

# SV74

## 2-Way Normally Closed Diaphragm Isolation Valve



Valcor Engineering Corporation



### DESCRIPTION

The SV74 series 2-way normally closed miniature diaphragm isolation valves provide high purity isolation of the media from the valve mechanism by excluding all metal components from the fluid path. Only PTFE or PEEK are in contact with the media. This design enables these valves to handle extremely corrosive or high purity liquids and gases without breaking down or contaminating the purity of the media. These valves are direct acting, and do not require system pressure to operate. They can control pressure and vacuum. Their compact size, low weight and low power coils allow these valves to be used portable and benchtop instruments.

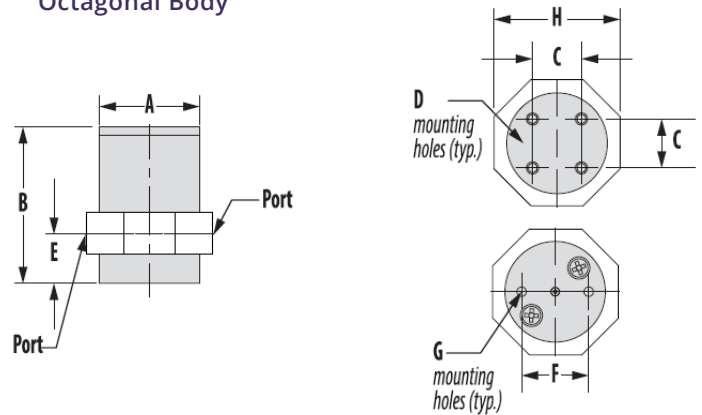
### APPLICATION

The SV74 series are designed for analytical and medical instruments requiring the total isolation of the media from the valve mechanism. Low internal volume makes purging and sterilization between media batch changes fast and efficient. Applications include: blood analyzers and packaging equipment, analytical and medical instruments and equipment, clinical instruments, reagent and diluent dispensers, and printing inks, dyes, and colorants.

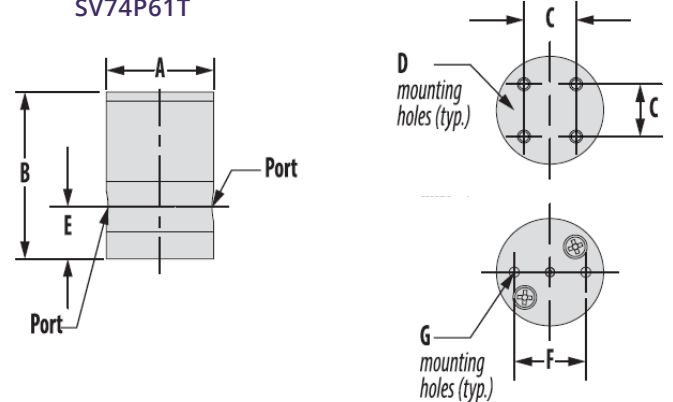
### FEATURES

- Low power consumption is ideal for portable battery powered instruments
- 30 PSIG max pressure, optional 100 PSIG available
- 28" Hg vacuum
- Low internal volume
- Bi-Directional Flow capability
- Low power 12 and 24 VDC coils rated for continuous duty
- 1/4-28 zero dead volume ports
- Convenient panel mounting holes in solenoid
- Mountable in any orientation
- Fully customizable for your application

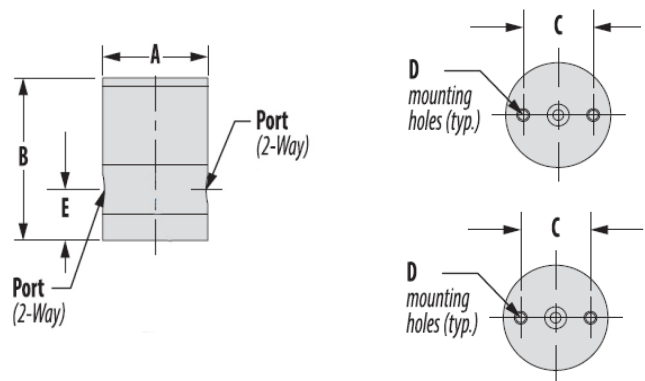
#### Octagonal Body



#### Round Body SV74P61T



#### Round Body SV74P25T, SV74P60T-R



Custom designs are our specialty. Contact us today to see how we can help on your next project.

