



AVB Series

Air Volume Booster



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AVB

Air Volume Booster
with 1/4" - 3/4" port options

The AVB Series is an air volume booster that is mounted between the positioner and actuator. It provides the actuator with a high air flow output, whose pressure corresponds exactly to the signal pressure.

Features

- Delivers high air volume to actuator
- Provides ample air volume flow between positioner and actuator to eliminate over and/or under travel of the control signal
- Provides a tight shut off to reduce a costly air consumption
- Exhaust filters are installed for prevention of contamination by foreign substances from outside
- Standard operating temperature range of -4°F to 175°F
- 1/4", 3/8", 1/2" or 3/4" NPT supply and output port sizes available

Options

- Aluminum Die-Cast or Stainless Steel body
- High temperature : -4°F to 250°F
- Low temperature : -40°F to 175°F
- Supply gauge & 1/2" NPT exhaust port options available for AVB2 and AVB3 series



AVB1 Air Volume Boosters with 1/4" or 3/8" ports provide the actuator with a high output for air flow, which corresponds to the signal pressure.

- 1/4" or 3/8" NPT supply and output ports



AVB-10

AVB

Air Volume Booster
with 1/4" - 3/4" port options



AVB-20

AVB-22

AVB2 Air Volume Boosters with 1/2" port

The AVB-2 series is a higher volume booster relay with bigger ports and more flow capacity to help a large actuator move faster by converting a low flow control signal to the higher flow.

- High Temp (-4°F to 250°F) or Low Temp (-40°F to 175°F) models available
- Options include supply gauge, 1/2" NPT exhaust port or both

AVB3 Air Volume Booster with 3/4" port

The AVB-3 series is a heavy-duty volume booster relay with 3/4" ports and even more flow capacity to help large actuators move fast by converting low flow to high flow.

- High Temp (-4°F to 250°F) or Low Temp (-40°F to 175°F) models available
- Options include supply gauge, 1/2" NPT exhaust port or both



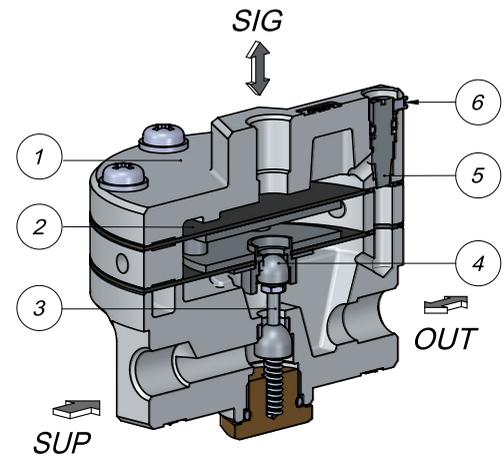
AVB-30

AVB-32

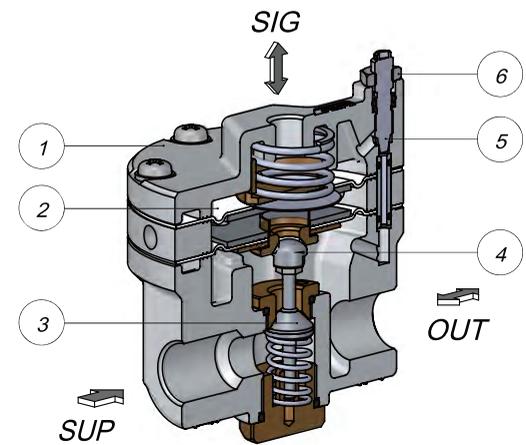
AVB
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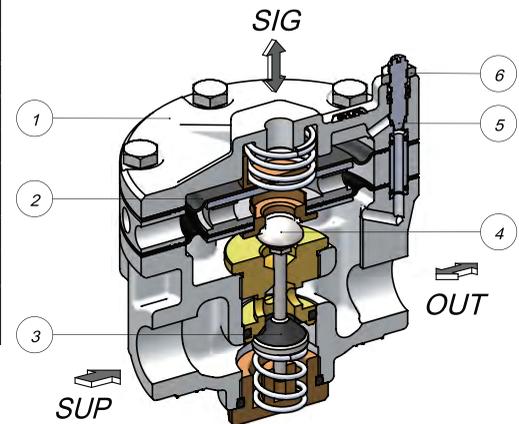
Air Volume Booster
with 1/4" - 3/4" port options



