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**SAMPLE SPECIFICATION**

**CHECKtronic® Pump Control Valve**

GA-CKTR-SPEC Rev B

1.0 GENERAL

1.1 Manufacturer shall have a minimum of ten (10) years’ experience in the manufacture of electric motor actuated pump control valves and when requested shall provide a list of installations of similar size that have been in operation for at least 5 years.

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 pump control valve shall consist of a main valve and electric motor actuator, completely factory assembled, tested and ready for installation and field wiring.

2.2 The valve body have integral flanged connections, be of the streamlined long radius elbow or wye type for low headloss and incorporate an integral, spring-assisted stop-check that closes independent of the actuator to prevent flow reversal subsequent to power outage or pump, pump motor or actuator failure. The valve body shall be inherently self-cleaning and non-clogging and have an inspection port near the seat.

2.3 There shall be valve mounted SPDT limit switch actuated by the valve disc to provide a pump off signal during normal pump shutdown. Limit switch contacts in the electric motor actuator shall not be used for this purpose.

3.0 MATERIALS

3.1 The valve body and cover shall be made from cast iron conforming to ASTM A126 Class B and have a replaceable 316 stainless steel body seat ring. Maximum working pressure for Class 125 flanged valves 3” to 12” shall be 200 PSI, 14” to 24” shall be 150 PSI. Class 250 flanged valves shall be rated for 300 PSI maximum working pressure.

3.2 The valve disc shall be made from ductile iron conforming to ASTM A536 Grade 65-45-12 with a replaceable seat made from Ultra High Molecular Weight Polyethylene (UHMWPE) retained by a 316 stainless steel follower ring and stainless steel screws.

3.3 The valve stem shall be stainless steel and guided in a long bronze bushing retained in the valve cover. A pressure-actuated seal shall seal the valve stem where it passes through the body and a wiper seal shall be provided where the stem enters the bushing. The threaded actuator stem shall be made from 17-4PH high strength stainless steel with heavy duty Acme threads.

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

4.0 OPTIONS

4.1 Specify when required: The valve shall be supplied with an externally adjustable spring.

4.2 Specify when required: The valve shall be supplied with an externally adjustable spring and controlled closure upon power failure. Power failure closing speed shall be adjustable.

5.0 ACTUATION

5.1 The valve shall be operated by a multi-turn, non-modulating electric motor actuator meeting AWWA C542 with integral controls. The actuator controls shall include reversing starter, control transformer, local-off-remote selector switch, indicating lights, open/stop/close pushbuttons, torque switches and limit switches.

5.2 A manual override with handwheel and visual position indication shall be provided. The manual override shall automatically disengage when the actuator is electrically operated.

5.3 The electric motor actuator shall provide an independent valve opening and closing stroke time to suit field conditions and be capable of providing two-speed operation with an adjustable transition point from slow to fast speed.

6.0 MANUFACTURER

6.1 The valve shall be GA Industries CHECKtronic® Pump Control Valve as manufactured by VAG USA, LLC Mars, PA USA.