



# Furon® Astipure II Pumps

### Bellows High Purity Fluoropolymer Air Operated Pump (15lpm/4gpm; 30lpm/8gpm; 60lpm/16gpm)

#### Description

Furon® Astipure II pumps are pneumatically-operated, driven by two reciprocating PTFE bellows. Their oscillation frequency is much lower than an equivalent diaphragm pump, resulting in an extended life and reduced cost of ownership.

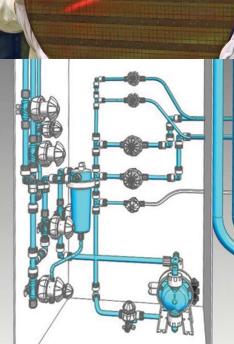
All Furon® Astipure II pump wetted components are manufactured from High Purity PTFE and PFA, making the pumps suitable for handling even the most aggressive concentrated chemicals. All other (non-wetted) components are manufactured from advanced engineering thermoplastics such as ETFE and PEEK to ensure no possibility of ionic contamination, even in the event of a bellows failure. Furon® Astipure II pumps are also 100% elastomer free, using our highly reliable No O-Ring sealing technology throughout. This substantially reduces the chance of contamination due to a failed O-Ring as well as reduces the maintenance costs.

Our pumps are self-priming, providing an easy installation and setup. In addition, the Furon® Astipure II pumps feature our innovative shuttle valve fixation technology, allowing us to provide three different driving systems to adapt our pumps to the customer's requirements.

Astipure II Pumps offer a 2-year factory warranty. Upon completion of preventive maintenance (performed by a certified technician), the warranty is extended an additional two years up to a maximum of six years total warranty. This assures superior system up-time and significantly reduces cost of ownership.

#### **Applications**

- Transfer of ultrapure acids and solvents used in the semiconductor industry
- Transfer of abrasive slurries
- · Recirculation, dispensing, and filtration with controlled flow rates and volumes
- · Bulk chemical delivery



#### Features and Benefits

- No metal parts
- 100% High-Purity PTFA and PFE wetted flow path
- 100% elastomer free
- Worldwide service center for preventive maintenance
- Unique recirculating pilot air concept to improve system uptime
- Stall-proof twin shuttle option available
- 2-year warranty, renewable to 6 years with preventive maintenance



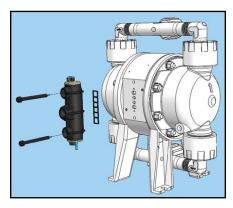
## **Furon® Astipure II Pumps**

#### **Specifications**

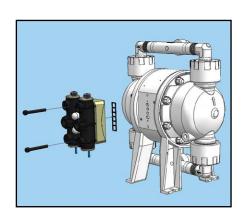
Pump Size	Maximum Flow Rate	Maximum Suction Head	Maximum Air Pressure*	Maximum Air Consumption	Maximum Back Pressure	Temperature Range**	Weight
ı	4 gpm - 15 lpm	10" - 3m	80 psi - 5.5 bar	4.5 SCFM - 7 m³/h	80 psi - 5.5 bar	30 - 195° F 0 - 90° C	5 lbs - 2.5 kg
2	8 gpm - 30 lpm	12" - 3.5m	80 psi - 5.5 bar	6 SCFM - 9 m³/h	80 psi - 5.5 bar	30 - 195° F 0 - 90° C	9 lbs - 4.5 kg
3	16 gpm - 60 lpm	14" - 4m	80 psi - 5.5 bar	9 SCFM - 14 m³/h	80 psi - 5.5 bar	30 - 195° F 0 - 90° C	16 lbs - 8 kg

 $<sup>^{</sup>st}$  Contact factory for use with higher pressure

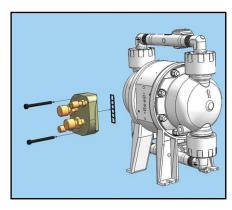
 $<sup>{}^{**}\</sup>operatorname{\mathsf{High-temperature}}\ \operatorname{\mathsf{version}}\ \operatorname{\mathsf{available}}\ \operatorname{\mathsf{for}}\ \operatorname{\mathsf{media}}\ \operatorname{\mathsf{temperatures}}\ \operatorname{\mathsf{greater}}\ \operatorname{\mathsf{than}}\ \operatorname{\mathsf{the}}\ \operatorname{\mathsf{one}}\ \operatorname{\mathsf{indicated}}\ \operatorname{\mathsf{here}}$ 



Single shuttle valve driving system



Twin shuttle valve driving system (anti stalling system)



External driving (allow a direct driving through a PLC system)

#### **Ordering Information**

		Pump Size	End Connection Type	End Connection Size	Driving System			
Base Part Number	Media				Single Standard Driving Shuttle Valve	TWIN Shuttle Valve Driving System	External Driving	
A2CHI F8		ı	FlareGrip II®	1/2"	<b>Nothing</b> to add to the base Part Number	Add <b>TWIN</b> at the end of the base Part Number	Add <b>EXT</b> at the end of the base Part Number	
A2CHI T8			Tube End					
A2CH2 FI2	Chemical	2	FlareGrip II®	3/4"				
A2CH2 TI2	Chemical		Tube End					
A2CH3 F16	İ	3	FlareGrip II®	- "				
A2CH3 T16			Tube End					
A2SYI F8	Slurry	I	FlareGrip II®	1/2"				
A2SYI T8			Tube End					
A2SY2 FI2		2	FlareGrip II®	3/4"				
A2SY2 TI2			Tube End					
A2SY3 FI6		3	FlareGrip II®	- 1"				
A2SY3 TI6			Tube End					

