

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 |
| Operating temperature depends on soft goods materials. See table below. |
| Flow Capacity |
| $C_v = 0.06$ |

MEDIA CONTACT MATERIALS

| |
|---|
| Body |
| Aluminum 6061 (Nickel-plated) |
| Seat |
| PCTFE, PEEK, or Polyimide (Vespe ^l) |
| 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^l, Viton[®], and Kalrez[®] 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

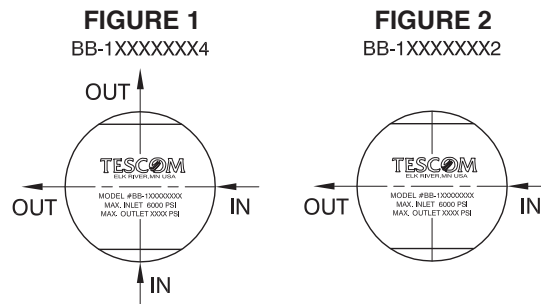
- Durable piston-sensed design
- Outlet pressure ranges are field adjustable
- Two and four 1/4" NPTF or SAE ports are standard
- Minimal soft goods
- Non-venting
- Two-stage and cartridge versions are available
- 316 Stainless Steel construction is available

| 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 |

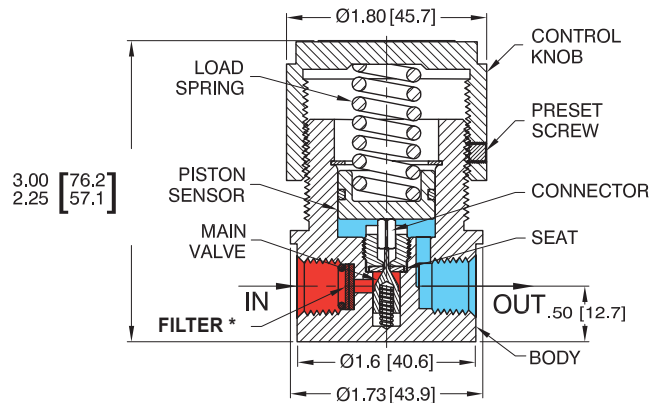
| SEAT | OPERATING TEMPERATURE |
|--------|---------------------------------------|
| PCTFE | -30 °F TO +140 °F / -34 °C TO +60 °C |
| VESPEL | -30 °F TO +400 °F / -34 °C TO +204 °C |
| PEEK | -30 °F TO +350 °F / -34 °C TO +177 °C |

BB-1 SERIES

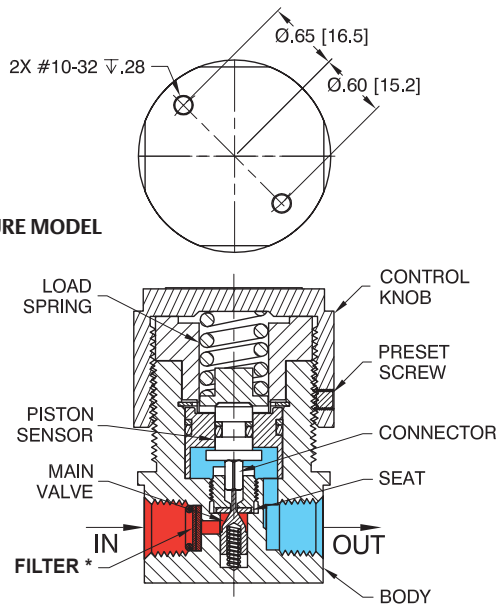
BB-1 Series Regulator Drawings



LOW PRESSURE MODEL



HIGH PRESSURE MODEL

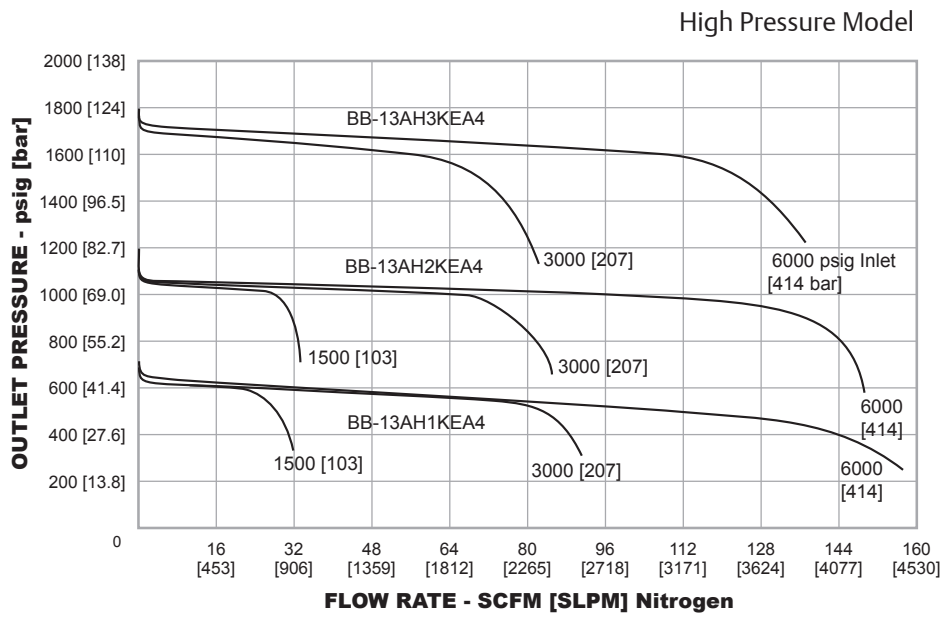
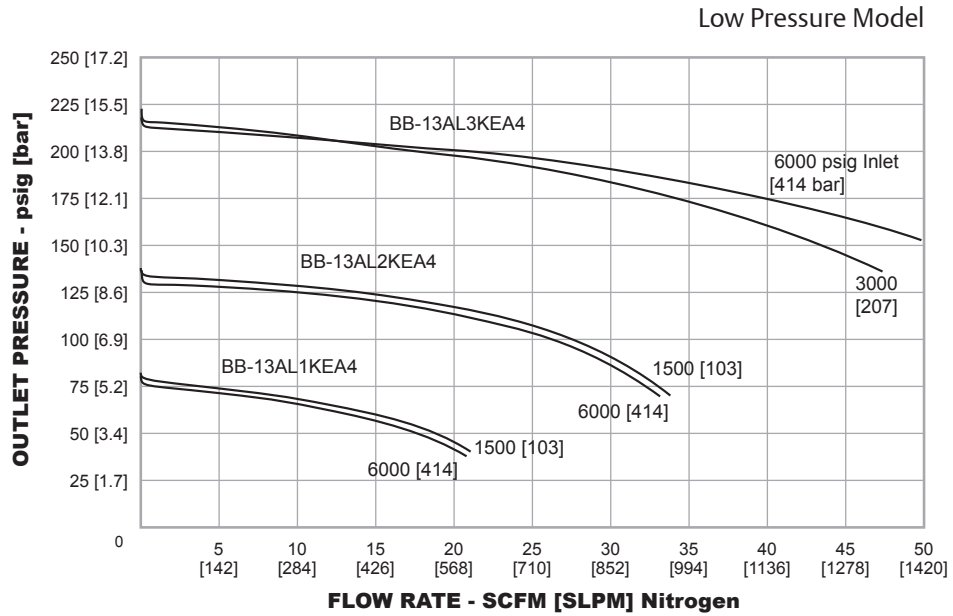


* Filter is only available for 1/4" NPTF

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.



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

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