

Emergency Stop Switches (Unibody Type) Specifications

Contact Ratings

Rated Insulation Voltage (Ui)		250V			
Rated Thermal Current (Ith)		10A			
Rated Operational Voltage (Ue)		24V	110V	220V	
Rated Operational Current	AC 50/60 Hz	Resistive Load (AC-12)	6A	3A	3A
		Inductive Load (AC-15)	6A	3A	3A
	DC	Resistive Load (DC-12)	6A	2A	1A
		Inductive Load (DC-13)	1.5A	0.3A	0.15A

Note: The operational current represents the classification by making and breaking currents (IEC 60947-5-1).

Minimum applicable load (reference value): 3V AC/DC, 5 mA (Applicable range may vary with operating conditions and load types.)

LED Lamp Ratings

Unit Rated Operating Voltage	LED Lamp		
	Type No.	Rated Voltage	Rated Current
6V AC/DC	LSTD-6R	6V AC/DC ±10%	14 mA
12V AC/DC	LSTD-1R	12V AC/DC ±10%	10 mA
24V AC/DC	LSTD-2R	24V AC/DC ±10%	10 mA

Incandescent Lamp Ratings

Unit Rated Operating Voltage	Incandescent Lamp	
	Type No.	Wattage
6V AC/DC	LS-6	1W (6.3V)
12V AC/DC	LS-8	1W (18V)
24V AC/DC	LS-3	1W (30V)


Specifications

Operating Temperature	–25 to +60°C (no freezing) Illuminated units: –25 to +50°C
Storage Temperature	–40 to +80°C
Operating Humidity	45 to 85% RH (no condensation)
Contact Resistance	50 mΩ maximum (initial value)
Insulation Resistance	100 MΩ minimum (500V DC megger)
Dielectric Strength	Between live and dead metal parts
	Contacts: 2,500V AC, 1 minute Illuminated parts: 1,000V AC, 1 minute
Vibration Resistance	Damage limits: 60 m/s ²
	Operating extremes: 5 to 55 Hz, amplitude 0.5 mm
Shock Resistance	Damage limits: 1,000 m/s ²
	Operating extremes: 100 m/s ²
Operating Frequency	900 operations/h
Life	Mechanical: 250,000 operations minimum
	Electrical: 100,000 operations minimum (at 900 operations/h, duty ratio 40%)
Degree of Protection	IP65
Terminal Style	M3.5 screw

Applicable Standards and Approvals

Safety Standards	File No. or Organization
UL508	UL Listing File No. E55996
CSA C22.2 No. 14	c-UL (File No. E55996)
EN60947-5-5	DEMKO approved


Pushlock Turn Reset Switches (Unibody Type)

Shape	Contact	Type No.	Button Color
ø40mm Mushroom Pushlock Turn Reset HW1E-BV4 	1NO-1NC	HW1E-BV411R	Red only
	2NC	HW1E-BV402R	

- When pressed, the button is held depressed. The button is released by turning clockwise.
- Terminal cover HW-VL7 is supplied with the switch.

ø22 HW Series Emergency Stop Switches

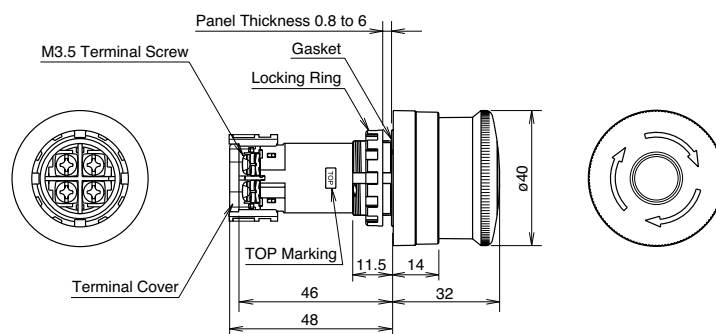
Illuminated Pushlock Turn Reset Switches (Unibody Type)

Shape	Lamp	Contact	Type No.	Lens Color
ø40mm Mushroom Pushlock Turn Reset HW1E-LV4 	Without Lamp	1NO-1NC	HW1E-LV411Q0R	Red only
		2NC	HW1E-LV402Q0R	

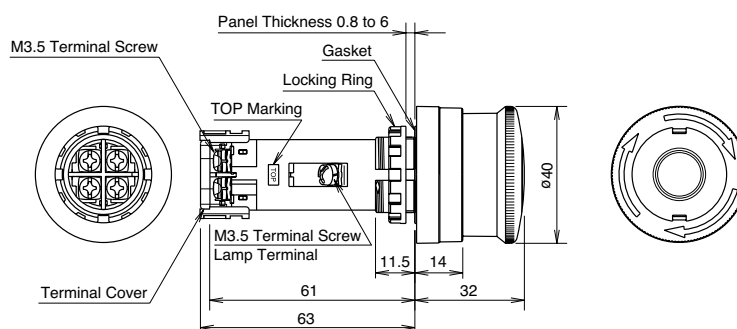
- When pressed, the button is held depressed. The button is released by turning clockwise.
- The illuminated pushlock turn reset switch does not contain a lamp. Order LED or incandescent lamps separately. For lamps, see page 43.
- Terminal cover HW-VL7 is supplied with the switch.

Dimensions

• HW1E-BV4

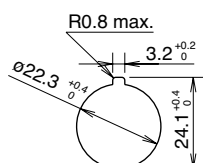


• HW1E-LV4



All dimensions in mm.

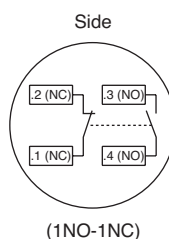
Mounting Hole



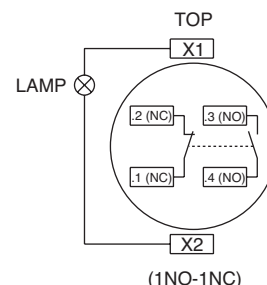
Determine the minimum mounting hole centers in consideration of convenience for wiring.

Terminal Arrangement (Bottom View)

• HW1E-BV4



• HW1E-LV4



Replacement Parts

Name	Type No.	Ordering Type No.	Package Quantity	Remarks
Terminal Cover	HW-VL7	HW-VL7PN10	10	Used on HW1E emergency stop switches for preventing electrical shocks. The HW-VL7 terminal cover is supplied with the HW1E.