



30-6-QR

DOROT model "QR" is an automatic, pilot controlled, quick relief safety valve, activated by the pressure of the pipeline.

The valve, mounted on a T-junction in the pipeline, releases water from the network.

Should the upstream pressure exceed the safe value, the valve instantly opens to its fully open position, preventing a possible pressure surge.

When the network pressure falls to the required value, the valve slowly closes to avoid a pressure surge that may be caused by a sudden flow reduction.

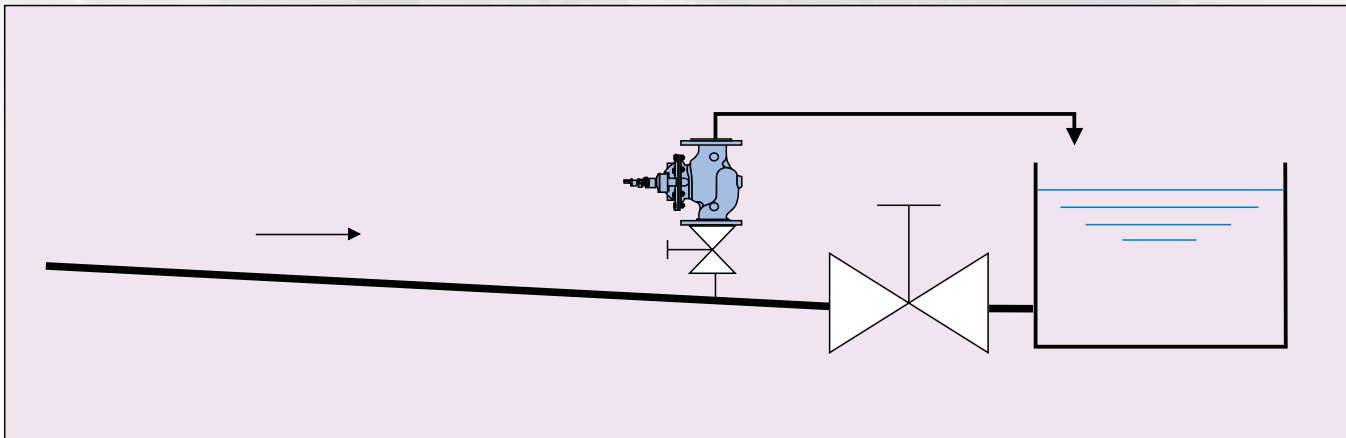
The main valve is supplied in two models.

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

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

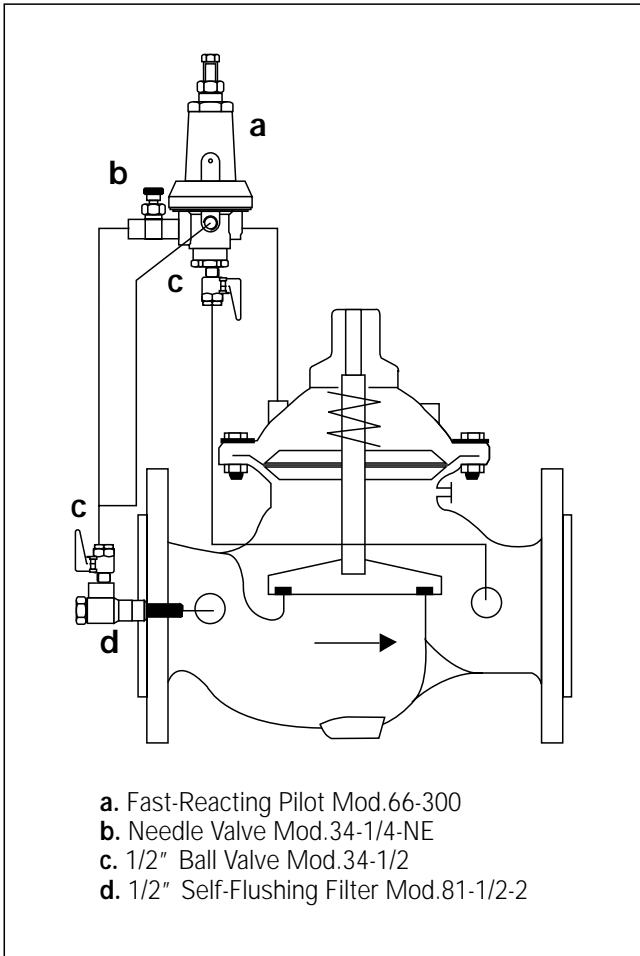
*For further information see p. G5; and graph #3 on page G5-c.
For pilot data refer to p. G6-c.*

Typical Application:



The "QR" Valve, assembled upstream of the valve that controls the filling of the tank, instantly opens if the pressure rises to an unsafe value, due to sudden valve closure.

Schematic Control Diagram



Purchase Specifications

(Insert value)

- The valve will open to the fully open position within 1 second of the upstream pressure exceeding the set-point.
- The valve will close, at an adjustable pace, when the pressure drops to the set-point.
- The pressure differential between opening and closing positions will not exceed 10% of the set-point.
- The 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 Valve.
- Needle Valve.
- Self-Flushing, Removable, Internal Filter.

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

Design Notes

The valve size should accommodate the flow created by the pump at the pressure set-point.

The relief valve operates in high pressure differentials. The flow velocity may be extremely high and the diameter of the draining pipe should be larger than the valve size.

The valve is not a modulating type, therefore cannot be used for pressure regulation.
 See **PS(R)** p. 3B-1 for further information.

Surges generated by the pump shut-off cannot be prevented by the Quick Relief Valve.
 Refer to **RE** p. 6F-1 for further information

Operating Data Checklist

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

Maximum Network Flow Rate: _____
 Pump Flow At Maximum 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.

How To Order

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

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