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**PMV pump family**

**Designed for exceptional performance, long service life, low maintenance cost**

Lincoln’s new PMV family of grease and oil pumps represents 100 years of high-quality engineering, technology and manufacturing. The unique, modular design of these pumps includes precision-machined parts made with durable materials which allows for a longer pump life.

Based on Lincoln’s proven PowerMaster III air logic pump technology, PMV is a simple design with few moving parts. This translates to exceptional performance, long service life and low maintenance cost.
Pumps and accessories – PMV pump family

PMV features and benefits

Air valve assembly
- Proven design based on the PowerMaster III air logic pump technology
  - More than 25 years of precision pump engineering ensures dependable, quiet performance
- Modular, fastened by four bolts
  - Quick and easy to maintain throughout the service life of the pump
- Precision machined and made from aircraft aluminum
  - Precise, durable and less susceptible to temperature than plastic spools
- Runs without external lubrication
  - Reduces cost of ownership
- No springs, rods, levers or slides
  - Fewer parts to wear out, increasing durability, decreasing repair cost
- Designed to work in a contaminated air supply

Air cylinder
- One-piece cylinder casting contains all ports and passages
  - Simplifies repairs
- One-piece piston
  - No connection to any rods, spools, springs or poppets reduces premature mechanical failures, simplifies repairs
- One o-ring on the piston
  - Reduces leak paths, improves durability

Pump tube
- One-piece, machined gland nut
  - Easy to maintain over the life of the pump
- Divorced pump tube and air motor seal
  - Air motor seal is a separate o-ring which reduces the chance of contamination in the motor

Pump seals
- Made from durable polyurethane
  - Compatible with a wide range of natural and synthetic lubricants
- PMV grease pumps and 5:1 and 10:1 oil pumps feature copper gasket seal between externally threaded pump tube and outlet body; 6:1 pump uses polyurethane seal on internal pump tube threads
  - Helps to ensure a positive seal against extreme pressure conditions

Pump rod
- Hard-chrome plated
  - Allows for superior sealing and extends the life of the rod

Outlet check
- For oil pump models
- Protects pump from system back pressure
Pumps and accessories – PMV pump family

Oil pumps with 10 W 30 motor oil

**PMV 3 in. 5:1 pumps**
- Reels with 50 ft. (15,24 mm) x ½ in. ID hose (Alemite model 8078-D)
- Electronic meters (models 905, 953, 954)
- ½ OD x 0.049 in. (1.24 mm) wall tubing

**PMV 4.25 in. 10:1 pumps**
- Reels with 50 ft. (15,24 mm) x ½ in. ID hose (Alemite model 8078-D)
- Electronic meters (models 905, 953, 954)
- ½ OD x 0.049 in. (1.24 mm) wall tubing

**PMV 4.25 in. 6:1 pumps**
- Reels with 50 ft. (15,24 mm) x ½ in. ID hose (Alemite model 8078-D)
- Electronic meters (models 905, 953, 954)
- 1.25 in. sch. 40 seamless pipe
- 1.5 in. sch. 40 seamless pipe

**PMV 3 in. 50:1 pumps**
- Reels with 50 ft. (15,24 mm) x ⅜ ID hose (Alemite model 8078-T)
- Control valve and swivel (models 3050, 81729)
- ⅜ OD x 0.083 in. (2.11 mm) wall tubing

**PMV 4.25 in. 50:1 pumps**
- Reels with 50 ft. (15,24 mm) x ⅜ ID hose (Alemite model 8078-T)
- Control valve and swivel (models 3050, 81729)
- ⅜ OD x 0.109 in. (2.769 mm) wall tubing
- 1 in. sch. 160 pipe

Grease pumps with NLGI #1 grease

**PMV 3 in. 50:1 pumps**
- Reels with 50 ft. (15,24 mm) x ⅜ ID hose (Alemite model 8078-T)
- Control valve and swivel (models 3050, 81729)
- ⅜ OD x 0.083 in. (2.11 mm) wall tubing

**PMV 4.25 in. 50:1 pumps**
- Reels with 50 ft. (15,24 mm) x ⅜ ID hose (Alemite model 8078-T)
- Control valve and swivel (models 3050, 81729)
- ⅜ OD x 0.109 in. (2.769 mm) wall tubing
- 1 in. sch. 160 pipe

All systems based on 100 psi (6.89 bar) air input and 70 °F (21 °C)

1) Two simultaneous dispenses at 1 gallon/min. (3.78 liter/min.) each
2) Four simultaneous dispenses at 1 gallon/min. (3.78 liter/min.) each
3) 6:1 pumps are for stub or wall mount only. Not for use with bung bushings.

1) Two simultaneous dispenses at 0.125 lbs./min. (56.7 grams/min.) each
2) Four simultaneous dispenses at 0.125 lbs./min. (56.7 grams/min.) each

1 Values are for typical systems
2 Some of the factors that affect actual system's performance
   2.1 Temperature
   2.2 Viscosity
   2.3 Number and type of fitting (elbows, tees, reducers) and connecting hoses
   2.4 Air supply – pressure, scfm, line size
3 Lincoln can provide system design and/or performance parameters for any specific application. Contact your representative.
4 For specific installations, please refer to Lincoln’s Vehicle Service Planning Manual
Pumps and accessories – PMV pump family

Pump performance curves

Material discharge pressure

To find material discharge pressure [psi (bar)] at a specific delivery [gal./min. (liter/min.)] and air pressure [psi (bar)];

1. Locate required gal./min. (liter/min.) output along bottom of scale (example 1.5 gal./min.)
2. Locate system pressure requirement from calculations along the vertical right scale (example 375 psi)
3. Plot intersection of two points on the graph

3.1 If intersection falls on or below a solid air PSI curve, then the pump will be OK for the given output and pressure requirements.

Air consumption

To find air consumption [scfm (Sm³/min.)] at a specific delivery [gal./min. (liter/min.)] and air pressure [psi (bar)];

1. Locate required delivery along bottom of scale (example 1.5 gal./min.)
2. Follow vertical line up to where it intersects with air pressure curve (dashed line)
3. Follow the line horizontally to the right column of chart to determine air consumption
### 5:1 Oil Pump Technical Data

- **Pumping Ratio**: 5:1
- **Air Pressure**: 40 to 150 psi (2.7 to 10.3 bar)
- **Maximum Output Pressure**: 750 psi (51.7 bar)
- **Air Inlet**: 3/4 NPTF
- **Material Outlet**: 1/2 NPTF
- **Material Inlet**: 1 1/2 NPTF
- **Air Motor Bore Diameter**: 3 in. (76.2 mm)
- **Stroke**: 3 1/4 in. (82.5 mm)
- **Output per Cycle**: 6.7 cu. in. (110 cm³)
- **Cycles per Gallon**: 34.5/Liter
- **Wetted Parts**: Carbon steel, brass, zinc, polyurethane, nitrile
- **Free Flow**: 7 gallon/min. (26.5 liter/min.)
- **Overall Length (Stub)**: 17 3/8 in. (442 mm)

Decibels less than 85 at all normal operating conditions.

