

# 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

**VS 1000 S** 

SS 316L



### **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

> 650 psig (45 bar) max steam pressure 482°F (250°C) maximum temperature

Flow coefficient (Cv)\*\*

Polyimide to 482°F (250°C) Operating temperature

> PEEK to 275°F (135°C) PCTFE to 160°F (71°C)

Leak rate  $1 \times 10^{-9} \text{ sccs}$ 

#### MATERIALS OF CONSTRUCTION

Body and Steam Tube Poppet and diaphragm

SS 316 Seat Polyimide, PEEK or PCTFE SS 303

**Bonnet** 

**VS 1000 SH** 

SS 316L

Ni-Cr-Mo alloy / UNS N06022 Polyimide, PEEK or PCTFE

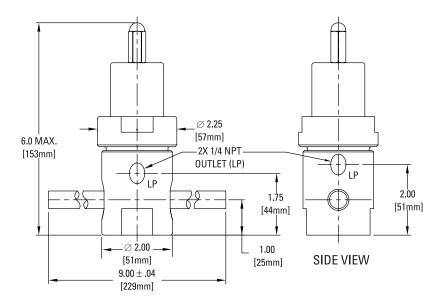
SS 303

<sup>\*</sup>VS 1050 and panel mount height dimension different

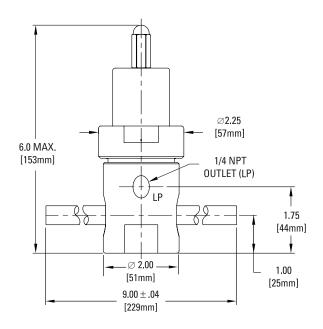
All specifications subject to change without notice.

<sup>\*\*</sup>A pressure regulator Cv is a nominal value which indicates the point of choked flow. Please refer to a flow curve or a recommendation guide for usable flow range.

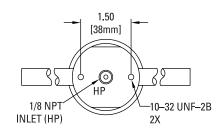
## "PB" PORTING



# "PA" PORTING



# **Common Bottom View**



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

| ORDERING INFORMATION   |   |   |  |   |
|--|---|---|--|---|
| Series VS 1010   | S   | PA  | PK   | P   |
| VS 1002= 1-30 psig (.07 to 2 bar)<br>VS 1010= 2-100 psig (.14 to 7 bar)<br>VS 1025= 5-250 psig (.3 to 17 bar)<br>VS 1050= 10-500 psig (.7 to 35 bar) | Material S = Stainless steel SH = SS/Ni-Cr-Mo alloy internals | Ports PA = "PA" Porting PB = "PB" Porting | Seat Material VS = Poyimide seat PK = PEEK Seat KF = PCTFE | Options P = Panel installation*  *Panel hole 1.42 inch diameter |

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.