

# Two-Position Three-Way Air Valve

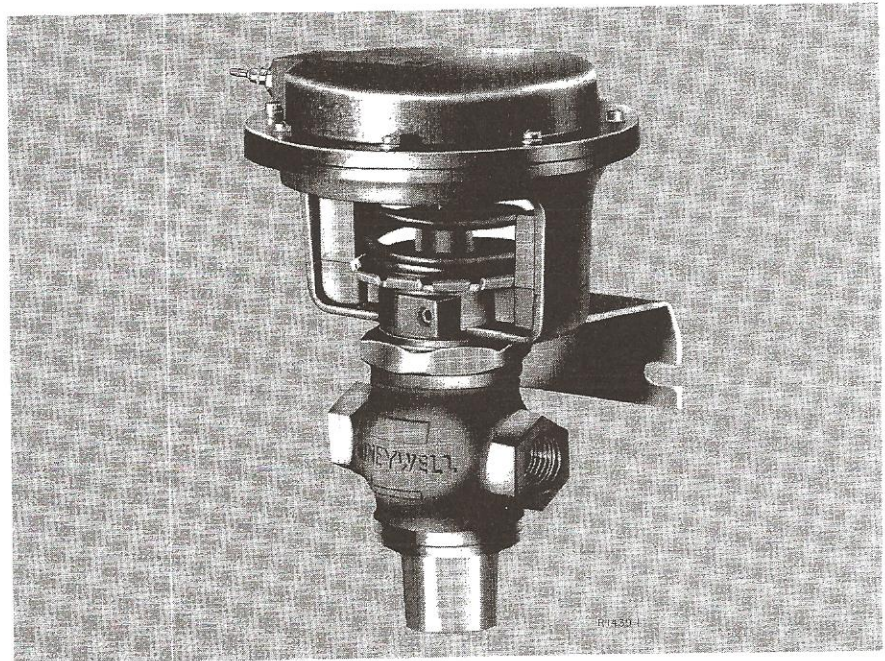
**MODEL NUMBER VP519C**

## General

The VP519C operates as an air switch in large Day-Nite or Summer-Winter switch-over systems, providing two-position action.

## Features

- Spring-loaded, self-adjusting Teflon cone packing.
- Removable composition upper and lower seats.
- Operator rotates on bonnet, permitting alignment of air connection with control air or relay piping.
- Right-angle mounting bracket permits mounting on a wall or panel.



## Specifications

### DIMENSIONS

See Fig. 1 and Table 1.

Table 1. Approximate A and B Dimensions in Inches (Millimeters).

Valve Size	A	B
1/2 in.	3-1/8 (79)	2-3/4 (70)
3/4 in.	3-3/8 (86)	2-19/32 (66)

### BODY

#### NOMINAL BODY RATING

150 lb/in<sup>2</sup> (1034 kPa) maximum.

#### CONNECTIONS

1/2 in. NPT for 1/2 in. valve.

3/4 in. NPT for 3/4 in. valve.

#### DISCS

Removable composition (upper and lower). Refer to Table 2 for disc limitations.

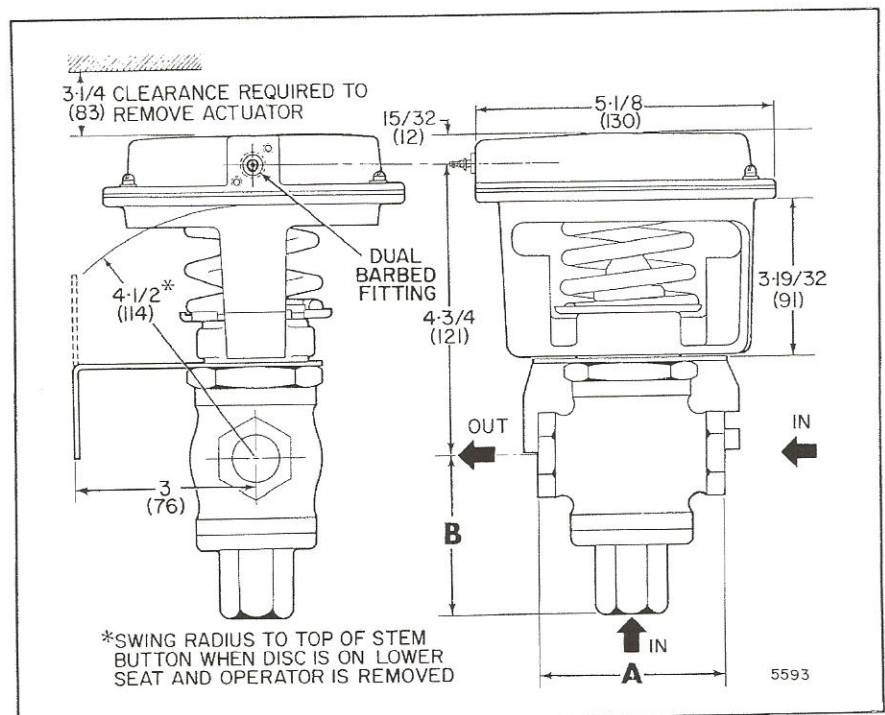


FIG. 1. VP519C APPROXIMATE DIMENSIONS IN INCHES (MILLIMETERS) SEE TABLE 1 FOR A AND B DIMENSIONS



**SEATS**

Upper Seat: Integral in bronze body.  
Lower Seat: Integral in lower brass inlet.

