

# GO REGULATOR

## BP-8 Series

High Flow Back Pressure Regulators

### Introduction

This series is designed to control back pressure at low to moderate pressure ranges with relatively high flow. While designed primarily for instrumentation systems and similar to the PR-7, the BP-8 is also suitable for pilot plant, research and development activities. Special diaphragm and spring combinations give the user a selection of pressure ranges that are near atmospheric. The glass filled PTFE / stainless seat assembly gives tight shut off even at lower flows for most applications.

The 316 stainless steel body assembly provides service for most chemical environments and brass models are available for those applications not requiring that type of corrosion resistance. If special requirements demand other materials of construction, please contact the factory.



### Typical Applications

- Instrumentation systems
- Pilot plants
- Air compressors

### Technical Data

CONSTRUCTION	316L stainless steel or brass (standard) Monel® or Hastelloy® C-276 (optional)
ADJUSTABLE STANDARD PRESSURE RANGES	0–10, 0–25, 0–50, 0–100, 0–250, and 0–500 psig
OPERATING TEMPERATURE	–40° F to +250° F (–40° C to +121° C)
C <sub>v</sub> COEFFICIENT	1.2 (standard) 0.40 and 0.70 (optional)
INLET & OUTLET CONNECTIONS	¼" FNPT

### Features & Benefits

- Pressure control of large flows
- Standard stainless steel diaphragm, PTFE faced

### Options

- Panel mounting
- Extra ports
- ⅜" FNPT, ½" FNPT, ¼" tube weld, ¼" pipe weld,  
½" tube weld

### GO Regulator

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pressure regulators

# High Flow Back Pressure Regulators

## Maximum Temperature and Control Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Viton®	250° F (121° C)	@	250 psig (1.72 MPa)
Glass filled PTFE	250° F (121° C)	@	500 psig (3.44 MPa)

Temperatures in excess of 175° F (80° C) require the use of a T-handle or the tamper proof option.

## How to Order

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

**BP8 – 1 A 1 1 L 9 G 1 1 1**

**Body Material**

- 1** 316L stainless steel
- 2 Brass
- 4 Monel®
- 6 Hastelloy® C-276

**Port Configuration**

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

**Process Port Types**

- 1** ¼" FNPT (¼" FNPT gauge ports)
- 2 ¼" Tube stub, 2" long (¼" FNPT gauge ports)
- 3 ¼" Sch 80 pipe stub, 4" long (¼" FNPT gauge ports)
- 4 ¾" FNPT (¼" FNPT gauge ports)
- 5 ½" FNPT (¼" FNPT gauge ports)
- 6 ½" Tube stub, 2" long (¼" FNPT gauge ports)
- K** ¼" Sch 40 pipe stub, 4" long (¼" FNPT gauge ports)

**Cavity Finish**

- 1** < 25 Ra

**Actuator Material**

- D** Viton®
- L** Glass filled PTFE

**Cap Assembly**

- 1** Standard, stainless steel
- 2 T-handle, stainless steel
- 3 T-handle, panel mount, stainless steel
- 4 Panel mount, stainless steel
- 5 Captured vent, aluminum
- 6 Captured vent, panel mount, aluminum
- 7 Captured vent, stainless steel
- 8 Tamper-proof, stainless steel
- G** Metal knob
- H** ¼" NPT dome-loaded, stainless steel

**Diaphragm Facing/Backing Material**

- 1** PTFE / stainless steel
- 2 PTFE / Viton®
- 6 Tefzel® ring / stainless steel
- 8 PTFE / Inconel®
- 0 PTFE / Hastelloy® C-276

**Diaphragm Type**

- 1** Standard diaphragm

**Control Range**

- C** 0–10 psig
- D** 0–25 psig
- E** 0–50 psig
- G** 0–100 psig
- I** 0–250 psig
- J** 0–500 psig

