



# AV | Volume booster



## Product description

The Volume Booster (model **AV**), available sizes 1/4" and 3/4", is designed to meet high speed control valve applications. It produces a high volume boosting action and contains an integral stabilizing by-pass valve controlled by a screwdriver adjustment in the body. By opening this valve it is possible improve the stability of the pneumatic circuit made up of a positioner, volume booster(s) and actuator.

## Advantages

- **Safety - more sensibility - more accuracy**  
Regulation screw is not ejectable by internal air pressure.  
Regulation screw is accurate and lockable.
- **Environment protection increase**  
Exhaust protected by double differentiated mesh.
- **Cost saving**  
Suitable for one air connection to feed both volume boosters on a double acting actuator.
- **Design advantages**  
Less leakage → More repeatability  
Using conical plug seat with controlled deformation for elastomeric air-tight.

## Key features

### Suitable for

- Standard, Offshore, Sandstorm, copper free ambient condition.
- Single and double acting actuators.
- Low and high ambient temperature.

**Exclusive** manifold mounting system. It is a special **STI** application to connect our accessories. Fittings or nipples are not necessary as the connection is achieved using machined connection faces with sealing o'ring. This system saves time for assembly, reduces cost on items such as fittings, reducing inventory and the shortened dimensions save space.

## Technical specifications - Model AV 1/4"



AV 1/4" ALUMINUM  
Manifold mounting



AV 1/4" STAINLESS STEEL 316  
Manifold mounting



AV 1/4" ALUMINUM

### Housing materials

- Painted RAL 7001 aluminum
- Stainless steel 316

### Operating temperature\*

- -20°C / +70°C
- -40°C / +70°C available on request
- -20°C / +85°C available on request

### Operating pressure

- P min = 3 bar
- P max = 7 bar
- Design pressure = 10 bar

### Pilot signal connection

- 1/4" NPT

### Options

- Collected exhaust
- Silencer

### CV Max

- Inlet = 1
- Outlet = 1

### Diaphragm material

- Elastomeric fabric reinforced

### Output connections

- Manifold mounting
- 1/4" NPT

### Feeding connections

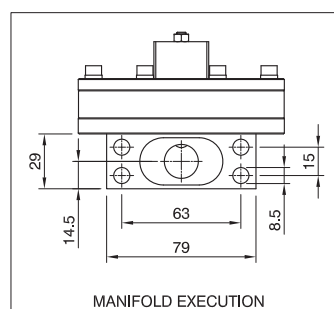
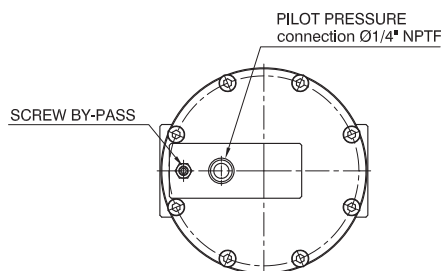
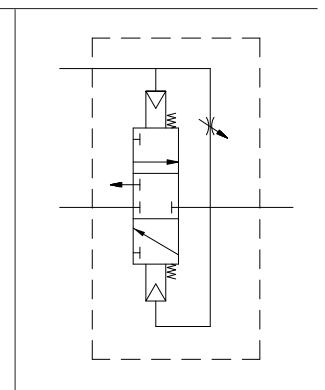
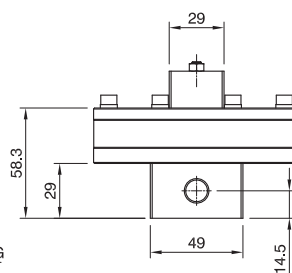
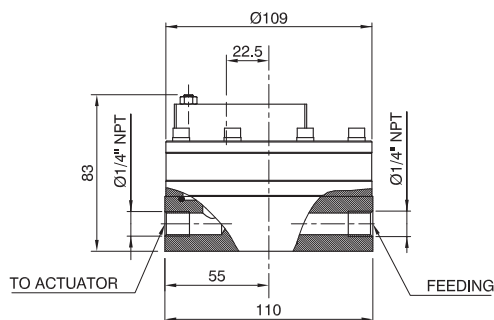
- 1/4" NPT

### Weight

- Aluminum = 1,2 kg
- Stainless steel 316 = 3,3 kg

(\*) Lower or higher temperature available on request.

## Dimensional drawing



## Technical specifications - Model AV 3/4"



AV 3/4"  
ALUMINUM



AV 3/4"  
ALUMINUM  
Manifold mounting

### Housing materials

- Painted RAL 7001 aluminum
- Stainless steel 316

### Operating temperature\*

- -20°C / +70°C
- -40°C / +70°C available on request
- -20°C / +85°C available on request

### Operating pressure

- P min = 3 bar
- P max = 7 bar
- Design pressure = 10 bar

### Pilot signal connection

- 1/4" NPT

### Options

- Collected exhaust
- Silencer

### CV Max

- Inlet = 4,5
- Outlet = 3

### Diaphragm material

- Elastomeric fabric reinforced

### Output connections

- Manifold mounting
- 3/4" NPT

### Feeding connections

- 3/4" NPT

### Weight

- Aluminum = 4 kg
- Stainless steel 316 = 10,3 kg

(\*) Lower or higher temperature available on request.

## Dimensional drawing

