

BP-8LF Series

High Sensitivity Back Pressure Regulators

Introduction

The BP-8LF Series back pressure regulator is designed to furnish precise low back pressure control in analytical instrumentation. With the combination of the large diaphragm sensing area of the BP-8 Series Regulator and the low flow seat assembly of the BP-3 Series pressure regulator, pressure control down to 10 inches of water is easily obtainable.



Typical Applications

- Analytical instrumentation
- Gas and liquid sampling
- Research labs

Technical Data

CONSTRUCTION	316L stainless steel (standard) Monel® or Hastelloy® C-276 (optional)
ADJUSTABLE STANDARD PRESSURE RANGES	0–6, 0–25, 0–50, 0–75, 0–125, 0–250 & 0–500 psig
OPERATING TEMPERATURE	–40° F to +500° F (–40° C to +260° C)
C _v COEFFICIENT	0.2 (standard) 0.03, 0.05, 0.06, 0.12, 0.24, 0.3, 0.095, 0.025, 0.04, 0.005, 0.01 (optional)
INLET & OUTLET CONNECTIONS	¼" FNPT

Features & Benefits

- Sensitive pressure control
- Low pressure adjustability
- Standard PTFE / Viton® diaphragm

Options

- PTFE / stainless steel diaphragm

GO Regulator

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High Sensitivity Back Pressure Regulators

Maximum Temperature and Control Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Viton®	250° F (121° C)	@	500 psig (5.16 MPa)
Kalrez®	300° F (148° C)	@	500 psig (5.16 MPa)
High density PTFE	200° F (93° C)	@	500 psig (5.16 MPa)
Polyimide	500° F (260° C)	@	500 psig (5.16 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.**

BP8L – 1 A 1 1 D 5 D 1 2 1

Body Material

- 1 316L stainless steel**
- 2 Brass
- 4 Monel®

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)
- 4 ⅜" FNPT (¼" FNPT gauge ports)
- 5 ½" FNPT (¼" FNPT gauge ports)
- 6 ½" tube stub, 2" long (¼" FNPT gauge ports)

Cavity Finish

- 1 < 25 Ra**

Actuator Material

- B CF PTFE**
- C Polyimide
- D Viton®**
- I High density PTFE**
- K Kalrez®

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
- 9 Fine adjust, ½" panel mount, stainless steel

Diaphragm Facing/Backing Material

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

Diaphragm Type

- 1 Standard diaphragm**

Control Range

- B 0– psig**
- D 0–25 psig**
- E 0–50 psig**
- F 0–75 psig**
- H 0–125 psig**
- I 0–250 psig**
- J 0–500 psig**

Flow Coefficient (C_v)

