

SERIES AZ 1200

SINGLE STAGE REGULATOR

Flow Rates to 1,500 SLPM (52 scfm)



- SS 316L construction
- High performance
- 10 µin. surface finish (25 µin. optional)
- High flow with low particle generation
- Flow rates
 - standard to 800 slpm (28 scfm)
 - HF option to 1,000 slpm (35 scfm)
 - FC option to 1,500 slpm (52 scfm)
- Point of use or cylinder specialty and bulk gases
- Vacuum to 1,700 psig (117 bar) inlet
FC Option – vacuum to 300 psig (21 bar)
HR Option – vacuum to 3,000 psig (207 bar)
- Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

Operating Parameters

Source pressure	AZ 1200	vacuum to 1,700 psig (117 bar)
	AZ 1200 HR	vacuum to 3,000 psig (207 bar)
	AZ 1200 FC	vacuum to 300 psig (21 bar)
Delivery pressure	AZ 1202	1 to 30 psig (0.07 to 2 bar) (not available for FC or HR)
	AZ 1206	2 to 60 psig (0.14 to 4 bar) (not available for FC or HR)
	AZ 1210	2 to 100 psig (0.14 to 7 bar)
	AZ 1215*	5 to 150 psig (0.34 to 10 bar)
Proof pressure		2,550 psig (176 bar); HR option 4,500 psig (310 bar)
Burst pressure		8,000 psig (552 bar); HR option 9,000 psig (620 bar)

Other Parameters

Inlet/outlet connectors	1/4, 3/8, 1/2 inch face seal or tube weld
Flow coefficient (Cv)	0.9 (FC = 0.65, HF = 1.1)
Internal volume	1.07 in ³ (17.6 cm ³)
Operating temperature	-40° to +160°F (-40° to +71°C)
Surface finish	10 µin. (0.25 µm) Ra avg. standard 25 µin. (0.62 µm) Ra avg. optional
Inboard leakage	2 x 10 ⁻¹⁰ sccs
Outboard leakage	2 x 10 ⁻⁹ sccs He
Leakage across seat	4 x 10 ⁻⁸ sccs He
Installation	surface or panel (optional)
Delivery pressure rise	3.5 psig per 100 psig source pressure drop
HF & FC	4.2 psig per 100 psig source pressure drop

ENGINEERING DATA — SERIES AZ 1200 SINGLE STAGE REGULATOR

Materials

	Series AZ 1200 S	Series AZ 1200 SHP
Wetted Parts		
Body, nozzle	stainless steel 316L**	stainless steel 316L**
Poppet	stainless steel 316L	Hastelloy C-22
Diaphragm	Hastelloy® C-22®	Hastelloy C-22
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE (Vespel® optional)	PCTFE

All specifications subject to change without notice.

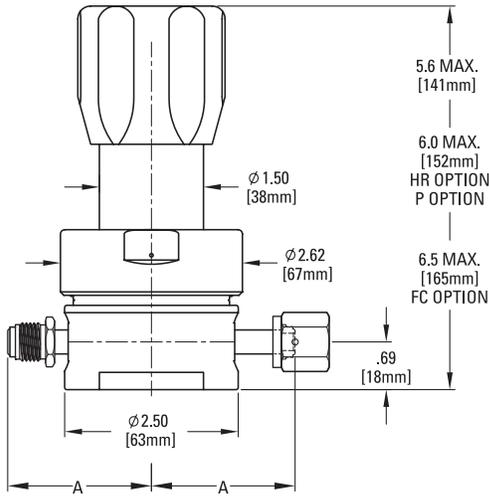
*AZ 1215 will not achieve full outlet pressure rating at all inlet pressures.

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

Hastelloy® C-22® Haynes Corporation Vespel® DuPont

SERVICE AND SUPPORT BEYOND COMPARE

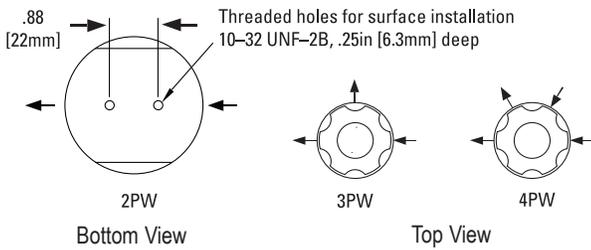
DIMENSIONAL INFORMATION



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

Face Seal	A	
	in	mm
1/4"	2.15 ±.01	55
3/8", 1/2"	2.61 ±.02	66

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 1210SQ 3PW FV8 FV8 V3 FC	
AZ 1210 Series	AZ 1202 = 1-30 psig (.07 to 2 bar) AZ 1206 = 2-60 psig (.14 to 4 bar) AZ 1210 = 2-100 psig (.14 to 7 bar) AZ 1215 = 5-150 psig (.34 to 10 bar)	FV8 FV8 Connections Inlet / Outlet
S Material	S = Stainless steel (SS) SHP = SS/Hastelloy poppet and diaphragm	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
Q Surface Finish Option	Q = 25 µin. Ra avg.	Tube weld stub available "FC" option only available with 1/2" connectors
3PW Ports	2PW = 2 ports butt weld 3PW = 3 ports butt weld 4PW = 4 ports butt weld	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).
		FC Options
		VS = Vespel seat HR = High Inlet Pressure** HF = High Flow** FC = Force Compensation** P = Panel installation***
		HR, HF and FC options are only available separately. These options may not be combined. *Panel hole 1.56" diameter.

