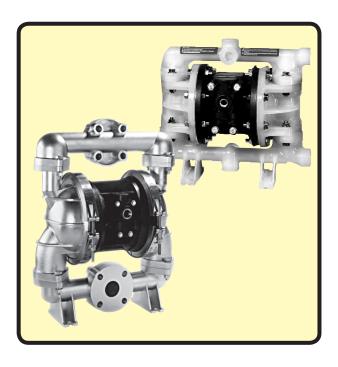
# PUMP ANYTHING THAT CAN POUR SAFELY AND RELIABLY



Wide selection of materials

SS - 316 stainless steel PP - Polypropylene K - PVDF AL - Aluminum NSS - Conductive nylon

Selection of diaphrams and elastomers

TF - Teflon (PTFE)

N - Geolast/Nitrile

L - Santroprene/EPDM

V - Viton

- Flows to 180 U.S. GPM (681 I/m) 1/4" - 2" sizes —
- Patented lube-free air system
- Will not stall at slow speeds
- Self-priming
- Runs dry

Here is a line of remarkably rugged and durable self-priming, double diaphragm pumps. Lube-free and non-stalling, all models will handle any product that pours, from clear water to highly viscous, abrasive and chemically aggressive materials. Proven to handle suspended solids and abrasives without damage to the product or the pump.

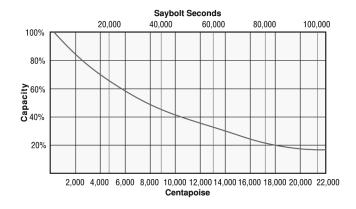
The unique pump design utilizes far fewer parts than other pumps on the market. This results in longer operating life and easier maintenance at a lower cost.

Since these pumps are driven by compressed air, there is no need for shielded electrical connections or explosion-proof motors. All models can run dry because there are no close fitting or sliding parts in the fluid section. Flow rates can be controlled to produce from zero to maximum flow simply by increasing or decreasing air flow or pressure.

### INSTALLATION

- 1. A lube-free, clean, dry compressed air source (or any non-flammable, compressed gas) is reccomended. Use a filter that is capable of filtering out particles larger than 50 microns.
- 2. Pumps should be mounted in an upright position with the exception of 1/4" models which may be rotated 360° to suit the application.
- 3. Install a particle fluid filter on the fluid suction line when particles in the fluid exceed the maximum particle size specification of the pump or particles are sharp enough to cut the diaphragms.
- 4. Never restrict fluid suction lines by means of reduced pipe size (smaller than pump inlet size) or control the pump with valves on the fluid inlet side of the pump.
- 5. Limit fluid inlet pressure to 10 PSIG or (.68 BAR)

# HIGH VISCOSITY APPLICATIONS





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1/4"

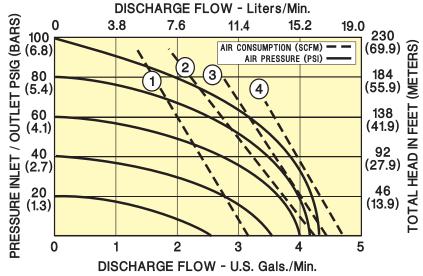
# **BOLTED**



# **SPECIFICATIONS**

Capacity:	
Adjustable	0-4.3 GPM (16 liters/min.)
Maximum temperature:	
PVDF	200°F
(93°C)	
Other models	150°F (66°C)
Maximum air pressure:.	
All Models	100 PSI (6.8 bars)
Dry lift capacity @ 100 PSI (6.8 bars):	15 ft. (4.5 meters)
Maximum solids:	1/16" (1.6 mm)
Air supply:	
Inlet	
Outlet	1/4" FNPT
Fluid inlet / discharge:	1/4" FNPT

# PLASTIC MODELS: PPBN-1/4 PPBTF-1/4 PPBL-1/4 NSSBTF-1/4 KBTF-1/4 KBL-1/4



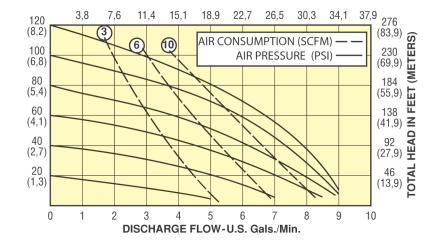
3/8"

