**Model X54TD Pressure Reducing Transition Device Specification**

**Function:**
The pressure reducing transition device shall be installed in pressure reducing stations where parallel water supply lines exist. These parallel water supply lines shall be designed to operate where only smaller diameter line(s) open on lower flow and the smaller and larger diameter line(s) open on high flow. The larger line(s) shall be designated the "main" and the smaller line(s) the "bypass." The pressure reducing transition device shall be installed on the downstream side of the "bypass" line(s).

The device shall ensure the velocity rate at which the transition happens where the "main" line valve (s) begins to open. The velocity shall be governed by the pressure setpoint gap between the pressure reducing valves in the "main" and "bypass" lines.

**Materials:**
The transition device shall have an epoxy-coated ASTM A536 ductile iron compact wafer-style body with a stainless steel 302 trim. The wafer-style body shall be designed to fit between ANSI 125/150/250/300 flanges.

To aid correct installation, the leading edge of the transition device shall have a chamfer and machined arrow to indicate the inlet side of the transition device.

**Product Data:**
The pressure reducing transition device manufacturer shall provide a computerized program with a digital printout available to allow for simulation of the transition velocities and/or alternate transition reducing valve set points.

> *For example, when a 5 psi (35 kPa) difference exists between the set points of the "bypass" and "main" reducing valves, the transition device will promote the opening of the larger reducing valve(s) once pipeline velocity meets or exceeds 16 ft/s (4.57 m/s).*

The computerized program shall show printout of 0 – 100% flow range of the pressure reducing station showing valve velocity and percentage opening of both "main" and "bypass" lines valves.

The Transition Device shall be a CLA-VAL Company ***[1.5"-12"/ 38mm-300mm]*** model X54TD.

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