

SERIES AZ 1300

SINGLE STAGE REGULATOR

High Flow Line Regulator



- SS 316L construction
- High flow free poppet design
- 10 μ m. surface finish (25 μ m. optional)
- High flow with low particle generation
- Flow rates to 1,000 slpm (35 scfm)
- Line regulator for specialty and bulk gases
- Vacuum to 300 psig (21 bar) inlet
- Knob LOTO (refer to AP KL data sheet)
- Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

Operating Parameters

Source pressure	AZ 1300	vacuum to 300 psig (21 bar)
Delivery pressure	AZ 1302	1 to 30 psig (0.07 to 2 bar)
	AZ 1306	2 to 60 psig (0.14 to 4 bar)
	AZ 1310	2 to 100 psig (0.14 to 7 bar)
	AZ 1315	5 to 150 psig (0.34 to 10 bar)
Proof pressure		150% of operating pressures
Burst pressure		300% of operating pressures

Other Parameters

Inlet/outlet connectors	1/4, 3/8, 1/2 inch face seal or tube weld
Flow coefficient (Cv)**	1.1
Internal volume	1.19 in ³ (19.6 cm ³)
Operating temperature	-40° to +160°F (-40° to +71°C)
Surface finish	10 μ m. (0.25 μ m) Ra avg.
	25 μ m. (0.62 μ m) optional
Inboard leakage	2 x 10 ⁻¹⁰ sccs
Outboard leakage	1 x 10 ⁻⁹ sccs He
Leakage across seat	4 x 10 ⁻⁸ sccs He
Installation	surface or panel (optional)
Supply pressure effect	4.6 psig per 100 psig source pressure change

**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.

Materials

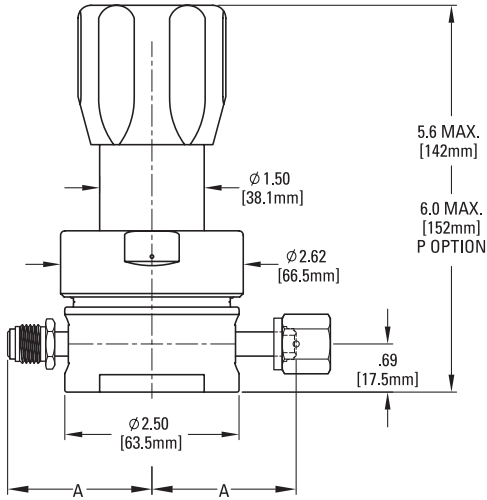
Series AZ 1300 S	
Wetted Parts	
Body, nozzle	stainless steel 316L*
Poppet	stainless steel 316L
Diaphragm	Ni-Cr-Mo alloy / UNS N06022
Finish	electropolished and passivated
Seat	PCTFE (PTFE optional)

*Please refer to product note PN 414 regarding single melt 316L SS material.

All specifications subject to change without notice.

SERVICE AND SUPPORT BEYOND COMPARE

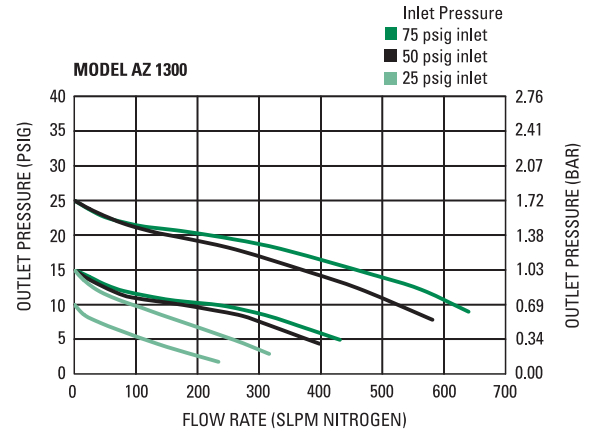
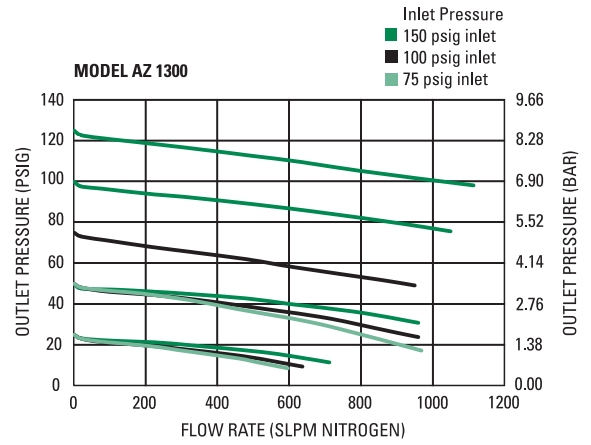
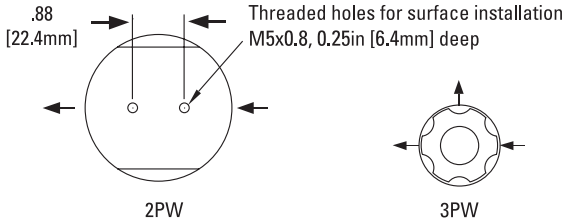
DIMENSIONAL INFORMATION



Face Seal	A	
	in	mm
1/4"	2.15 ±.01	54.6
3/8", 1/2"	2.61 ±.02	66.3

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

PORTING CONFIGURATIONS



CAUTION: Product selection is the sole responsibility of the user, regardless of any recommendations or suggestions made by the factory. The user shall make selections based upon their own analysis and testing with regard to function, material compatibility and product ratings. Proper installation, operation and maintenance are also required to assure safe, trouble free performance.

ORDERING INFORMATION

Sample Order Number	AZ 1310SQ 3PW FV8 FV8 V3	
AZ 1310 Series	AZ 1302 = 1-30 psig (.07 to 2 bar) AZ 1306 = 2-60 psig (.14 to 4 bar) AZ 1310 = 2-100 psig (.14 to 7 bar) AZ 1315 = 5-150 psig (.34 to 10 bar)	
S Material	S = Stainless steel (SS)	
Q Surface Finish Option	Q = 25 µin. Ra avg.	
3PW Ports	2PW = 2 ports butt weld 3PW = 3 ports butt weld	

FV8 FV8 Connections Inlet / Outlet	FV4 = 1/4 inch face seal female MV4 = 1/4 inch face seal male FV6 = 3/8 inch face seal female MV6 = 3/8 inch face seal male FV8 = 1/2 inch face seal female MV8 = 1/2 inch face seal male Tube weld stub available
V3 Delivery Gauge*	0 = No gauge V3 = 30-0-30 psig/bar L = 30-0-60 psig/bar 1 = 30-0-100 psig/bar H = 30-0-160 psig/bar * Standard gauge port is 1/4 inch face seal male (1/4 inch female available).
P Options	P = Panel installation TF = PTFE seat KL = Knob LOTO (refer to AP KL data sheet) Panel hole 1.56" 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.