# **BAND CLAMP**



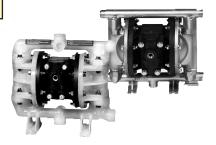
PLASTIC MODELS:
PPN-3/8 PPTF-3/8N SSTF-3/8
KTF-3/8 KL-3/8

Capacity:	
Adjustable	0 - 9 GPM (34.0 liters/min.)
Maximum temperature:	
PVDF model	200°F(93°C)
Other models	
Maximum air pressure:	
All Models	120 PSI (8.2
bars) Dry lift capacity	
Models w. PTFE Balls	10ft (3 me-
ters)	
Models with Max-Pass™ valves	17 ft (5.2 me-
ters)	
Maximum solids:	
Max-Pass™:	1/4"
(6.4mm)	
PPTF, NSSTF, KTF:	1/16" (3.2
mm)	
Air supply:	
Inlet	
Outlet	
Fluid inlet / discharge:	3/8" FNPT





# **BOLTED**



PLASTIC MODELS: PPBN-1/2, PPBTF-1/2, PPBL-1/2, PPBV-1/2, KBTF-1/2, KBL-1/2, KBV-1/2, NSSBTF-1/2

METALLIC MODELS: ALBN-1/2, ALBTF-1/2, ALBL-1/2, SSBTF-1/2, SSBL-1/2, SSBN-1/2

# **SPECIFICATIONS**

Capacity:	
Adjustable	0-17 GPM (64.6 liters/min.)
Maximum temperature:	
PVDF, AL and SS models	200°F (93°C)
Other models	150°F (66°C)
Minimum air pressure:	20 PSI (1.4 bar)
Maximum air pressure:	
Dry lift capacity @ 120 PSI (8.0 bars):	10 ft. (3 meters)
Maximum solids:	1/8" (3.2 mm)
Air supply:	1/4" FNPT
Fluid inlet / discharge:	
(FBSP available. Specify wh	nen ordering.)

Stock models have a side port. Optional center, top or dual ports must be specified when ordering. Fluid is not separated within the single piece manifold when dual ports are specified.



# **BAND CLAMP**

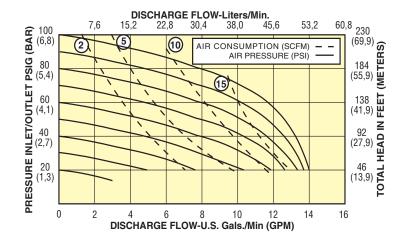


### DISCHARGE FLOW-Liters/Min. 68,1 276 (83,9) 7,6 15,1 30,3 37,9 45,4 60,6 PRESSURE INLET/OUTLET PSIG (BARS) 120 (8,2) **FOTAL HEAD IN FEET (METERS)** (15) AIR CONSUMPTION (SCFM) 100 (6,8) 230 (69,9) AIR PRESSURE (PSI) 80 (5,4) 184 (55,9)60 138 (4,1)(41,9)40 (2,7) 92 (27,9)20 46 (13,9)0 10 12 16 18 DISCHARGE FLOW-U.S. Gals./Min.

PLASTIC MODELS: PPN-1/2, PPTF-1/2, PPL-1/2, KTF-1/2

# **SPECIFICATIONS**

Capacity: Adjustable	0 - 14 GPM (53.2 liters/min.)
Maximum temperature:	,
PVDF model	
Other models  Minimum air pressure:	
bars) Maximum air pressure:(6.8 bars)	
Dry lift capacity @ 100 PSI (6.8 bars): meters)	10 ft. (3
Maximum solids:	1/8" (3.2 mm)
FNPT	1/4
Fluid inlet / discharge:	1/2" FNPT





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1"

# **BOLTED**

PLASTIC MODELS: PPBN-1, PPBTF-1, PPBL-1, PPBV-1

KTBF-1, KBL-1, KBV-1

METALLIC MODELS: ALBN-1, ALBTF-1, ALBL-1,

SSBTF-1, SSBL-1, SSBN-1





### **DISCHARGE FLOW-Liters/Min.** 23 45 68 91 114 136 159 120 (8,2) PRESSURE INLET/OUTLET PSIG (BAR) **(10)** 230 (69,9) 184 (55,9) 138 (41,9) 92 (27,9) 14 AIR CONSUMPTION (SCFM) AIR PRESSURE (PSI) 100 (6,8) (30) 80 (5,4) (40) 60 (4,1) 40 (2,7) 20 (1,3) 46 (13,9) **2** 36 42 48 DISCHARGE FLOW-U.S. Gals./Min.

