

## SP200 Brushless DC Variable-Flow OEM Pumps

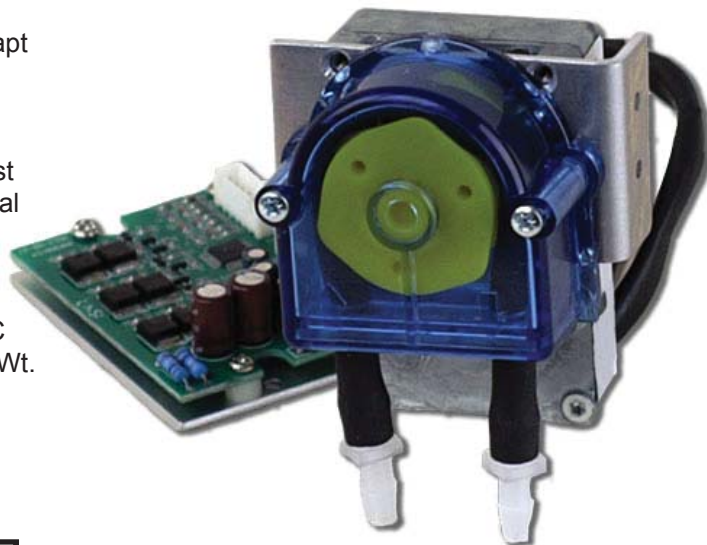
**All Plastic pump head**  
**Variable-flow**  
**Reversible**

The SmallPumps™ SP200 pumps are compact, low-flow pumps that are ideal for low flow metering applications. Flow rates are available from 0 to 200 ml/min. Brushless DC pumps are designed for continuous-duty operation. Motors have tachometer output. External 0-5Vdc analog signal required to vary pump speed. Adapt them to almost any low-flow fluid transfer application.

Select from two different motor voltages, two motor speeds 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.

These all-plastic pumps have SAN plastic housings, acetal rotor assembly with three nylon rollers. The Vdc motors are reversible brushless DC style. Optional PVC housing. They are rated for continuous-duty. Shipping Wt. 1 lb. (0.4 kg). Two year warranty.

Installation Note: Motor control PCB provides all power supplies and regulation required for proper operation.



*Compact, variable-flow  
SP200VOBLA pumps.*

### SPECIAL FEATURES

*Fluid only contacts the tubing*  
*Self-priming, run dry without damage*  
*Pump viscous fluids and slurries*  
*Continuous-duty brushless DC motors*  
*Compact design*

### APPLICATIONS

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

### SPECIFICATIONS

	Tygon® A60G, 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 and 5.0 mm ID	25-ft (7.5 m) H <sub>2</sub> O	25-ft (7.5 m) H <sub>2</sub> O
Flow Range:	See ordering table (page 2)	
Accuracy:	±2% full scale	
Repeatability:	±2% full scale	
Max. Fluid Temp.:	93°C (200°F)	
Duty Cycle (motor life):	Continuous, 20,000 hours	
Operating Temp.:	0 to 50°C (32 to 122°F)	
Enclosure:	open motor systems; PVC optional	
Wetted parts:	Silicone, Tygon® A60G or Viton®	
Power:	12 or 24Vdc; up to 0.8 A	
Dimensions (W x H x D):	66 x 81 x 121 mm (2.6 x 3.2 x 4.8 in.)	
Shipping Wt:	0.6 kg (1.2 lb)	

### SP200VOBLA Max Flowrates (ml/min)

Motor RPM	Vdc	Amps	Tubing ID (mm)			
			5	3	1.6	0.8
200	12 or 24	0.6A	200	120	28	8
10	12 or 24	0.3A	10	6	1.4	0.4

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 slightly higher. Viton flow rates slightly lower.

