

## IN THIS ISSUE:

AP 9000 Series . . . . .	2
Valve Seat Material Options . . . . .	2
FR Series . . . . .	3
FA Series . . . . .	4

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## The AP 3100 Series High pressure ~ High flow ~ High purity

The AP 3100 Series is a recently released complete new family of ½ inch diaphragm valves designed to deliver both bulk specialty and house gases. Manual and pneumatic versions coupled with a variety of connections and options provide an array of choices to suit most any application. High pressure melds with high flow to meet today's emerging challenge in bulk specialty gas delivery (BSGS).

The 3100 family of valves have a Cv that ranges from 0.7 to 1.3 with pressure ratings from 1,300 psig (90 bar) to 3,000 psig (207 bar).

Though this is a spring type diaphragm valve, it embraces ultraclean technology to deliver ultra high purity gases, contributing virtually no contamination to the process stream. The design is also unique in that there is no differential backpressure rating common to most spring type diaphragm valves.

Naturally, the AP 3100 Series is manufactured utilizing state of the art techniques as are all AP Tech products.



Please refer to the product > valve section of the web site to review the data sheet. ❖



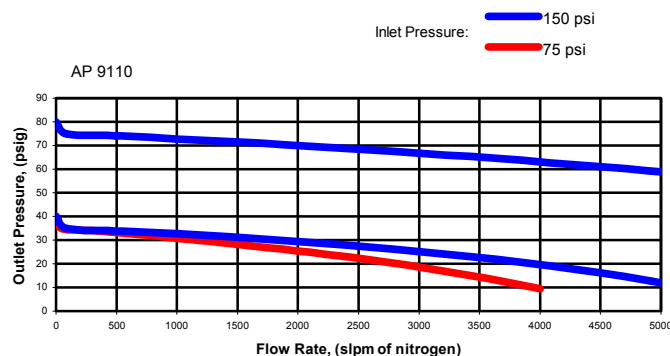
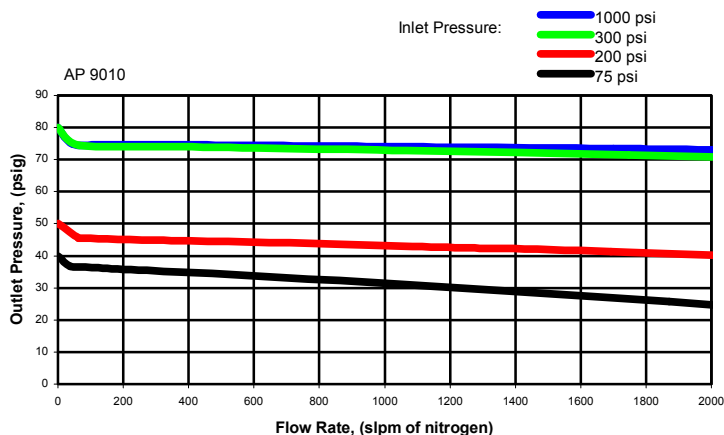
# The AP 9000 Series

## Bulk Gas Pressure Regulation At It's Finest

AP 9000 and AP 9100 Series are UHP / ultraclean pressure regulators designed to deliver the utmost in performance and purity. Three highs ~ purity, pressure and flow define these pressure regulators for bulk specialty gas systems (BSGS) and house gases. Flow rates of up to 5,000 slpm are achieved with this series in a unique blend of pressure rating (to 1,700 psig), flow capacity (Cv to 4.0) and corrosion resistant materials.

The poppet is physically attached to the bellows sensing element for safe high pressure use. Positive shut off, also referred to as 'tied diaphragm or linked poppet', provides a fail safe feature which helps prevent over pressurization due to contamination.

The data sheets for these series are posted to the web site and may be located in the product > pressure regulator section. ❖



## Valve Seat Material Options

The AP 3 and 4 Series valves have four seat material options: PCTFE (formerly known as Kel-F), Vespel, all metal and now, PFA. PFA fills the gap between PCTFE and Vespel in temperature range with a rating of 125°C (260°F). It has far broader chemical compatibility than Vespel, as it is basically equivalent to PCTFE.

