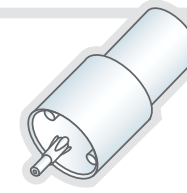
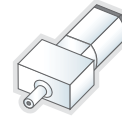
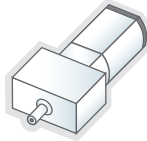
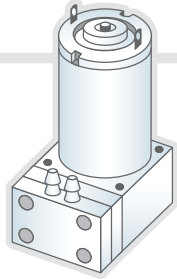


Air Pumps SERIES 8000/AP MICRO



MODEL
FEATURES

SP-8000

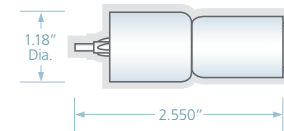
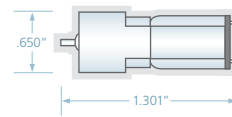
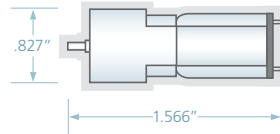
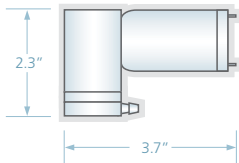
AP-2P01

AP-2P02A

AP-3P04

Pump Design	Single diaphragm, positive displacement	Rotary diaphragm, miniature, ideal for battery powered applications	Rotary diaphragm, miniature, ideal for battery powered applications	Rotary diaphragm, miniature, ideal for battery powered applications
Ports	3/16" barb	3mm outlet	3mm outlet	4mm outlet
Approvals	FAA approved (D0160C)	N/A	N/A	N/A
Valves	N/A	Suction valve, discharge valve	Suction valve, discharge valve	Suction valve, discharge valve
Voltage Range	12 or 24 VDC	Nominal 3 VDC, 2.0 - 3.2 VDC	Nominal 3 VDC, 1.9 - 3.1 VDC	Nominal 12 VDC
Power Consumption	Less than 1 amp	Max. 460 mA	Max. 320 mA	Max. 270 mA
Noise	N/A	< 60 dBA @10cm	< 65 dBA @10cm	< 55 dBA @1ft
Electrical Connections	Spade type terminals	Terminals extend from top of pump	Terminals extend from top of pump	Terminals extend from top of pump
Max. Output Pressure	20 PSI (1.38 Bar)	6.76 PSI (350mmHg)	6.76 PSI (350mmHg)	11.0 PSI (570mmHg)
Max. Flow Rate	0.14 CFM (4 LPM), 8.5 CFH (240 LPH)	1.48 SCFH (0.7 LPM)	0.42 SCFH (0.2 LPM)	3.18 SCFH (1.5 LPM)
Pressure Drop	N/A	<2 mmHg/min from 300 mmHg	<2 mmHg/min from 300 mmHg	<3 mmHg/min from 525 mmHg
Typical Performance	0.035 CFM @ 14.5 PSI (1.0 LPM @ 1 Bar)	N/A	N/A	N/A
Vacuum	18 inHg (457 mmHg)	N/A	N/A	N/A
Motor	Permanent Magnet DC	N/A	N/A	N/A
Size	1.5" W x 2.28" L x 3.7" H (38.1 x 57.9 x 93.98 mm)	1.566" W x 0.472" L x 0.827" H (39.78 x 11.99 x 21.00 mm)	1.301" W x 0.394" L x 0.650" H (33.04 x 10.01 x 16.51 mm)	2.550" L x 1.18" Diameter (64.77 x 29.97 mm)
Weight	0.5 lb. (227 g)	0.55 oz. (15.5 g)	0.28 oz. (8.0 g)	2.12 oz. (60.0 g)
Temperature Range	32° - 220° F (0° - 104° C) Estimated	N/A	N/A	N/A
Duty Cycle	1000 hours @ 100% duty cycle*	Tested to 30,000 operating cycles	Tested to 30,000 operating cycles	Tested to >80,000 operating cycles

DIMENSIONS



*Lifetime will vary depending on usage

SERIES 8000 MATERIALS

- Pump Body**
Nylon FDA
- Diaphragm**
Buna-N FDA, Viton® FDA
- Valves**
Buna-N FDA, Viton® FDA

AP MICRO MATERIALS

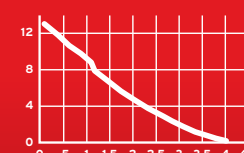
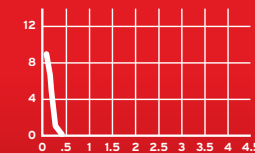
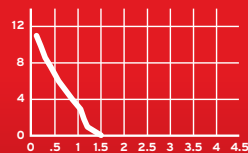
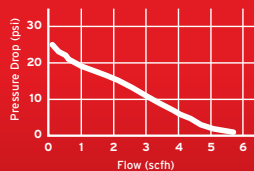
- Pump Body**
Celcon® M90 Natural
- Retainer Base**
Celcon® M90 Natural
- Top Cover**
ABS 757 Natural (N/A for #AP-3P01)
- Piston**
Delrin® 500 AL
- Diaphragm**
Buna 50° A
- Cap**
ABS 757 Natural
- Suction Valve**
Buna 50° A
- Discharge Valve**
Buna 45-50° A

An ISO Certified Company

Smart Products, Inc.
675 Jarvis Dr., Morgan Hill, CA 95037 USA
ph: 408-776-3035 • fax: 408-776-3186
e-mail: sales@smartproducts.com

Visit us at www.smartproducts.com or call **1-800-338-0404** for more information

AIR FLOW CHARTS



Our products are subject to continuous improvement. To achieve this goal, Smart Products reserves the right to change features, processes, materials, testing and other specifications as necessary. All plastic body material recommendations are based on standard corrosion resistant and compatibility guides. Smart Products strongly recommends that customers test products for each application-specific use.

Buyer is urged to test and investigate the compatibility of any substance used with our products prior to actual use. Seller will not be responsible for the failure of Buyer to thoroughly test and investigate the compatibility of the substances used with our products and the fitness of the products for its particular use or application.

©2012 Smart Products, Inc. All rights reserved. Delrin is a registered trademark of DuPont Corp. Viton is a registered trademark of DuPont Dow Elastomers. Celcon is a registered trademark of Celanese Corp.