

Air-operated diaphragm pumps

Model 85630



Model 85628



Model 85622



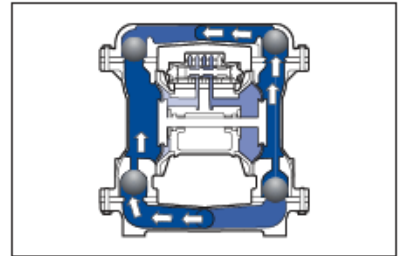
Model 85634



Basic design features

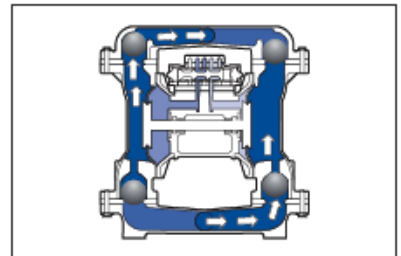
Diaphragm pumps are driven by compressed air. The directional air distribution valve and pilot valve – the “air end” – are located in the center section of the pump. Liquid moves through two manifolds and outer chambers of the pump, the “wet end”. Generally, check valves are located at the top and bottom of each outer chamber or on a common manifold. Lincoln’s double diaphragm self-priming design offers many advantages over other pumps.

- Pump abrasive and shear-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.



*Right chamber – discharge
Left chamber – suction*

*Left chamber – discharge
Right chamber – suction*



WARNING!

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

Pumps and accessories – air-operated diaphragm (AODD) pumps

1:1 air-operated diaphragm pump line

Model	Description	Pump body	Wetted or soft parts	Size		Free delivery		Air inlet NPT (f)	Maximum pressure		Element particle size		Application
				inlet NPT	outlet NPT	gal.	liter		psi	bar	in.	mm	
–	in.	–	–	in.	in.	gal.	liter	in.	psi	bar	in.	mm	–
85630	¼	Polyprop	PTFE	¼	¼	4	15,1	¼	100	6,89	½	0,79	New oil, AF, windshield washer fluid
85631	½	Aluminum	Buna-N	½	½	15	56,8	¼	100	6,89	¾	3,17	New/used oil, AF
85632	½	Aluminum	PTFE	½	½	15	56,8	¼	100	6,89	¾	3,17	New oil, AF
85633	½	Aluminum	Hytrel	½	½	15	56,8	¼	100	6,89	¾	3,17	New oil
85622	½	Polyprop	Santoprene	½	½ ¹⁾	14	53	¼	100	6,89	¾	3,17	High abrasion materials
85623	½	Polyprop	PTFE	½	½ ¹⁾	14	53	¼	100	6,89	¾	3,17	New oil, AF
85626	½	Polyprop	Buna-N	½	½ ¹⁾	14	53	¼	100	6,89	¾	3,17	New oil, AF
85629	1	Aluminum	Hytrel	1	1	45	170,3	½	125	8,6	¾	6,35	New oil
85628	1	Aluminum	PTFE	1	1	45	170,3	½	125	8,6	¾	6,35	New oil, AF
85627	1	Aluminum	Buna-N	1	1	45	170,3	½	125	8,6	¾	6,35	New/used oil, AF
85621	1 ½	Aluminum	Buna-N	1 ½	1 ½	106	401,3	¾	125	8,6	¾	6,35	New/used oil, AF
85624	2	Aluminum	Buna-N	2	2	150	567,8	¾	125	8,6	¾	6,35	New/used oil, AF

¹⁾ Can be converted to dual ½ in. outlet.

U.L. listed

Model	Description	Pump body	Wetted or soft parts	Size		Free delivery		Air inlet NPT (f)	Maximum pressure		Element particle size		Application
				inlet NPT	outlet NPT	gal.	liter		psi	bar	in.	mm	
–	in.	–	–	in.	in.	gal.	liter	in.	psi	bar	in.	mm	–
85634	1 U.L.	Aluminum	Buna-N	1	1	45	170,3	½	50 ²⁾	3,45	¾	6,35	Used oil, diesel, kerosene
85635	1 U.L.	Aluminum	PTFE	1	1	45	170,3	½	50 ²⁾	3,45	¾	6,35	Unleaded gas, diesel, kerosene used oil

²⁾ 50 psi (3,45 bar) flammable liquids, 125 psi (8,6 bar) others

Dual inlet

Model	Description	Pump body	Wetted or soft parts	Size		Free delivery		Air inlet NPT (f)	Maximum pressure		Element particle size		Application
				inlet NPT	outlet NPT	gal.	liter		psi	bar	in.	mm	
–	in.	–	–	in.	in.	gal.	liter	in.	psi	bar	in.	mm	–
85636	½	Aluminum	Buna-N	½	½	15	56,8	¼	125	8,6	¾	3,17	AF/water
85637	½	Polyprop	Buna-N	½	½	14	53	¼	100	6,89	¾	3,17	AF/water
85639	1	Polyprop	Buna-N	1 ANSI ³⁾	–	45	170,3	½	100	6,89	¾	6,35	AF/water
85638	1	Aluminum	Buna-N	1	1	42	159	½	125	8,6	¾	6,35	AF/water

³⁾ Model 85639 requires model 275631 adapter and model 275632 seal kit for pipe thread installations.

Air-operated diaphragm pump accessories



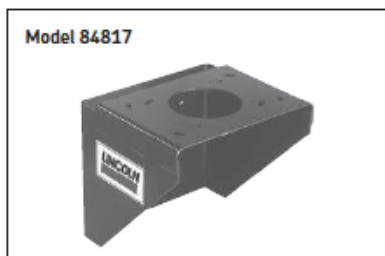
Wall mount brackets

Model 85255 wall mount bracket

Wall mount bracket for 3/4 to 1/2 in. air-operated diaphragm pumps.

Model 84817 wall mount bracket

Wall mount bracket for 1/2 to 2 in. air-operated diaphragm pumps.



Other accessories

Model 240994 drum adapter kit

For use with 1/2 in. polypropylene AODD pumps. Includes 2 in. NPT (f) bung bushing, 1 x 36 in. (25,4 x 914,4 mm) suction tube and adapter.

Model 275631 1 in. ANSI flange to 1 in. NPT adapter

Adapts 1 in. ANSI flange of model 85639 polypropylene dual inlet pump to 1 in. NPT (f). PVC for low pressure installations. Three required to convert all pump inlets/outlets.

Model 275632 ANSI bolt kit with seal

Attaches adapter to model 85639 pump. One bolt kit required for each adapter. Three required to convert all pump inlets/outlets.

Thermal pressure protection

Protect lubrication system components from high pressure spikes caused by temperature change in a closed fluid network.



Thermal pressure protection

Model	Description	Application	Pre-set relief pressure		Size NPT
			psi	bar	
-	-	-	psi	bar	in.
282902	Valve only	AODD pumps	150	10	1/2
277601-4	Kit with valve, hose, adapters	1/2 in. AODD pumps	150	10	Integrated
277601-5	Kit with valve, hose, adapters	1/2 in. AODD pumps	150	10	Integrated

