

Once you have determined your total lubricant requirements, your greatest line length and compensated for line expansion, you're ready to determine the pump you need.

If your overall requirements are less than 2.4 cu. in. for oil or 2.15 cu. in. for grease, you can select a single stroke pump. Should your requirements demand more capacity, a reciprocating pump will fill the need.

Your Lincoln representative will suggest the best pump for you based on your application. Look over the following pages of pump selection options and feel free to ask questions.



Model 83817 Economy Grease Pump

Manual pump has metal reservoir and spring-loaded follower. Indicator pin in pump base shows when 2500 psi system operating pressure has been achieved.

Model:		83817
Output/Stroke:		.100 cu. in. / 1.6 cc
Reservoir Capacity:		1 lb. 30 cu. in. / .45 kg 492 cc
Lube Outlet:		1/8" NPTF (F)
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 241 bar
Dimensions (HxWxL):	in.	15 1/4" x 5" x 5 5/8"
	mm	387 x 127 x 141 mm
Filling Method:		14.6 oz. Grease Cartridge/Bulk Fill



Model 1810 Grease Pump

Translucent reservoir with spring-loaded follower. Indicator pin in pump base shows when 2500 psi system operating pressure has been achieved. Refill through included fitting using Model 81834 filler pump or other manual pump equipped with Model 645006 coupler.

Model:		1810
Output/Stroke:		.160 cu. in. / 2.6 cc
Reservoir Capacity:		5 lb. 150 cu. in./ 2.27 kg 2458.50 cc
Lube Outlet:		1/4" NPTF (F)
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 241 bar
Dimensions (HxWxL):	in.	16 1/4" x 7 1/8" x 7 3/4"
	mm	413 x 181 x 197 mm
Filling Method:		81834 Filler Pump

Centro-Matic® Integrated Pumps

All models are air-operated, positive displacement pumps delivering a maximum volume by means of a single stroke of the pump (volumes listed below). Solenoid air valves and adjustable solid-state time controls are integrated into the pump body. All pumps are designed to deliver grease to single-line injectors and include a special high-volume refill fitting. Acrylic reservoirs are available in several sizes. Integrated controls feature LED indicators for “Power On”, “Pump On” and “Alarm,” along with a membrane-type, “Manual Lube” switch.



Model 85434

Model 85434 Integrated Grease Pump

Ratio:		31:1
Power:		120 VAC
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 240 bar
Maximum Output:		1.4 in ³ / 18.7 cm ³
Reservoir Capacity:		4.5 lbs. / 1.8 kg
Dimensions (LxWxH):		24.70" x 6.52" x 18.11" / 627 x 166 x 460 mm

Model 85435 Integrated Grease Pump

Same as Model 85434 except 240 VAC.



Model 85442

Model 85436 Integrated Grease Pump

Same as Model 85434 except with a Ratio of 25:1 and Maximum Output of 2.15 in³ (35.2 cm³).

Model 85442 Integrated Grease Pump

Ratio:		20:1
Power:		120 VAC
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 240 bar
Maximum Output:		0.45 in ³ / 7.4 cm ³
Reservoir Capacity:		1 lb. / 0.450 kg
Dimensions (LxWxH):		5.25" x 7.24" x 12.02" / 133 x 184 x 305 mm

Model 85444 Integrated Grease Pump

Ratio:		20:1
Power:		120 VAC
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 240 bar
Maximum Output:		0.45 in ³ / 7.4 cm ³
Reservoir Capacity:		4 lbs. / 1.8 kg
Dimensions (LxWxH):		5.25" x 7.24" x 20.75" / 133 x 184 x 527 mm



Model 85444

Model 85445 Integrated Grease Pump

Same as Model 85444 except 240 VAC.

Timer and Controller Specifications

On Time	Off Time	Alarm Contacts	Operating Temperature
10 sec or 30 sec	1/2 to 30 min or 30 min to 30 hrs	8 amps @ 250 VAC	-10°F to 150°F -23°C to 65°C



Model 82886

Model 82886 Pump

Pump discharges lubricant on air-powered forward stroke and vents on springpowered return stroke through built-in check/vent valve. Reservoir is translucent with spring-loaded follower. Includes filler fitting for refilling reservoir with Model 81834 or other manual pump equipped with Model 645006 coupler.



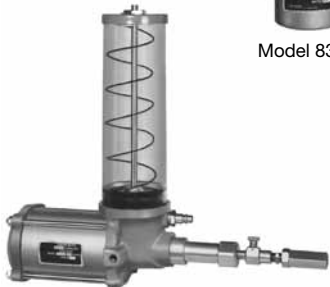
Model 83668

Model 83668

Same as Model 82886 except includes larger reservoir.

