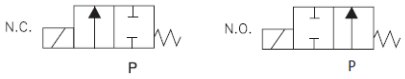
# SV350 & SV450

2-Way Normally Closed and Normally Open
High Pressure Pilot Operated Solenoid Valves




Valcor General Purpose Series

## DESCRIPTION

These 2-way piloted piston operated solenoid valves are available in normally closed and normally open operating modes. They range from 1/4" to 1/2" port sizes, with orifice sizes of 3/8" and pressures to 2,200 psi. Available in stainless steel bodies and optional seal materials, these high flow, high pressure valves are designed to handle a wide range of gases and fluids. For special applications, contact your Valcor customer service representative.

## APPLICATION

The SV350 & SV450 series are suitable for a broad range of industrial applications. Typical applications include:

- General on-off control of water, oil and gas
- High pressure calibration and test stands
- High flow fuel lines
- Process control and production piping
- Economical choice for OEM applications

## FEATURES

- Zero PSI minimum operating pressures
- High flow capability in compact design
- AC and DC solenoid coils in a wide range of standard voltages
- NEMA4 as standard coil enclosure, NEMA7 Explosion proof and others available
- Mountable in Any Position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## VALCOR SV350 & SV450 SPECIFICATIONS

### Construction

| | |
|---|---|
| Operating Mode | Normally Closed: Open when energized, closed when de-energized<br>Normally Open: Closed when energized, open when de-energized |
| Port Size (in.) | Normally Closed: 1/4, 3/8, 1/2<br>Normally Open: 1/4, 3/8, 1/2 |
| Orifice Size (in.) | 3/8 |
| Temperature Range | Ambient Temp 32°F to 125°F<br>Fluid Temp: See specifications on next page |
| Mounting Position | Any position |
| Agency Listings | UL recognized |

| **Valve Parts in Contact With Fluid** | |
|---|---|
| Body | 303 stainless steel |
| Seals | FKM, PTFE |
| Internal Metal Parts | 303 and 430F stainless steel |

### Electrical

| | |
|---|---|
| Standard Voltage | AC 24V 60Hz<br>AC 110V 50Hz, AC 120V 60Hz<br>AC 220V 50Hz, AC 240V 60Hz<br>DV 12V, DC 24V |
| Voltage Tolerance | +10% to -15% of applicable voltage |
| Standard Coil Housing | Standard: Watertight NEMA 4<br>Options: Explosion proof NEMA 7, open frame, junction box |
| Coil | Class F and H |
| Lead Length | 24 inch |

*Consult the factory for specifications other than those listed above.

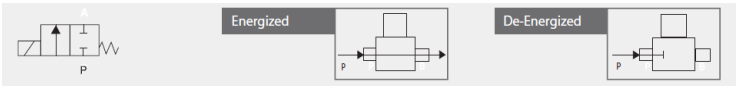
### Coil Data

| **Model** | | | |
|---|---|---|---|
| Frequency (Hz) | | 60 | 50 |
| Power (VA) | Inrush | 46 | 46 |
| | Holding | 20 | 21 |
| Power Consumption | AC | 10 | 10 |
| | DC | 14 | 14 |

## VALCOR SV350 & SV450 SPECIFICATIONS

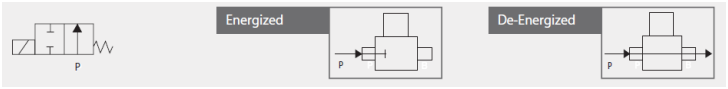
### Specifications for SV350 Normally Closed

| Port Size (in.) (NPT) | Orifice Size (in.) | $C_V$ | Minimum Operating Pressure (PSIG) | Max. Operating Pressure (PSIG) | | | | | | Max Fluid Temp °F | Model Number* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Air/Gas | | Water | | Lt. Oil | | | |
| | | | | AC | DC | AC | DC | AC | DC | | |
| 1/4 | 3/8 | 1.1 | 0 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 230 | SV350GF02Z1BF5 |
| 3/8 | 3/8 | 1.5 | 0 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 230 | SV350GF02Z1CF5 |
| 1/2 | 3/8 | 1.5 | 0 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 230 | SV350GF02Z1DF5 |




