

UP15 - PIVOT Series  
1-1/2" Air-operated double diaphragm pump

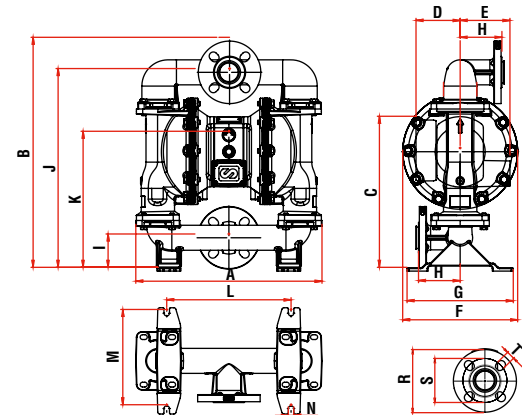


TECHNICAL DATA

PRESSURE RATIO	1:1
MAXIMUM FREE DELIVERY	475 l/min (125 US gal/min)
AIR PRESSURE OPERATING RANGE	1,5 to 8 bar (22 to 120 psi)
MAXIMUM SIZE SOLIDS IN SUSPENSION	6,4 mm (1/4")
MAXIMUM DRY SUCTION LIFT	6 m (19.6')
MAXIMUM WET SUCTION LIFT	9 m (29.5')
DISPLACEMENT PER CYCLE*	2,5 l (0.66 gal)
FLUID INLET AND OUTLET CONNECTIONS (MULTIPORTS)	1-1/2" BSP (F) - 1-1/2" NPT (F)
AIR INLET CONNECTION	1/2" NPT (F)
AIR EXHAUST CONNECTION	1" NPT (F)
SOUND LEVEL	82,8 dB (A) @ 60 cycles/min @ 70 psi
MATERIAL AND WEIGHT: Central Body/Fluid Chamber & Manifolds	
ALUMINIUM / ALUMINIUM	Threaded 22 kg (48.5 lb)
ALUMINIUM / DUCTILE IRON	36 kg (79.4 lb)
ALUMINIUM / 316 SS	38 kg (83.8 lb)
	Flanged 41,5 kg (91.5 lb)

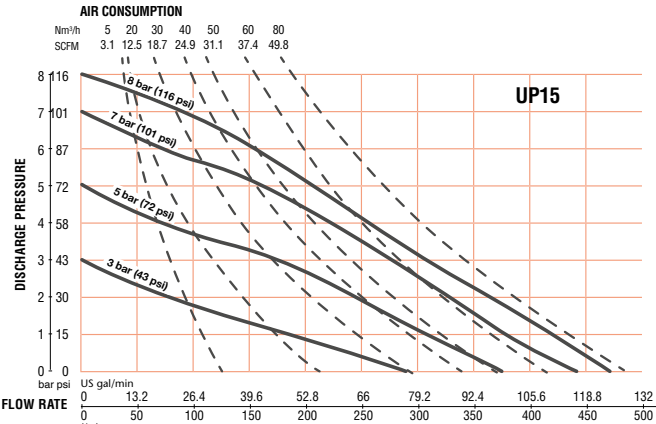
\* Delivery per cycle depends on the diaphragms material, air inlet and fluid viscosity.

DIMENSIONS



DIMENSIONS (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	R	S	T
UP15 FLANGED PUMP	447	577,5	362,5	106	220	276	255	100	80	477	326,5	298,5	228,6	13	150	104,7	20
UP15 THREADED PUMP	456	517,5	344	106	220	276	252	55	70	466,5	308	298,5	228,6	13	-	-	-
DIMENSIONS (inches)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	R	S	T
UP15 FLANGED PUMP	17.6	22.7	14.13	4.2	8.7	10.9	10	3.9	3.2	18.8	18.86	11.8	9	0.59	5.9	4.1	0.78
UP15 THREADED PUMP	17.95	20.4	13.5	4.2	8.7	10.9	9.9	2.2	2.8	18.4	12.1	11.8	9	0.59	-	-	-

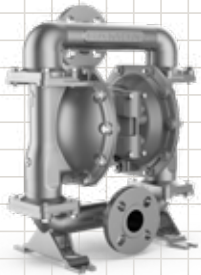
PERFORMANCE CURVES



FLANGED PUMPS



Stainless Steel



Stainless Steel

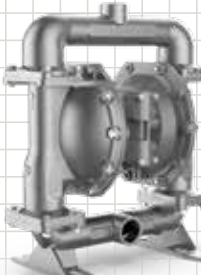
THREADED PUMPS



Aluminium



Ductile Iron



Stainless Steel



YouTube

1-1/2" Air-Operated Double Diaphragm Pump

METALLIC UP15



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Visit: [www.samoaindustrial.com](http://www.samoaindustrial.com) for more information.

SAMOA INDUSTRIAL, S.A. - PROCESS DIVISION  
Pol. Ind. Porceyo, I-14 • Camino del Fontán, 831  
E-33392 GIJÓN (Asturias) SPAIN  
Tel.: +34 985 381 488  
support@samoaindustrial.com • [www.samoaindustrial.com](http://www.samoaindustrial.com)



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# UP15 - PIVOT Series

## 1-1/2" Air-operated double diaphragm pump

Discover the SAMOA UP15 pump: a breakthrough in design with a **unique air motor** for unparalleled performance and energy efficiency, setting new benchmarks in the industry.