Model 82653 Bare Pump

Pump uses air for forward and return stroke but dispenses lubricant on forward stroke only. Return stroke vents lubricant pressure through included check/vent valve. Translucent reservoir has spring-loaded follower. Refill through included filler fitting using Model 81834 or other manual pump equipped with Model 645006 coupler.



Model 82653

Model 83834 High Volume Bare Pump

Same as Model 82653 except 25:1 ratio, 2.15 cu. in (35.2 cc) maximum output.

Model 82655 Pump with Controls

Same as Model 82653 except includes Model 84501 solid state timer and 350244 four way electric solenoid valve.

Model 83800 High Volume Pump with Controls

Same as Model 83834 except includes Model 84501 solid state timer and 350244 four way electric solenoid valve.

Model	Lubricant/ Air Ratio	Max. Output	Reservoir Capacity	Reservoir Temp. Range	Air Inlet	Lube Outlet	Lubricant Oper. Pressure		Dimensions HxWxL	Air Valve Required
							Min.	Max.		
82886	20:1	.45 in ³ 7.4 cm ³	1 lb/.45 kg 30 in ³ /492 cm ³	0°F to 150°F -18°C to 65°C	1/4" NPTF(F)	1/4" NPTF(F)	1200 psig / 82 bar	3500 psig / 240 bar	10 3/8" x 5 1/4" x 6" 263 x 133 x 152 mm	3-way
83668		18 1/2" x 5 1/4" x 6" 470 x 133 x 152 mm								
82653	31:1	1.4 in ³ 22.9 cm ³	4 lb/1.81 kg 120 in ³ 1967 cm ³	0°F to 150°F -18°C to 65°C	1/4" NPTF(F)	1/4" NPTF(F)	1200 psig / 82 bar	3500 psig / 240 bar	18 1/2" x 5 3/4" x 21" 470 x 146 x 533 mm	4-way
82655		2.15 in ³ 35.2 cm ³								
83834	25:1	2.15 in ³ 35.2 cm ³	4 lb/1.81 kg 120 in ³ 1967 cm ³	0°F to 150°F -18°C to 65°C	1/4" NPTF(F)	1/4" NPTF(F)	1200 psig / 82 bar	3500 psig / 240 bar	18 1/2" x 5 3/4" x 21" 470 x 146 x 533 mm	4-way
83800		2.15 in ³ 35.2 cm ³								

Note:
 Air consumption @ 100 psi is .15 CFM per stroke.

Timer Specifications

Cycle Time		On Time		Power Requirements	Ambient Operating Temp. Range
Min	Max	Min	Max		
20 Sec.	24 Hr.	10 Sec.	1 Min. 24 Sec.	120 VAC, 60 hz 110 VAC, 50 hz	10°F to +150°F -23°C +65°C

Note:
 Refer to System Controls section for detailed timer and solenoid operated air valve specifications.



Model 83167

Includes transparent reservoir, spring-loaded follower, vent valve assembly and filler fitting for refilling of reservoir with 81834 filler pump or other manual pump equipped with Model 645006 coupler.

Model:		83167
Lubricant/Air Ratio:		40:1
Output/Min @ 100 PSIG Air:		12 cu. in. 197 cc
Reservoir Capacity:		12 lb. / 5.44 kg / 360 cu. in. / 5900 cc
Air Inlet:		1/8" NPTF (F)
Lube Outlet:		3/4" NPTF (F)
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max	3500 psig / 241 bar
Dimensions (HxWxL):		22 1/2" x 9" x 16 1/4" / 572 x 229 x 413 mm
Filling Method:		81834 Filler Pump
Reservoir:		Translucent Acrylic

Notes: 1. Pump requires 3-way air valve. 2. Air consumption @ 100 psi is .15 CFM per cycle



Model 83599

Same as Model 83167 except includes base mounting kit and metal reservoir with indicator rod for visual check of grease level. Reservoir includes spring-loaded follower.

Model:		83599
Lubricant/Air Ratio:		40:1
Output/Min @ 100 PSIG Air:		12 cu. in. / 197 cc
Reservoir Capacity:		12 lb. / 5.44 kg 360 cu. in. / 5900 cc
Air Inlet:		1/4" NPTF (F)
Lube Outlet:		3/4" NPTF (F)
Typical System Operating Pressure:	Min.	1200 psig 82 bar
	Max.	3500 psig 241 bar
Dimensions (HxWxL):		24 3/8" x 9" x 18 3/16" / 619 x 229 x 462 mm
Filling Method:		81834 Filler Pump
Reservoir:		Aluminum

Notes: 1. Pump requires 3-way air valve. 2. Air consumption @ 100 psi is .15 CFM per cycle



Model 1823

Includes 2½" air motor driven pump, vent valve assembly, pump elevator, connecting lubricant and air hoses, and control panel.

