

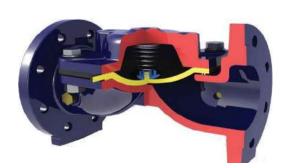


## PRODUCT DESCRIPTION

Having been designed to control pressure, flow rate and level in closed loop pipe networks, hydraulic control valves with diaphragm actuator are automatic hydraulic control valves operating with the network pressure. Hydraulic valve body consists of 3 main components: Valve Cover, Valve Body and Diaphragm materials. Since the components such as shaft, flap, seal bushing, shaft sleeve etc do not exist in hydraulic control valves with diaphragm actuator, their maintenance and usage are quite easy

## **MATERIAL LIST**

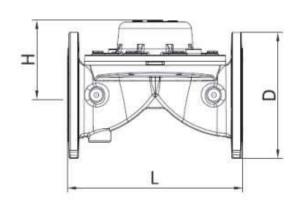


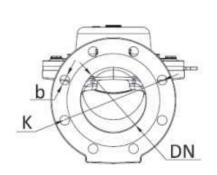


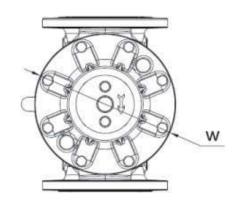
| Name               | Material  |
|--------------------|---|
| 1 Valve Body       | GGG 40 Ductile iron   |
| 2 Valve Cover      | GGG 40 Ductile iron   |
| 3 Sipring          | Standard :SS 304<br>Optional :SS 316                          |
| 4 Spring seal      | Nylon 6   |
| 5 Bolt             | Standard : 8.8 Galvanized<br>Steel                            |
| 6 Rondela          | 8.8 Galvanized steel  |
| 7 Diaphram         | Standard: EPDM rubber   |
| 8 Nut              | Standart: 8.8 Galvanized<br>Steel Optional: Inox<br>stainless |
| 9 Control Fittings | Ms 58 forged brass  |











| DIMENSION AND WEIGHT TABLE |      |         |      |         |      |             |      |             |      |             |      |         |      |          |
|----------------------------|------|---------|------|---------|------|-------------|------|-------------|------|-------------|------|---------|------|----------|
|                            | mm   | inch    | mm   | İnch    | mm   | İnch        | mm   | İnch        | mm   | İnch        | mm   | İnch    | mm   | İnch     |
| DN                         | 50   | 2"      | 65   | 2½"     | 80   | 3"          | 100  | 4"          | 125  | 5"          | 150  | 6"      | 200  | 8"       |
| D                          | 165  | 6 1/2   | 185  | 7 9/32  | 200  | 7 7/8       | 220  | 8 21/32     | 250  | 9 27/32     | 285  | 11 7/32 | 340  | 13 25/64 |
| Н                          | 125  | 4 59/64 | 135  | 5 5/16  | 190  | 7 31/64     | 200  | 7 7/8       | 227  | 8 15/16     | 244  | 9 39/64 | 272  | 10 45/64 |
| L                          | 195  | 7 43/64 | 215  | 8 15/32 | 300  | 11<br>13/16 | 300  | 11<br>13/16 | 380  | 14<br>61/64 | 400  | 15 3/4  | 450  | 17 23/32 |
| K                          | 125  | 4 59/64 | 145  | 5 45/64 | 160  | 6 19/64     | 180  | 7 3/32      | 210  | 8 17/64     | 240  | 9 29/64 | 295  | 11 39/64 |
| W                          | 115  | 4 17/32 | 115  | 4 17/32 | 200  | 7 7/8       | 200  | 7 7/8       | 320  | 1219/32     | 320  | 1219/32 | 320  | 1219/32  |
| b                          | 19   | 3/4     | 19   | 3/4     | 19   | 3/4         | 19   | 3/4         | 19   | 3/4         | 23   | 29/32   | 23   | 29/32    |
| Weigh<br>t                 | 7 kg | 15lbs   | 9 kg | 21lbs   | 18kg | 45lbs       | 23kg | 50lbs       | 45kg | 103lbs      | 48kg | 105lbs  | 76kg | 165lbs   |



### **TECHNICAL SPECIFICATIONS**

Nominal Diameter DN 50 - DN 65 - DN 80 - DN 100 - DN 125 - DN 150 - DN 200

Nominal Pressure

ISO PN 10 - Medium Pressure Range
ISO PN 16 - High Pressure Range

Operating pressure Medium Pressure Range : 0,7 – 10 bar High Pressure Range : 0,7 – 16 bar

