

HA1B/HA1E E-Stop

Miniature Switches and Pilot Devices: 5/8" (16mm)

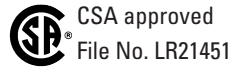
Key features of HA1B/HA1E Push lock Turn Reset include:

- PCB or Solder Terminals
- Quick Release Contact Blocks
- Positive Action Contacts
- 1 or 2 form B (SPST-NC) Contacts
- IP65 Protection
- 16mm Mounting Hole
- Tamper Proof Construction



A2

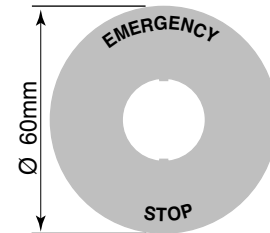
Switches & Pilot Devices



Specifications	Contact Ratings		24VDC/2A
			120VAC/3A
	Contact Form		1 or 2 form B (2-SPST-NC)
	Termination		PCB or Solder Terminal
	Contact Material		Silver
	Applicable Standards		EN60947-5-1, UL-508, CSA 22.2. No. 14
	Rated Insulation Voltage		250V
	Degree of Protection		IP65, when mounted in an enclosure
	Conditional Short-Circuit Current & Short-Circuit Protective Device		50 A (at 250V) 10A 250V Fuse, operation class aM according to IEC269-1 and IEC269-2
	Positive Opening Operation	Positive opening travel	3.4mm
Minimum force required to achieve positive opening operation of all break contacts.		10.3 N (2 form B contacts)	
Maximum travel including travel beyond the minimum travel position		5.5mm	
Maximum frequency of actuation		1,200 operations/hour	
Pollution Degree		3	


Part Numbers: Nameplates


HAAV-Yellow Plastic




	Part Number
Blank	HAAV-0
Engraved Emergency Stop	HAAV-27

Part Numbers: Positive Action E-Stop

Appearance	Operation	Contact	Terminal Style	
			Solder Tab	PCB
E-Stop 	Pushlock/ Turn Reset	DPST(NC) (2 form B)	HA1B-V2E2R	HA1B-V2E2VR
		Short Body SPST-NC (1 form B) DPST-NC (2 form B)	HA1E-V2S1R HA1E-V2S2R	-

 Button is non-removable, available in red and as complete assembled unit only.

Part Number: Buzzers (IP40)

Appearance	Operating Voltage	Terminal Style	
		Solder/Tab	PCB
Buzzer-Rectangular 	6V AC/DC ± 10%	LA3Z-1X2	LA3Z-1X2V
	12V to 24 AC/DC ± 10%	LA3Z-1X4	LA3Z-1X4V

Frequency: 2kHz ± 500 Hz
Amplitude: 80db at 0.1m
Beeping: Adjustable from steady tone to 600 beeps per minute.

Pilot Lights (Sub-Assembled)

Terminals + Safety Lever Lock + Lamp Holder + Lamp + Operator + Lens = Completed Unit



A2

Switches & Pilot Devices

Part Numbers: Operators

Style	Part Number
Round	LA1P-0
Square	LA2P-0
Rectangular	LA3P-0
Oversize Round	HA1P-0
Oversize Square	HA2P-0
Oversize Round Unibody	HA1P-00
Oversize Square Unibody	HA2P-00

Part Numbers: Lenses

Style	Part Number
Round	AL6M-LK3-②
Square	AL6Q-LK3-②
Rectangular	AL6H-LK3-②
Oversize Round	HA1A-P1-②
Oversize Square	HA2A-P1-②

In place of ② specify lens color code.

Part Numbers: Lamps

Style	Voltage	Part Number
LED	5V DC	LFTD-5②
	6V AC/DC	LFTD-6②
	12V AC/DC	LFTD-1②
	24V AC/DC	LFTD-2②
	120 V AC	LFTD-H2②
Incandescent	6V AC/DC	LH-06
	12V AC/DC	LH-14
	24V AC/DC	LH-28

In place of ② specify LED color code from table below.

Part Numbers: Terminals

Appearance	Solder Tab	PCB
	HA-C00	HA-C00V

Not required for unibody models.

Part Number: Lamp Holder

Appearance	Part Number
	HA9Z-AH

Part Number: Safety Lever Lock

Appearance	Part Number
	HA9Z-LS







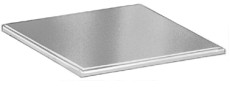



② Lens/LED Color Codes

Color	Code
Amber	A
Green	G
Red	R
Blue	S
Yellow	Y

Accessories

A2

Switches & Pilot Devices

Part		Specifications	Part Number	Notes	
Ring Wrench		Made of metal	MT-001	Used for tightening the plastic locking ring when installing the L6 series unit on a panel. Tightening torque should not exceed 9kgf cm when tightening a locking ring.	
Lamp Holder Tool (Made of Rubber)		Made of rubber. Used for removing and replacing LED and incandescent lamps in illuminated units.	OR-44	Rubber tool used for replacing LED and incandescent lamps.	
Lens Removal Tool		For Illuminated pushbuttons and pilot lights.	MT-101	Used for removing the lens or button from the housing.	
LED Lamp		5V DC 6V AC/DC 12V AC/DC 24V AC/DC 120V AC	LFTD-5② LFTD-6② LFTD-1② LFTD-2② LFTD-H2②	T 1-3/4 miniature flange base. In place of ② specify LED Color Code (see page A2-43).	
Incandescent Lamp		6V AC/DC 12V AC/DC 24V AC/DC	LH-06 LH-14 LH-28	0.5W, T 1-3/4 miniature flange base	
Switch Guard		90 degrees opening maintained	Round/Square	AL-K6	Prevents inadvertent switch operation. IP40 dust-tight rated.
			Rectangular	AL-KH6	
		180 degrees opening, spring return	Round/Square	AL-K6SP	Prevents inadvertent switch operation. IP65 oiltight rated.
			Rectangular	AL-KH6SP	
Dust-proof Cover		For round units	AL-D6	Provides extra level of sealing for "front-panel" portion of switches. (Not applicable for units with oversize lenses or buttons).	
		For square units	AL-DQ6		
		For rectangular units	AL-DH6		
Terminal Cover		Made of white nylon	All removable contacts	H6-VL2	Covers terminals to prevent possible electric shock.
			Unibody Pilot Lights	H6-PVL	
Mounting Hole Plug		Rubber		AL-B6	Fills unused panel cutouts. Made of nitrile rubber. Push-in installation from front of panel. IP65 (oiltight) rated.
		Aluminum		AL-BM6	Fills unused panel cutouts. Made of aluminum. Screw-on locking ring from inside of panel. IP65 (oiltight) rated.
Replacement Keys		for LA1K (#132)		AS6-SK	Pair of keys.
		for HA1K (#231)		KG9Z-SK	
Replacement Engraving Inserts			Round Square Rectangle Oversize Round Oversize Square Mushroom	AL6M-W AL6Q-W AL6H-W HA9Z-P1-W HA9Z-P2-W HA9Z-P13-W	
Replacement Locking Ring		All models		HA9Z-LN	
Replacement Anti-Rotation Ring			L6 standard	AL6-LP	Prevents rotation of switches in panel. (included with all assembled switches)
			L6 oversize	HA9Z-LP	
Replacement Selector Inserts				HA9Z-HC1-①	Applicable to round oversize selectors only ① = (G, R, S, W, Y)
Replacement Safety Lever Lock				HA9Z-LS	