Series VS 1000
Vaporizing Steam Heated
Single Stage Pressure Regulator

- Vacuum to 3,500 psig (241 bar) inlet, 500 psig (35 bar) outlet
- Steam heat vaporizes liquids and prevents condensation of gases
- Stainless Steel construction
- Seat materials / temperature range
  Polyimide / 482°F (250°C)
  PEEK / 275°F (135°C)
  PCTFE / 160°F (71°C)
- Ni-Cr-Mo alloy internals, ‘SH’ option, for added corrosion resistance
- High leak integrity
- Machined from bar stock
- Optional accessories
- Diffusion resistant Stainless Steel diaphragm
- Low internal volume
- Safety stop for diaphragm travel
- Installation and operating instructions available at www.aptech-online.com

Engineering Data

Operating Parameters
Source pressure vacuum to 3,500 psig (241 bar)
Delivery pressure
  - VS 1002 1 to 30 psig (0.07 to 2 bar)
  - VS 1010 2 to 100 psig (0.14 to 7 bar)
  - VS 1025 5 to 250 psig (0.3 to 17 bar)
  - VS 1050* 10 to 500 psig (0.7 to 35 bar)
Proof pressure 150% of operating pressures
Burst pressure 300% of operating pressures

Other Parameters
- Inlet port 1/8” NPT
- Outlet port 1/4” NPT
- Steam tube 1/2” OD x 0.049” wall tubing
- Maximum temperature 482°F (250°C)
- Flow coefficient (Cv) 0.09
- Operating temperature
  - Polyimide to 482°F (250°C)
  - PEEK to 275°F (135°C)
  - PCTFE to 160°F (71°C)
- Leak rate 1 x 10^-9 sccs

Materials of Construction

<table>
<thead>
<tr>
<th></th>
<th>VS 1000 S</th>
<th>VS 1000 SH</th>
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</thead>
<tbody>
<tr>
<td>Body and Steam Tube</td>
<td>SS 316L</td>
<td>SS 316L</td>
</tr>
<tr>
<td>Poppet and diaphragm</td>
<td>SS 316</td>
<td>Ni-Cr-Mo alloy / UNS N06022</td>
</tr>
<tr>
<td>Seat</td>
<td>Polyimide, PEEK or PCTFE</td>
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</tr>
<tr>
<td>Bonnet</td>
<td>SS 303</td>
<td>SS 303</td>
</tr>
</tbody>
</table>

*VS 1050 and panel mount height dimension different
All specifications subject to change without notice.
**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Series VS 1010</th>
<th>S Material</th>
<th>PA Ports</th>
<th>PK Seat Material</th>
<th>P Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS 1002 = 1-30 psig (.07 to 2 bar)</td>
<td>S = Stainless steel</td>
<td>PA = “PA” Porting</td>
<td>VS = Polyimide seat</td>
<td>P = Panel installation*</td>
</tr>
<tr>
<td>VS 1010 = 2-100 psig (.14 to 7 bar)</td>
<td>SH = SS/Ni-Cr-Mo alloy internals</td>
<td>PB = “PB” Porting</td>
<td>PK = PEEK Seat</td>
<td></td>
</tr>
<tr>
<td>VS 1025 = 5-250 psig (.3 to 17 bar)</td>
<td>*Panel hole 1.42 inch diameter</td>
<td>KF = PCTFE</td>
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<tr>
<td>VS 1050 = 10-500 psig (.7 to 35 bar)</td>
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AP Tech has product options and variations which are not documented in data sheets. If you have a model number that is not defined by the ordering information, please consult the factory or your local representative.

**“PB” PORTING**

- 2.25 [57mm]
- 2X 1/4 NPT OUTLET (LP)
- 1.75 [44mm]
- 2.00 [51mm]
- SIDE VIEW

**“PA” PORTING**

- 2.00 [51mm]
- 1.75 [44mm]
- 9.00 ± .04 [229mm]

All dimensions in inches (mm). Metric dimensions are for reference only.