Expertise In
Engineered Plastics

## Diaphragm Pressure Relief Valve

Material:
PVC, PP, PVDF, TEFLON
Size:
$1 / 4^{\prime \prime}-2^{\prime \prime}$
Upstream Pressure: Vacuum to 150 psi
Relief Pressure
$1 / 4^{\prime \prime}$ to $3 / 4^{\prime \prime}-10$ to 125 psi
$1^{\prime \prime}-10$ to 100 psi
$11 / 2^{\prime \prime}$ to $2^{\prime \prime}-10$ to 60 psi
Seals: EPDM, VITON, KALREZ
Diaphragm:
TEFLON
Connections:
Female Threaded ( $1 / 4^{\prime \prime}-1^{\prime \prime}$ )


ISO 9002 CERTIFIED

## Engineering Guide Specification

## Materials of Construction:

PVC: Class 12454B per ASTM D1784
PP: Class PP 110B76383 per ASTM D4101
PVDF: Type 1 per ASTM D3222

Guide Specification: The SIMTECH SBR series diaphragm pressure relief valve is designed to protect piping and equipment from pressure changes where a rapid release of excess pressure is required. Prevents pumps from dead heading, over pressurization, pressure surge conditions, and maintains back pressure in closed loop systems. Adjustable screw and locknut makes it easy to accurately preset desired relief pressure. Teflon (primary) and EPDM (back-up) diaphragms standard.No metal contact with fluid.Wide adjustable relief pressure range (10-125 PSI) Small pressure differential band from cracking point to fully open, and from fully open to close. Top entry makes in-line maintenance quick and easy. Ideal for DI water, harsh chemical, and other high purity applications, as manufactured by SIMTECH.

Note: Teflon Internals Available for Non Lubricant and Extended Cycle Life Applications

## Pressure/Temperature Graph: Working PSI/Fahrenheit



The performance curves are showing the flow rate of RSB with its piston seals is fully open, and $100 \%$ of the fluid flow thru the valve. These curves will be changed depend upon to the and $100 \%$ of the fluid flow thru the valve. These curves will be $c$


INLET PRESSURE - PSIG

## Dimensional Data

| Nom. <br> Size | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{C}_{\mathbf{v}}$ |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4 "$ | 1.60 | 2.10 | 0.39 | 0.72 |
| $1 / 2 "$ | 3.00 | 4.50 | 0.93 | 3.67 |
| $3 / 4 "$ | 3.50 | 4.80 | 0.93 | 4.28 |
| $1 "$ | 4.00 | 5.09 | 0.93 | 5.42 |
| $11 / 2^{\prime \prime}$ | 5.00 | 5.70 | 1.50 | 17.2 |
| $2 "$ | 6.00 | 6.50 | 1.70 | 22.4 |



