

BP-60 Series

High Pressure Back Pressure Regulators

Introduction

The BP-60 Series is the counterpart of the PR-50 pressure reducing series for systems that are higher in pressure and low to moderate flows. This regulator has a diaphragm for maximum sensitivity in providing relief at high pressures. The PTFE stainless seat assembly provides good shutoff in most applications. For economy purposes the cap assembly and knob are of aluminum construction as in the PR-50 companion unit. Good sensitivity and a wide selection of control ranges make this regulator an excellent selection in many research and pilot plant facilities.



pressure regulators

Typical Applications

- Sampling Systems
- Pilot plants
- Research labs

Technical Data

CONSTRUCTION	316L stainless steel or brass (alloy 360) Monel® and Hastelloy® C-276 (optional)
ADJUSTABLE PRESSURE CONTROL RANGES	0–500, 0–1000 and 0–2000 psig
OPERATING TEMPERATURE	–40° F to +350° F (–40° C to +175° C)
C_v COEFFICIENT	0.04
INLET/OUTLET CONNECTIONS	¼" FNPT

Features & Benefits

- Designed for moderate flow applications
- Diaphragm sensing with nylon, PTFE or stainless steel diaphragm
- Bubble tight shutoff

Options

- Various Cv's available – 0.005, 0.01, 0.025, 0.09
- Panel mounting
- ⅜" FNPT, AN 10050-4, SAE J514 or MS 33649 connections

High Pressure Back Pressure Regulators

Maximum Temperature and Control Pressures

Nylon Diaphragm Backing

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Tefzel®	175° F (80° C)	@	1000 psig (6.89 MPa)
PTFE	175° F (80° C)	@	1000 psig (6.89 MPa)
Polyimide	175° F (80° C)	@	2000 psig (13.76 MPa)
PEEK™	175° F (80° C)	@	2000 psig (13.76 MPa)

PTFE Diaphragm Backing

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Tefzel®	175° F (80° C)	@	2000 psig (13.76 MPa)
PTFE	175° F (80° C)	@	2000 psig (13.76 MPa)
Polyimide	350° F (176° C)	@	2000 psig (13.76 MPa)
PEEK™	350° F (176° C)	@	2000 psig (13.76 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.**

BP60 – 1 A 1 1 C E J 1 2 1 A

Body Material

- 1** 316L stainless steel
- 2 Brass
- 4 Mone®
- 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)
- 4** ⅜" FNPT (¼" FNPT gauge ports)
- 6** ½" Tube stub, 2" long (¼" FNPT gauge ports)
- 7** AN 10050-4 (¼" FNPT gauge ports)
- 8** SAE J514 (¼" FNPT gauge ports)
- 9** M/S 33649 (¼" FNPT gauge ports)

Cavity Finish

- 1** < 25 Ra
- 5** < 25 Ra with 10-32 mounting holes

Actuator Material

- A** Tefzel®
- B** CF PTFE
- C** Polyimide
- I** PTFE
- Q** PEEK™

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** Standard, aluminum
- 4** Panel mount, aluminum
- 5** Captured vent, aluminum

Diaphragm Facing/Backing Material

	FACING	BACKING	O-RING	ACTUATOR
1	SS	Nylon	Viton®	SS
2	none	Nylon	PTFE	SS
7	Inconel®	Nylon	Viton®	Monel®
8	Inconel®	Nylon	PTFE	Monel®
O	Hastelloy® C-276	Nylon	PTFE	Hastelloy® C-276
A	Hastelloy® C-276	Nylon	Viton®	Hastelloy® C-276
Q	SS	PTFE	PTFE	SS
S	SS	PTFE	PTFE/ Kalrez®	SS (max. 450° F)
T	SS	PTFE	Kalrez®	SS (max. 450° F)
V	Inconel®	PTFE	PTFE	Monel®
W	Hastelloy® C-276	PTFE	PTFE	Hastelloy® C-276

Diaphragm Type

- 1** Standard diaphragm

Control Range

- J** 1–500 psig
- K** 1–1000 psig
- L** 1–2000 psig

Flow Coefficient (C_v)

- C** 0.025
- E** **0.04**
- G** 0.09
- I** 0.005
- J** 0.01

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.

