

**SAFEPLEX SYSTEMS, INC.**

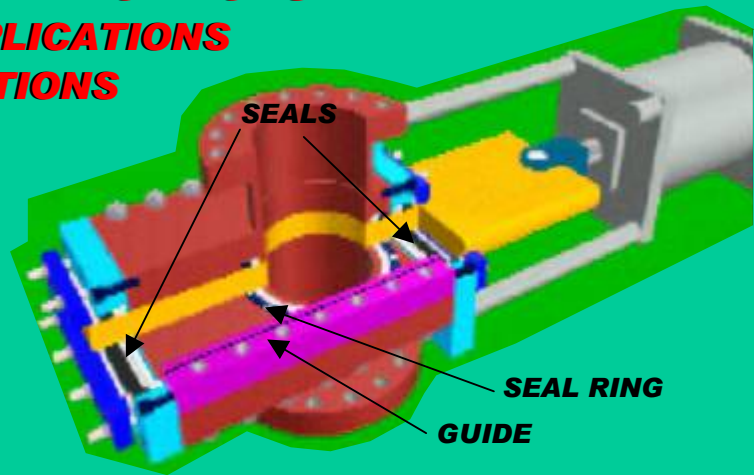
**SYSTEMS, PRODUCTS, SERVICES, INTEGRITY**

## **SILvalve-3 ---- A Unique Valve**

- **FOR NORMALLY CLOSED ESD VALVE APPLICATIONS**
- **FOR HIGH PRESSURE DROP APPLICATIONS**
- **FOR BI-DIRECTIONAL APPLICATIONS**
- **FOR DIRTY STREAM APPLICATIONS**
- **FOR POLYMER APPLICATIONS**

### **DESCRIPTION**

**The basic concept of the SILvalve-3 design is very Simple --- three plates of steel! The outer two plates serve as the flange plates and the center plate is the modulating plate, called the O-Port Plate.**



**The seals are located on the inside of the flange plates. Both sets of seals are pressed against the O-Port plate at all times. This unique seal arrangement allows the SILvalve-3 to be use for bi-directional flow applications. Because the seals are 1 inch away from the edge of the plate orifice, gouging from pressure drop or in-stream abrasives has to exceed 1 inch before breaching the valve's seals.**



**Because the plates have only a 30mm separation, there are no edges for compounds such as polymers to gather and buildup within the valve body. Additionally, the SILvalve-3 does not have traditional seats. Likewise the act of closing the valve does not built up material within the valve's body.**

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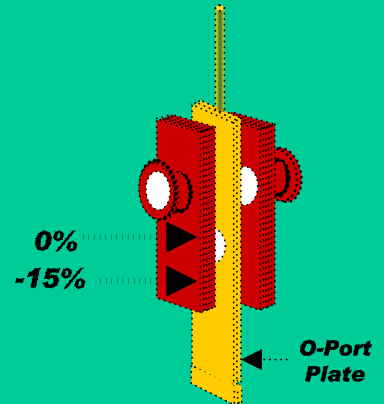
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## **SILvalve-3 --- A Unique Valve**

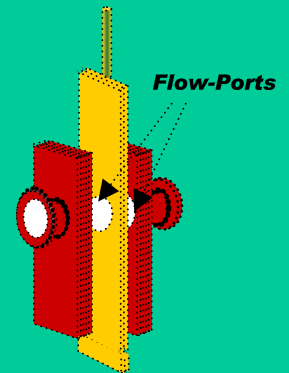
- **PST IN THE "CLOSE" POSITION**
- **TRAVEL – 0% to (-15%)**
- **NEVER OPENS DURING PST**

**SafePlex's SILvalve-3 supports partial stroke testing of a 'closed' ESD valve. This is particularly useful for vent and flare block valve applications. For the first time a closed block valve can be partial stroke tested without venting or flaring. Because of the SILvalve-3 "Open Body" design, the O-Port Plate can go pass 0% ( the closed position) to a negative 15% position. This allows for movement of the O-Port Plate without opening the valve.**

**Not like standard valves, the high pressure drop during the release does not damage the "seats" because there are no seats! Flow-Port gouging is mitigated until the gouging reaches a depth of 1 inch. Therefore, SILvalve-3 will support numerous releases without requiring maintenance of the plate.**



**CLOSED VALVE**



**OPEN VALVE**

## **General Valve Specifications**

**Fluids:** Gas to Sludge

**Shutoff Rating:** Class VI Rating

**Temperature Rating:** Up to 2,500 Degrees F

**Material:** SS 304, 316, 317, Hastelloy, Titanium, carbon steel, etc.

**Sizes:** 2" to 72"

**Pressure Rating:** 150# to 15,000# PSIG

**Stroke Time:** Approximately 1 second per inch opening

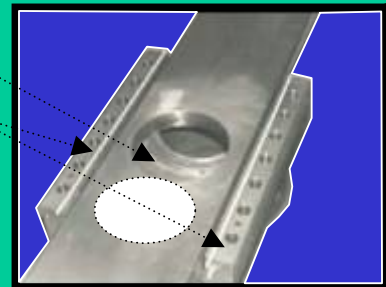
**Pressure Drop:** Near Zero PSIG (*Perfect Cv*)

**Mounting Positions:** Any (*Does not require full vertical or horizontal position*)

**Mounting Types:** Bolted, Welded Flange, and Welded In-Line

**SEAL RING**

**GUIDES**



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