



SERIES AZ 10PA

SINGLE STAGE REGULATOR

PNEUMATIC ACTUATION

Flow Rates to 120 slpm

- Actuation control pressure isolated from process gas
- SS 316L construction
- 10 μin. surface finish (25 μin. optional)
- Vacuum to 3500 psig (241 bar) inlet
- 7 to 150 psig (0.5 to 10 bar) outlet
- Flow rates
 - Standard to 30 slpm
 - HF option to 100 slpm
- 100 psig outlet achieved with 80 psig control pressure or less
- Actuator 'fail safe' normally closed (NC)
- Installation and operating instructions available at www.aptech-online.com

Operating Parameters

Source pressure		vacuum to 3,500 psig (241 bar)
Delivery pressure	AZ 10PA	7 to 150 psig (0.5 to 10 bar)
Proof pressure		150% of operating pressures
Burst pressure		300% of operating pressures
Control pressure		150 psig (10 bar) maximum

Other Parameters

Inlet/outlet connectors		1/4 or 3/8 inch face seal or tube weld
Control pressure port		1/8 inch NPT
Bonnet vent port		1/8 inch NPT
Flow coefficient (Cv) ^{***}		0.09 (0.15 HF option)
Internal volume		0.49 in ³ (8 cm ³)
Operating temperature		-40° to +160°F (-40° to +71°C)*
Surface finish		10 μin. (0.25 μm) Ra avg 25 μin. (0.62 μm) 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
Supply pressure effect		0.25 psig per 100 psig source pressure change
	HF	0.75 psig per 100 psig source pressure change

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

***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.

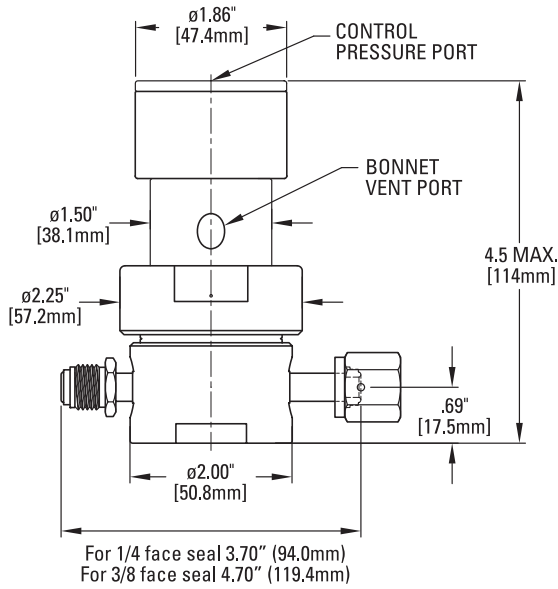
Materials

	Series AZ 10PA S	Series AZ 10PA 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

**Please refer to product note PN 414 regarding single melt 316L SS material.
All specifications subject to change without notice.

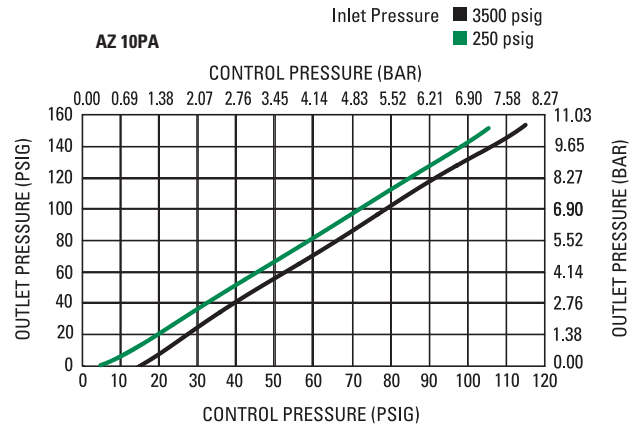
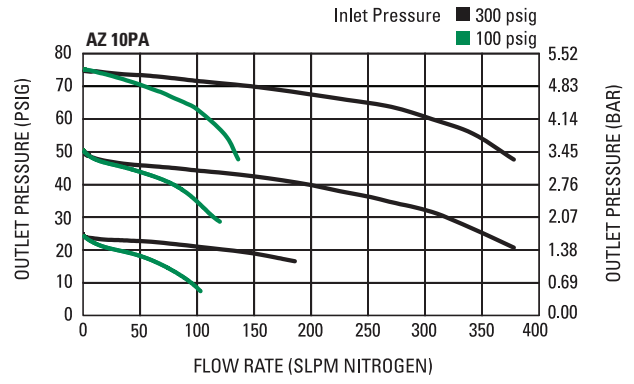
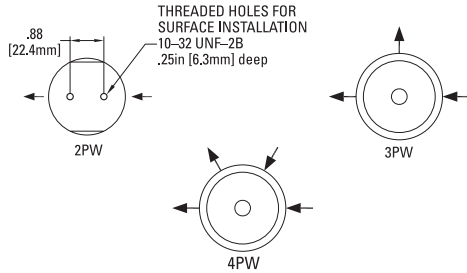
ULTRACLEAN BY DESIGN AND MANUFACTURING

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 10PASQ 2PW FV4 FV4	
AZ 10PA Series	AZ 10PA = 7-150 psig (0.5 to 10 bar)	
S Material	S = Stainless steel (SS) 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 = 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 HF = High flow	

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.