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Valcor Scientific

Subminiature Valves

2-Way, 3-Way, and Manifold Mounted Poppet Solenoid Valves
Models: SV24 and SV24M

INTRODUCTION

Valcor Scientific, A Division of Valcor Engineering, has designed and engineered rugged, reliable solenoid operated valves for more than 40 years.

The SV24/SV24M series of valves are designed for use in systems that require a group of small valves to control a variety of liquids and gases. These valves are also ideal as pilot valves for larger valves and actuators.

The valves have elastometric discs at each seat. Three-way valves have discs at both ends of the solenoid plunger. These disks seal against a seat in the body when the solenoid is de-energized and seal against a seat in the stop when the solenoid is energized. Two-way valves have no upper port and are normally closed in configuration. De-energized, the seal disc seats on the body orifice and when energized, unseats to permit flow.

DESCRIPTION - SV24 FREE STANDING

The SV24 Series are direct acting, poppet solenoid valves which are available as either 2-way or 3-way.

The normally open port in the 3-way valve is located at the opposite end of the solenoid and requires a separate external connection, or may be vented to the atmosphere. Two orifice sizes are available in the standard version. Other orifices sizes are available by request.

DESCRIPTION - SV24M MANIFOLD MOUNT

The SV24M solenoid operated valves can be ordered in 2- or 3-way configurations. The normally closed and common ports are connected to the manifold. The normally open port is located at the opposite end of the solenoid, and requires a separate external connection, or may be vented to atmosphere.

Valves mount via a 10-32 stud using O-ring seals. Valves may be mounted on a manifold in any attitude or position.

APPLICATIONS

Typical applications utilizing the Model SV24/SV24M are:

- Air control in medical equipment
- Pneumatic controls for surgical and dental instruments
- Water control
- Pneumatic controls in wafer processing for semiconductors
- Solvent replenishment in ink jet printing

FEATURES

- Life-tested to 250 million cycles
- Fast response time
- Rapid cycle capability to 10+ cycles/sec.
- Small, physical size
- Lightweight
- Wide pressure and vacuum range
- Bubble-tight sealing
- Manifold configuration for multiple valve requirements

MODEL SV24

PHYSICAL SPECIFICATIONS

Size: ..... .81" Dia. 1.97" (max) lg.
Weight: ..... 2.0 oz. (62 g)
Body Materials: ..... Delrin® and Polypropylene
Seal Materials: ..... Buna N, Viton® or EPDM

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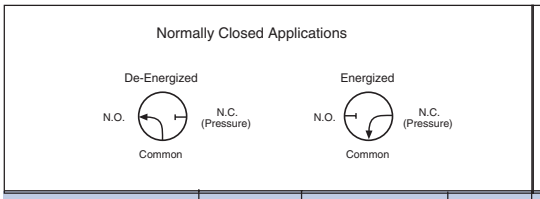
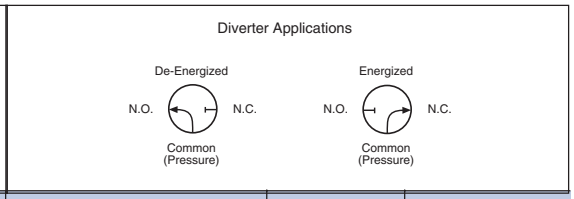
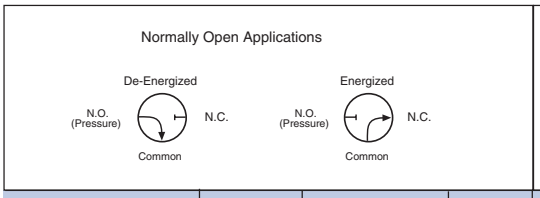
Other Materials in Contact with Fluid: ..... Stainless Steel, Polyester or Ryton
Power: ..... 2 Watts
Ports: ..... 10-32 Thread

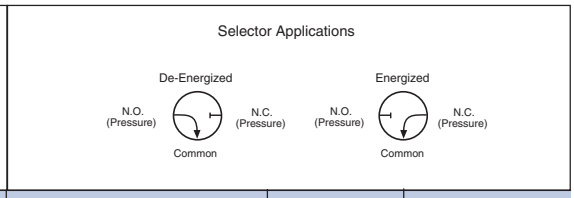
PERFORMANCE SPECIFICATIONS





Model No.	Volts VDC	Orifice Diameter (inches)	C_v	Configuration	Pressure (psig)	Vacuum
SV2412+#13	12	.055	.05	2-way N.C/Diverter	100	28in. Hg
SV2412+#23	12	.078	.11	2-way N.C/Diverter	35	28in. Hg
SV2424+#13	24	.055	.05	2-way N.C/Diverter	100	28in. Hg
SV2424+#23	24	.078	.11	2-way N.C/Diverter	35	28in. Hg





Model No.	Volts VDC	Orifice Diameter (inches)	C_v	Configuration	Pressure (psig)	Vacuum
SV2412+#13	12	.055	.05	2-way N.O/Selector	50	28in. Hg
SV2412+#23	12	.078	.11	2-way N.O/Selector	35	28in. Hg
SV2424+#13	24	.055	.05	2-way N.O/Selector	50	28in. Hg
SV2424+#23	24	.078	.11	2-way N.O/Selector	35	28in. Hg