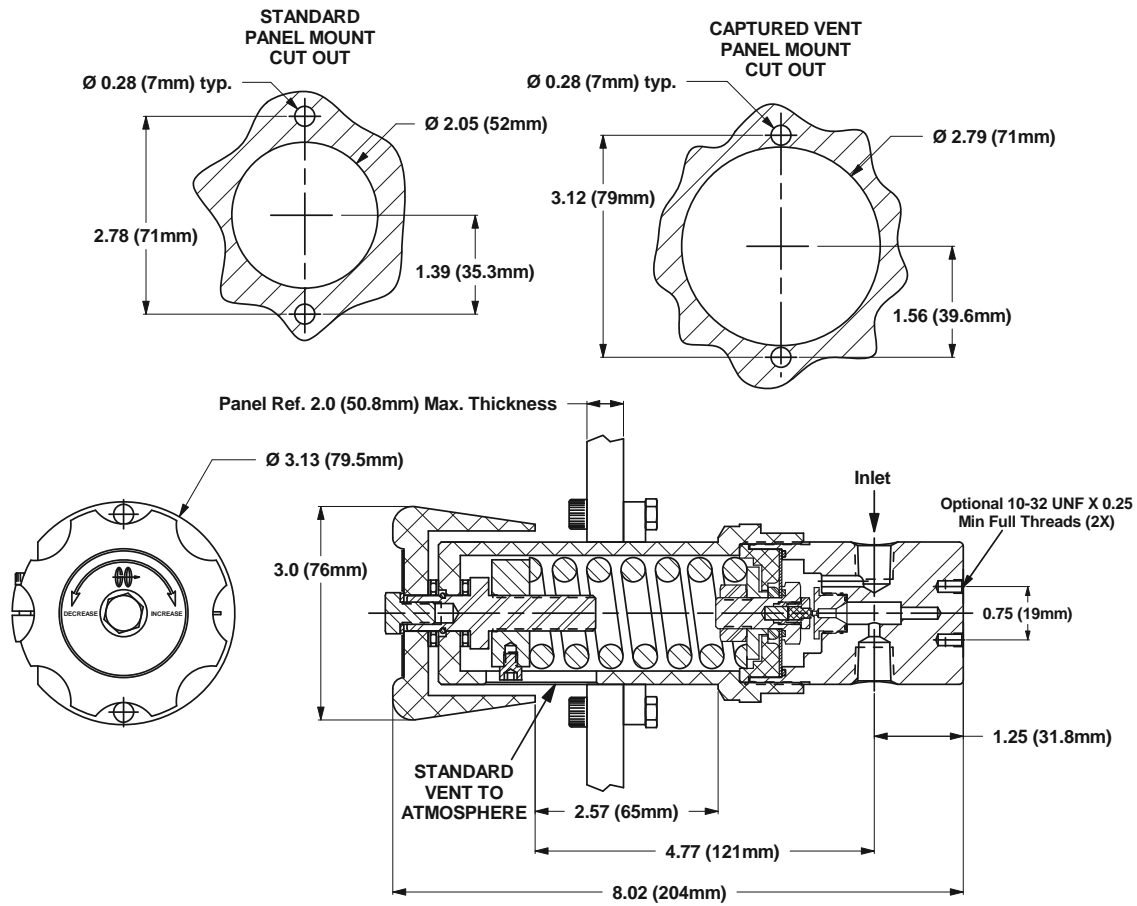
For flow curve charts, visit <http://www.goreg.com>.

