

# GO REGULATOR

## CBP-3 Series

Compact Stainless Steel Back Pressure Regulators

### Introduction

The CBP-3 Series is a compact back pressure regulator with some of the time proven features of the BP-3 Series and new features evolving the compact size. This regulator is designed to allow the construction of compact sophisticated analytical instrumentation where the optimum in back pressure control is required. Standard features allow service in many varied applications including corrosive fluids and with the optional features available, the user can tailor this regulator to virtually any application requiring small to moderate flow rates.



### Typical Applications

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

### Technical Data

CONSTRUCTION	316L stainless steel
ADJUSTABLE STANDARD PRESSURE RANGES	0-10, 0-25, 0-50, 0-100, 0-250 & 0-500 psig
OPERATING TEMPERATURE	-40° F to +500° F (-40° C to +260° C)
C <sub>v</sub> COEFFICIENT	0.2 (standard) 0.005, 0.01, 0.025, 0.03, 0.04, 0.05, 0.06, 0.095, 0.12, 0.24, 0.3 (optional)
INLET & OUTLET CONNECTIONS	1/8" FNPT

### Features & Benefits

- Gas or liquid service
- Bubble tight shutoff
- Compact size
- Tefzel® or Kalrez® in flow stream

### Options

- Panel mount (requires a 1 3/8" mounting hole)
- Extra ports
- Special welded 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

pressure regulators

# Compact Stainless Steel Back Pressure Regulators

## Maximum Temperature and Control Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM CONTROL RANGE
Viton®	250° F (121° C)	@	250 psig (1.72 MPa)
Kalrez®	300° F (148° C)	@	250 psig (1.72 MPa)
Tefzel®	175° F (80° C)	@	500 psig (3.44 MPa)
Polyimide	500° F (260° C)	@	500 psig (3.44 MPa)

