,14) (2,79¢) TYP

PANEL MOUNTING

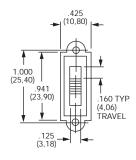
AVAILABLE WITH:

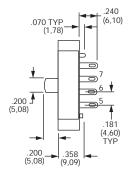
Models: L101, L102, L112, L201 and L202 Terminations: 01, 02, 03, 06, 10, 12 Actuators: 01, 02, 03, 05, 11 and 12

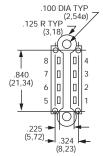
TS PANEL WITH INTEGRAL MOUNTING EARS

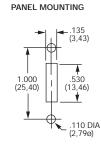


03011TS03Q **DP3T** 









#### AVAILABLE WITH:

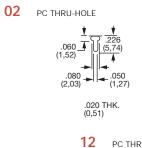
Models: L103, L113, L123 and L203 Terminations: 01, 02, 03, 06, 10, 12 Actuators: 01, 02, 03, 05, 11 and 12





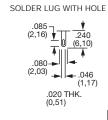
#### **TERMINATIONS**

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

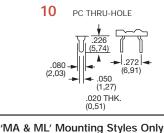


020 THK '01' terminations ®

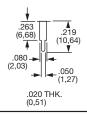
SOLDER LUG WITH NOTCH



-0-0-

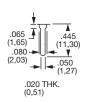


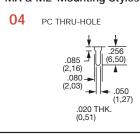
PC THRU-HOLE



06 WIRE WRAP 065 (1,65)

03





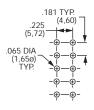


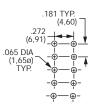












All models with '04' terminations and 'ML' mounting style All 2 position models, except '04' terminations.

All 2 position models with '04' terminations and 'MA' mounting style All 2 position models with '04' terminations and 'MA' mounting style

.181 TYP

All 3 position models, except '04' terminations.

.181 TYP

All 3 position models, with '10' terminations.

All 4 position models, with '10' terminations

#### **CONTACT MATERIAL**

OPTION CODE	CONTACT MATERIAL	RATINGS	
Q	SILVER <sup>2</sup>	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/CSA). LX6X MODELS: 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC (UL/CSA).
В	GOLD <sup>1</sup>	POWER	0.4 VA MAX. @20 V AC OR DC max.
G	GOLD OVER SILVER <sup>3</sup>	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/CSA). 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/CSA).

<sup>\*</sup> Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

<sup>2</sup> CONTACTS & TERMINALS: Copper, silver plated (standard with all termination options).

<sup>3</sup> 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  ${}_{\scriptscriptstyle{\otimes}}$   $\mbox{\bf M}{}^{\scriptscriptstyle{\otimes}}$  with all options (except '01' termination) when ordered with 'G' or 'Q' contact material.

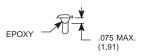
Models with '01' termination option  $_{\mbox{\tiny $\otimes$}} \mbox{\bf A} \mbox{ }$  only.

NOTE: 'G' contact material is equivalent to both 'B' and 'Q' contact materials.



NONE NO SEAL







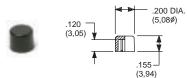


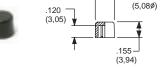
<sup>&</sup>lt;sup>1</sup> CONTACTS & TERMINALS: Copper, with gold plate over nickel plate.

# L Series Miniature Slide Switches

# **AVAILABLE HARDWARE**

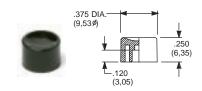
# Cap Compatible with 13-19 actuators





PART NO. 708902000 BLACK 708903000 RED Material: Nylon Finish: Gloss

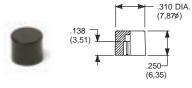
# Cap Compatible with 13-19 actuators



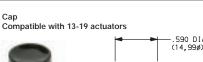
PART NO. 752702000 BLACK 752703000 RED Material: Nylon

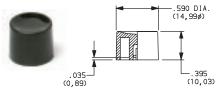
Finish: Gloss

# Cap Compatible with 13-19 actuators



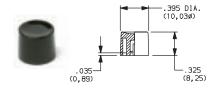
PART NO 801802000 BLACK 801803000 RED Material: Nylon Finish: Gloss





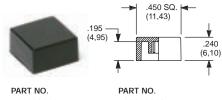


# Compatible with 13-19 actuators



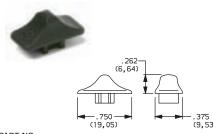
PART NO. 894102000 BLACK **894103000** RED Material: Nylon Finish: Gloss

Cap Compatible with 13-19 actuators



484602000 BLACK 798202263 BLACK 484603000 RED 798203000 RED Material: Nylon Finish: Matte Material: Nylon Finish: Gloss

Cap Compatible with 01-05 actuators



PART NO. 120100602 BLACK Material: Nylon Finish: Matte

Splash Cap





Splash Cap



Fits 'MV' mounting style, LX1X models only.

PART NO. 120100300 Material: Nylon

#### Splash Cap



Fits 'MA' mounting style,

PART NO. 120100400 Material: Nylon LXX3 models only.

NOTE: Other colors available, consult Customer Service Center.



