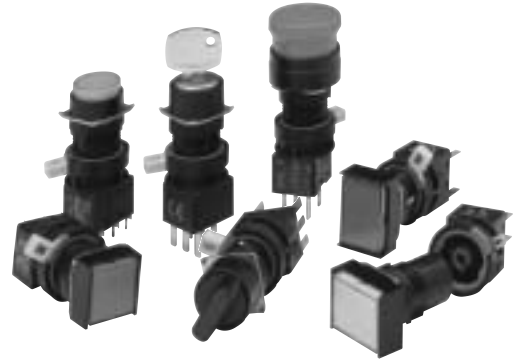


## L6 Series — Miniature Switches and Pilot Devices

Key features of the 5/8" L6 Series include:

- 5/8" (16mm) mounting holes
- Locking lever removable contact blocks
- Solder terminal or PCB terminal options
- Available assembled or as sub-components
- Worldwide approvals
- Incandescent or LED illumination
- Snap action contacts



CSA Certified  
File No. LR21451




Registration No. R9551089 (E-stops)  
Registration No. J9551458 (all other switches)  
Registration No. J9650511 (Pilot Lights)

Switches & Pilot Devices

Contact Ratings	<b>Conforming to Standards</b>	EN60947-1, EN60947-5-1, VDE0660-200, UL508, CSA C22-2 N0.14						
	<b>Operating Temperature</b>	Operation: -25 to +55°C (without freezing), 45 to 85% rh Storage: -30 to +80°C (without freezing)						
	<b>Vibration Resistance</b>	5 to 55Hz, 1.0 peak-peak amplitude max						
	<b>Shock Resistance</b>	Operating limit: 100 in/sec <sup>2</sup> (approximately 10G) Damage limit: 1000 in/sec <sup>2</sup> (approximately 100G)						
	<b>Mechanical Life</b>	Momentary pushbuttons 2,000,000 operations minimum All others: 250,000 operations minimum						
	<b>Degree of Protection</b>	IP65 (conforming to IEC 60529)						
	<b>Dielectric Strength</b>	Switch unit: between live and ground: 2500 volt AC, 1 minute between terminals of different poles: 2500 volt AC, 1 minute between terminals of same pole: 1000 volt AC, 1 minute Illumination unit: between live part and ground: 2500 volt AC, 1 minute						
	<b>Insulation Resistance</b>	100 MΩ minimum (using 500V DC megger)						
	<b>Rated Insulation Voltage</b>	250 V AC/DC						
	<b>Rated Thermal Current</b>	Gold Contacts (pcb): 3A Silver Contacts (solder): 5A						
<b>Contact Resistance</b>	50 Ω maximum initial value							
	<b>Rated Operating Current</b>	<b>Silver Contacts</b> (Solder Terminals)			<b>Gold Clad Contacts</b> (PCB terminals)			
			30V	125V	250V	30V	125V	
		AC resistive	3A	3A	2A	AC inductive	-	0.1A
		AC inductive	2A	2A	1.5A	DC resistive	0.1A	-
		DC resistive	2A	0.4A	-			
		DC inductive	1A	0.2A	-			
<b>Minimum Recommended Load</b> (reference value for silver contacts)	5 VAC/DC, 1mA							
<b>Terminal Style</b>	0.110" Solder Tab /PCB							
<b>Contact Form</b>	Snap Action, Double Throw							
<b>Contact Material</b>	Solder Tab: Pure Silver /PCB thermal Gold Plated Silver							
<b>Electrical Life</b> (at full load)	Momentary pushbuttons: 100,000 operations minimum (1800 operations / hour) All others: 100,000 operations minimum (1200 operations / hour)							
Lamp Ratings	<b>Lamp Current Draw</b>	5V DC LED: 8mA		6V incandescent: 100 mA				
		6V LED: 7mA		12V incandescent: 50 mA				
		12V LED: 8mA		24V incandescent: 25 mA				
24V LED: 8mA								
<b>Lamp Life</b>	Incandescent: 2000 hours./LED: 50,000 hours. (on pure DC, half-life intensity)							
Buzzer Ratings	<b>Frequency</b>	2 khz ± 500 HZ						
	<b>Amplitude</b>	80db @ 0.1m (at rated voltage)						
	<b>Operating Voltage</b>	6V AC/DC or 12 - 24V AC/DC ± 10%						
	<b>Adjustable Cycle</b>	55 to 600 cycles per minute						
	<b>Current Draw</b>	DC: 7mA AC: 20mA						
	<b>Life</b>	1000 hrs. minimum						
	<b>Insulation Voltage</b>	60V AC/DC						
<b>Operating Temperature</b>	-20 to 55 C (no freezing), 45 to 85% rh							

## Pushbutton Selectors (Assembled)

### Part Numbers: Pushbutton Selectors

Style	Terminal Style	
	Solder Tab	PCB
 2 Position	HA1R-2C6-①	HA1R-2C2V-①
	HA1R-3C6-①	HA1R-3C2V-①

### ① Button Color Code

Color	Code
Black	B
Green	G
Red	R
Blue	S
Yellow	Y




- In place of ① specify Button Color Code.
- PCB terminal models also available with silver contacts (change "1" or "2" to "5" or "6" respectively, ie HA1R-2C2V-① becomes HA1R-2C6V-①).

### Contact Operation

Style	Operator Position					
	Left		Center		Right	
	Normal	Depressed	Normal	Depressed	Normal	Depressed
2 Position						
3 Position				Blocked		

## Lever Switch (Assembled)

### Part Numbers: Lever Switches

Style	Operation	Contacts	Terminal Type		
			Solder Tab	PCB	
 2-Position	Maintained		DPDT	LA1T-2C6	LA1T-2C2V
	Spring return from top		DPDT	LA1T-21C6	LA1T-21C2V
	Spring Return from bottom		DPDT	LA1T-22C6	LA1T-22C2V
3-Position	Maintained		DPDT	LA1T-3C6	LA1T-3C2V
	Spring return from top		DPDT	LA1T-31C6	LA1T-31C2V
	Spring return from bottom		DPDT	LA1T-32C6	LA1T-32C2V
	Spring return from both		DPDT	LA1T-33C6	LA1T-33C2V



PCB terminal models also available with silver contacts (change "1" or "2" to "5" or "6" respectively, ie LA1T-2C2V becomes LA1T-2C6V).

### Contact Operation

Contacts	Operator Position & Contact Operation	Operator Position & Contact Operation		
		Down	Center	Up
2-pos. (DPDT)	Maintained Spring from Up			
2-pos (DPDT)	Spring Return from Down			
3-pos. (DPDT)	All models			



As viewed from front of switch.