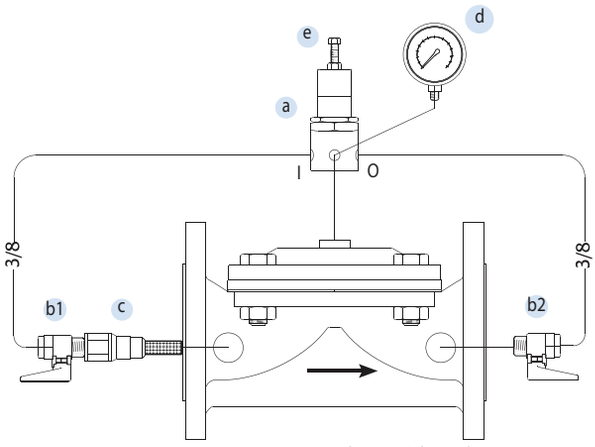
PRESSURE REDUCING CONTROL VALVE

Model: KVS 701 - G



a. Pressure Reducing Pilot Valve
b. Ball valve
c. In-line finger filter
d. Pressure Gauge
e. Adjustment Bolt

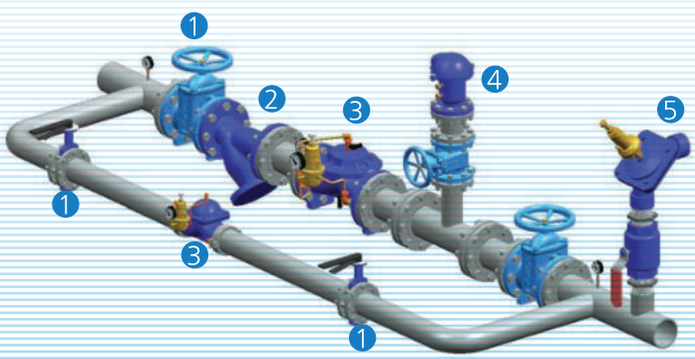
DESCRIPTION

KVS 701-G model pressure reducing control valve is the hydraulic control valve which reduces high upstream pressure valve into desired lower pressure value by means of built-in pressure reducing pilot valves. Pressure reducing control valve controls downstream pressure value continuously and maintains it constant without being affected from flow rate and upstream pressure values. When no flow exists in the system, it is closer by itself automatically. When valve upstream pressure value decreases below adjusted downstream pressure value, it is opened fully by itself. Valve may be user in vertical and horizontal positions in the system .

INSTALLATION

Valve nominal diameter must equal to or one size smaller than line diameter..
Mount valve in direction of arrow indicated on it.
It is recommended that insulation valves (butterfly or gate valves etc.), air relief valve, quick pressure relief valve (QR) and strainer valves will be used in line - mounting of valve.
During pressure decrease, cavitation risk is dangerous for valve body. Adjust downstream pressure valve by referring cavitation data or consult our technical service.

TYPICAL APPLICATION



1. Isolation Valve (Gate, Butterfly, etc.)
2. Strainer Valve
3. Pressure Reducing Control Valve
4. Air Relief Valve
5. Quick Pressure Relief Valve

ADJUSTMENT

Operate pump, open main valve on network and deliver water to the system.
Open ball valve indicated with "b1" and close ball valve indicated with "b2"
Wait for a while until water reach valve control chamber. When water reach control chamber, pressure gauge will show a certain pressure value.
Adjust desired downstream pressure value by means of adjustment bolt with "e" on pilot valve indicated with "a" by referring pressure gauge indicated with "d" .
When you turn adjustment bolt clockwise, downstream pressure value will increase and when you turn adjustment bolt counter - clockwise it will decrease.
After adjusting desired downstream pressure value, tighten contra nut below adjustment bolt.
Open ball valve indicated with "b2" and deliver water into system. Pressure gauge will show zero value after opening "b2" valve .
Check downstream pressure value continuously. If valve regulating process is not realized, consult our company.

FAILURE	CAUSES	CORRECTING/REPAIR
Valve not opening	• Ball valves in valve upstream and downstream may be closed. • Valve upstream pressure may be too low. • Adjustment bolt of pilot valve may be too loosened.	• Check ball valves and open them if they are closed. • Check your system. • Bring adjustment bolt into desired value and tighten contra nut.
Valve not closing	• Diaphragm may be punctured. • Foreign substances may exist in diaphragm seat. • Connections of pilot valve may be clogged because of foreign substances. • Finger filter may be clogged.	• Check diaphragm and replace with the new one if it is punctured. • Check diaphragm seat and remove foreign substances if any. • Check connections and clean them. • Clean if it is clogged.
Valve does not regulate	• Movable parts of pilot valve may be clogged because of calcification. • Needle valve or orifice in pilot valve upstream may be clogged. • Pressure gauge may be failed.	• Replace with new one. • Clean it. • Replace with new one.

MAINTENANCE

than one within a few months unless water is too dirty.
Drain water within actuator and pilot valves of valves not used in winter.

PILOT VALVE PRESSURE ADJUSTMENT RANGE

Standard Pressure Range	5 - 160 m	7.5 - 240 psi
Medium Pressure Range	10 - 100m	15 - 150 psi
High Pressure Range	5 - 240 m	7.5 - 360 psi

ORDER INFORMATION

Please submit following information to our sales representative while ordering

Maximum Flow Rate (in l/s or m^3/h)
Maximum Network Pressure (in bar, atmosphere or meter)
Maximum Upstream Pressure (in bar, atmosphere or meter)
Minimum Upstream Pressure (in bar, atmosphere or meter)
Desired Downstream Pressure (in bar, atmosphere or meter)