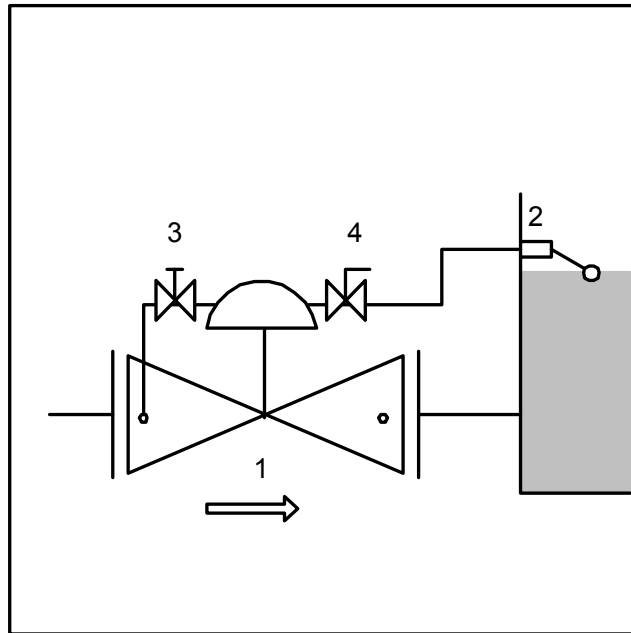
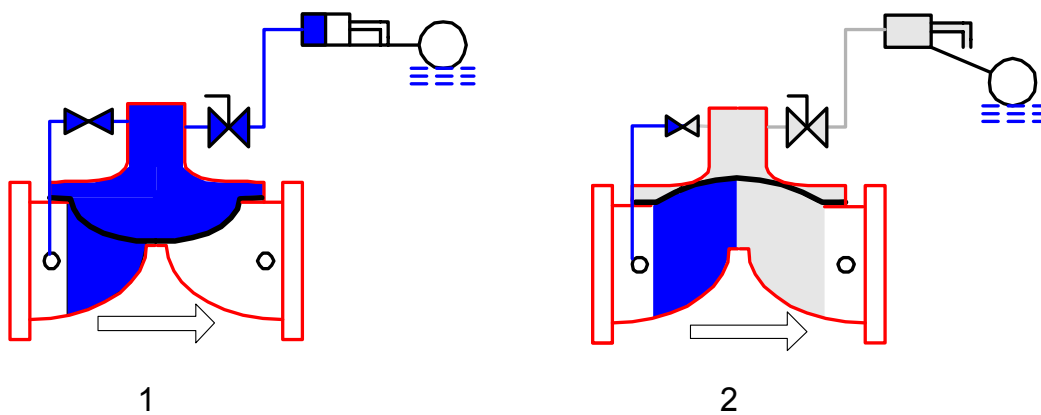


**STANDARD CONFIGURATION**  
**FLOVAL PHOENIX LEVEL CONTROL (FLOAT PILOT) VALVE**



**1. SYSTEM:**

- 1. FLOVAL PHOENIX CONTROL VALVE
- 2. FLOAT BALL PILOT VALVE
- 3. NEEDLE VALVE
- 4. FLOAT PILOT ISOLATION VALVE



## **2. OPERATION:**

The valve is hydraulically controlled, pilot operated. The pilot system consists of the following:

2. **Direct acting level control pilot:** The pilot controls the reservoir level. When the level lowers, the pilot valve float drops opening the pilot. Water pressure in the control valve diaphragm chamber is released through the pilot outlet port and the main valve opens. When the reservoir level is restored, the pilot valve float will rise closing the pilot. Water pressure in the diaphragm chamber will increase and close the main valve.
3. **Needle Valve:** Regulates the closing speed of the control valve and also assists the pilot valve operation. Normal setting is to fully close and then open 1-2 turns.
4. **Float pilot isolation valve:** The valve is for emergency closure or pilot maintenance and therefore should always be open during normal operating conditions. Valve closure with the pilot valve open will prevent pressure discharge from the diaphragm chamber resulting in the main valve closure.

## **3. SPARES LIST:**

ITEM	STOCK RATIO
VALVE DIAPHRAGM	1:20
FLOAT PILOT	1:20

## **4. MAINTENANCE PROCEDURE:**

Since the valve diaphragm is the only moving part in the valve, no regular maintenance is required on the valve itself. The following tests and inspections are however advised on a regular basis.

- X Inspect exterior pipe work and fittings for leaks.
- X Inspect float pilot for damage and operation.

**FAULT FINDING LIST:**

SYMPTOM	PROBABLE CAUSE	REMEDY
VALVE WILL NOT OPEN:	1. PILOT ISOLATION VALVE CLOSED 2. PILOT LINES BLOCKED / DAMAGED / FROZEN	1. OPEN PILOT ISOLATION VALVE 2. CLEAN BLOCKAGE / REPAIR
VALVE OPENS ONLY PARTIALLT	1. NEEDLE VALVE 100 % OPEN 2. OBSTRUCTION IN LINE FROM CONTROL VALVE TO PILOT VALVE	1. CLOSE NEEDLE VALVE 100 % AND OPEN 1 ½ TURNS. 2. CHECK AND CLEAR ANY OBSTRUCTION IN LINE
VALVE WILL NOT CLOSE:	1. NEEDLE VALVE CLOSED 2. PILOT LINES BLOCKED / DAMAGED / FROZEN 3. FLOAT PILOT FAULTY 4. VALVE DIAPHRAGM BURST	1. OPEN NEEDLE VALVE 1 - 1 2 TURNS 2. CLEAN BLOCKAGE / REPAIR 3. REPLACE FLOAT PILOT 4. REPLACE VALVE DIAPHRAGM