

## New SmallPumps™ SP100VOA Variable-Flow OEM

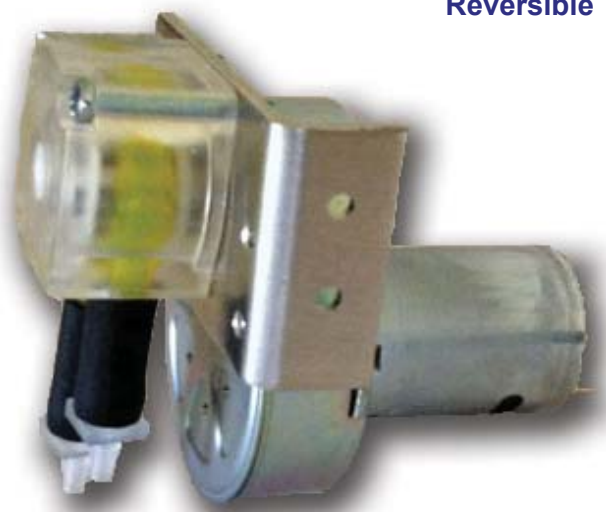
These low-cost peristaltic pumps provide variable flow and exception life performance. Flow rates are available from 0 to 62 ml/min. They adapt easily to almost any equipment application. Enjoy the benefits of peristaltic pumps in your fluid transfer application.

Select from 6 different Vdc motor speeds, 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. New models available with optional ABS housing, power jack and on/off power switch.

These all-plastic pumps have ABS plastic housings, acetal rotor assembly with four stainless steel rollers. These brush Vdc motors are reversible. Silicone and Tygon® A60G pump systems are supplied with polypropylene fittings. Viton systems are supplied with PVDF fittings. One year warranty.

**Installation Note:** These brush-type Vdc motors are rated for intermittent duty. Request information on our brushless dc motors for continuous-duty applications.

**Mini pump head  
Variable-flow  
Reversible**



### SPECIAL FEATURES

*Fluid only contacts the tubing  
Self-priming, run dry without damage  
Variable-flow 12 & 24Vdc motors  
Pump viscous fluids and slurries  
Compact size*

Inquire for details on manual or remote control PCB systems.

*Compact, variable-flow SP100 Vdc pumps.*

### 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	16-ft (4.8 m) H <sub>2</sub> O	16-ft (4.8 m) H <sub>2</sub> O
3.0 mm ID	25-ft (7.5 m) H <sub>2</sub> O	25-ft (7.5 m) H <sub>2</sub> O
Measurement Range:	See ordering table (page 2)	
Accuracy:	±10% full scale	
Repeatability:	±10% full scale	
Max. Fluid Temp.:	93°C (200°F)	
Duty Cycle:	Intermittent	
Operating Temp.:	0 to 50°C (32 to 122°F)	
Enclosure:	open motor systems; ABS optional	
Wetted parts:	Silicone, Tygon® A60G or Viton®	
Power:	12 or 24Vdc; up to 400 mA	
Dimensions (W x H x D):	60 x 74 x 90 mm (2.4 x 2.9 x 3.5 in.)	
(with housing)	84 x 140 x 97 mm (3.3 x 5.5 x 3.8 in.)	
Weight:	260 g (9.2 oz); 570 kg (20 oz)	
Shipping Wt:	0.45 kg (1 lb); 0.9 kg (2 lbs)	

### APPLICATIONS

*Chemical metering  
Reagent dispensing  
Condensate removal  
Analytical instruments  
Research & Development*

### SP100VOA Max Flowrates (ml/min)

Motor RPM	Vdc	Amps	Tubing ID (mm)		
			3.0	1.6	0.8
330	12	400 mA	62	17	5.6
150	12	300 mA	28	8	2.5
70	12	200 mA	13	3.6	1.2
300	24	200 mA	56	16	5
220	24	150 mA	41	11	3.7
140	24	100 mA	26	7	2.4

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 approx 10-20% higher. Viton flow rates slightly lower.

# SP100VOA-Peri Pumps

NA - Not Available at this time

NR - Not Recommended

## SP100VOA Ordering Information – (Flow rates listed are for Tygon A60G tubing; Silicone is 10-20% higher).

Flow Rate ml/min	Tubing ID	RPM Range	Tygon® A60G	Pump Part No.	
				Silicone	Viton®
<b>12Vdc Pumps - Variable-flow; reversible; up to 400 mA current draw</b>					
0 to 62	3.0 mm (1/8")	0 to 330	SP101-513	SP100-513	SP102-513
0 to 28	3.0 mm (1/8")	0 to 150	SP101-512	SP100-512	SP102-512
0 to 17	1.6 mm (1/16")	0 to 330	SP101-510	SP100-510	SP102-510
0 to 13	3.0 mm (1/8")	0 to 70	SP101-509	SP100-509	SP102-509
0 to 8	1.6 mm (1/16")	0 to 150	SP101-508	SP100-508	SP102-508
0 to 5.6	0.8 mm (1/32")	0 to 330	SP101-506	SP100-506	SP102-506
0 to 3.6	1.6 mm (1/16")	0 to 70	SP101-505	SP100-505	SP102-505
0 to 2.5	0.8 mm (1/32")	0 to 150	SP101-504	SP100-504	SP102-504
0 to 1.2	0.8 mm (1/32")	0 to 70	SP101-502	SP100-502	SP102-502
<b>24Vdc Pumps - Variable-flow; reversible; up to 200 mA current draw</b>					
0 to 56	3.0 mm (1/8")	0 to 300	SP101-558	SP100-558	SP102-558
0 to 41	3.0 mm (1/8")	0 to 220	SP101-557	SP100-557	SP102-557
0 to 26	3.0 mm (1/8")	0 to 140	SP101-556	SP100-556	SP102-556
0 to 16	1.6 mm (1/16")	0 to 300	SP101-555	SP100-555	SP102-555
0 to 11	1.6 mm (1/16")	0 to 220	SP101-554	SP100-554	SP102-554
0 to 7	1.6 mm (1/16")	0 to 140	SP101-553	SP100-553	SP102-553
0 to 5	0.8 mm (1/32")	0 to 300	SP101-552	SP100-552	SP102-552
0 to 3.7	0.8 mm (1/32")	0 to 220	SP101-551	SP100-551	SP102-551
0 to 2.4	0.8 mm (1/32")	0 to 140	SP101-550	SP100-550	SP102-550

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.

## Customize your OEM pumps!

Order your OEM pump with an optional protective ABS plastic housing and power switch. All cased and switched models include a 5.5 x 2.5 mm jack for quick power connect.

Add the following letter(s) to the p/n to include the options.

"C" ABS plastic housing (e.g. SP101C-551).

"CS" ABS plastic housing w/ on-off switch (e.g. SP101CS-551).



## For more information contact:

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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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