### 5:1 Oil Pump Performance Testing

<table>
<thead>
<tr>
<th>Mean Effective Pressure [psi (bar)]</th>
<th>Air Consumption [scfm (Sm³/min.)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 (5)</td>
<td>100 psi (7 bar)</td>
</tr>
<tr>
<td>25 (0.7)</td>
<td>36 (1.0)</td>
</tr>
<tr>
<td>20 (0.5)</td>
<td>32 (0.9)</td>
</tr>
<tr>
<td>15 (0.4)</td>
<td>28 (0.8)</td>
</tr>
<tr>
<td>10 (0.3)</td>
<td>24 (0.7)</td>
</tr>
<tr>
<td>5 (0.1)</td>
<td>20 (0.6)</td>
</tr>
</tbody>
</table>

Output [gal./min. (liter/min.)] SAE 10 W at 70 °F (21 °C)

### 6:1 Oil Pump Technical Data

- **Pumping Ratio**: 6:1
- **Air Pressure**: 40 to 150 psi (2.7 to 10.3 bar)
- **Maximum Output Pressure**: 900 psi (62 bar)
- **Air Inlet**: 3/4 NPTF
- **Material Outlet**: 1/2 NPTF
- **Material Inlet**: 1 1/2 NPTF
- **Air Motor Bore Diameter**: 4 3/4 in. (108 mm)
- **Stroke**: 3 1/4 in. (82.5 mm)
- **Output per Cycle**: 11.9 cu. in. (195 cm³)
- **Cycles per Gallon**: 19.4/Liter
- **Wetted Parts**: Carbon steel, brass, zinc, polyurethane, nitrile
- **Free Flow**: 7 gallon/min. (26.5 liter/min.)
- **Overall Length (Stub)**: 18 3/8 in. (480 mm)

Decibels less than 85 at all normal operating conditions.

### 6:1 Oil Pump Performance Testing

<table>
<thead>
<tr>
<th>Mean Effective Pressure [psi (bar)]</th>
<th>Air Consumption [scfm (Sm³/min.)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 (5)</td>
<td>100 psi (7 bar)</td>
</tr>
<tr>
<td>25 (0.7)</td>
<td>36 (1.0)</td>
</tr>
<tr>
<td>20 (0.5)</td>
<td>32 (0.9)</td>
</tr>
<tr>
<td>15 (0.4)</td>
<td>28 (0.8)</td>
</tr>
<tr>
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<td>24 (0.7)</td>
</tr>
<tr>
<td>5 (0.1)</td>
<td>20 (0.6)</td>
</tr>
</tbody>
</table>

Output [gal./min. (liter/min.)] SAE 10 W at 70 °F (21 °C)

### 10:1 Oil Pump Technical Data

- **Pumping Ratio**: 10:1
- **Air Pressure**: 40 to 150 psi (2.7 to 10.3 bar)
- **Maximum Output Pressure**: 1 500 psi (103 bar)
- **Air Inlet**: 3/4 NPTF
- **Material Outlet**: 1/2 NPTF
- **Material Inlet**: 1 1/2 NPTF
- **Air Motor Bore Diameter**: 4 3/4 in. (108 mm)
- **Stroke**: 3 1/4 in. (82.5 mm)
- **Output per Cycle**: 7.2 cu. in. (118 cm³)
- **Cycles per Gallon**: 32.1/Liter
- **Wetted Parts**: Carbon steel, brass, zinc, polyurethane, nitrile
- **Free Flow**: 5 gallon/min. (18.6 liter/min.)
- **Overall Length (Stub)**: 17 3/16 in. (443 mm)

Decibels less than 85 at all normal operating conditions.

### 10:1 Oil Pump Performance Testing

<table>
<thead>
<tr>
<th>Mean Effective Pressure [psi (bar)]</th>
<th>Air Consumption [scfm (Sm³/min.)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 (5)</td>
<td>100 psi (7 bar)</td>
</tr>
<tr>
<td>25 (0.7)</td>
<td>36 (1.0)</td>
</tr>
<tr>
<td>20 (0.5)</td>
<td>32 (0.9)</td>
</tr>
<tr>
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<td>28 (0.8)</td>
</tr>
<tr>
<td>10 (0.3)</td>
<td>24 (0.7)</td>
</tr>
<tr>
<td>5 (0.1)</td>
<td>20 (0.6)</td>
</tr>
</tbody>
</table>

Output [gal./min. (liter/min.)] SAE 10 W at 70 °F (21 °C)
PMV 3 in. (76,2 mm) oil pumps

**Model V30500SSU**
Package includes:
- Bare pump model V305000000
- Stub/universal kit model K000005SSU
  - Bung bushing model 85824
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 2 ft. (0,6 m) air hose model 72024A
  - ½ in. x 2 ft. (0,6 m) fluid hose model 73024
  - 90° swivel model 241584

**Model V305055BB**
Package includes:
- Bare pump model V305000000
- 55 gallon (208 liter) bung mount kit model K000055BB
  - Bung bushing model 85824
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1,5 m) air hose model 273299
  - ½ in. x 5 ft. (1,5 m) fluid hose model 73060
  - Down tube model 85807
  - 90° swivel model 241584

**Model V305016DC**
Package includes:
- Bare pump model V305000000
- 16-gallon (60,6 liter) drum cover kit model K000016DC
  - Drum cover model 85826
  - Suction tube model 85806
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1,5 m) air hose model 273299
  - ½ in. x 5 ft. (1,5 m) fluid hose model 73060

**Model V305275BB**
Package includes:
- Bare pump model V305000000
- 275 gallon (1 041 liter) pump mount kit model K000275BB
  - Bung bushing model 85824
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1,5 m) air hose model 273299
  - ½ in. x 5 ft. (1,5 m) fluid hose model 73060
  - Universal suction tube model 85949

**Model V30500SWM**
Package includes:
- Bare pump model V305000000
- Remote suction kit model 84945
- Wall mount kit model 275398
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1,5 m) air hose model 273299
  - ½ in. x 5 ft. (1,5 m) fluid hose model 73060
  - 90° swivel model 241584
  - Wall mount assembly model 275413

**Model V305055LT**
Package includes:
- Bare pump model V305000000
- Drum cover and hose kit model K000055LT
  - 400 lb. (181 kg) drum cover with tie rods model 83115
  - Down tube model 85807
  - Lifting eye model 275415
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1,5 m) air hose model 273299
PMV 4.25 in. (108 mm) oil pumps

Model V40600SSU 6:1 stub pump
Package includes:
- Bare pump model V406000000
- 6:1 stub kit model K40600SSU
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 2 ft. (0.6 m) air hose model 72024A
  - ¾ in. x 2 ft. (0.6 m) fluid hose model 73024
  - 90° swivel model 241584

Model V40600SWM 6:1 wall mount pump
Package includes:
- Bare pump model V406000000
- Remote suction kit model 84945
- Wall mount kit model 275398
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1.5 m) air hose model 273299
  - ¾ in. x 5 ft. (1.5 m) fluid hose model 73060
  - 90° Swivel model 241584
  - Wall mount assembly model 275413

Model V41000SSU 10:1 stub/universal pump
Package includes:
- Bare pump model V410000000
- Stub/universal kit model K00000SSU
  - Bung bushing model 85824
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 2 ft. (0.6 m) air hose model 72024A
  - ¾ in. x 2 ft. (0.6 m) fluid hose model 73024
  - 90° swivel model 241584

