



UP05 Non-Metallic PIVOT SERIES



1/2"
Air-Operated
Double Diaphragm Pump

NON-METALLIC
UP05

PIVOT
S E R I E S
UNIVERSAL DESIGN

 **SAMOA**
LEADING THROUGH INNOVATION

UP05 - PIVOT Series

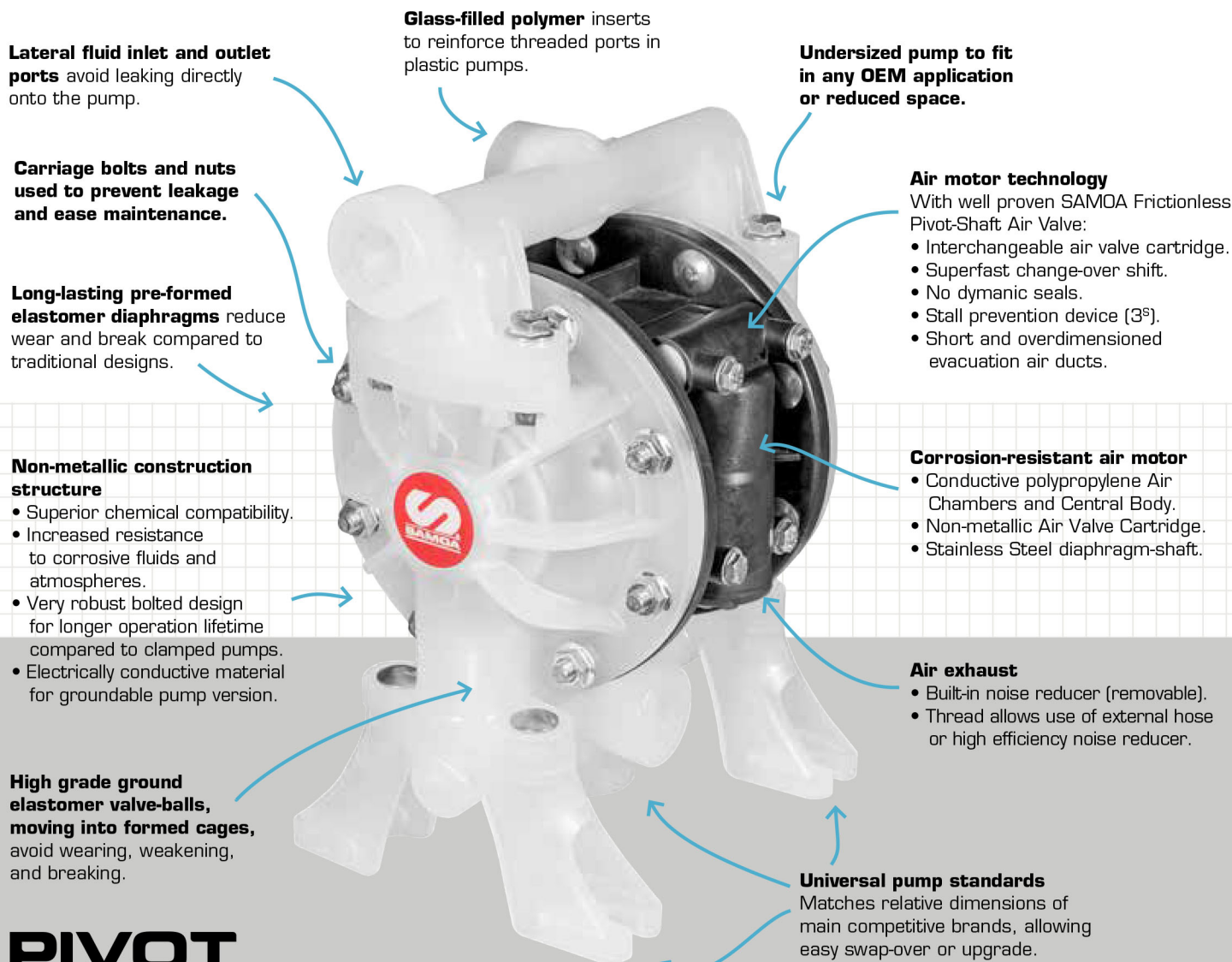
1/2" Air-operated double diaphragm pump

54 l/min
14.3 gal/min

The new SAMOA UP05 pump combines a Universal design with a unique frictionless Pivot-Shaft Air Valve to provide maximum performance and **energy efficiency**, exceeding market expectations.

