Valcor Nuclear has created this compact size and low weight 3-way, internally piloted, nuclear-qualified solenoid valve, to be used primarily as a pilot operator on large control valves in nuclear power plants. It has been designed specifically to prevent the chronic operational problems, associated with conventional solenoid valves currently installed in many PWR, BWR and CANDU plants. V70900-99 is ideal for use in host of safety-related, high flow solenoid valve applications. Its single coil design is both highly reliable and adaptable. Its versatility offers improvements for a variety of applications and configurations, including 2-way (one port plugged), normally closed, with AC or DC voltages. 10 psi minimum operating pressure differential is required, however, the valve vents to 0 psi.

The principal function is pressurizing and venting pneumatic diaphragm actuator air cylinders under extremely harsh environmental conditions, including chemical spray. This is suitable for control rod drive (CDR) applications in certain boiling water reactors (BWR) plants currently using single coil solenoid valves. These valves may also be used on compressors and turbines.

- Compact size, low weight and rugged construction are special characteristics; can replace outdated valves in most cases
- Optional configurations available using mounting brackets and side-faced port connections
- Internal flow path sealing by stainless steel poppets on Vespel or Arlon 1000 polymide seats.
- Available in aluminum, forged brass or stainless steel body material
- Solenoid enclosure is all stainless steel, seal welded construction for NEMA-4,-7 compliance (Water tight and explosion proof)
- Class H Insulation
- Coil requires less than 10 watts of power; cool running/potted coil design.
- Can be mounted in any position
- Virtually maintenance-free. Coil replacement in the field can be made without disturbing in-line piping.
Operating Pressure and Flow Ratings

<table>
<thead>
<tr>
<th>Operating Modes Normally Open/Closed</th>
<th>Operating Pressure (PSIG)</th>
<th>Ambient Temp.</th>
<th>Min. Volts DC</th>
<th>Cv</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO and NC</td>
<td>10-150</td>
<td>150°F</td>
<td>48</td>
<td>1.2 to 45</td>
</tr>
</tbody>
</table>

Electrical Data

- Voltage: 48 VDC, 120 VAC, 125 VDC
- Electrical Connector: 36” leads