Model V410055DC 10:1 55 gallon (208 liter) pump with drum cover
Package includes:
- Bare pump model V410000000
- 55-gallon (208 liter) drum cover kit model K000055DC
  - Drum cover model 85827
  - Suction tube model 85807
  - 90° swivel model 241584
  - Air coupler/nipple model 5874/5875
  - ¾ in. x 5 ft. (1.5 m) air hose model 273299
  - ¾ in. x 5 ft. (1.5 m) fluid hose model 73060
Model V410055BB 10:1 55 gallon (208 liter) pump with bung bushing
Package includes:
- Bare pump model V410000000
- 55 gallon (208 liter) bung mount kit model K000055BB
  - Air coupler/nipple model 5874/5875
  - 3/8 in. x 5 ft. (1.5 m) air hose model 273299
  - 1/2 in. x 5 ft. (1.5 m) fluid hose model 73060
  - Down tube model 85807
  - 90° swivel model 241584

Model V41000SWM 10:1 wall mount pump
Package includes:
- Bare pump model V410000000
- Remote suction kit model 84945
- Wall mount kit model 275398
  - Air coupler/nipple model 5874/5875
  - 3/8 in. x 5 ft. (1.5 m) air hose model 273299
  - 1/2 in. x 5 ft. (1.5 m) fluid hose model 73060
  - 90° swivel model 241584
  - Wall mount assembly model 275413

Model V410055LB 10:1 55 gallon (208 liter) lubrication truck pump with bung bushing
Package includes:
- Bare pump model V410000000
- 55 gallon (208 liter) lubrication truck kit with bung bushing model K000055LB
  - Bung bushing model 85824
  - Tie rod kit model 83131
  - Suction tube model 85807
  - Air coupler/nipple model 5874/5875
  - 3/8 in. x 5 ft. (1.5 m) air hose model 273299

Model V410055LT 10:1 55 gallon (208 liter) lubrication truck pump with drum cover
Package includes:
- Bare pump model V410000000
- Drum cover and hose kit model K000055LT
  - 400 lb. (181 kg) drum cover with tie rods model 83115
  - Down tube model 85807
  - Lifting eye model 275416
  - Air coupler/nipple model 5874/5875
  - 3/8 in. x 5 ft. (1.5 m) air hose model 273299
PMV oil pump accessories

PMV runaway controller

Model V340HH
Compatible with new and existing Lincoln PMV pumps, the runaway controller shuts off the pump and signals an alarm if the pump exceeds a preset cycle rate.

- Fully electronic
- Monitors and controls based on positive pump-cycle count
- Operates independently of air supply volume and pressure
- Prevents pump damage due to high runaway speeds if lubrication drum or tank is depleted
- Limits spills if broken hose or line leak causes pump to run faster than preset cycle rate

Low-level cutoffs
Automatically shuts off flow of oil; keeps air out of the pump when tank or drum level is low. Recommended when dispensing oil through metering devices to conform with standards of the National Conference of Weights and Measures.

- Model 82439 for 1 1/2 in. NPT suction tubes
- Model 84946 for 1 NPT suction tubes

Model 275413 wall mount bracket
Wall mount bracket for PMV pumps.

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Application</th>
<th>Pre-set relief pressure</th>
<th>Size NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>psi</td>
<td>bar</td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>282876</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1</td>
<td>1 000</td>
<td>68</td>
</tr>
<tr>
<td>275197</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1</td>
<td>500</td>
<td>34</td>
</tr>
<tr>
<td>282957</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1, 10:1, 12:1</td>
<td>1 500</td>
<td>103</td>
</tr>
<tr>
<td>277601-1</td>
<td>Kit with valve, hose, adapters</td>
<td>PMV 5:1 and 6:1</td>
<td>900</td>
<td>62</td>
</tr>
<tr>
<td>277601-2</td>
<td>Kit with valve, hose, adapters</td>
<td>PMV 10:1</td>
<td>1 500</td>
<td>103</td>
</tr>
</tbody>
</table>

* Adapt PMV kits to PowerMaster III stub pump tube (model 84986) with a 300 lb. (136 kg) malleable iron 2 x 1.5 in. (50.8 x 38.1 mm) reducing coupling.
Suction kit

Model 84945 suction kit
For transfer of product from drums, bulk tanks or reservoirs. Includes bung bushing suction tube, hose and coupling assembly.

Note: 2 x 1 in. (50.8 x 25.4 mm) bell reducer required for use with model 1914, supplied by others - general plumbing part.

Model 85806
16 gallon (60 liter) suction tube.

Model 85807
55 gallon (208 liter) suction tube.

Modular air line equipment accessories – lockout valve

Install in-line or modular with other AirCare products to help conform to OSHA lockout regulations. In the closed position, valves block inlet air flow and exhaust downstream air.

Lockout valve

<table>
<thead>
<tr>
<th>Model</th>
<th>Modular use</th>
<th>In-line use</th>
<th>Maximum pressure</th>
<th>Temperature range</th>
</tr>
</thead>
<tbody>
<tr>
<td>247771</td>
<td>3/8 modular</td>
<td>3/8</td>
<td>250</td>
<td>0 to 150</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-18 to +65</td>
</tr>
</tbody>
</table>

Integrated, modular filter and regulator with gauge

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum pressure</th>
<th>Temperature range</th>
<th>Pressure range</th>
<th>Drain type</th>
<th>Size</th>
<th>Size</th>
<th>Size</th>
<th>Diameter</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>602136</td>
<td>250</td>
<td>17,24</td>
<td>0 to 150</td>
<td>Manual</td>
<td>3/8</td>
<td>5.27</td>
<td>134</td>
<td>2.89</td>
<td>1.98</td>
</tr>
</tbody>
</table>

Element particle size 40µ.
Model 85824 bung bushing
Screws in bung opening of 55 gal. (208 liter) drums and custom-built tanks to secure PMV pumps. Plated to resist rust. Threaded 2 in. NPT (m).

Model 277020 heavy-duty bung bushing
For outdoor use. Protection from the environment is provided by plating and two gaskets.

Model 85826 drum cover for 120 lb. (54 kg) drum
For mounting PMV pumps on open 120 lb./16 gal. (54 kg/60 liter) drums.

Model 85827 drum cover for 400 lb. (181 kg) drum
For mounting PMV pumps on open 400 lb. or 55 gal. (181 kg or 208 liter) drums.

Model 83115 lubrication truck drum cover tie rod assembly for 400 lb. (181 kg) drum
Secures PMV pump and 400 lb. or 55 gal. (181 kg or 208 liter) drum to lubrication truck deck.

Model 82989 lubrication truck drum cover tie rod assembly for 120 lb. (54 kg) drum
Secures PMV pump and 120 lb. or 16 gal. (54 kg or 60 liter) drum to lubrication truck deck.

Model 273299 air inlet hose
3/4 in. ID x 5 in. (127 mm) air hose.

