

AP Tech

GAS CONTROL NEWS

QUALITY – RELIABILITY – SAFETY

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Now Something to Really Bellow About

Hear the noise from Napa? – WE NOW HAVE A 1 INCH BELLOWS VALVE!

The BZ 91 is the first release of an entirely new family of bellows valves in development. This departure from diaphragm valves provides a much higher flow capacity. The BZ 91 has two pressure ratings, 250 psig (17 bar) and 1,700 psig (117 bar) with Cv's of 20 and 12 respectively. It is only available with a multi-turn wheel. Normally closed, NC, pneumatic actuators are in development for both pressure ratings. It is a unique modular design that enables piping prefabrication with assembly to piping on site. Fitting flanges bolt weldable tube stubs or fittings to the body with metal to metal seals – another AP Tech innovation.

The traditional transition from diaphragm to bellows type valves is above 1/2 inch in size, thus our 1 inch bellows valve. This is because a bellows design provides significantly more flow for their size compared to a diaphragm valve. A 20 Cv diaphragm valve would be the size of a small coffee table (exaggeration, but you get the point). This is why a bellows is employed instead of diaphragm for this valve.



Ultraclean now meets ultra high flow - introducing the BZ 91. ❖

HF isn't just text speak for Have Fun!

The HF, high flow, option has been available for years with the 1000 and 1200 series. The same basic option is now available with the AP, AZ and AK 1500 series and the AP and AK 1700 series. It provides the same increase in flow capacity as one now enjoys with the 1000 series. The flow rating increases from 30 slpm to over 100 slpm of N₂. The nominal price of the option provides a significant increase in flow capability between the standard 1500 or 1700 and the next step up respectively, the 1400T and 2700 series.

Please be aware that the flow one may achieve with N₂ can vary significantly, more or less, depending upon the specific gas in the application. Gas density and thermal characteristics along with gas system design each have an impact on a regulator's ultimate flow capacity. ❖

Corporate Office:

687 Technology Way
Napa, California 94558
Ph: 1-707-259-0102
Fax: 1-707-259-0117

www.aptech-online.com

Bridging the Flow Gap – 41 Series

The 4141 normally closed pneumatic and the 4150 1/4 turn manual valves are two more first born of another entirely new family. These valves have a flow coefficient (Cv) of 0.8 with a 250 psig (17 bar) pressure rating. They bridge the flow capacity gap between the current models with a 0.5 to a 2.8 Cv providing a middle of the road cost and flow between the two. The springless diaphragm design provides the ultimate in ultraclean gas delivery. The 41 series 1½ inch diameter body is still compact relative to flow performance. ❖



AK 1000T, A New Lower Cost Alternative

A value engineered AK 1000 is unveiled – introducing the AK 1000T. This new single stage pressure regulator enjoys cost saving material reductions in addition to non-wetted stamped and drawn parts to provide the same dependable 1000 series performance at a lower price point.. The new AK 1000T is standard with the HF option and has identical ratings and specifications as the existing AK 1000 HF. The AK 1000T does not replace the AK 1000, which will remain in our product line up, but simply adds yet another solution for your applications. ❖

AZ 3800, Yet Another New Lower Cost Alternative

The AZ line continues to expand with the addition of the AZ 3800. As with other AZ's, the new valve is a single melt 316L SS version of the AP. The valve has a bit different look with the body being lower and squared off without the top surface angled down away from the knob. All parts other than the body are the same as are the specifications. ❖

Metered Excitement



The 3672 and 3675 are another exciting new departure for AP Tech – metering valves. The design is a springless diaphragm valve utilizing our standard 1/4 inch 3 series valve bodies as a foundation coupled with a new, very high resolution adjustment mechanism. The diaphragm movement is finely controlled to enable gas flow metering. The valves are available in AP, AZ and AK series with any combination or porting and fittings now available for their shut off cousins. There are two flow ranges 0-10 and 0-40 slpm available and a pressure rating of 145 psig (10 bar). The unique design also provides positive shut off in addition to metering. ❖

Metal Seated Valve Under Increased Pressure

The 32 series 1/4 inch metal seated diaphragm valves just got a pressure lift to 500 psig (35 bar) from 125 psig (9 bar). The new valves, AP 3202 and 3262, vary from the existing 3200 and 3260 in pressure rating. The higher pressure is achieved through finer seat polishing and testing at the higher pressure. There are no other differences beyond labeling.

A 1/4 turn lever version has also been released, the AP 3225. It is rated the same as an AP 3260 in terms of specifications. ❖