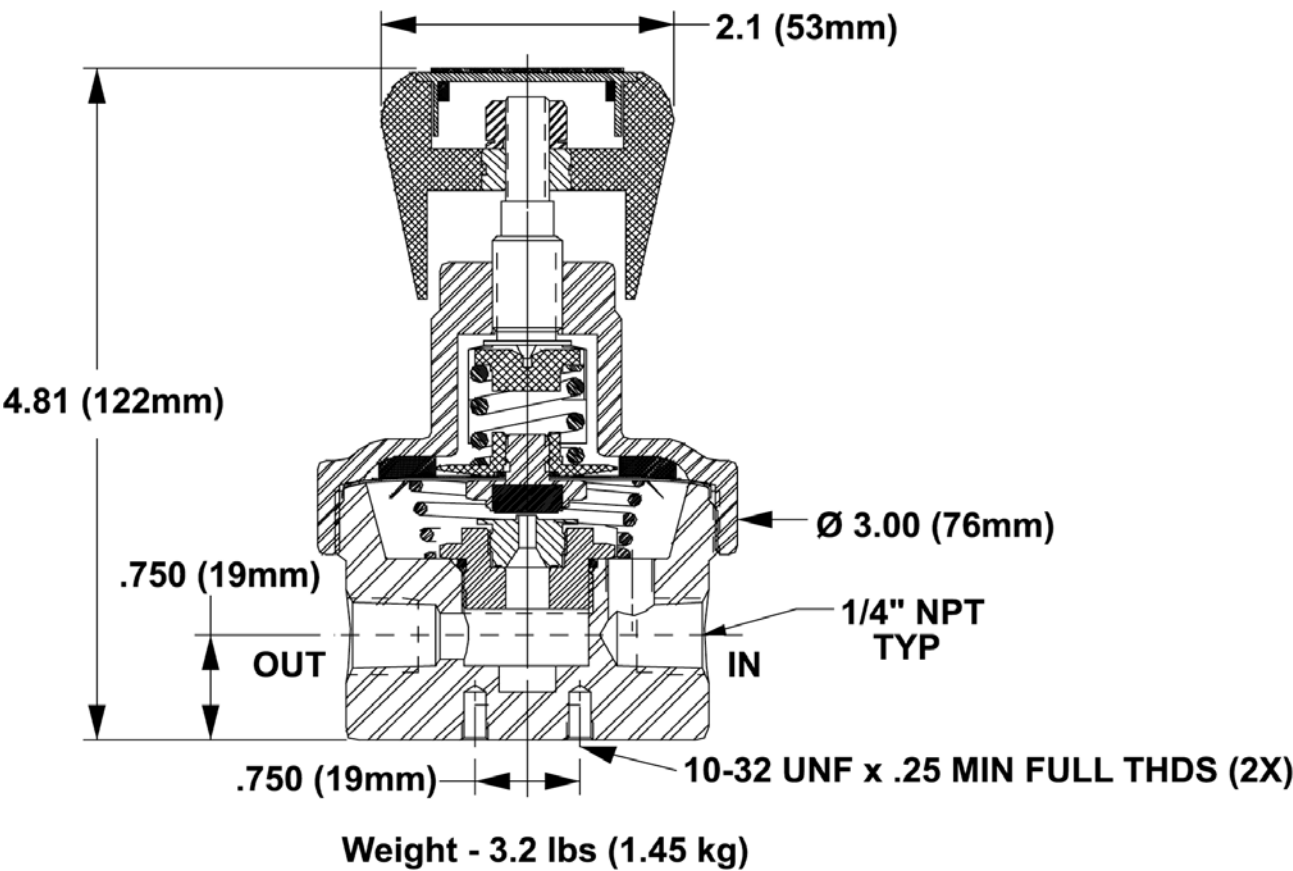
- 5 0.2**

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.

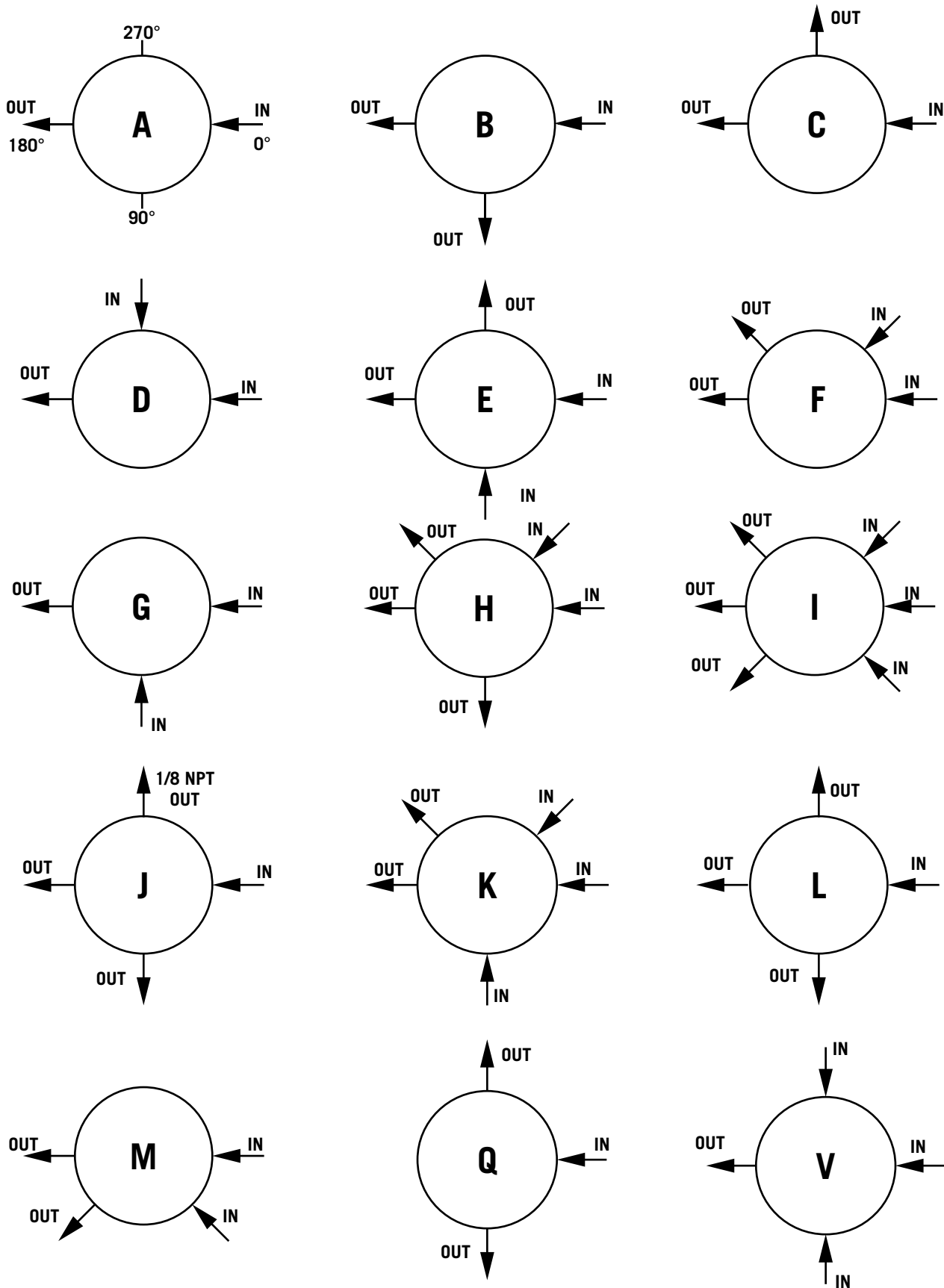
For flow curve charts, visit <http://www.goreg.com>.

