

BP-66 Series*

High Pressure Back Pressure Regulator (10,000 psig)



The BP-66 Series is the counterpart of the PR-57 pressure reducing series for systems that are higher in pressure and low to moderate flows. This regulator has piston sensing to provide relief at high pressures. The Polyimide/stainless steel assembly provides good shutoff in most applications. For economy purposes, the cap assembly and knob are of aluminum construction as in the PR-57 companion unit. Good sensitivity and a selection of control ranges make this regulator an excellent selection in many research and pilot plant facilities.

* Replaces the BPR1xA Series.

Features & Specifications

- 316L stainless steel construction
- Adjustable pressure control ranges of 0–2,000 psig, 0–4,000 psig, 0–6,000 psig, 0–7,500 psig, and 0–10,000 psig
- Spring-loaded piston sensor
- Gas and liquid service
- Cv flow coefficient: 0.04
- Operating temperature of –40° F to +350° F (–40° C to +176° C)
- ¼" FNPT connections standard

Applications

- Pilot plants
- Analytical instrumentation
- Compressors
- Pump bypass
- Pressure vessel protection
- Hydrostatic testing

Options

- Monel® and titanium body construction
- Optional Cv's: 0.01 and 0.12
- Panel mounting
- AND10050–4, SAE J514, MS 33649, or ⅜" FNPT connections

Maximum Temperature & Control Pressures

Seat Material	Maximum Temperature	@	Maximum Control Range
Polyimide	350° F (176° C)	@	10,000 psig (68.9 MPa)
PEEK™	350° F (176° C)	@	10,000 psig (68.9 MPa)

Circle Seal Controls

2301 Wardlow Circle • Corona, CA 92880
 Phone (951) 270-6200 • Fax (951) 270-6201
 www.circlesealcontrols.com

back pressure regulators

BP-3 Series

How to Order

BP66 - 1 A 1 1 C E L 1 5 1 C

BODY MATERIALS

- 1 316L stainless steel
- 4 Monel®
- 7 Titanium

PORT CONFIGURATION

- A Standard (one inlet & one outlet port)
- For more port configurations, see page 13.

PROCESS PORT TYPES

- 1 ¼" FNPT (¼" FNPT gauge ports)
- 2 ¼" tube (¼" tube gauge ports)
- 4 ⅜" FNPT (¼" FNPT gauge ports)
- 6 ½" tube (¼" tube gauge ports)
- 7 AND10050-4 (¼" FNPT gauge ports)
- 8 SAE J514 (¼" FNPT gauge ports)
- 9 MS 33649 (¼" FNPT gauge ports)

SURFACE FINISH/DIAPHRAGM CAVITY

- 1 < 25 Ra (standard)
- 5 < 25 Ra with 10-32 mounting holes

ACTUATOR MATERIALS

- C Polyimide
- Q PEEK™

CAP ASSEMBLY

- 1 Standard, aluminum
- 4 Panel mount, aluminum
- 5 Captured vent, aluminum
- 6 Captured vent, panel mount, aluminum
- 7 Captured vent, stainless steel
- F Stainless steel

PISTON MATERIAL

- 5 Stainless steel
- B Monel®
- S Titanium

PISTON TYPE

- 1 Standard

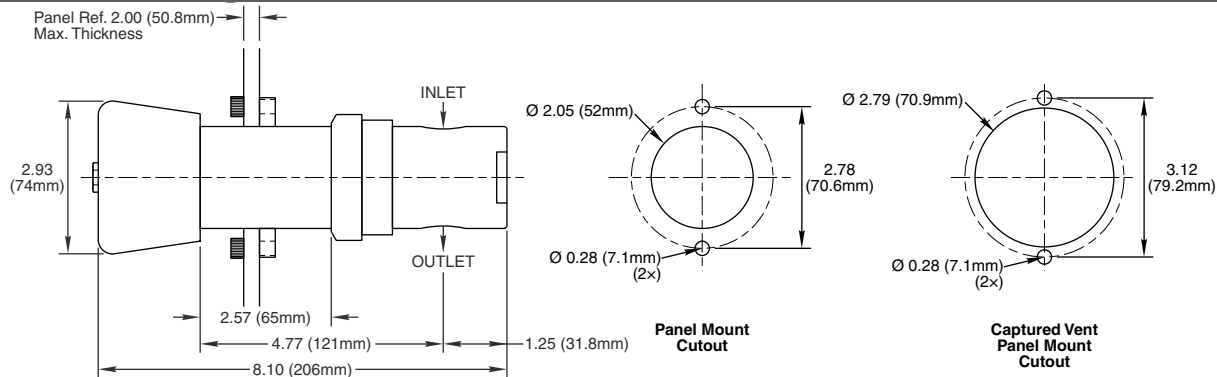
CONTROL RANGE

- L 0-2,000 psig
- N 0-4,000 psig
- O 0-6,000 psig
- P 0-7,500 psig
- Q 0-10,000 psig

FLOW COEFFICIENT (CV)

- 4 0.12
- E 0.04
- J 0.01

Outline & Mounting Dimensions



For Your Safety

It is solely the responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products. Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or property damage.

PEEK™ is a trademark of Victrex PLC.

Monel® is a registered trademark of Special Metals Corporation.