







SSAMOA

UP10 - PIVOT Series

1" Air-operated double diaphragm pump



The new SAMOA UP10 pump combines a Universal design with a unique frictionless Pivot-Shaft Air Valve to provide maximum performance and **energy efficiency**, exceeding market expectations.

UP10 Metallic pumps make the difference through:

- HIGHER EFFICIENCY. Maximum fluid flow with reduced air consumption.
- INCREASED RELIABILITY. No stall, no icing, reliable start-up and longer air valve and diaphragms life.
- MAXIMUM VERSATILITY. Aluminium and Stainless Steel pumps with a wide range of diaphragms, seats and balls options offer broad fluid and application compatibility. Highly suitable for outdoors and general applications with presence of
- EASY SERVICING. Simplified maintenance and cleaning. The pump is held together by carriage bolts and nuts allowing to accomplish a much faster strip down and rebuild.
- COMPACT DESIGN.

designs.

High grade ground

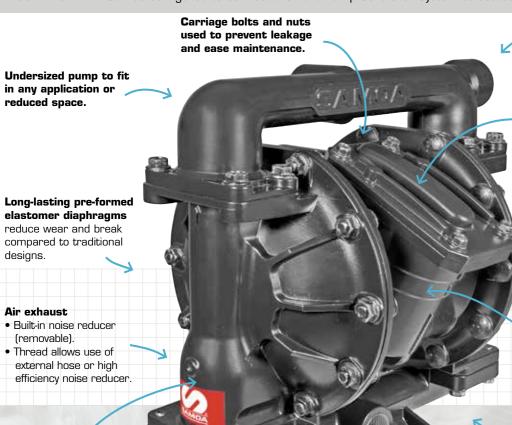
breaking.

elastomer valve-balls moving

into formed cages, avoid

wearing, weakening, and

• CONNECTIVITY. Can be configured to connect a Smart Pump-Controller System to actuate, control and monitor your pumps.



Lateral fluid inlet and outlet ports avoid leaking directly onto the pump.

Air motor technology

With well proven SAMOA Frictionless Pivot-Shaft Air Valve:

- Interchangeable air valve cartridge.
- Superfast change-over shift.
- No dymanic seals.
- Stall prevention device (3^s).
- Short and overdimensioned evacuation air ducts

Robust air motor

- Threaded and bolted construction.
- Air cap protects valve as a shield. • Fully groundable ATEX versions.
- Durable diaphragms shaft.

Metallic construction structure

- Superior abrasion resistance.
- Stainless Steel versions for increased resistance to corrosive fluids, harsh atmospheres, high tensile, and aggressive temperatures.
- Very robust design for longer operation lifetime compared to clamped pumps.

Universal pump standards

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

NO VIBRATION | PROVEN SUPERIOR PERFORMANCE | RELIABLE | DURABLE | LOWER CONSUMPTION | UNIVERSAL

Exclusive frictionless PIVOT-SHAFT Air Valve

Incredibly fast changeover shift:

- Larger flow delivery.
- Smooth pump operation.
- Reduced flow pulsation.
- No pump vibration.
- · Reduced air consumption.

Patented Smooth Start Shifter (3^S):

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

Short and overdimensioned evacuation air ducts:

- No icing, even during long pump runs at high pressure.
- · No whistle noise.
- · Long-life shift and evacuation Pivot-Pads even with high operating pressure.

Modular air valve:

- Pivot-Shaft cartridge design
- · Precision machined cartridge and Pivot-Shaft.
- · Quick teardown for cleaning and repair

No dynamic seals:

- · No parts subject to wear.
- · Reliably work with dry or humid air.
- · No lubrication required.







AVAILABLE MATERIALS

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

PUMP TYPE	AIR MOTOR		HOUSINGS		WETTED PARTS				
1 Pump Type & Size	Central Body & Air Chambers	Fluid Ports / Location Multiport manifolds: central and lateral	Fluid Chambers & Manifolds	Hardware Bolts	Valve Seats	Valve Balls	B Diaphragms Type & Material		
UP10 Universal Pump (Bolted)	A* = Aluminium B* = Conductive Polypropylene (black)	B = 1" BSP threaded ports N = 1" NPT threaded ports	A* = Aluminium S* = AISI 316 Stainless Steel	C = Carbon Steel S = Stainless Steel	A = Aluminium H = Hytrel® M = Santoprene® N = Nitrile (Buna-N) S = AISI 316 Stainless Steel	H = Hytrel® M = Santoprene® N = Nitrile (Buna-N) T = PTFE (Teflon®)	A = Santoprene® C = Hytrel® G = Nitrile (Buna-N) Two piece Z = PTFE (Teflon with Santoprene® backer)		

 $[\]star$ (EX) ATEX Certified pumps for use in hazardous locations ATEX Group II 2GDx.

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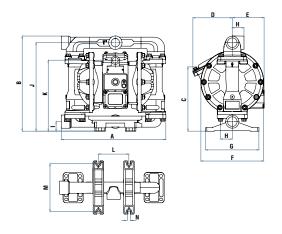


TECHNICAL DATA

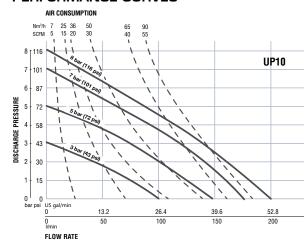
TEOTIMORE BAIA	METALLIC UP10 - PIVOT SERIES						
PRESSURE RATIO	1:1						
MAXIMUM FREE DELIVERY	200 I/min (53 US gal/min)						
AIR PRESSURE OPERATING RANGE	1,5 to 8 bar (20 to 120 psi)						
MAX. SIZE SOLIDS IN SUSPENSION	6,4 mm (1/4")						
MAXIMUM DRY SUCTION LIFT	5 m (16')						
MAXIMUM WET SUCTION LIFT	8 m (26')						
DISPLACEMENT PER CYCLE*	0,85 I (0,2gal)						
FLUID INLET AND OUTLET CONNECTIONS (MULTIPORTS)	1" NPT (F) - Threaded / 1" BSP (F) - Threaded						
AIR INLET CONNECTION	1/2" NPSM (F)						
AIR EXHAUST CONNECTION	1" NPT (F)						
SOUND LEVEL	75 dB (A) @50 cycles/min @70 psi						
WEIGHT: ALUMINIUM STAINLESS STEEL	Threaded 11,5 kg (25 lb) 17,5 kg (38.6 lb)						

^{*} Delivery per cycle depends on the diaphragms material, air inlet pressure and fluid viscosity.

DIMENSIONS



PERFORMANCE CURVES



DIMENSIONS (mm)

UP10 ALUMINIUM & STAINLESS STEEL PUMP

DIMENSIONS (inches)

UP10 ALUMINIUM & STAINLESS STEEL PUMP

Α	В	C	D	E	F	G	Н	I	J	K	L	M	N
348	317	214	131	106	209	177	39	32	295	237	102	159	10
A	В	С	D	E	F	G	Н	ı	J	K	L	M	N
13 45/64	12 31/64	8 27/64	5 5/32	4 11/64	8 15/64	6 31/32	1 17/32	1 17/64	11 39/64	9 21/64	4 1/64	6 17/64	15/64

THREADED PUMPS



ALUMINIUM

STAINLESS STEEL





Pol. Ind. Porceyo, I-14 • Camino del Fontán, 831 E-33392 Gijón (Asturias) SPAIN Tel.: +34 985 381 488 - Fax: +34 985 147 213 flow@samoaindustrial.com • www.samoaindustrial.com

