

**Specifications**

For other materials or modifications, please consult TESCOM.

**OPERATING PARAMETERS**

Pressure rating per criteria of ANSI/ASME B31.3

<b>Maximum Inlet Pressure</b> 6000 psig / 414 bar
<b>Outlet Pressure Ranges</b> <b>Low Pressure:</b> 0-220 psig / 0-15.2 bar <b>High Pressure:</b> 0-1800 psig / 0-124 bar
<b>Design Proof Pressure</b> 150% maximum rated
<b>Leakage</b> Bubble-tight
<b>Operating Temperature</b> Operating temperature depends on soft goods materials. See table below.
<b>Flow Capacity</b> C <sub>v</sub> = 0.06



**MEDIA CONTACT MATERIALS**

<b>Body</b> Aluminum 6061 (Nickel-plated)
<b>Seat</b> PCTFE, PEEK, or Polyimide (Vespe <sup>l</sup> )
<b>O-Rings</b> See Part Number Selector
<b>Remaining Parts</b> 300 Series Stainless Steel or Aluminum

**OTHER**

<b>Connections</b> 1/4" NPTF or SAE
<b>Cleaning</b> CGA 4.1 and ASTM G93
<b>Weight (approximate)</b> 0.5 lbs / 0.2 kg

Vespe<sup>l</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**

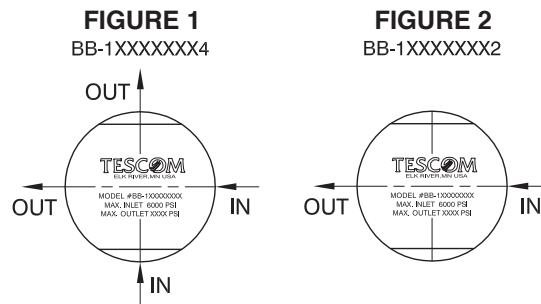
- Durable piston-sensed design
- Outlet pressure ranges are field adjustable
- Two and four 1/4" NPTF or SAE ports are standard
- Minimal soft goods
- Non-venting
- Two-stage and cartridge versions are available
- 316 Stainless Steel construction is available

O-RING SEAL	OPERATING TEMPERATURE
90 DURO BUNA	-30 °F TO +165 °F / -34 °C TO +74 °C
ETHYLENE PROPYLENE	-30 °F TO +300 °F / -34 °C TO +149 °C
BUNA-N	-30 °F TO +165 °F / -34 °C TO +74 °C
POLYURETHANE	-30 °F TO +250 °F / -34 °C TO +121 °C
FKM	-15 °F TO +400 °F / -26 °C TO +204 °C
KALREZ	+20 °F TO +400 °F / -7 °C TO +204 °C

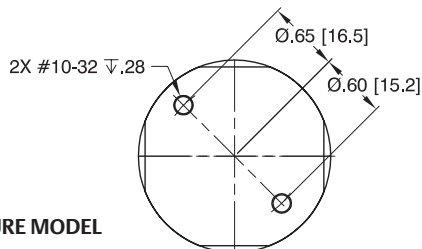
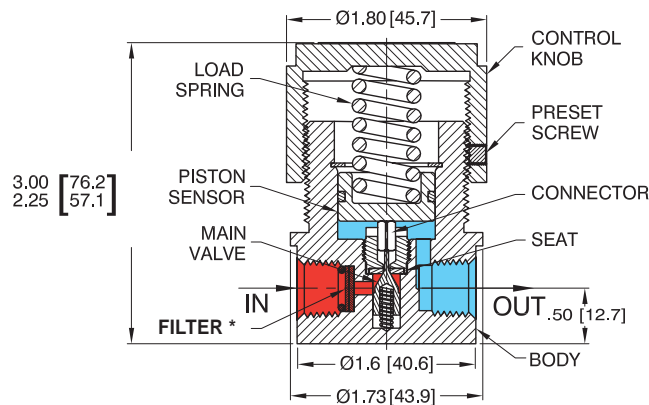
SEAT	OPERATING TEMPERATURE
PCTFE	-30 °F TO +140 °F / -34 °C TO +60 °C
VESPEL	-30 °F TO +400 °F / -34 °C TO +204 °C
PEEK	-30 °F TO +350 °F / -34 °C TO +177 °C

