

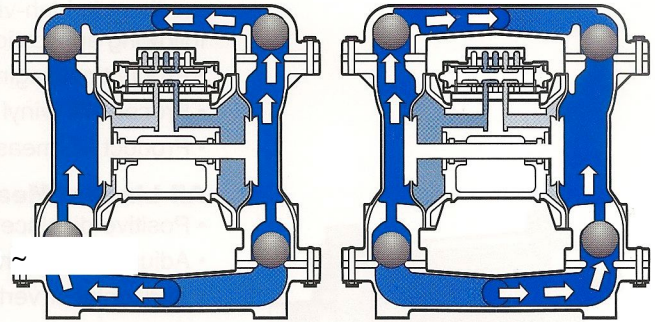
Industrial Pumping Equipment

Air-Operated Diaphragm Pumps

1 1/4" - 2" Air-Operated Pumps

Basic Design Features

Diaphragm pumps are driven by compressed air. The directional air distribution valve and pilot valve—the "air end"—are located in the center section of the pump. Liquid moves through two manifolds and outer chambers of the pump—the "wet end". Generally, check valves are located at the top and bottom of each outer chamber or on a common manifold. The two outer chambers are connected by suction and discharge manifolds.

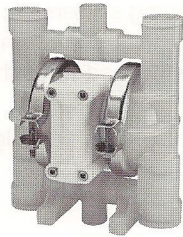


Right chamber-discharge
Left chamber-suction

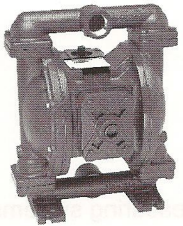
Left chamber-discharge
Right chamber-suction

Lincoln's double diaphragm self-priming design offers many advantages over other pumps.

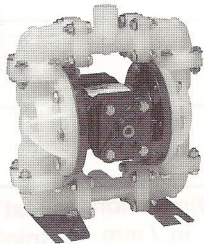
- *Pump abrasive and sheer-sensitive materials.* Low interval velocities move abrasives easily with no damage. Gentle pumping action does not shear fragile materials.
- *Pumps viscous materials.* Even heavy or solids-laden materials can be pumped.
- *Environmentally friendly.* No motors, seals or packing to leak.
- *Self-priming.* Able to dry prime under most suction lift or flooded suction conditions.
- *Variable flow.* Regulate the inlet air supply to adjust flow.
- *Runs dry without damage.*
- *Deadheads against closed discharge.* Excessive back pressure stops operation without damage until discharge opens. Eliminates bypass systems or relief valves.
- *Explosion-proof.* Eliminates sparking concerns of other electrical or rotating pumps.



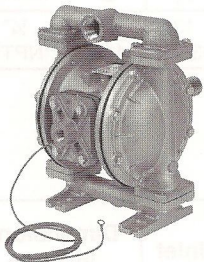
85630



85628



85622



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WARNING

The pump exhaust should be piped to an area for safe disposal of product being pumped in the event of a diaphragm failure.

1:1 Air-Operated Diaphragm Pump Line

Model Number	Pump Description	Pump Body	Wetted or Soft Parts	Pump Inlet/Outlet NPT	Max. Free Delivery GPM	Air Inlet NPT(F)	Max. Rec. Inlet Air Pressure	Max. Susp. Solids	Application
85630	1/2"	Polyprop	PTFE	1/2"/1/2"	4	1/4"	100 psi	1/2"	New oil, AF, windshield washer
85631	3/8"	Aluminum	Buna-N	1/2"/1"	15	1/4"	100 psi	1/8"	New/used oil, AF
85632	3/8"	Aluminum	Teflon®	1/2"/1"	15	1/4"	100 psi	1/8"	New oil, AF
85633	1/2"	Aluminum	Hytrel	1/2"/1/2"	15	1/4"	100 psi	1/8"	New oil
85622	1/2"	Polyprop	Santoprene	1/2"/1/2" *	14	1/4"	100 psi	1/8"	High abrasion materials
85623	1/2"	Polyprop	Teflon®	1/2"/1/2" *	14	1/4"	100 psi	1/8"	New oil, AF
85626	1/2"	Polyprop	Buna-N	1/2"/1/2" *	14	1/4"	100 psi	1/8"	New oil, AF
85629	1"	Aluminum	Hytrel	1"/1"	45	1/2"	125 psi	1/8"	New oil
85628	1"	Aluminum	Teflon®	1"/1"	45	1/2"	125 psi	1/8"	New oil, AF
85627	1"	Aluminum	Buna-N	1"/1"	45	1/2"	125 psi	1/8"	New/used oil, AF
85621	1 1/2"	Aluminum	Buna-N	1 1/2"/1 1/2"	106	1/2"	125 psi	1/8"	New/used oil, AF
85624	2"	Aluminum	Buna-N	2"/2"	150	1/2"	125 psi	1/8"	New/used oil, AF

Dual Inlet

85636	3/8"	Aluminum	Buna-N	1/2"/1/2"	15	1/4"	125 psi	1/8"	AF/Water
85637	1/2"	Polyprop	Buna-N	1/2"/1/2"	14	1/4"	100 psi	1/8"	AF/Water
85639	1"	Polyprop	Buna-N	1"ANSI**	45	1/2"	100 psi	1/8"	AF/Water
85638	1"	Aluminum	Buna-N	1"/1"	42	1/2"	125 psi	1/8"	AF/Water

* Can be converted to dual 1/2" outlet. ** 85639 requires 275631 Adapter and 275632 Seal Kit for Pipe Thread installations