## How to Order

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

**CBP-3 – 1 A 0 1 K 5 E 1 1 1**

**Body Material** ————

**1** 316L stainless steel

**Port Configuration** ————

**A** Standard (body “A”)  
See pg. 28 for port locations.

**Process Port Types** ————

**2** ¼” Tube stub, 2” long  
(¼” FNPT gauge ports)

**0** ⅛” FNPT (⅛” FNPT gauge ports)

**Cavity Finish** ————

**1** < 25 Ra

**Actuator Material** ————

**A** Tefzel®

**C** Polyimide

**D** Viton®

**K** Kalrez®

**Q** PEEK™

**Cap Assembly**

**1** Standard, aluminum

**4** Panel mount, aluminum

**8** Tamper-proof, aluminum

**9** Fine adjust, ½” panel mount, aluminum

**0** Fine adjust, 1⅜” panel mount, aluminum

**E** Tamper-proof, panel mount, aluminum

**Diaphragm Facing/Backing/O-ring Material**

**1** Tefzel® seal ring / stainless steel / PTFE

**2** Tefzel® seal ring / Inconel® / PTFE

**3** PTFE facing / Viton® / Viton®

**7** Tefzel® seal ring / stainless steel / Viton®

**H** Tefzel® seal ring / Inconel® / Viton®

**Diaphragm Type**

**1** Standard, Nylon diaphragm slip ring  
(170° F max. temp)

**2** Standard, Polyimide diaphragm slip ring  
(high temp. service)

**Control Range**

**C** 0–10 psig

**D** 0–25 psig

**E** 0–50 psig

**G** 0–100 psig

**I** 0–250 psig

**J** 0–500 psig

**Flow Coefficient (C<sub>v</sub>)**

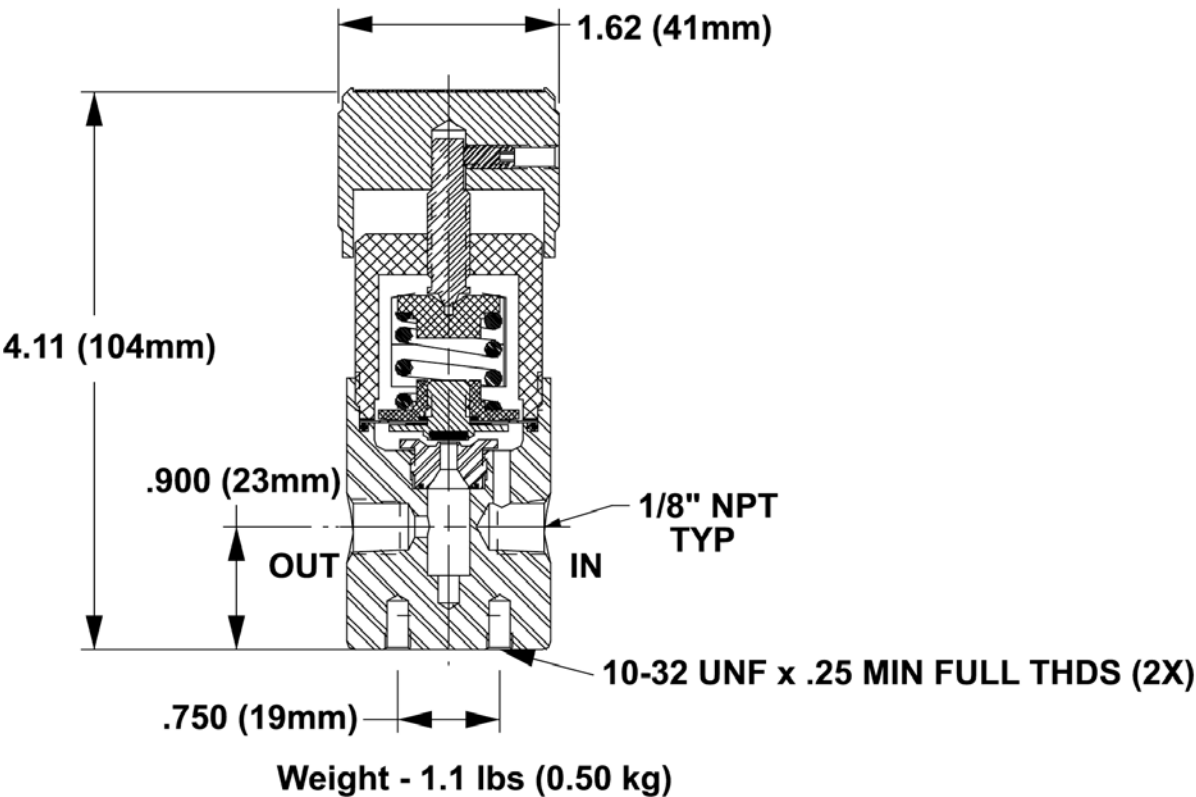
**5** 0.2

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.

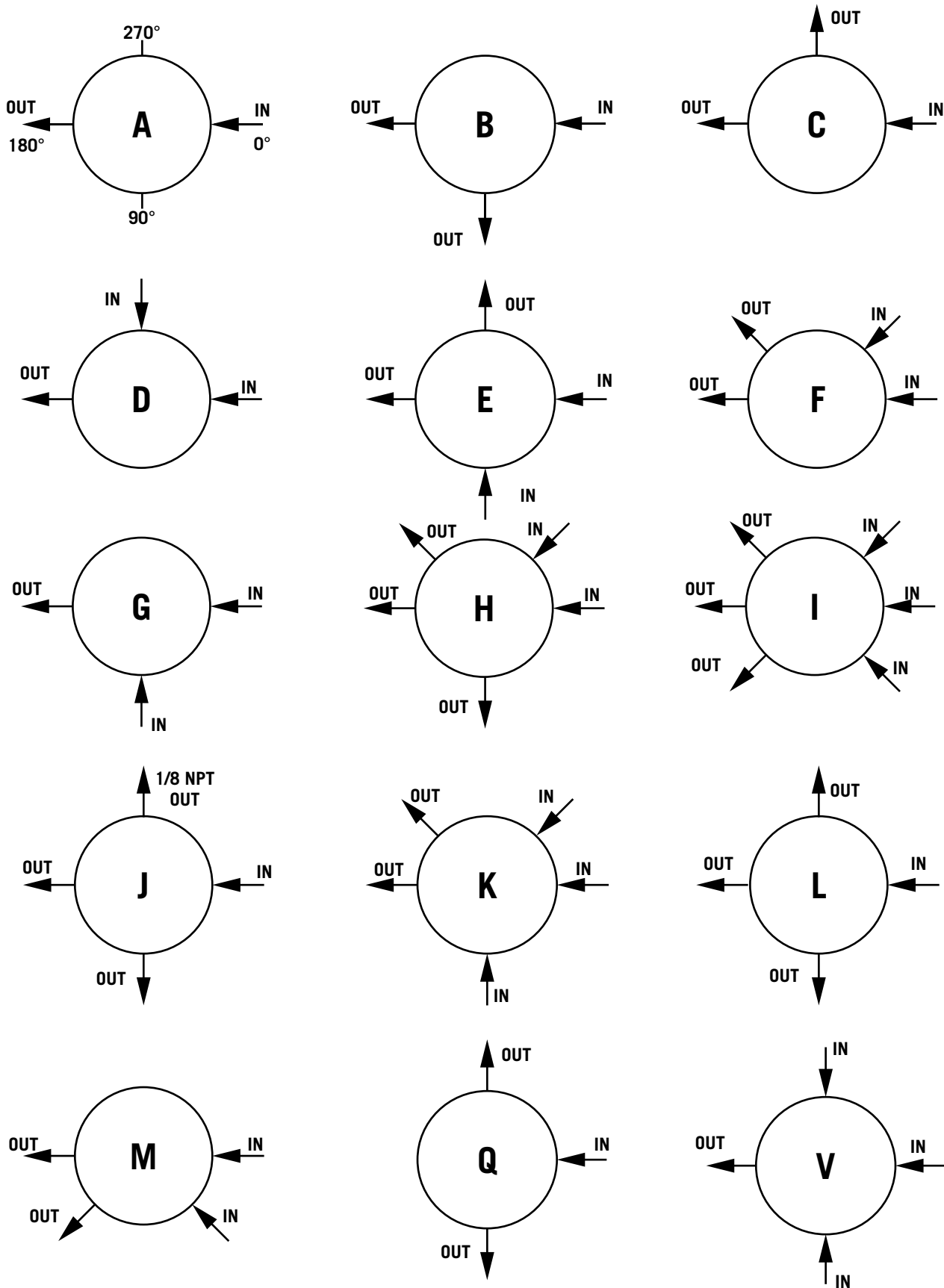
For flow curve charts, visit <http://www.goreg.com>.