Sectional View of AVB-1



Sectional View of AVB-2



Sectional View of AVB-3

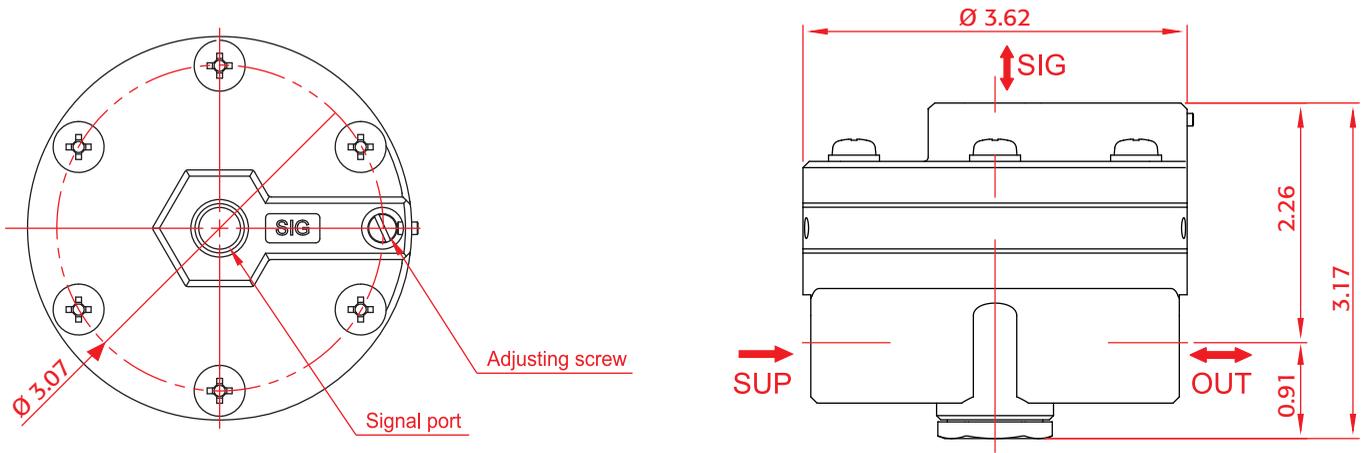
Specifications

MODELS	AVB-10	AVB-12	AVB-20	AVB-22	AVB-30	AVB-32
Materials						
Body	Aluminum die-cast	Stainless Steel 316	Aluminum die-cast	Stainless Steel 316	Aluminum die-cast	Stainless Steel 316
Connecting Port Threads						
Supply (SUP) / Output (OUT)	1/4" NPT or 3/8" NPT	1/4" NPT or 3/8" NPT	1/2" NPT	1/2" NPT	3/4" NPT	3/4" NPT
Signal (SIG)	1/4" NPT					
Conditions of Supply Air						
Supply Air Pressure	150 psi					
Signal Air Pressure (positioner output)	105 psi					
Supply Air Quality acc. to ISO 8573-1	Filtered, compressed dry and non-oiled to meet Class 3					
Closed Loop Control						
Pressure Ratio : signal to output	1 : 1					
Dead Band	2% (0.232 psi)					
Hysteresis	1%					
Linearity	±1% FS					
Flow Cv						
Supply Cv	1.2		3.1		5.1	
Exhaust Cv	1.1		2.4		5.1	
Other Operating Parameters						
Operating Ambient Temperature	-4°F~175°F (standard), -4°F~250°F (high), -40°F~175°F (low)					
Weight	1.23 lbs		2.2 lbs	5.28 lbs	4.4 lbs	9.5 lbs
Protection Class						
Explosion-proof	CE Ex II2 G/D SIL					