Quarter-turn valves

Model 66084 medium pressure
1/2 in. NPT (f), 600 psi (52 bar) maximum working pressure.
50:1 3 in. grease pump technical data

Pumping ratio 50:1
Air pressure 40 to 150 psi (2.7 to 10.3 bar)
Maximum output pressure 7 500 psi (517 bar)
Air inlet 1/8 NPTF
Material outlet 1/4 NPTF
Airmotor bore diameter 3 in. (76.2 mm)
Stroke 3 1/4 in. (82.5 mm)
Output per cycle 0.78 cu. in. (12.8 cm³)
Wetted parts Carbon steel, brass, zinc, polyurethane, nitrile
Free flow 168 cu. in./min. (2 753 cm³/min.)
Overall length (stub) 35 lb. (15 kg)
120 lb. (54 kg)
400 lb. (181 kg)
Decibels less than 85 at all normal operating conditions

50:1 3 in. grease pump performance testing

Mean effective pressure [psi (bar)]

<table>
<thead>
<tr>
<th>Pressure</th>
<th>100 psi (7 bar)</th>
<th>70 psi (5 bar)</th>
<th>40 psi (3 bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000 (345)</td>
<td>25 (0.7)</td>
<td>20 (0.6)</td>
<td>15 (0.4)</td>
</tr>
<tr>
<td>4500 (310)</td>
<td>100 ps (7 bar)</td>
<td>70 psi (5 bar)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>4000 (276)</td>
<td>30 (0.8)</td>
<td>20 (0.7)</td>
<td>10 (0.3)</td>
</tr>
<tr>
<td>3500 (241)</td>
<td>40 psi (3 bar)</td>
<td>20 (0.6)</td>
<td>10 (0.3)</td>
</tr>
<tr>
<td>3000 (207)</td>
<td>100 psi (7 bar)</td>
<td>70 psi (5 bar)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>2500 (172)</td>
<td>15 (0.4)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>2000 (138)</td>
<td>15 (0.4)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>1500 (103)</td>
<td>100 psi (7 bar)</td>
<td>70 psi (5 bar)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>1000 (69)</td>
<td>20 (0.6)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>500 (35)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Output [lbs/m (kg/m)] NLGI #2 at 70 °F (21 °C)

Air consumption [scfm (Sm³/min.)]

<table>
<thead>
<tr>
<th>Pressure</th>
<th>0.5</th>
<th>1</th>
<th>1.5</th>
<th>2</th>
<th>2.5</th>
<th>3</th>
<th>3.5</th>
<th>4</th>
<th>4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 psi (7 bar)</td>
<td>0.5</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>70 psi (5 bar)</td>
<td>0.5</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>40 psi (3 bar)</td>
<td>0.5</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Decibels less than 85 at all normal operating conditions

50:1 4.25 in. grease pump technical data

Pumping ratio 50:1
Air pressure 40 to 150 psi (2.7 to 10.3 bar)
Maximum output pressure 7 500 psi (517 bar)
Air inlet 1/8 NPTF
Material outlet 1/4 NPTF
Airmotor bore diameter 4 1/4 in. (108 mm)
Stroke 3 1/4 in. (82.5 mm)
Output per cycle 1.47 cu. in. (24.1 cm³)
Wetted parts Carbon steel, brass, zinc, polyurethane, nitrile
Free flow 220 cu. in./min. (3 605 cm³/min.)
Overall length (stub) 120 lb. (54 kg)
400 lb. (181 kg)
Decibels less than 85 at all normal operating conditions

50:1 4.25 in. grease pump performance testing

Mean effective pressure [psi (bar)]

<table>
<thead>
<tr>
<th>Pressure</th>
<th>100 psi (7 bar)</th>
<th>70 psi (5 bar)</th>
<th>40 psi (3 bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000 (345)</td>
<td>20 (0.6)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>4500 (310)</td>
<td>30 (0.8)</td>
<td>15 (0.4)</td>
<td>7 (0.2)</td>
</tr>
<tr>
<td>4000 (276)</td>
<td>40 psi (3 bar)</td>
<td>20 (0.6)</td>
<td>10 (0.3)</td>
</tr>
<tr>
<td>3500 (241)</td>
<td>100 psi (7 bar)</td>
<td>70 psi (5 bar)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>3000 (207)</td>
<td>15 (0.4)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>2500 (172)</td>
<td>15 (0.4)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>2000 (138)</td>
<td>100 psi (7 bar)</td>
<td>70 psi (5 bar)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>1500 (103)</td>
<td>20 (0.6)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
</tr>
<tr>
<td>1000 (69)</td>
<td>10 (0.3)</td>
<td>5 (0.1)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>500 (35)</td>
<td>5 (0.1)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Output [lbs/m (kg/m)] NLGI #2 at 70 °F (21 °C)

Air consumption [scfm (Sm³/min.)]

<table>
<thead>
<tr>
<th>Pressure</th>
<th>0.5</th>
<th>1</th>
<th>1.5</th>
<th>2</th>
<th>2.5</th>
<th>3</th>
<th>3.5</th>
<th>4</th>
<th>4.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 psi (7 bar)</td>
<td>0.5</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>70 psi (5 bar)</td>
<td>0.5</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>40 psi (3 bar)</td>
<td>0.5</td>
<td>1</td>
<td>1.5</td>
<td>2</td>
<td>2.5</td>
<td>3</td>
<td>3.5</td>
<td>4</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Decibels less than 85 at all normal operating conditions
PMV 3 in. (76,2 mm) grease pumps

Model V350120000 50:1 3 in. 120 lb. (54 kg) bare pump

Model V350400000 50:1 3 in. 400 lb. (181 kg) bare pump

Model V350400DC 50:1 3 in. 400 lb. (181 kg) stationary package
Package includes:
• Bare pump model V350400000
• 400 lb. (181 kg) drum cover kit model K050400DC*
  – 400 lb. (181 kg) drum cover model 85827
  – Air coupler/hipple model 5874/5875
  – ¾ in. x 5 ft. (1.5 m) grease hose model 75060
  – (2) hose connectors model 10198
  – ¾ in. x 5 ft. (1.5 m) air hose model 732299
  – Elbow union model 80202

Model V350120DC 50:1 3 in. 120 lb. (54 kg) stationary package
Package includes:
• Bare pump model V350120000
• 120 lb. (54 kg) stationary kit model K050120DC*
  – Drum cover model 85826
  – (2) Hose connectors model 10198
  – Elbow union model 80202
  – ¼ in. x 5 ft. (1.5 m) grease hose model 75060
  – ¾ in. x 5 ft. (1.5 m) air hose model 732299
  – Follower model 84780
  – Air coupler/hipple model 5874/5875

Model V350120HF 50:1 3 in. 120 lb. (54 kg) inductor package
Package includes:
• Bare pump model V350120000
• Hoist/follower kit model 274932

Model V350400HF 50:1 3 in. 400 lb. (181 kg) inductor package
Package includes:
• Bare pump model V350400000
• Hoist/follower kit model 275260 *

Model V350120LT 50:1 3 in. 120 lb. (54 kg) lubrication truck package
Package includes:
• Bare pump model V350120000
• 120 lb. (54 kg) lubrication truck kit model K050120LT
  – 120 lb. (54 kg) drum cover with tie downs model 82989
  – Elbow union model 80202
  – Air coupler/hipple model 5874/5875
  – Lifting eye model 275415

Model V350400LT 50:1 3 in. 400 lb. (181 kg) lubrication truck package
Package includes:
• Bare pump model V350400000
• 400 lb. (181 kg) lubrication truck kit model K050400LT
  – 400 lb. (181 kg) drum cover with tie rods model 83115
  – Elbow union model 80202
  – Air coupler/hipple model 5874/5875
  – Lifting eye model 275415

--- WARNING ---
California Proposition 65:
Cancer and reproductive harm
www.P65Warnings.ca.gov
PMV 4.25 in. (108 mm) grease pumps