# **SPECIFICATIONS**

Capacity:	
Adjustable	0 to 41 GPM (156 liters/min.)
Maximum temperature:	,
PVDF, AL and SS models	200°F (93°C
Other models	150°F (66°C)
Minimum air pressure:	
Maximum air pressure:	
Dry lift capacity @ 120 PSI (8.0 bars):	,
Models w/TFE balls	10 ft. (3 meters)
Other models	15 ft. (4.5 meters
Maximum solids:	1/4" (6.4 mm
Air supply:	•
Inlet	1/4" FNPT
Outlet	3/8"FNPT
Fluid inlet / discharge:	
Plastic Models	1" Flange ANSI/DIN compatible
Metallic Models	

1"

**BAND CLAMP** 



PLASTIC MODELS: PPN-1, PPTF-1, PPL-1, KTF-1,

**SPECIFICATIONS** 

# DISCHARGE FLOW - Liters/Min. O 19 38 57 76 95 114 133 152 230 (69.9) O 19 38 57 76 95 114 133 152 230 (69.9) O 19 38 57 76 95 114 133 152 230 (69.9) O 10 15 20 25 30 35 40 45 DISCHARGE FLOW - U.S. Gals./Min.

### 

Other models................ 15 ft. (4.5 meters)

Maximum solids:	1/4" (6.4 mm)
Air supply:	
Inlet	1/4" FNPT
Outlet	3/4" FNPT
(Air flow control valve of 1/4" FNPT)	on plastic pumps,
Fluid inlet / discharge:	1" FNPT



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1-1/2"

# **BOLTED**





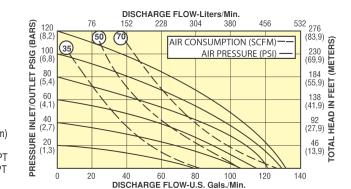
PLASTIC MODELS: PPBN-1 1/2, PPBTF-1 1/2, PPBL-1

1/2, KBTF-11/2, KBL-11/2

METALLIC MODELS: ALBN-1 1/2, ALBTF-1 1/2, ALBL-

1 1/2, SSBTF-1 1/2, SSBL-1 1/2,

SSBN- 1 1/2



# **SPECIFICATIONS**

Capacity:					
Adjustable 0 to 130 GPM (492 liters/min.)					
Maximum temperature:					
PVDF, AL & SS models200°F (93°C)					
Other models150°F (66°C)					
Minimum air pressure:20 PSI (1.2 bars)					
Maximum air pressure:					
All model120 PSI (8.2 bars)					
Dry lift capacity @ 100 PSI (6.8 bars):					
Model w/PTFF balls 10 ft (3 meters)					

Other Models......15 ft. (4.5 meters)

Maximum solids:	1/4" (6.4 mm
Air supply:	
Inlet	3/4" FNP
Outlet	3/4" FNP
(Air flow control valv	re on plastic pumps,
3/4" FNPT)	
Fluid inlet / discha	rge:
	11/" flance (20 mm

All Models.....1½" flange (38 mm)
(ANSI & DIN compatible)

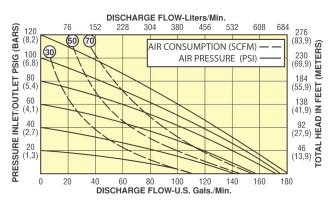
2"

# **BOLTED**

PLASTIC MODELS: PPBN-2, PPBTF-2, PPBL-2,

KTBF-2, KBL-2

METALLIC MODELS:ALBN-2, ALBTF-2, ALBL-2, SSBTF-2, SSBL-2, SSBN-2







# **SPECIFICATIONS**

Capacity:
Adjustable0 to 180 GPM (681 liters/min.)
Maximum temperature:
PVDF, AL & SS models200°F
(93°C)
Other models150°F
(66°C)
Minimum air pressure: 20 PSI (1.3 bars)
Maximum air pressure:
All model120 PSI (8.2 bars)
Dry lift capacity @ 100 PSI (6.8 bars):
Models w/PTFE balls10 ft. (3 meters)
Other Models15 ft. (4.5 meters)

Maximum solids:	1/4" (6.4 mm)
Air supply:	
Inlet	3/4"
FNPT	
Outlet	3/4" FNPT
(Air flow control valve of	n plastic pumps,
3/4" FNPT)	
Fluid inlet / discharge	:
Plastic Models	2" flange (51mm)
(ANSI & DIN compa	tible)
Metal Models	2" NPT Female



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# TO ORDER, Use Price Code No.

