

PNEUMATIC ACTUATOR ACCESSORIES



< AVB-3000 > CE Ex II2 G/D



< AVB-3100 > CE Ex II2 G/D

Overview



Volume boosters mount between a positioner and the actuator and provide the actuator with a high air flow which corresponds exactly to the positioner signal pressure. Volume boosters can increase the speed of operation of the actuator or in some cases allow a smaller actuator to be used.

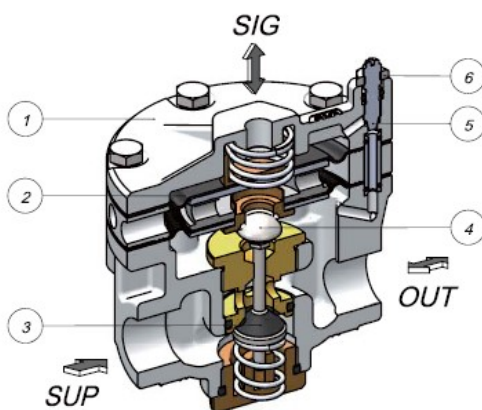
Features

- > SIL 3 rated
- > Delivers fast, high air volume to the actuator
- > Can eliminate actuator overshoot or damping
- > Tight shut off reduces air consumption
- > ATEX certified flameproof Ex d II2 G/D
- > Exhaust filters supplied

Options

- > For high temperature applications -20C to +120C
- > For low temperature applications -40C to +80C
- > Supply pressure gauge port
- > 1/2" NPT exhaust ports

Sectional View

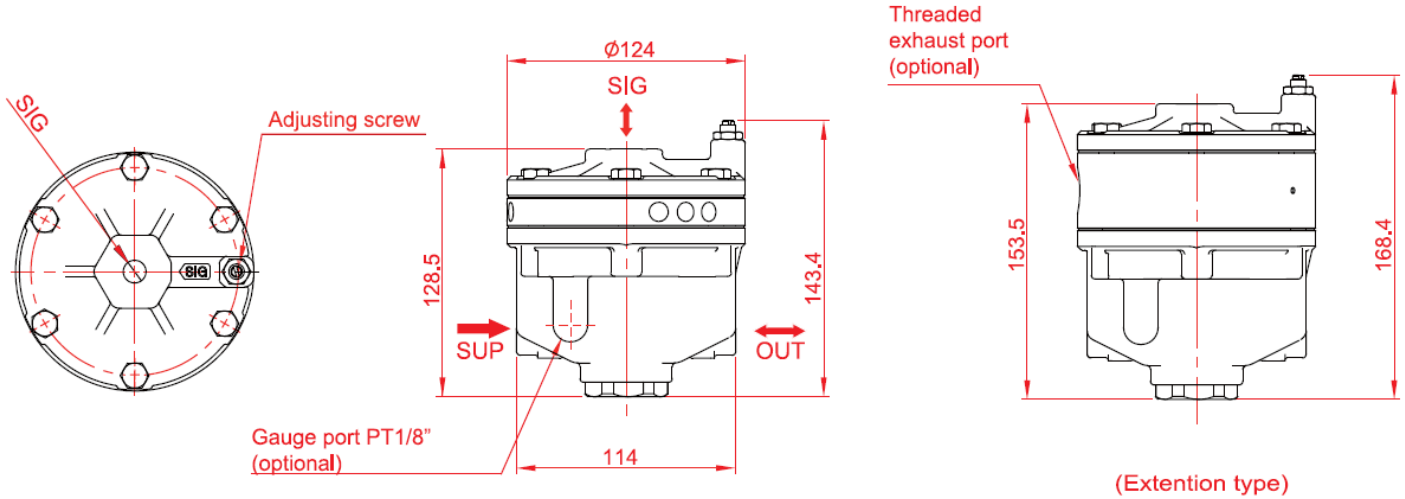


| Part | Detail | AVB-3000 | AVB-3100 |
|------|-----------------|---------------|---------------|
| 1 | Body | Aluminium | 316 Stainless |
| 2 | Diaphragm | NBR | NBR |
| 3 | Inlet valve | 304 Stainless | 316 Stainless |
| 4 | Exhaust valve | 304 Stainless | 316 Stainless |
| 5 | Adjusting screw | 304 Stainless | 316 Stainless |
| 6 | Lock screw | 304 Stainless | 316 Stainless |

Ordering

| Body Material | Port Size | Working Temperature Range | Options |
|-------------------------|--------------|---------------------------|-----------------------|
| 0 : Die cast aluminium | 0 : 3/4" BSP | 0 : -20 to +80C [Std] | N : None |
| 1 : 316 Stainless Steel | 1 : 3/4" NPT | 1 : -20 to +120C [High] | A : Supply gauge port |
| | | 2 : -40 to +80C [Low] | B : 1/2" NPT Exhaust |
| | | | C : A + B |

