



PRESSURE REDUCING and SUSTAINING VALVE with HYDRAULIC CHECK FEATURE

01/05

Classic Series

F115-11 (Globe)
F1115-11 (Angle)

Specifications

The Pressure Reducing and Sustaining Control Valve with Hydraulic Check Feature shall be a pilot operated diaphragm valve designed to automatically reduce a fluctuating higher upstream pressure to a constant lower downstream pressure regardless of varying flow rates, sustain a minimum upstream pressure, and close drip-tight when downstream pressure becomes greater than upstream pressure.

The main valve shall be a hydraulically operated, single diaphragm actuated, globe or angle pattern valve. Y-pattern valves shall not be permitted. The valve shall contain a disc and diaphragm assembly that forms a sealed chamber below the valve cover, separating operating pressure from line pressure. The diaphragm shall be constructed of nylon reinforced Buna-N, and shall not seal directly against the valve seat and shall be fully supported by the valve body and cover. Rolling diaphragm construction will not be allowed and there shall be no pistons operating the main valve or any pilot controls.

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The main valve body and cover shall be Ductile Iron ASTM A536, and all internal cast components shall be Ductile Iron or CF8M (316) Stainless Steel. All Ductile Iron components, including the body and cover, shall be lined and coated with an NSF 61 Certified Epoxy Coating applied by the electrostatic heat fusion process. All main valve throttling components (valve seat and disc guide) shall be Stainless Steel. The valve body and cover must be machined with a 360-degree locating lip to assure proper alignment.

The disc and diaphragm assembly shall contain a Buna-N synthetic rubber "Quad Seal" that is securely retained on 3-1/2 sides by a disc retainer and disc guide. Diaphragm assemblies utilizing bolts or cap screws for component retention will not be permitted.

Pilot control systems for valves 3" and smaller shall contain a Flow Clean Strainer, Fixed Orifice Closing Speed, Adjustable Opening Speed Control, (2) Check Valves, Pressure Sustaining Pilot and Pressure Reducing Pilot. Pilot control systems for valves 4" and larger shall contain an external Y-Strainer, Fixed Orifice Closing Speed, (2) Check Valves, Pressure Sustaining Pilot, Pressure Reducing Pilot and Isolation Ball Valves on all body connections. All pilot control systems shall utilize copper tubing and brass fittings regardless of valve size. The adjustment range of the pressure sustaining pilot shall be 20-200 psi and the pressure reducing pilot shall be 30-300 psi.

The valve shall be Watts ACV Model F115-11 (globe) or F1115-11 (angle) pattern Pressure Reducing and Sustaining Control Valve with Hydraulic Check Feature.