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**SAMPLE SPECIFICATION**

**Air & Vacuum Valves for Clean Water**

1.0 GENERAL

1.1 Manufacturer shall have a minimum of ten (10) years’ experience in the manufacture of automatic air valves conforming to American Water Works Association (AWWA) Standard C512 (latest revision).

1.2 Manufacturer shall have an ISO-9001 quality management system certified by an accredited body.

1.3 When requested, manufacturer shall provide detailed product data and descriptive literature including dimensions, weight, capacity, pressure rating, materials of construction and cross-sectional drawings clearly illustrating the individual components.

2.0 PRODUCT

2.1 The air & vacuum valve shall conform to AWWA C512 (latest revision) and employ the “Kinetic” operating principle, designed to exhaust air during the filling of the pipeline or system at up to sonic velocity without blowing shut.

2.2 The valve shall have the same size inlet and outlet connections and a venting orifice with a flow area equivalent to that of the inlet connection size. Valves 3-inch and smaller shall have NPT inlet connection and 4-inch and larger shall have a flanged inlet connection. Valves 4-inch and smaller shall have an NPT outlet; 6” and larger shall be supplied with a protective cowl on the outlet.

2.3 Additional plugged NPT ports shall be provided near the top and bottom of the body for testing and draining.

2.4 Valves with NPT inlet shall be rated for 300 PSI working pressure. Class 125 flanged inlet valves shall be rated for 150 PSI and Class 250 flanged valves shall be rated for 300 PSI working pressure.

3.0 MATERIALS

3.1 The valve body and cover shall be made from cast iron conforming to ASTM A126 Class B.

3.2 The float ball shall be spherical and made from Type 316 stainless steel. A non-metallic float ball is not acceptable.

3.3 The seat shall be replaceable and made from Buna-N rubber.

3.4 The exterior of the valve shall be shop coated with enamel primer

4.0 OPTIONS *(Specifier to select any combination of options)*

4.1 When specified, 6-inch and larger valves shall be supplied with optional Class 125 flanged outlet connection.

4.2 When specified, 4-inch and smaller valves shall be supplied with an optional protective cowl on the outlet.

4.3 When specified for deep well service applications, the valves shall be supplied with a double acting throttle device in the outlet to provide regulated air exhaust from and unregulated air into the well column.

4.4 When specified, valves shall be supplied with a slow-closing “surge check” mounted on the inlet of the valve to provide normal air flow in and out but close upon excessive venting velocity to reduce air exhaust rate to minimize surge, slam and valve damage.

4.5 Specify when required: The valve shall be supplied with 316 stainless steel external fasteners and be coated on external and exposed internal ferrous surfaces with NSF-61 certified 2-part epoxy.

5.0 MANUFACTURER

5.1 Air & vacuum valves shall be GA Industries Figures 930, 931 (with surge check) or 933 (with throttle device) as manufactured by VAG USA, LLC Mars, PA USA.