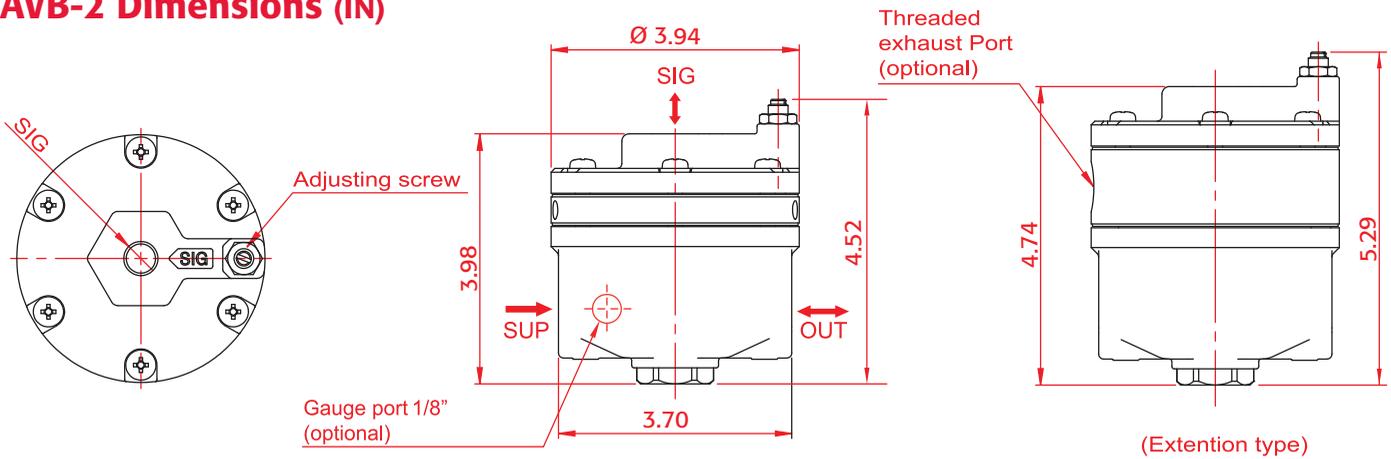
MATERIALS

NO.	DESCRIPTION	AVB-10	AVB-12	AVB-20	AVB-22	AVB-30	AVB-32
1	Body	ALDC 12.1	SS316	ALDC 12.1	SS316	ALDC 12.1	SS316
2	Diaphragm	N.B.R.	N.B.R.	N.B.R.	N.B.R.	N.B.R.	N.B.R.
3	Inlet valve	SS304	SS316	SS304	SS316	SS304	SS316
4	Exhaust valve	SS304	SS316	SS304	SS316	SS304	SS316
5	Adjusting screw	SS304	SS316	SS304	SS316	SS304	SS316
6	Lock nut	SS304	SS316	SS304	SS316	SS304	SS316

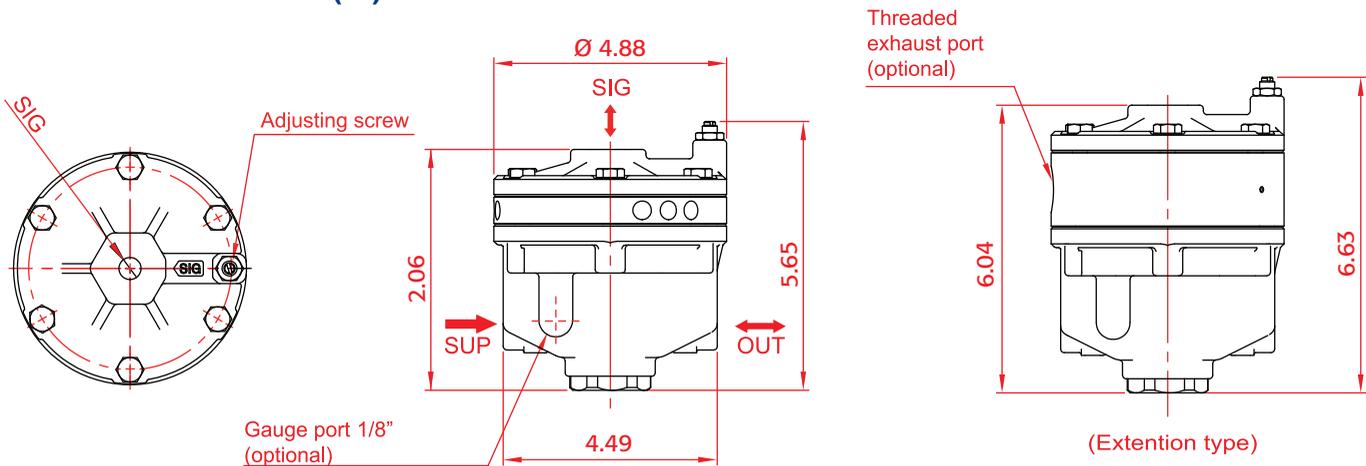
AVB-1 Dimensions (IN)



AVB-2 Dimensions (IN)

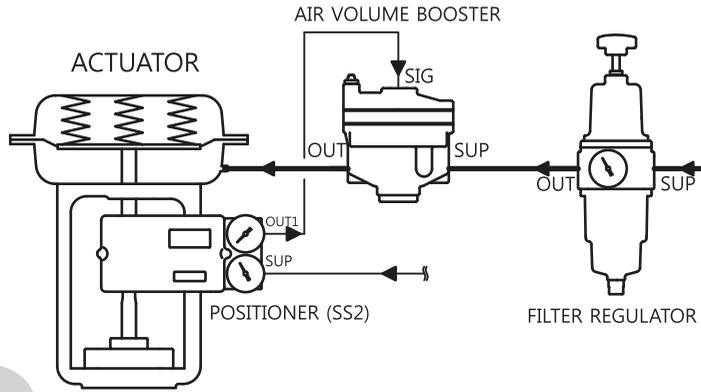


AVB-3 Dimensions (IN)