# SP200VOBLA-Peri Pumps

## SP200VOBLA Ordering Information – (Flow rates listed are for Tygon A60G tubing; Silicone is slightly higher).

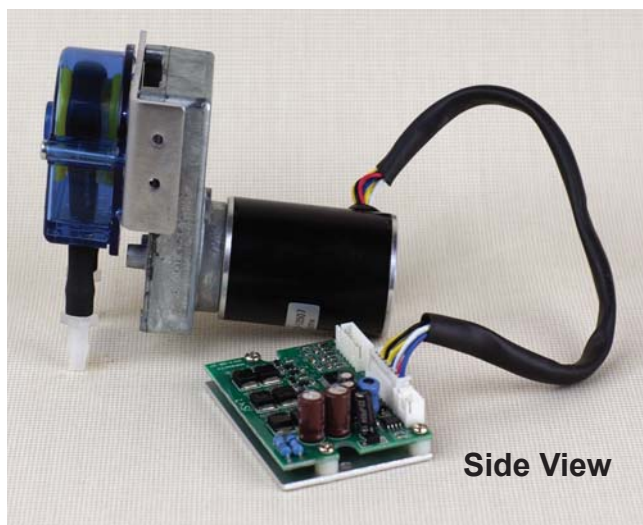
Flow Rate ml/min	Tubing ID	RPM Range (Vdc)	Tygon® A60G	Pump Part No. Silicone	Viton®
<b>12Vdc Pumps - Variable-flow; reversible; up to 0.6 A current draw</b>					
0 to 0.4	0.8 mm (1/32")	0 to 10	SP201-201A	SP200-201A	SP202-201A
0 to 1.4	1.6 mm (1/16")	0 to 10	SP201-204A	SP200-204A	SP202-204A
0 to 6	3.0 mm (1/8")	0 to 10	SP201-207A	SP200-207A	SP202-207A
0 to 8	0.8 mm (1/32")	0 to 200	SP201-213A	SP200-213A	SP202-213A
0 to 10	5.0 mm (3/16")	0 to 10	SP201-210A	SP200-210A	SP202-210A
0 to 16	1.6 mm (1/16")	0 to 200	SP201-214A	SP200-214A	SP202-214A
0 to 120	3.0 mm (1/8")	0 to 200	SP201-215A	SP200-215A	SP202-215A
0 to 200	5.0 mm (3/16")	0 to 200	SP201-216A	SP200-216A	SP202-216A
<b>24Vdc Pumps - Variable-flow; reversible; up to 0.3A current draw</b>					
0 to 0.4	0.8 mm (1/32")	0 to 10	SP201-251A	SP200-251A	SP202-251A
0 to 1.4	1.6 mm (1/16")	0 to 10	SP201-254A	SP200-254A	SP202-254A
0 to 6	3.0 mm (1/8")	0 to 10	SP201-257A	SP200-257A	SP202-257A
0 to 8	0.8 mm (1/32")	0 to 200	SP201-263A	SP200-263A	SP202-263A
0 to 10	5.0 mm (3/16")	0 to 10	SP201-260A	SP200-260A	SP202-260A
0 to 16	1.6 mm (1/16")	0 to 200	SP201-264A	SP200-264A	SP202-264A
0 to 120	3.0 mm (1/8")	0 to 200	SP201-265A	SP200-265A	SP202-265A
0 to 200	5.0 mm (3/16")	0 to 200	SP201-266A	SP200-266A	SP202-266A

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 PVC plastic housing. All models include small control board with inputs for pump operation - start/stop, fwd/rev, speed control and tachometer output.

Contact us for details on special controls or packaging.



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.

SmallPumps, APT logo—TM Advanced Product Technology, LLC

Tygon—Reg TM Saint Gobain Performance Plastics Co. Viton—Reg TM DuPont Dow Elastomers LLC  
©Copyright 2005-18 Advanced Product Technology, LLC.

**For more information contact:**

**APT Instruments**

**Omaha, NE 68144 USA**

**877.324.5444 Toll-free**

**217.498.0342 \* 217.498.0352Fx**

**[www.aptinstruments.com](http://www.aptinstruments.com)**

**[sales@aptinstruments.com](mailto:sales@aptinstruments.com)**