

SmallPumps™ SP300VO Variable-Flow OEM Pumps

The SmallPumps SP300 pumps are rugged little pumps designed for more robust applications requiring a little bit more flow rate than our SP100 and SP200 series. Flow rates are available from 12 to 825 ml/min. Adapt them to almost any fluid transfer application. Enjoy the benefits of peristaltic pumps in your fluid transfer application.

Select from 3 different motor speeds and a variety of tubing materials. Norprene® tubing offers the longest pump life, Silicone is the softest with higher flow rates. Viton® provides excellent chemical resistance. For greater chemical resistance, check out the new Chem*sure® tubing.

All quick change pumps have clear plastic housings, steel rotor assembly with two sealed needle-bearing rollers. The Vdc motors are reversible permanent magnet brush style. Optional PVC housing and switch. They are rated for continuous-duty.

Shipping Wt. 2.2 lb. (1 kg). One year warranty.

Installation Note: These pumps are rated for continuous-duty. For long-term applications - Request information on our brushless dc motors.

**Quick change pump head
Variable-flow
Reversible**



SPECIAL FEATURES

*Fluid only contacts the tubing
Self-priming, run dry without damage
Pump viscous fluids and slurries
Compact Size - (W x H x D approx)
72 x 90 x 131 mm (Vdc)*

Inquire for details on manual or remote control PCB systems.

Compact, variable-flow SP200VO pumps.

SPECIFICATIONS

	Norprene	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 ₂ O	16-ft (4.8 m) H ₂ O
3.0 and 5.0 mm ID	25-ft (7.5 m) H ₂ O	25-ft (7.5 m) H ₂ 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:	Continuous	
Operating Temp.:	0 to 50°C (32 to 122°F)	
Enclosure:	open motor systems; PVC optional	
Wetted parts:	Silicone, Norprene® or Viton®	
Power:	12 or 24Vdc; 0.3 to 1.2 A	
Dimensions (W x H x D):	72 x 90 x 131 mm (2.8 x 3.5 x 5.2 in.)	
(with housing)	100 x 100 x 137 mm (4 x 4 x 5.4 in.)	
Weight:	approx 1 kg (2 lbs).	
Shipping Wt:	1 kg (2.2 lb); 1.2 kg (3 lbs)	

APPLICATIONS

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

SP300VO Max Flowrates (ml/min)

Motor RPM	Vdc	Amps	Tubing ID (mm)		
			6.4	5.0	3.0
250	12	1.2 A	825	500	250
125	12	0.8 A	415	250	125
50	12	0.3 A	165	100	50

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

SP300VO-Peri Pumps

NA - Not Available at this time
NR - Not Recommended

SP300VO Ordering Information – (Flow rates listed are for Norprene tubing; Silicone is slightly higher).

Flow Rate ml/min	Tubing		Model No.	Norprene®	Pump Part No.		
	ID	RPM Range			Silicone	Viton®	
12Vdc Pumps - Variable-flow; reversible							
200 to 825	6.4 mm (1/4")	60 to 250	SP30XX.064.AXXX.XX	SP301.006	SP300.006	SP302.006	
120 to 500	5.0 mm (3/16")	60 to 250	SP30XX.050.AXXX.XX	SP301.005	SP300.005	SP302.005	
115 to 415	6.4 mm (1/4")	35 to 125	SP30XX.064.BXXX.XX	SP301.007	SP300.007	SP302.007	
70 to 250	5.0 mm (3/16")	35 to 125	SP30XX.050.BXXX.XX	SP301.004	SP300.004	SP302.004	
60 to 250	3.0 mm (1/8")	60 to 250	SP30XX.030.AXXX.XX	SP301.008	SP300.008	SP302.008	
40 to 165	6.4 mm (1/4")	12 to 50	SP30XX.064.DXXX.XX	SP301.009	SP300.009	SP302.009	
35 to 125	3.0 mm (1/8")	35 to 125	SP30XX.030.BXXX.XX	SP301.010	SP300.010	SP302.010	
25 to 100	5.0 mm (3/16")	12 to 50	SP30XX.050.DXXX.XX	SP301.002	SP300.002	SP302.002	
12 to 50	3.0 mm (1/8")	12 to 50	SP30XX.030.DXXX.XX	SP301.011	SP300.011	SP302.011	
24Vdc Pumps - Variable-flow; reversible							
200 to 825	6.4 mm (1/4")	60 to 250	SP30XX.064.EXXX.XX	SP301.056	SP300.056	SP302.056	
120 to 500	5.0 mm (3/16")	60 to 250	SP30XX.050.EXXX.XX	SP301.055	SP300.055	SP302.055	
115 to 415	6.4 mm (1/4")	35 to 125	SP30XX.064.FXXX.XX	SP301.057	SP300.057	SP302.057	
70 to 250	5.0 mm (3/16")	35 to 125	SP30XX.050.FXXX.XX	SP301.054	SP300.054	SP302.054	
60 to 250	3.0 mm (1/8")	60 to 250	SP30XX.030.EXXX.XX	SP301.058	SP300.058	SP302.058	
40 to 165	6.4 mm (1/4")	12 to 50	SP30XX.064.GXXX.XX	SP301.059	SP300.059	SP302.059	
35 to 125	3.0 mm (1/8")	35 to 125	SP30XX.030.FXXX.XX	SP301.060	SP300.060	SP302.060	
25 to 100	5.0 mm (3/16")	12 to 50	SP30XX.050.GXXX.XX	SP301.052	SP300.052	SP302.052	
12 to 50	3.0 mm (1/8")	12 to 50	SP30XX.030.GXXX.XX	SP301.061	SP300.061	SP302.061	

Flow rate 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 PVC 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” PVC plastic housing (e.g. SP301C.002).
- “CS” PVC plastic housing w/ on-off switch (e.g. SP301CS.002).

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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