

# BB-1 Series

## Regulators - Pressure Reducing

DBB011761X012

### Specifications

For other materials or modifications, please consult TESCOM.

#### OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

**Maximum Inlet Pressure**

6000 psig / 414 bar

**Outlet Pressure Ranges**

**Low Pressure:** 0-220 psig / 0-15.2 bar

**High Pressure:** 0-1800 psig / 0-124 bar

**Design Proof Pressure**

150% maximum rated

**Leakage**

Bubble-tight

**Operating Temperature**

-15°F to 165°F / -26°C to 74°C

-65°F to 165°F / -54°C to 74°C with Buna-N O-rings

Up to 400°F / 204°C with Vespe<sup>®</sup> or PEEK Seat

**Flow Capacity**

C<sub>v</sub> = 0.06

#### MEDIA CONTACT MATERIALS

**Body**

Aluminum 6061 (Nickel-plated)

**Seat**

CTFE, PEEK, or Vespe<sup>®</sup>

**O-Rings**

See Part Number Selector

**Remaining Parts**

300 Series Stainless Steel or Aluminum

#### OTHER

**Connections**

1/4" NPTF or SAE

**Cleaning**

CGA 4.1 and ASTM G93

**Weight (approximate)**

0.5 lbs / 0.2 kg

Vespe<sup>®</sup>, Viton<sup>®</sup>, and Kalrez<sup>®</sup> are registered trademarks of E.I. du Pont de Nemours and Company.



TESCOM BB-1 Series high pressure, low flow, miniature pressure reducing regulator provides six outlet pressure ranges available up to 1800 psig / 124 bar outlet. This non-venting regulator is small and compact, weighing approximately 0.5 lbs / 0.2 kg in the standard aluminum construction.

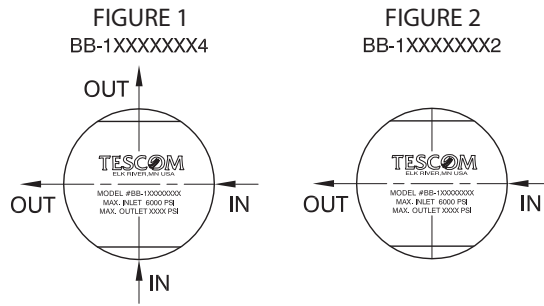
#### Applications

- Portable equipment
- OEM equipment

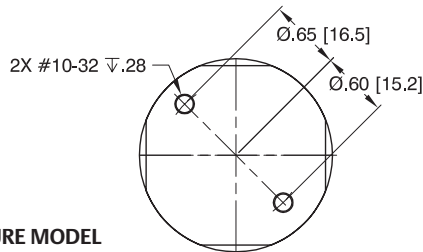
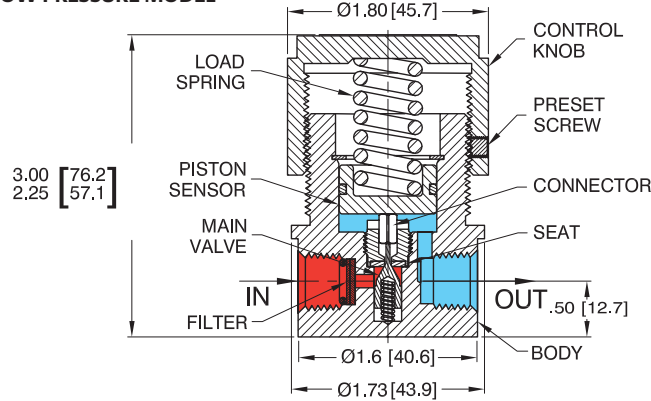
#### Features and Benefits

- Durable piston-sensed design
- Outlet pressure ranges are field adjustable
- Two and four 1/4" NPTF or SAE ports are standard
- Minimal soft goods
- Non-venting
- Two-stage and cartridge versions are available
- 316 Stainless Steel construction is available