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### Valve Parts in Contact with Fluid

|           |      |
|-----------|------|
| Body      | PTFE |
| Diaphragm | PTFE |

### Other Parts

|              |                     |
|--------------|---------------------|
| Armature     | 430F SS             |
| Spring       | 303 SS              |
| Coil Housing | Nickel Plated Steel |
| Base Plate   | Nickel Plated Steel |

Body is also available in PEEK and PCTFE. Consult factory for availability of specific constructions.

### Envelope Dimensions

| Model Number (Round) | A (in.) | B (in.) | C     | D     | E     | F     | G     | H   |
|----------------------|---------|---------|-------|-------|-------|-------|-------|-----|
| SV74P61T             | 0.75    | 1.155   | 0.5   | #2-56 | 0.363 | 0.50  | #2-56 | N/A |
| SV74P25T             | 1.00    | 1.488   | 0.486 | #4-40 | 0.45  | 0.687 | #4-40 | N/A |
| SV74P60T-R           | 1.25    | 1.863   | 0.884 | #4-40 | 0.5   | 0.884 | #4-40 | N/A |

| Model Number (Octagonal) | A (in.) | B (in.) | C     | D     | E     | F     | G     | H    |
|--------------------------|---------|---------|-------|-------|-------|-------|-------|------|
| SV74P60T                 | 1.25    | 1.863   | 0.625 | #4-40 | 0.5   | 0.844 | #4-40 | 1.5  |
| SV74P48T                 | 1.5     | 2.088   | 0.796 | #4-40 | 0.562 | 1.125 | #4-40 | 1.75 |

### Specifications

| Port Size                   | Orifice Size (ins.) | Max. Pressure (PSI) |                 | Model Number | Voltage | Wattage | Internal Volume (µl) |
|-----------------------------|---------------------|---------------------|-----------------|--------------|---------|---------|----------------------|
|                             |                     | Gas & Liquid        | Vacuum (in. Hg) |              |         |         |                      |
| <b>SV74 Normally Closed</b> |                     |                     |                 |              |         |         |                      |
| 10-32                       | 0.040"              | 30                  | 28              | SV74P61T-1   | 12 VDC  | 1.0     | 12                   |
| 1/4-28                      | 0.062"              | 30                  | 28              | SV74P25T-1   | 12 VDC  | 1.5     | 58                   |
| 1/4-28                      | 0.095"              | 30                  | 28              | SV74P60T-1** | 12 VDC  | 4.2     | 121                  |
| 1/8" NPS*                   | 0.156"              | 30                  | 28              | SV74P48T-1   | 12 VDC  | 7.2     | 399                  |
| 10-32                       | 0.040"              | 30                  | 28              | SV74P61T-2   | 24 VDC  | 1.0     | 12                   |
| 1/4-28                      | 0.062"              | 30                  | 28              | SV74P25T-2   | 24 VDC  | 1.5     | 58                   |
| 1/4-28                      | 0.095"              | 30                  | 28              | SV74P60T-2** | 24 VDC  | 4.2     | 121                  |
| 1/8" NPS*                   | 0.156"              | 30                  | 28              | SV74P48T-2   | 24 VDC  | 7.2     | 399                  |

For Temperature and Duty Cycle information, please consult "Temp and Duty Cycle" link under Technical Information on our website. Alternate voltage of 6 VDC & 115V/60 HZ available upon request. Please consult factory for availability & part number.

High pressure version available up to 100 PSI ('-HP'). Please consult factory for availability of specific constructions.

\*1/8"-27 NPS (National Pipe Straight) thread. Flat bottom.

\*\*Suffix part number with '-R' for round body.