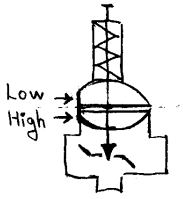
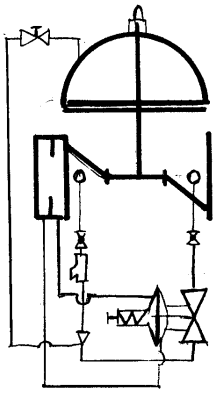
Fluid Equipment Co., Inc. 25 Years / 2000
70 Mountain Creek Trail . . . Social Circle, GA 30025
770-787-0551 FAX 770-787-8052 Cell 404-386-1499 E-mail: donmcpeak@att.net
Don McPeak —— Manufacturers Representative

Article 6 – Rate-of
Flow Control (Gallons Per Minute)

The Rate-of-Flow Pilot shown here needs to be a little more sensitive than the other pilot regulators that are used for pressure reducing and pressure relief. This is because it has to read a Differential Pressure across an Orifice Plate. This is achieved by using a larger diaphragm. The high pressure is tapped in appose the spring, and the low pressure is tapped in on the spring side of the diaphragm.



Like other pilots, it has a Spring Setting, but we are controlling flow instead of pressure. The Spring Setting (or tension) is the constant, and the Differential across the plate is the Variable. As the flow tries to increase or decrease, changing the differential pressure, the spring responds and maintains a Constant Flow.



This, of course, is accomplished by moving water either onto or off of the main valve diaphragm. (which is explained in previous articles)

This valve should be specified in water distribution systems more than it is. A pressure reducing valve, for instance, which you see everywhere, does not limit the amount of water that a customer can use. This valve function does just that; and, it can easily be combined with other pressure control functions, such as pressure reducing. (this will be covered in subsequent articles)

Finally, each valve size has a standard orifice plate hole size. However, this can be varied greatly to match special flow conditions; so, check flow condition with us.

Automatic Answer