



30-6-RE

DOROT model "RE" is an automatic, pilot controlled valve, activated by the pressure of the pipeline.

The valve is installed on a T-junction, on the discharge of a pump, downstream of the check valve.

The "RE" Valve instantly opens when the pipeline pressure drops below the static pressure.

The return flow is released through the open valve and the pressure increase is limited to a safe value.

When the pressure recovers, the valve begins gradually closing, preventing mainline drainage.

Closure time is adjustable in order to avoid a possible surge, created by valve closure.

Should the pressure exceed the safe operating pressure of the network, the valve instantly opens (Quick Relief Function "QR").

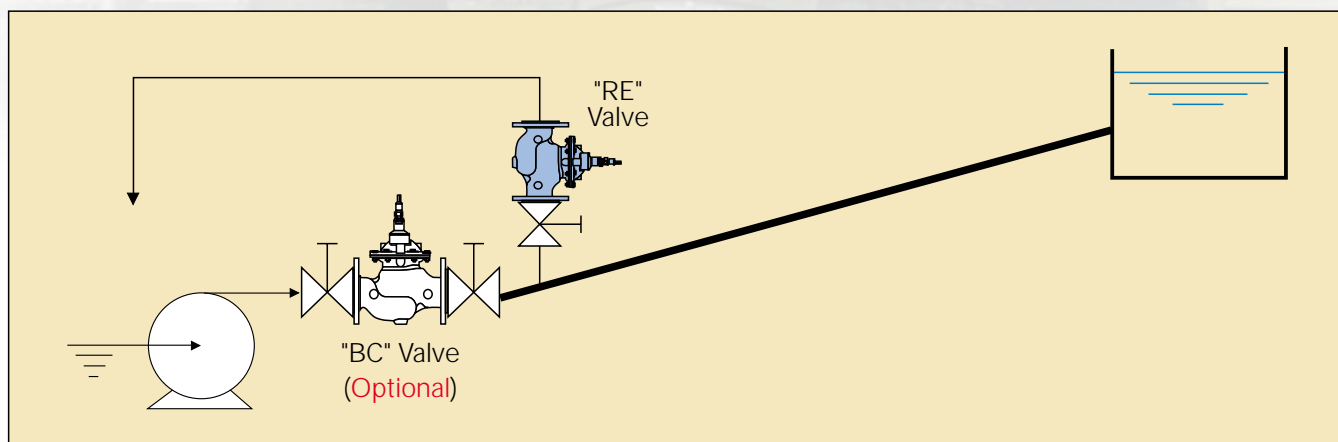
The main valve is supplied in two models:

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

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

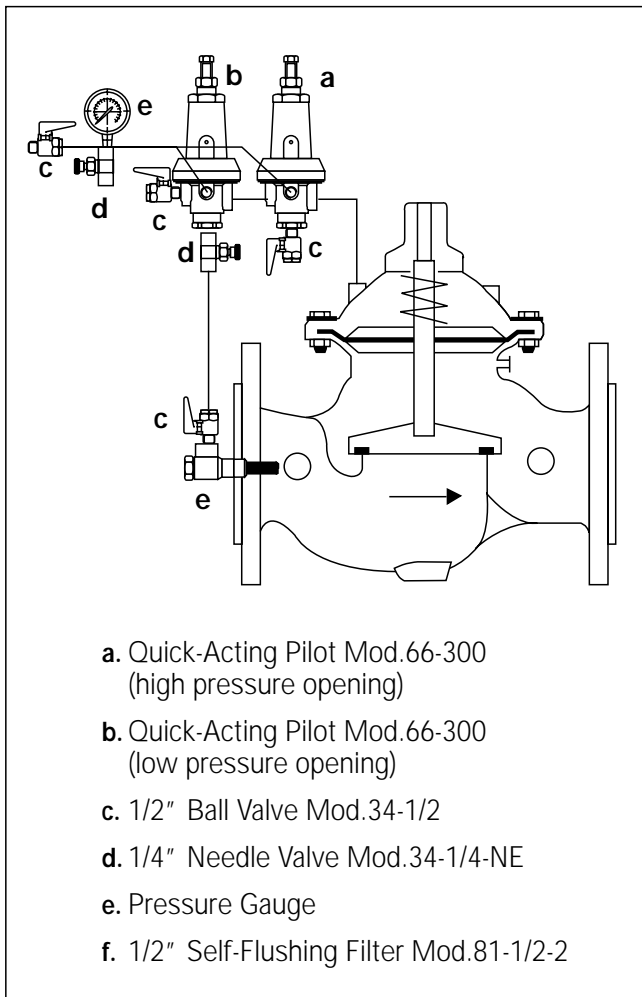
For further information see p. G5; and graph #3 on page G5-c.
For pilot data refer to p. G6-c and G6-d.

Typical Application:



The "RE" Valve, installed on a T-junction downstream of the pump control or check valves, protects the network and the pump from dangerous pressure surges caused by a power failure.

Schematic Control Diagram



Purchase Specifications

(Insert value)

- The valve will fully open within 1 second of the main pressure dropping below *(static pressure)*.
- The valve will fully open within 1 second of the main pressure exceeding *(pump duty point)*.
- When normal pressure resumes, the valve will close at an adjustable pace.
- 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:

- Fast-Acting Relief Pilot Valves
- Needle Valves
- Self-Flushing, Removable, Internal Filter.

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

Design Notes

The valve should be sized to release the return flow, at a pipe pressure equal to the static pressure of the network. A surge analysis is recommended for accurate size selection.

The relief valve may operate at a high pressure differential. Flow velocity is extremely high so the diameter of the draining pipe should be larger than the valve diameter.

Optional Features

Surge-Preventing Closure (add code "SP").
 See p.7C-1 for further information.

Operating Data Checklist

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

Pump Duty Point
Pressure:
Flow Rate:
Static Pressure:
Material of Main Pipe:
Length of Main Pipe:

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	(Inch): 1 1/2" - 20"	ISO, ANSI, JIS etc.		Electric On-Off Control	
↓	↓	↓	↓	↓	↓
30	— 6	— ISO PN16	— RE	/ EL (N.O.)	— Position Indicator