G-88

HYDRAULIC SURGE ANTICIPATING VALVE



The G 88 is intended for protecting the pipeline against hydraulic shock from water hammer. Hydraulic shock can be caused by emergency shutdown of the pump due to power outage or by abrupt closure of the stop valve alog the main line. thereby rapid pressure drop front is followed by a reverse wave with extremely high pressure.

The low and high-pressure waves alternate within a short time interval. The G 88 is controlled by two pilots – for high and low-pressure. Under normal conditions the G 88 is closed. When the pressure in the line increases or drops outside of the preset limits, the valve opens a quick pressure relief to discharge into atmosphere

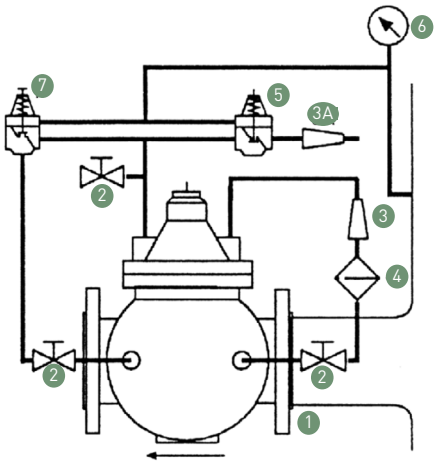
PRINCIPLE OF OPERATION

When line pressure rises above preset value, the pilot (7) is activated and releases extra pressure from the main valve's control chamber. The main valve opens, thus eliminating the overpressure.

If hydraulic shock wave develops, the pressure in the pipeline falls sharply. The low-pressure pilot (5) is actuated releasing pressure from the main valve's control chamber. The main valve opens in anticipation of the high surge to follow. The high surge will find a fully open valve capable of discharging the full flow into atmosphere and prevent the high surge development. As the pressure drops back to normal, both pilots closes and the main valve closes as a result.

TYPICAL APPLICATIONS

The Hydraulic Surge Anticipating **G-88** type is used for protection of pipelines, municipal and main water supply lines as well as for protection of pumping equipment against possible damage in locations of pressure surge



G-88 Hdyraulic Surge Anticipating

Ref	Name
1	Main valve
2	Cock Valve
3	Needle Valve
4	Filter
5	Low Pressure Control Pilot
6	Manometer
7	High Pressure Control Pilot