



SERIES AZ 1100

ABSOLUTE REGULATOR

Low flow — sub-atmospheric pressure

- Single stage
- SS 316L construction
- 10 μ m. surface finish (25 μ m. optional)
- Only one nonmetallic seal (PCTFE) in the process stream
- Cleaned, assembled and packaged for high purity semiconductor applications
- Flow rate to 500 sccm
- Vacuum to 300 psig (21 bar) inlet, 100 torr to 10 psig (.7 bar) outlet

Operating Parameters

Source pressure	vacuum to 300 psig (21 bar)
Delivery pressure AZ 1101	100 mm Hg absolute to 10 psig
Proof pressure	500 psig (34 bar)
Burst pressure	8,000 psig (552 bar)

Other Parameters

Inlet/outlet connectors	1/4 or 3/8 inch face seal or tube weld
Flow coefficient (Cv)	0.05
Internal volume	0.49 in ³ (8 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	2 x 10 ⁻⁹ sccs He
Leakage across seat	4 x 10 ⁻⁸ sccs He
Installation	surface or panel (optional)

Materials

	Series AZ 1100 S	Series AZ 1100 SHP
Wetted Parts		
Body, nozzle	SS 316L*	SS 316L*
Poppet, diaphragm	SS 316L	Hastelloy® C-22®
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE	PCTFE

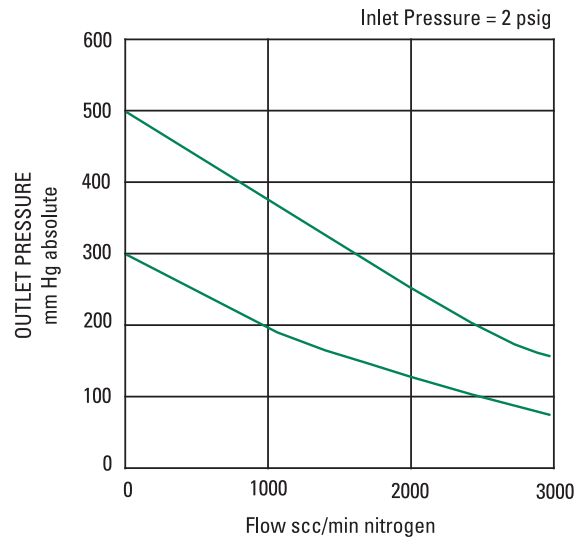
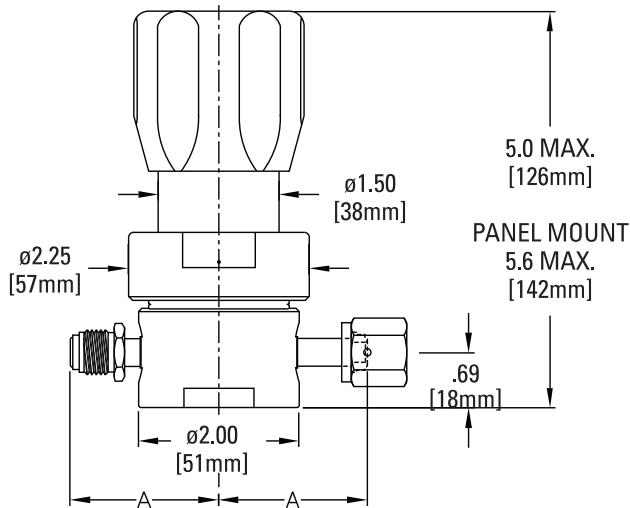
All specifications subject to change without notice.

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

Hastelloy® C-22® Haynes Corporation

ULTRACLEAN TECHNOLOGY BACKED BY SERVICE AND SUPPORT

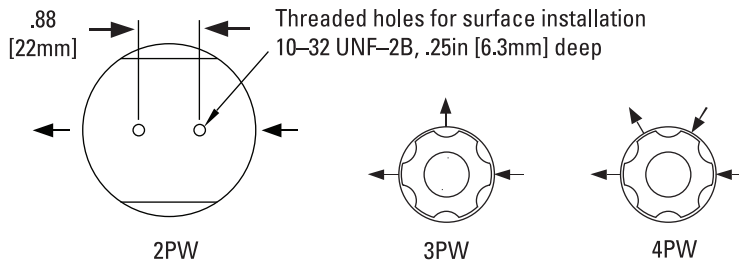
DIMENSIONAL INFORMATION



Face Seal	A	
	in	mm
1/4"	1.85 ±.01	47
3/8"	2.35 ±.02	60

All dimensions in inches (mm).

PORTING CONFIGURATIONS



ORDERING INFORMATION

Sample Order Number		AZ 1101SQ 4PW FV4 FV4 V3 V3	
AZ 1101 Series	AZ 1101 = 100 mm Hg – 10 psig	FV4 FV4 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 Tube weld stub available.
S Material	S = Stainless steel (SS) SHP = SS/Hastelloy poppet and diaphragm	V3 V3 Gauges* Source / Delivery	0 = No gauge V3 = 30-0-30 psig/bar L = 30-0-60 psig/bar * Standard gauge ports are 1/4 inch face seal male (1/4 inch female available).
Q Surface Finish Options	Q = 25 µin.	Options	P = Panel installation** ** Panel hole 1.56" diameter.
4PW Ports	2PW = 2 ports butt weld 3PW = 3 ports butt weld 4PW = 4 ports butt weld		