**Flow Coefficient (C<sub>v</sub>)**

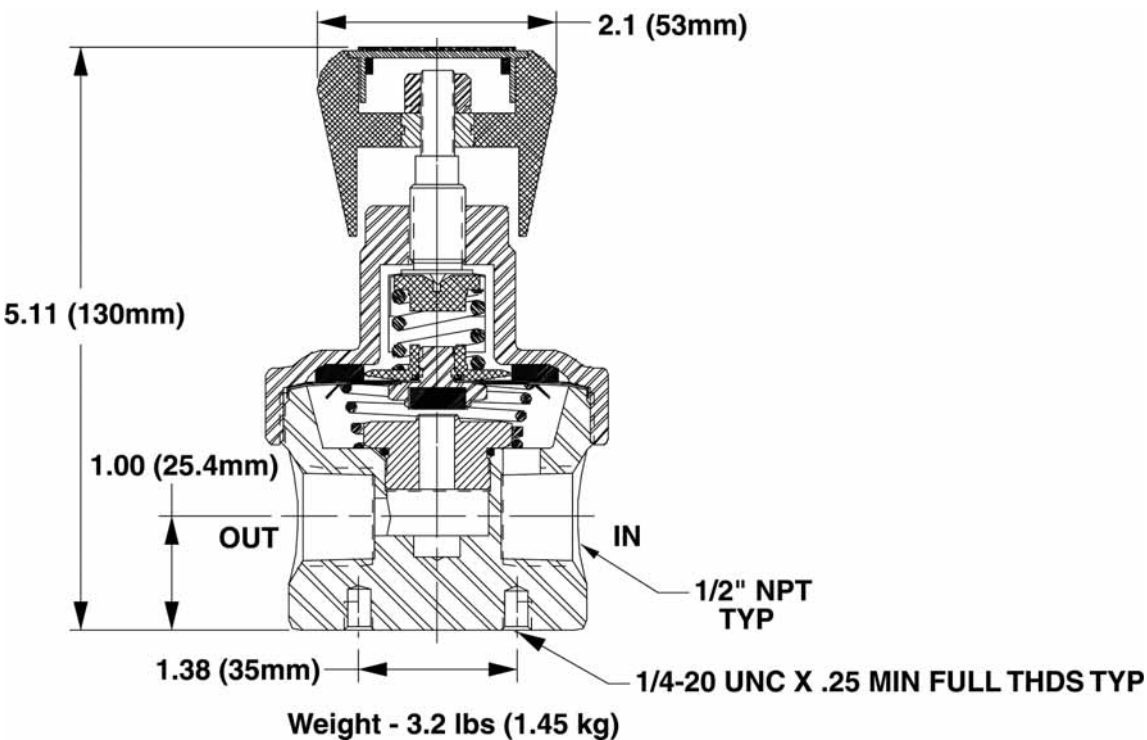
- 9** 1.2
- K** 0.7
- L** 0.4

**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](http://www.goreg.com) or contact the factory.

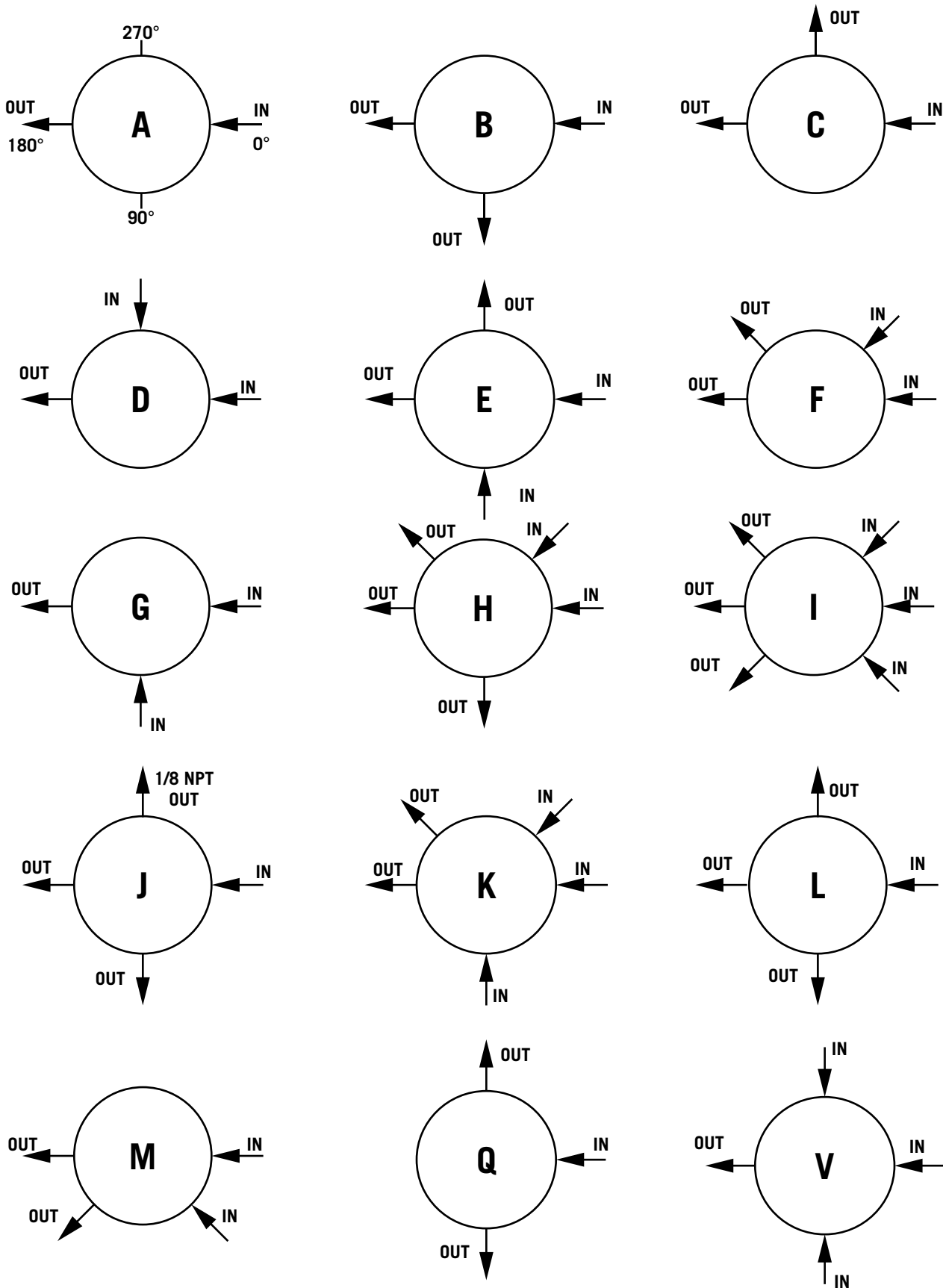
For flow curve charts, visit <http://www.goreg.com>.

