

Purchase Specification

Model No. 60GE-31KCOS / NG1E60-31KCOS

BOOSTER PUMP CONTROL VALVE

Sizes

Screwed: 1 ¼", 1 ½", 2", 3" - Flanged: DN40 – DN1000

Function

The booster pump control valve is designed for installation on the discharge of booster pumps to eliminate starting and stopping surges caused by the pump. The valve shall be equipped with a built-in lift type check feature to prevent reverse flow, operating independently of the solenoid control.

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 two piece stainless steel valve stem shall be guided by three bearings located in the cover and seat.

Pilot Control System

The valve operation shall be controlled by an externally mounted pilot control system with a four-way solenoid operated pilot. The solenoid shall be designed to operate on either AC or DC current and have a manual operator installed. Pilot system includes: four-way solenoid pilot valve, opening and closing speed controls, shut off valves, strainers and CVS-1 shuttle valve to provide the highest available operating pressure to the pilot system.

Limit Switch

An adjustable limit switch assembly shall be mounted on the main valve, connected to the main valve stem. It shall be actuated by opening or closing of the valve and easily adjusted to operate at any point of the valve's travel. The limit switch will be used to complete the pump off cycle. The actuating point of the limit switch shall be adjustable. A direct factory representative shall be made available for start-up service, inspection and necessary adjustments.