



< AVB-1000 >   II 2 G/D

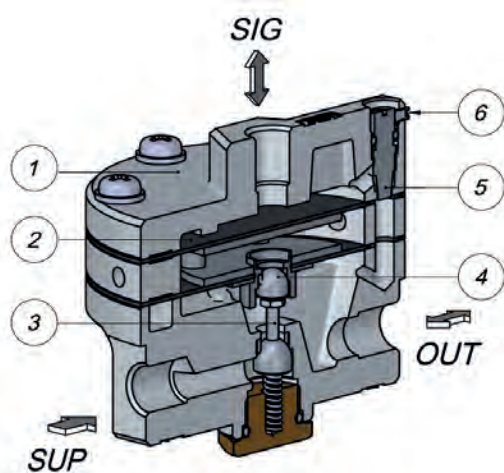
The AVB-1000 series is mounted between the positioner and actuator. It provides the actuator with a high air flow output whose pressure corresponds exactly to the signal pressure.

Features / Design

- 1.- Delivers high air volume to actuator rapidly.
- 2.- Tunes a unit response to eliminate an actuator overshoot or overdamping.
- 3.- Provides a tight shut off to reduce a costly air consumption.
- 4.- Optional 1/4 or 3/8, PT or NPT supply and output ports.

Options

- High temperature : -20°C - +120°C.
- Low temperature : -40°C - +80°C.

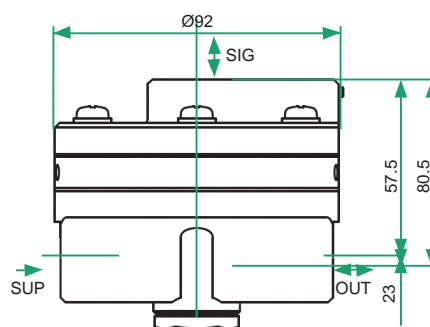
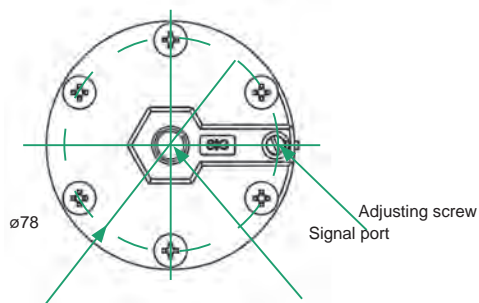


< Sectional View of AVB-1000 >

Material List

No.	DESCRIPTION	AVB-1000
1	Body	ALDC 12.1
2	Diaphragm	N.B.R
3	Inlet valve	SS304
4	Exhaust valve	SS304
5	Adjusting screw	SS304
6	Lock screw	SS304

Dimensions



Specifications

<i>MODEL</i>	<i>AVB-1000</i>
Conditions of Supply Air	
Supply Air Pressure	Max. 10 bar (150 psi)
Signal Air Pressure (positioner output)	Max. 7 bar (105 psi)
Supply Air Quality acc. to ISO 8573-1	Filtered, compressed dry and non-oiled to meet Class 3
<i>Closed Loop Control</i>	
Pressure Ratio: signal to output	1 : 1
Dead Band	2% (0.016 bar)
Hysteresis	1%
Linearity	±1% F.S
FlowCv	
Supply Cv	1.2
Exhaust Cv	1.1
<i>Other Operating Parameters</i>	
Operating Ambient Temperature	-20 ~ +80°C (std), -20 ~ +120°C (high), -40 ~ +80°C (low)
Weight	0.56 kg
<i>Connecting Port Threads</i>	
Supply (SUP) / Output (OUT)	PT 1/4, NPT 1/4, PT 3/8, NPT 3/8
Signal (SIG)	PT 1/4 or NPT 1/4
<i>Materials</i>	
Body	Aluminum die-cast
Diaphragm	NBR
O-rings	NBR
<i>Protection Class</i>	
Explosion-proof	CE Ex II2 G/D

How to Order

AVB-1 – Body Material — Port Size Operating Temp.

