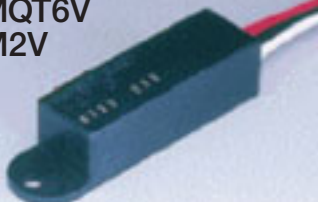
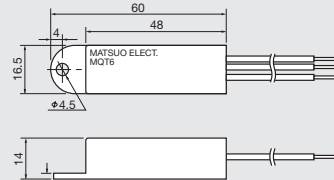


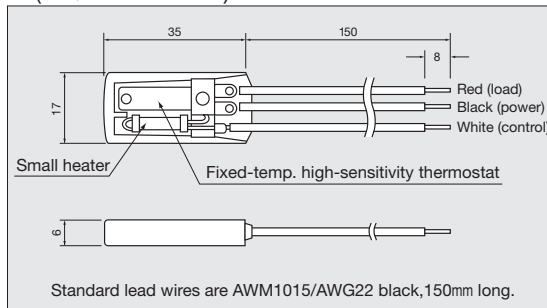
# Remote controlled variable thermostat

**NOTE:** This product is custom-designed and it takes time, therefore small quantity orders are not acceptable. We accept an order of 1,000 pieces, minimum.

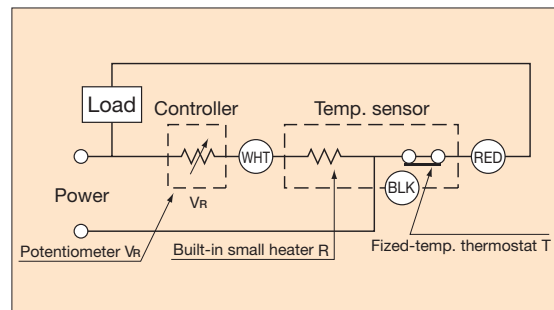
<p>MQT11LV MQT6V M2V</p>  <p>Shown is MQT6V.</p>	 <p>MQT11LV (2 Amp. Model. See the illustration below for dimensions.) MQT6V (5 Amp. Model. See the illustration above.) M2V (5 Amp. Model. Dimensions are the same as the M2's large differential.)</p>	<p><b>Features:</b> The conventional variable thermostat using bimetal has a control shaft extending directly from the body (see page 6). However, our series offers a thermostat which temperatures can be controlled remotely. The thermostat is contained in a small case and its temperature can be continuously adjusted by controlling resistance value of remotely located potentiometer. This arrangement has been adapted into many new product designs.</p>
---	---	---

## Principle of Operation

Structure of temperature sensing section (MQT11LV shown)



## Schematic diagram



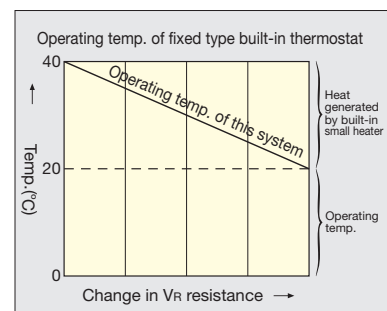
- Suppose the temperature-fixed thermostat T is set at 40°C. When the resistance of Vr is in a high resistance region and the built-in small heater R does not generate any heat at all, the operating temperature of the thermostat remains at 40°C and the thermostat operates just like an ordinary thermostat.
- If Vr is adjusted to its minimum resistance value, R generates heat and raises the temperature inside the housing to 20 degrees above room temperature. If room temperature is 20°C, the temperature inside the housing becomes 40°C, and the thermostat shuts off.
- Thus, the thermostat operates at a lower temperature using the heat generated by the built-in heater, and an inexpensive, remotely controllable variable thermostat is available without using complex control system.

## Simple method

Potentiometer Vr can be substituted with two fixed resistors and switched as shown in the illustration, if curve "D" Vr is not available.



## Operating diagram



## Ordering information for this system

1. This system is not applicable where heat inside the housing rapidly dissipates due to strong wind, etc.. It is suited for applications where heat stays inside, for example, when used with a heating mat.
2. Resistance of Vr and R need to be determined by the voltage and the temperature variable range. A technical bulletin for typical applications is available. Custom-design may be needed depending on your particular requirements.
3. Commercially available variable resistor with curve "B" can not be used. Curve "D" or equivalent is required.
4. This product is custom-designed and it takes time, therefore small quantity orders are not acceptable.
5. We accept a possible order for minimum production of 1,000 pieces.