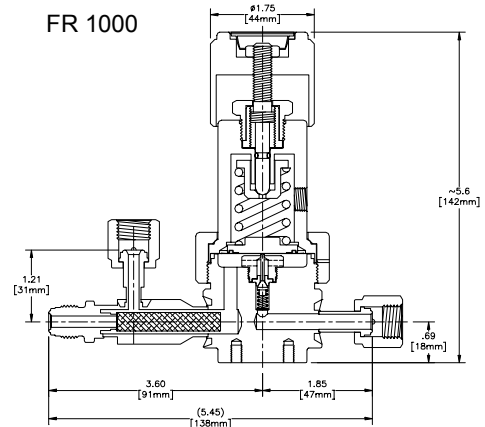
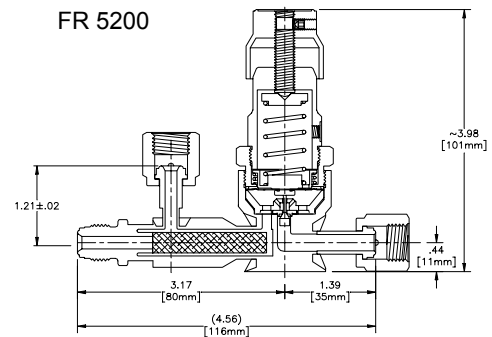
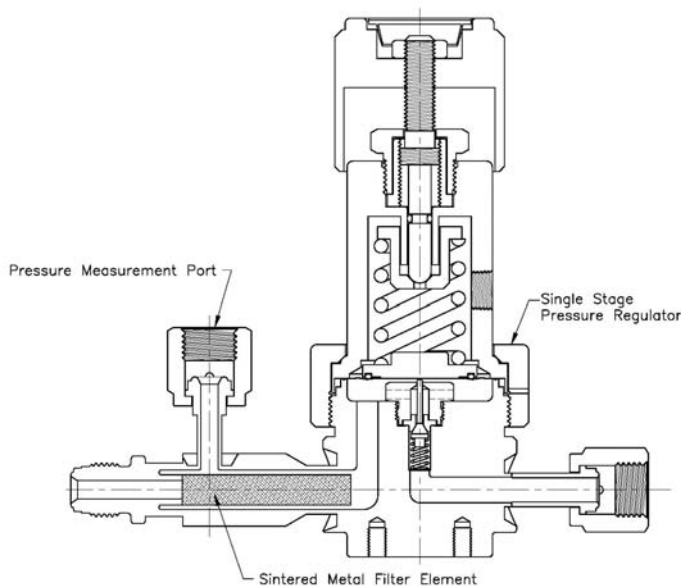
The new PFA seat option is specified by designating 'TF' at the end of the valve model number. ❖

# FR Series ~ The Integrated Stick Solution

The FR series integrates three key functions into one compact device ~ pressure regulation, filtration and pressure measurement. Minimizing connection points and size, the FR module is a complete gas stick unto itself. It combines the three critical stick components into one serviceable unit at less than half the length required by traditional components.

Floor real estate is a scarce commodity in fabs today. The FR series and other AP Tech technologies enable one to downsize valve manifolds, VMB & VMP, to compact, densely

populated systems. The overall size is equivalent to those achieved with surface mount, integrated gas system (IGS), technology to date, but at less cost with far fewer connections. Consult with your local representative or the factory directly to investigate these solutions. ❖



# FA ~ 1 1/8" Surface Mount Solutions

FA designates a member of our 1 1/8" family of down mount components:

- AP 500 FA            Pressure regulator
- AP 3545 FA        Pneumatic valve, LP/NC
- AP 3585 FA        Pneumatic valve, LP/NO
- AP 3625 FA        Manual valve, 1/4 turn with optional lock out
- AP 61 FA            Check valve, sandwich block

The FA is a counterbore C seal configuration. It meets the generally accepted industry standard and is interchangeable with other products adhering to the same. Product performance specifications are the same as the basic series.

Please refer to the Technical Bulletin section of the website to review the FA data sheet specifications and dimensions. ❖

