

Back Pressure Relief Valves

Diaphragm pressure relief valves are designed to protect pumping systems from over pressure damage caused by defective equipment or blockage in the pump system line.

- Reliability and low cost
- Adjustable from 15 to 150 psi
- 2 port (standard) or 3 port (with gauge)
- Viton diaphragm standard (others available)
- Full range of chemically resistant wetted materials
- Sizes from ¼" to 1" depending on model

Diaphragm pressure relief valves operate when the pressure in the pumping system exceeds the preset pressure of the valve. The diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded the diaphragm is forced up and the system fluid flows out the relief port, back to the system fluid tank or to the suction side of the pump. The valves are pre-set at 40 psi; however they are field adjustable from 10 to 150 psi, (optional 350 psi) via the adjustment screw. The relief valve should be set approximately 15 psi higher than the system pressure. Installation should be made as close to the pump as possible, without any valves or accessories between the relief valve and the pump.

Chemworld performs a pressure test on every back pressure relief valve prior to shipping. This ensures the unit will operate leak-free and to the specified pressure ratings.

These Chemworld back pressure valves come standard without a gauge port or gauge. When ordering please specify if a gauge port and/or gauge is required.

Materials:

Material	Designation	Max
		Temperature
PVC	PVC	140°F (60°C)
CPVC	CPVC	140°F (60°C)
Polypropylene	PP	140°F (60°C)
Type 316 Stainless	SS	300°F (149°C)
Steel		
PTFE (Teflon)	TFE	140°F (60°C)
PVDF (Kynar)	PVDF	140°F (60°C)
Alloy 20	C20	300°F (149°C)
Hastalloy C276	C276	300°F (149°C)

NPT port sizes: • 1⁄4" = 025

• $\frac{1}{2}$ " = 050

• 34" = 075

• 1" = 100

Pressure Range: 5 - 150 psi (50 - 350 psi available on

metal valves)

Available Diaphragm Material:

Viton – Standard

EPDM – Upon Request

Made in the USA

