

PRESSURE REGULATORS

DESCRIPTION

The R-K BPR (Back Pressure Regulator) series is designed to control the up-stream pressure of the piping system from any change of its back-pressure due to the close of any component or sub-systems. The BPR will prevent pumps from Dead head, over pressure, pressure surges, and maintains back pressure in closed loop systems. Adjustable screw and lock-nut makes it easy and accurate preset pressure. Teflon (primary) and elastomer (back-up) diaphragms.

No metal contact with fluid. Wide pre-set pressure range (10-120 PSI) Small pressure differential band from cracking point to fully open, and from widely open to close. Top entry makes in-line maintenance quickly and easily Ideally for DI water, harsh chemical, and other high purity applications.

R-K BPR SERIES BACK PRESSURE REGULATOR



KEY FEATURES

- No metal contact with fluid: Ensures chemical compatibility
- Ideal for: DI water, harsh chemicals, and other high purity applications
- Closed loop systems: Specifically designed for maintaining back pressure in these systems
- Precise adjustment: Adjustable screw and lock-nut for easy and accurate pressure setting

VALVE BODY MATERIALS:

- Type 1 – Grade 1 PVC
- Natural Polypropylene (PP)
- PVDF (Polyvinylidene Fluoride)
- Teflon

SEAL

- EPDM,
- VITON,
- KALREZ.

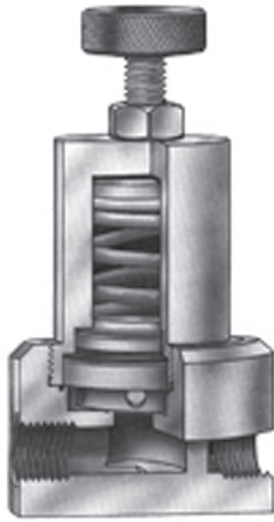
SIZES & PORTING

Valve Sizes: ¼", ½", ¾", 1", 1.5", 2"

Port Types:

¼" to 1" Valve FNPT,
1.5" to 2" Valve MPT
(all fully ported).

Mounting: ((4) ¼"-20 tapped holes for standard machined valve body (1/4" to 1").



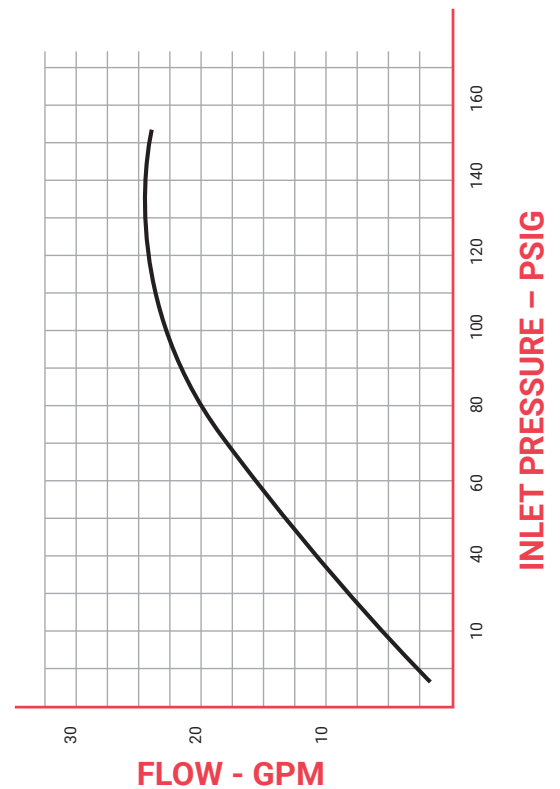
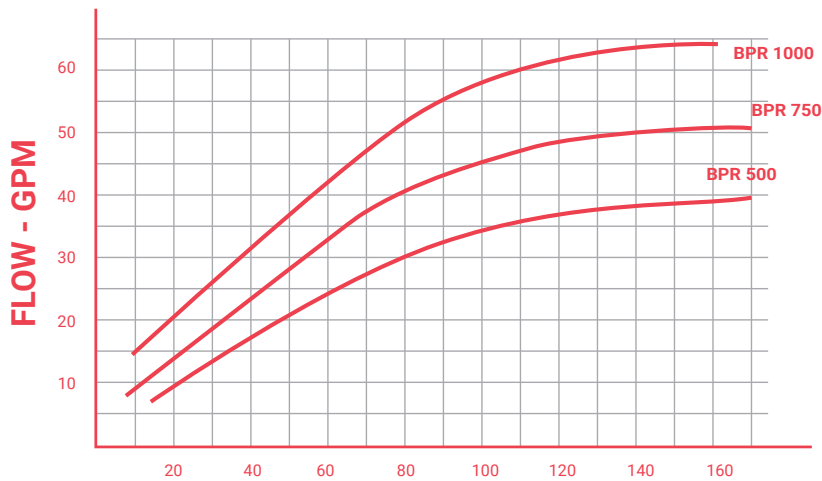
PRESSURE & TEMPERATURE RATINGS:

Regulated Pressure: 1/4"-3/4" 10-125 PSIG,
1: 10-100PSIG, 1-1/2" & 2" 10-60PSIG

Temperature Range

- 0°F to 140°F for PVC
- 0°F to 180°F for POLYPRO
- 0°F to 280°F for PVDF
- 0°F to 400°F for TEFLON

ENGINEERING & PERFORMANCE DATA



For 1/4 Valve only

The chart below will specify R - K standard valves regarding valve size, valve material, and seal material.
For special orders, please consult the factory for pricing and delivery information.

BPR - X X X - X

VALVE SIZE

- 25 = 1/4"
- 50 = 1/2"
- 75 = 3/4"
- 100 = 1.0"
- 150 = 1.5"
- 200 = 2.0"

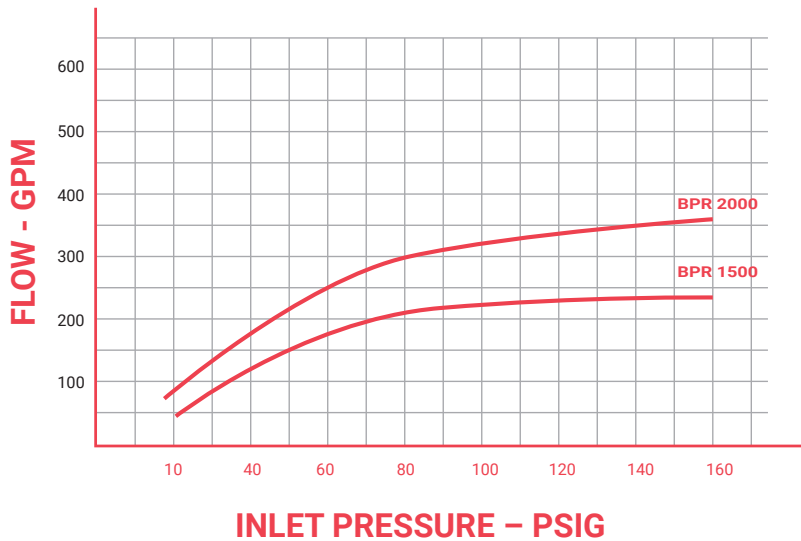
MATERIAL

- 1 = PVC
- 2 = POLYPRO
- 3 = PVDF
- 4 = TEFLON
- 5 = OTHER (Please specify)

SEALS

- E = EPDM
- V = VITON
- K = KALREZ
- O = OTHER (Please specify)

ENGINEERING & PERFORMANCE DATA



DIMENSIONAL DATA

DIMENSIONS IN INCHES

Valve size	Ports	A	B	C	Cv
1/4"	FNPT	1.6	2.1	0.39	0.72
1/2"	FNPT	3	4.5	0.93	3.67
3/4"	FNPT	3.5	4.8	0.93	4.28
1.0"	FNPT	4	5.09	0.93	5.42
1.5"	MPT	5	5.7	1.5	17.2*
2.0"	MPT	6	6.5	1.7	22.4*

(*) Cv value @ 150 GPM

NOTES

- Performance curves show the flow rate of bpr valves with the valve fully open and 100% flow thru the valve. These curves will change depending on the flow rate of your system at each different set point.
- Test data was performed with 68°F water, and 150 PSIG maximum pressure. These performance curves will be changed with higher viscosity liquid and/or higher temperature.
- Consult your local sales rep or manufacturer directly for custom products or special applications.