UP05 Non-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.** Polypropylene, Conductive Polypropylene, PVDF and Conductive Acetal pumps with a wide range of diaphragms, seats and balls options offer broad fluid and application compatibility. Highly suitable for aggressive chemicals 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.
- **ULTRA-COMPACT DESIGN.** Ready to meet any OEM application needs. Multi-port manifolds: central and lateral openings.
- **CONNECTIVITY.** Can be configured to connect a Smart Pump-Controller System to actuate, control and monitor your pumps.



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Exclusive frictionless PIVOT-SHAFT Air Valve

3^S
Smooth-Start-Shifter



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:

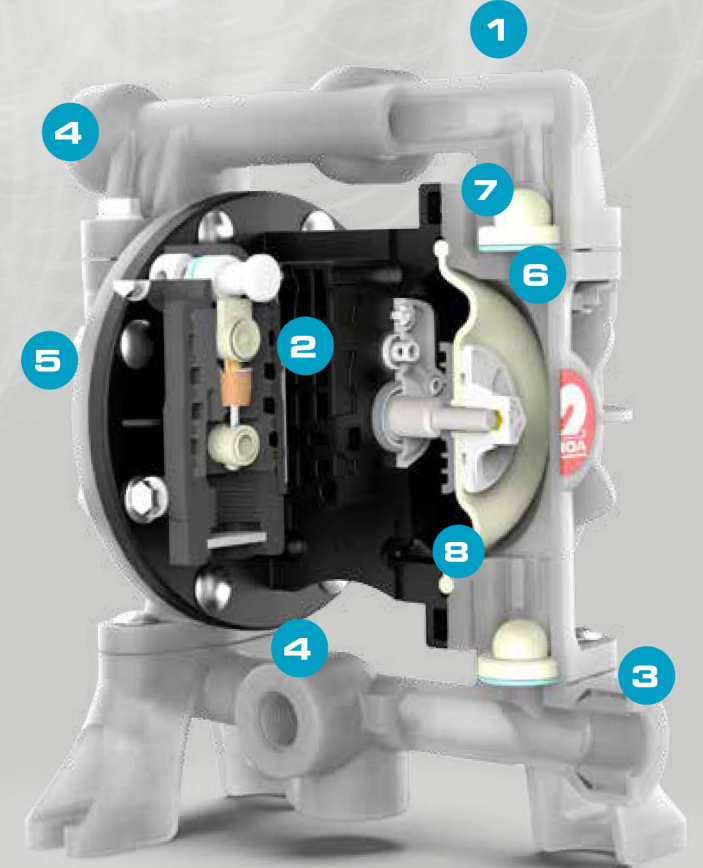
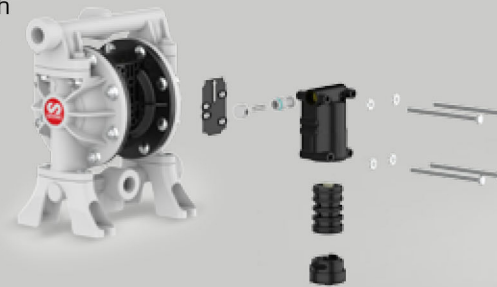
- No icing, even during long pump runs at high pressure.
- No whistle noise.
- Long-life shift and evacuation Pivot-Pads even with high operating pressure.

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.

Example: **UP05X-XXX-XXX**

UP05X		XXX			XXX		
PUMP TYPE	AIR MOTOR	HOUSINGS		WETTED PARTS			
1 Pump Type & Size	2 Central Body & Air Chambers	3 Fluid Ports / Location Multiport manifolds: central and lateral	4 Fluid Chambers & Manifolds	5 Hardware Bolts & Inserts	6 Valve Seats	7 Valve Balls	8 Diaphragms Type & Material
UP05 Universal Pump (Bolted)	ATEX Certified B* = Conductive Polypropylene (black)	B = 1/2" BSP threaded ports N = 1/2" NPT threaded ports	P = Polypropylene (white) W = PVDF (Kynar®) (white) ATEX Certified B* = Conductive Polypropylene (black) D* = Conductive Acetal (black)	S = Stainless Steel	C = Acetal P = Polypropylene S = AISI 316 Stainless Steel T = PTFE (Teflon®) V = FKM (Viton®)	H = Hytrel® M = Santoprene® N = Nitrile (Buna-N) S = AISI 316 Stainless Steel 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)

*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.

