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**SAMPLE SPECIFICATION**

**3” to 72” AWWA C504 Butterfly Valves**

GA-S800-SPEC Rev B

1.0 GENERAL

1.1 Manufacturer shall have a minimum of ten (10) years’ experience in the manufacture of rubber seated butterfly valves conforming to American Water Works Association (AWWA) Standard C504 (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 butterfly valve shall fully conform to AWWA C504 (latest revision) and as described below, Pressure Class 150B or 250B as shown on the plans or in the valve schedule. The valve shall be NSF-61 certified for contact with drinking water and NSF-372 certified lead free.

2.2 The valve body have integral flanged connections (wafer or lugged type are not acceptable) conforming to ANSI/ASME B16.1 Class 125 or mechanical joint connections conforming to ANSI/AWWA A21.11/C111, as shown on the plans or in the valve schedule.

3.0 MATERIALS

3.1 The valve body shall be made from ductile iron conforming to ASTM A536 Grade 65-45-12 and contain a Buna-N or EPDM rubber seat that is mechanically retained without epoxy. Sizes 24-inch and smaller shall have a permanent, transfer molded and vulcanized rubber seat. Sizes 30-inch and larger shall have rubber seat that is field adjustable or replaceable using common hand tools.

3.2 The valve disc shall be made from ductile iron conforming to ASTM A536 Grade 65-45-12 with a 316 stainless steel seat edge.

3.3 Size 24-inch and smaller valve shafts shall be one-piece, larger sizes shall have upper and lower stub shafts. Shafts shall be made from Type 304 stainless steel in Class 150B valves and ASTM A564 Type 17-4PH stainless steel in Class 250B valves. The valve disc shall be attached to the shaft by multiple, mechanically secured stainless steel pins.

3.4 The valve shall have upper and lower self-lubricating shaft bearings. Sizes 24” and larger shall be provided with an adjustable thrust bearing. The shaft shall be sealed with self-adjusting Buna-N or EPDM packing. The actuator shall not be used to retain the packing and shaft packing leakage shall be prevented from entering the actuator.

3.5 Ferrous surfaces of the valve body and disc shall be factory coated with NSF-61 certified epoxy.

3.6 External fasteners shall be Type 316 stainless steel

4.0 ACTUATION

4.1 The valves shall be supplied with a factory mounted actuator, adjusted and tested in accordance with Section 5 of AWWA C504.

4.2 Manually operated exposed valves shall have a worm gear actuator with a handwheel or 2” operating nut and a visual position indicator. When shown on the plans or in the valve schedule, sizes 3-inch to 8-inch may be operated with a 10-position lever. Buried service actuators shall be grease filled and sealed against water entry with a 2” operating nut.

4.3 When shown on the plans or in the valve schedule, butterfly valves shall be operated by an electric motor or pneumatic actuator sized per AWWA C504, as specified elsewhere.

5.0 MANUFACTURER

5.1 AWWA C504 Butterfly Valves shall be GA Industries Series 800 as manufactured by VAG USA, LLC Mars, PA USA.