

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 Teflon® 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, Teflon® or stainless steel diaphragm
- Bubble tight shutoff

Options

- Various Cv's available – 0.005, 0.01, 0.025, 0.09
- Panel mounting
- ¾" FNPT, AN 10050-4, SAE J514 or MS 33649 connections

GO Regulator

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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)
Teflon®	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)

Teflon® Diaphragm Backing

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Tefzel®	175° F (80° C)	@	2000 psig (13.76 MPa)
Teflon®	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)

How to Order

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

BP60 – 1 A 1 1 C E J 1 2 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)
- 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 Teflon®
- C** Polyimide
- I** Teflon®
- Q** PEEK™

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	Teflon®	SS
7	Inconel®	Nylon	Viton®	Monel®
8	Inconel®	Nylon	Teflon®	Monel®
0	Hastelloy® C-276	Nylon	Teflon®	Hastelloy® C-276
A	Hastelloy® C-276	Nylon	Viton®	Hastelloy® C-276
Q	SS	Teflon®	Teflon®	SS
S	SS	Teflon®	Teflon®/Kalrez®	SS (max. 450° F)
T	SS	Teflon®	Kalrez®	SS (max. 450° F)
V	Inconel®	Teflon®	Teflon®	Monel®
W	Hastelloy® C-276	Teflon®	Teflon®	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

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

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Outline and Mounting Dimensions

