

New SmallPumps™ SP100FO Fixed-Flow Pumps

These new low cost peristaltic pumps are among the smallest fixed-flow pumps in the market. The complete pump is provided in a small, compact housing with on/off switch and power cord. Flow rates are available from 0.05 to 5.6 ml/min. They adapt easily to almost any equipment application. Ideal for low-flow metering applications. Enjoy the benefits of peristaltic pumps in your fluid transfer application.

Select from 3 different Vac motor speeds, three 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.

All pumpheads have ABS plastic housings, acetal rotor assembly with four stainless steel rollers. These continuous-duty synchronous Vac motors are not reversible. Silicone and Norprene pump systems are supplied with polypropylene fittings. Viton systems are supplied with PVDF fittings. ABS housing, 6-ft power cord with U.S. standard plug (115Vac) or european plug (230Vac). One year warranty.

**Continuous-duty
Synchronous Motor
ABS Housing
On/Off Switch**



Meter small volumes with the SP100CS.100 peristaltic pump

SPECIAL FEATURES

- Fluid only contacts the tubing*
- Self-priming, run dry without damage*
- Fixed-flow 115 and 230Vac motors*
- Pump viscous fluids and slurries*
- Compact size*

APPLICATIONS

- Chemical metering*
- Salt water aquariums*
- Drain Treatment*
- 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	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	25-ft (7.5 m) H ₂ O
Measurement Range:	See ordering table (page 2)	
Accuracy:	±5% full scale	
Repeatability:	±5% 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, Norprene® or Viton®	
Power:	100-130Vac; 210-240Vac; 3.5W	
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 g (20 oz.)	
Shipping Wt:	0.45 kg (1 lbs); 0.9kg (2 lbs)	

SP100FOC Max Flowrates (ml/min)

Motor RPM	Vdc	Amps	Tubing ID (mm)		
			3.0	1.6	0.8
30	115 or 230	3.5W	5.6	1.5	0.5
18	115 or 230	3.5W	3.3	0.9	0.3
3.6	115 or 230	3.5W	0.65	0.18	0.06

Flow rates 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 is not recommended for use with the 30 rpm motor. Pumps operating at 50Hz will deliver 5/6 of the flow rate.

SP100FOC-Peri Pumps

NA - Not Available at this time

NR - Not Recommended

SP100FOC Ordering Information – (Flow rates listed are for Norprene tubing; Silicone is 10-20% higher).

Flow ml/min	Tube ID	Pump RPM	Model No.	Pump Part No.		
				Norprene®	Silicone	Viton®
Fixed-flow Pumps; AC synchronous motors; non-reversible; 3.5 W						
115Vac/50-60Hz Pump Systems (60Hz flow rates are shown)						
0.06	0.8 mm (1/32")	3	SP10XX.008.RF00.S1Y	SP101CS.112	SP100CS.112	SP102CS.112
0.18	1.6 mm (1/16")	3	SP10XX.016.RF00.S1Y	SP101CS.100	SP100CS.100	SP102CS.100
0.3	0.8 mm (1/32")	15	SP10XX.008.QF00.S1Y	SP101CS.114	SP100CS.114	SP102CS.114
0.5	0.8 mm (1/32")	30	SP10XX.008.PF00.S1Y	SP101CS.116	SP100CS.116	SP102CS.116
0.65	3.0 mm (1/8")	3	SP10XX.030.RF00.S1Y	SP101CS.102	SP100CS.102	SP102CS.102
0.9	1.6 mm (1/16")	15	SP10XX.016.QF00.S1Y	SP101CS.104	SP100CS.104	SP102CS.104
1.5	1.6 mm (1/16")	30	SP10XX.016.PF00.S1Y	SP101CS.106	SP100CS.106	SP102CS.106
3.3	3.0 mm (1/8")	15	SP10XX.030.QF00.S1Y	SP101CS.108	SP100CS.108	SP102CS.108
5.6	3.0 mm (1/8")	30	SP10XX.030.PF00.S1Y	SP101CS.110	SP100CS.110	NR
230Vac/50-60Hz Pump Systems (50Hz flow rates are shown)						
0.05	0.8 mm (1/32")	3	SP10XX.008.RF00.S1Z	SP101CS.113	SP100CS.113	SP102CS.113
0.16	1.6 mm (1/16")	3	SP10XX.016.RF00.S1Z	SP101CS.101	SP100CS.101	SP102CS.101
0.25	0.8 mm (1/32")	15	SP10XX.008.QF00.S1Z	SP101CS.115	SP100CS.115	SP102CS.115
0.4	0.8 mm (1/32")	25	SP10XX.008.PF00.S1Z	SP101CS.117	SP100CS.117	SP102CS.117
0.55	3.0 mm (1/8")	3	SP10XX.030.RF00.S1Z	SP101CS.103	SP100CS.103	SP102CS.103
0.78	1.6 mm (1/16")	15	SP10XX.016.QF00.S1Z	SP101CS.105	SP100CS.105	SP102CS.105
1.3	1.6 mm (1/16")	25	SP10XX.016.PF00.S1Z	SP101CS.107	SP100CS.107	SP102CS.107
2.3	3.0 mm (1/8")	15	SP10XX.030.QF00.S1Z	SP101CS.109	SP100CS.109	SP102CS.109
4.6	3.0 mm (1/8")	25	SP10XX.030.PF00.S1Z	SP101CS.111	SP100CS.011	NR

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.

Other special tubing options are available on special order. For higher flow applications, consider SP100FOHD pumps. Call 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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