#### Standard Options

- Optic fiber for stroke counting (5m standard) PN = 9475

- FN 74/3

  Fiber optic converter

   PN = 8319

   Metal free leak detection system

   LDI for size I & 2 pump

   LD2 for size 3 pump

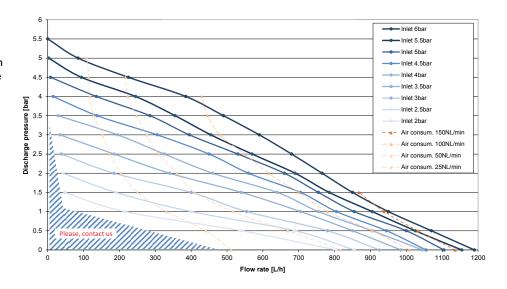
   Other manifold orientations than the standard horizontal/horizontal
- Various combinations of end connections available (Flare, tube, pipe, NPT).

  Please contact our Technical Service for details

#### Flow Rate Curves

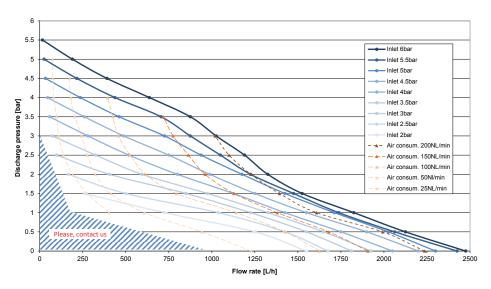
#### Pump Size I

Inlet air pressure (bar) and air comsumption (NL/min) as a function of fluid flow rate (L/h) and discharge pressure (bar) Pump chemical a2 size 1, Ø4x6 air pressure tube



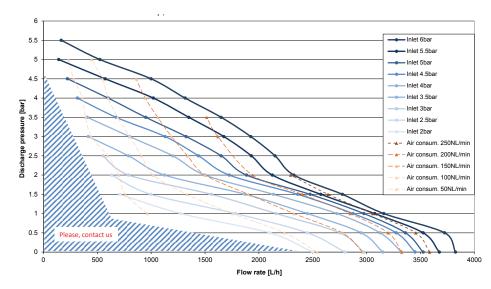
#### Pump Size 2

Inlet air pressure (bar) and air comsumption (NL/min) as a function of fluid flow rate (L/h) and discharge pressure (bar) Pump chemical a2 size 2,  $\emptyset$ 6x8 air pressure tube



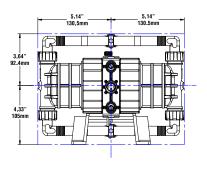
#### Pump Size 3

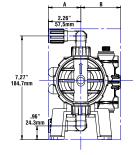
Inlet air pressure (bar) and air comsumption (NL/min) as a function of fluid flow rate (L/h) and discharge pressure (bar) Pump chemical a2 size 3, Ø8x10 air pressure tube

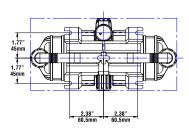


#### **Dimensions**

#### Pump Size I

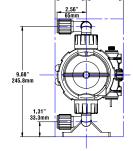


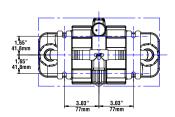


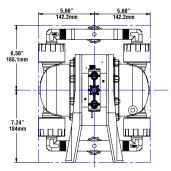


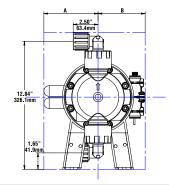
#### Pump Size 2

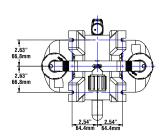
5.31" 5.31" 135mm 138mm 124.9mm 5.43"











#### Pump Size 3

	Pump Size I		Pump Size 2		Pump Size 3	
	Control Side	Muffler Side	Control Side	Muffler Side	Control Side	Muffler Side
	Α	В	Α	В	Α	В
Single Shuttle	71 mm - 2.8"		82.5 mm - 3.25"		120 mm - 4.72"	
Twin Shuttle	129 mm - 5.08"		131 mm - 5.16"		148 mm - 5.84"	
External Shuttle	123 mm - 4.87"		132 mm - 5.21"		148 mm - 5.84"	
Muffler Only		58 mm - 2.28"		69.5 mm - 2.74"		138 mm - 5.43"
Muffler & Leak Detection System		94.5 mm - 3.72"		95.5 mm - 3.72"		165 mm - 6.50"



#### **Saint-Gobain Performance Plastics**

7301 Orangewood Avenue Garden Grove, CA 92841

1-800-833-5661 Tel: (714) 630-5818 Fax: (714) 688-2614

#### **Saint-Gobain Performance Plastics France**

56, Chemin des Berthilliers 71850 CHARNAY LES MACON, France

Tel: 33/(0) 3 85 20 27 00 Fax: 33/(0) 3 85 29 18 48

www.processsystems.saint-gobain.com

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