# BB-3 SERIES

Regulators - Relief / Backpressure

DBB031790X012

## Specifications

*For other materials or modifications, please consult TESCOM.*

### OPERATING PARAMETERS

*Pressure rating per criteria of ANSI/ASME B31.3*

**Inlet Pressure Ranges**
See Part Number Selector

**Design Proof Pressure**
150% of maximum pressure

**Operating Temperature**[1]
-15°F to 140°F / -26°C to 60°C

**Flow Capacity**
$C_V$ = 0.2

**Internal Leakage**
Bubble-tight

### MEDIA CONTACT MATERIALS

**Body**
Nickel-plated Aluminum or 316 Stainless Steel

**Seat**
ETFE (Tefzel®), PCTFE, PTFE or Polyimide (Vespel®)

**O-Rings**
Ethylene Propylene, Nitrile, Buna-N, FKM (Viton®-A) or FFKM, Perfluoroelastomer (Kalrez®)

**Remaining Parts**
300 Series Stainless Steel or Aluminum

### OTHER

**Cleaning**
CGA 4.1 and ASTM G93

**Connections**
1/4" NPTF or SAE inlet and outlet ports

**Weight**
**Aluminum:** 0.5 lbs / 0.2 kg
**Stainless Steel:** 1 lbs / 0.5 kg

*1. For extended temperatures from -40°F to 204°F / -40°C to 96°C, consult TESCOM.*



TESCOM BB-3 is a high pressure, low flow, miniature backpressure regulator. Six control pressure ranges are available up to 1200 psig / 83 bar outlet. This regulator can be used for hydraulic or pneumatic service and is small and compact, weighing approximately 4 oz / 0.11 kg in the standard Aluminum construction (316 Stainless Steel also available).

## Applications

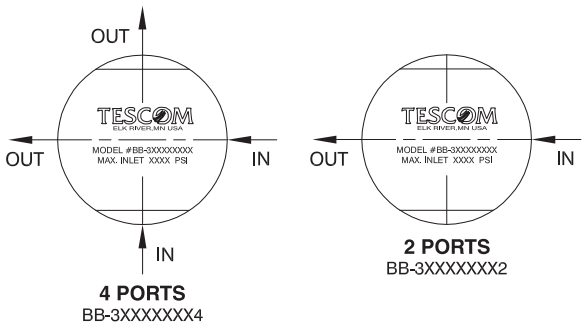
- Portable equipment
- OEM equipment

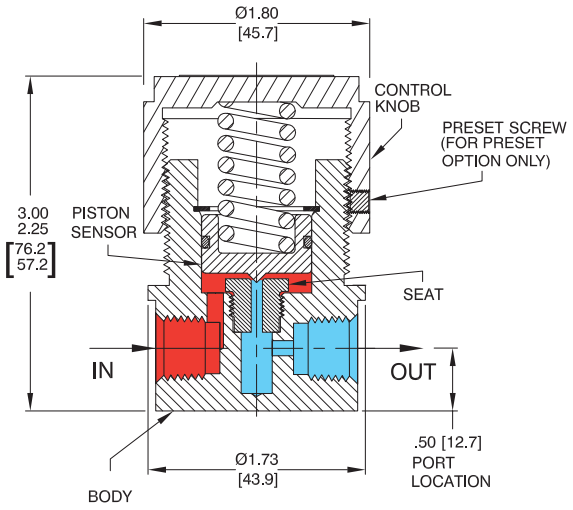
## Features and Benefits

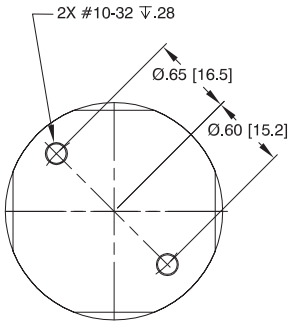
- Economical and extremely compact
- Durable piston sensor design
- High flow capacity
- High temperature version (up to 204°F / 96°C)
- Close pressure differential between crack and reseat
- Bubble-tight shutoff at all reseating pressures
- Six control pressure ranges

