

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 (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

Vespel®, 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

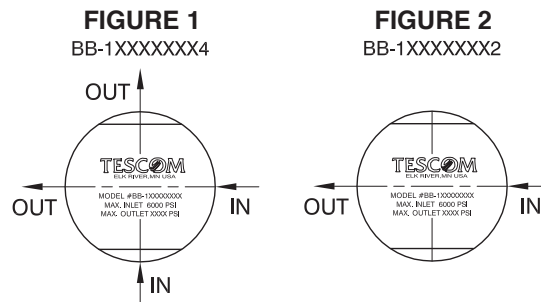
SEAT

OPERATING TEMPERATURE

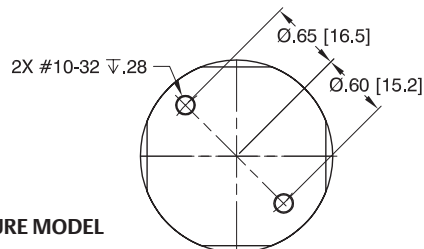
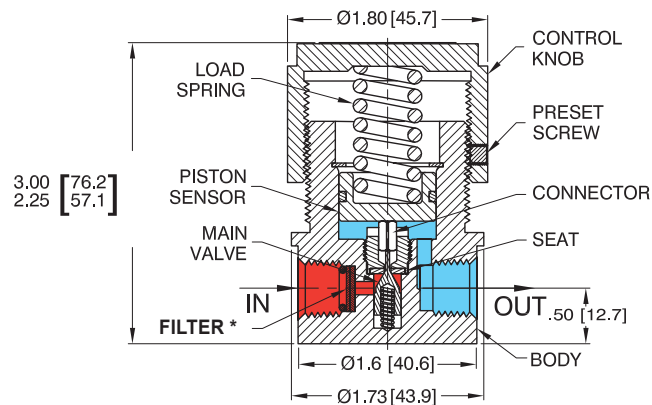
PCTFE	-30 °F TO +140 °F / -34 °C TO +60 °C
VESPEL	-30 °F TO +400 °F / -34 °C TO +204 °C
PEEK	-30 °F TO +350 °F / -34 °C TO +177 °C

BB-1 SERIES

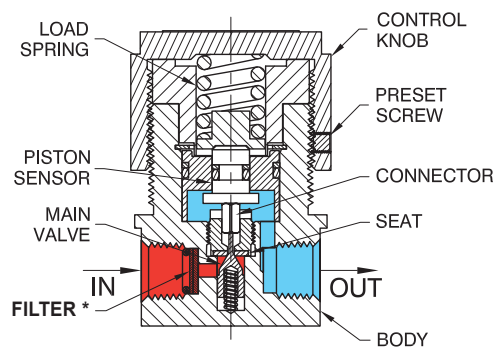
BB-1 Series Regulator Drawings



LOW PRESSURE MODEL



HIGH PRESSURE MODEL

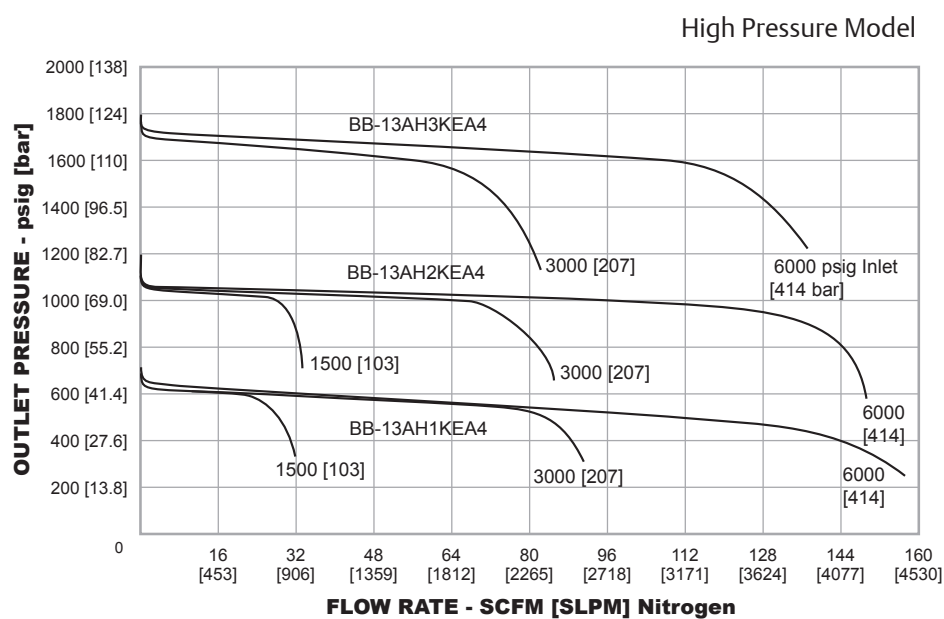
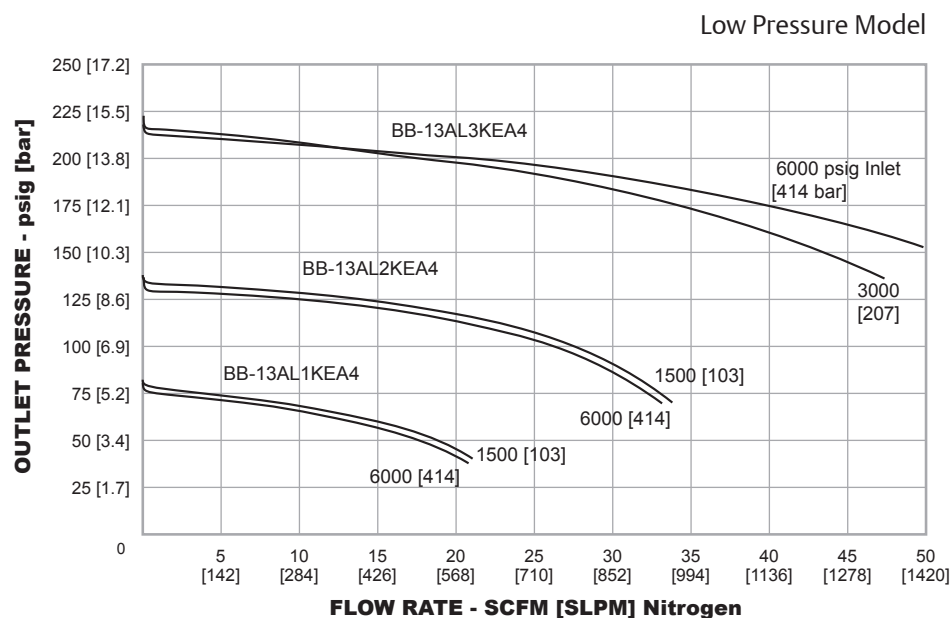


* Filter is only available for 1/4" NPTF

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 TESCO 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 (Vespel®)	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)	