<i>DESCRIPTION</i>	<i>CODE</i>	<i>DESCRIPTION</i>	<i>CODE</i>
Body Material:	0 Aluminum die-east	Operating Temperature:	0 -20 ~ +80 °C (standard)
Port Size:	0 PT (Re) 1/4		1 -20 ~ +120 °C (high temp.)
	1 NPT 1/4		2 -40 ~ +80 °C (low temp.)
	2 PT (Re) 3/8		
	3 NPT 3/8		



< AVB-2000 > CE Ex II2 G/D

The AVB-2000 series is the heavy-duty volume booster relays with bigger ports and a more flow capacity to help a large actuator move faster by converting a low flow control signal to the higher flow.

Features / Design

- 1.- Delivers a high air volume for a fast actuator movement.
- 2.- Tunes a unit response to eliminate an actuator overshoot or overdamping.
- 3.- Provides a tight shut off to reduce a costly air consumption.
- 4.- Available in aluminum or stainless steel 316.
- 5.- Exhaust filters are installed for prevention of contamination by foreign substances from outside.

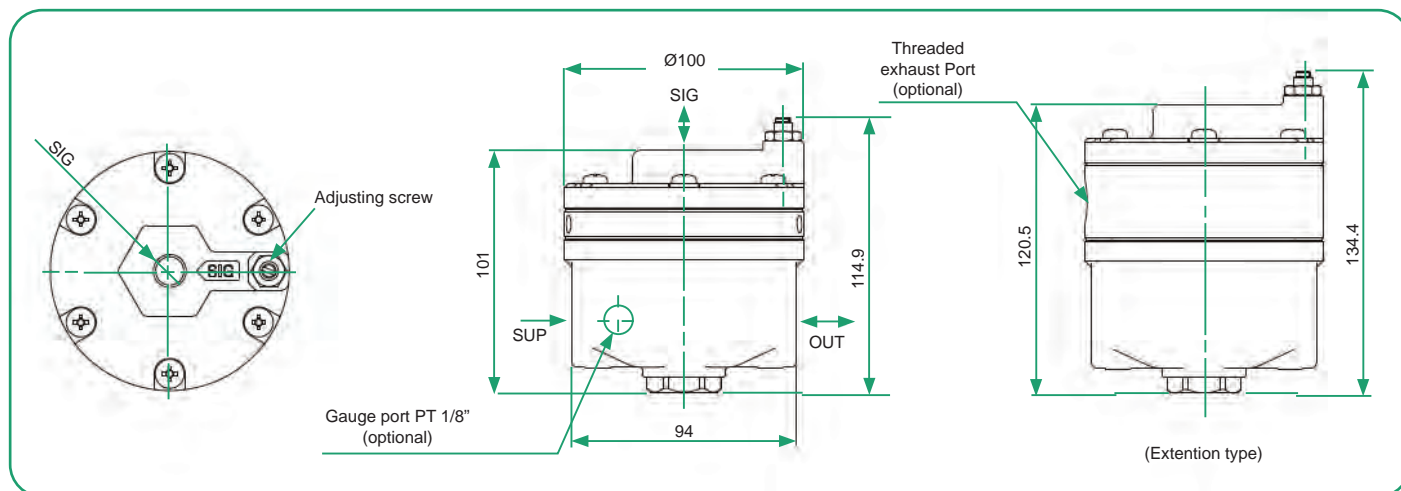


< AVB-2100 > CE Ex II2 G/D

Options

- NPT 1/2 threaded exhaust ports.
- Supply pressure gauge port.
- High temperature: -20°C - +120°C.
- Low temperature : -40°C - +80°C.

