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**SAMPLE SPECIFICATION**

**Silent Check Valves**

GA-280-290-SPEC Rev B

1.0 GENERAL

1.1 Manufacturer shall have a minimum of ten (10) years’ experience in the manufacture of silent check valves.

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

1.2 When requested, 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 Globe style valves shall have integral flanged connections conforming to ANSI B16.1 Class 125 or 250 flat face. Wafer style valves sizes 2-inch through 6-inch shall be designed to fit between ANSI B16.1 Class 125 or 250 or ANSI B16.5 Class 150 or 300. Sizes 8-inch and 10-inch shall fit between ANSI B16.1 Class 125 or B16.5 Class 150 flanges.

2.2 The valve design shall be of the in-line type that initiates valve closure as soon as the forward flow velocity decreases and is fully closed before flow reversal to prevent water hammer.

2.3 The valve shall have a spring-loaded, center-guided disc that presents a concave surface to the flow allowing the valve to fully open at minimum velocity and a short stroke for quick closure.

2.4 When fully open, the flow area through the valve shall be no less than the internal area of the nominal pipe size. Valve design shall permit installation in a horizontal or vertical flow up pipe without modification.

2.5 The valve shall incorporate a rubber seat designed to provide zero leakage at both high and low pressure with a metal-to-metal back up to prevent over compression. The rubber seat shall not be bonded or glued to the seat ring.

2.6 All components shall be field replaceable using common tools

3.0 MATERIALS

3.1 The valve body shall be cast iron conforming to ASTM B126 Class B.

3.2 The valve disc and seat ring shall be Type 316 stainless steel conforming to ASTM A351 Grade CF8M. The seat ring shall have a Buna-N (or another suitable elastomer) O-ring retained in a dovetail groove without bonding.

3.3 The internal spring shall be Type 302 stainless steel and the disc guide shall be Type 316 stainless steel.

4.0 MANUFACTURER

4.1 Silent check valves shall be GA Industries Figure 280 (globe) or 290 (wafer) as manufactured by VAG USA, LLC Mars, PA USA.