

# 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 Vespel® or PEEK Seat

##### Flow Capacity

$C_v = 0.06$

#### MEDIA CONTACT MATERIALS

##### Body

Aluminum 6061 (Nickel-plated)

##### Seat

CTFE, PEEK, or Vespel®

##### 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

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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.

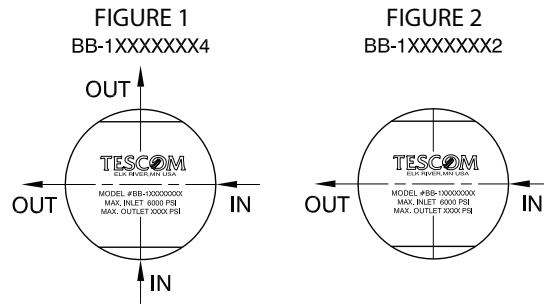
### Applications

- Portable equipment
- OEM equipment

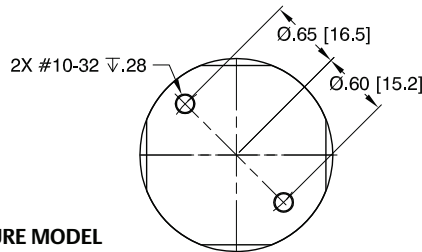
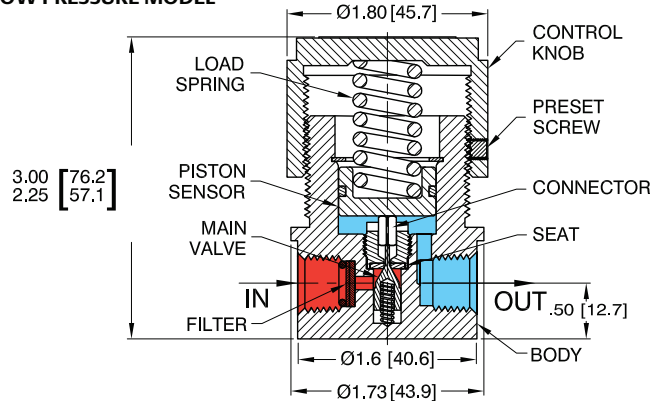
### Features and Benefits

- 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

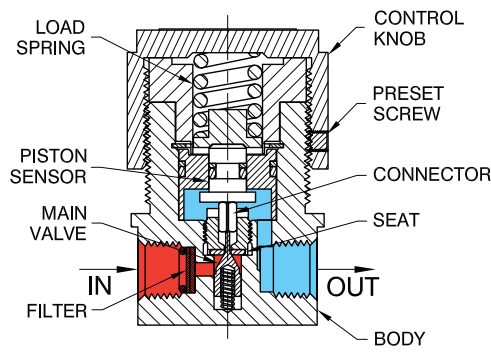
BB-1 Series Regulator Drawings



LOW PRESSURE MODEL



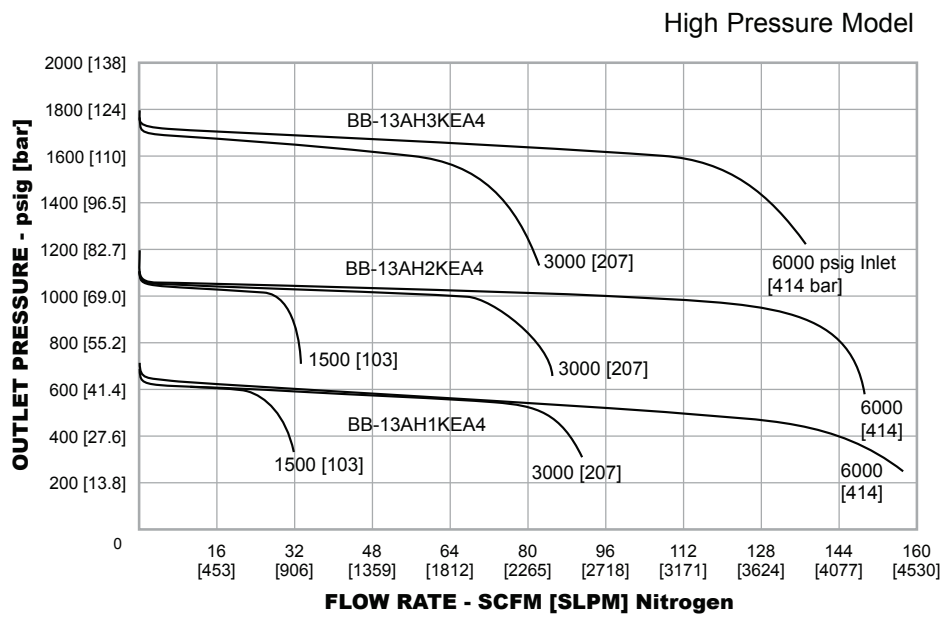
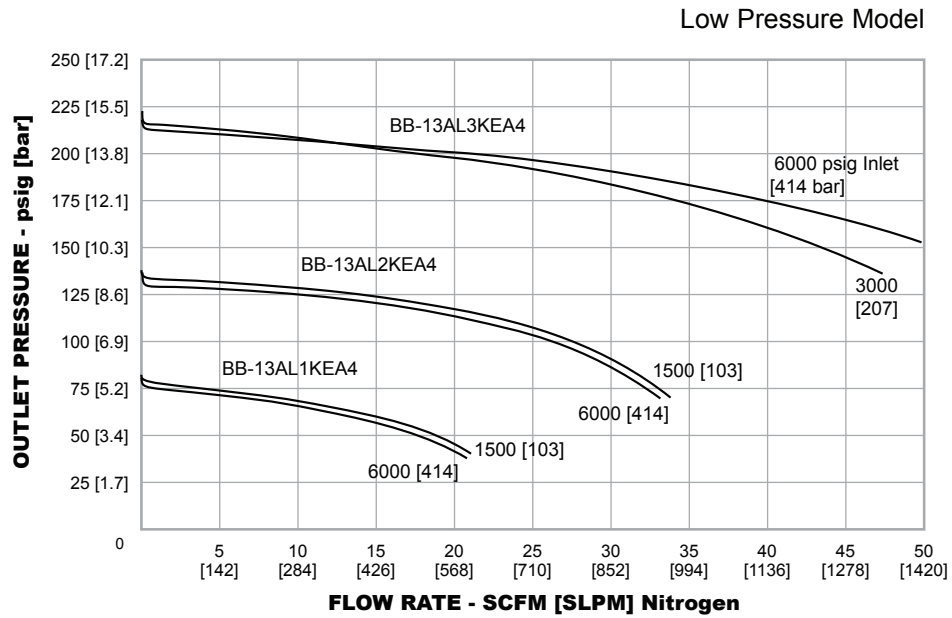
HIGH PRESSURE MODEL



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:

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