Dimensions

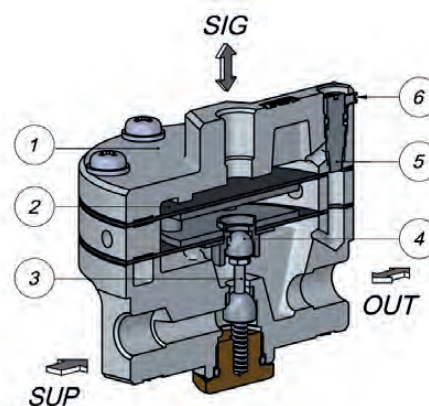


Specifications

MODEL	AVB-2000	AVB-2100
Conditions of Supply Air		
Supply Air Pressure	Max. 10 bar (150 psi)	
Signal Air Pressure (positioner output)	Max. 7 bar (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% (0.016 bar)	
Hysteresis	1%	
Linearity	±1% F.S	
Flow Cv		
Supply Cv	3.1	
Exhaust Cv	2.4	
Other Operating Parameters		
Operating Ambient Temperature	-20 ~ +80°C (std), -20 ~ +120°C (high), -40 ~ +80°C (low)	
Weight	1.0 kg	2.4kg
Connecting Port Threads		
Supply (SUP) / Output (OUT)	PT 1/2 or NPT 1/2	NPT 1/2
Signal (SIG)	PT 1/4 or NPT 1/4	NPT 1/4
Materials		
Body	Aluminum die-cast	Stainless steel 316
Diaphragm	NBR (std)	
O-rings	NBR (std)	
Protection Class		
Explosion-proof	CE Ex II2 G/D	

Material List

No.	DESCRIPTION	AVB-2000	AVB-2100
1	Body	ALDC 12.1	SS316
2	Diaphragm	N.B.R	N.B.R
3	Inlet valve	SS304	SS316
4	Exhaust valve	SS304	SS316
5	Adjusting screw	SS304	SS316
6	Lock screw	SS304	SS316



< Sectional View of AVB-2000 >

How to Order

AVB-2- Body Material Port Size Operating Temp. Options

DESCRIPTION	CODE	DESCRIPTION	CODE
Body Material:	0 Aluminum die-east 1 Stainless steel 316	Operating Temperature:	0 -20 ~ +80 °C (standard) 1 -20 ~ +120 °C (high temp.) 2 -40 ~ +80 °C (low temp.)
Port Size:	0 PT (Re) 1/2 1 NPT 1/2	Options:	N None A Supply pressure gauge port B NPT 1/2 threaded exhaust port C A+B



< AVB-3000 > II 2 G/D



< AVB-3100 > II 2 G/D

The AVB-3000 series is the heavy-duty volume booster relays with bigger ports and a more flow capacity to help a large actuator move faster by converting a low flow control signal to the higher flow.