# **BOLTED MODELS**

MATERIAL OF CONSTRUCTION		PRICE CODE NUMBER					
MODEL DIAPHRAGM		1/4"	1/2"	1"	1 1/2"	2"	
I MOMBELL I	HOUSINGS**	ELASTOMERS/ VALVE SEATS**	0-4 GPM (16 l/m)	0-14 GPM (65 l/m)	0-41 GPM (156 l/m)	0-130 GPM (492 l/m)	0-180 GPM (681 l/m)
PPBN* PPBTF* PPBL* PPBV*	Polypropylene	Geolast® / Nitrile	55-7244-B	55-7287	55-7602	55-7615	55-7667
	Polypropylene	PTFE	55-7245	55-7288	55-7603	55-7616	55-7668
	Polypropylene	Santoprene® / EPDM	55-7270	55-7289	55-7604	55-7617	55-7669
	Polypropylene	Viton	—	55-7290	55-7605	—	—
NSSBTF*	Conductive Nylon	PTFE	55-7271	55-7292		_	_
KBTF- <u>*</u>	PVDF	PTFE	55-7247	55-7293	55-7606	55-7618	55-7629
KBL- <u>*</u>	PVDF	Santoprene® / EPDM	55-7286	55-7294	55-7607	55-7619	55-7630
KBV- <u>*</u>	PVDF	Viton	—	55-7295	55-7608	—	—
ALBN- <u>*</u>	Aluminum	Geolast® / Nitrile	_	55-7646	55-7655	55-7658	55-7649
ALBTF- <u>*</u>	Aluminum	PTFE / nylon	_	55-7647	55-7656	55-7659	55-7650
ALBL- <u>*</u>	Aluminum	Santoprene® / EPDM / PP	_	55-7648	55-7657	55-7660	55-7651
SSBTF *	Stainless steel	PTFE	_	55-7643	55-7661	55-7664	55-7652
SSBL *	Stainless steel	Santoprene® / EPDM	_	55-7644	55-7662	55-7665	55-7653
SSBN *	Stainless steel	Geolast® / Nitrile	_	55-7645	55-7663	55-7666	55-7654

<sup>\*</sup> Insert pump size to complete Model Number: i.e. PPBN - 1/4

# **BAND CLAMP MODELS**

	MATERIAL	PRICE CODE NUMBER			
MODEL	WETTED	DIAPHRAGM	3/8"	1/2"	1"
NUMBER * HOUSINGS**		ELASTOMERS/	0-9 GPM	0-14 GPM	0-40 GPM
		VALVE SEATS**	(34 l/m)	(53 l/m)	(152 l/m)
PPN*_	Polypropylene	Geolast® / Nitrile	55-7637	55-7120-B	55-7144-B
PPTF*_	Polypropylene	PTFE	55-7638	55-7118-A	55-7145-A
PPL*_	Polypropylene	Santoprene® / EPDM	55-7639	55-7248	55-7249
NSSTF*	Conductive Nylon	PTFE	55-7640	_	
KTF- <u>*</u>	PVDF	PTFE	55-7641	55-7110-A	55-7147-A
KL- <u>*</u>	PVDF	Santoprene® / EPDM	55-7642	—	—

<sup>\*</sup> Insert pump size to complete Model Number: i.e. PPN-1/2

<sup>\*\*</sup> See Material notes on page 7

<sup>\*\*</sup> See Material notes on Page 7



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# AIR OPERATED DIAPHRAGM PUMP Specifications and ordering information

### Material notes:

- Geolast is a nitrile blend and is a replacement for Buna-N or Neoprene®. Use chemical resistance information for Buna-N.
- Santoprene is an EPDM blend and is highly resistant to some acids and basses. Use the chemical resistance information for EPDM.
- Aluminum pumps have polypropylene valve seats, except aluminum w/ TFE models which have nylon valve seats.
- All pumps built with TFE contain a backup diaphragm of Santoprene.
- 5. NSSTF pumps are constructed of 316SS filled nylon and include ground / bond lugs.
- Air system constructed of polypropylene, except nylon and aluminum w/TFE models which have nylon air systems.

