



The first pump with no internal or external metal parts, eliminating ionic contamination.



CONTROLLED FLOW PUMP

PFD I

2.5 GPM*
10 l/min



US Patents 5 480 292 and 5 573 385

The AstiPure™ PFD pumps are pneumatically operated: two bellows made from TEFLON® reciprocate horizontally. Their pumping frequency is much lower than an equivalent diaphragm pump and results in an extended life. Due to this low frequency and amplitude of the bellows pump, we guarantee a lower level of particle contamination. All AstiPure™ PFD pump wetted components are manufactured with TEFLON® (PFA HP, PTFE and FEP), and are suitable for pumping even the most corrosive concentrated chemicals (acids and solvents). All other components are manufactured with high technology materials; e.g. PVDF and PEEK, and ensure no ionic contamination of the chemical, even if there is a bellows failure. Our pumps are assembled in our cleanroom, tested with DI water, cleaned, then double sealed in plastic bags.

FEATURES/BENEFITS

- No metal parts (internal or external).
- Easy maintenance.
- No rotating shafts or glands to cause leakage.
- Pneumatically operated (dry air or nitrogen).
- Adjustable pumping rate up to 2.5 GPM (10 l/min).
- Self priming.
- Suitable for liquid temperatures from 32°F (0°C) up to 212°F (100°C).
- Compact design.

APPLICATIONS

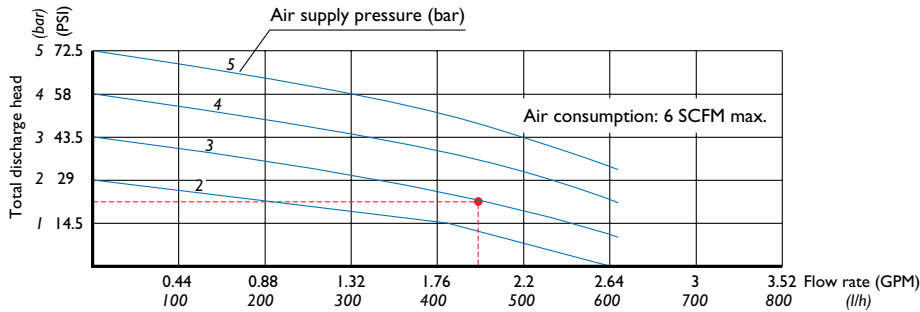
- Transfer of ultrapure acids and solvents used in the semiconductor industry.
- Recirculation, dispensing, and filtration with controlled flow rates and volumes.
- Chemical injection and sampling.
- Transfer of chemicals and solvents in cleanrooms.
- Safe transfer of corrosive chemicals and solvents in hazardous areas.
- Transfer and dispensing of pharmaceuticals.

* US GPM

SPECIFICATIONS

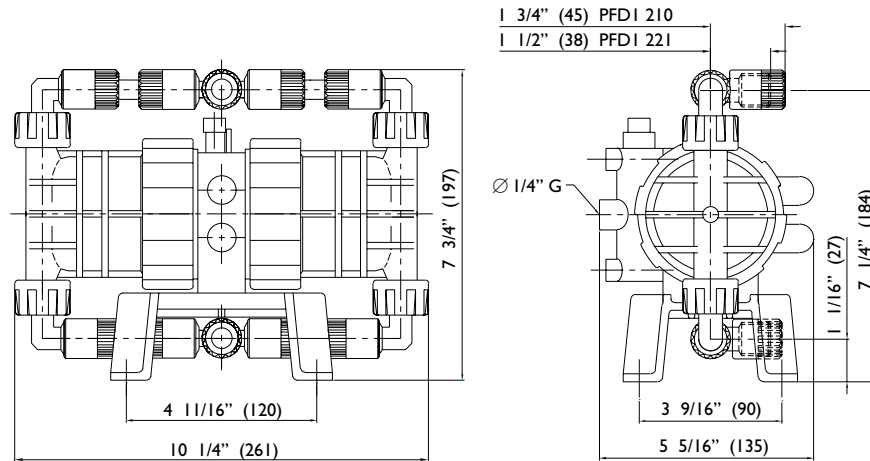
Flow rate	Max. suction head	Max. air pressure*	Max. back pressure	Max. air consumption	Max. air connection	Weight
0 - 2.5 GPM	10 feet	72.5 PSI	58 PSI	6 SCFM	Ø 3/32" I.D.	4.5 lbs
0 - 600 l/h	3 m	5 bar	4 bar	10 m ³ /h	Ø 2.5 mm I.D.	2 kg

* Please ensure that the air pressure is no greater than 43.5 PSI (3 bar) when the fluid temperature is greater than 140°F (60°C).



- **Example:**
Air supply pressure: 43.5 PSI (3 bar)
Discharge head: 22 PSI (1.5 bar)
Flow rate: 2 GPM (450 l/h)

DIMENSIONS



ORDERING INFORMATION

Part number	Fluid connection
PFD1 210	Flare fitting Ø 10x13 or 3/8"x1/2"
PFD1 221	Pipe thread Ø 1/2" MNPT

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P		F		D		I		2		1		0		W	
Piloting		Fluid		Sealing											
F	Standard	D	Standard	None	FEP										
R	Recirculation	S	Slurry	W	No seals										
O	No piloting														

* Please call us before ordering.

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PERFORMANCE PLASTICS



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