Dimensions

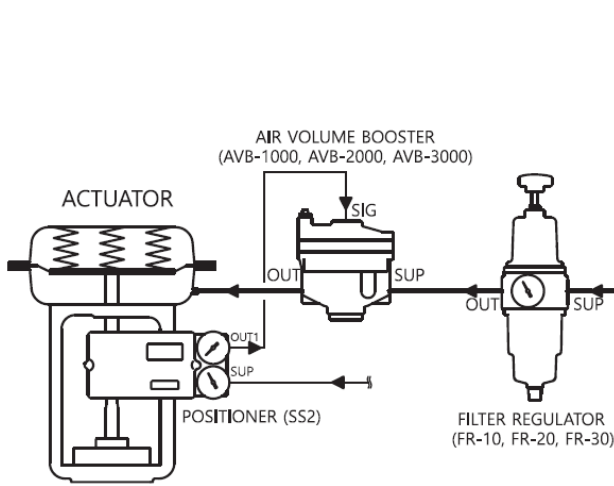


Specifications

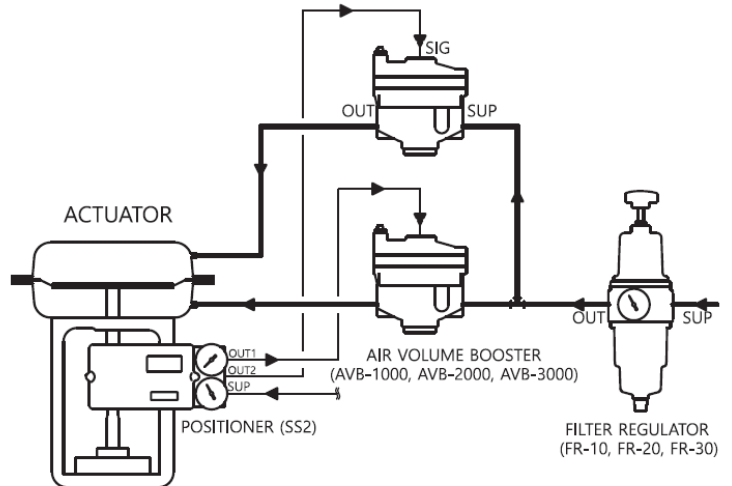
| Model | AVB-3000 | AVB-3100 |
|---|---|---------------------|
| Supply air pressure | Max 10 bar Filtered, dry , oil-free compressed air | |
| Signal air pressure (positioner output) | Max 7 bar Filtered, dry , oil-free compressed air | |
| Pressure ratio (signal to output) | 1:1 | |
| Deadband | 2% (0.016 bar) | |
| Hysteresis / Linearity | 1% / ±1% FS | |
| Explosion proof class/ rating | Ex II2 G/D CE IP66 | |
| Operating ambient temperature | [Std] -20 to +80C [High] -20 to +120C [Low] -40 to +80C | |
| Supply Cv / Exhaust Cv | 5.1 / 5.1 | |
| Mounting | Pipe to pipe, screwed female (PT or NPT) | |
| Supply / Output air connections | 3/4" BSP or NPT | 3/4" NPT |
| Signal air connection | PT 1/4" or NPT 1/4" | 1/4" NPT |
| Valve body material | Aluminium | 316 Stainless steel |
| Diaphragm | NBR | NBR |
| O Rings | NBR | NBR |
| Weight | 2.0Kg | 4.3Kg |

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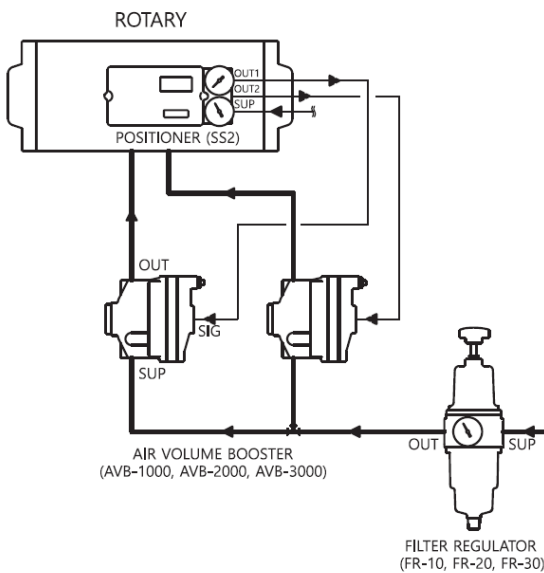
Typical Applications



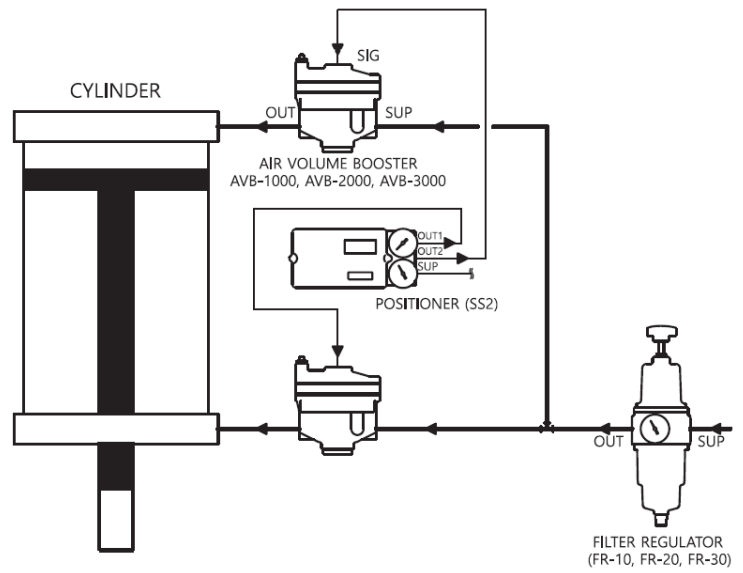
SINGLE ACTING



DOUBLE ACTING



ROTARY ACTUATOR



CYLINDER ACTUATOR