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|--------------------------------|--------------------------------|
| a Solenoid Pilot Valve | d Limit Switch Assemble |
| b Ball Valves | e Needle Valve |
| c In-line Finger Filter | f Check Valve |

Desription

Armaş "PC" model pump control valve is a control valve designed for putting booster type pumps into/out of service automatically which is used water network elevating lines. When start button is pressed, pump control valve is opened by itself slowly in comparison with booster pump until pump rotation will reach working rotation. When "stop" button is pressed, control valve is closed slowly without causing surge in the first plan. When pump control valve was closed as fully sealed, it is disengaged from system by means of "Limit Switch" on it. In situations like energy interruption, works as a check valve to prevent back-flow to pump and eliminates use of an extra check valve in the system.

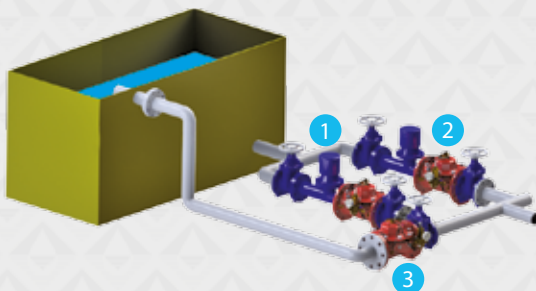
Features

- Pump control valve works synchronously with booster pump.
- Control panel of pump control valve controls valve and pump together.
- Opening-closing speed of valve may be adjusted easily.
- Valve may be operated in mounting in horizontal and vertical positions in the system

Installation

- Make sure that valve is on a level with the pipeline while mounting it.
- Mount valve in direction of arrow indicated on it.
- While connecting valve on pipeline, place gasket between valve flange and pipe flange to ensure sealing and tighten the bolts as crosswise.
- It is recommended that isolation valves (butterfly or gate valves etc.), air relief valve and strainer valves will be used in line-mounting of valve (see sample montage illustration).

Typical Application



- 1** Pump
- 2** Pump Control Valve
- 3** Surge Anticipating Valve

Adjustment

- Connect pump control valve to pump panel according to electric schema of electric panel.
- Open ball valve indicated with "b1" and "b2."
- Valve will be opened slowly. When valve came to full open position, fixate the position of limit switch indicated with "d" according to full closed position of valve. Knob at the end of valve indicator should contact with Limit Switch.
- Adjust valve opening speed by means of needle valve indicated with "e2" and valve closing speed by means of needle valve indicated with "e1".

Pump Control Valve Sizing Table*

| Valve Diameter | Proposed Ideal Flow Rate | Vana Çapı | Tavsiye Edilen İdeal Akış Miktarı |
|----------------|--------------------------|--------------|-----------------------------------|
| 2" - 50 mm | 15 m ³ /h | 5" - 125 mm | 100 m ³ /h |
| 2 1/2" 65 mm | 24 m ³ /h | 6" - 150 mm | 130 m ³ /h |
| 3" - 80 mm | 36 m ³ /h | 8" - 200 mm | 225 m ³ /h |
| 4" - 100 mm | 56 m ³ /h | 10" - 250 mm | 350 m ³ /h |
| | | 12" - 300mm | 510 m ³ /h |

* Recommended flow rate values for minimum head loss.

Troubleshooting

| Failure | Causes | Correcting/Repair |
|--|---|--|
| Valve not opening | <ul style="list-style-type: none"> • Ball valve indicated with "c" on valve may be closed. • Solenoid Pilot valve coil may be burnt. • Needle valve may be closed. | <ul style="list-style-type: none"> • Check the ball valves and open them if they are closed. • Replace it with the new one. • Open needle valve according to valve opening speed. |
| Valve not closing | <ul style="list-style-type: none"> • Diaphragm may be punctured. • Foreign substances may exist in diaphragm seat. • Connections of valve control panel may be wrong. • Finger filter may be clogged. | <ul style="list-style-type: none"> • Check diaphragm and replace with the new one if it is punctured. • Check diaphragm seat and remove foreign substances if any. • Check connections and correct them according to electric schema.. • Clean if it is clogged. |
| Valve is closed but Pump does not stop | <ul style="list-style-type: none"> • Position of Limit Switch may be wrong. • Connections of Limit Switch to control panel may be wrong. | <ul style="list-style-type: none"> • Readjust it according to instruction. • Check it and correct its connections |

Order Information

Please submit following information to our sales department while ordering.

Maximum flow rate _____ m³/h
 Maximum network/line pressure _____ bar
 Main line size _____ mm
 Valve connection type _____

Sample order form

| Model | Connection | Size | Control Feature | Additional Features |
|-----------|-------------------------|-----------|-----------------|-------------------------|
| 67-67D | F: Flanged (ISO-ANSI) | 2"-16" | Pump Control | PS: Pressure Sustaining |
| 66-66D-64 | TH: Threaded (BSPT-NPT) | 1 1/2"-3" | | FR: Flow Rate Control |
| 63-63D | VIC: Grooved End | 2"-4" | | PG: Pressure Gauge |
| 67 | F | 6" | PC | PG |