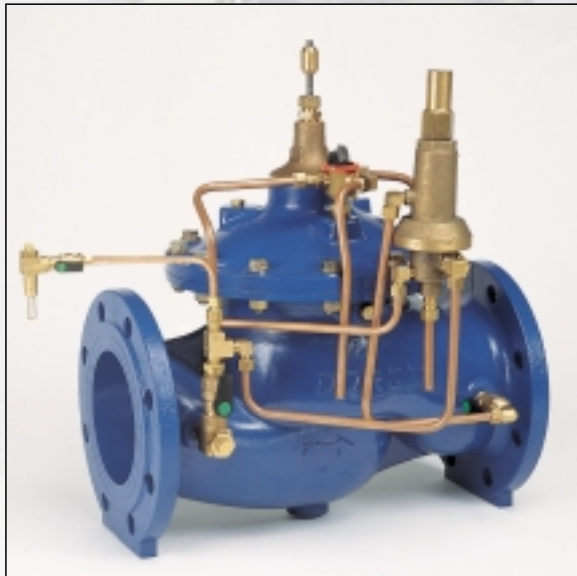


EXCESSIVE FLOW SHUT-OFF VALVE



30-6-FE

DOROT model "FE" is an automatic, pilot controlled, rate-of-flow control valve, activated by the pressure of the pipeline.

The valve is fully open when the flow is below the preset maximum value.

The valve automatically closes when its flow rate exceeds the preset value.

An orifice plate is assembled on the upstream flange of the valve, creating a small pressure differential when the required flow rate passes through it.

A differential pilot valve simultaneously senses the upstream pressure of the orifice and the pressure at the valve outlet.

Should the flow increase above the set-point (due, for example, to pipe rupture), the pilot immediately closes the main valve. Reopening is done by a manual override selector valve in the control system.

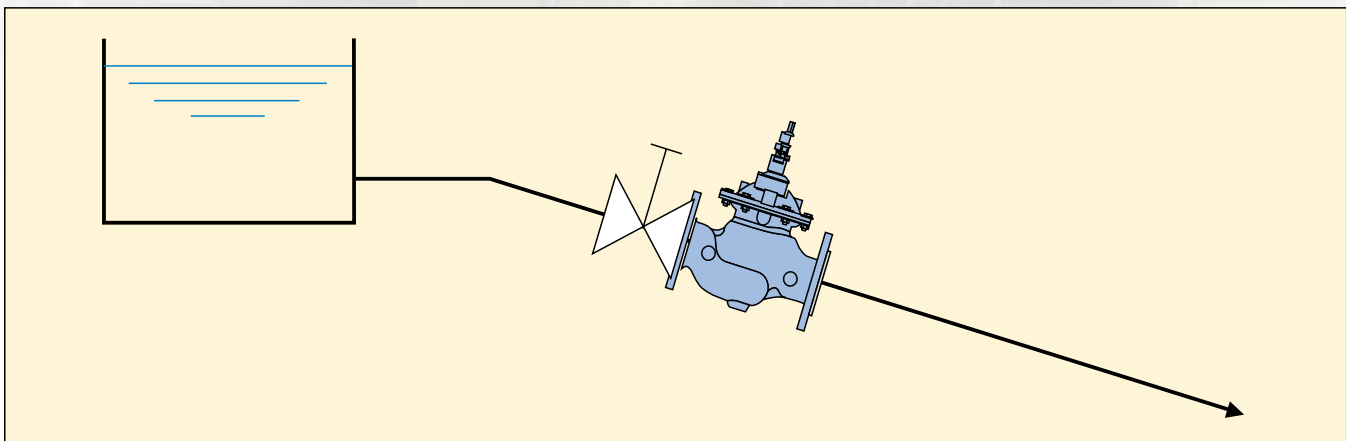
The main valve is supplied in two models:

Model 30, 30A for medium pressure (up to 16 bar / 230 psi)

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

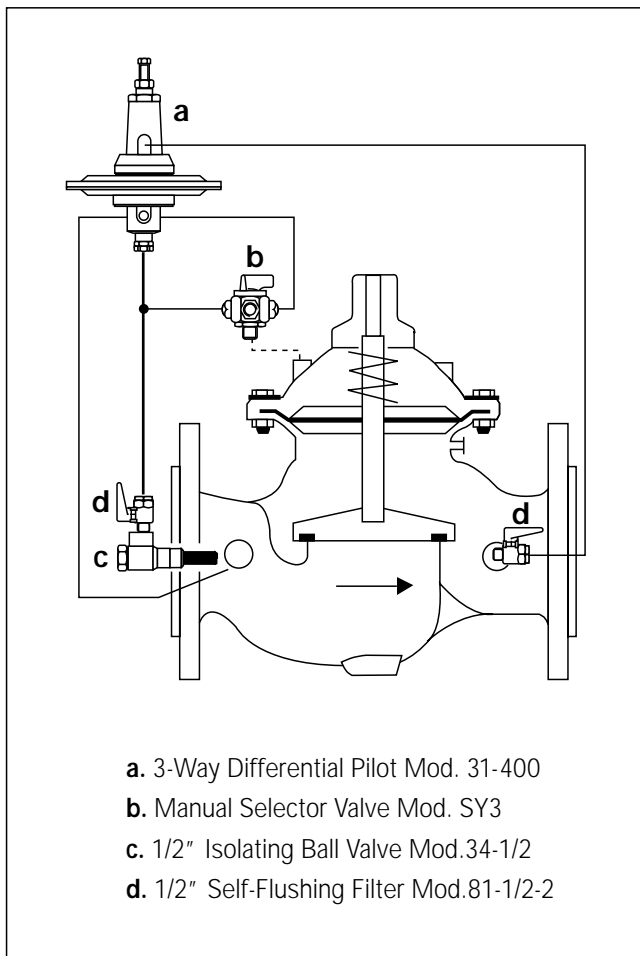
*For further information see p. G5; and graph #1 on page G5-b.
For pilot data refer to p. G6-b.*

Typical Application:



The "FE" Valve, located on a gravity-fed pipeline, automatically closes when the flow rate exceeds the normal value (due, for example, to pipe rupture).

Schematic Control Diagram



Purchase Specifications

(Insert value)

- The valve will limit the flow rate to *(value)*. It will automatically close when the flow rate, in its location, exceeds the above mentioned flow rate by 10%.
- The valve will be controlled by a differential pilot valve, sensing pressure differentials created by the flow across the main valve.
- A manual opening device will enable reopening of the main valve if closed by the automatic system.
- The main valve will be a hydraulically operated, diaphragm actuated, 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 and 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 5752(S-1) Standard.
- Flange standard will be to *(network standard)*.

The control system will consist of:

- 3-Way Differential Pilot Valve
- Orifice Plate
- Manual Override Selector Valve
- Self-Flushing, Removable Internal Filter.

The valve shall be DOROT mod. 30 (31) - *(size)* - FE or equal in all aspects.

Design Notes

The orifice plate is calculated to create 1-1.5m (1.5-2 psi) pressure loss at the maximum flow-rate.

A pressure sensing port, 1/2" minimum size, should be provided upstream of the valve.

Operating Data Checklist

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

Maximum Flow Rate:	_____
Maximum Upstream Pressure:	_____

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.

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	— FE	/ EL (N.O.)	— Position Indicator