

Tideflex® TFO Flow Restrictor Valve



- Helps to eliminate cavitation in control valves
- Low operating cost
- Extends service life of control valves
- Induces backpressure
- Alternative to orifice plates

The Tideflex® TFO Flow Restrictor Valve is an elastomeric variable orifice designed to induce backpressure and help eliminate cavitation in control valves on clean water and highly abrasive slurry applications. The flow characteristics are superior to an orifice plate and other similar devices placed in the line to restrict flow and create backpressure. The TFO is installed either in-line or on the discharge end of a pipe and is ideal for applications where flow is discharging to atmosphere.

Materials of Construction

- **Elastomers:** Natural Rubber (NR), Ethylene Propylene Diene Terpolymer (EPDM), Acrylonitrile-Butadiene (NBR), Fluoroelastomer (FKM), Chloroprene (CR), Chlorosulfonated Polyethylene (CSM), Chloro-Isobutylene-Isoprene (CIIR), NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372 certified EPDM
- **Retaining Rings:** 316 Stainless Steel, special alloys available

As indicated in the open area and head loss charts below, the TFO Flow Restrictor Valve outperforms the fixed diameter orifice plate. The advantage of the TFO is the inherent variable orifice produces a linear head loss characteristic compared to a fixed orifice with a non-linear characteristic. Therefore, the TFO induces greater backpressure at lower flows, preventing cavitation in control valves at a wider range of flow rates.

The TFO Flow Restrictor Valve is manufactured with an orifice in the center of the bill, allowing for the discharge of very low flows and enabling the pipe to drain when the line is taken out of service.

The TFO's dimensions are identical to the CTF Tideflex® 35 Flanged Duckbill Check Valve. Slip-on versions are also available similar to the CIL Tideflex® 37 In-Line Flanged Check Valve and CIL Tideflex® 39 In-Line Check Valve. For more information, see the following documents:

CUT SHEET RV09.01-2 for CTF Tideflex® 35 Flanged Duckbill Check Valve

CUT SHEET RV09.01-5 for CIL Tideflex® 37 In-Line Flanged Check Valve

CUT SHEET RV09.01-2 for CIL Tideflex® 39 In-Line Check Valve

When Ordering, Please Provide:

Pipe Size (I.D. in inches)		
Flange Specification (ASME 150, DIN 2633, etc.)		
Materials of Construction		
Base Elastomer		
Cover Material		
Retaining Ring Material		
Pressure Drop at Specific Flow Rate	psi	gpm
Specific Gravity of Process Fluid		
Maximum Line Pressure		

