

BPR7A-12A SERIES

INLET & OUTLET 25 to 10,000 PSIG



BACK PRESSURE REGULATOR RELIEF VALVE

Features

- High Pressure
- Outstanding Accuracy & Response
- Manually Adjustable
- Positive Shutoff

Applications

- Compressors
- Gas & Liquid Sampling
- Pump Bypass
- Hydrostatic Testing
- Relief Valve Requirements
- Pressure Vessel Protection

Technical Data

Materials of Construction

Body	– 316 Stainless Steel
Seals	– Buna N, Neoprene or Viton®
Seat	– Kel F, Kynar, Nylatron GS or Polyimide
Adjusting Spring	– Cadmium Plated High Carbon Steel
Other Springs	– Stainless Steel
Other Components	– Stainless Steel & Teflon®

Port Sizes & Connections

1/4" Pipe, AND10050-4,
or AND10050-6

Flow Capacity

$C_V = 0.017$

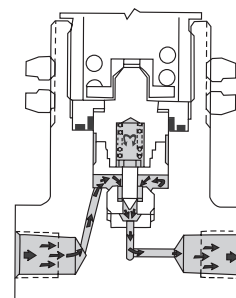
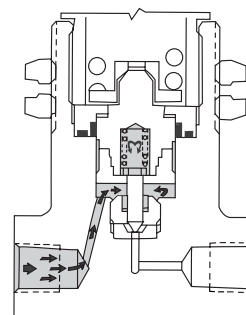
Pressure Ratings

Inlet & Outlet –
25 to 10,000 PSIG (690 BAR)

How It Works

CLOSED

With the unit spring load adjusted to the desired regulated "set" pressure, a dead tight seal is effected against the applied upstream pressure by the small seating spring contained within the piston.



REGULATING

When the upstream process pressure (acting on the regulating piston) increases, an opposing force is generated which, through the regulating piston, acts against the "set" spring load.

As the increasing upstream pressure level reaches the "set" pressure, the poppet is

gradually lifted off its seat. A consequent decrease in upstream pressure is experienced when the flowing fluid is relieved to the downstream side of the process at a faster rate than the upstream pressure can supply.

With decreasing upstream pressure, the spring force starts the poppet moving toward its closed position thus maintaining the desired "set" pressure level within a narrow band.

When the upstream pressure has decreased to a level just below "crack," the spring loaded poppet again creates a tight seal against the sharp edge of the valve seat.

Temperature Range

-65°F to +160°F;
-54°C to +71°C

Weight

4.2 lbs.



CIRCLE SEAL CONTROLS, INC.

A division of CIRCOR International, Inc.

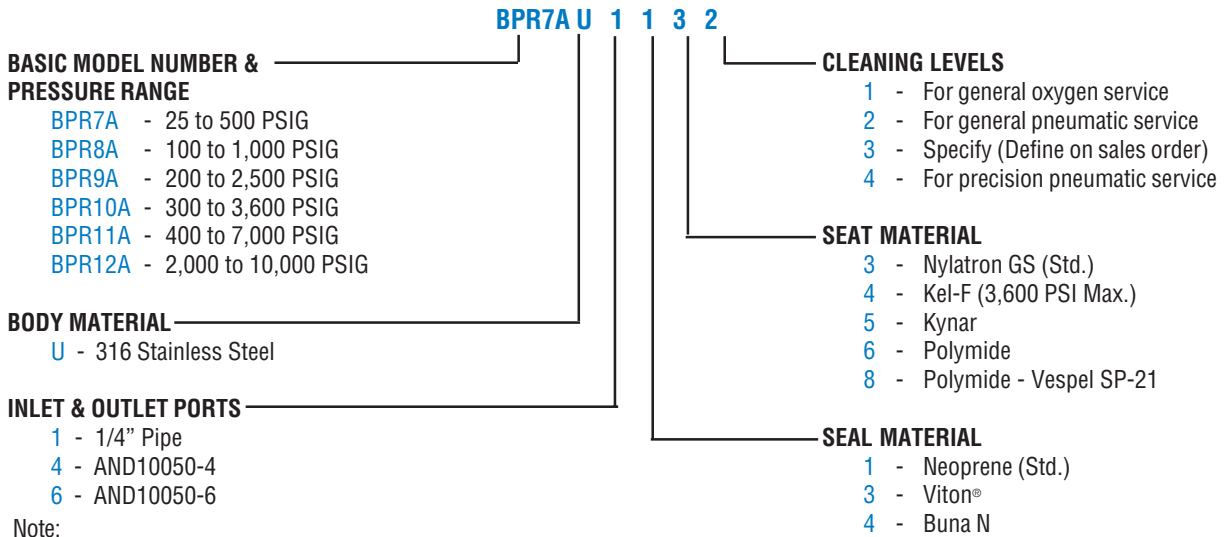
Certified to ISO 9001

2301 WARDLOW CIRCLE • P.O. BOX 3300 • CORONA, CALIFORNIA • 92878 • TEL: (909)270-6200 • FAX: (909) 270-6201

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How To Order



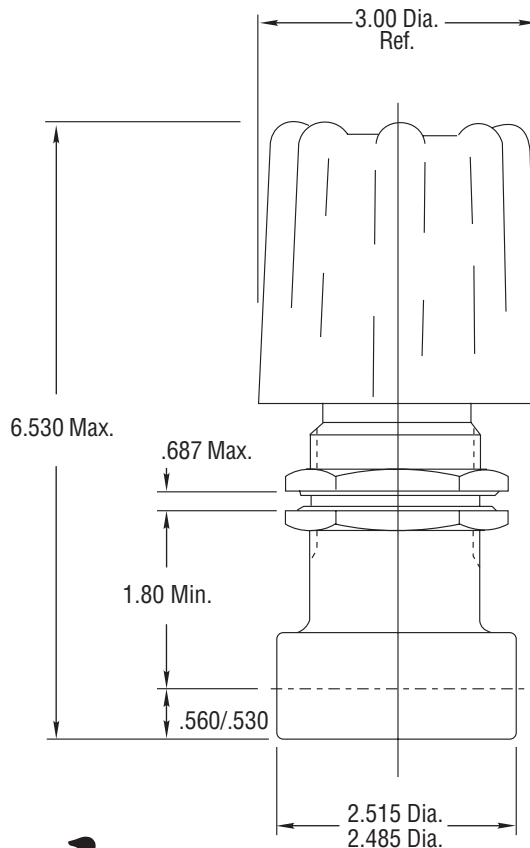
Note:

These units are not intended for applications where the exhaust connection will see a buildup of downstream pressure.

Please consult your Circle Seal Controls Representative or the factory for information on special connections, operating pressures and temperature ranges.

Teflon® and Viton® are registered trademarks of DuPont.

Dimensions



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