

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.

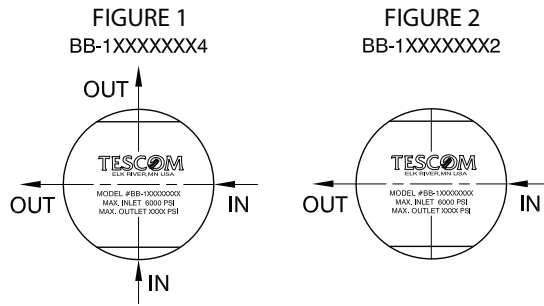
Applications

- Portable equipment
- OEM equipment

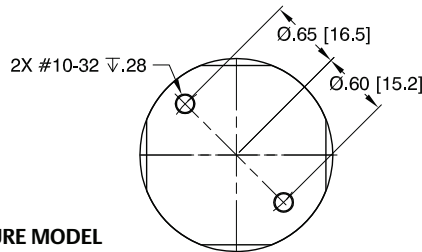
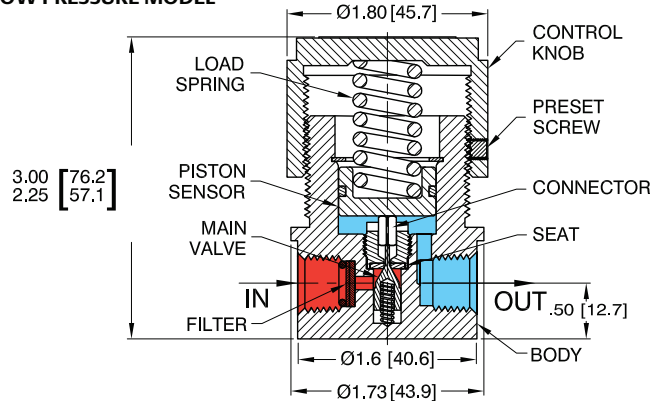
Features and Benefits

- 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

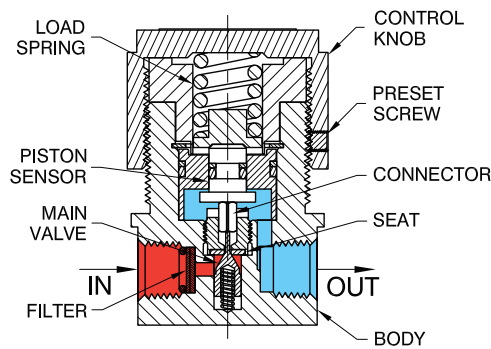
BB-1 Series Regulator Drawings



LOW PRESSURE MODEL



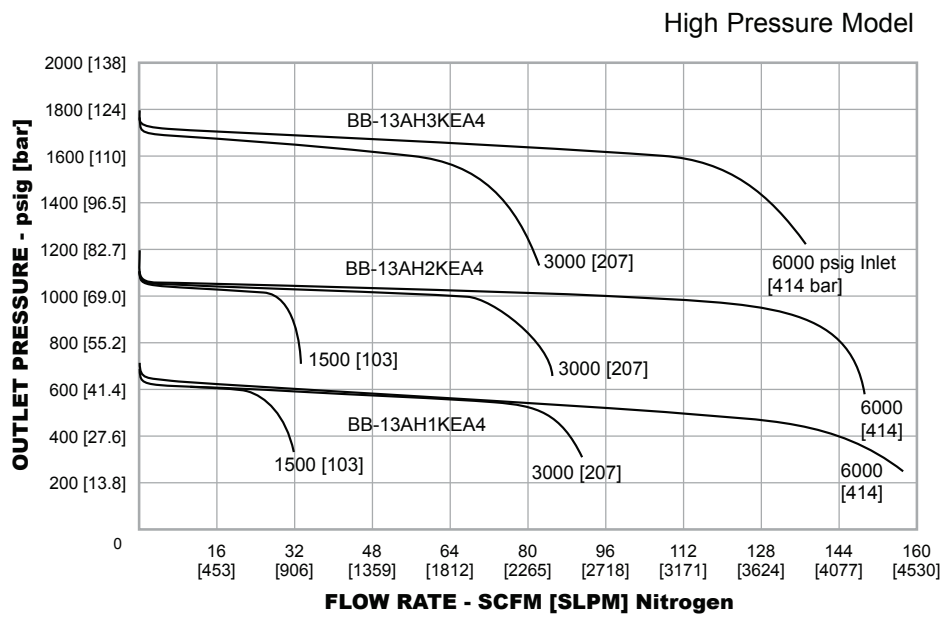
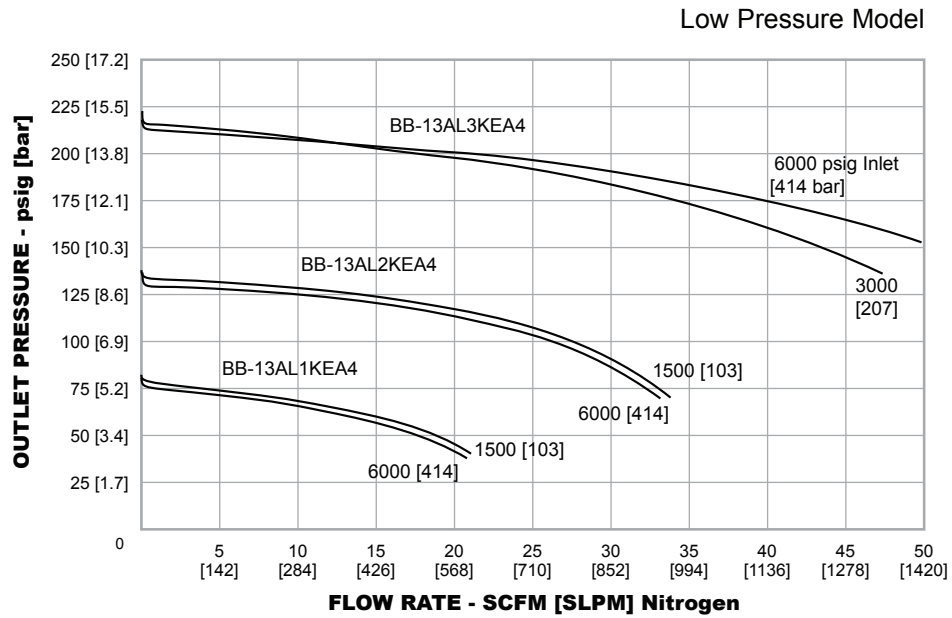
HIGH PRESSURE MODEL



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.



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 | | | | |