8769 Pressure Relief Valve







Assembly:

Clean glass body and dry thoroughly. Do not leave detergent residue on seating surface; this could cause sticking.

Inspect seating surface to make sure it is free of lint or other particulates.

Inspect all PTFE surfaces for cleanliness, particularly the O-Ring groove containing the small O-Ring. Check the position of this O-Ring after placement to see that the O-Ring is uniformly seated; it might be necessary to force it (gently) into firm contact.

Insert the plug assembly into the No. 11 thread and tighten until the small O-Ring on the end contacts the glass seat.

Attach the valve to the system.

Adjusting Set Point:

All pressure relief valves have a "cracking" pressure at which gas will begin to flow at 1-2 bubbles/sec., from a 1/4" hose attached to the outlet at one end and the other submerged in water. This pressure should be as close to the "set point" as possible and should not be greater than 5 psig (see below).

The "full" open pressure for this valve is normally 10-12 psig above the set point. If this exceeds 12 psig, look for sticking of the O-Ring or binding of the spring.

The spring is 316 Stainless Steel and is contained within the valve to protect against accumulation of debris. Note! This is a special spring and should not be replaced except with a proper spring, Cat. No. 8769-89. It can be cleaned with organic solvents. It should not be heated above 450° C. to burn off deposits.

With the discharge hose partially submerged in water, just close the valve and apply air pressure, preferably using the reactor gauge as the indicator.

If air escapes. slowly close the valve until flow just stops completely at the desired pressure. Increase the pressure slowly until air escapes at 1-2 bubbles per second. The pressure should not be more than 5 psig greater than the set pressure.

Repeat the operation several times to establish a base line. Always set the maximum pressure by closing the valve against a flow; reversing the procedure will result in a 1-2 lb. lower cutoff pressure.

Increase the pressure and flow until the rate of pressure increase approaches zero as the supply valve is being opened; this should be 10-12 psig above the set point.

Now back off the pressure until flow stops; the pressure will be lower than the set point, generally 1-2 psig. Be sure that the FETFE O-Rings are compatible with vapors to be expected (see accompanying instruction sheet).