Model:	1823	
Lubricant/Air Ratio:	50:1	
Output/Min @ 100 PSIG Air:	30 cu. in. / 492 cc	
Drum Size:	U.S. standard 120 lb. refinery drum	
Air Inlet:	¾" NPTF (F)	
Lube Outlet:	¾" NPTF (F)	
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 241 bar
Components included:	Pump & Vent Assembly	282288
	Controller	85209
	Pump Elevator	83447
Controller Electrical Requirements:	120V, 60 Hz., 110 V, 50hz	

Notes: 1. Air consumption @ 100 psi is .42 CFM per cycle.
2. Model 83371 follower plate is available as an optional accessory.

Model 282288

Same specifications as Model 1823 but does not include elevator or controller.

Model 1827 Heavy-Duty Unit

Consists of PowerMaster pump, vent valve assembly with air and lubricant connecting hoses, drum cover and control panel.



Model:	1827	
Lubricant/Air Ratio:	75:1	
Output/Min @ 100 PSIG Air:	161 cu. in. / 2638 cc	
Drum Size:	U.S. standard 400 lb. refinery drum	
Air Inlet:	¾" NPTF (F)	
Lube Outlet:	¾" NPTF (F)	
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 241 bar
Components included:	Basic Pump	2004
	Vent Valve	85215
	Controller	85209
	Drum Cover	81675

Model 1828

Same as Model 1827 except includes Model 2008 pump, 85218 vent valve and Model 84034 drum cover sized for U.S. standard 120 lb. refinery drum. Includes 85209 controller.

Model 1829

Same as Model 1827 except includes Model 2010 pump (50:1 ratio, 231 cu.in./min. (3785 cc) delivery at 100 psig air). Fits U.S. standard 400 lb. refinery drum. Includes 85209 controller and 85215 vent valve.



Model 1849

Fully automatic assembly including pump, 220/440 volt motor, translucent reservoir with spring-loaded follower, 4000 psi (276 bar) safety unloader, adjustable pressure switch and time control. Time control is adjustable for lubrication cycle frequency of 5, 10, 15, 20, 30 or 60 min. Solid state time delay relay (35 sec. to 240 sec.) included for connection of audible or visual alarm to signal lubrication failure due to empty reservoir or broken supply line.

Model:		1849*
Output Min:		18 cu. in. / 295 cc
Reservoir Capacity:		12 lb. / 5.44 kg / 360 cu. in. / 5900 cc
Lube Outlet:		¼" NPTF (F)
Electrical Specifications:	Pump Motor	220/440 VAC, 60 Hz, 3 ph
	Controller	115 VAC, 60 Hz
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 241 bar
Dimensions (HxWxL):		25 ³ / ₈ " x 13" x 19 ¹³ / ₁₆ " / 645 x 330 x 503 mm
Reservoir Fill Method:		81834 Filler Pump or Manual Pump and 645006 Coupler

* See Model 85520 in Systems Control section for controller specifications.



Model 201849

Same as Model 1849 except has 7 lb. reservoir capacity.

Model 1835

Same as Model 1849 except has 115 VAC, 60 Hz motor and controller.

Model 1833

Similar to Model 1849 except: 24 VDC pump motor and controller; metal reservoir with visual level indicator rod; 2.5, 5, 10, 20, 40 and 80 minute cycle frequency adjustment; 60 second fixed on time and alarm relay features. Incorporates pressure switch factory set at 2500 psi (172 bar).

Model:		1833
Output/Min:		18 cu. in. / 295 cc
Reservoir Capacity:		12 lb. / 5.44 kg / 360 cu. in. / 5900 cc
Lube Outlet:		¼" NPTF (F)
Electrical Specifications:	Pump Motor	¼ HP, 24 VD, 10 AMP
	Controller	24 VDC, 5 watts
Typical System Operating Pressure:	Min.	1200 psig / 82 bar
	Max.	3500 psig / 241 bar
Dimensions (HxWxL):		34 ¹ / ₄ " x 11 ¹ / ₂ " x 21 ³ / ₄ " / 870 x 292 x 552 mm
Reservoir Fill Method:		81834 Filler Pump or Manual Pump with 645006 Coupler

Notes:

1. Controller has provision for remote manual lube button and remote lube failure alarm.
2. Enclosure is designed to meet NEMA 3S and 12 specifications.

Manually Operated Oil

Model 1812

Pump has translucent reservoir with filler cap and strainer. Pump base has built-in check/vent valve and an indicator pin to show when system pressure is achieved.



Model:		1812
Output/Stroke:		.160 cu. in. / 2.6 cc
Reservoir Capacity:		4½ pint / 130 cu. in. 2.13 liter / 2130 cc
Lube Outlet:		¼" NPTF (F)
Typical System Operating Pressure:	Min.	750 psig / 52 bar
	Max.	1000 psig / 69 bar
Dimensions (HxWxL):		16 ³ / ₄ " x 7 ¹ / ₈ " x 7 ³ / ₄ " / 425 x 181 x 197 mm