

Type 6000

Volume Booster

High Flow Capacity in a Rugged Aluminum or Stainless Steel Casing

The Type 6000 Volume Booster is a one-to-one signal to output relay that, when used with a positioner/actuator, is designed to increase the stroking speed of control valves. An integral bypass valve allows you to tailor the output force to meet the application requirements. Large signal changes to the booster can deliver high volume, fast action throttling control while smaller signal changes are dampened. When used with on/off control valves, the bypass can be closed for increased stroking speed. The T6000 is available in aluminum or stainless steel construction.

FEATURES

- **Fast Response**
Delivers high air volume for rapid actuator stroking
- **Adjustable Bypass Valve**
Tunes unit response to eliminate actuator overshoot or overdamping
- **Soft Seat Sealing**
Provides tight shutoff to reduce costly air consumption
- **Corrosion and Wear Resistant Construction**
Stainless steel external trim and internal wear parts
- **Available in Aluminum or Stainless Steel**
- **Choice of Porting**
1/2" or 3/4" NPT supply and output ports

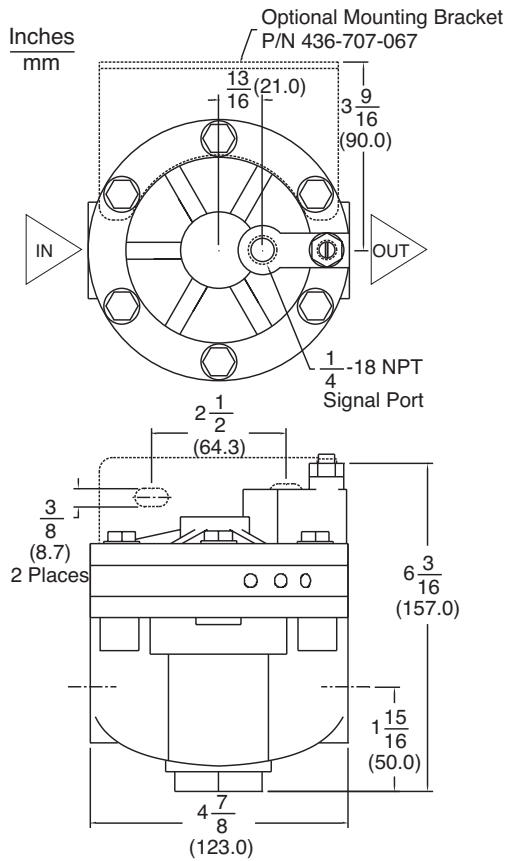
Materials of Construction

Body/Bonnet/Spacer:	Aluminum or 316 Stainless Steel
Diaphragms:	Nitrile / Nylon
Springs:	304 Stainless Steel
Plug:	Stainless Steel / Nitrile
Seat Ring:	Brass or Stainless Steel
Trim:	Stainless Steel
Bypass Valve:	Stainless Steel

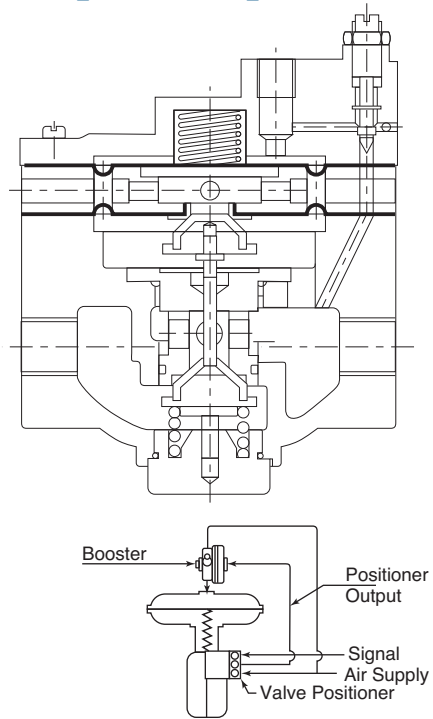
Note: Versions available with EPDM or Silicone elastomers and stainless steel internals. Consult factory for availability.



Type 6000 Dimensions



Principles of Operation



Type 6000 Specifications

Supply Pressure	150 psig (10 bar) maximum. Not to exceed actuator rating.	
Signal Pressure	150 psig (10 bar) maximum.	
Maximum Flow Coefficients (Cv)	Supply	3.0
	Exhaust	3.0
Flow Capacity	200 scfm (6000 nl/min)	
Deadband	Under 0.25 psig (0.017 bar)	
Signal to Output Ratio	1:1 ± 5% of 100 psi output span	
Temperature Limits	-40° to 160° F (-40° to 71° C) standard	
	EPDM Option "R" -40° to 230° F (-40° to 110° C)	
	Silicone Option "H" -60° to 230° F (-51° to 110° C)	
Signal Port	1/4" NPT	
Supply/Output Port	1/2" or 3/4" NPT	
Weight	Aluminum	5 lbs. (2.3 kg)
	Stainless Steel	11.7 lbs (5.3 kg)

Ordering Information

Part Number	In/Out Port	Output Range (psig/bar)	Construction
6000-DA	1/2" NPT	0-150 / 15.0	Aluminum
6000-EA	3/4" NPT	0-150 / 15.0	Aluminum
6000-DS	1/2" NPT	0-150 / 15.0	Stainless Steel
6000-ES	3/4" NPT	0-150 / 15.0	Stainless Steel

Options Add proper letter to end of model number

- R EPDM Elastomers
- H Silicone Elastomers
- X ATEX 94/9/EC II 2 GD

Accessory

Mounting Bracket (304 stainless steel): P/N 436-707-067

Warranty

ControlAir, Inc. products are warranted to be free from defects in materials and workmanship for a period of eighteen months from the date of sale, provided said products are used according to ControlAir, Inc. recommended usages. ControlAir, Inc.'s liability is limited to the repair, purchase price refund, or replacement in kind, at ControlAir, Inc.'s sole option, of any products proved defective. ControlAir, Inc. reserves the right to discontinue manufacture of any products or change products materials, designs or specifications without notice. Note: ControlAir does not assume responsibility for the selection, use, or maintenance of any product. Responsibility for the proper selection, use, and maintenance of any ControlAir product remains solely with the purchaser and end user.



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