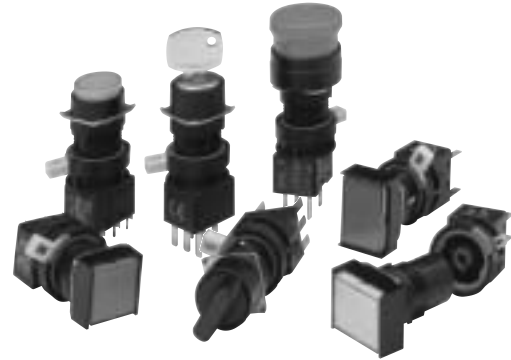


## L6 Series — Miniature Switches and Pilot Devices

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



A2

Switches & Pilot Devices



UL Recognized  
File No. E55996



CSA Certified  
File No. LR21451











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

Contact Ratings	<b>Conforming to Standards</b>	EN60947-1, EN60947-5-1, VDE0660-200, UL508, CSA C22-2 NO.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 m/sec <sup>2</sup> (approximately 10G) Damage limit: 1000 m/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	2A	-	0.1A	
	AC inductive	-	2A	1.5A	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			
	<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						

## Non-Illuminated Pushbuttons (Assembled)

### Part Numbers: Non-Illuminated Pushbuttons

Style	Operation	Contact	Terminal Style	
			Solder Tab	PCB
Round 	Momentary	SPDT DPDT	LA1B-M1C5-① LA1B-M1C6-①	LA1B-M1C1V-① LA1B-M1C2V-①
	Maintained	SPDT DPDT	LA1B-A1C5-① LA1B-A1C6-①	LA1B-A1C1V-① LA1B-A1C2V-①
Square 	Momentary	SPDT DPDT	LA2B-M1C5-① LA2B-M1C6-①	LA2B-M1C1V-① LA2B-M1C2V-①
	Maintained	SPDT DPDT	LA2B-A1C5-① LA2B-A1C6-①	LA2B-A1C1V-① LA2B-A1C2V-①
Rectangular 	Momentary	SPDT DPDT	LA3B-M1C5-① LA3B-M1C6-①	LA3B-M1C1V-① LA3B-M1C2V-①
	Maintained	SPDT DPDT	LA3B-A1C5-① LA3B-A1C6-①	LA3B-A1C1V-① LA3B-A1C2V-①
Oversize Round Flush 	Momentary	SPDT DPDT	HA1B-M1C5-① HA1B-M1C6-①	HA1B-M1C1V-① HA1B-M1C2V-①
	Maintained	SPDT DPDT	HA1B-A1C5-① HA1B-A1C6-①	HA1B-A1C1V-① HA1B-A1C2V-①
Oversize Round Extended 	Momentary	SPDT DPDT	HA1B-M2C5-① HA1B-M2C6-①	HA1B-M2C1V-① HA1B-M2C2V-①
	Maintained	SPDT DPDT	HA1B-A2C5-① HA1B-A2C6-①	HA1B-A2C1V-① HA1B-A2C2V-①
Oversize Square Flush 	Momentary	SPDT DPDT	HA2B-M1C5-① HA2B-M1C6-①	HA2B-M1C1V-① HA2B-M1C2V-①
	Maintained	SPDT DPDT	HA2B-A1C5-① HA2B-A1C6-①	HA2B-A1C1V-① HA2B-A1C2V-①
Oversize Square Extended 	Momentary	SPDT DPDT	HA2B-M2C5-① HA2B-M2C6-①	HA2B-M2C1V-① HA2B-M2C2V-①
	Maintained	SPDT DPDT	HA2B-A2C5-① HA2B-A2C6-①	HA2B-A2C1V-① HA2B-A2C2V-①
Mushroom 	Momentary	SPDT DPDT	HA1B-M3C5-① HA1B-M3C6-①	HA1B-M3C1V-① HA1B-M3C2V-①
	Maintained	SPDT DPDT	HA1B-A3C5-① HA1B-A3C6-①	HA1B-A3C1V-① HA1B-A3C2V-①

