SERIES THP 24 WATT DIVERTER SOLENOID VALVES
INSTALLATION, MAINTENANCE & OPERATING INSTRUCTIONS

A. IMPORTANT - BEFORE INSTALLING
Check all valve specifications below and please consult our Technical Support staff if you require more information.
1. Body Material
   • PVC (Geon®) maximum temperature is 140°F (60°C)
   • Natural Polypropylene maximum temperature is 180°F (80°C)
     (threaded natural polypropylene is not recommended for pressure service)
   • PVDF (Kynar®) maximum temperature is 280°F (140°C)
   • PTFE (Teflon®) maximum temperature is 280°F (140°C)
2. Seal Material
   • Buna-N maximum temperature is 200°F (95°C)
   • EPDM maximum temperature is 250°F (120°C) Viton® maximum temperature is 300°F (150°C)
     Minimum temperature for all valves is 40°F (5°C)
3. Pressure Ratings

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Office Size</th>
<th>C_v Factor</th>
<th>Maximum Inlet Pressure PSI</th>
<th>Maximum Back Pressure PSI</th>
<th>Model Number</th>
<th>EPDM Seals</th>
<th>Viton Seals</th>
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<tr>
<td>1/4</td>
<td>3.2</td>
<td>.31</td>
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<td>THP2EP4W24</td>
<td>THP2V4W24</td>
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<td>3/16</td>
<td>4.8</td>
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<td>THP2EP6W24</td>
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B. INSTALLATION
1. Install the valve in the proper flow direction as indicated by the flow label. The valve may be set in any position, vertically or horizontally. The recommended position is coil up. See the coil instruction sheet for wiring and coil assembly information.
2. THREADED CONNECTION - Apply a suitable thread sealant (for example, Teflon tape) to male tapered threads to assure a “leak-tight” seal. Assemble “hand-tight” followed by a quarter (1/4) turn with a strap wrench. Do not over tighten or use pipe wrenches on plastic pipe and components.
   Caution: Teflon tape will “string” as pipe threads are joined. Loose “strings” could lie across the seating surface and prevent the valve from completely closing. To avoid this problem, clean out old tape, and do not apply tape to the first thread.

   Caution: Connect to plastic pipe and fittings only; when using metal pipe, install an intervening plastic fitting. Metal pipe and straight threaded pipe tends to cut, stretch, and distort the plastic bodies, resulting in cracking or leaking over time.
3. NON-THREADED CONNECTIONS - For solvent cementing or heat fusion, follow the instructions supplied with the cement or fusion equipment, or contact your distributor.
4. FAIL DRY® - Vent ports are provided on THP models to protect the springs from contact with the liquid. If there is a failure of the primary seals, secondary seals protect the valve, and the leaking liquid drains out through the Fail Dry vent. You can run a line from the port to an open drain or containment.
5. MOUNTING - These valves are designed to be supported by the piping. The piping must be properly supported, taking into account the weight of the valve, piping, and process liquid.

C. MAINTENANCE

Plast-O-Matic recommends keeping a spare seal kit available for repairs. Seal life will vary in applications due to cycles, temperatures, pressures, chemicals, and concentration. Based on the application, a periodic inspection and maintenance plan should be established.