

## Digital Thermometer

**E5LC**

### Ideal Replacement for Alcohol Thermometers

- Microprocessor precision allows measuring in 0.1°C increments.
- Internal battery, thermometer needs no power supply wiring.
- Large, easy-to-read LCD display.

### Ordering Information

The standard models listed below include mounting brackets and knurled screws. The attached temperature sensor is a thermistor with a 2-meter lead. The thermometer housing is light gray.

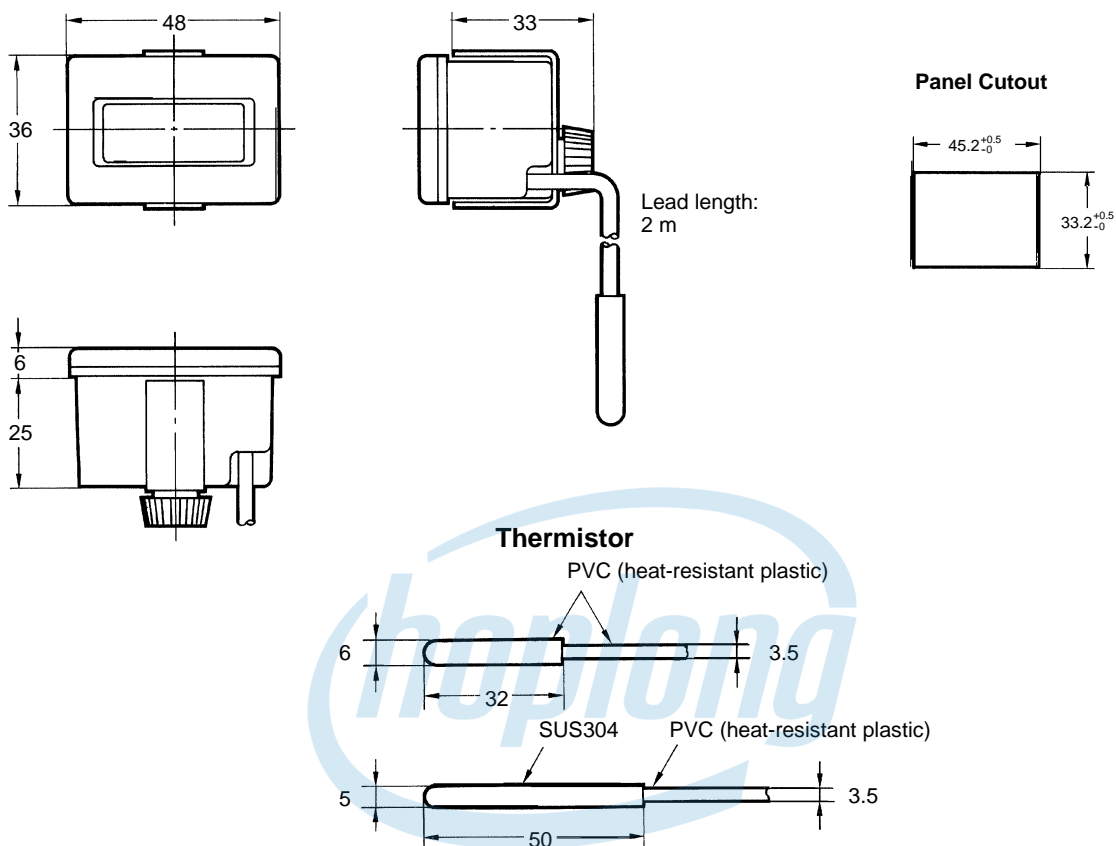
Model	Measurement range
E5LC-1	-30.0% to 20.0°C
E5LC-2	-10.0% to 40.0°C
E5LC-3	40.0% to 90.0°C
E5LC-4	60.0% to 110.0°C
E5LC-5	-40.0% to 40.0°C
E5LC-6	-20.0% to 60.0°C
E5LC-7	30.0% to 110.0°C

