

## P4000 SERIES

## PNEUMATIC PUMP DISPENSING SYSTEMS



The P4000 programmable cycle time and pre-settable shot volume dispensing system is designed to incorporate EMS PACIFIC's state-of-the-art pump technology into a highly efficient pneumatic delivery configuration.

The P4000 system features EMS PACIFIC's rotary valve-type pump technology; delivering the highest level of accuracy, purity, and chemical compatibility for precision dispensing applications. This is the high viscosity compatible model that EMS Pacific offers.

In packaging of cosmetic and pharmaceutical products, biotechnology, semiconductor fabrication and assembly, food production, the P4000 is designed for virtually any manufacturing or laboratory environment where repeatability and accuracy must be maintained. The system can be fitted with 1/4", 1/2" or 1" cylinder bore pump modules to accommodate a variety of shot volume needs.

The P4000 system comes in two (2) model packages, P4100 and P4000. The P4100 is the smaller of the packages.

The systems are composed of a pump module and a controller. Pump module and controller can be purchased separately.

To Order or for Additional Information  
Call Toll Free: 1-800-575-5093  
Email: [pump@emspacific.com](mailto:pump@emspacific.com)  
[www.emspacific.com](http://www.emspacific.com)



2986 Teagarden St., San Leandro, CA 94577

## **P4000 FEATURES**

- Pump module is easy to maintain and clean
- Adaptable for remote operation
- Minimum dead volume for easy priming
- Purging with minimum effort
- Horizontal and vertical mounting
- Pre-settable shot volume
- Clean material cut-off
- Relay or PLC controllers available
- Air requirements: filtered dry air at 100 PSI max

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## P4000 SPECIFICATIONS

### PNEUMATIC FLUID METERING - DISPENSING PUMPS P4000 SERIES

PISTON TYPE POSITIVE DISPLACEMENT	PNEUMATIC PUMP MODULE WITH SST CYLINDER		
P4000 SERIES - VALVELESS TYPE	P4100	P4000	
MODELS	PR0804	PR1608	PR1616
ADJUSTABLE SHOT RANGE (mL)	.080 -.400	0.5 -3.5	3.5 - 12.5
REPEATABILITY/ ACCURACY (%)	99.9/ 99.7	99.9/ 99.7	99.9/ 99.7
FLUID PRESSURE, MAX. (PSIG)	100	400	100
TEMPERATURE MAX. (° F)	140	140	140
NOMINAL SPEED (CYCLES/MIN.)	60	60	60
PISTON MATERIAL	99.5% ALUMINA CERAMIC		
CYLINDER MATERIAL	316SS		
VALVE TYPE & MATERIAL	ROTARY PISTON, 99.5% ALUMINA CERAMIC		
WETTED MATERIAL	POLYETHYLENE, 316SS, CERAMIC, VITON™, TEFLON™		
STROKE ADJUSTMENT	.001" RESOLUTION MICROMETER		
FLUID PORTS: INLET/ OUTLET, NPT	1/16	1/8	1/8
PUMP MODULE DIMENSIONS (INCHES)	1 1/8 X 12 1/4	2 X 17.5	2 X 17.5
WEIGHT (POUNDS)	2	7	7
MAX. VISCOSITY CENTIPOISE, cps	150000 cps	150000 cps	150000 cps
ELECTRICAL REQUIREMENTS	110 VAC, 60Hz		
CONTROLLERS *	SAC1100, CLC1100		

\* Customer can utilize its' own controller. Click on how to activate the pump.

Repeatability is the measure of the consistency of shot volume delivery, obtained by calculating the ratio of any shot volume to the average shot volume of a particular pump stroke setting multiplied by 100.

Accuracy is determined by comparing actual shot volume to the preset shot volume, calculated as the quotient of the actual shot volume to the preset shot volume, multiplied by 100.

Data in website is based on tests performed using water as the pumping media.

Note: All information contained in this catalog is subject to engineering change without notice.

