The Series HNV Needle Valve is a barstock style needle valve that is designed for controlling low flow rates of liquids or gases. The valve series features fine threading and large seat area to ensure precise flow control. Wetted materials are 316 SS and PTFE making these ideal for use with corrosives. The HNV has been tested to assure vibration and thermal stability. Body includes a lock pin to prevent accidental bonnet disengagement. The HNV is available in male x male, male x female, and female x female connections from 1/8˝ to 1˝. Tee handle is constructed of 316 SS and allows low torque operation.

**SPECIFICATIONS**
- **Service:** Gases and liquids compatible with wetted materials.
- **End Connections:** NPT.
- **Wetted Materials:** 316 SS and PTFE packing.
- **Pressure Limits:** 6000 psi (431 bar) @ 200°F (93°C). 4000 psi (276 bar) @ 464°F (240°C).
- **Temperature Limits:** 464°F (240°C).
- **Other Materials:** Handle: 316 SS.
- **Options:** Contact the factory for tube and BS connections, other materials of construction, NACE certified, and round handwheel handles.

### Dimensions in (mm)

<table>
<thead>
<tr>
<th>Connection</th>
<th>A</th>
<th>L</th>
<th>H</th>
<th>Connection</th>
<th>A</th>
<th>L</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8˝ F x F</td>
<td>7/8</td>
<td>1-31/32 (50.01)</td>
<td>2-3/8</td>
<td>3/8˝ M x F</td>
<td>63/64 (25)</td>
<td>2-9/16 (65.09)</td>
<td>2-49/64 (70.25)</td>
</tr>
<tr>
<td>1/8˝ M x M</td>
<td>2-3/8 (60.33)</td>
<td>2-3/8 (60.33)</td>
<td>1/2˝ F x F</td>
<td>1/2˝ M x F</td>
<td>1-17/64 (32.15)</td>
<td>1-1/2 (38.10)</td>
<td></td>
</tr>
<tr>
<td>1/4˝ M x F</td>
<td>63/64 (25)</td>
<td>2-9/16 (65.09)</td>
<td>2-9/16 (65.09)</td>
<td>1/2˝ M x M</td>
<td>1-17/64 (32.15)</td>
<td>1-1/2 (38.10)</td>
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<td>1/4˝ M x M</td>
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<td>1-1/2 (38.10)</td>
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</tbody>
</table>

**Model TNV-1, PTFE Needle Valve (Female x Female)**

The Model TNV PTFE Needle Valve is designed for laboratory and industrial applications for regulating corrosive gases and liquids for high purity services. Media only come in contact with PTFE and PCTFE. Valve spindles are made of ridged PCTFE to minimize “creeping” normally associated with PTFE. The TNV is designed to be used in pressure or non-critical vacuum applications and can be used as a shut off valve.

**SPECIFICATIONS**
- **Service:** Gases and liquids compatible with wetted materials.
- **End Connections:** 3/8˝ female NPT.
- **Pressure Limits:** 75 psi (517 KPa).
- **Wetted Materials:** Body and O-ring: PTFE; Valve spindle: PCTFE.
- **Temperature Limits:** 150°F (65°C).
- **Flow Coefficient:** 0.75.
- **Max. Flow:** Air: 300 LPM; Water: 9 LPM.
- **Weight:** 5.6 oz (158.8 g).