Compact and Reliable Temperature Control

Fluid Power Energy (FPE) thermostatic valves utilize the principle of expanding wax, which in the semi-liquid state undergoes large expansion rates within a relatively narrow temperature range. The self-contained element activates a stainless steel sleeve, which directs flow. All FPE thermostatic valves are factory set at predetermined temperatures: no further adjustments are necessary.

When used in a diverting application, on start-up the total fluid flow is routed back to the main system. As fluid temperature rises to the control range, some fluid is diverted to the cooling system. As fluid temperature continues to increase, more flow is diverted. When the thermostat is in a fully stroked condition, all fluid flow is directed to the cooling system.

FPE thermostatic valves may also be used in a mixing application. Hot fluid enters the “B” port and colder fluid enters the “C” port. The flows mix and the thermostat adjusts flow through ports “B” and “C” to reach the desired temperature, exiting the “A” port.

Standard FPE thermostatic valve housings are made from aluminum and grey iron castings, however, ductile iron, bronze, steel and stainless steel housings are available.

Including:

- 2510 2½” Flange 125 ANSI Class
- 2510M 2½” Flange, lever manual override
- 2510MZ 2½” Flange, nut manual override
- 2510U 2½” Flange DN/PN
- 2510UM 2½” Flange DN/PN, lever manual override
- 2510UMZ 2½” Flange DN/PN, nut manual override
- 2510XM 2½” Flange ANSI 300, lever manual override
- 2510XMZ 2½” Flange ANSI 300, nut manual override

Features and Benefits

- Wide range of temperatures
- Heavy duty
- Self-contained
- Replaceable element
- Non-adjustable
- Rugged construction
- Tamper-proof
- Operate in any orientation
- Compact
# Model 2510 Three-Way Thermostatic Valve Specifications

All units in inches (mm) or lbs (Kg); English (metric)

## NOTE:
- Service Kits are supplied with Housing O-Rings & Housing Gaskets. Make sure to replace your original housing seal using the same style seal, and discard the extra component. If your valve was originally supplied with a gasket, DO NOT attempt to use an O-Ring, as the seal will leak without a groove to accept the O-Ring.
- FPE reserves the right to substitute ordered material for better quality.

---

## Model 2510

### Specifications
- **Body Material**
- **Connection Size**
- **Principal Dimensions Units**
  - **Y**
  - **W**
  - **Z**
  - **V**
  - **No. of elements**
  - **Diam. of hole**
  - **Bolt circle**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Body Material</th>
<th>Connection Size</th>
<th>Principal Dimensions Units</th>
<th>Flange Drilling</th>
<th>No. of elements</th>
<th>Diam. of hole</th>
<th>Bolt circle</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>2510</em></td>
<td></td>
<td>2½&quot; 125lbs FF FLANGE</td>
<td>5 127 10 6 5/8 7 4 4/9 (19)</td>
<td>6 152 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>2510</em></td>
<td></td>
<td>2½&quot; 150lbs FF FLANGE</td>
<td>4 7/8 123 9 6 6 7 4 4/9 (19)</td>
<td>6 152 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>2510</em></td>
<td></td>
<td>2½&quot; 125lbs FF FLANGE</td>
<td>5 3/16 131 10 3 6 7 4 4/9 (19)</td>
<td>6 152 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>2510</em></td>
<td></td>
<td>2½&quot; 150lbs FF FLANGE</td>
<td>5 3/16 131 10 3 6 7 4 4/9 (19)</td>
<td>6 152 2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Service Kits

### (xxx represents temperature °F)

<table>
<thead>
<tr>
<th>Model</th>
<th>O-Ring</th>
<th>Gasket</th>
<th>LipSeal</th>
<th>Thermostat</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500-xxx</td>
<td>2 of Buna-N</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2500V-xxx</td>
<td>2 of Viton</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2500E-xxx</td>
<td>2 of Neoprene</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

## Lip Seal Insertion Tools

### Part Number Component

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>2071-IT</td>
<td>Lip Seal Insertion Plug</td>
</tr>
</tbody>
</table>

## Lip Seal Extraction Tools

### Part Number Component

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>2071-RT</td>
<td>Lip Seal Extraction Plug</td>
</tr>
</tbody>
</table>

**NOTE:** Service Kits are supplied with Housing O-Rings & Housing Gaskets. Make sure to replace your original housing seal using the same style seal, and discard the extra component. If your valve was originally supplied with a gasket, DO NOT attempt to use an O-Ring, as the seal will leak without a groove to accept the O-Ring.

**Note:** FPE reserves the right to substitute ordered material for better quality.