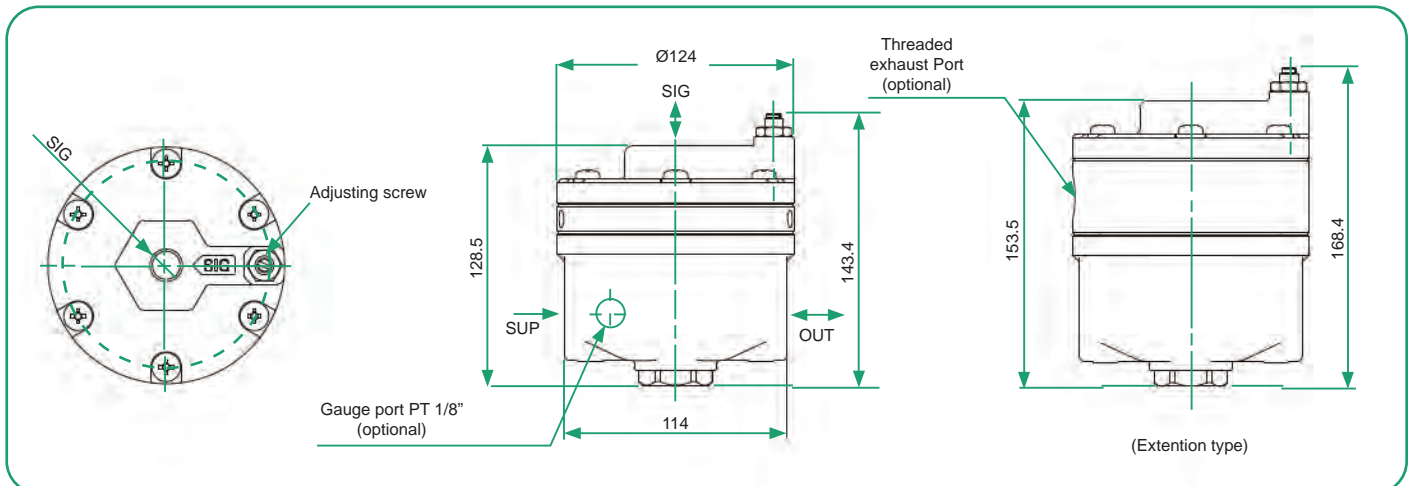
Features / Design

- 1.- Delivers a high air volume for a fast actuator movement.
- 2.- Tunes a unit response to eliminate an actuator overshoot or overdamping.
- 3.- Provides a tight shut off to reduce a costly air consumption.
- 4.- Available in aluminum or stainless steel 316.
- 5.- Exhaust filters are installed for prevention of contamination by foreign substances from outside.

Options

- NPT 1/2 threaded exhaust ports.
- Supply pressure gauge port.
- High temperature: -20°C - +120°C.
- Low temperature : -40°C - +80°C.

Dimensions

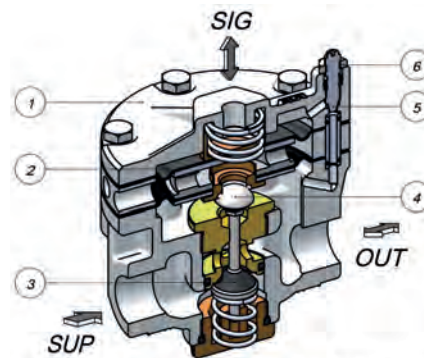


Material List

Model	AVB-3000	AVB-3100
Conditions of Supply Air		
Supply Air Pressure	Max. 10 bar (150 psi)	
Signal Air Pressure (positioner output)	Max. 7 bar (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% (0.016 bar)	
Hysteresis	1%	
Linearity	±1% F.S	
FlowCv		
Supply Cv	5.1	
Exhaust Cv	5.4	
Other Operating Parameters		
Operating Ambient Temperature	-20 ~ +80°C (std), -20 ~ +120°C (high), -40 ~ +80°C (low)	
Weight	2.0 kg	4.3 kg
Connecting Port Threads		
Supply (SUP) / Output (OUT)	PT 1/2 or NPT 3/4	NPT 3/4
Signal (SIG)	PT 1/4 or NPT 1/4	NPT 1/4
Materials		
Body	Aluminum die-cast	Stainless steel 316
Diaphragm	NBR (std)	
O-rings	NBR (std)	
Protection Class		
Explosion-proof	CE Ex II 2 G/D	

Material List

No.	DESCRIPTION	AVB-3000	AVB-3100
1	Body	ALDC 12.1	SS316
2	Diaphragm	N.B.R	N.B.R
3	Inlet valve	SS304	SS316
4	Exhaust valve	SS304	SS316
5	Adjusting screw	SS304	SS316
6	Lock screw	SS304	SS316



< Sectional View of AVB-3000 >

How to Order

AVB-3- Body Material Port Size Operating Temp. Options

DESCRIPTION	CODE	DESCRIPTION	CODE
Body Material:	0 Aluminum die-east 1 Stainless steel 316	Operating Temperature:	0 -20 ~ +80 °C (standard) 1 -20 ~ +120 °C (high temp.) 2 -40 ~ +80 °C (low temp.)
Port Size:	0 PT (Re) 3/4 1 NPT 3/4	Options:	N None A Supply pressure gauge port B NPT 1/2 threaded exhaust port C A+B

