PULSAFEEDER, INC.
A Unit of IDEX Corporation
2883 Brighton-Henrietta Town Line Rd.
Rochester, New York 14623

ECO Series BPV-6 Relief Valve Instructions

Description

The Eco Series BPV-6 is a side inlet, bottom outlet diaphragm back pressure valve designed to impose a pre-set pressure in pump discharge lines carrying corrosive fluids. The diaphragm is TFE and wetted parts below the diaphragm are either 316 stainless steel (Model BPV-6A) or Hastelloy C (Model BPV-6C).

Ratings

Maximum Set Pressure:	100 psig (700 kPa)
Minimum Set Pressure:	20 psig (140 kPa)
Maximum Flow:	25 US GPM (5.68 m^3/hr)
Maximum Viscosity:	200 cps (1000 SSU)
Temperature Range:	-40°F to 250° F (-40° C to 121° C)

Not recommended for slurries, non-Newtonian fluids or cohesive media such as glues, adhesives, etc.

Installation

Install valve vertically with inlet piping at the side and outlet piping at the bottom. Provide both means to isolate valve from system to facilitate maintenance as well as means to read back pressure. Provide pipe support so weight of valve is not taken by pumps or other process equipment.

Valves are furnished with a weep hole in the bonnet that is sized for a 1/8" NPT tap. This hole may be tapped and then piped to a drain. In the event of diaphragm rupture, pumped fluid will then be conveyed safely from the valve.

Maintenance

BEFORE PERFORMING MAINTENANCE ON ANY EQUIPMENT THAT CONTAINS OR MAY CONTAIN HAZARDOUS FLUID, FLUSH EQUIPMENT THOROUGHLY WITH A NEUTRAL FLUID.

It is recommended that a spare diaphragm be kept on hand. To inspect or replace the diaphragm or other valve internals, remove cap, back off adjusting screw until no spring tension is noticeable and remove the six screws fastening the bonnet to the body. Carefully remove bonnet with all top works inside. Removal of diaphragm and top works can be aided by turning down on the adjusting screw.

Inspect all parts and clean as necessary. Examine condition of seat insert and replace if scored or pitted, or sealing edge is uneven, using new seat o-ring. Check for free movement of poppet assembly within guide. Make sure diaphragm clamping surfaces in body and bonnet are clean and install new diaphragm. Mount bonnet with all top works properly installed on body and replace the six screws and lock washers, tightening uniformly in a criss-cross pattern.

Tighten adjusting screw until it is flush with the lock nut, so as to form the new diaphragm to the contours of the seal and poppet. Set valve to desired back pressure and actuate several times. Tighten lock nut and replace cap.

CAUTION: NEVER TIGHTEN ADJUSTING SCREW TO A POINT WHERE THE SPRING CAN GO SOLID.