NEPTUNE RELIEF VALVES AND NEPTUNE BACK PRESSURE VALVES

PVC MODELS, STAINLESS STEEL MODELS AND KYNAR MODELS

Neptune Relief Valves and Back Pressure Valves are intended for liquid services only. Theses valves are used to maintain a set pressure at the pump discharge port, protect piping and system from over pressure and prevent siphoning.

All valves are factory set at 50 psi or it can be set at customer requested setting. They are field adjustable to 150 psi. Pressure is adjustable via the adjustment screw at the top of the valve.

The 2-port design allows chemical to flow through the valve. When pressure at the inlet exceeds the preset pressure of the valve, the diaphragm lifts off the seat and the chemical flow through the valve.

INSTALLATION:

Back Pressure Valve: Models; BP-XXX

Back pressure valves can be installed inline anywhere in the discharge line. The direction of the flow is marked on the valve.

Back pressure valve performance will be improved by the installation of a pulsation dampener upstream of the BP valve.

Generally 90% to 95% dampening is sufficient. Consult your pump manufacturer for their recommendations.

Pressure Relief Valve: Models; RV-XXX

Installation should be made as close the pump discharge as possible. Do not install any shut off valves between the pump and the relief valve. The direction of flow is marked on the valve.

The relief valves are to be installed on a tee branch off the discharge line. Relief valve outlet should be piped back the chemical tank. If this is not possible, the outlet can be piped back into the suction side of the pump.

Do not pipe back between the suction shut off valve and the pump to avoid short-circuiting.
Note: Neptune recommends setting relief valve 50 psi above normal operating discharge pressure.

MAINTENANCE:

The pressure relief and back pressure valves are designed to minimize frequency of maintenance to keep the valves in operation. However, periodic replacement of the internal parts is required.

To facilitate inspection and replacement, the valve design is such that the internal parts can be replaced without removing the valve from the chemical line.

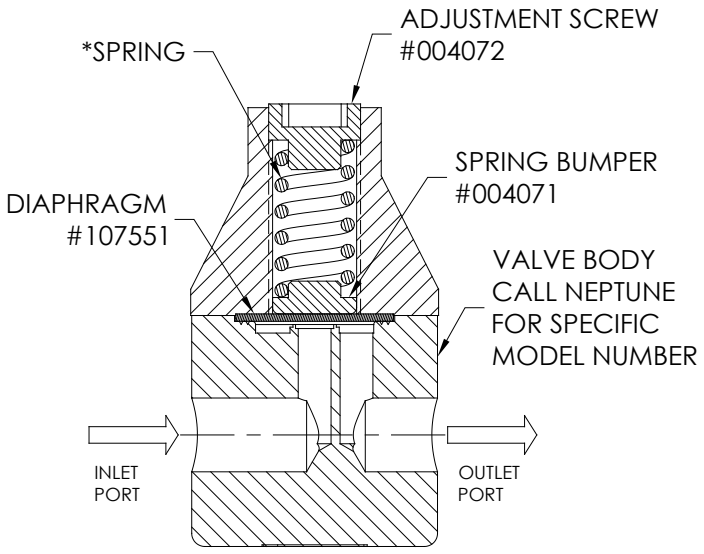
Caution: Insure that the system is not pressurized and that the chemical lines are drained and flushed before disassembly. Follow safety procedures and wear appropriate protective equipment necessary when working on or around chemical equipment.

TO DISASSEMBLE:

Remove the adjustment screw to completely unload the spring from the diaphragm. Unbolt and lift off the valve top from the body. Inspect, clean or replace diaphragm, if necessary. Check the adjustment spring. Replace if corroded.

Reinstall the adjustment screw, spring and the spring bumper into the valve top. Bolt the valve top back onto the body. Torque the bolts that go through the valve body into the valve top to 25 in-lbs.

Reset the adjustment screw to approximately the same position as it was prior to disassembly. Use a pressure gauge to verify the setting. Turning the adjustment screw clockwise increases pressure.



*SPRING: #107550 FOR 50-150 PSI
#128125 FOR 0-50 PSI

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