### Button Color Codes

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

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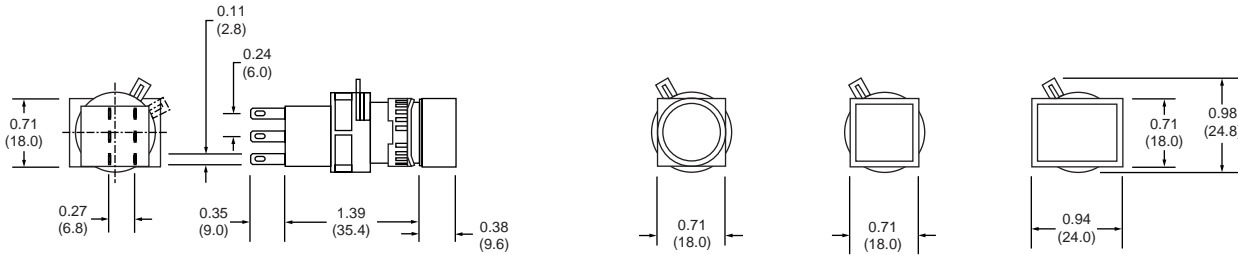
Switches & Pilot Devices



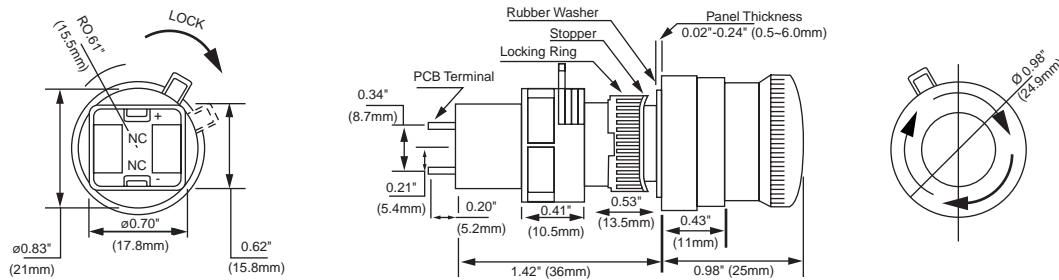
- In place of ① specify Button Color Code from table on right.
- Illuminated (translucent) style lenses also available, specify as such: instead of LA1B-M1C5-① use LA1B-M1C5L-② in place of ② specify Lens Color Code from next page.)
- PCB terminal models also available with silver contacts (change "1" or "2" to "5" or "6" respectively, ie LA1B-M1C1V-① becomes LA1B-M1C5V-①).

## Dimensions

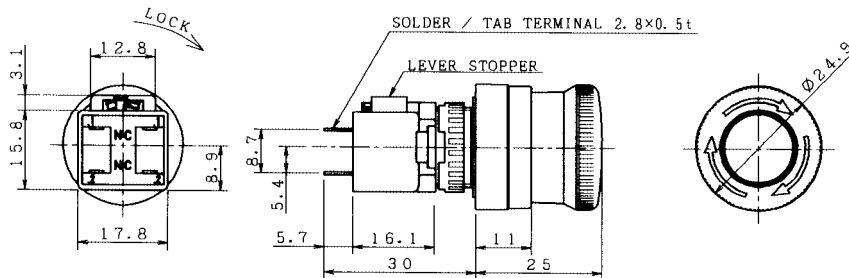
### Non-Illuminated Pushbuttons (LA\*B)



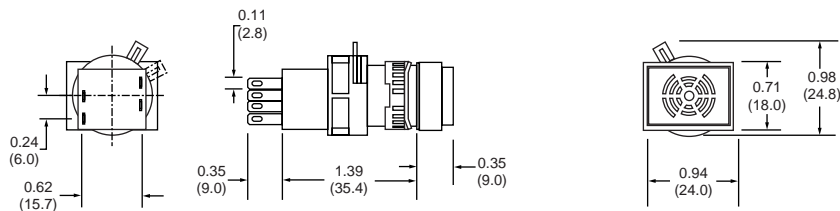
### Emergency Stop Switch (HA1B)



### Emergency Stop Switch (HA1E) - Short Body Style



### Buzzer (LA3Z)



### Pilot Lights (LA\*P)

