

SERIES W1500

SINGLE STAGE, TIED DIAPHRAGM REGULATOR

Low to intermediate flow capacity



- Flow rates to 120 slpm (4 scfm) of N₂
- Tied diaphragm design for failsafe shutoff
- Inlet pressure rating 3,500 psig (24.1 MPag)
- SS 316L VAR or SS 316L construction
- Super alloy internals option
- Standard surface finish 10 Ra μ inch (0.25μm) , 5 Ra μ inch (0.125μm) optional
- Regulator of choice for source applications
- All manufacturing and testing to Pure T UHP semiconductor standards
- Performance verified with automated testing
- 100% He leak tested
- True metal to metal diaphragm seal
- Face seal connection options
- Installation and operating instructions posted to www.puretuhp.com in the Pure Tech section

Operating Parameters

Source pressure	vacuum to 3,500 psig (24.1 MPag)
Delivery pressure W1503	1 to 30 psig (0.007 to 0.2 MPag)
W1506	2 to 60 psig (0.014 to 0.4 MPag)
W1510	2 to 100 psig (0.014 to 0.7 MPag)
W1515	5 to 150 psig (0.034 to 1.0 MPag)
Proof pressure	150% of operating pressures
Burst pressure	300% of operating pressures

Other Parameters

Inlet/outlet connectors	1/4 or 1/2 inch face seal
Flow coefficient (Cv)	0.15
Operating temperature	-30° to +70°C (-22° to +158°F)*
Surface finish	10 Ra μ inch (0.25μm) standard, 5 Ra μ inch (0.125μm) optional
Inboard leakage	1 x 10 ⁻¹⁰ sccs He
Outboard leakage	2 x 10 ⁻⁹ sccs He
Leakage across seat	He sniffer probe, no rise above background
Installation	surface or panel (optional)
Supply pressure effect	1.0 psig per 100 psig source pressure change

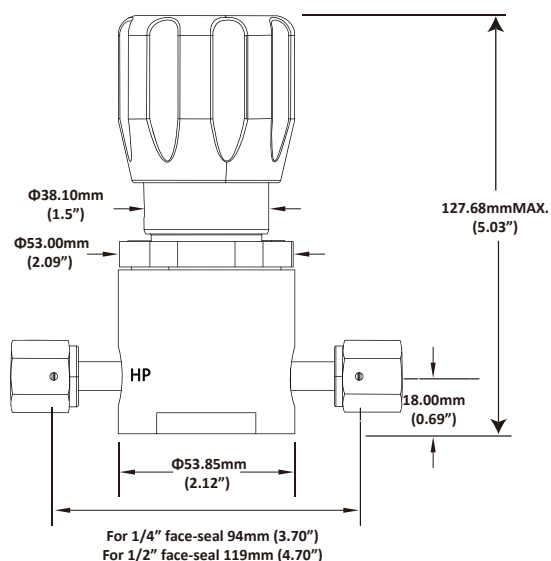
*VS option -10° to +90°C (14° to 194°F)

Materials

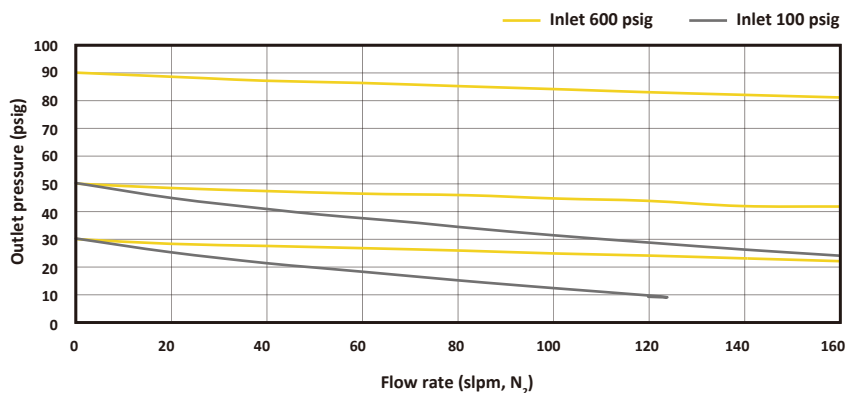
	Series W1500 S / SV	Series W1500 SVH
Wetted Parts		
Body	SS 316L / SS 316L VAR	SS 316L VAR
Poppet, diaphragm	SS 316L	NiCrMo alloy / UNS N06022
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE (Polyimide & PTFE optional)	PCTFE (Polyimide & PTFE optional)

All specifications subject to change without notice

Dimensional Information

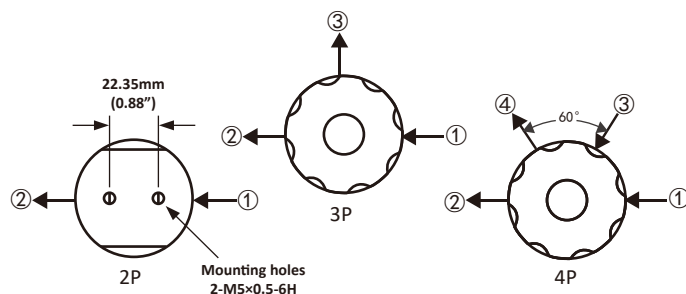


W1500 Flow curve



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

Porting Configurations



Caution: The customer is entirely responsible for product selection and it should be based upon the customer's own analysis regardless of any recommendations, published or communicated, by Pure T. Products must also be installed, operated and maintained correctly for safe, problem-free usage.

Ordering Information

Model number W1510S2PF4F4					
Model Pressure	Material	Option ¹	Porting ²	Fittings	Options
W1503 = 30 psig W1506 = 60 psig W1510 = 100 psig W1515 = 150 psig	SV = SS 316L VAR S = SS 316L	H = NiCrMo internals X = 5Ra	2P 3P 4P	F4 = 1/4 inch female face seal M4 = 1/4 inch male face seal F8 = 1/2 inch female face seal M8 = 1/2 inch male face seal Tube stubs available upon request	VS = Polyimide seat P = Panel mount ring ³ R = Captured vent ring ³

1: Options listed in the order of H X

2: Porting configuration numbers specify sequence of fittings in model number

3: P and R options cannot be specified together

Pure T has product options which are not shown in the data sheet. Please consult your local distributor or the factory directly regarding special requests.