## BB-3 SERIES

### BB-3 Series Regulator Drawing



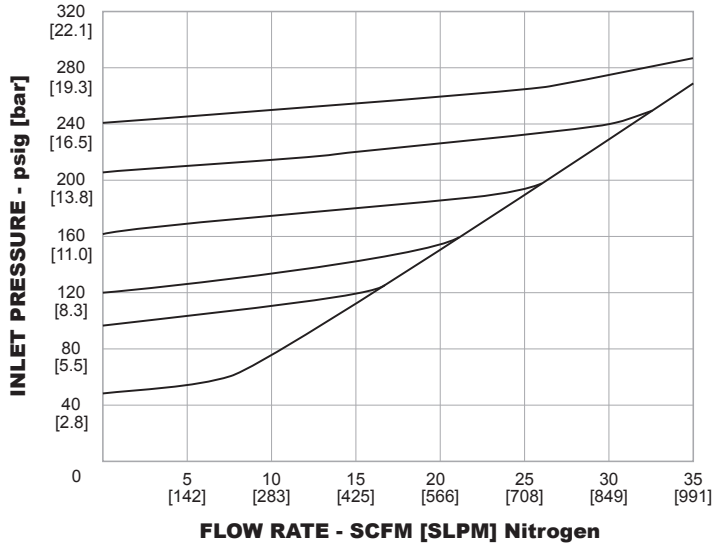



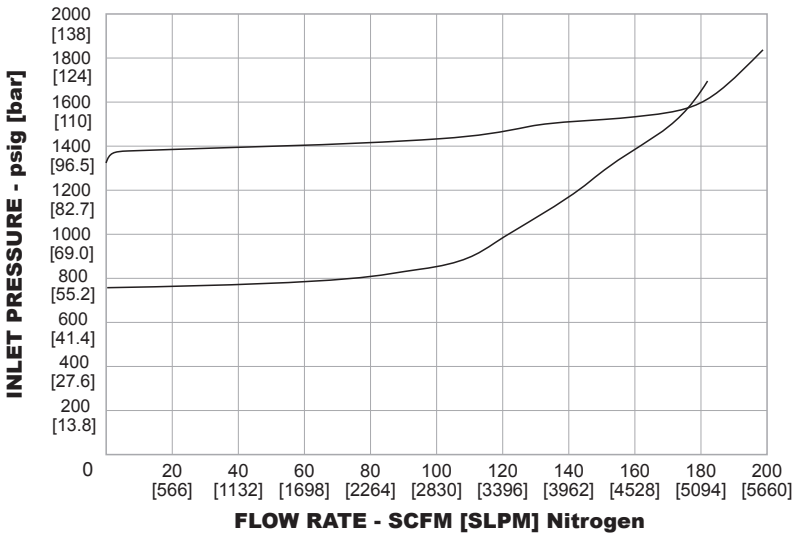




*All dimensions are reference & nominal*
*Metric [millimeter] equivalents are in brackets*

## BB-3 Series Regulator Flow Charts

*For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.*



# BB-3 SERIES

## BB-3 Series Regulator Part Number Selector

**Learn more about common options.**
For modifications, repair kits and accessories, contact factory.

*Example for selecting a part number:*

| BB - | 3 | 3 | A | L1 | | K | E | A4 | |
|---|---|---|---|---|---|---|---|---|---|
| BASIC SERIES | FUNCTION | BODY MATERIAL | LOAD TYPE | INLET PRESSURE RANGES | | SEAT MATERIAL | O-RING SEAL | PORTING | NUMBER OF PORTS |
| | | | | ADJUSTABLE | PRESET | | | | |
| BB | **3** – Backpressure<br>**3000 psig / 207 bar available, please consult factory.* | **3** – Nickel-plated Aluminum (Spring Load only)<br>**6** – 316 Stainless Steel | **A** – Adjustable<br>**P** – Preset<br>**D** – Dome Load (250 psig / 17.2 bar* maximum reference pressure) | **L1** – 0-80 psig 0-5.5 bar<br>**L2** – 0-140 psig 0-9.7 bar<br>**L3** – 0-220 psig 0-15.2 bar<br>**H1** – 0-700 psig 0-48.3 bar<br>**H2** – 0-1200 psig 0-82.7 bar<br>**D1** – 0-250 psig 0-17.2 bar* | 0-80 psig 0-5.5 bar<br>80-140 psig 5.5-9.7 bar<br>140-220 psig 9.7-15.2 bar<br>220-700 psig 15.2-48.3 bar<br>700-1200 psig 48.3-82.7 bar<br>Dome Load Only | **A** – ETFE (Tefzel®)<br>**K** – PCTFE<br>**V** – Polyimide (Vespel®)<br>**T** – PTFE (250 psig / 17.2 bar maximum inlet pressure) | **E** – Ethylene Propylene<br>**N** – Nitrile, Buna-N<br>**S** – Special<br>**V** – FKM (Viton®-A)<br>**K** – FFKM, Perfluoroelastomer (Kalrez®) | **A4** – 1/4" NPTF 4<br>**B4** – 1/4" SAE 4<br>**B2** – 1/4" SAE 2<br>**A2** – 1/4" NPTF 2 | |