

Description:

The VBRM Series Volume Booster converts a low volume pressure signal into a 1:1 ratio high volume output specifically utilized for high pressure supply gas applications. It is specifically designed for both modulating and "on-off" pilot pressure signals and is utilized in tandem with VRG control instrumentation to provide adequate instrumentation flow volume. Typical applications include large displacement pneumatic actuators and installations that require rapid response stroking speed. The VBRM provides fast response in forward flow and reverse flow exhaust. When process conditions permit, the VBRM Series Volume Booster may be discharged into a lower pressure system to eliminate atmospheric bleed.

Common Applications:

- High Pressure Applications Up to 250 psig
- Large Volume Displacement Control Valve Actuators
- Power Plant Fuel Gas Feed that Require Rapid Response
- Industrial "Short Systems" that Require Rapid Response
- Larger Bore Monitor Control Valves that Require Rapid Response
- Anti-Surge and Fast Stop Valves that Require Rapid Response

Features:

- Inline Mounting
- Diaphragm Design for Excellent Regulation and Stability
- High Relief Characteristics
- Can Accept Backpressure to Eliminate Atmospheric Emissions
- NPT Inlet and Outlet Standard
- Repeatable, Bubble Tight Seating and Re-seating Soft Seat Design
- Integral Pilot Porting
- Superior Capacities Via Large Nozzles
- Compatible with All VRG Controls Instrumentation
- Captive Venting (Threaded Exhaust Port)
- ZERO Emissions at Steady State

Specifications:

Model:	VBRM-004, VRG Part No. BA-4480
Description:	Volume Booster
Port Sizes:	0.500 in FNPT – INLET / OUTLET 0.750 in FNPT - EXHAUST
Booster Output Ratio:	1:1
Max Supply Pressure:	Model VBRM-004 - 250 psig
Max Outlet Pressure:	Model VBRM-004 - 250 psig
Relief Flow	150 SCFM (Air) / 215 SCFM (NG)
Temperature Range:	-20 F to +158 F (-29 C to +70 C)
Overall Dimensions:	A= 4.18 in / B=3.52 in / C=1.54 in A= 106 mm / B=89 mm / C=39 mm
Weight:	4.84 lbs (2.2 kg)
Body / Dome:	Coated Zinc
Bottom Plug:	Acetal
Valve:	Brass
Elastomers:	Nitrile
Operating Media:	Natural Gas, Air, Inert Gases
Flow Coefficient (Cv):	3.6 Output, 3.6 Exhaust



Figure 1 – VBP-004 Volume Booster
0.500 in Ports

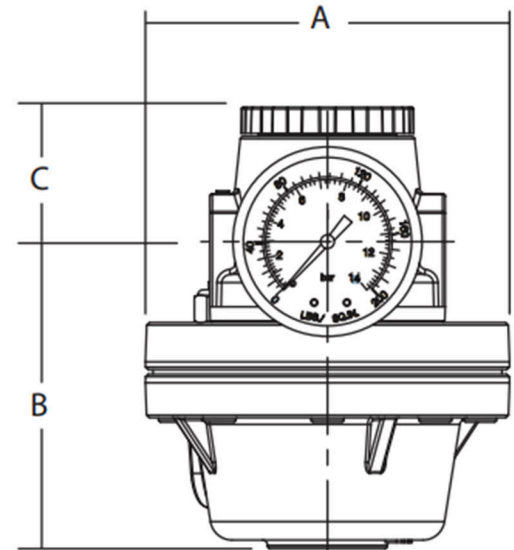


Figure 2 – VBP-004 Dimensions
*Gage Not Included