Purchase Specification

Model No. 40GE-01KCOS / NG1E40-01KCOS

RATE OF FLOW CONTROL VALVE

Sizes
Screwed: 1 ¼", 1 ½", 2", 3" -Flanged: DN40 – DN1000
Function
The Rate of Flow Control Valve shall limit flow to the preset maximum rate regardless of changing line pressure.
Main Valve
The valve shall be hydraulically operated, single diaphragm-actuated, globe or angle pattern. The valve shall consist of three major components: the body, cover and the diaphragm assembly. The diaphragm assembly shall be the only moving part and shall form a sealed chamber in the upper portion of the valve, separating operating pressure from line pressure.
Packing glands and/or stuffing boxes are not permitted and there shall be no pistons operating the main valve or pilot controls. No hourglass-shaped disc retainers shall be permitted and no V-type or slotted type disc guides shall be used. The valve shall contain a resilient, synthetic rubber disc, with a rectangular cross-section contained on three and one-half sides by a disc retainer and forming a tight seal against a single removable stainless steel seat insert.
The diaphragm assembly containing a non-magnetic 303 stainless steel stem shall be fully guided at both ends by a stainless steel bearing in the valve cover and an integral bearing in the valve seat. No centre guides shall be permitted.
Pilot Control System
The pilot system shall be a direct acting diaphragm valve designed to close when the controlling differential exceeds the adjustable spring setting. The pilot control is normally held open by the force of the compression on the spring above the diaphragm and it closes when the pressure acting on the underside of the diaphragm exceeds the spring setting. The pilot control system shall contain a fixed orifice. No variable orifices shall be permitted. An orifice plate flange assembly shall be included and mounted one to five pipe diameters downstream. The contractor shall connect the sensing line between the pilot system and the orifice plate.