



ADVANCED PRESSURE TECHNOLOGY

# 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  
Vespel® / 482°F (250°C)  
PEEK / 275°F (135°C)  
PCTFE / 160°F (71°C)
- ◆ Hastelloy® C-22® 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



## ENGINEERING DATA

### Operating Parameters

Source pressure	vacuum to 3,500 psig (241 bar)
Delivery pressure	1 to 30 psig (0.07 to 2 bar) VS 1002 2 to 100 psig (0.14 to 7 bar) VS 1010 5 to 250 psig (0.3 to 17 bar) VS 1025 *10 to 500 psig (0.7 to 35 bar) VS 1050
Proof pressure	4,500 psig (307 bar)
Burst pressure	10,000 psig (690 bar)

### 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)	0.09
Operating temperature	Vespel to 482°F (250°C) PEEK to 275°F (135°C) PCTFE to 160°F (71°C)
Leak rate	1 x 10 <sup>-9</sup> sccs
Delivery pressure rise	0.4 psig per 100 psig source pressure drop

## MATERIALS OF CONSTRUCTION

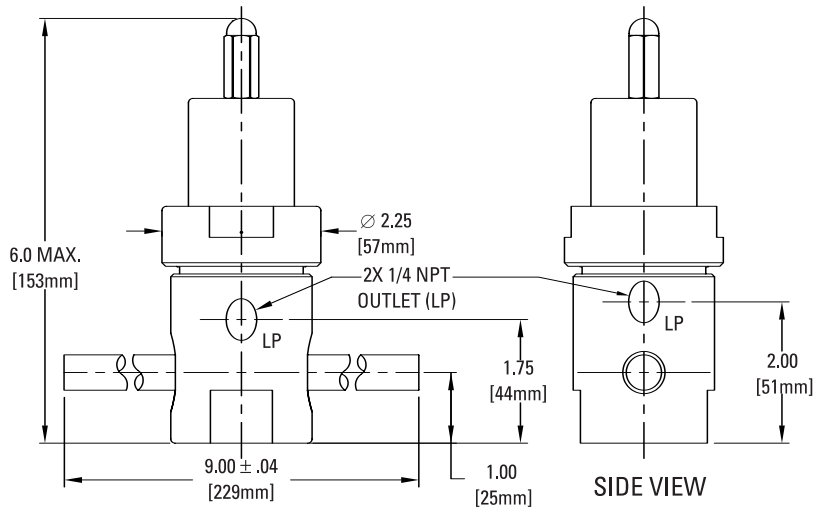
	<b>VS 1000 S</b>
Body and Steam Tube	SS 316L
Poppet and diaphragm	SS 316
Seat	Vespel, PEEK or PCTFE
Bonnet	SS 303

	<b>VS 1000 SH</b>
	SS 316L
	Hastelloy C-22®
	Vespel, PEEK or PCTFE
	SS 303

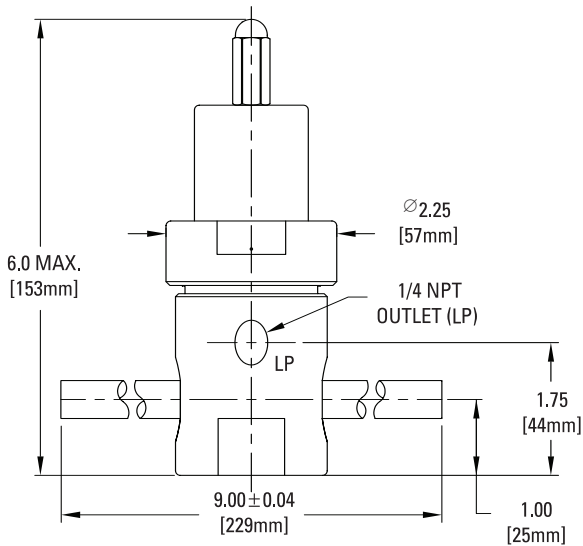
\* VS 1050 and panel mount height dimension different

All specifications subject to change without notice.  
Hastelloy® C-22® Haynes Corporation  
Vespel® DuPont

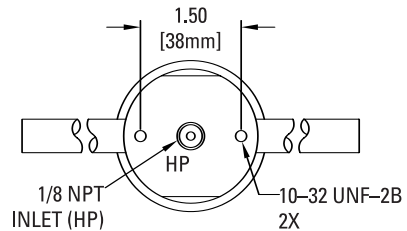
**PORTING "PB"**



**PORTING "PA"**



**Common Bottom View**



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

**ORDERING INFORMATION**

Series VS 1010	S Material	PA Ports	PK Seat Material	P Options
VS 1002= 1-30 psig (.07 to 2 bar) VS 1010= 2-100 psig (.14 to 7 bar) VS 1025= 5-250 psig (.3 to 17 bar) VS 1050= 10-500 psig (.7 to 35 bar)	S =Stainless steel SH=SS/Hastelloy internals	PA = "PA" Porting PB = "PB" Porting	VS = Vespel seat PK = PEEK Seat KF = PCTFE	P = Panel installation