

BP-6 Series

High Flow Back Pressure Regulator

Introduction

The BP-6 Series was originally designed as a back pressure regulator for reverse osmosis water purification systems. It may also be easily used in pilot facilities and large instrumentation systems. The standard 316 stainless steel seat assembly, which was intended for long term usage in sea water, can also be useful in various chemical environments. While the stainless steel seat assembly does not offer tight shutoff, it is not normally required in high flow systems. If a more positive shutoff is required a PTFE/stainless steel seat assembly is available.

The BP-6 Series is normally provided in 316 stainless steel construction but other materials are available.



pressure regulators

Typical Applications

- Pilot plants
- Large instrumentation systems
- Reverse osmosis water purification systems

Technical Data

CONSTRUCTION	316L stainless steel (standard), Monel®, Hastelloy® C-276, or titanium (optional)
ADJUSTABLE STANDARD PRESSURE RANGES	0–100, 0–250, 0–500 and 0–1000 psig
OPERATING TEMPERATURE	–40° F to +500° F (–40° C to +260° C)
Cv COEFFICIENT	3.0
INLET & OUTLET CONNECTIONS	½" FNPT

Features & Benefits

- Gas or liquid service
- Sensing with PTFE lined stainless diaphragm
- Metal to metal seat

Options

- Soft seat for bubble tight shutoff
- Panel mounting
- Extra ports
- Special welded connections
- Pressure gauges

High Flow Back Pressure Regulators

Maximum Temperature and Control Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
PTFE	200° F (93° C)	@	1000 psig (6.88 MPa)
316L stainless steel	500° F (260° C)	@	1000 psig (6.88 MPa)
Monel®	500° F (260° C)	@	1000 psig (6.88 MPa)
Hastelloy® C-276	500° F (260° C)	@	1000 psig (6.88 MPa)
Titanium	500° F (260° C)	@	1000 psig (6.88 MPa)

To Order, contact your local Distributor Link below:
www.goreg.com/distributor/index.htm

Verify that your chosen part number is valid using the GO Wizards at
www.goreg.com/products/matrix/index.htm

How to Order

For additional configurations, consult the factory. **Standard items in bold.**

BP6 – 1 A 5 1 G O J 1 1 1 A

Body Material

- 1** 316L stainless steel, stainless steel diaphragm
- 4 Monel®, Inconel® diaphragm
- 6** Hastelloy® C-276, Inconel® backing
- 7 Titanium, Inconel® backing
- C 316L stainless steel, Inconel® backing

Port Configuration

- A** Standard (body "A")
See pg. 28 for port locations.

Process Port Types

- 5** ½" FNPT (¼" FNPT gauge ports)
- 6 ½" Tube stub, 2" long (¼" FNPT gauge ports)
- E** ¾" Tube stub, 2" long (¼" FNPT gauge ports)

Cavity Finish

- 1** < 25 Ra

Actuator Material

- G** 316L stainless steel
- I PTFE
- N Monel®
- P Hastelloy® C-276
- W Titanium

Options

- A** EB33 (oxygen cleaning)
- B** EB5 cleaning
- D** Helium leak test
- E** Pressure test certificate
- F** Certificate of Conformity
- G** CMTR

Cap Assembly

- 1** T-handle, stainless steel
- 4** T-handle, panel mount, stainless steel
- L BP-3 Top Works, stainless steel
- O BP-3 Top Works, panel mount, stainless steel

Diaphragm Facing/Backing Material

- 1** PTFE / metal backing
- O PTFE / Hastelloy® C-276

Diaphragm Type

- 1** Standard diaphragm

Control Range

- G** 0–100 psig
- I 0–250 psig
- J 0–500 psig
- K 0–1000 psig

Flow Coefficient (C_v)