High Pressure Back Pressure Regulators

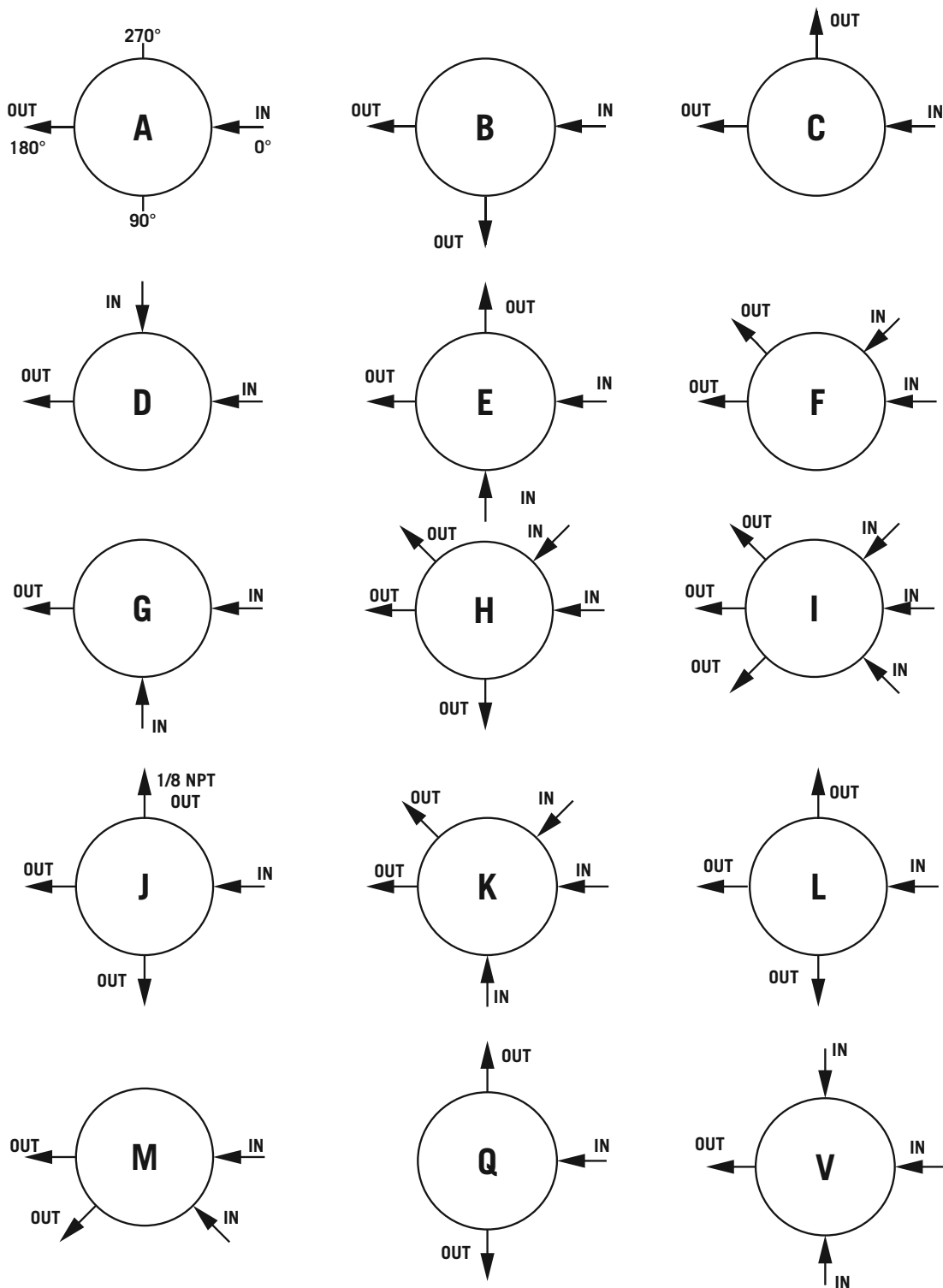
Outline and Mounting Dimensions

Outline and Mounting Dimensions

Weight = 4.4 lbs (2.0 kg)



Port Locations (Back Pressure Regulators)

