BULLETIN 613
JULY 2014

DeZURIK
APCO | HILTON

APCO SLOW CLOSING AIR/VACUUM VALVES

Series 1900

Specifications

The Slow Closing Air/Vacuum Valve shall be four valves furnished assembled and tested as a single unit. The Air/Vacuum Valve must have a stainless steel float guided at each end with stainless stems. The stems shall be guided through stainless steel bushings inside the body and cover. The seat* must be Buna-N fastened to the cover with stainless shoulder screws without distortion to allow drop tight closure.

The cover shall have a male lip to fit the female body register for positive float guide direction into the seat. Cover outlets may be threaded, flanged, or hooded. (Engineer to specify.)

The Surge Check Valve shall be a normally open spring loaded valve consisting of a body, seat and plug bolted to the inlet of the Air/Vacuum Valve. The surge check shall operate on the interphase between the kinetic energy and relative velocity flows of air and water. It will allow air to pass through but water shall actually close the surge check, reducing the rate of water flow by means of throttling orifices in the plug to prevent shock closure of the Air/Vacuum Valve. The surge check orifices must be adjustable type to suite operating conditions in the field.

The inlet Isolation Butterfly Valve shall be wafer (compact) style constructed to AWWA Standards with hand lever and variable position locking device. The seat to be freely interchangeable from the body without the need for special tools or skill. The seat must be Buna-N, molded with a steel flanged insert for high strength and tight seating. The disc must pivot eccentrically from closed position to clear center valve area.

The Air Release Valve shall be side connected to the upper valve, but separated with an Isolation Shut-Off Valve. The internal mechanism shall be the compound lever type to permit the valve to open under pressure to vent pockets of entrapped air as they accumulate. The compound mechanism shall be activated by a stainless steel concave float to lift the Buna-N needle to shut-off the Air Release orifice.

The Slow Closing Air/Vacuum Valve shall have been flow tested in the field, substantiated by test data to show reduction of surge pressure in the valve.

Materials shall be certified to ASTM specifications:

Air/Vacuum Valve/Air Release Valve Covers, Bodies Surge Check Body and Butterfly Valve Body	Cast Iron	ASTM A126 GR.B
Floats & Spring	Stainless Steel	ASTM A240
Surge Check Seat & Disc	Bronze*	ASTM B584
Air Release Valve Needle	Buna-N	
Air/Vacuum Valve Seat*	Buna-N (4"-12", 100-300 mm)	
14" (350mm) and Larger 250# Class	Stainless Steel with Buna-N Molded Seal	ASTM A240
ARV Leverage Assembly	Delrin	ASTM D2133
Butterfly Valve Shaft	Stainless Steel	ASTM A270
Exterior Paint	Universal Metal Primer	FDA Approved for Potable Water Contact

*Bronze components meet current lead-free requirements.

Valve to be APCO Series 1200 Slow Closing Air & Vacuum Valves.

Other materials available.

Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:
Web Site: www.dezurik.com **E-Mail: info@dezurik.com**

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Printed in the U.S.A.