- **HIGHER EFFICIENCY**
- **SUPERIOR RELIABILITY**
- **EASY SERVICING**
- **UNIQUE FRICTIONLESS PIVOT-SHAFT**

### Bolted multi-port construction

- Longer operation lifetime compared to clamped pumps.
- Same size bolts for ease of maintenance.
- Lateral fluid inlet and outlet ports avoid leaking directly onto the pump.

### High-grade materials

- Durable diaphragms shaft.
- Long-lasting, preformed diaphragms reduce wear and avoid breakage.
- Ground elastomer balls, moving into formed cages, avoid wearing and breaking.

**PIVOT**  
SERIES  
UNIVERSAL DESIGN

Product pictures and specifications are subject to change without prior notice.



Easy to service air valve

### First-class quality and finishes

- External and internal e-coated manifolds, fluid chambers, air chambers and central body.
- Superior resistance to abrasion and outdoor working conditions.
- Better finish, scratch-resistant surfaces.

### Innovative Air Distribution System

### Air exhaust

- Built-in noise reducer.
- Threaded connection allows adding external hose for remote exhaust, or for installing an available quieter muffler.

### UNIVERSAL PUMP STANDARDS

Matches relative dimensions of main competitive brands, allowing easy swap-over.

470 l/min  
125 gal/min

# PIVOT Series Air Distribution System

Advanced and exclusive air motor technology: more than 15% of energy savings compared to other technologies. <sup>(1)</sup>

### Modular frictionless air valve:

- Precision machined cartridge and Pivot-Shaft.
- Quick teardown for cleaning and repair.
- Works reliably with dry or humid air.
- No dynamic seals.

#### 1 Pivot-Shaft Air Valve:

- Fast shifting reduces air consumption.
- Smooth pump operation.
- No icing with large and direct exhaust passages.
- No whistle noises.

#### 2 Quick-Fill Valve:

- Precise air chamber filling reduces air consumption.
- High-Performance fast filling system.

#### 3 Smooth Start Shifter (3<sup>rd</sup>)

- No stall operation.
- Low pressure reliable start-up.

<sup>(1)</sup> Tested in SAMOA laboratories at 6 bar of inlet pressure and with 4 bar of pressure drop.



LUBE FREE OPERATION



NO VIBRATION



REDUCED FLOW PULSATION



ICE FREE EXHAUST





REDUCED AIR CONSUMPTION

## AVAILABLE MATERIALS

SAMOA offers a wide range of material options for chemical compatibility and to withstand abrasion, temperature and fatigue caused by demanding conditions.

Example: **UP15X-XXX-XXX**  
**UE15X-XXX-XXX-X**

UP15X		XXX			XXX		X	
PUMP TYPE		AIR MOTOR	HOUSINGS		WETTED PARTS			ACCESSORIES
Pump Type & Size	Central Body & Air Chambers	Fluid Ports / Location Multiport manifolds: central and lateral	Fluid Chambers & Manifolds	Hardware Bolts	Valve Seats	Valve Balls	Diaphragms Type & Material	Accessories (UE pumps only)
UP15 Universal Pump (Bolted)	 <b>ATEX Certified</b> <b>A*</b> = Aluminium <b>S*</b> = AISI 316 Stainless Steel (only for pumps with Stainless Steel Fluid Chambers & Manifolds)	<b>B</b> = 1-1/2" BSP threaded ports/ Lateral (only in Aluminium versions) or Central	 <b>ATEX Certified</b> <b>A*</b> = Aluminium <b>F*</b> = Ductile Iron <b>S*</b> = AISI 316 Stainless Steel	<b>C</b> = Carbon Steel <b>S</b> = Stainless Steel	<b>A</b> = Aluminium <b>D</b> = AISI 440 Hardened Stainless Steel <b>H</b> = Hytrel® <b>M</b> = Santoprene® <b>N</b> = Nitrile (Buna-N) <b>S</b> = AISI 316 Stainless Steel	<b>H</b> = Hytrel® <b>M</b> = Santoprene® <b>N</b> = Nitrile (Buna-N) <b>T</b> = PTFE (Teflon®) <b>S</b> = AISI 316 Stainless Steel <b>V</b> = FKM (Viton®)	<b>A</b> = Santoprene® <b>C</b> = Hytrel® <b>G</b> = Nitrile (Buna-N) <b>V</b> = FKM (Viton®)  <b>Two piece</b> <b>Z</b> = PTFE (Teflon® with Santoprene® backer)	<b>A</b> = Diaphragm leak detectors <b>B</b> = Diaphragm leak detectors (ATEX) <b>C</b> = Stroke sensor <b>D</b> = Stroke sensor (PLC) <b>E</b> = Stroke sensor (ATEX) <b>F</b> = Diaphragm leak detectors + Stroke sensor <b>G</b> = Diaphragm leak detectors + Stroke sensor (PLC) <b>H</b> = Diaphragm leak detectors + Stroke sensor (ATEX)
UE15 Universal Pump (Bolted) with electronic interface		<b>C</b> = 1-1/2" ANSI / DIN flanged ports / Central horizontal (only in Stainless Steel & Ductile Iron versions) <b>N</b> = 1-1/2" NPT threaded ports/ Lateral (only in Aluminium versions) or Central <b>V</b> = 1-1/2" ANSI / DIN flanged ports/Central horizontal inlet, Central vertical outlet						

\*ATEX Certified pumps for use in hazardous locations ATEX Group II 2GDx.

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Contact us for more information about connected pumps' configuration.

METALLIC  
UP15