

30-EL\TO Two Stage Opening Solenoid Control Valve

Principal of operation

Dorot Series 300 Electric Control Valve ('30-EL\TO') is an automatic, solenoid control valve, activated by the pressure of the pipeline. The valve controls by an electric current or an electric pulse, opens or closes the main valve. The 'TO' device prevents damage caused by too fast filling of a drained pipeline. The flow rate will be restricted, until the network, downstream of the valve is full and then a full opening of the valve is enabled.

*The 'TO' device can be added to any el control function.



S300 Features

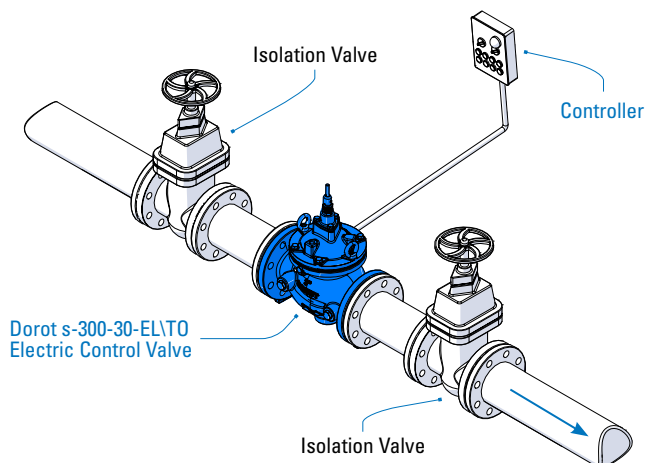
- Superb performance:
 - Regulates at a stable mode, regardless of valve-size, down to near-zero flow. Thus, eliminating the need for a special low flow plug-design (such as 'V-port') or a bypass valve.
 - 'Floating', low-friction internal-trim design, guided by unique LPT® device.
- High reliability:
 - All control ports are fitted with SST sleeves for preventing corrosion-blockage.
 - Pre-shaped reinforced diaphragm – for easier assembly and improved longevity.
- Reduced periodic inspection/maintenance labor:
 - The control-trim is fitted with a self-flushing, inline control-filter.
 - Easy in-situ adjustment and maintenance.
- Versatility:
 - A standard and simple single-chamber valve design, provides smooth operation. Conversion to a double chamber is a patented option.

Standard Materials

- Body & Cover – Ductile Iron
Optional – Cast Steel, SST, N.A.B, S.Duplex
- Main Internal – SST (1.5"-6), Coated steel (8"-32")
Optional – Cast Steel, SST, N.A.B, S.Duplex
- Elastomers – EPDM
Optional – NBR, Neoprene, Viton or others
- Coating – Polyester, Epoxy / Optional – Halar and others
- Control trim – Brass, PA / Optional – SST316, Duplex

Typical Installation

The EL\TO valve is activated from a central control point by electric command. The 'TO' device prevents damage caused by too fast filling of a drained pipeline



Purchase Specifications

- The valve will be controlled by an electric solenoid valve.
- Face-to-face length dimension meets ISO 5752 Standard.
- The stem will be guided at the top by a replaceable guide bearing and at the bottom by a stainless steel unique LPT® device.
- All control ports will be fitted with stainless steel sleeves for preventing corrosion-blockage.

Design Considerations

- The valve should be suited for the maximal flow and allowed Headloss.
- Large pressure differentials may cause cavitation damage. Consult Dorot for solutions if such conditions are expected.

Quick Sizing

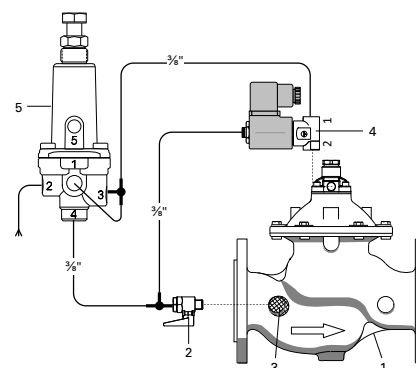
- Valve sized to be the same as line-size or one nominal-size smaller.
- Maximum recommended flow velocity for continuous operation 5.5 m/sec (18 ft. /sec).

Pressure rating

- Model 30, 30A for medium pressure (PN16 bar / 250 psi)
- Model 31, 31A for high pressure (PN25 bar / 360 psi)

Main Control System Components*

1. Main Valve
2. Ball valve
3. Self-flushing filter
4. 3/2 Solenoid Valve
5. 3W PR Pilot Valve



* Indicative drawing