High Sensitivity Back Pressure Regulators

Outline and Mounting Dimensions



Port Locations (Back Pressure Regulators)

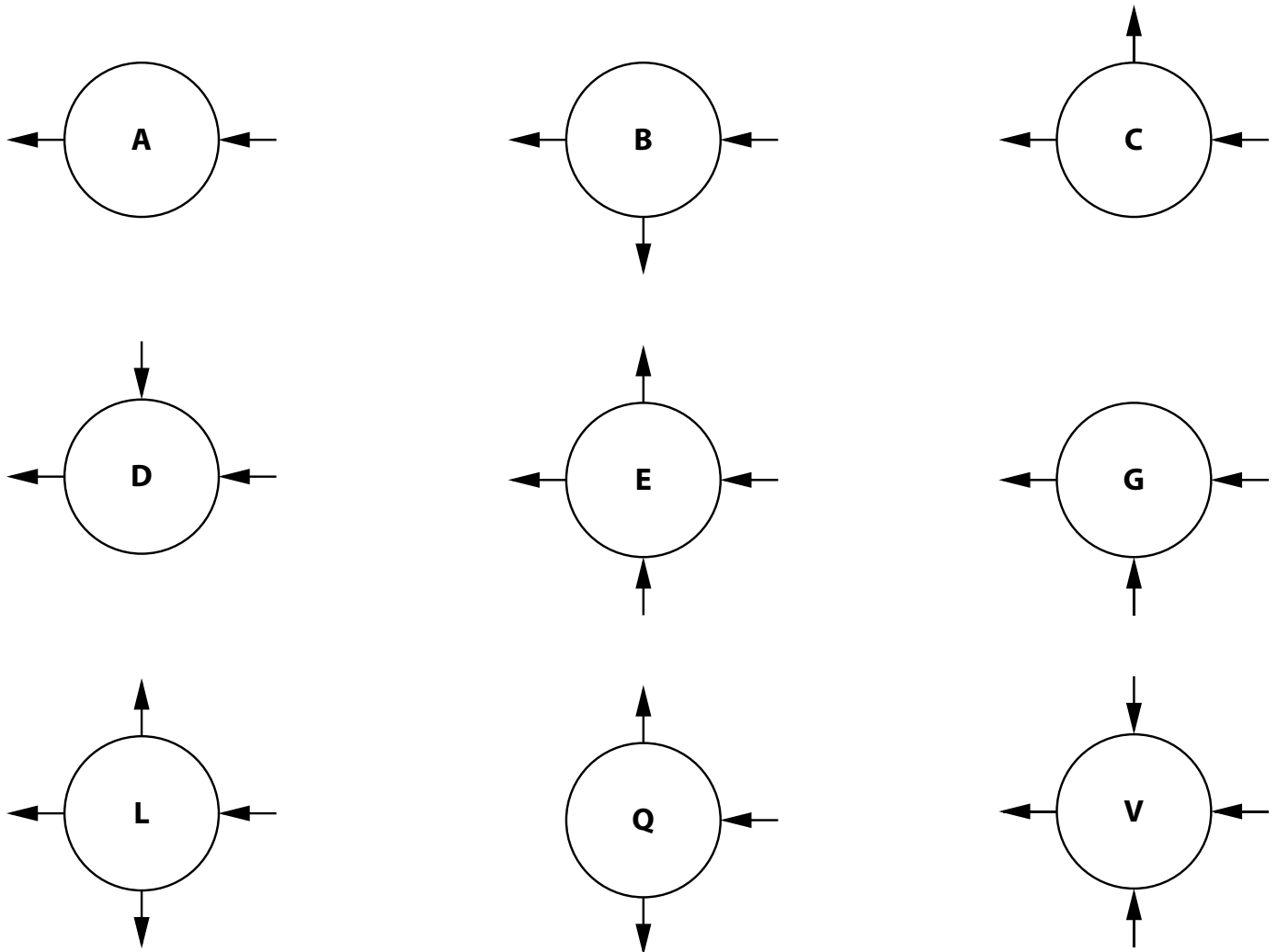


LOCATION OF PORTS FROM
TOP VIEW

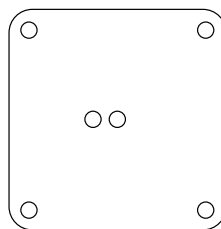
Porting Options for LB-1 Back Pressure Valve

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