

Description:

The VBP Series Volume Booster converts a low volume pressure signal into a 1:1 ratio high volume output. 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 VBP provides fast response in forward flow and reverse flow exhaust. When process conditions permit, the VBP Series Volume Booster may be discharged into a lower pressure system to eliminate atmospheric bleed.

Common Applications:

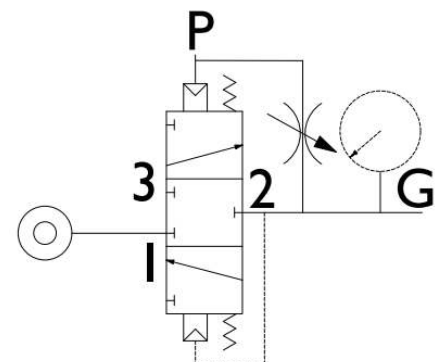
- Large Volume Displacement Control Valve Actuators
- Power Plant Fuel Gas Feed that Require Rapid Response
- Industrial "Short Systems" that Require Rapid Response
- Larger Bore Monitor Control Valves that Require Rapid Response
- Anti-Surge and Fast Stop Valves that Require Rapid Response

Features:

- 316 Stainless Steel Construction Trim and Body
- Compact Size with Convenient Port Configuration
- Can Accept Backpressure to Eliminate Atmospheric Emissions
- Improved Sensitivity and Stability Compared to Other Volume Boosters
- Built-In Panel Mounting Brackets Included
- NPT Inlet and Outlet Standard
- Repeatable, Bubble Tight Seating and Re-seating Soft Seat Design
- Superior Capacities Via Large Nozzles
- SIL 3 Third Party Certified to IEC 61508 Parts 1 & 2
- ATEX and PED Compliant
- Compatible with All VRG Controls Instrumentation
- Captive Venting (Threaded Exhaust Port)
- ZERO Emissions at Steady State
- Manifolded Port Connections Facilitate Replacement & Installation
- Variable Speed Control Adjustment


Figure 1 – VBP Volume Booster
Specifications:

Model:	VBP-150, Part No. BA-4465 VBP-200, Part No. BA-4464
Description:	Volume Booster
Port Sizes:	0.500 in FNPT
Booster Output Ratio:	1:1
Max Supply Pressure:	Model VBP-150 - 150 psig Model VBP-200 – 200 psig
Temperature Range:	-76°F to +212°F (-60°C to +100°C)
Overall Dimensions:	4.3 in X 5.1 in X 5.6 in 102 mm X 130 mm X 142 mm
Weight:	6.0 Lbs (2.75 kg)
Body, Brackets, Manifolds:	316L Stainless Steel
Springs:	302S26 Stainless Steel (BS2056)
Seals:	Low Temp Nitrile, Fluor silicone (Low Temp)
Accuracy:	5.0% (Valve to Pilot Pressure)
Operating Media:	Natural Gas, Air, Inert Gases
Flow Coefficient (Cv):	3.6 Output, 3.6 Exhaust


Figure 2 – VBP-08-11-AL Schematic Symbol

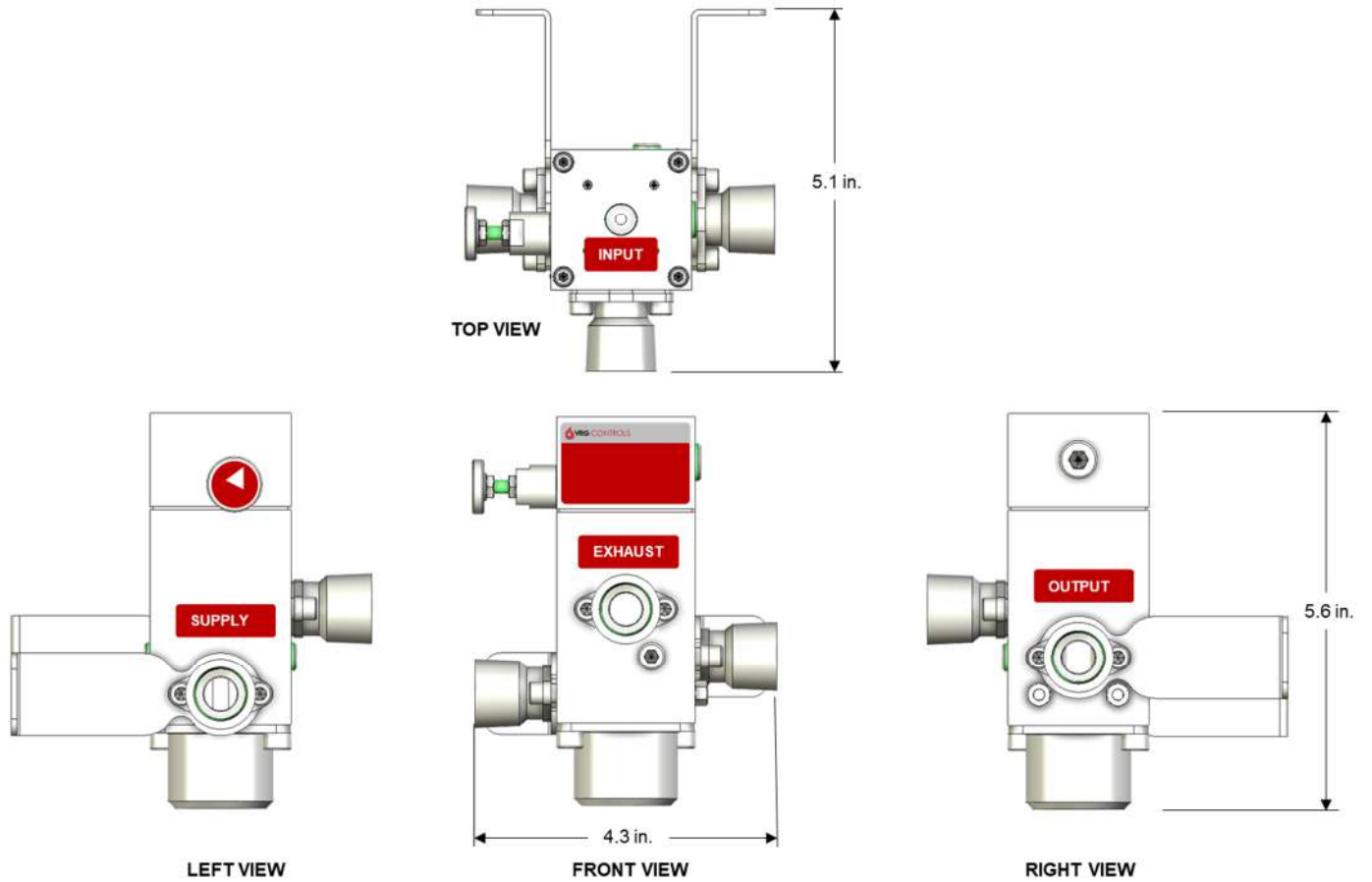


Figure 3 – VBP-150 / VBP-200 Volume Booster – Dimensions