В



PRESSURE REGULATORS FOR BIOTECH & PHARMACEUTICAL

Sanitary flange connection

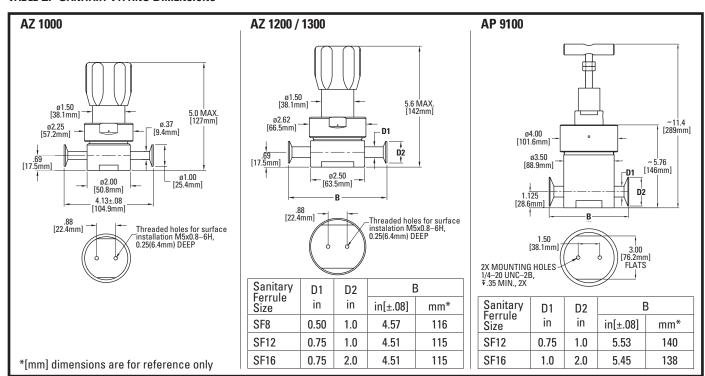
TECHNICAL BULLETIN 209A

TABLE 1. REGULATOR SELECTION MATRIX

| Regulator Series | Inlet Pressure Sanitary* | Outlet Pressure | SF Fitting Size | Cv** Flow Capacity | |
|---------------------|-----------------------------|--|-------------------|---|--|
| AZ 1000 | 300 psig* (21 bar) | 30, 100, 150 & 300 psig (2, 7, 10 & 21 bar) | 3/8 inch | 0.09** 30 slpm (0.15 Cv & 120 slpm HF opt) | |
| AZ 1200/1300 | 300 psig* (21 bar) | 30, 100 & 150 psig (2, 7 & 10 bar) | 1/2, 3/4 & 1 inch | 0.9** 800 slpm (1.1 Cv 1,000 slpm - 1200HF / 1300) | |
| AP 9100 | 300 psig* (21 bar) | 100 & 150 psig (7 & 10 bar) | 3/4 & 1 inch | 4.0** 5,000 slpm | |

^{*} Pressure rating for sanitary fitting is dependent upon fitting and seal selection. The rated pressures are only a general guideline.

TABLE 2. SANITARY FITTING DIMENSIONS



All specifications subject to change without notice.

^{**} Flow curves are the preferred means of regulator sizing as not all manufacturers calculate Cv in the same way which makes comparison impossible. Please refer to individual data sheets or the Tech Brief section of www.aptech-online.com to review flow curves.

TABLE 3. GENERAL COMMENTS

- 1. Product wetted materials of construction are FDA CFR 21.177 compliant with PCTFE seats (polyimide material is not from a certified source).
- 2. Though products are compliant in certain configurations, AP Tech and our products are not FDA or other agency certified.
- 3. Certificate of Conformance for products are provided with each shipment. The certificate notes FDA CFR 21.177 compliance.
- 4. Products are cleaned for Oxygen service per PN 436.
- 5. Many other product configurations are available, such a different porting, fittings, tube stubs, etc.
- 6. AP and AZ series products are assembled, tested and packaged in a double bag in a class 100 cleanroom.
- 7. Product specifications are per the data sheet for the basic model, such as AZ 1000, except as noted in this technical bulletin. The variances from the data sheet are fitting dimensions and pressure ratings relative to sanitary flanges.

TABLE 4. MATERIAL

| Body and Nozzle | 316L stainless steel | | |
|--------------------|--------------------------------|--|--|
| Diaphragm, AZ 1000 | 316L stainless steel | | |
| AZ 1200 / 1300 | Ni-Cr-Mo alloy / UNS N06022 | | |
| Bellows, AP 9100 | Ni-Cr-Mo alloy / UNS N06022 | | |
| Seat | PCTFE (Polyimide optional) | | |
| Surface Finish | 10μin. (0.25 μm) Ra avg | | |
| Surface Treatment | Electropolished and passivated | | |
| Surface Cleaning | Cleaned for O₂ service | | |

TABLE 5. ORDERING INFORMATION

| AZ 1010 Series | S Material | 2PW Ports | SF6 SF6 Connections Inlet / Outle | VS Options |
|---|--------------------------|---------------|--|--|
| Series AZ 1010 AZ 1002 = 1 to 30 psig (.07 to 2 bar) AZ 1010 = 2 to 100 psig (.14 to 7 bar) AZ 1015 = 5 to 150 psig (.3 to 10 bar) AZ 1030 = 5 to 300 psig (.3 to 21 bar) | S = Stainless steel 316L | 2PW = 2 ports | SF6 = Sanitary 3/8 in. | VS = Polyimide seat HF = High Flow WT = White knob |
| Series AZ 1210 AZ 1202 = 1 to 30 psig (.07 to 2 bar) AZ 1210 = 2 to 100 psig (.14 to 7 bar) AZ 1215 = 5 to 150 psig (.3 to 10 bar) | S = Stainless steel 316L | 2PW = 2 ports | SF8 = Sanitary 1/2 in. SF12 = Sanitary 3/4 in. SF16 = Sanitary 3/4 in. | VS = Polyimide seat HF = High Flow WT = White knob |
| Series AZ 1310 AZ 1302 = 1 to 30 psig (.07 to 2 bar) AZ 1310 = 2 to 100 psig (.14 to 7 bar) AZ 1315 = 5 to 150 psig (.3 to 10 bar) | S = Stainless steel 316L | 2PW = 2 ports | SF8 = Sanitary 1/2 in. SF12 = Sanitary 3/4 in. SF16 = Sanitary 3/4 in. | VS = Polyimide seat HF = High Flow WT = White knob |
| Series AP 9110 AP 9110 = 5 to 100 psig (.3 to 7 bar) AP 9115 = 5 to 150 psig (.3 to 10 bar) | S = Stainless steel 316L | 2PW = 2 ports | SF12 = Sanitary 3/4 in. SF16 = Sanitary 1 in. | VS = Polyimide seat |

All specifications and dimensions subject to change without notice.