Model V450120000 50:1 4.25 in. 120 lb. (54 kg) bare pump

Model V450400000 50:1 4.25 in. 400 lb. (181 kg) bare pump

Model V450120DC* 50:1 4.25 in. 120 lb. (54 kg) stationary package
Package includes:
- Bare pump model V450120000
- 120 lb. (54 kg) stationary kit model K050120DC*
  - Drum cover model 85826
  - (2) hose connectors model 10198
  - ¼ in. x 5 ft. (1.5 m) grease hose model 75060
  - ½ in. x 5 ft. (1.5 m) air hose model 273299
  - Follower model 84780
  - Air coupler/nipple model 5874/5875
  - Elbow union model 80202

Model V450400DC* 50:1 4.25 in. 400 lb. (181 kg) stationary package
Package includes:
- Bare pump model V450400000
- 400 lb. (181 kg) stationary kit model K050400DC*
  - Drum cover model 85827
  - Air coupler/nipple model 5874/5875
  - ¼ in. x 5 ft. (1.5 m) grease hose model 75060
  - (2) hose connectors model 10198
  - ½ in. x 5 ft. (1.5 m) air hose model 273299
  - Elbow union model 80202

For heavy greases and/or low temperatures, order follower model 85825 on (→ page 55).

Model V450400HF 50:1 4.25 in. 400 lb. (181 kg) inductor package
Package includes:
- Bare pump model V450400000
- Hoist/follower kit model 275260

Model V450120LT 50:1 4.25 in. 120 lb. (54 kg) lubrication truck package
Package includes:
- Bare pump model V450120000
- 120 lb. (54 kg) lubrication truck kit model K050120LT
  - 120 lb. (54 kg) drum cover with tie downs model 82989
  - Elbow union model 80202
  - Air coupler/nipple model 5874/5875
  - Lifting eye model 275416

Model V450400LT 50:1 4.25 in. 400 lb. (181 kg) lubrication truck package
Package includes:
- Bare pump model V450400000
- 400 lb. (181 kg) lubrication truck kit model K050400LT
  - 400 lb. (181 kg) drum cover with tie rods model 83115
  - Elbow union model 80202
  - Air coupler/nipple model 5874/5875
  - Lifting eye model 275416

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**WARNING**
California Proposition 65:
Cancer and reproductive harm
www.P65Warnings.ca.gov
PMV grease pump accessories

Modular air line equipment accessories – lockout valve

Install in-line or modular with other AirCare products to help conform to OSHA lockout regulations. In the closed position, valves block inlet air flow and exhaust downstream air.

Lockout valve

<table>
<thead>
<tr>
<th>Model</th>
<th>Modular use</th>
<th>In-line use</th>
<th>Maximum pressure</th>
<th>Temperature range</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>in.</td>
<td>in.</td>
<td>psi, bar</td>
<td>°F, °C</td>
</tr>
<tr>
<td>247771</td>
<td>3/8 modular</td>
<td>3/8</td>
<td>250, 17.24 psi</td>
<td>0 to 150, -18 to +65</td>
</tr>
</tbody>
</table>

Integrated, modular filter and regulator with gauge

Can be used with other AirCare modular components.

Integrated, modular filter and regulator with gauge

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum pressure</th>
<th>Temperature range</th>
<th>Pressure range</th>
<th>Drain type</th>
<th>Size</th>
<th>Size</th>
<th>Size</th>
<th>Size</th>
<th>Size</th>
<th>Diameter</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>psi, bar</td>
<td>°F, °C</td>
<td>psi, bar</td>
<td>–</td>
<td>in.</td>
<td>in.</td>
<td>mm</td>
<td>in.</td>
<td>in.</td>
<td>mm</td>
<td>lbs., kg</td>
</tr>
<tr>
<td>602136</td>
<td>250, 17.24 psi</td>
<td>0 to +65 °F, °C</td>
<td>5 to 10.34 psi</td>
<td>Manual</td>
<td>3/8</td>
<td>5.27</td>
<td>134</td>
<td>2.89</td>
<td>73</td>
<td>1.98</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Element particle size 40µ
Model 84780
Follower plates
Recommended when pumping viscous lubricants that will not seek their own level.

Model 84780
For use with 120 lb. (54 kg) containers for 1, 1 1/4, 1 3/8, 1 1/2 and 2 1/8 in. diameter pump tubes. Used with series 20 and 40 air-operated grease pumps.

Model 85825
Deluxe pressed steel follower plate for 400 lb. (181 kg) drums includes a seal in the hub to prevent channelling of grease past the pump tube.

Model 85826 drum cover for 120 lb. (54 kg) drum
For mounting PMV pumps on open 120 lb./16 gal. (54 kg/60 liter) drums.

Model 85827 drum cover for 400 lb. (181 kg) drum
For mounting PMV pumps on open 400 lb. or 55 gal. (181 kg or 208 liter) drums.

Model 83115 lubrication truck drum cover tie rod assembly for 400 lb. (181 kg) drum
Secures PMV pump and 400 lb. or 55 gal. (181 kg or 208 liter) drum to lubrication truck deck.

Model 82989 lubrication truck drum cover tie rod assembly for 120 lb. (54 kg) drum
Secures PMV pump and 120 lb. or 16 gal. (54 kg or 60 liter) drum to lubrication truck deck.

Model 273299 air inlet hose
3/8 in. ID x 5 in. (127 mm) air hose.

Model 778 needle-type valve for chassis grease
High pressure valve with 1/4 in. NPT (f).

Lifting eye
Model 275416
Attach to PMV pump for easy drum removal/insertion with air-operated elevator model 1709.
The 3:1 and 5:1 stub pump family from Lincoln

Motor oil, ATF, gear lubrication and other fluid lubricants

For more than 100 years, Lincoln’s exclusive pump designs have proven their superiority in application after application. And our lineup of strong, silent oil-dispensing pumps is no exception.

Both our stub pumps are built with the same rugged reliability and powerful performance you’ve come to expect from Lincoln. They are super quiet – the quietest pumps on the market. They deliver increased output for faster product delivery. And they let you handle a wider range of applications with total mounting flexibility.

Lincoln has taken the time-proven pump design of the Lincoln model 84933 5:1 pressure ratio balanced double-acting oil stub pump and created a more compact air motor to produce a 3:1 pressure ratio balanced double-acting oil stub pump, model 282396. This pump creates a versatile, economical, reliable and smooth delivering lower pressure version of the Lincoln 5:1 ratio pump.

Since model 282396 balanced double-acting 3:1 pressure ratio oil stub pump and model 84933 balanced double-acting 5:1 pressure ratio oil stub pump share all dimensions other than air motor cylinder diameter, these pumps are now directly interchangeable without piping changes.

The Lincoln oil pump design enables all pump users to choose 3:1 ratio or 5:1 ratio pump models to suit their specific application.

