

# GO REGULATOR

## BP-3 Series

Adjustable Back Pressure Regulators

### Introduction

The BP-3 Series is designed for either liquid or gas service in instrumentation systems. Similar in design to pressure reducing control regulators which regulate outlet pressures, back pressure regulators control the inlet pressure. The many features of this regulator, particularly its precise throttling action, make it ideal for this type of application. In low flow or closed systems, over-pressures often are released by pressure relief valves. This type of relief is on-off with no throttling control. In contrast to relief valves, the back pressure control regulator with its throttling action substantially improves system pressure regulation.



pressure regulators

### Typical Applications

- Analytical instrumentation
- Gas and liquid sampling
- Petrochemical industry
- Air compressors
- Research labs
- Pilot plants

### Technical Data

|                                    |  |
|------------------------------------|--|
| CONSTRUCTION                       | 316L stainless steel   |
| ADJUSTABLE PRESSURE CONTROL RANGES | 0-6, 0-10, 0-25, 0-50, 0-100, 0-250, 0-500, 0-750 & 0-1000 psig        |
| OPERATING TEMPERATURE              | -40° F to +500° F (-40° C to +260° C)                                  |
| C <sub>v</sub> COEFFICIENT         | 0.2  |
| OPTIONAL VARIOUS ORIFICE SIZES     | 0.005, 0.01, 0.025, 0.03, 0.04, 0.05, 0.06, 0.095, 0.12, 0.24, and 0.3 |

### Features & Benefits

- Only 316L stainless steel and PTFE in flow stream
- Bubble tight shutoff
- Gas or liquid service

### Options

- Wetted materials of construction brass, Monel®, Hastelloy® C-276, titanium
- Extra ports
- Panel mount (requires a 1<sup>3</sup>/<sub>8</sub>" mounting hole)
- High purity connections
- Pressure gauges

### GO Regulator

405 Centura Court • PO Box 4866 (29305) • Spartanburg, SC 29303  
Phone (864) 574-7966 Fax (864) 574-5608  
www.goreg.com • sales@goreg.com

# Adjustable Back Pressure Regulators

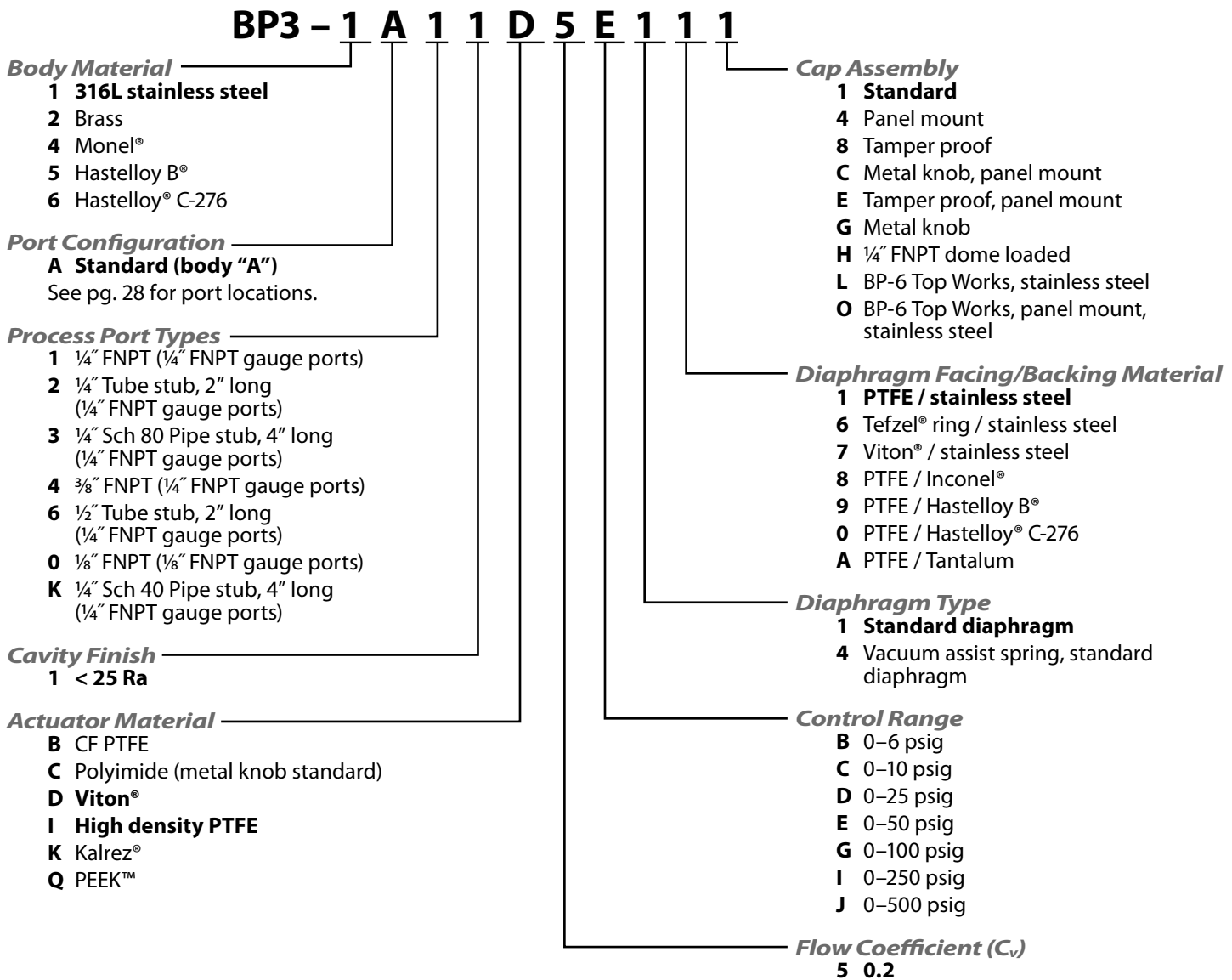
## Maximum Temperature and Control Pressures