**FLOW CHARACTERISTIC**

Two-position.

**OPERATOR**

**DIAPHRAGM**

Neoprene rubber.

**MAXIMUM SAFE AIR PRESSURE**

25 lb/in<sup>2</sup> (172 kPa).

**MAXIMUM AMBIENT TEMPERATURE**

160 F (71 C).

**OPERATING RANGE**

6 to 9 lb/in<sup>2</sup> (41 to 62 kPa), non-adjustable.

**STARTING POINT**

Non-adjustable.

**CONNECTIONS**

Dual barbed connection for 5/32 in. (4 mm) or 1/4 in. (6 mm) plastic tubing.

**CLOSE-OFF RATINGS AT VARIOUS AIR PRESSURES**

See Fig. 2.

**WHEN ORDERING, SPECIFY**

Valve (pipe) size.

Table 2. Body Specifications.

Valve Size	Cv	Travel in. (mm)	Packing Limitations			Disc Limitations		
			Temp Limits of Agent		Press. Limits of Agent lb/in <sup>2</sup> (kPa)	Temp. Limits of Agent		Max. Press. Differential lb/in <sup>2</sup> (kPa)
			Max. F (C)	Min. F (C)		Max. F (C)	Min. F (C)	
1/2 in.	5.5	1/4 (6)	337 (169)	40 (4)	150 (1034)	115 (46)	35 (2)	75 (517)
3/4 in.	7.5	9/32 (7)						

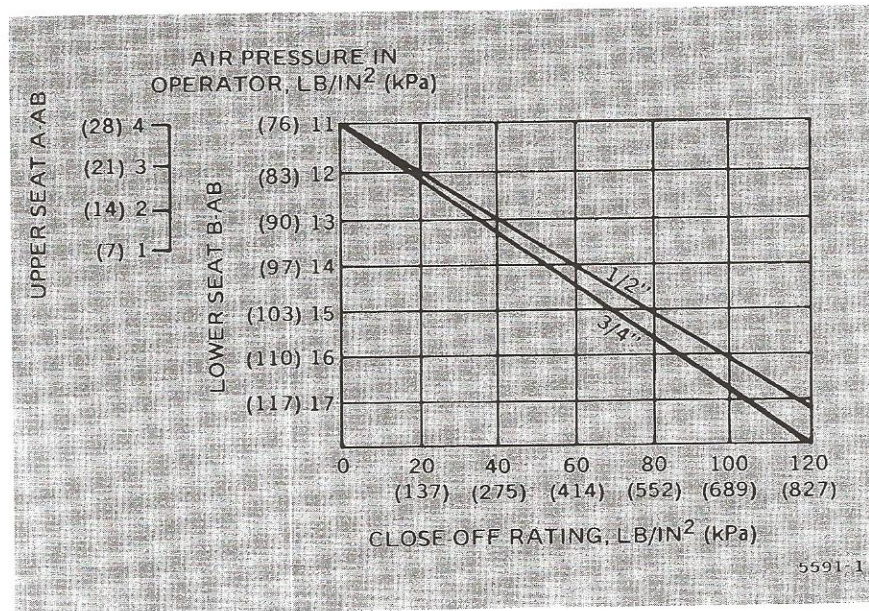


FIG. 2. MAXIMUM DIFFERENCE IN PRESSURE BETWEEN OUTLET AND INLET

**Typical Operation**

With 0 lb/in<sup>2</sup> (0 kPa) pilot pressure, Port AB is open to Port B and closed to Port A, furnishing 18 lb/in<sup>2</sup> (124 kPa) supply pressure to the system. With 13 lb/in<sup>2</sup> (90 kPa) pilot pressure, Port AB is open to Port A and closed to Port B, furnishing 13 lb/in<sup>2</sup> (90 kPa) supply pressure to the system (Fig. 3).

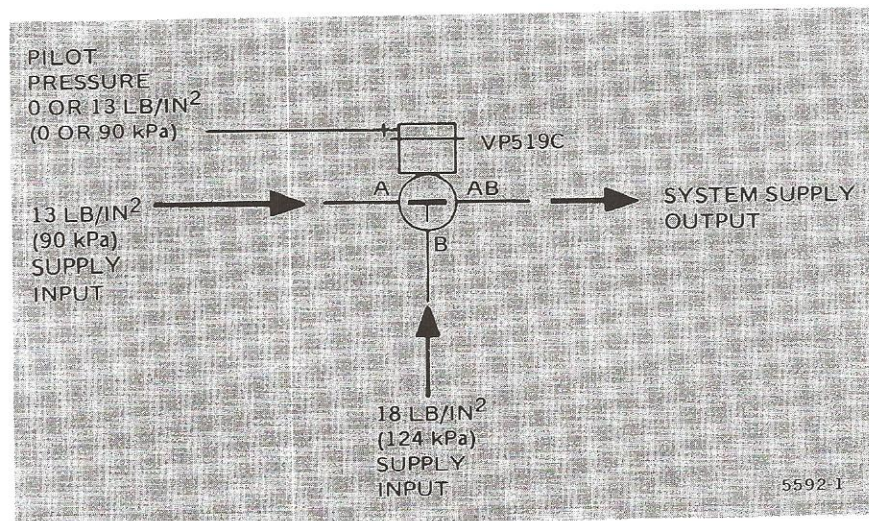


FIG. 3. VP519C TYPICAL OPERATION

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