







# **S**SAMOA

# **UP10 - PIVOT Series**

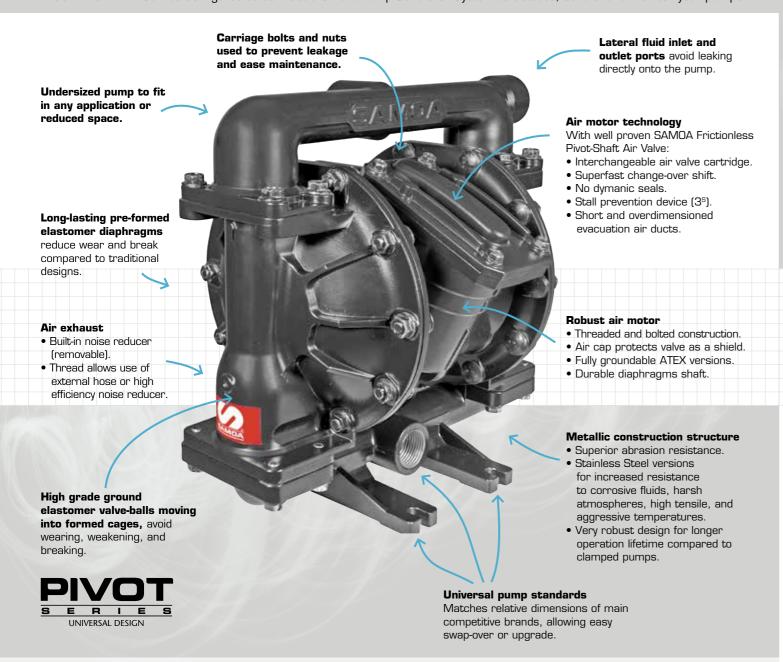
# 1" Air-operated double diaphragm pump



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



# **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<sup>S</sup>):

- 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.

Example: UP10X-XXX-XXX

UPTUX			XXX		XXX				
PUMP TYPE	AIR MOTOR		HOUSINGS		WETTED PARTS				
Pump Type & Size	Central Body & Air Chambers	Fluid Ports / Location Multiport manifolds: central and lateral	Fluid Chambers & Manifolds	Hardware Bolts	6 Valve Seats	Valve Balls	3 Diaphragms Type & Material		
<b>UP10</b> 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 V = FKM (Viton®)	H = Hytrel® M = Santoprene® N = Nitrile (Buna-N) T = PTFE (Teflon®) V = FKM (Viton®)	A = Santoprene® C = Hytrel® G = Nitrile (Buna-N) V = FKM (Viton®)  Two piece Z = PTFE (Teflon with Santoprene® backer)		

<sup>\*</sup> ATEX Certified pumps for use in hazardous locations ATEX Group II 2GDx.

Hytrel® is a registered trademark of the DuPont Company, Viton® & Teflon® of the Chemours Company and Santoprene® of the Monsanto Company, licensed for Advanced Elastomer Systems, L.P. Kynar® is a registered trademark of Arkema, Inc.

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# 1" Air-operated double diaphragm pump

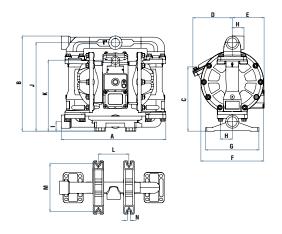


## **TECHNICAL DATA**

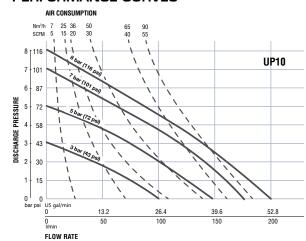
	METALLIC UP10 - PIVOT SERIES					
PRESSURE RATIO	1:1					
MAXIMUM FREE DELIVERY	200 I/min (53 US gal/min)					
AIR PRESSURE OPERATING RANGE	1,5 to 8 bar (20 to 120 psi)					
MAX. SIZE SOLIDS IN SUSPENSION	6,4 mm (1/4")					
MAXIMUM DRY SUCTION LIFT	5 m (16')					
MAXIMUM WET SUCTION LIFT	8 m (26') 0,85 l (0,2gal)					
DISPLACEMENT PER CYCLE*						
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)					

<sup>\*</sup> 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	М	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

# METALLIC **UP10**





INIUM STAINLESS STEEL

THREADED PUMPS



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