# Compact Stainless Steel Back Pressure Regulators

## *Outline and Mounting Dimensions*



# Port Locations (Back Pressure Regulators)

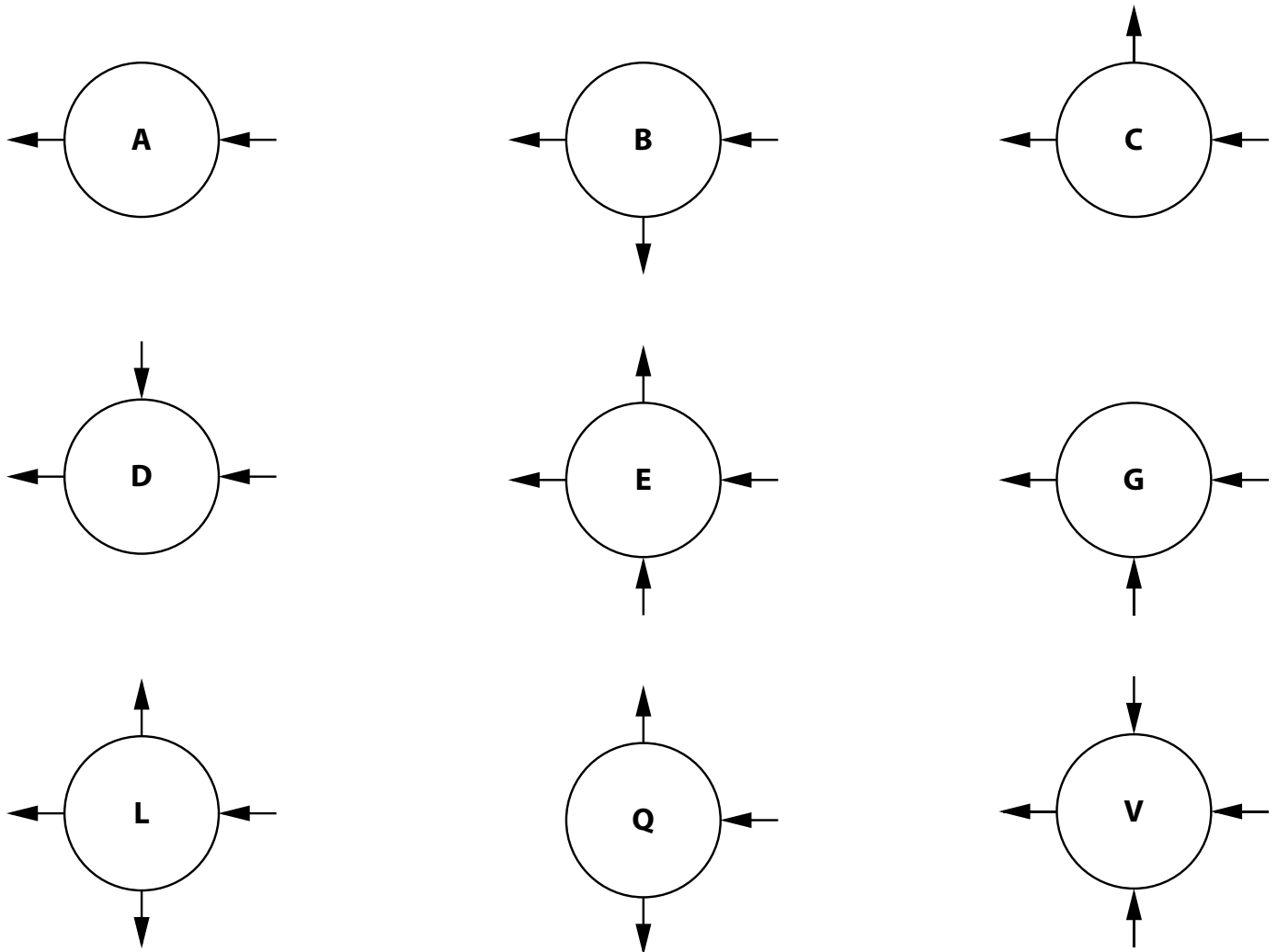


LOCATION OF PORTS FROM  
TOP VIEW

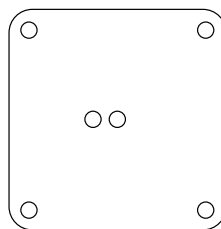
# Porting Options for LB-1 Back Pressure Valve

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