Serial 25 and 40 oil pump features

- More powerful.
  - 25 or 40 cu. in. (409.7 or 655.5 cm³) air motor with universal mounting capability.
- Balanced double-acting pump design provides uniform output and stroke for less pulsation [7.5 cu. in./cycle (123 cm³/cycle)].
- Longer life.
  - Full 4 ½ in. (114 mm) stroke for fewer cycles per gallon dispensed.
- Lightweight, corrosion-resistant zinc head casting design incorporates uniform wall thickness. Keeps pumping while other pumps slow down or stop due to icing.
- 150 psi (10,34 bar) air motor with integral patented muffler. Keeps noise below OSHA standards without compromising performance.
- Ball check valve helps keep pump primed.
- Pneumatically assisted mechanical air valve assures positive tripping.
- Springless air motor construction prevents premature pump failure due to spring fatigue.
- Precision-machined, hardened steel slide valve for longer life.
- Designed for greater cycle rates. Exceeds maximum limits recommended for competitive pumps.
- Large pump outlet.
  - ½ in. (12.7 mm) NPT(f).
- Easier serviceability.
  - Majority of parts are common with other series 20, 25 and series 40 pumps.
- Each pump is 100% electronically tested to assure quality performance.
- Backed by the most extensive, qualified service network in the industry.
- Large pump inlet.
  - 1 in. (25.4 mm) NPT(f) inlet with 1 ½ in. (38.1 mm) NPT(m) pump inlet for versatile pump mounting and full oil flow.
- Backed by our five year limited warranty. See your Lincoln representative for details.
3:1 and 5:1 • Motor oil, ATF, gear lubrication and other fluid lubricants

Model 282396 3:1 bare stub pump

Model 282398 3:1 series 25 stub pump
Package includes:
• Bare stub pump model 282396
• Pump cover kit model 84935
• Oil connecting hose model 73024
• Air connecting hose model 72024
• 90° volume union elbow model 241584
• Air coupler model 815
• Air nipple model 11659
• Bung bushing model 84538

Model 84934 5:1 series 40 stub pump
Package includes:
• Bare stub pump model 84933
• Pump cover kit model 85935
• Oil connecting hose model 73024
• Air connecting hose model 72024
• 90° volume union elbow model 241584
• Air coupler model 815
• Air nipple model 11659
• Bung bushing model 84538

Versatile stub pump mounting options

Standpipe and wall mount assembly to remote bulk tanks
3:1 (282398) or 5:1 (84934) pump, wall mount kit (84940), low level cut-off (84946) or foot valve (85765).

Wall mount to any size drum
3:1 (282398) or 5:1 (84934) pump, wall mount kit (84940), suction kit (84945) and 90° volume union elbow model 241584 or foot valve (85765).

Above ground tank
[275 gallon (1041 liter) tank shown]
3:1 (282398) or 5:1 (84934) pump and universal suction kit (85949).

55 gallon (208 liter) drum mount using bung bushing
3:1 (282398) or 5:1 (84934) pump and 55-gallon drum suction (85755).

16 gallon (60 liter) drum mount using drum cover
3:1 (282398) or 5:1 (84934) pump, drum cover (46007) and 16-gallon drum suction kit (85716).

55 gallon (208 liter) drum mount on lubrication truck using drum cover
3:1 (282398) or 5:1 (84934) pump, eyebolt kit (84941), drum cover/tie-down kit (83115) 55 gal. (208 liter) drum suction kit (85755).
Pumps and accessories – Series 20, 25 and 40 medium-pressure oil pumps

Series 25 • 3:1 • Motor oil, ATF, gear lubrication and other fluid lubricants

Shop, garage and lubrication truck* applications – 16 gal. (60 liter) drums

Model 2437
Package includes:
• Pump model 282396
• Lubricant connecting hose model 73060
• Volume elbow model 241584
• Air connecting hose model 72060
• Air coupler model 815
• Air nipple model 11659

Lubrication truck and mobile applications – 55 gal. (208 liter) drum

Model 284231
Package includes:
• Pump model 282133
• Eyebolt kit model 84941
• Drum cover with tie down assembly model 83115
• Air coupler model 815
• Air nipple model 11659

55 gal. (208 liter) drums

Model 2424
Package includes:
• Pump model 282133
• 2 in. (50.8 mm) NPT (m) bung bushing model 84538
• Volume union elbow model 241584
• Air coupler model 815
• Air nipple model 11659
• Lubricant connecting hose model 73060
• Air hose model 72060

* For lubrication truck applications, contact your Lincoln distributor.

250 or 275 gal. (946 or 1,041 liter) drums

Model 284168
Package includes:
• Pump model 282396
• Universal suction tube kit model 85949
• Bung bushing model 84538
• Lubricant connecting hose model 73060
• Volume elbow model 241584
• Air connecting hose model 72060
• Air coupler model 815
• Air nipple model 11659
Series 40 • 5:1 • Motor oil, ATF, gear lubrication and other fluid lubricants

Shop and garage applications – 16 gal. (60 liter) drums

Model 2537
Package includes:
- Pump model 84933
- Lubricant connecting hose model 73060
- Volume elbow model 241584
- Air connecting hose model 72060
- Air coupler model 815
- Air nipple model 11659
- Drum cover model 46007

55 gal. (208 liter) drums

Model 2524
Package includes:
- Pump model 84933
- 2 in. NPT (m) bung bushing model 84538
- Volume union elbow model 241584
- Air couple model 815
- Air nipple model 11659
- Lubricant connecting hose model 73060
- Air hose model 72060

Note: Order drum cover model 81523 separately.

Model 285168
Comes complete with model 84933 pump and model 85949 universal suction tube kit, model 84538 bung bushing, air and lubricant connecting hose. Pumps oil, gear lubrication, ATF, etc. from tanks, drums.

Model 285231
Package includes:
- Pump model 285133
- Eyebolt kit model 84941
- Drum cover with tie down assembly model 83115
- Air coupler model 815
- Air nipple model 11659
## Series 25 oil pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Bare pump</th>
<th>Free delivery</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Air Inlet</th>
<th>Size</th>
<th>Use / location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>gal.</td>
<td>liter</td>
<td>NPT</td>
<td>NPT</td>
<td></td>
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<tr>
<td>282133</td>
<td>Bare drum pump</td>
<td>282396</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>282396</td>
<td>Bare stub pump</td>
<td>282396</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
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<tr>
<td>2424</td>
<td>Stationary</td>
<td>282133</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>2437</td>
<td>Stationary with suction kit</td>
<td>282396</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
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</tr>
<tr>
<td>282398</td>
<td>Stub pump assembly</td>
<td>282396</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
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<tr>
<td>284168</td>
<td>Stationary tank</td>
<td>282396</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
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<tr>
<td>284231</td>
<td>Lube truck</td>
<td>282133</td>
<td>6</td>
<td>22</td>
<td>3:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
</tbody>
</table>

All models based on model 282396 series 25 3:1 bare oil pump which delivers 6 gallon/min. (22 liter/min.) free flow plus a suction tube.

