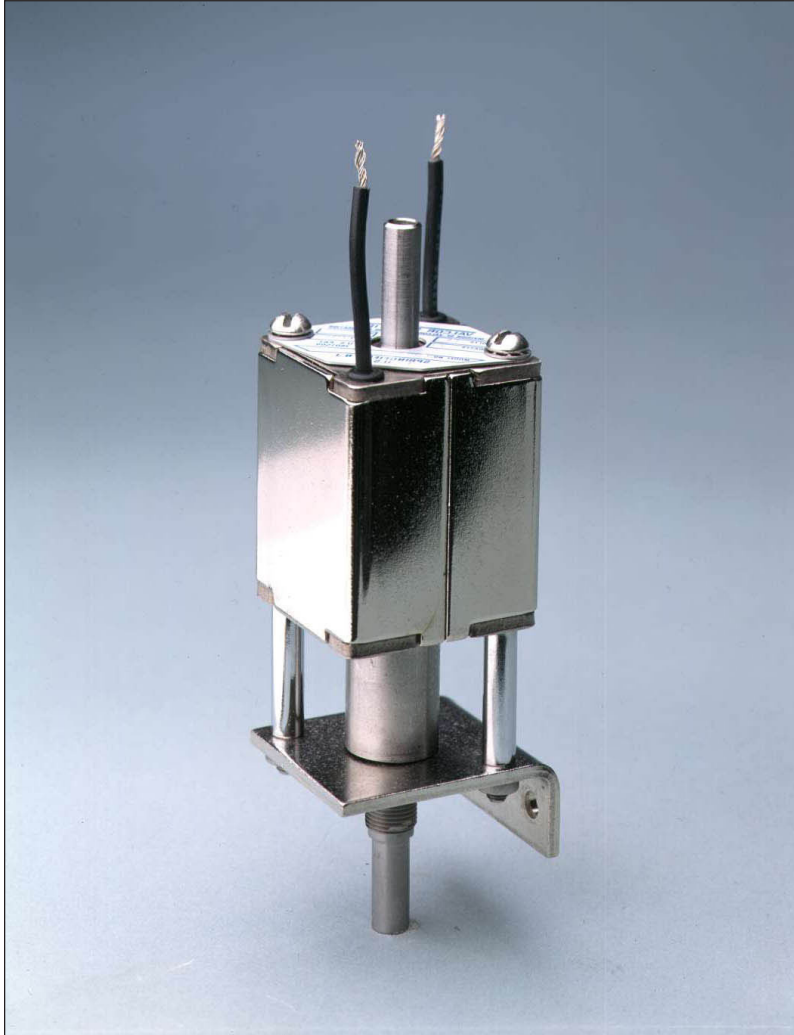


Dispensing Pump

Solenoid Operated, Piston Design

Model: SV500



INTRODUCTION

For over 40 years, Valcor Scientific, a Division of Valcor Engineering Corporation has designed and provided solenoid operated pumps. The SV500 Series pumps are rugged, reliable, precision devices, capable of operating through one million cycles without the need of maintenance.

Recommended for a wide range of liquid dispensing applications, the SV500 Series offers distinct advantages over other pumps in

terms of durability, cost, size and accuracy.

The SV500 pump provides an output range, ranging from 100 to 1500 microliters per dispense.

DESCRIPTION

The SV500 is a piston-pump activated by the electrical energization of a solenoid coil. As the coil is energized and de-energized, a piston moves up and down to dispense liquids.

Wetted parts are stainless steel and elastometric seals, making the SV500 suitable for most non-corrosive liquids.

The volume of liquid dispensed per piston stroke depends on the stroke length, which is easily adjustable. To dispense at a specific flow rate, the solenoid coil is pulsed at an appropriate cycle rate.

APPLICATIONS

The SV500 pump is well suited to applications requiring repeatable precision dispensing of small volumes over-time to create a total volume of liquid.

It performs well in a wide range of industrial and laboratory applications, including high viscosity fluids.