# High Flow Back Pressure Regulators

## *Outline and Mounting Dimensions*



# Port Locations (Back Pressure Regulators)

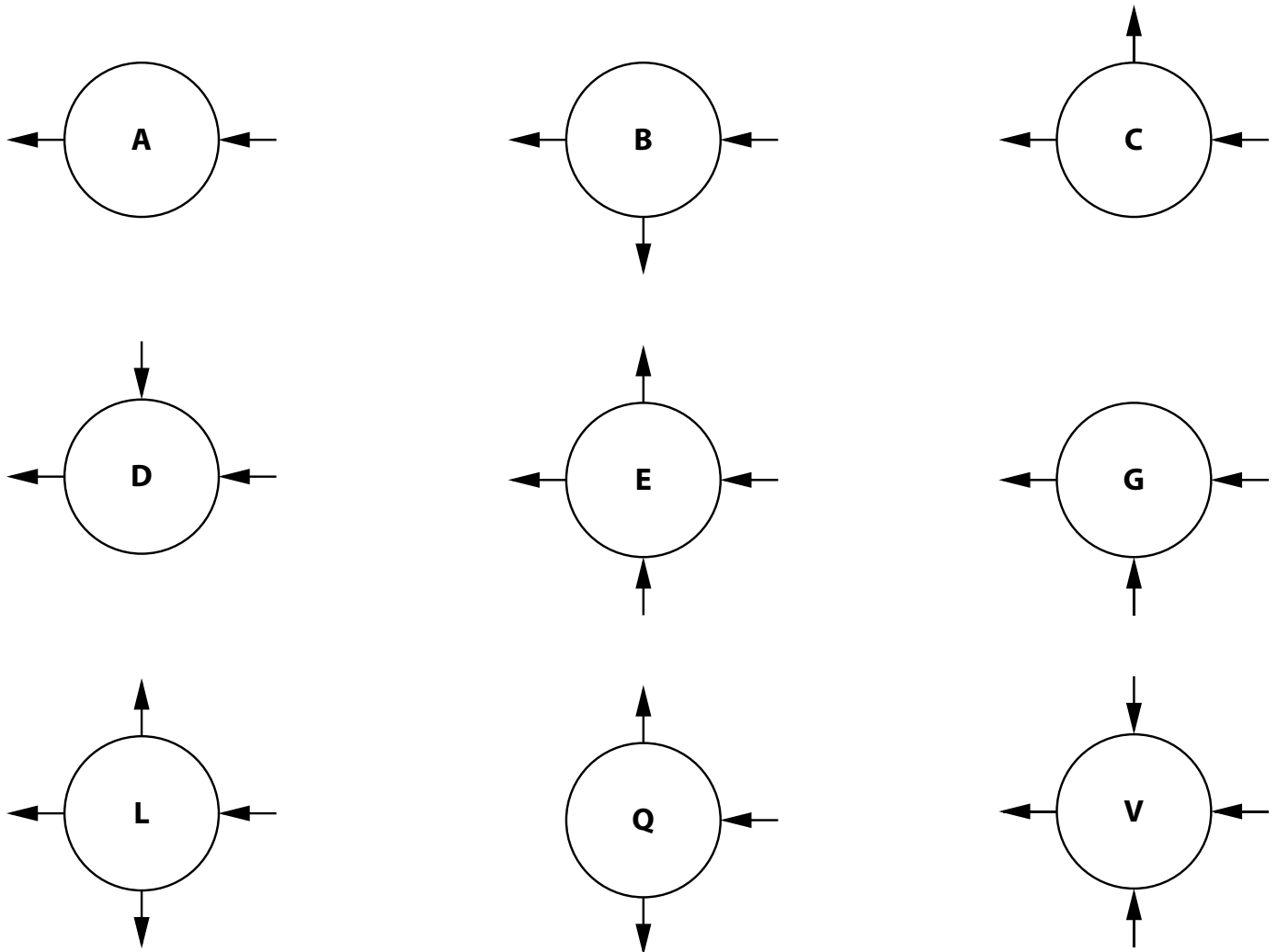


LOCATION OF PORTS FROM  
TOP VIEW

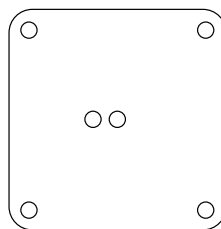
# Porting Options for LB-1 Back Pressure Valve

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

## LOCATION OF PORTS FROM TOP VIEW



### **SURFACE MOUNT STYLES** requires "Surface Mount" port type connections



**#1**

Center port is outlet, all other ports are inlets.  
Location of ports from bottom view