

# 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<sup>1</sup>**

-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**

Tefzel®, CTFE, PTFE or Vespel®

**O-Rings**

Ethylene Propylene, Buna-N, Viton® or 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.

Viton®, Vespel®, Kalrez® and Tefzel® are registered trademarks of E.I. du Pont de Nemours and Company.



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).

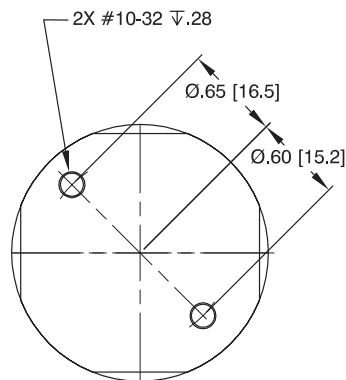
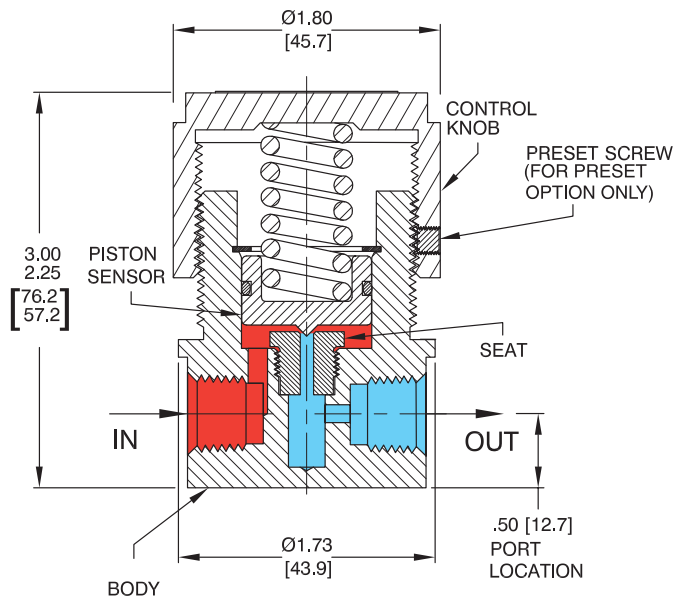
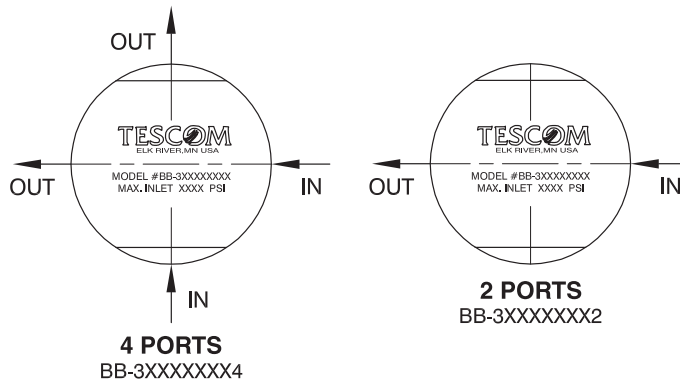
### Applications

- 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 reseal
- Bubble-tight shutoff at all reseating pressures
- Six control pressure ranges

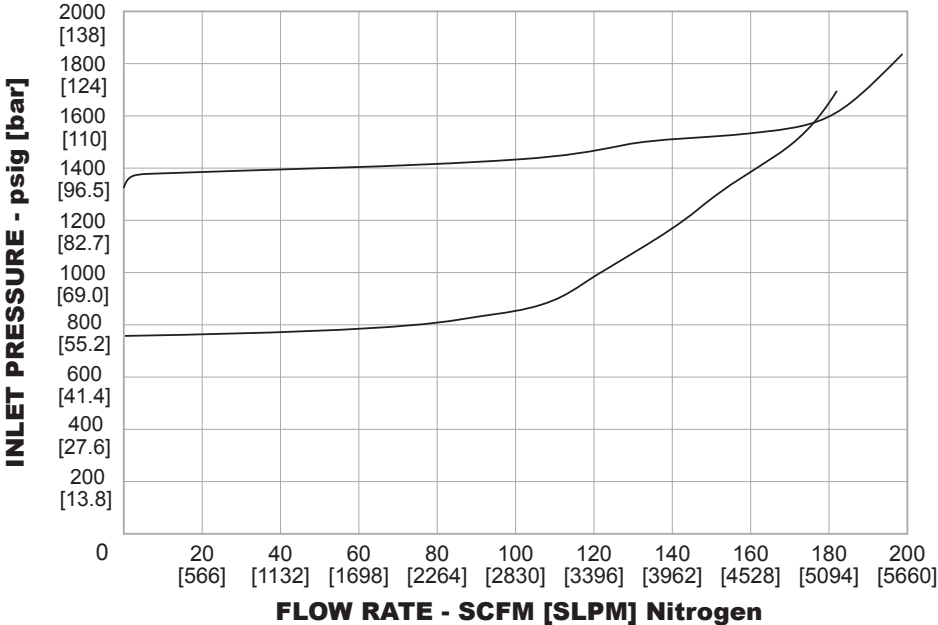
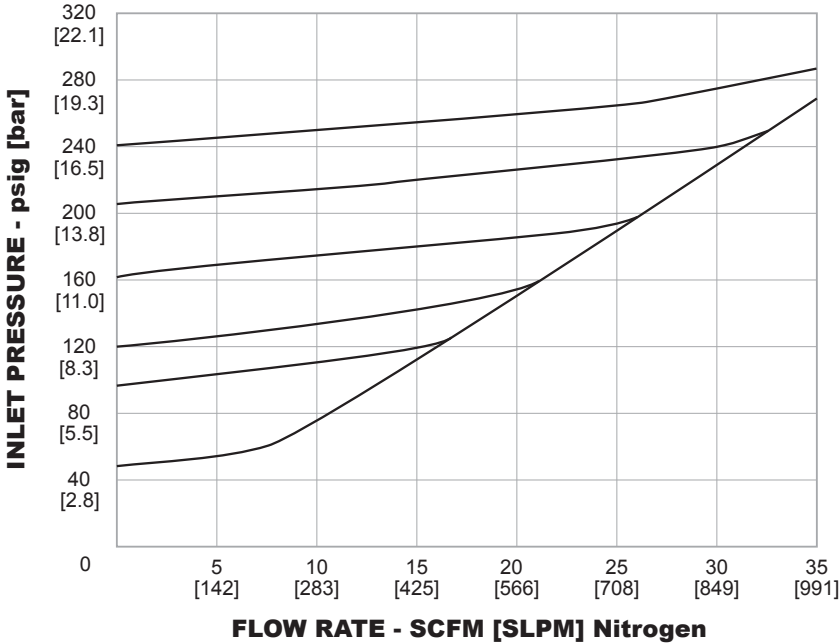
**BB-3 Series Regulator Drawing**



*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](http://www.tescom.com).



## BB-3 Series Regulator Part Number Selector

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

Example for selecting a part number:

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



**WARNING!** Do not attempt to select, install, use or maintain this product until you have read and fully understood the *TESCOM Safety, Installation and Operation Precautions*.

DBB031790X012 © 2012, 2017 Emerson Process Management Regulator Technologies, Inc. All rights reserved. 08/2017.  
Tescom, Emerson Process Management, and the Emerson Process Management design are marks of one of the Emerson Process Management group of companies. All other marks are the property of their respective owners.