### Specifications

<b>External power source</b>	Unnecessary (internal battery)
<b>Ambient temperature</b>	Operating: -10% to 55°C (no icing) Storage: -25% to 65°C (no icing)
<b>Ambient humidity</b>	Operating: 35% to 85%
<b>Indication accuracy</b>	+1°C max. The accuracy for the E5LC-5 in the range 20.0% to 40.0°C, the E5LC-6 in the range 40.0% to 60.0°C, and the E5LC-7 in the range 90.0% to 110.0°C is +2°C max..
<b>Sampling cycle</b>	2 seconds
<b>Vibration resistance</b>	Malfunction: 2 to 55 Hz (2 G) for 10 min. each in X, Y, and Z directions Destruction: 10 to 55 Hz, 0.75 mm double amplitude for two hrs each in X, Y, and Z directions
<b>Shock resistance</b>	Malfunction: 100 m/s <sup>2</sup> 3 times each in 6 directions Destruction: 300 m/s <sup>2</sup> 3 times each in 6 directions
<b>Battery life</b>	10 years min. under specified operating conditions
<b>Weight</b>	85 g (includes mounting bracket)

## Dimensions

**Note:** All units are in millimeters and dimensional tolerance is +0.4 mm unless otherwise specified.



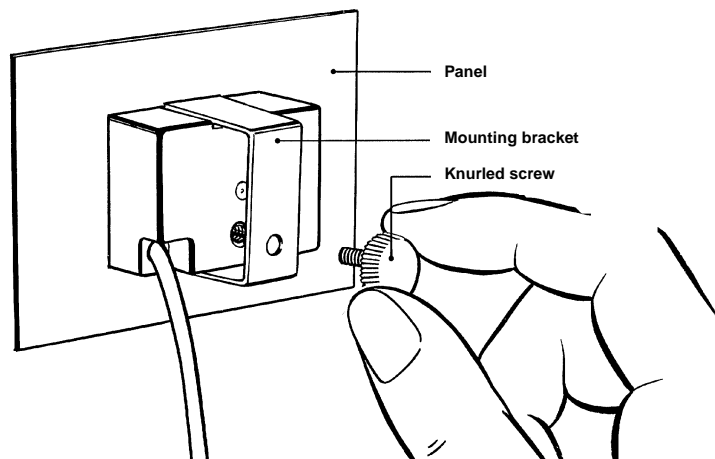
## Installation

### ■ Mounting

Insert the E5LC through the mounting panel with the display facing forward.

Place the knurled screw through the mounting bracket and screw it by hand into the E5LC. Do not use a screw other than the knurled

screw included, and do not use pliers or other tools to screw it in, as this may damage the unit.



## Precautions

The operating range of the lead wire is -40% to 105% C for all models. The operating range of the temperature sensor is -40% to 105% C for models E5LC-1, E5LC-2, E5LC-3, E5LC-5, and E5LC-6 and -40% to 130% C for models E5LC-4 and E5LC-7.

The temperature sensor conforms to JISC0902 specifications for submersion in water, but should not be used constantly under water.

The temperature sensor and thermometer are calibrated as a set. Use them together.

Do not apply mechanical force to the tip of the temperature sensor.

Do not pull or push the temperature sensor with excessive force.

If the temperature sensor wire breaks, or if the sensor is damaged by shorting, the entire thermometer must be readjusted. Contact your OMRON dealer.

Keep the temperature sensor away from power supply wires to prevent adverse effects from inductive noise.

Do not mount the thermometer where it will be subject to any of the following.

- Mechanical vibration or impact
- Dust or corrosive gases
- High humidity
- Splashing oil or water
- High-frequency noise such as that produced by welders and other equipment.

To clean the housing use a cloth moistened with a neutral detergent or alcohol. Do not use organic solvents such as thinner or benzene, or highly alkaline or acidic solutions as they may damage the surface.

## ■ Error Displays

--- Temperature is below the thermometer's measurable range.

FFF Temperature is above the thermometer's measurable range.

Flashing --- Temperature sensor's lead wire has broken.

Flashing FFF Temperature sensor has short circuited.



INDUSTRIAL AUTOMATION

**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. H035-E1-2 In the interest of product improvement, specifications are subject to change without notice.

## OMRON Corporation

Temperature Control Devices Division  
29th Fl., Crystal Tower Bldg.  
1-2-27, Shiromi, Chuo-ku,  
Osaka 540 Japan  
Phone: 06-949-6070 Fax: 06-949-6084

Printed in Japan  
0591-2M (0591)