Model No.	Volts VDC	Orifice Size	C_v	Configuration	Pressure	Vacuum
SV2412+#12	12	.055	.05	2-way N.C	100	28in. Hg
SV2412+#22	12	.078	.11	2-way N.C.	35	28in. Hg
SV2424+#12	24	.055	.05	2-way N.C.	100	28in. Hg
SV2424+#22	24	.078	.11	2-way N.C.	35	28in. Hg

+ Available in Delrin® (D) and Polypropylene (P)
# Available in Buna-N (B), Viton® (V) and EPDM (E)

MODEL SV24M

PHYSICAL SPECIFICATIONS

Size: ..... .81" Dia. 1.97" (max) lg.
Weight: ..... 2.0 oz. (62 g)
Body Materials: ..... Delrin® with stainless steel threaded stud or brass with brass threaded stud
Seal Materials: ..... Buna N, Viton® or EPDM
Other Materials in Contact with Fluid: ..... Stainless Steel, Polyester or Ryton
Power: ..... 2 Watts
Ports: ..... 10-32 Thread and 10-32 mounting stud

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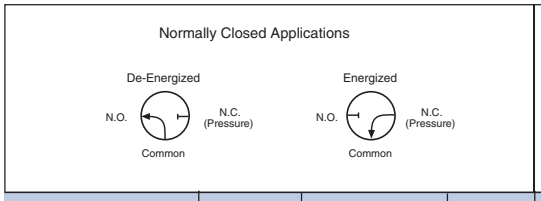
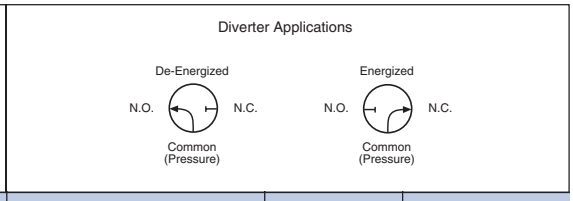
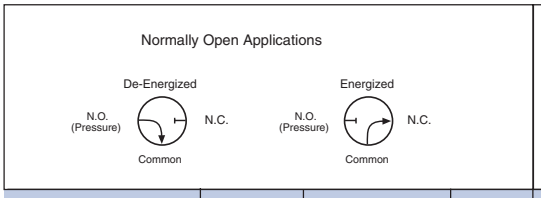
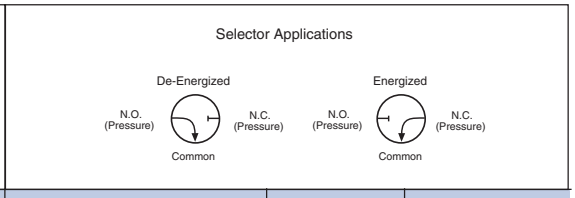
PERFORMANCE SPECIFICATIONS





Model No.	Volts VDC	Orifice Diameter (inches)	C_v	Configuration	Pressure (psig)	Vacuum
SV24M12+#13	12	.055	.05	3-way N.C/Diverter	100	28in. Hg
SV24M12+#23	12	.078	.11	3-way N.C/Diverter	35	28in. Hg
SV24M24+#13	24	.055	.05	3-way N.C/Diverter	100	28in. Hg
SV24M24+#23	24	.078	.11	3-way N.C/Diverter	35	28in. Hg





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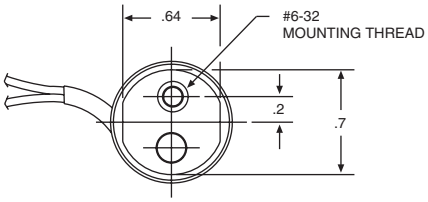
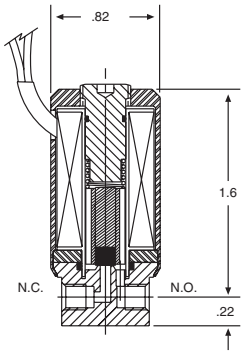
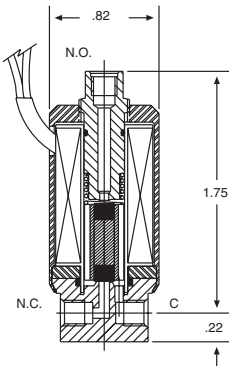
OUTLINE DIMENSIONS
MODEL SV24



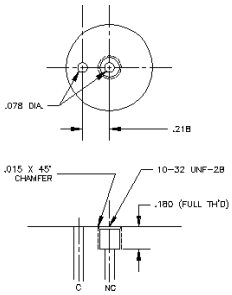


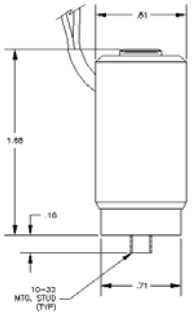
2-Way



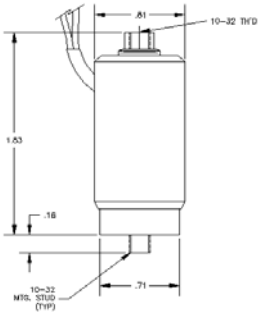
3-Way

OUTLINE DIMENSIONS
MODEL SV24M





2-Way



3-Way

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