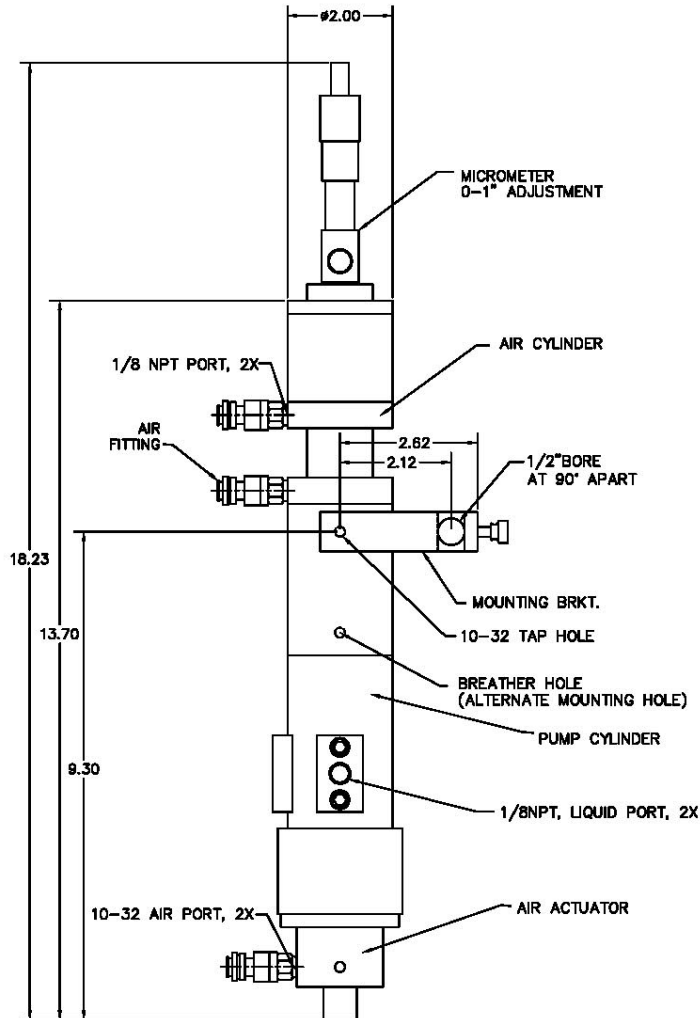
Patent Pending  
Teflon® is a registered trademark of Dupont.  
Viton® is a registered trademarks of DuPont Dow Elastomers.

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## P4000 Pump Module Dimensions (inches)



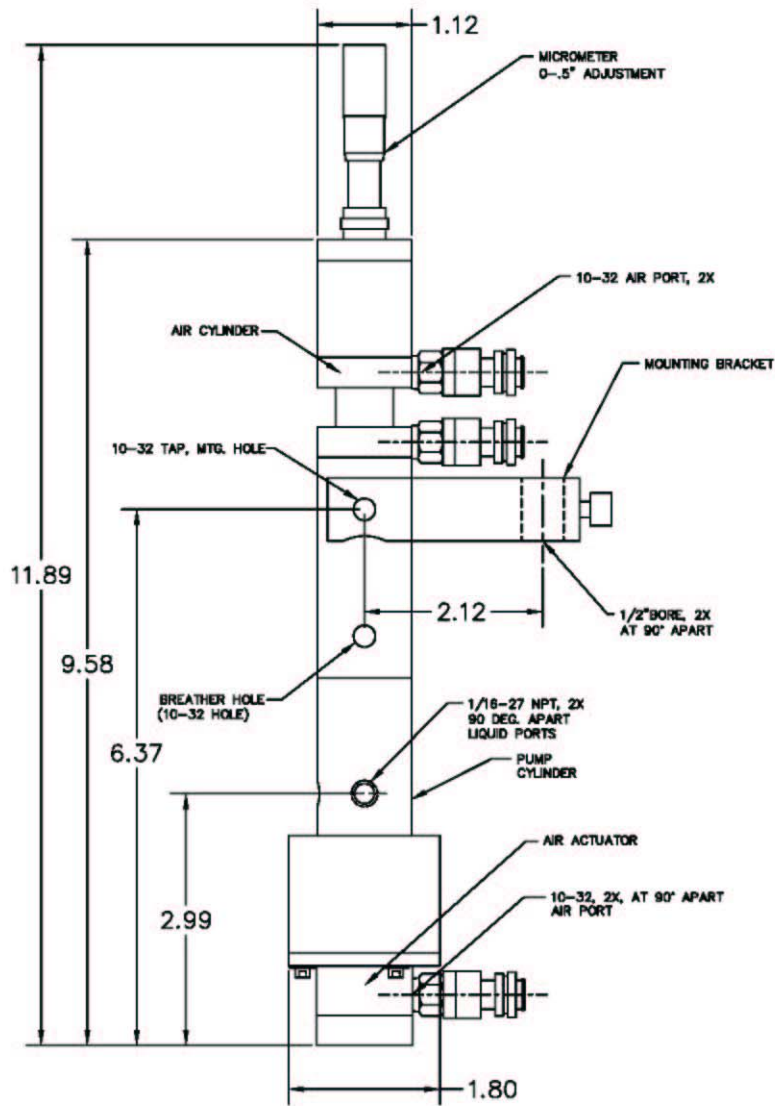
EMS PACIFIC P4000 PUMP MODULE-PR1616 & PR1608  
(CAN BE MOUNTED IN VERTICAL OR HORIZONTAL POSITION)

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## P4100 Pump Module Dimensions (inches)



EMS PACIFIC P4100 PUMP MODULE-PR0804 & PR0804-CR  
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