AIRPRO MAX™ AIR VALVES

Suggested Specifications

1. AIR RELEASE VALVE SPECIFICATION

1.1 The Air Release Valve shall be float operated, simple lever or compound lever type, designed to automatically vent accumulated air from the pipeline while the system is pressurized and operating.

1.2 An adjustable designed orifice button shall be used to seal the valve discharge port with drip-tight shut-off. The diameter of the orifice must be sized to vent air within a given operating pressure range to insure maximum air venting capacity.

1.3 The float and connection shall be all 316 stainless steel construction and guaranteed to withstand the designed system surge pressure without failure. The body and cover shall be ductile iron construction and valve internal parts and cover bolts shall be 316 stainless steel. The rubber seat shall be EPDM for water tight shut-off. A vent cap with screen must be provided to prevent debris from entering the valve.

1.4 The Air Release Valve shall be manufactured per ANSI/ AWWA C512 and shall be Series WAR AirPro Max™ Air Release Valves manufactured by us, Aurora, IL USA.

1.5 For UL/FM Air Release Valve: The UL/FM Air Release Valve shall be manufactured per ANSI/ AWWA C512, UL Listed (UL 2575) and FM Approved (FM 1344) and shall be Series WAR AirPro Max™ UL/FM Air Release Valves manufactured by us, Aurora, IL USA.

2. AIR VACUUM VALVE SPECIFICATIONS

2.1 Air Vacuum valve shall allow large volumes of air to be exhausted from the pipeline during filling and large volumes of air to re-enter when draining the pipeline occurs for any reason.

2.2 The size of the Air Vacuum Valve shall have the same cross-section area as the valve inlet size. A stainless-steel single bottom guide shaft shall guide the float. The 4” and larger air vacuum valve floats shall have top and bottom guide shafts to accurately guide the float, without hunting, into the seat for shut-off. A steel valve hood shall be provided to protect the valve discharge orifice from debris.

2.3 The float shall be of all stainless-steel construction guaranteed to withstand the design system surge pressure without failure. The body and cover shall be concentrically located for vertical float rising accurately into the seat shut-off position to prevent water spilling. The valve body and cover shall be constructed of ductile iron and the valve internal parts shall be of 316 Stainless Steel with EPDM rubber seat.

2.4 The Air Vacuum Valve shall be manufactured per ANSI/ AWWA C512 and shall be Series WAV AirPro Max™ Air Vacuum Valves manufactured by us, Aurora, IL USA.

3. COMBINATION AIR VALVE SPECIFICATIONS

3.1 The Combination Air Valve shall function as an air vacuum valve and air release valve in a single or dual body design.

The large air vacuum orifice shall allow large volumes of air to be exhausted during pipeline filling and large volume of air intake while draining, or in the event of a break in the pipeline, to prevent a vacuum from forming.

3.2 The inlet/outlet and seat of the valve shall have the same flow area. The stainless-steel poppet shall be guided by a stainless-steel guide shaft and seal drip tight against a EPDM seat. 4” and larger valves shall have dual guided stainless-steel shafts of hexagonal cross section and a protective discharge hood.
3.3 The float shall be of all stainless-steel construction and capable of withstanding maximum system surge pressure without failure. The body and cover shall be concentrically located and of ductile iron and the valve internal trim shall be of 316 Stainless Steel. Seat shall be EPDM for water tight shut off.

3.4 The Combination Air Valve shall be manufactured per ANSI/AWWA C512 and shall be Series WCV AirPro Max™ Combination Air Valves manufactured by us, Aurora, IL USA.

4. WASTEWATER AIR RELEASE VALVE SPECIFICATIONS

4.1 The Air Release Valve shall be of the float operated, compound lever type, and capable of automatically venting accumulated air, gas or vapor from a fluid system while the system is pressurized and operating. An adjustable designed orifice button shall be used to seal the valve discharge port with drip-tight shut-off. The diameter of the orifice must be sized for use within a given operating pressure range to insure maximum air venting capacity.

4.2 The float shall be of all stainless-steel construction and guaranteed to withstand the maximum system surge pressure without failure. The body and the cover shall be of ductile iron and all valve internal parts shall be of stainless steel. The rubber seat is EPDM for water tight shut-off.

4.3 The air release valve shall be manufactured per ANSI/ AWWA C512 and shall be Series WWAR AirPro Max™ Wastewater Air Release Valves manufactured by us, Aurora, IL USA.

5. WASTEWATER AIR VACUUM VALVE SPECIFICATIONS

5.1 The Wastewater Air Vacuum Valve shall be able to automatically exhaust large quantities of air during filling of a pipeline and allow air to re-enter pipeline during the draining or when a negative pressure occurs.

5.2 The inlet and outlet of the Air Vacuum Valve shall have the same cross-section area as the valve size. A stainless-steel bottom guide shaft shall guide the float. The 4” and larger valve floats shall have top and bottom guide shafts of hexagonal cross section and have a protective steel discharge hood.

5.3 The float shall be of all stainless-steel construction and capable of withstanding maximum system surge pressure without failure. The body and cover shall be concentrically located and of ductile iron and the valve internal parts shall be of 316 stainless steel with EPDM rubber seat.

5.4 The Wastewater Air Vacuum Valve shall be manufactured per ANSI/AWWA C512 and shall be Series WWAV AirPro Max™ Air Vacuum Valves manufactured by us, Aurora, IL USA.

6. WASTEWATER COMBINATION AIR VALVE SPECIFICATIONS

6.1 The Combination Air Valve shall combine the operating features of both the large orifice Air Vacuum Valve and the small orifice Air Release Valve into one unit. The large orifice Air Vacuum Valve portion shall automatically exhaust large quantities of air during the filling of the pipeline and automatically allow large volumes of air to reenter the pipeline when the internal pressure of the pipeline approaches a negative value due to vacuum column separation, draining of the pipeline, or other emergency condition. The small orifice Air Release Valve portion shall automatically release small pockets of air from the pipeline while it is under pressure.

6.2 The inlet and outlet of the valve shall have the same size and cross-section flow area. The float shall be center guided by a single or double stainless-steel guide shaft and shut drop tight against a resilient EPDM seat.

6.3 The float shall be of all stainless-steel construction and capable of withstanding maximum system surge pressure without failure. The body and cover shall be concentrically located to accurately guide the float, without hunting, to shut-off to prevent spillage. The body and cover shall be ductile iron and the valve internal parts shall be of 316 stainless steel with EPDM rubber seat.

6.4 The Combination Air Release and Vacuum Valve shall be manufactured per ANSI/AWWA C512 and shall be Series WWCV AirPro Max™ Combination Air Valves manufactured by us, Aurora, IL USA.