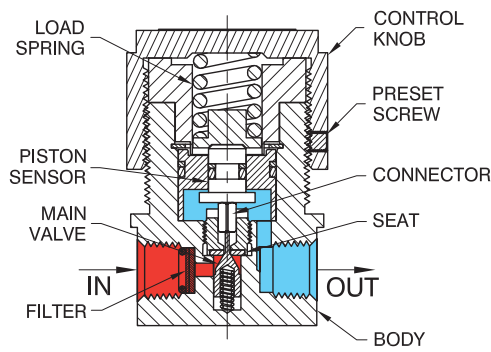
BB-1 Series Regulator Drawings



LOW PRESSURE MODEL



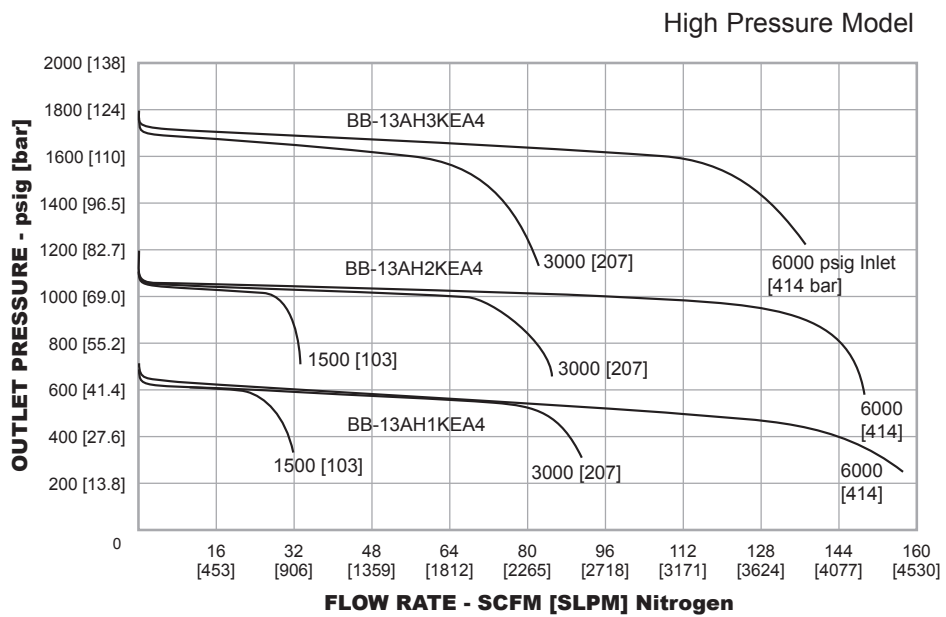
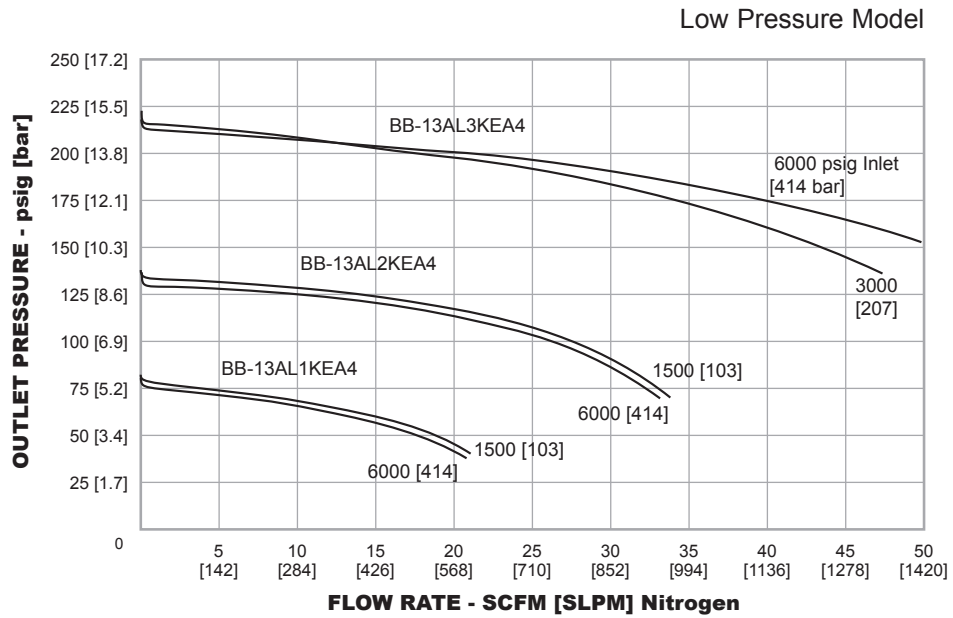
HIGH PRESSURE MODEL



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

## BB-1 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-1 Series Regulator Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

| BASIC SERIES | FUNCTION                     | BODY MATERIAL            | LOAD TYPE                                  | OUTLET PRESSURE                                                                                                                                                                                                                                |                                                                                                                                                                                               | SEAT                                                                | O-RING SEAL                                                                                                                                                                 | PORTING CONFIGURATION NUMBER OF PORTS                                                                                                                          |
|--------------|------------------------------|--------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |                              |                          |                                            | ADJUSTABLE                                                                                                                                                                                                                                     | PRESET                                                                                                                                                                                        |                                                                     |                                                                                                                                                                             |                                                                                                                                                                |
|              |                              |                          |                                            |                                                                                                                                                                                                                                                |                                                                                                                                                                                               |                                                                     |                                                                                                                                                                             |                                                                                                                                                                |
| <b>BB</b>    | <b>1</b> - Pressure Reducing | <b>3</b> - Aluminum 6061 | <b>A</b> - Adjustable<br><b>P</b> - Preset | <b>L1</b> - 0-80 psig<br>0-5.5 bar<br><b>L2</b> - 0-140 psig<br>0-9.7 bar<br><b>L3</b> - 0-220 psig<br>0-15.2 bar<br><br><b>H1</b> - 0-700 psig<br>0-48.3 bar<br><b>H2</b> - 0-1200 psig<br>0-82.7 bar<br><b>H3</b> - 0-1800 psig<br>0-124 bar | 0-80 psig<br>0-5.5 bar<br>80-140 psig<br>5.5-9.7 bar<br>140-220 psig<br>9.7-15.2 bar<br><br>220-700 psig<br>15.2-48.3 bar<br>700-1200 psig<br>48.3-82.7 bar<br>1200-1800 psig<br>82.7-124 bar | <b>K</b> - CTFE<br><b>P</b> - PEEK<br><b>V</b> - Vespe <sup>®</sup> | <b>B</b> - 90 Duro Buna<br><b>E</b> - Ethylene Propylene<br><b>K</b> - Kalrez <sup>®</sup><br><b>N</b> - Buna-N<br><b>U</b> - Polyurethane<br><b>V</b> - Viton <sup>®</sup> | <b>A4</b> - 1/4" NPTF<br>4 (Figure 1)<br><b>B4</b> - 1/4" SAE<br>4 (Figure 1)<br><b>A2</b> - 1/4" NPTF<br>2 (Figure 2)<br><b>B2</b> - 1/4" SAE<br>2 (Figure 2) |



**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*.

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