

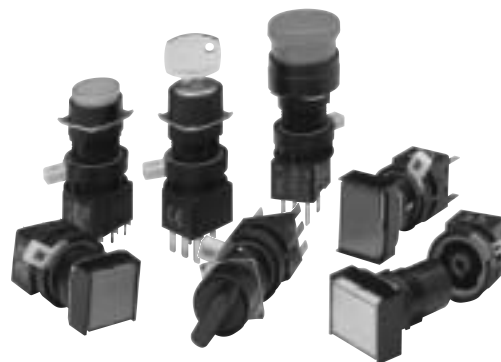
L6 Series — Miniature Switches and Pilot Devices

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	Conforming to Standards	EN60947-1, EN60947-5-1, VDE0660-200, UL508, CSA C22-2 N0.14																																														
	Operating Temperature	Operation: -25 to +55°C (without freezing), 45 to 85% rh Storage: -30 to +80°C (without freezing)																																														
	Vibration Resistance	5 to 55Hz, 1.0 peak-peak amplitude max																																														
	Shock Resistance	Operating limit: 100 m/sec ² (approximately 10G) Damage limit: 1000 m/sec ² (approximately 100G)																																														
	Mechanical Life	Momentary pushbuttons 2,000,000 operations minimum All others: 250,000 operations minimum																																														
	Degree of Protection	IP65 (conforming to IEC 60529)																																														
	Dielectric Strength	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																																														
	Insulation Resistance	100 MΩ minimum (using 500V DC megger)																																														
	Rated Insulation Voltage	250 V AC/DC																																														
	Rated Thermal Current	Gold Contacts (pcb): 3A Silver Contacts (solder): 5A																																														
	Contact Resistance	50 Ω maximum initial value																																														
	Rated Operating Current	<table><tr><td></td><td colspan="3">Silver Contacts (Solder Terminals)</td><td></td><td colspan="2">Gold Clad Contacts (PCB terminals)</td></tr><tr><td></td><td>30V</td><td>125V</td><td>250V</td><td></td><td>30V</td><td>125V</td></tr><tr><td>AC resistive</td><td>-</td><td>3A</td><td>2A</td><td>AC inductive</td><td>-</td><td>0.1A</td></tr><tr><td>AC inductive</td><td>-</td><td>2A</td><td>1.5A</td><td>DC resistive</td><td>0.1A</td><td>-</td></tr><tr><td>DC resistive</td><td>2A</td><td>0.4A</td><td>-</td><td></td><td></td><td></td></tr><tr><td>DC inductive</td><td>1A</td><td>0.2A</td><td>-</td><td></td><td></td><td></td></tr></table>							Silver Contacts (Solder Terminals)				Gold Clad Contacts (PCB terminals)			30V	125V	250V		30V	125V	AC resistive	-	3A	2A	AC inductive	-	0.1A	AC inductive	-	2A	1.5A	DC resistive	0.1A	-	DC resistive	2A	0.4A	-				DC inductive	1A	0.2A	-		
		Silver Contacts (Solder Terminals)				Gold Clad Contacts (PCB terminals)																																										
	30V	125V	250V		30V	125V																																										
AC resistive	-	3A	2A	AC inductive	-	0.1A																																										
AC inductive	-	2A	1.5A	DC resistive	0.1A	-																																										
DC resistive	2A	0.4A	-																																													
DC inductive	1A	0.2A	-																																													
Minimum Recommended Load (reference value for silver contacts)	5 VAC/DC, 1mA																																															
Terminal Style	0.110" Solder Tab /PCB																																															
Contact Form	Snap Action, Double Throw																																															
Contact Material	Solder Tab: Pure Silver /PCB thermal Gold Plated Silver																																															
Electrical Life (at full load)	Momentary pushbuttons: 100,000 operations minimum (1800 operations / hour) All others: 100,000 operations minimum (1200 operations / hour)																																															
Lamp Ratings	Lamp Current Draw	5V DC LED: 8mA 6V LED: 7mA 12V LED: 8mA 24V LED: 8mA 6V incandescent: 100 mA 12V incandescent: 50 mA 24V incandescent: 25 mA																																														
	Lamp Life	Incandescent: 2000 hours./LED: 50,000 hours. (on pure DC, half-life intensity)																																														
Buzzer Ratings	Frequency	2 khz ± 500 HZ																																														
	Amplitude	80db @ 0.1m (at rated voltage)																																														
	Operating Voltage	6V AC/DC or 12 - 24V AC/DC ± 10%																																														
	Adjustable Cycle	55 to 600 cycles per minute																																														
	Current Draw	DC: 7mA AC: 20mA																																														
	Life	1000 hrs. minimum																																														
	Insulation Voltage	60V AC/DC																																														
Operating Temperature	-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