AVB
SERIES

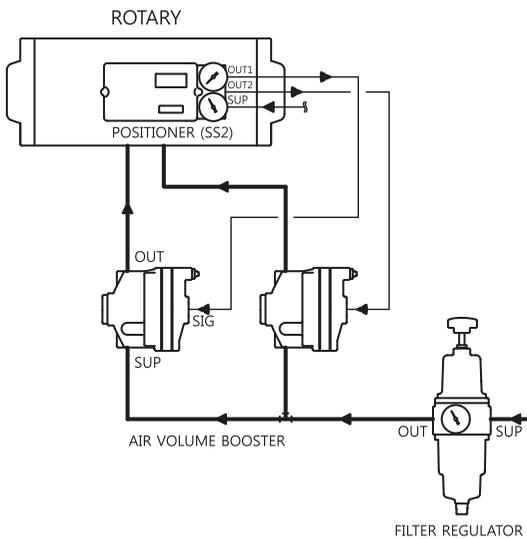
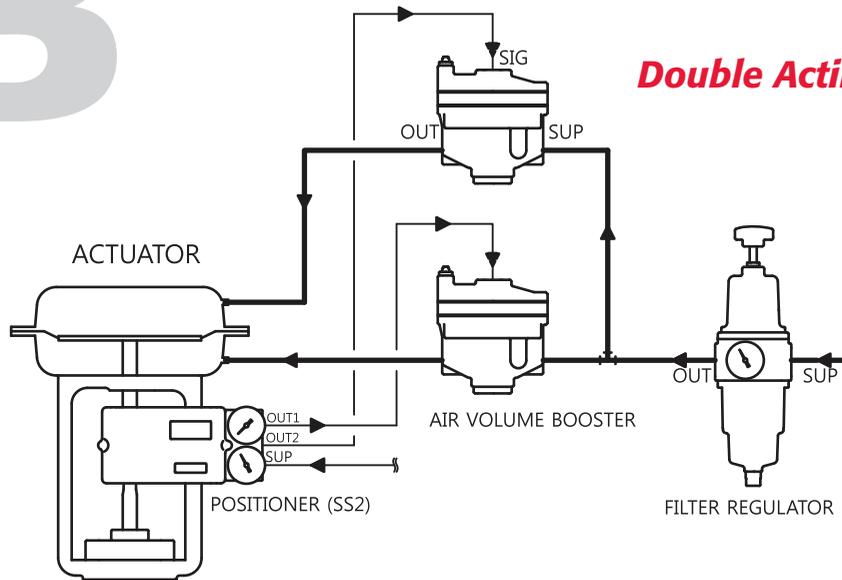
Single Acting



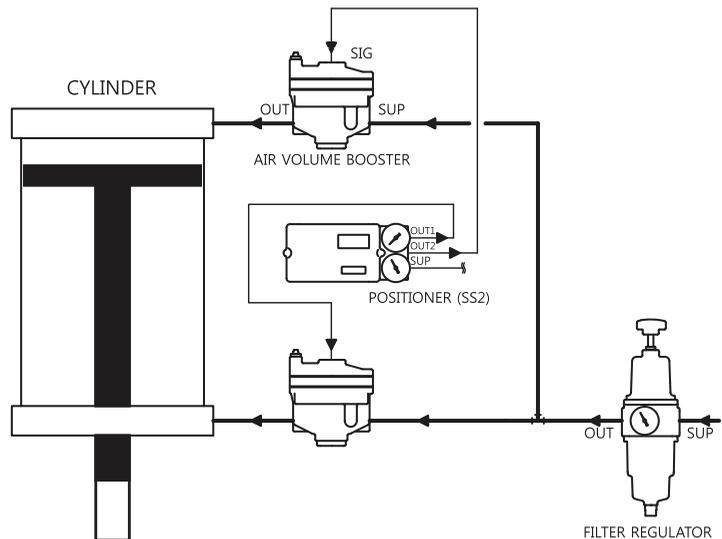
Air Volume Booster
with 1/4" - 3/4" port options

Applications

Double Acting



Rotary Actuator



Cylinder Actuator

AVB

Air Volume Booster
with 1/4" - 3/4" port options

How to Order TRIAC® Air Volume Boosters

Series	
AVB-1	Triac Air Volume Booster
AVB-2	Triac Air Volume Booster
AVB-3	Triac Air Volume Booster

Body Material	
0	Aluminum Die-Cast
2	316 Stainless Steel

Size (NPT)	
0	1/4" (AVB-1 only)
1	3/8" (AVB-1 only)
2	1/2" (AVB-2 only)
3	3/4" (AVB-3 only)

Temperature Range		
0	-4°F to 175°F	Standard
1	-4°F to 250°F	High Temp
2	-40°F to 175°F	Low Temp

Miscellaneous Options (Options n/a on AVB-1 Series)	
Blank	No options (Standard)
A	Supply Gauge
B	1/2" NPT Exhaust Port
C	Both Supply Gauge & 1/2" NPT Exhaust Port



Example: AVB-100-0

