PLAST-O-MATIC SERIES "S" MULTIPORT SELECTOR VALVE
INSTALLATION & MAINTENANCE INSTRUCTIONS

- General Operating Instructions
  - Operate valve within pressure and temperature range.
  - Select a valve material that is compatible with the media. Consult factory for recommendations for wetted media.
  - Do not use valve with media containing particulate.
  - Do not use excessive force in operating the valve.
  - Allow sufficient space for maintenance and inspection.
  - Keep valve away from excessive heat or fire.

- Transportation, Unpacking, and Storing
  - Keep valve packed in the carton or box as delivered until installation.
  - Do not impact or drop the valve.
  - Protect valve from scratches and dents due to mishandling.

- Pressure Ratings / C_v Values

<table>
<thead>
<tr>
<th>Size</th>
<th>Orifice Diameter (in)</th>
<th>5 Way C_v</th>
<th>4 Way C_v</th>
<th>3 Way C_v</th>
<th>2 Way C_v</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8&quot;</td>
<td>0.125</td>
<td>0.3</td>
<td>0.14</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>0.228</td>
<td>1.15</td>
<td>0.55</td>
<td>1.15</td>
<td>1.15</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>0.375</td>
<td>2</td>
<td>1.33</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>0.435</td>
<td>3.69</td>
<td>2.4</td>
<td>3.69</td>
<td>3.69</td>
</tr>
</tbody>
</table>

C_v values for 5 way stack valves are approximately 25% lower. Consult Factory

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**Installation Procedure**

- **Necessary Items**
  - Teflon sealing tape or pipe dope.
  - Strap wrench (To avoid damage to valve).
  - Adjustable wrench
  - Mounting hardware (1/4 – 20 Hardware).
  - Hand tools to mount valve.

- **Pipe Connection Procedure**
  - Wind sealing tape around male thread of joint 1.5 – 2 times.
  - Insert male thread into valve using a clock wise motion to engage thread. Take steps to avoid cross threading.
  - Hand tighten joint.
  - Using strap wrench to hold valve, tighten joint using adjustable wrench ½ to ¼ additional rotation as needed.

*Caution: Avoid excessive tightening.*
*Caution: Avoid installation of plastic valves using metal fittings. Over tightening will result in damage to valve body.*

- **Valve Mounting Procedure**
  - Valve should be securely mounted to panel or wall plate using 1/4 – 20 hardware. Length of hardware dependent on thickness of surface.
  - If valve cannot be mounted insure adequate support of connecting pipe to resist torque applied during valve operation.

- **Operating Procedure**
  - Control flow by moving pointer on valve handle to required port.
  - Insure that piping is connected per porting design to insure accurate control of media.

![Valve Diagrams](image)

- **Disassembly & Repair Procedure**
  - It is never recommended to open valve in the field. Only factory authorized and trained individuals should disassemble valve.

*Caution: Valve is assembled under load at factory! Do not disassemble!!*

- **Trouble Shooting**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotation of handle requires excessive torque.</td>
<td>The Teflon seat will cold flow if valve remains inactive raising operational torque.</td>
<td>Operational torque will reduce after initial break period.</td>
</tr>
<tr>
<td>Media leaks from valve when closed.</td>
<td>There is particulate in seating area.</td>
<td>Flush valve</td>
</tr>
<tr>
<td></td>
<td>Valve is not in correct position.</td>
<td>Reposition valve handle.</td>
</tr>
<tr>
<td></td>
<td>Seat has worn</td>
<td>Return to factory for repair/replacement</td>
</tr>
<tr>
<td>Handle fails to engage</td>
<td>Loose screw</td>
<td>Tighten screw holding handle.</td>
</tr>
<tr>
<td></td>
<td>Knurl has worn out on handle.</td>
<td>Replace handle.</td>
</tr>
</tbody>
</table>

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