### Specifications for SV450 Normally Open

| Port Size (in.) (NPT) | Orifice Size (in.) | $C_V$ | Minimum Operating Pressure (PSIG) | Max. Operating Pressure (PSIG) | | | | | | Max Fluid Temp °F | Model Number* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Air/Gas | | Water | | Lt. Oil | | | |
| | | | | AC | DC | AC | DC | AC | DC | | |
| 1/4 | 3/8 | 0.8 | 0 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 230 | SV450GF02Z1BF5 |
| 3/8 | 3/8 | 1.0 | 0 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 230 | SV450GF02Z1CF5 |
| 1/2 | 3/8 | 1.0 | 0 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 230 | SV450GF02Z1DF5 |




*PTFE seats may allow for a small amount of internal leakage at pressures less than 100 PSI

## VALCOR SV350 & SV450 SPECIFICATIONS

### Part Number Configurator

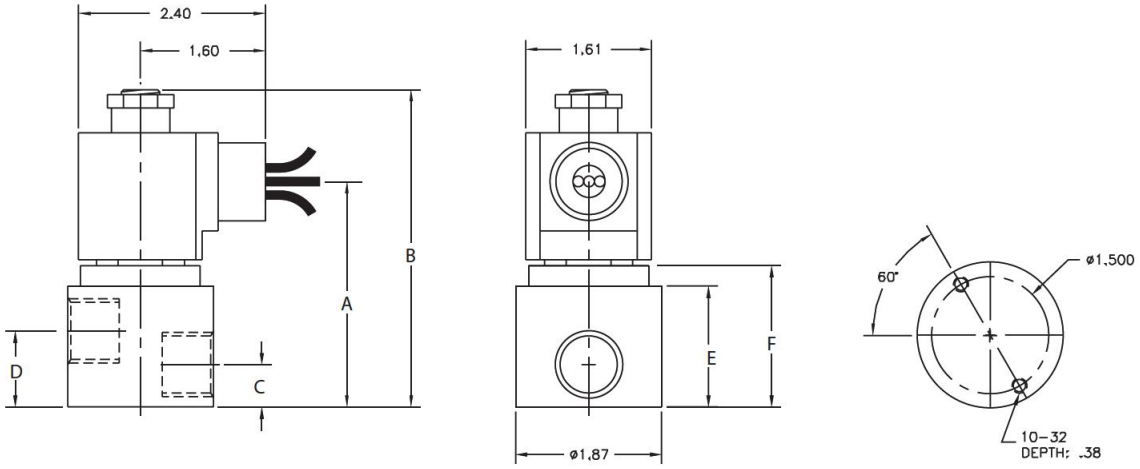
**Example Part Number: SV350GF02Z1BF5**

| S | V | 3 | 5 | 0 | G | F | 0 | 2 | Z | 1 | B | F | 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Numbers 1 thru 5 | | | | | 6 | 7 | 8-9 | | 10 | 11 | 12 | 13-14 | |

| Series | Operating Mode | Housing | | Coil Insulation | | Application Voltage | | Seal Material | | Body Code | | Port Connection (NPT) (in.) | | Orifice Size (in.) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SV350** | Normally Closed | **X** | Explosion Proof NEMA 7 | **F** | Class F | **02** | 120V/60Hz 110V/50Hz | **Z** | FKM/PTFE | **1** | SS | **B** | 1/4 | **F5** | 3/8 |
| **SV450** | Normally Open | **G** | Watertight NEMA 4 | **H** | Class H | **45** | 12V DC | | | | | **C** | 3/8 | | |
| | | **Y** | DIN | | | **46** | 24V DC | | | | | **D** | 1/2 | | |

*Please specify media and pressure when ordering.

### External Dimensions




| Port Connection NPT (in.) | A | | B | | C | | D | | E | | F | | Weight (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NC | NO | NC | NO | NC | NO | NC | NO | NC | NO | NC | NO | |
| 1/4 | 2.66 | 2.73 | 3.61 | 4.10 | 0.42 | 0.42 | 0.95 | 0.95 | 1.47 | 1.47 | 1.74 | 1.74 | 1.80 |
| 3/8 | 2.66 | 2.73 | 3.61 | 4.10 | 0.42 | 0.42 | 0.95 | 0.95 | 1.47 | 1.47 | 1.74 | 1.74 | 1.80 |
| 1/2 | 2.74 | 2.81 | 3.69 | 4.17 | 0.54 | 0.54 | 0.97 | 0.97 | 1.55 | 1.55 | 1.82 | 1.82 | 2.00 |