

SmallPumps™ SP200VO Variable-Flow OEM Pumps

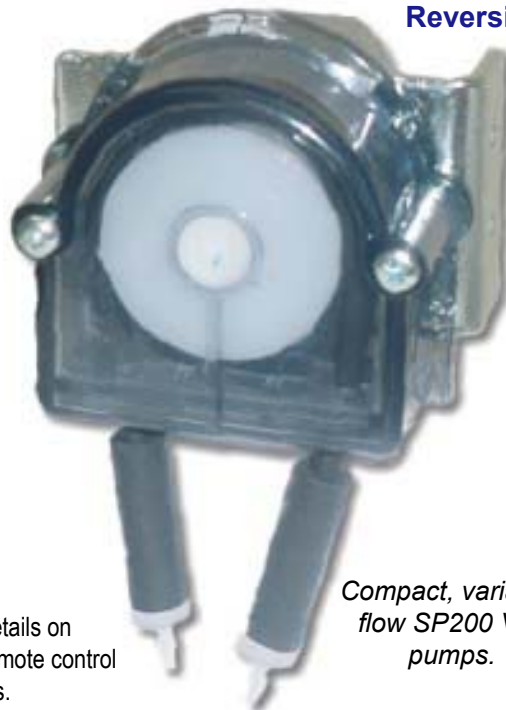
These low-cost peristaltic pumps provide variable flow and exception life performance. Flow rates are available from 0.06 to 62 ml/min. They adapt easily to almost any equipment application. Enjoy the benefits of peristaltic pumps in your fluid transfer application.

Select from 5 different Vdc motor speeds, four different tubing sizes 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. New models available with optional ABS housing, power jack and on/off power switch. For greater chemical resistance, check out the new Chem*sure® tubing.

These all-plastic pumps have SAN plastic housings, acetal rotor assembly with three nylon rollers. These brush Vdc motors are reversible. Silicone and Norprene 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.

**All-plastic Pump Head
Variable-flow
Reversible**



Compact, variable-flow SP200 Vdc pumps.

Inquire for details on manual or remote control PCB systems.

SPECIAL FEATURES

- Fluid only contacts the tubing*
- Self-priming, run dry without damage*
- Variable-flow 6, 12 & 24Vdc motors*
- Pump viscous fluids and slurries*
- Compact size*

APPLICATIONS

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

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:	Intermittent	
Operating Temp.:	0 to 50°C (32 to 122°F)	
Enclosure:	open motor systems; ABS optional	
Wetted parts:	Silicone, Norprene® or Viton®	
Power:	6, 12 or 24Vdc; 50 to 300 mA	
Dimensions (W x H x D):	60 x 70 x 66 mm (2.4 x 2.8 x 2.6 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)	

SP200VO Max Flowrates (ml/min)

Motor RPM	Vdc	Amps	Tubing ID (mm)			
			5.0	3.0	1.6	0.8
70	6	300 mA	62	38	9.4	2.8
70	12	150 mA	62	38	9.4	2.8
70	24	75 mA	62	38	9.4	2.8
35	12	100 mA	38	22	5.5	1.6
35	24	50 mA	38	22	5.5	1.6
20	12	75 mA	21	12	2.8	0.8
10	12	75 mA	10	6	1.3	0.38
5	12	75 mA	5.3	3	0.7	0.2

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

SP200VO-Peri Pumps

NA - Not Available at this time
NR - Not Recommended

SP200VO Ordering Information – (Flow rates listed are for Norprene tubing; Silicone is 10-20% higher).