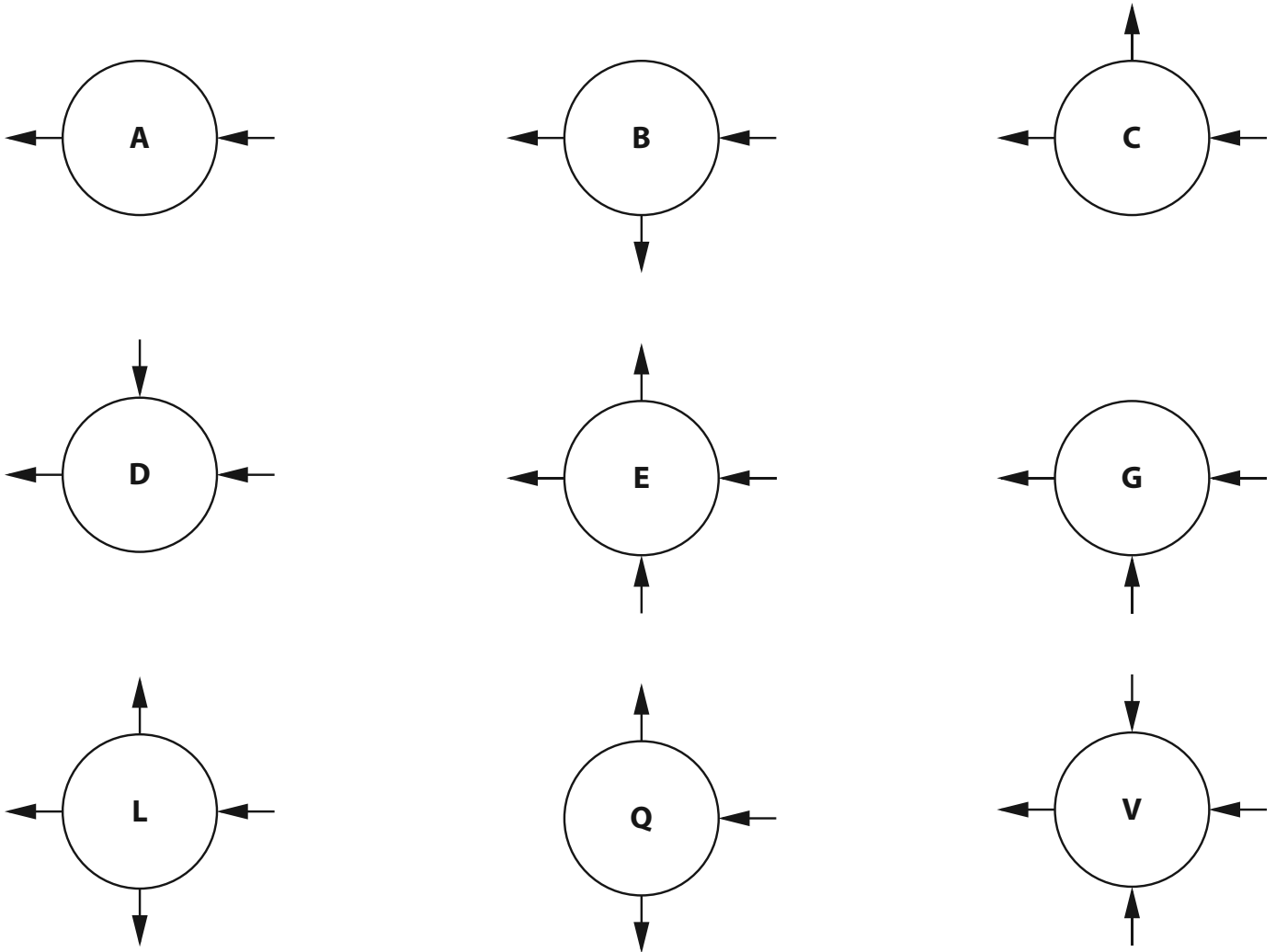


LOCATION OF PORTS FROM TOP VIEW

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

The diagram shows a square valve body with four small circles at the corners representing ports. Two small circles are located in the center of the square, representing a center port. The label #1 is centered below the diagram.