

New SP100 Variable-Flow Stepper OEM Pumps

**Quick change pump head
Stepper Control
Reversible**

These low cost peristaltic pumps are among the smallest variable-flow stepper-driven pumps in the market. Flow rates are available from 0.01 to 28 ml/min. They adapt easily to almost any instrument application. Enjoy the precise control of stepper peristaltic pumps in your fluid transfer application.

Select from three different tubing sizes and a variety of tubing materials. Tygon A60G tubing offers the longest pump life, Silicone is the softest with higher flow rates. Viton provides excellent chemical resistance. Other custom tubing options available - inquire for details. New models available with optional ABS housing, power jack and on/off power switch.

All pumpheads have ABS plastic housings, acetal rotor assembly with four stainless steel rollers. These brush Vdc motors are reversible. Silicone and Tygon A60F pump systems are supplied with polypropylene fittings. Viton systems are supplied with PVDF fittings. One year warranty.



Compact, variable-flow
SP100VOST pump.

SPECIAL FEATURES

- Fluid only contacts the tubing*
- Pump viscous fluids and slurries*
- Quiet, long-life motor operation*
- Wide flow control range*
- Compact design*

SPECIFICATIONS

	Tygon, Viton	Silicone
Max. Fluid Pressure:	30 psig (2 bar)	10 psig (0.7 bar)
Max. Suction Lift:		
0.8 and 1.6 mm ID	12-ft (3.6 m) H ₂ O	12-ft (3.6 m) H ₂ O
3.0 mm ID	25-ft (7.5 m) H ₂ O	20-ft (6 m) H ₂ O
Measurement Range:	See ordering table (page 2)	
Accuracy:	±1% full scale	
Repeatability:	±1% full scale	
Max. Fluid Temp.:	93°C (200°F)	
Duty Cycle:	Continuous	
Operating Temp.:	0 to 50°C (32 to 122°F)	
Enclosure:	open motor systems; ABS optional	
Wetted parts:	Silicone, Tygon® A60G or Viton®	
Power:	24Vdc; 75 to 400 mA	
Dimensions (W x H x D):	60 x 47 x 74 mm; (2.4 x 1.9 x 2.9 in.)	
Weight:	235 g (8.2 oz); 570 g (20 oz.)	
Shipping Wt:	0.45 kg (1 lbs); 0.9kg (2 lbs)	

APPLICATIONS

- Chemical metering*
- Fluid dispensing*
- Proportional control*
- Analytical instruments*
- Research & Development*

SP100VOST Max Flowrates (ml/min)

Motor RPM	Vdc	Amps	Tubing ID (mm)		
			3.0	1.6	0.8
150	24	2 A	28	7.8	3

Flow rate listed are nominal and will vary depending upon fluid viscosity and back pressure. Specifications listed are for Tygon A60G (formerly Norprene) tubing. Silicone flow rates are slightly higher. Viton flow rates slightly lower.

SP100VOST-Peri Pumps

SP100VOST Ordering Information – (Flow rates listed are for Tygon A60G tubing; Silicone is slightly higher).

Flow Rate ml/min	Tubing ID	RPM Range	Pump Part No. (does not include controller)		
			Tygon® A60G	Silicone	Viton®
24Vdc Pumps - Variable-flow; Standard Tubing					
0.1 to 28	3.0 mm (1/8")	0.15 to 150	SP101-259ST	SP100-259ST	SP102-259ST
0.05 to 7.8	1.6 mm (1/16")	0.15 to 150	SP101-256ST	SP100-256ST	SP102-256ST
0.01 to 3	0.8 mm (1/32")	0.15 to 150	SP101-253ST	SP100-253ST	SP102-253ST

Flow rates listed are nominal and will vary depending upon fluid viscosity and back pressure.
Other special tubing options are available on special order. Call for details.

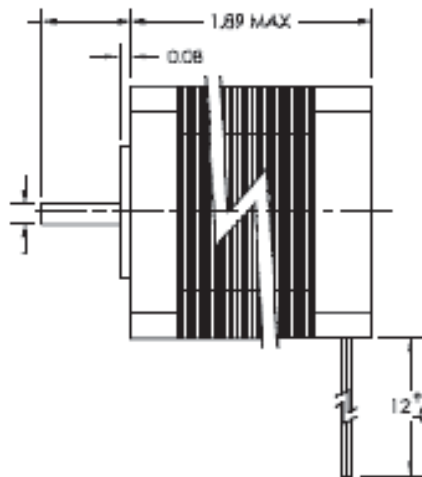
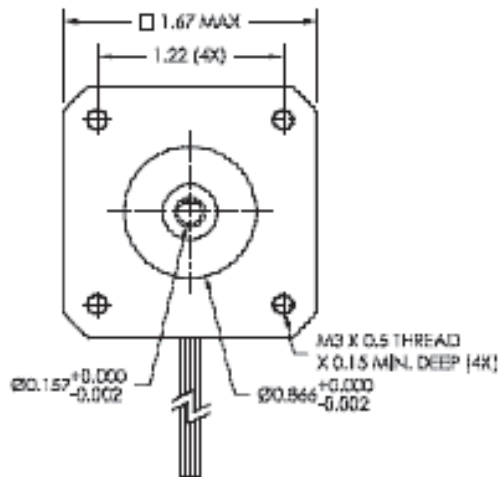
MOTOR SPECIFICATIONS

Full Step Angle:	1.8°
Motor Frame Size:	NEMA Size 17
Rated Current/Phase:	2.4A
Resistance/Phase:	0.95 ohm ±10%
Inductance/Phase:	1.94 mH ±20%
Rotor Inertia:	0.376 oz-in. ²
Di-electric Strength:	500V
Lead Wires:	four 22AWG

A Red, A-Blue, B-Green, B-Black

Customize your OEM pumps!

Order your OEM pump with an optional protective ABS plastic housing and control knobs/switches. All cased and switched models include a 5.5 x 2.5 mm jack for quick power connection. Driver controls are mounted in the housing. For completely cased pumps, inquire for details.



Specifications subject to change.

APT Instruments provides no warranty on usage of pumps or life of tube.
Immersion and life tests are recommended prior to use.
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Tygon—Reg TM Saint-Gobain Performance Plastics
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