



Actual Size

# Humphrey®

*Build on Our Experience.*

Corrosion Resistant  
316 Stainless Steel

Chemical-/Temperature-  
Tolerant Viton®

## SS250A Air Valve

### Need a Valve That Can Last?

Then you need Humphrey's **SS250A Air Valve**, featuring our exclusive double diaphragm design in 2-way and 3-way models only. Its stainless steel body is perfect for use where corrosion, chemical, and temperature resistance are a primary consideration.

#### Features:

- Simple and Reliable
- Versatile
- Pressure operated
- Spring and pressure returned
- No O-rings
- No sliding seals
- No lubrication required
- No sticking
- Tolerates clean/dry or dirty/wet air
- Short stroke (.060")
- Fast response
- 1/4-inch NPT
- Full 1/4-inch orifice
- High air flow
- Compact size
- Mounts in any position

#### Applications:

- Exterior environments compatible with valve materials, specs and design
- Offshore
- Onshore
- Process control
- Instrumentation
- Panel work
- Non-lubricated or lubricated applications
- Ships
- Trucks
- Other vehicles
- Clean rooms
- Processing
- Washdown areas
- Infrequent and/or rapid cycling applications

## Specifications

### MEDIA:

Air or inert gasses

### PRESSURE RANGE:

Normally closed..... 0-125 PSIG

Normally open.....0-60 PSIG

Optimum cycle life..... to 60 PSIG

### TEMPERATURE RANGE:

0°F to 400°F (-17.7°C to 204°C)

### AIR FLOW (SCFM to atmosphere):

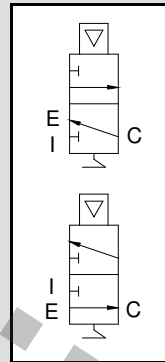
Multiply PSIG x 0.6

### OPERATING SPEEDS:

To 600 CPM

WEIGHT.....11.5 OZ

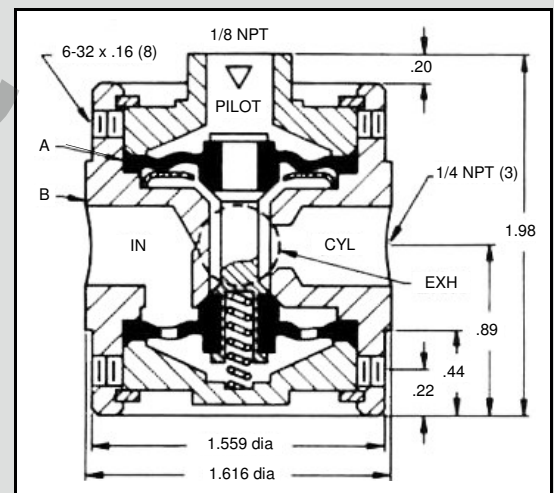
## 2-/3-Way



Normally Closed-  
Connect pressure source to "IN."  
For 2-Way, plug "EXH" port.

Normally Open-  
Connect pressure source to "EXH."  
("IN" port becomes exhaust.)  
For 2-Way, plug "IN" port.

| Response and Fill/Exhaust Times (seconds)<br>at 100 PSIG/72°F |                                     |      |      |      |                                 |                   |                                  |                   |
|---------------------------------------------------------------|-------------------------------------|------|------|------|---------------------------------|-------------------|----------------------------------|-------------------|
| SS250A                                                        | Length of Pilot Line<br>. 170 I. D. |      |      |      | 10 Inch <sup>3</sup><br>Chamber |                   | 100 Inch <sup>3</sup><br>Chamber |                   |
|                                                               | 5'                                  | 10'  | 20'  | 30'  | Fill<br>0-80                    | Exhaust<br>100-20 | Fill<br>0-80                     | Exhaust<br>100-20 |
| Open                                                          | .011                                | .021 | .046 | .072 | .038                            | .076              | .330                             | .720              |
| Close                                                         | .018                                | .035 | .072 | .118 |                                 |                   |                                  |                   |



| Minimum Pilot Pressure<br>Requirements<br>(PSIG) |    |    |     |     |
|--------------------------------------------------|----|----|-----|-----|
| Valved<br>Pressure                               | 15 | 60 | 100 | 120 |
| Normally<br>Closed                               | 18 | 40 | 75  | 100 |
| Normally<br>Open                                 | 20 | 57 | NA  | NA  |

### Materials:

- A. Viton® "A" 70 ± 5 durometer Shore "A" scale
- B. 316 Stainless Steel, except 302 Stainless Steel (passivated) spring and PH-7Mo Stainless Steel retaining rings

### Mounting Base:

Part No. 8-20A Order separately.  
2.250" sq. w/four .218 dia. holes on 1.593 centers.  
Attach to valve over 1.559 dia.  
Flat black painted mild steel w/four zinc plated #6-32 screws.