FEATURES

| MODEL | #SP8000 | | |
|---------------------------|--|------------------------|--|
| PUMP OVERVIEW | Single diaphragm, positive displacement | TYPICAL PERFORMANCE | 0.035 CFM @ 14.5 PSI (1.0 LPM @ 1 Bar) |
| PORTS | 3/16" barb | VACUUM | 18 inHg (457 mmHg) |
| APPROVALS | FAA approved (D0160C) | MOTOR | Permanent magnet DC |
| VOLTAGE RANGE | 12 or 24 VDC | SIZE | 1.5"W x 2.28"L x 3.7"H (38.1 x 57.9 x 93.98 mm) |
| POWER CONSUMPTION | Less than 1 amp | WEIGHT | 0.5 lb. (227 g) |
| ELECTRICAL CONNECTIONS | Spade type terminals | TEMPERATURE RANGE | 32° - 220° F (0° - 104° C) estimated |
| MAX OUTPUT PRESSURE | 20 PSI (1.38 Bar) | DUTY CYCLE | 1000 hours @ 100% duty cycle (Lifetime will vary depending on usage) |
| MAX FLOW RATE | 0.14 CFM (4 LPM), 8.5 CFH (240 LPH) | MATERIALS | Pump body: Nylon FDA Diaphragm & Valves: Buna-N FDA, Viton® FDA |



SERIES 8000 AIR PUMPS

ENERGY-EFFICIENT, DURABLE, & DEPENDABLE

Series 8000 air and vacuum pump features a single diaphragm and positive displacement – and delivers 1,000 hours of continuous duty. Energy efficient and durable, the Series 8000 pump utilizes a long-lasting flapper valve.

Available in a **12 or 24 voltage option**, this pump is best known for its ability to move air/gasses from an inlet and deliver it to an outlet.

Customers also get an option of using a Buna-N or Viton® o-ring. The pump body is nylon with a **permanent magnet DC motor**.

Note: 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.

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FEATURES

PUMP OVERVIEV

Rotary diaphragm, miniature, ideal for battery powered applications

PUMP BODY & RETAINER BASE

Celcon® M90 Natural

TOP COVER

ABS 757 Natural (N/A for #AP-3P04)

ELECTRICAL CONNECTIONS

Terminals extend from top of pump

PISTON Delrin® 500 AL

DIAPHRAGM Buna 50° A

VALVES

Suction valve in Buna 50° A, discharge valve in Buna 45-50° A

CAP

ABS 757 Natural

FUNCTION

Creates pressure for air flow

SERIES AP MICRO PRESSURE PUMPS

MICRO SIZE WITH MAXIMUM DURABILITY

Compact and portable, Series AP Micro Pressure Pumps are a **great solution for battery powered applications**. They are easily mounted and provide maximum durability. This pump features a **rotary diaphragm** and has been tested to 30,000 operating cycles.

Ideal for any industry, these pumps are unique because of their **micro size** and lower maximum pressure abilities. Please note these pumps only **create pressure for air flow**.

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OPTIONS BY MODEL

| | #AP-2P01 | #AP-2P02A | #AP-3P04 |
|------------------------|---|---|--|
| PORTS | 3mm outlet | 3mm outlet | 4mm outlet |
| VOLTAGE RANGE | Nominal 3 VDC, 2.0 - 3.2 VDC | Nominal 3 VDC, 1.9 - 3.1 VDC | Nominal 12 VDC |
| POWER CONSUMPTION | Max 460 mA | Max 320 mA | Max 270 mA |
| NOISE | <60 dBA @10cm | <65 dBA @10cm | <55 dBA @1ft |
| MAX OUTPUT PRESSURE | 6.76 PSI (350mmHg) | 6.76 PSI (350mmHg) | 11.0 PSI (570mmHg) |
| MAX FLOW RATE | 1.48 SCFH (0.7 LPM) | 0.42 SCFH (0.2 LPM) | 3.18 SCFH (1.5 LPM) |
| PRESSURE DROP | <2 mmHg/min from 300 mmHg | <2 mmHg/min from 300 mmHg | <3 mmHg/min from 525 mmHg |
| SIZE | 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 | 0.55 oz. (15.5 g) | 0.28 oz. (8.0 g) | 2.12 oz. (60.0 g) |
| DUTY CYCLE | Tested to 30,000 operating cycles | Tested to 30,000 operating cycles | Tested to >80,000 operating cycles |

MICRO PUMPS CREATE PRESSURE FOR AIR FLOW



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