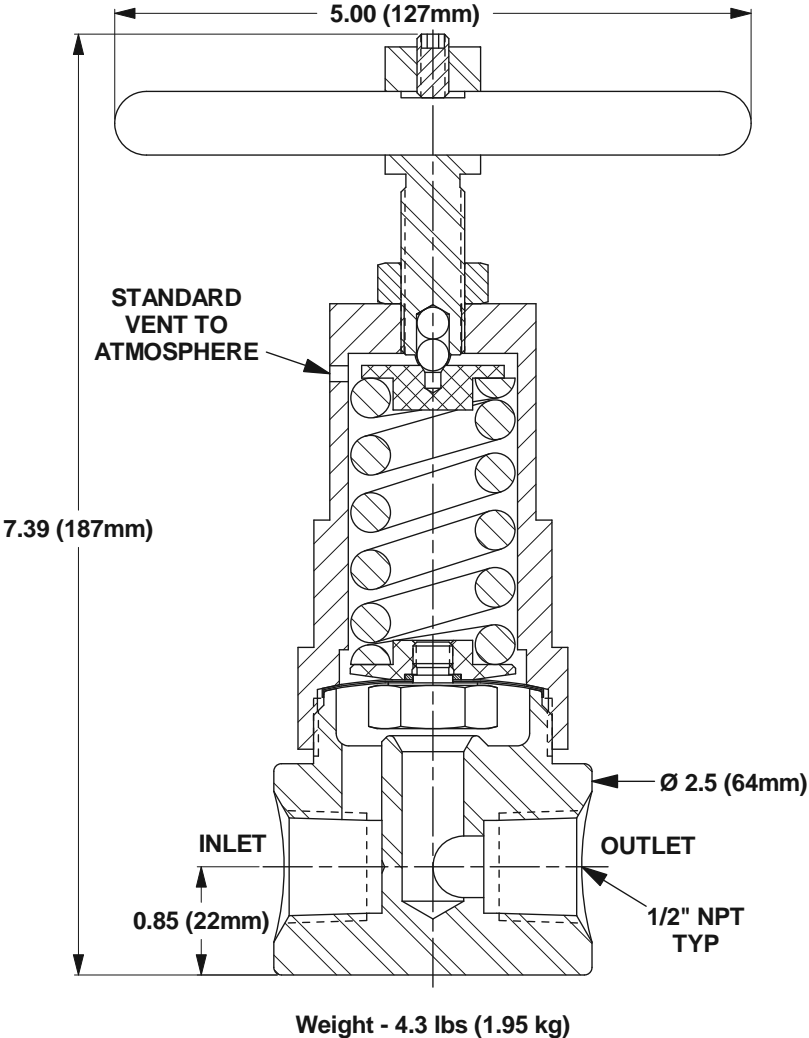
- O** 3.0

NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at www.goreg.com or contact the factory.

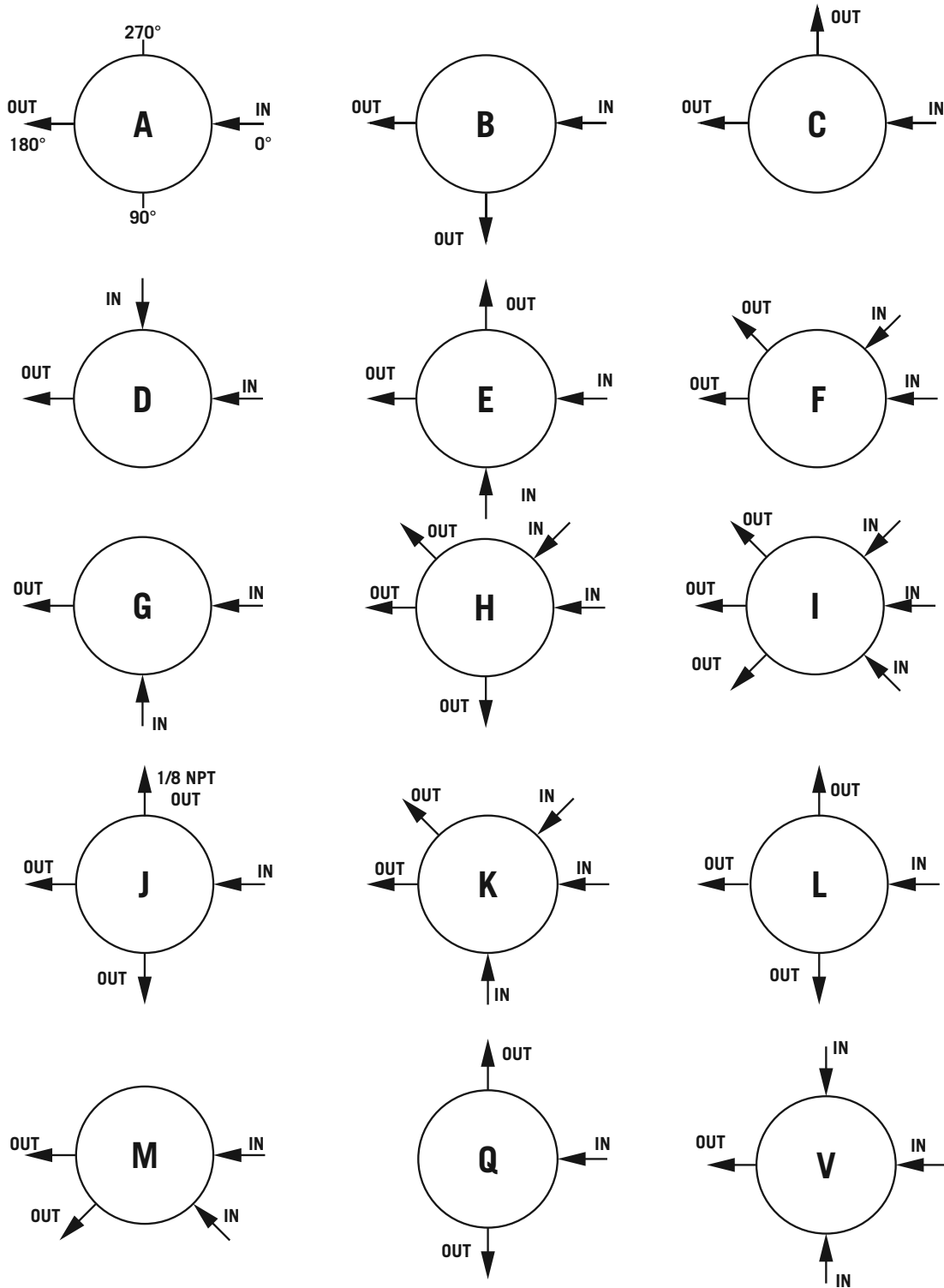
For flow curve charts, visit <http://www.goreg.com>.

High Flow Back Pressure Regulators

Outline and Mounting Dimensions



Port Locations (Back Pressure Regulators)



LOCATION OF PORTS FROM TOP VIEW

Porting Options for LB-1 Back Pressure Valve

Arrow pointing toward body is inlet, arrow pointing away from body is outlet.

Location of ports from top view

