

DIFFERENTIAL FLOAT CONTROLLED VALVE



30-6-FLDI1

DOROT model "FLDI1/FLDI2" is an automatic, pilot controlled, level control valve, activated by the pressure of the pipeline.

The valve is mounted on the tank or reservoir inlet, below or above the requested water level .

The float pilot can either be assembled on the main valve (for above-level installation), or can be connected to the main valve by command tubes.

The standard valve closes when the water rises to the requested maximum level and opens when the water level drops to the preset minimum point.

High level opening/low level closing valves are supplied on request.

The Differential Float Valves are available in two versions:

1. **FLDI1**, equipped with float pilot model 70-550, enabling level differentials of 5-160cm (2" - 63").
2. **FLDI2**, equipped with float pilot model 70-610, enabling level differentials of 5-40cm (2" -16").

The main valve is supplied in two models:

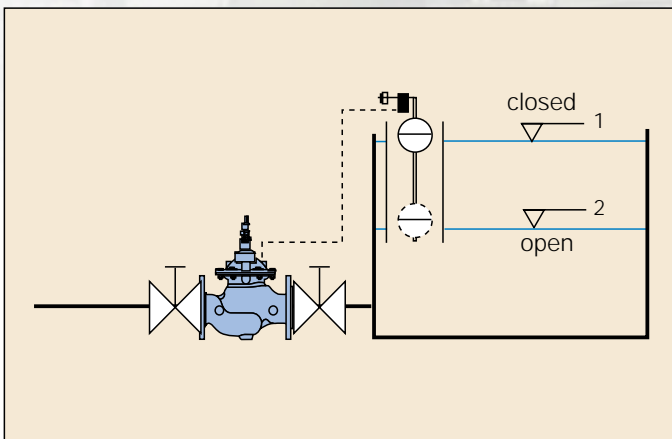
Model 30, 30A for medium pressure (up to 16 bar / 250 psi)

Model 31, 31A for high pressure (up to 25 bar / 350 psi).

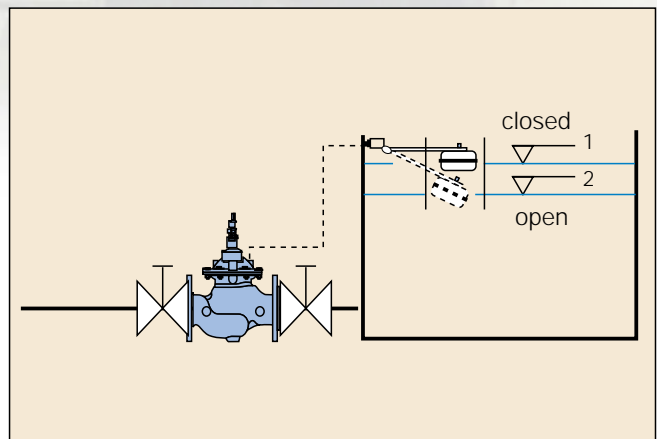
For further information see p. G5 ; and graph #1 on page G5-b.

For pilot refer to p. G6-f.

Typical Application:

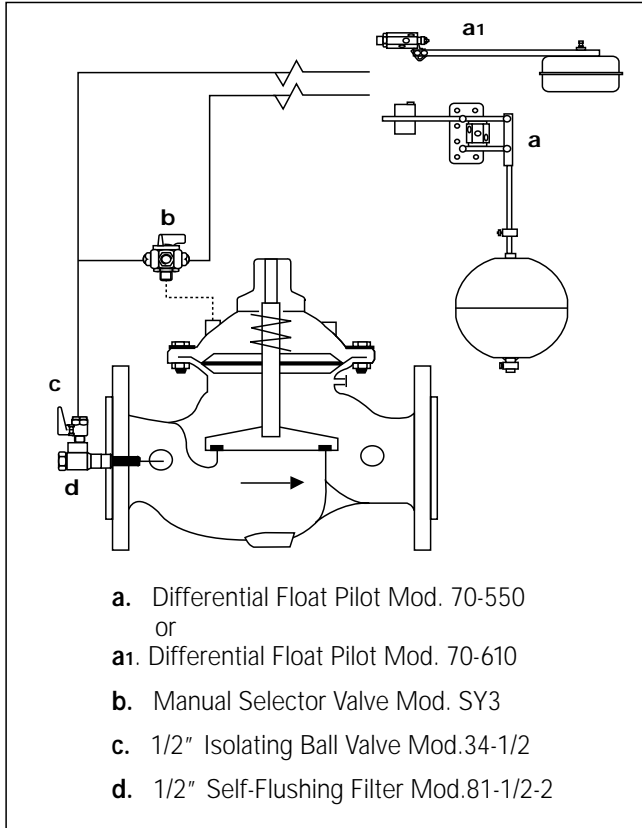


The "FLDI1" Valve prevents the frequent start and stop of flow by providing a large difference between maximum (1) and minimum (2) water levels in the tank.



The "FLDI2" Valve permits the permanent utilization of the entire tank's capacity, through the use of smaller level differentials.

Schematic Control Diagram



Design Notes

The float must be surrounded by a partition wall, creating a still water surface.

Closure of the valve can cause serious pressure surges if the supply pipe is long.

Refer to **SP** p. 7C - 1 for surge protection information.

Optional Features

Electric On-Off Control (add code "**EL**").

When ordering specify "normally open" (N.O.) or "normally closed" (N.C.).
 See p. 1A-1 for further information.

Hydraulic Check Valve Function (add code "**CV**").

See p. 1B-1 for further information.

Surge-Preventing Closure (add code "**SP**").

See P. 7C-1 for further information.

Back-Pressure Sustaining (add code "**PS**").

See p. 3A-1 for further information.

How To Order

Please specify the requested valve in the following sequence (see example below):

Model	Size	Connection Standard	Control Function	Additional Features	Special Instructions
30, 30A 31, 31A [D]	(Inch): 1 1/2" - 20"	ISO, ANSI, JIS etc.		Electric On-Off Control	
↓	↓	↓	↓	↓	↓
30	— 6	— ISO PN16	— FLDI1/FLDI2/	EL (N.O.)	— Position Indicator

Purchase Specifications

(Insert value)

- The valve will be controlled by a differential float-operated pilot valve, located in the tank.
- The main valve will be installed below the water level, or on top of the tank.
- The requested level differential is *(the maximum differential)*.
- The valve will be a hydraulically operated, diaphragm actuated, *(double chambered)* Globe Type.
- The main valve will consist of a removable SST seat and resilient Rubber seal, fully supported by a seal disc.
- The stem will be guided at the top by a replaceable guide bearing in the valve bonnet, and at the bottom, by a Bronze centering device, connected to the seal disc, moving freely inside the seat.
- No bottom guide bearing is permitted.
- The diaphragm will be fully supported, top and bottom, by rigid discs and will be connected to the stem in a way which enables fast and easy replacement on site.
- No external packing gland and piston activation is permitted.
- Face to face length dimension meets ISO 57529S-10 Standard.
- Flange standard will be to *(system standard)*.

The control system will consist of:

- 3-Way/4-Way Float Valve (70-550)
- Manual Override Selector Valve
- Self-Flushing, Removable, Internal Filter.

The valve shall be DOROT mod. 30[D] (31[D]) - *(size)* - FLDI1/FLDI2 or equal in all aspects.

Operating Data Checklist

(Please fill out and send to the distributor when ordering)

Required Flow Rate: _____

Maximum Upstream Pressure (on closed valve): _____

Level _____

Maximum: _____

Minimum: _____