



# 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](http://www.aptech-online.com) in the Tech Briefs section

### 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    |         | 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                 |
| 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 <sup>3</sup> (8 cm <sup>3</sup> )              |
| Operating temperature   |    | -40° to +160°F (-40° to +71°C)                         |
| Surface finish          |    | 10 µin. (0.25 µm) Ra avg<br>25 µin. (0.62 µm) optional |
| Inboard leakage         |    | 2 x 10 <sup>-10</sup> sccs                             |
| Outboard leakage        |    | 2 x 10 <sup>-9</sup> sccs He                           |
| Leakage across seat     |    | 4 x 10 <sup>-8</sup> 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          |

### Materials

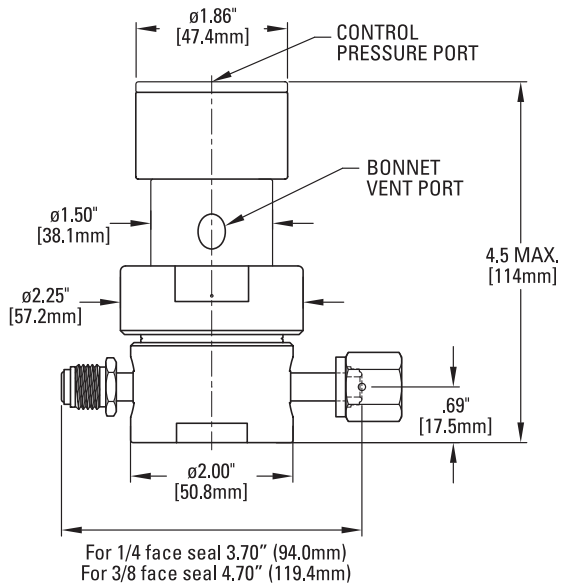
|                   | Series AZ 10PA S               | Series AZ 10PA SHP             |
|-------------------|--------------------------------|--------------------------------|
| Wetted Parts      |                                |                                |
| Body, nozzle      | SS 316L*                       | SS 316L*                       |
| Poppet, diaphragm | SS 316L                        | Ni-Cr-Mo alloy / UNS N06022    |
| Finish            | electropolished and passivated | electropolished and passivated |
| Seat              | PCTFE (Polyimide optional)     | PCTFE                          |

All specifications subject to change without notice.

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

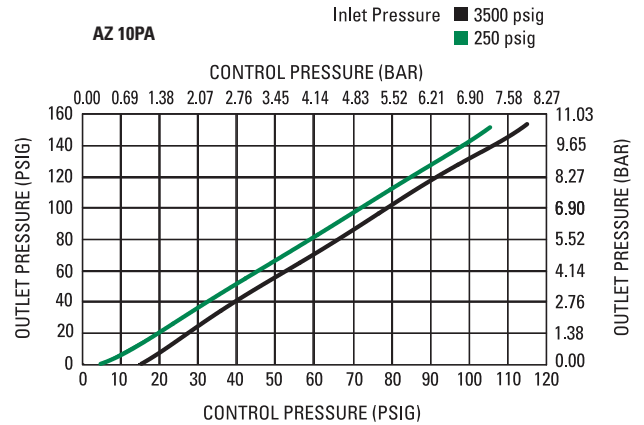
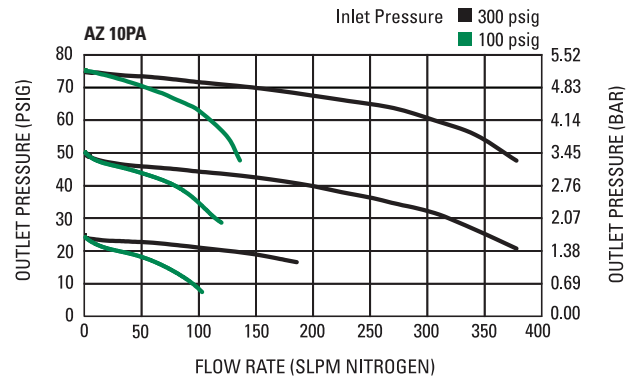
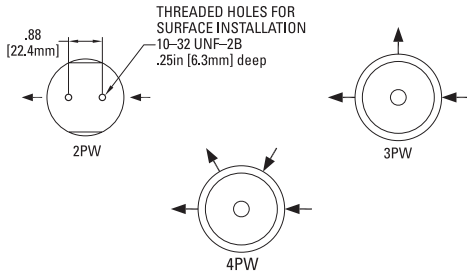
# ULTRACLEAN BY DESIGN AND MANUFACTURING

## 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                         | <b>AZ 10PASQ 2PW FV4 FV4</b>  |  |
| <b>AZ 10PA   Series</b>                     | AZ 10PA = 7-150 psig (0.5 to 10 bar)  |  |
| <b>S   Material</b>                         | S = Stainless steel (SS)<br>SHP = SS/Ni-Cr-Mo alloy poppet and diaphragm  |  |
| <b>Q   Surface Finish Option</b>            | Q = 25 $\mu$ in.  |  |
| <b>2PW   Ports</b>                          | 2PW = 2 ports butt weld<br>3PW = 3 ports butt weld<br>4PW = 4 ports butt weld   |  |
| <b>FV4 FV4   Connections Inlet / Outlet</b> | FV4 = 1/4 inch face seal female<br>MV4 = 1/4 inch face seal male<br>FV6 = 3/8 inch face seal female<br>MV6 = 3/8 inch face seal male<br><br>Tube weld stub available  |  |
| <b>Gauges* Source / Delivery</b>            | 0 = No gauge<br>V3 = 30-0-30 psig/bar<br>L = 30-0-60 psig/bar<br>1 = 30-0-100 psig/bar<br>2 = 0-200 psig/bar<br>4 = 0-400 psig/bar<br>10 = 0-1000 psig/bar<br>40 = 0-4000 psig/bar<br><br>* Standard gauge ports are 1/4 inch face seal male (1/4 inch face seal female are available). |  |
| <b>Options</b>                              | VS = Polyimide seat<br>HF = High flow   |  |