



SERIES AZ 15PA

TIED DIAPHRAGM REGULATOR

PNEUMATIC ACTUATION

Low Flow — High Pressure

- Actuation control pressure isolated from process gas
- SS 316L construction
- 10 μ m. surface finish (25 μ m. optional)
- Vacuum to 3500 psig (241 bar) inlet
- 7 to 150 psig (0.5 to 10 bar) outlet
- Cleaned, assembled and packaged for high purity semiconductor applications
- 100 psig outlet achieved with 80 psig control pressure or less
- Actuation 'fail safe' normally closed (NC)
- Installation and operating instructions available at www.aptech-online.com in the Tech Briefs section

Operating Parameters

Source pressure	vacuum to 3,500 psig (241 bar)
Delivery pressure AZ 15PA	7 to 150 psig (0.5 to 10 bar)
Proof pressure	5,000 psig (345 bar)
Burst pressure	10,000 psig (690 bar)
Control pressure	150 psig (10 bar) maximum

Other Parameters

Inlet/outlet connectors	1/4 or 3/8 inch face seal or tube weld
Flow coefficient (Cv)	0.09
Control pressure port	1/8 inch NPT
Bonnet vent port	1/8 inch NPT
Internal volume	0.51 in ³ (8.4 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) option
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
Supply pressure effect	0.25 psig per 100 psig source pressure change

Materials

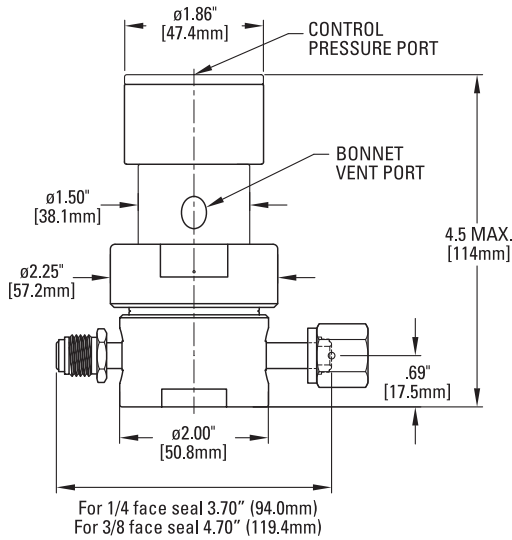
	Series AZ 15PA S	Series AZ 15PA SHP
Wetted Parts		
Body, nozzle	SS 316L*	SS 316L*
Poppet, diaphragm	SS 316L	Ni-Cr-Mo alloy / UNS N06022
Finish	electropolished and passivated	electropolished and passivated
Seat	PCTFE (Polyimide optional)	PCTFE

All specifications subject to change without notice.

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

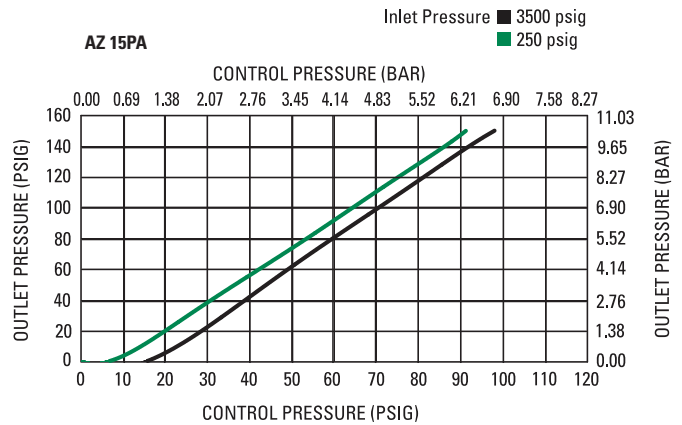
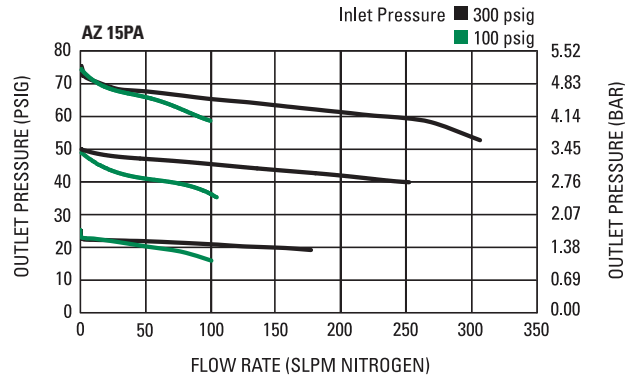
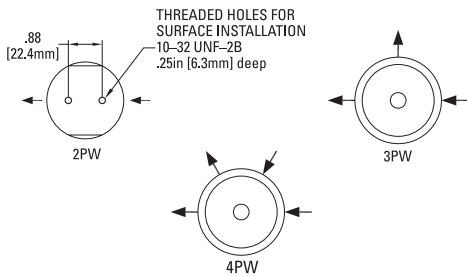
ULTRACLEAN BY DESIGN AND MANUFACTURING

DIMENSIONAL INFORMATION



All dimensions in inches (mm).

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 15PASQ 2PW FV4 FV4	
AZ 15PA Series	AZ 15PA = 7-150 psig (0.5 to 10 bar)	
S Material	S = Stainless steel SHP = SS/Ni-Cr-Mo alloy poppet and diaphragm	
Q Surface Finish Option	Q = 25 μ in.	
2PW Ports	2PW = 2 ports butt weld 3PW = 3 ports butt weld 4PW = 4 ports butt weld	
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	
Gauges* Source / Delivery	0 = No gauge V3 = 30-0-30 psig/bar L = 30-0-60 psig/bar 1 = 30-0-100 psig/bar 2 = 0-200 psig/bar 4 = 0-400 psig/bar 10 = 0-1000 psig/bar 40 = 0-4000 psig/bar * Standard gauge ports are 1/4 inch face seal male (1/4 inch face seal female are available).	
Options	VS = Polyimide seat	