Flange Connection Dimensions TS ISO 7005/2 – EN 1092 – 2

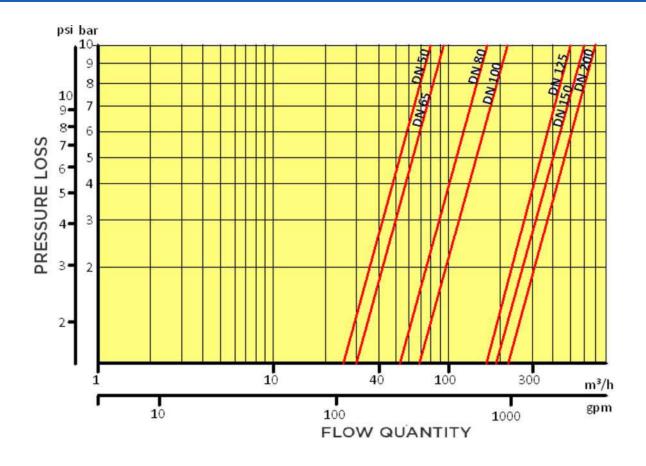
Operating temperature -10 °C - 80 °C

Test

Body Sealing Test: 1,5 X PN (TS EN 12266-1)

Diaphragm Sealing Test: 1,2 X PN (TS EN 12266-1)

### PRESSURE LOSS GRAPH







### **PRODUCT DESCRIPTION**

Level control valves with floater are hydraulic control valves which are used for controlling water level in water storing tanks such as water storages, reservoirs, pressure reducers etc. In order the main valve to perform opening  $\otimes$  closing, a minimum 7 meters of pressure head shoul exist

### **PROPERTIES**

- 1- Due to its simple structure, level control valve with floater offers a big advantage in terms of its operation.
- 2- Floater assembly of the valve is modular which provides easy installation in the constructions where the level control is to be performed.

  3- Hydraulic hose between the main valve and floater assembly could easily be connected to the valve and floater assembly. 4- Could also be used as opening @ closing valve owing to the ball valve on the level control valve with floater.
- 5- Operates hydraulically only with the line pressure withour requiring any extra power supply.

#### **WORKING PRINCIPLE**



#### **VALVE OPEN**

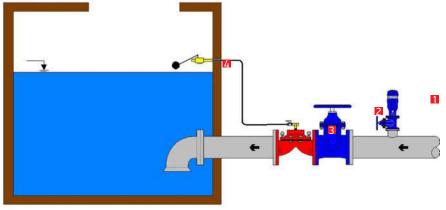
VALVE OPEN
Floater assembly connected to the level control valve with floater in a modular way functions like a 3/2 way valve. Having been mounted steadily on the reservoir, floater goes down position as the water reservoir empties and opens the discharge port of the 3/2 way valve on the floater assembly. Pressurized water in the actuator of the main valve is discharged through this port to atmosphere and the reservoir starts filling with water through opening of the diaphragm of the main valve via the line pressure in the system



#### **VALVE CLOSED**

As the water level increases in the reservoir once the main valve starts filling it with water, the floater which moves upward, closes the discharge port of the 3/2 way valve slowly. After the discharge port of the pilot valve is closed, line pressure in the system is transmitted to the actuator of the main valve. With the help of the spring force, pressurized water arriving at the actuator switches the diaphragm to closed position and main valve is closed with a full-sealing without having any impact.

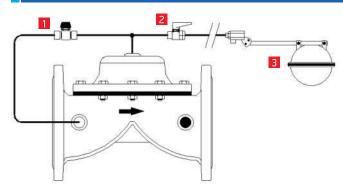
### SAMPLE MOUNTING AND APPLICATION SCHEME



#### 1.Air Discharge Valve

- 2. Isolation Valve
- (Gate Valve Buttery Valve, etc)
- 3.Level Control Valve With Floater
- 4.Floater Assembly

#### **APPLICATION SCHEME**



- 1.Speed Adjuments Valve
- 2.Mini Ball Valve
- 3.Floater

Install the valve according to the flow direction arrow on it.

For the sake of simplicity in case of service maintenance, it is recommended to mount isolation valves (gate, butterfly or ball etc. valves) to close the water in the inlet direction of the line.

For enabling the valve to operate efficiently, it is recommended a vacum lifter to be placed before the valve.

Floater assembly of the level control valve with floater should be mounted steadily on the reservoir. If it is not fixed, then main valve will not work.

After the floater assembly is mounted, switch the mini ball valve (shown as 2) on the main valve to open position. In case the mini ball valve is in closed position, main valve will close

Hydraulic control valves are the control valves which operate with the system pressure. In practice in the sytems where the reservoir inlet pressure is almost zero, floater in the level control valve with floater should be mechanical instead of hydraulic. For detailed information, please contact us.

To avoid frosting in the winter, discharge the water in the valve actuator into atmosphere.