To meet individual requirements, Valcor can modify elastomer materials, mountings, inlet and outlet fittings, voltage, and other features.

Typical SV500 applications include:

Dispensing

- Adhesives
- Reagents in clinical instrumentation
- Diluent in analytic instrumentation
- Lubricants

Adding

- Syrup to carbonated water in soda machines
- Fragrance to personal products

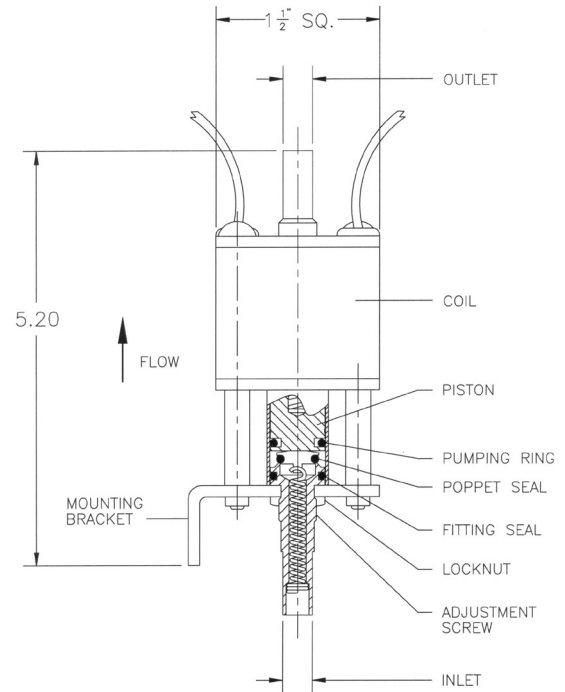
FEATURES

- Adjustability over a wide range of operating conditions is a function of two variables:
 - Volume output per stroke is adjustable mechanically by setting piston stroke (Adjustable screw)
 - Flow rate per minute is adjusted by frequency of coil energization
- High precision, repeatability within 2%
- Self-priming, can start from dry condition and capable of lifting six feet of water
- Compact, smaller than peristaltic and syringe pumps
- Long life, operates over a million cycles without maintenance
- High viscosity compatibility, dispense liquids with viscosities as high as 10,000 centistokes, by adjusting coil "on-time"
- Choice of elastomeric seal materials for application compatibility
- Custom mounting configurations available
- Custom inlet/outlet fittings available, including barb, lure and threaded
- Custom electrical terminations
- Low cost, one of the most affordable high precision metering pumps
- Easily maintained, while designed to be maintenance free over a million cycles, refurbishment kits are available

PHYSICAL SPECIFICATIONS

Size: 5 1/4"H x 1 1/2"W x 1 3/4"D
 Weight: 13 oz (369 g)
 Tube Connection: For 1/4" I.D. Flex Tubing
 Material in Contact with Fluid: .. Stainless Steel, EPDM or Viton®, (AC Silver)
 Coil Construction: UL Class H,
 with 10" leads
 Power: 21 watts (115 VAC)
 21 watts (24 VDC)
 Output/Stroke: 100 to 1250 µl
 Specials to 1500µl
 100 to 1000ml (DC pumps)
 Maximum Strokes/Min: 120 on H₂O
 Maximum Dispensing Rate: 180cc/minute (AC pump)
 120cc/minute (DC pump)
 Maximum Priming Height: 72 in H₂O
 Minimum On-Time: 250 Milliseconds
 Maximum On-Time: 1.0 Seconds (AC pump)
 6.0 Seconds (DC pump)
 Repeatability: +/-2%
 Special Requirements: Consult Factory

MODEL: SV500



HOW TO ORDER

Select the voltage code and elastomer code from the table below. **Example:** SV500 + [Enclosure Code] + [Voltage Code] + [Elastomer Code] + 1 = SV500P94H-2-1

Enclosure Code	
Conduit = C	Pigtail = P
Voltage Code	
115V/60Hz = 94H	24VDC = 84H
Elastomer Code	
Viton® = V	EPDM = 7

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Valcor Scientific

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