## Series 40 oil pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Bare pump</th>
<th>Free delivery</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Air Inlet</th>
<th>Size</th>
<th>Use / location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>gal.</td>
<td>liter</td>
<td>NPT</td>
<td>NPT</td>
<td></td>
</tr>
<tr>
<td>84933</td>
<td>Bare stub pump</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>Stub/universal</td>
<td>1/4</td>
<td>1/2</td>
</tr>
<tr>
<td>285133</td>
<td>Bare pump with tube</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>Stub/universal</td>
<td>1/4</td>
<td>1/2</td>
</tr>
<tr>
<td>2524</td>
<td>Stationary 55 gal. (208 liter)</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>2537</td>
<td>Stationary 56 gal. (60 liter) with suction kit model 85716</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>84934</td>
<td>Stub pump assembly</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>Stub/universal</td>
<td>1/4</td>
<td>1/2</td>
</tr>
<tr>
<td>285168</td>
<td>Stationary tank</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>285231</td>
<td>Lube truck</td>
<td>84933</td>
<td>6</td>
<td>22</td>
<td>5:1</td>
<td>55</td>
<td>208</td>
<td></td>
</tr>
</tbody>
</table>

All models based on model 84933 series 40 5:1 bare oil pump which delivers 6 gallon/min. (22 liter/min.) free flow plus a suction tube.
# Medium-pressure pump accessories

## Bung bushing, low-level cut-off and foot valves

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Thread size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>84538</td>
<td>Pump bung bushing</td>
<td>2 (m)</td>
<td>Mounts series 25 or 40 pump to 2 in. (50.8 mm) oil opening</td>
</tr>
<tr>
<td>85824</td>
<td>Bung bushing</td>
<td>2 (m)</td>
<td>Mounts PMV pumps to 55 gal. (208 liter) drum or custom-built tanks</td>
</tr>
<tr>
<td>82439</td>
<td>Low-level cutoff</td>
<td>1 1/2 (m)</td>
<td>Used with new oil oil pumps</td>
</tr>
<tr>
<td>84946</td>
<td>Low-level cutoff</td>
<td>1 (m)</td>
<td>Used with new oil oil pumps</td>
</tr>
<tr>
<td>85765</td>
<td>Foot valve</td>
<td>1 (f)</td>
<td>Used with new oil oil pumps</td>
</tr>
</tbody>
</table>

## Wall mount kits

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>84940</td>
<td>Wall-mount kit – series 25 and 40</td>
<td>Used with model 84945 suction kit</td>
</tr>
<tr>
<td>84942</td>
<td>Flange-mount kit – series 25 and 40</td>
<td>Mounts pump to custom made tanks (lubrication trucks)</td>
</tr>
</tbody>
</table>

## Suction kits

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Thread size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>84945</td>
<td>Remote suction kit</td>
<td>1 (f)</td>
<td>Includes 5 ft. (1.5 m) oil hose, bung bushing and 1 x 32 in. (0.8 m) pipe</td>
</tr>
<tr>
<td>85716</td>
<td>16 gal. (60,57 liter) drum suction kit</td>
<td>1 (m)</td>
<td>Adapts any series 25 or 40 oil pump to 16 gallon (60 liter) drum</td>
</tr>
<tr>
<td>85755</td>
<td>55 gal. (208,2 liter) drum suction kit (steel)</td>
<td>1 (m)</td>
<td>Adapts any series 25 or 40 oil pump to 55 gallon (208 liter) drum</td>
</tr>
<tr>
<td>85949</td>
<td>Universal suction kit</td>
<td>1 (m)</td>
<td>Adapts any series 25 or 40 oil pump to drum or tank use</td>
</tr>
</tbody>
</table>

## Pump covers

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>84935</td>
<td>Pump cover</td>
<td>Series 20 pumps</td>
</tr>
<tr>
<td>85935</td>
<td>Pump cover</td>
<td>Series 25 and 40 pumps</td>
</tr>
</tbody>
</table>
## Hose

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Thread size</th>
<th>Maximum pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NPT (m)</td>
<td>in. psi bar</td>
</tr>
<tr>
<td>72036</td>
<td>3 ft. (0.9 m) low-pressure connecting</td>
<td>1/4</td>
<td>250 17.24</td>
</tr>
<tr>
<td>72060</td>
<td>5 ft. (1.5 m) low-pressure connecting</td>
<td>1/4</td>
<td>250 17.24</td>
</tr>
<tr>
<td>73036</td>
<td>3 ft. (0.9 m) medium-pressure connecting</td>
<td>1/2</td>
<td>1 000 68.95</td>
</tr>
<tr>
<td>73060</td>
<td>5 ft. (1.5 m) medium-pressure connecting</td>
<td>1/2</td>
<td>1 000 68.95</td>
</tr>
</tbody>
</table>

### Eye-bolt kit

**Model 84941**

Eye bolt kit for all series 20, 25 and 40 pumps, makes drum changing easy. Two part kit screws directly onto pump for lifting with pump elevator.

### Shut-off valves

*See fittings and accessories section for pump shut-off valves.*

### Lubricant filters

**Model 84004**

For mounting at pump outlet. Contains replaceable 140 micron stainless steel filter element model 69524. 1/2 in. NPT (m) inlet and outlet. 1 3/8 in. hex. steel body. Maximum pressure 5 000 psi (344.7 bar). 100 mesh screen.

## Thermal pressure protection

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

### Thermal pressure protection models

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Application</th>
<th>Pre-set relief pressure</th>
<th>Size NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>psi bar in.</td>
<td></td>
</tr>
<tr>
<td>282876</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1</td>
<td>1 000 68 1/2</td>
<td></td>
</tr>
<tr>
<td>275197</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1</td>
<td>500 34 1/2</td>
<td></td>
</tr>
<tr>
<td>282957</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1, 10:1, 12:1</td>
<td>1 500 103 1/2</td>
<td></td>
</tr>
<tr>
<td>277601-3</td>
<td>Kit with valve, hose, adapters</td>
<td>Series 40 5:1, series 20 3:1</td>
<td>900 62 Integrated</td>
<td></td>
</tr>
</tbody>
</table>
### Reducing bushings

<table>
<thead>
<tr>
<th>Model</th>
<th>Thread size</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>10200*</td>
<td>1/8 NPT (f) x 1/2-27 (m)</td>
<td>Brass</td>
</tr>
<tr>
<td>10204*</td>
<td>1/4 NPT (f) x 1/2-27 (m)</td>
<td>Brass</td>
</tr>
</tbody>
</table>

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov

### Reducing couplings

<table>
<thead>
<tr>
<th>Model</th>
<th>Thread size</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>11852</td>
<td>1/8 x 1/2-27</td>
<td>Steel</td>
</tr>
<tr>
<td>10522*</td>
<td>1/4 x 1/2-27</td>
<td>Brass</td>
</tr>
</tbody>
</table>

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov

### Nipples

<table>
<thead>
<tr>
<th>Model</th>
<th>Thread size</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>10130</td>
<td>1/8 x 1/8</td>
<td>Steel</td>
</tr>
<tr>
<td>10199*</td>
<td>1/8 x 1/2-27</td>
<td>Brass</td>
</tr>
<tr>
<td>10462</td>
<td>1/4 x 1/4</td>
<td>Steel</td>
</tr>
</tbody>
</table>

### Nipples

<table>
<thead>
<tr>
<th>Model</th>
<th>Thread size</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>11197</td>
<td>1/2 x 1/2</td>
<td>Steel</td>
</tr>
<tr>
<td>12957</td>
<td>1/2 x 1/2-27</td>
<td>Steel</td>
</tr>
<tr>
<td>10202*</td>
<td>1/2-27 x 1/2-27</td>
<td>Brass</td>
</tr>
<tr>
<td>12296</td>
<td>3/4 x 3/4</td>
<td>Steel</td>
</tr>
</tbody>
</table>

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov

### Adapter unions

<table>
<thead>
<tr>
<th>Model</th>
<th>Thread size</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>66883</td>
<td>1/2 NPSM (f) x 1/2 NPT (m)</td>
<td>Steel</td>
</tr>
<tr>
<td>69375</td>
<td>1 NPT (f) swivel x 1 NPT (m)</td>
<td>Steel</td>
</tr>
</tbody>
</table>

### Quarter-turn valves

#### High pressure

Control lever with "on" or "off" positions provides visual check as to whether lubrication line is open or closed. Buna-N seals with PTFE seat.