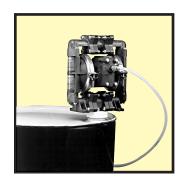
# General product notes:

- All pumps are lube-free and non-stalling. A clean, dry compressed air supply is all that is needed.
- 2. BSP thread models available. Consult Sales Department.
- 3. Flanges, available on 11/2" and 2" sizes only, are slotted for DIN or ANSI compatibility.

# **SHIPPING WEIGHTS**

	SHIPPING WEIGHT LBS (kg)						
HOUSING MATERIAL	1/4"	3/8"	1/2"	1" BOLTED	1" CLAMP	1-1/2"	2"
Polypropylene, Nylon	5 (2.3)	4 (1.7)	9 (4.1)	20 (9.1)	19 (8.6)	46 (21)	56 (25)
Conductive Nylon, PVDF	7 (3.2)	5 (2.3)	12 (5.4)	30 (13.7)	22 (9.9)	65 (29)	84 (38)
Aluminum			10 (4.5)	23 (10.5)		60 (27)	62 (29)
Stainless Steel			19 (8.6)	45 (20.4)		133 (60)	133 (60)

# **OPTIONAL EQUIPMENT**



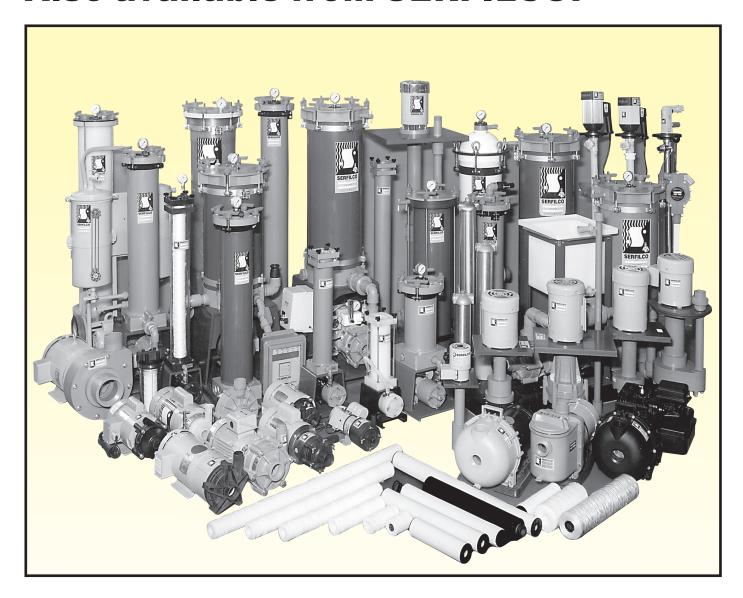
ACCESSORY KIT for drum transfer applications	PUMP	PRICE CODE NUMBER		
Turns diaphragm pump into an ideal drum pump.	SIZE	PP	PVDF	AL
Includes: 39" polypropylene or PVDF suction tube with 2" NPT polypropylene barrel adapter.	1/2" 1"	44-7236 44-7237	44-7239 44-7240	44-7628 —

AIR PRESSURE REGULATOR	INLET	CFM @	PRICE
	FNPT	100 PSI	CODE NO.
Tamper-proof design with special removable key. Maximum inlet pressure is 250 PSIG. Outlet pressure range is 5 to 125 PSIG.	1/4"	20	79-0305
	1/2"	50	79-0306
	3/4"	120	79-0307

REPAIR KIT Typically includes ball and valve seats manifold O-rings and diaphrams (may vary depending on model)	PRICE CODE NUMBER		
	Add -k to pump price code number		

GROUND-BOND CABLE KIT Pumping of flammable or combustable liquids	DESCRIPTION	PRICE CODE NO.
from one container to another requires proper grounding and bonding to prevent static discharge and explosion hazard. Only for use with metal or conductive pumps.	Ground cables, 2-6ft Bond cable, 10 ft Ground cable, 1 ft	55-0247

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**SERFILCO** can help you realize the economic value of clarification and purification of your process solutions and waste streams. Our wide range of pumps, filters, packaged systems, accessories and related control instruments make it possible for you to take advantage of one-stop shopping for all of your liquid handling needs. With modern filtration technology at work in your facility, you can reduce waste, lower your manufacturing costs, and enhance product integrity.

We've been serving industry worldwide for 50 years. We're ready to serve you, too!

Registered trademarks:
Viton - DuPont Dow Elastomers
Santoprene - Advanced Elastomer Systems, L.P.
Geolast - F.C. Witt Assoc.. Inc.