

## SmallPumps™ SP400VO Variable-Flow OEM Pumps

The SmallPumps SP400-series pumps are rugged little industrial pumps designed for larger flow OEM applications. These rugged pumps are best for single purpose applications. Flow rates are available from 0.3 to 5 liters/min. Adapt them to almost any fluid transfer application. Enjoy the benefits of peristaltic pumps in your fluid transfer application.

All pumps have chemical-resistant plastic housings and steel rotor assemblies with sealed ball-bearing rollers. Select from several brush-type reversible VDC motors. Shipping Wt. 5 lb. (2.0 kg).

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



Inquire for details on manual or remote control PCB systems.

*SP400 Peristaltic Pump*

### 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)*  
*154 x 185 x 154 mm (Vdc)*

### SPECIFICATIONS

	Norprene & Viton	Silicone
Max. Fluid Pressure:	20 psig (1.4 bar)	10 psig (0.7 bar)
Max. Suction Lift:	20-ft (6 m) H <sub>2</sub> O	10-ft (3 m) H <sub>2</sub> O
Flow 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:	12VDC; 1.2 to 4A	
Dimensions (W x H x D):		
60 RPM:	154 x 185 x 154 mm (6.1 x 7.3 x 6.1 in)	
200 RPM:	154 x 185 x 206 mm (6.1 x 7.3 x 8.1 in)	
Weight:	approx 2 kg (5 lbs)	
Shipping Wt:	approx 2 kg (5 lbs)	

### APPLICATIONS

*Fluid Transfer*  
*Chemical Metering*  
*Waste Removal*  
*Printing Inks*  
*Production Dispensing*

### SP400VO Max Flowrates (LPM)

RPM	Motor		Tubing ID (mm)	
	Vdc	Max Amps	10	13
200	12	4	3.3	5
60	12	1.5	1.5	1

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.

# SP400VO Peristaltic Pumps

NA - Not Available at this time  
NR - Not Recommended

## SP400VO Ordering Information – (Flow rates listed are for Norprene tubing; Silicone is slightly higher).

Flow Rate LPM	Tubing ID	RPM Range	Norprene®	Pump Part No.	
				Silicone	Viton®
<b>12Vdc Pumps - Variable-flow; reversible</b>					
1 to 5	13 mm (1/2")	40 to 200	SP401.006	SP400.006	SP402.006
0.7 to 3.3	10 mm (3/8")	40 to 200	SP401.005	SP400.005	SP402.005
0.4 to 1.5	13 mm (1/2")	15 to 60	SP401.002	SP400.002	SP402.002
0.3 to 1	10 mm (3/8")	15 to 60	SP401.001	SP400.001	SP402.001

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. SP401C.002).

"CS" PVC plastic housing w/ on-off switch (e.g. SP401CS.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.*

APT logo—TM Advanced Product Technology, LLC Viton—Reg TM DuPont Dow Elastomers LLC

Norprene—Reg TM Norton Co.

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