# BB-1 SERIES

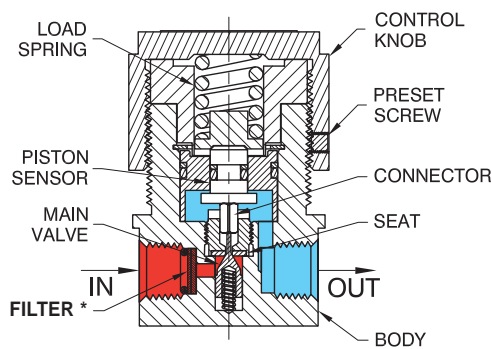
## BB-1 Series Regulator Drawings



LOW PRESSURE MODEL



HIGH PRESSURE MODEL

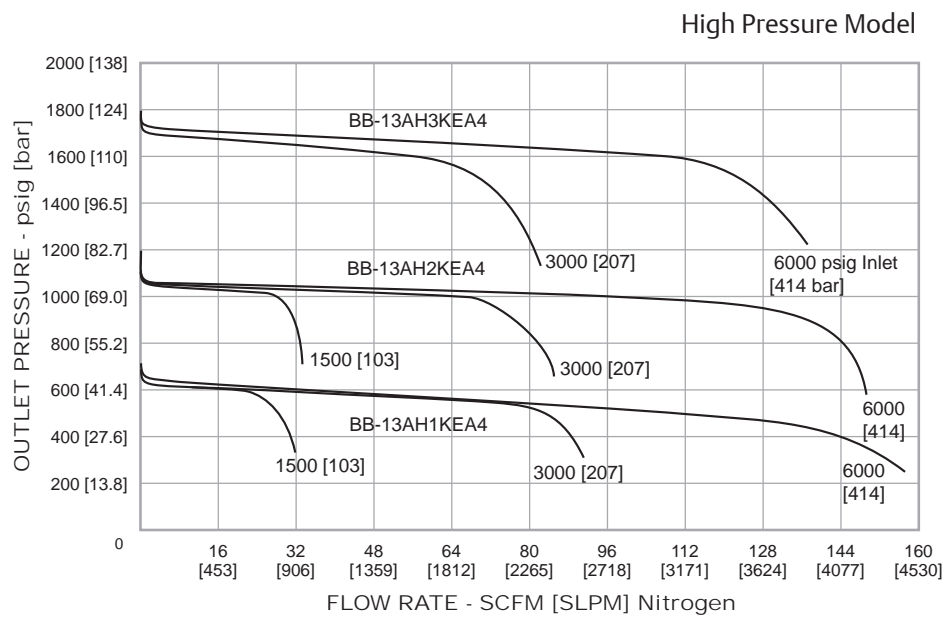
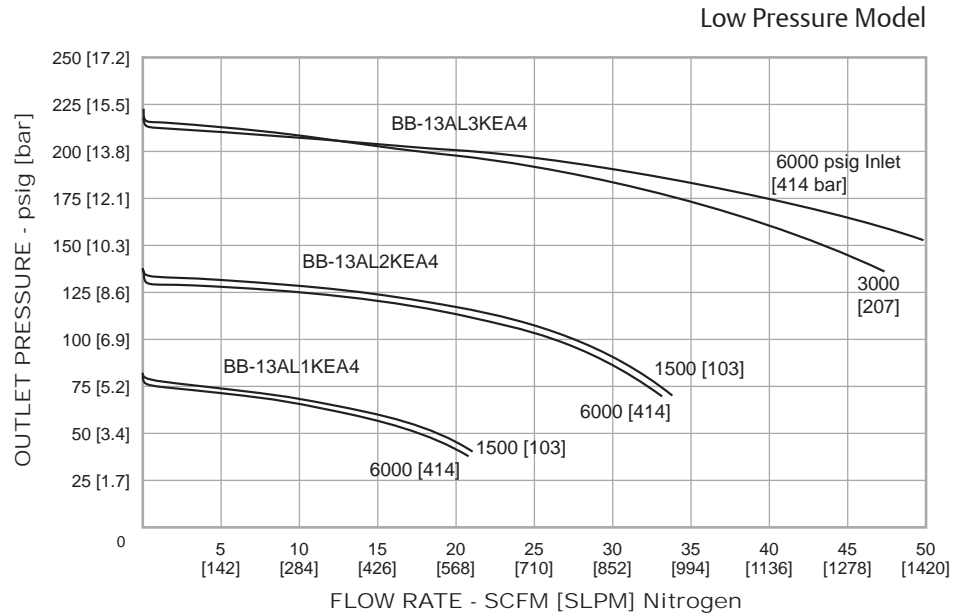


\* Filter is only available for 1/4" NPTF

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

## BB-1 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    1        3        A                    L3                    K        E                    A4**  
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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 <b>P</b> - Preset	<b>L1</b> - 0-80 psig 0-5.5 bar	0-80 psig 0-5.5 bar	<b>K</b> - PCTFE  <b>P</b> - PEEK  <b>V</b> - Polyimide (Vespel®)	<b>B</b> - Nitrile, Buna-N 90 Durometer  <b>E</b> - Ethylene Propylene  <b>K</b> - FFKM, Perfluoroelastomer (Kalrez®)  <b>N</b> - Nitrile, Buna-N  <b>U</b> - Polyurethane  <b>V</b> - FKM (Viton®-A)	<b>A4</b> - 1/4" NPTF 4 (Figure 1) <b>B4</b> - 1/4" SAE 4 (Figure 1) <b>A2</b> - 1/4" NPTF 2 (Figure 2) <b>B2</b> - 1/4" SAE 2 (Figure 2)
				<b>L2</b> - 0-140 psig 0-9.7 bar	80-140 psig 5.5-9.7 bar			
				<b>L3</b> - 0-220 psig 0-15.2 bar	140-220 psig 9.7-15.2 bar			
				<b>H1</b> - 0-700 psig 0-48.3 bar	220-700 psig 15.2-48.3 bar			
				<b>H2</b> - 0-1200 psig 0-82.7 bar	700-1200 psig 48.3-82.7 bar			
				<b>H3</b> - 0-1800 psig 0-124 bar	1200-1800 psig 82.7-124 bar			