| SEAT MATERIAL     | MAXIMUM TEMPERATURE | @ | MAXIMUM CONTROL RANGE |
|-------------------|---------------------|---|-----------------------|
| Viton®            | 250° F (121° C)     | @ | 250 psig (1.71 MPa)   |
| Kalrez®           | 300° F (148° C)     | @ | 250 psig (1.72 MPa)   |
| High Density PTFE | 200° F (93° C)      | @ | 500 psig (5.16 MPa)   |
| Polyimide         | 500° F (260° C)     | @ | 1000 psig (6.88 MPa)  |
| PEEK™             | 500° F (260° C)     | @ | 1000 psig (6.88 MPa)  |

Note: Temperatures in excess of 175° F (79° C) require the use of a metal knob or the tamper proof option.

## How to Order

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

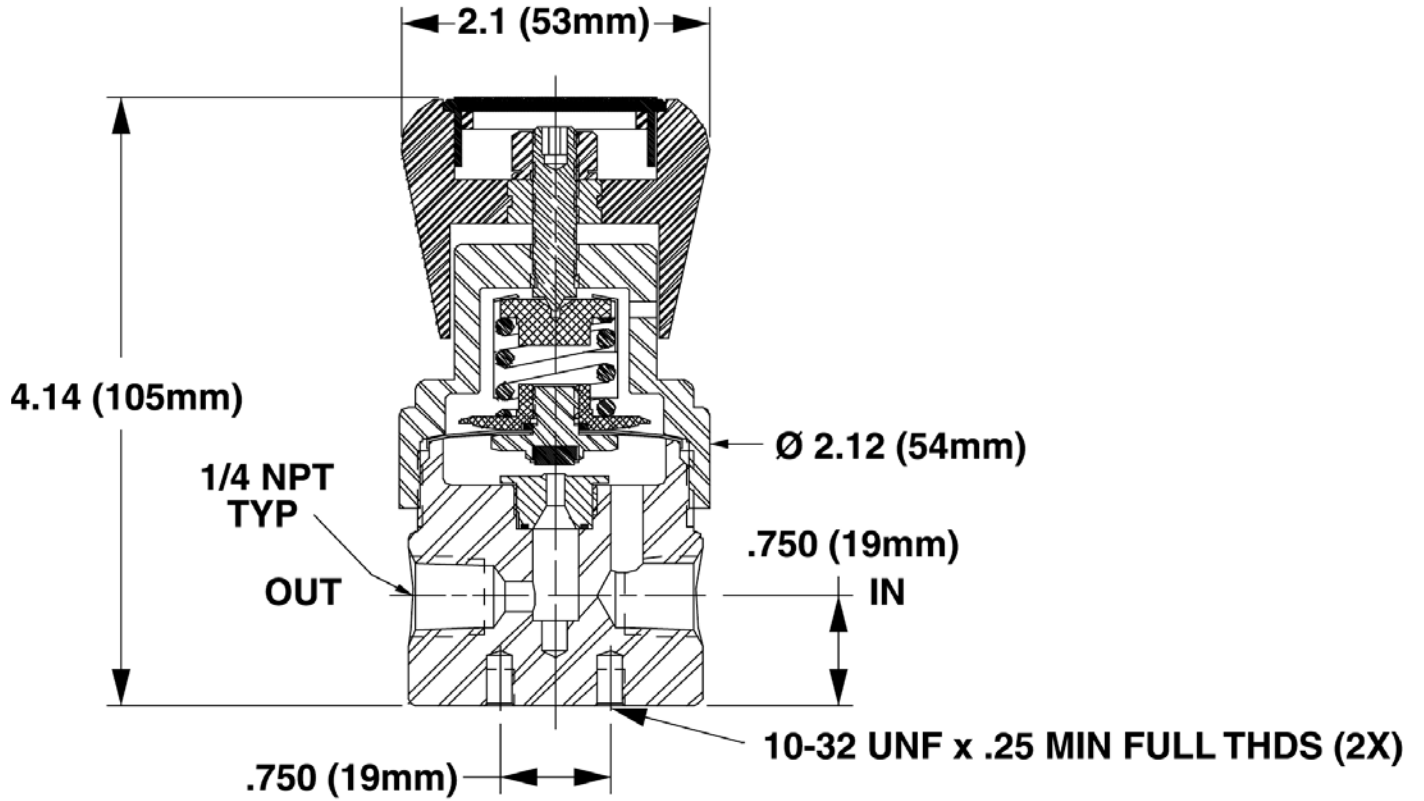


NOTE: The choices above represent an abbreviated list of the more commonly ordered options. For a complete listing of all available options, please see the Selection Wizard on the GO website at [www.goreg.com](http://www.goreg.com) or contact the factory.

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

# Adjustable Back Pressure Regulators

## *Outline and Mounting Dimensions*

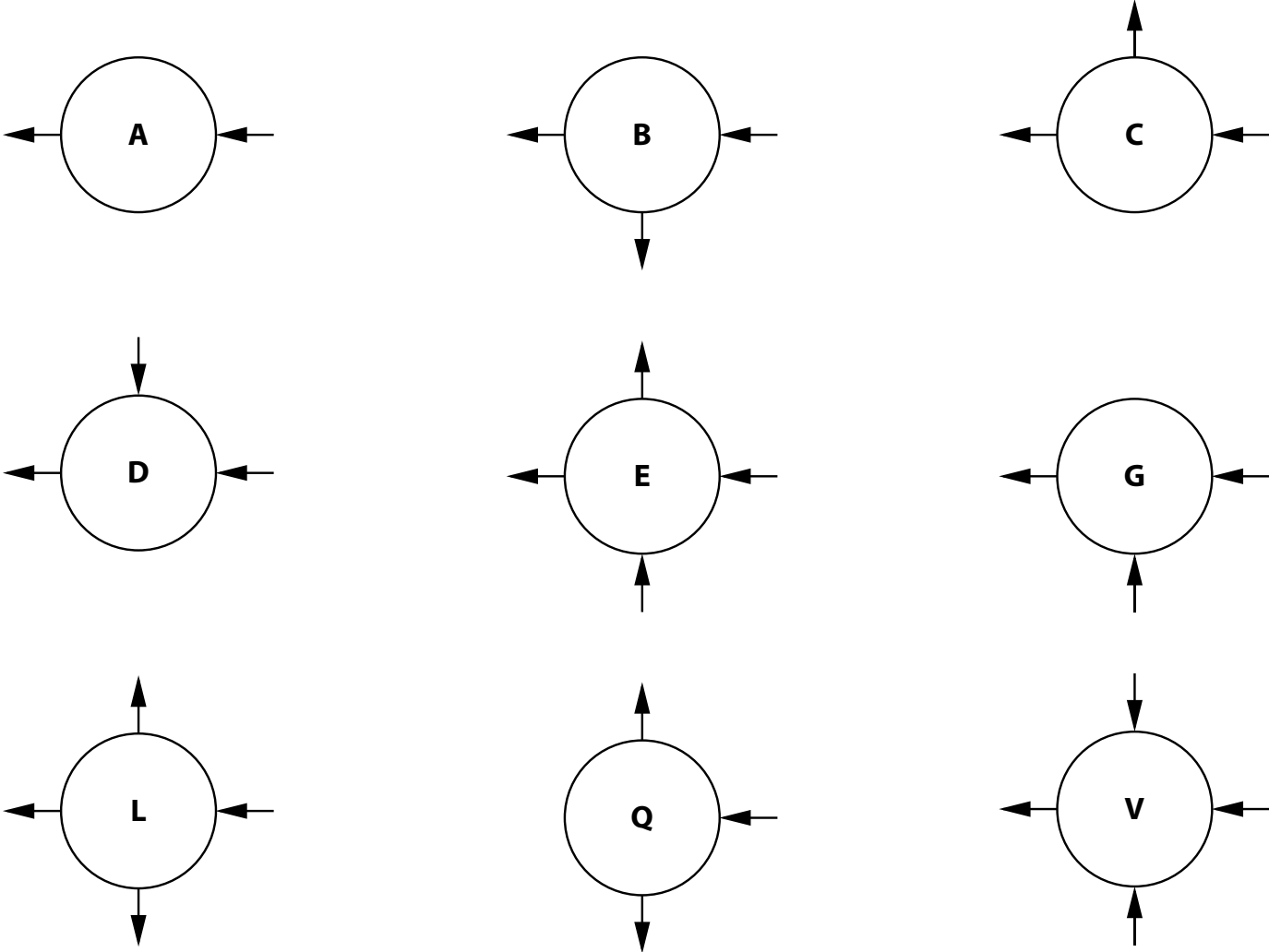


**Weight - 1.9 lbs (0.86 kg)**

# 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