A2

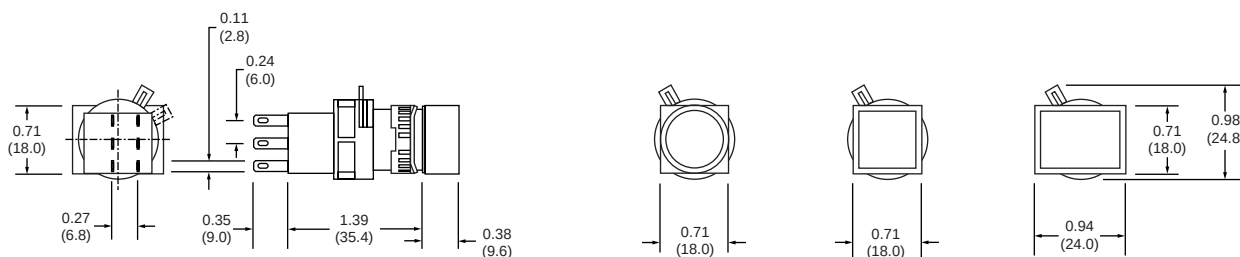
Switches & Pilot Devices



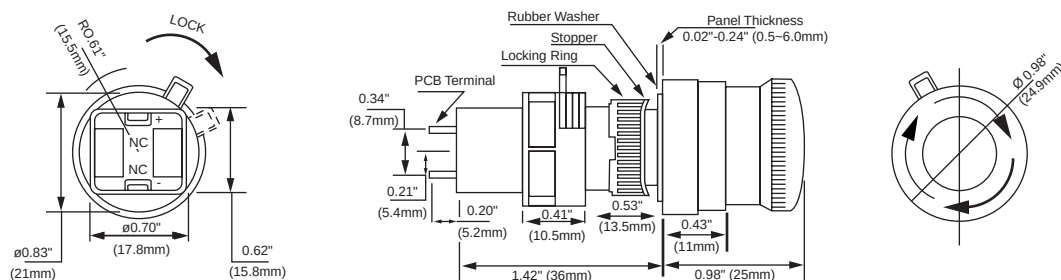
1. In place of ① specify Button Color Code from table on right.
2. Illuminated (translucent) style lenses also available, specify as such: instead of LA1B-M1C5-① use LA1B-M1C5L-② in place of ② specify Lens Color Code from next page.)
3. PCB terminal models also available with silver contacts (change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

Dimensions

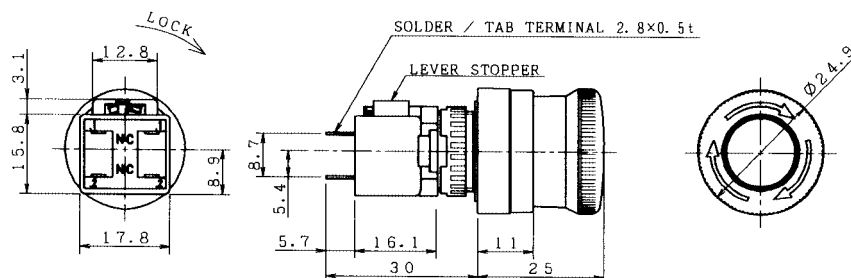
Non-Illuminated Pushbuttons (LA*B)



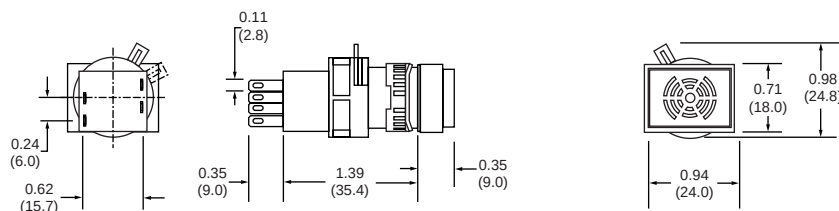
Emergency Stop Switch (HA1B)



Emergency Stop Switch (HA1E) - Short Body Style



Buzzer (LA3Z)



Pilot Lights (LA*P)