Flow ml/min	Tubing ID	RPM Range (Vdc)	Model No.	Norprene®	Pump Part No.	
					Silicone	Viton®
6Vdc Pumps - Variable-flow; reversible; up to 300 mA current draw						
1 to 2.8	0.8 mm (1/32")	20 to 77 (5 to 12Vdc)	SP20XX.008.FV00.00X	SP201.009	SP200.009	SP202.009
3.2 to 9.4	1.6 mm (1/16")	20 to 77 (5 to 12Vdc)	SP20XX.016.FV00.00X	SP201.010	SP200.010	SP202.010
13 to 38	3.0 mm (1/8")	20 to 77 (5 to 12Vdc)	SP20XX.030.FV00.00X	SP201.011	SP200.011	SP202.011*
35 to 62	5.0 mm (3/16")	38 to 64 (9 to 12Vdc)	SP20XX.050.FV00.00X	SP201.012*	SP200.012	NR*
12Vdc Pumps - Variable-flow; reversible; up to 150 mA current draw						
Standard Pump Range						
0.5 to 1.6	0.8 mm (1/32")	12 to 43 (5 to 12Vdc)	SP20XX.008.BV00.00X	SP201.005	SP200.005	SP202.005
1 to 2.8	0.8 mm (1/32")	20 to 77 (5 to 12Vdc)	SP20XX.008.AV00.00X	SP201.006	SP200.006	SP202.006
1.6 to 5.5	1.6 mm (1/16")	12 to 40 (5 to 12Vdc)	SP20XX.016.BV00.00X	SP201.007	SP200.007	SP202.007
3.2 to 9.4	1.6 mm (1/16")	20 to 77 (5 to 12Vdc)	SP20XX.016.AV00.00X	SP201.008	SP200.008	SP202.008
6.6 to 22	3.0 mm (1/8")	12 to 40 (5 to 12Vdc)	SP20XX.030.BV00.00X	SP201.001	SP200.001	SP202.001
13 to 38	3.0 mm (1/8")	20 to 77 (5 to 12Vdc)	SP20XX.030.AV00.00X	SP201.002	SP200.002	SP202.002*
15 to 38	5.0 mm (3/16")	16 to 39 (6 to 12Vdc)	SP20XX.050.BV00.00X	SP201.003	SP200.003	SP202.003
35 to 62	5.0 mm (3/16")	38 to 64 (9 to 12Vdc)	SP20XX.050.AV00.00X	SP201.004*	SP200.004	NR*
Low Flow Pump Range						
0.06 to 0.2	0.8 mm (1/32")	1.5 to 5.5 (4 to 12Vdc)	SP20XX.008.EV00.00X	SP201.013	SP200.013	SP202.013
0.12 to 0.38	0.8 mm (1/32")	3.3 to 10.5 (4 to 12Vdc)	SP20XX.008.DV00.00X	SP201.014	SP200.014	SP202.014
0.2 to 0.7	1.6 mm (1/16")	1.5 to 5.5 (4 to 12Vdc)	SP20XX.016.EV00.00X	SP201.015	SP200.015	SP202.015
0.3 to 0.8	0.8 mm (1/32")	8 to 22 (4 to 12Vdc)	SP20XX.008.CV00.00X	SP201.016	SP200.016	SP202.016
0.45 to 1.3	1.6 mm (1/16")	3.3 to 10.5 (4 to 12Vdc)	SP20XX.016.DV00.00X	SP201.017	SP200.017	SP202.017
1 to 2.8	1.6 mm (1/16")	8 to 22 (4 to 12Vdc)	SP20XX.016.CV00.00X	SP201.018	SP200.018	SP202.018
0.8 to 3	3.0 mm (1/8")	1.5 to 5.5 (4 to 12Vdc)	SP20XX.030.EV00.00X	SP201.019	SP200.019	SP202.019
1.4 to 5.3	5.0 mm (3/16")	1.5 to 5.5 (4 to 12Vdc)	SP20XX.050.EV00.00X	SP201.020	SP200.020	SP202.020
1.5 to 6	3.0 mm (1/8")	3.3 to 10.5 (4 to 12Vdc)	SP20XX.030.DV00.00X	SP201.021	SP200.021	SP202.021
3 to 10	5.0 mm (3/16")	3.3 to 10.5 (4 to 12Vdc)	SP20XX.050.DV00.00X	SP201.022	SP200.022	SP202.022
4.2 to 12	3.0 mm (1/8")	8 to 22 (4 to 12Vdc)	SP20XX.030.CV00.00X	SP201.023	SP200.023	SP202.023
7.5 to 21	5.0 mm (3/16")	8 to 22 (4 to 12Vdc)	SP20XX.050.CV00.00X	SP201.024	SP200.024	SP202.024
24Vdc Pumps - Variable-flow; reversible; up to 75 mA current draw						
0.5 to 1.6	0.8 mm (1/32")	12 to 43 (8 to 24Vdc)	SP20XX.008.GV00.00X	SP201.055	SP200.055	SP202.055
1 to 2.8	0.8 mm (1/32")	20 to 77 (10 to 24Vdc)	SP20XX.008.HV00.00X	SP201.056	SP200.056	SP202.056
1.6 to 5.5	1.6 mm (1/16")	12 to 40 (8 to 24Vdc)	SP20XX.016.GV00.00X	SP201.057	SP200.057	SP202.057
3.2 to 9.4	1.6 mm (1/16")	20 to 77 (10 to 24Vdc)	SP20XX.016.HV00.00X	SP201.058	SP200.058	SP202.058
6.6 to 22	3.0 mm (1/8")	12 to 40 (8 to 24Vdc)	SP20XX.030.GV00.00X	SP201.051	SP200.051	SP202.051
13 to 38	3.0 mm (1/8")	20 to 77 (10 to 24Vdc)	SP20XX.030.HV00.00X	SP201.052	SP200.052	SP202.052*
15 to 38	5.0 mm (3/16")	16 to 39 (8 to 24Vdc)	SP20XX.050.GV00.00X	SP201.053	SP200.053	SP202.053
35 to 62	5.0 mm (3/16")	38 to 64 (10 to 24Vdc)	SP20XX.050.HV00.00X	SP201.054*	SP200.054	NR*

Flow rates listed are nominal and will vary depending upon fluid viscosity and back pressure.

*3 and 5 mm Viton and Norprene tubing with 70 rpm motor operates at approx 10% or more less than ratings. Flow is reduced.

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. SP201C.013).

“CS” ABS plastic housing w/ on-off switch (e.g. SP201CS.013).

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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