APCO VACUUM RELIEF/AIR INLET VALVES (AVR) SUGGESTED SPECIFICATION



APPLICATION DATA 1500.01-2

December 16, 2015 Supersedes Specification in Bulletin 1500; July, 2011

Vacuum Relief/Air Inlet Valves shall be APCO model AVR as manufactured by DeZURIK, Inc.

The Threaded Type Vacuum Relief/Air Inlet Valve (Body Style 1500T) shall consist of a body, cover, baffle, float, seat, stainless steel spring. The resilient valve seat shall be fastened to the cover without distortion to provide drip tight shutoff. The valve flow area shall be equal or greater than the valve inlet size to insure full vacuum relief protection during draining, pipeline rupture or water column separation. Valve orifice shall automatically open, allowing air entry when a vacuum/pressure differential exceeds 0.25 psi (2 kPa). The valve float shall be stainless steel and shall be center guided for driptight shut-off. Valve internals shall be replaceable without removing the valve from the line.

The Flanged Type Vacuum Relief/Air Inlet Valve (Body Style 1500) shall have globe type body with integrally cast-on flanged ends. The valve shall have a cross-sectional inflow area 10% greater than equivalent pipe size for full vacuum relief protection during draining, pipeline rupture or water column separation. The molded resilient valve seat shall be retained in the body by a heavy cover for positive shut-off. The plug shall be center guided on both ends to prevent jamming. The plug shall be normally closed, by means of a stainless spring and shall open when a vacuum/pressure differential exceeds 0.25 psi (2 kPa). Valve internals shall be replaceable without removing the valve from the line.

<u>Combination Vacuum Relief/Air Inlet and Air Release Valve</u> (Body Style 1500C) shall have a double body and double orifice. The large orifice shall be the Body Style 1500 or 1500T with an air release valve.

The air release valve shall automatically release small pockets of air which accumulate at the high points of a system after it is filled and under pressure.

Air Release Valve shall have the ability to open against internal pressure because it has a small orifice and a leverage mechanism which multiplies the force of the float. This force must be greater than the internal pressure across the orifice in order to open the valve when a pocket of air needs to be vented. Valve needle and seat shall be replaceable and resilient seat seals shall provide drop tight shut off to the full valve pressure rating.

Two Year Warranty shall be provided for all valves.