Contact us for more information about connected pumps' configuration.

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

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

NON-METALLIC
UP05

UP05 - PIVOT Series

1/2" Air-operated double diaphragm pump

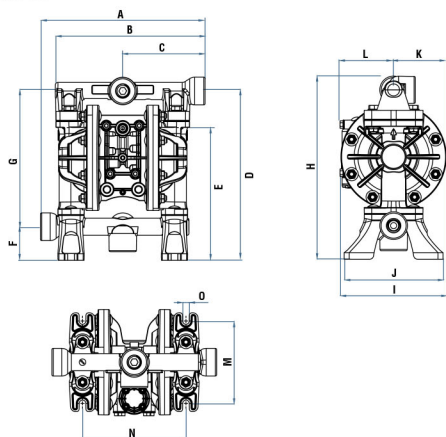
PIVOT
S E R I E S
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TECHNICAL DATA

	NON-METALLIC
PRESSURE RATIO	1:1
MAXIMUM FREE DELIVERY	54 l/min (14.3 US gal/min)
AIR PRESSURE OPERATING RANGE	1,5 to 7 bar (20 to 100 psi)
MAX. SIZE SOLIDS IN SUSPENSION	2,5 mm (3/32")
MAXIMUM DRY SUCTION LIFT	5 m (16')
MAXIMUM WET SUCTION LIFT	8 m (26')
DISPLACEMENT PER CYCLE*	0,15 l (0,04 gal)
FLUID INLET AND OUTLET CONNECTIONS (MULTIPOINTS)	1/2" NPT (F) Threaded / 1/2" BSP (F) Threaded
AIR INLET CONNECTION	1/4" NPSM (F)
AIR EXHAUST CONNECTION	1/2" NPT (F)
SOUND LEVEL	75 dB (A) @50 cycles/min@70 ps
WEIGHT: POLYPROPYLENE	2,7 kg (6 lb)
CONDUCTIVE POLYPROPYLENE	3 kg (6.6 lb)
PVDF	3,7 kg (8.2 lb)
CONDUCTIVE ACETAL	3,3 kg (7.3 lb)

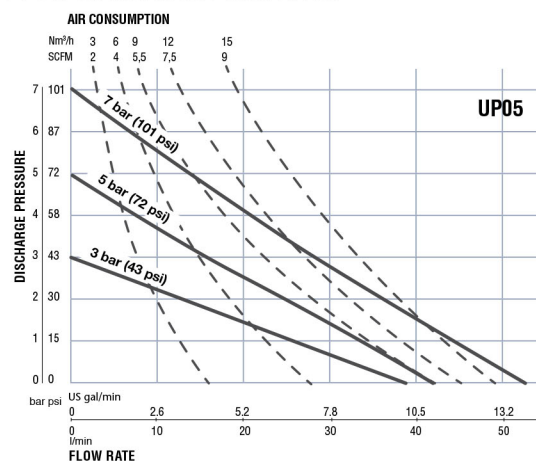
* Delivery per cycle depends on the diaphragms material, air inlet pressure and fluid viscosity.

DIMENSIONS



DIMENSIONS (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
UP05 PUMP	250	228	125	257	200	51	206	278	161	150	80	81	125	157	10
DIMENSIONS (Inches)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
UP05 PUMP	9 27/32	8 61/64	4 59/64	10 1/8	7 7/8	2 1/64	8 7/64	10 15/16	6 11/32	5 29/32	3 5/32	3 3/16	4 59/64	6 3/16	0 25/64

PERFORMANCE CURVES



THREADED PUMPS



POLYPROPYLENE



CONDUCTIVE
POLYPROPYLENE



PVDF



CONDUCTIVE
ACETAL

NON-METALLIC
UP05

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