#### Quarter-turn valves – high pressure

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet size</th>
<th>Maximum pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in.</td>
<td>psi</td>
</tr>
<tr>
<td>69503</td>
<td>1/2</td>
<td>2 000</td>
</tr>
<tr>
<td>69425</td>
<td>1/4</td>
<td>2 500</td>
</tr>
<tr>
<td>69423</td>
<td>1</td>
<td>2 500</td>
</tr>
</tbody>
</table>

#### Quarter-turn valves – medium pressure

<table>
<thead>
<tr>
<th>Model</th>
<th>Inlet size</th>
<th>Maximum pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in.</td>
<td>psi</td>
</tr>
<tr>
<td>256200</td>
<td>1/2</td>
<td>600</td>
</tr>
<tr>
<td>66084</td>
<td>1/2</td>
<td>600</td>
</tr>
</tbody>
</table>

### Shut-off valves – needle-type for chassis grease

<table>
<thead>
<tr>
<th>Model</th>
<th>Thread size</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>778</td>
<td>1/4</td>
<td>High pressure</td>
</tr>
<tr>
<td>884</td>
<td>3/8</td>
<td>High pressure</td>
</tr>
<tr>
<td>885</td>
<td>1/2</td>
<td>High pressure</td>
</tr>
</tbody>
</table>

Maximum working pressure 10,000 psi (68.0 bar)
The heavy-duty 50:1 grease pump family from Lincoln

Lincoln air-operated lubrication equipment models featuring our high-pressure Series 20 and 40 grease pumps have been performance proven in automotive, agricultural, heavy-duty, marine, construction and industrial facilities throughout the world.

- Series 20 grease pumps include the time-proven 20 cu. in. \((409.7 \text{ cm}^3)\) displacement Lincoln air motor with 2 1/2 in. \((63.5 \text{ mm})\) stroke – ideal for most applications.
- Series 40 grease pumps include the time-proven 40 cu. in. \((655.5 \text{ cm}^3)\) displacement Lincoln air motor with 4 1/2 in. \((114 \text{ mm})\) stroke – ideal for high volume applications.

These pumps are built for power, durability and dependability and these exclusive engineering features ensure top performance and longer service life.

Series 20 and 40 grease pump features

- Lightweight, corrosion-resistant zinc head casting design incorporates uniform wall thickness and an integral patented muffler which keeps noise level below OSHA standards without compromising performance. Keeps pumping, while other pumps slow down or stop due to icing.
- 150 psi \((10.34 \text{ bar})\) pre-lubricated air motor requires no external oiler.
- Pneumatically assisted mechanical air valve assures positive tripping.
- Springless air motor construction prevents premature pump failure due to spring fatigue.
- Precision-machined, hardened steel slide valve for longer life – no packings to wear out.
- Powerful.
  - 20 or 40 cu in. \((409.7 \text{ or } 655.5 \text{ cm}^3)\) air motor.
- Designed for greater cycle rates.
  - Exceeds maximum limits recommended for competitive pumps.
- One piece pump outlet body withstands constant high lubricant pressures.
- Easier serviceability.
  - Majority of parts are common with other series 20, 25 and 40 pumps.
- Faster output.
  - Double-acting design provides high pressure and uniform delivery on both up and down strokes.
- Hardened steel plunger and bushing resist abrasion and prolong pump life. Micro-lapped to high precision tolerance to eliminate bypassing lubricant.
- All pumps are 100% electronically tested to assure quality performance.
- Backed by the most extensive, qualified service network in the industry.
- Shovel-type foot valve adds mechanical priming to normal suction. Handles all grades of lubricants.
- Backed by a five-year limited warranty. See your Lincoln representative for details.
Pumps and accessories – Series 20, 25 and 40 high-pressure grease pumps

**Series 20 • 50:1 • Double acting**

**Shop and plant applications**

Model 918* 50:1 120 lb. (54 kg) drum
Package includes:
- Bare pump model 82050
- Drum cover model 46007
- Air coupler model 815
- Air nipple model 11659
- 3 ft. (0.91 m) air connecting hose model 72036
- 5 ft. (1.52 m) high-pressure grease connecting hose model 75060
- Deluxe follower plate model 84780
- Volume elbow union model 80202

Model 926* 50:1 400 lb. (181 kg) drum
Package includes:
- Bare pump model 82054
- Drum cover model 81523
- Air coupler model 815
- Air nipple model 11659
- 3 ft. (0.91 m) air connecting hose model 72036
- 5 ft. (1.52 m) high-pressure grease connecting hose model 75060
- Deluxe follower plate model 83366
- Volume elbow union model 80202

**Lubrication truck and mobile grease applications**

Model 82991 50:1 120 lb. (54 kg) drum
Package includes:
- Bare pump model 82050
- Drum cover and tie rod assembly model 82989
- Eye bolt kit model 84941
- Air coupler model 815
- Air nipple model 11659
- Volume elbow union model 80202

Note: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.

Model 83112 50:1 400 lb. (181 kg) drum
Package includes:
- 1-pump model 83112
- Drum cover and tie rod assembly model 83115
- Air coupler model 815
- Air nipple model 11659
- Volume elbow union model 80202

Note: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.

Note: For lubrication truck/mobile applications (models 82991 and 83112), optional deluxe follower plate is available (→ page 73).

---

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www.P65Warnings.ca.gov
Series 40 • 50:1 • High output, double acting

Shop and garage applications

Model 1418* 50:1 120 lb. (54 kg) drum
Package includes:
• Bare pump model 84667
• Drum cover model 46007
• Air coupler model 815
• Air nipple model 11659
• 3 ft. (0,91 m) air connecting hose model 72036
• 5 ft. (1,52 m) high-pressure grease connecting hose model 75060
• Deluxe follower plate model 84780
• Volume elbow union model 80202

Model 1426* 50:1 400 lb. (181 kg) drum
Package includes:
• Bare pump model 84668
• Drum cover model 81523
• Air coupler model 815
• Air nipple model 11659
• 3 ft. (0,91 m) air connecting hose model 72036
• 5 ft. (1,52 m) high-pressure grease connecting hose model 75060
• Deluxe follower plate model 83366
• Volume elbow union model 80202

Note: Deluxe follower plate model 83366 is recommended for use when pumping extra heavy lubricants and must be ordered separately for this model (→ page 73).

Model 2740* 50:1 400 lb. (181 kg) inductor
Package includes:
• Bare pump model 84668
• Primer assembly with follower model 274681*
• Air powered hoist
• Air coupler model 815
• Air nipple model 11659
• 7 ft. (2,13 m) air hose model 274728
• 7 ft. (2,13 m) grease hose model 75084
• Air regulator for hoist model 602003
• Air gauge model 274843

Model 2740

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Pumps and accessories – Series 20, 25 and 40 high-pressure grease pumps

Grease pumps for lubrication truck applications

Model 84684 120 lb. (54 kg) drum
Package includes:
• Bare pump model 84667
• Drum cover and tie rod assembly model 82989
• Eye bolt kit model 84941
• Air coupler model 815
• Air nipple model 11659
• Volume elbow union model 80202
• Follower plate not included

Note: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.

Model 84683 400 lb. (181 kg) drum
Package includes:
• Bare pump model 84668
• Drum cover and tie rod assembly model 83115
• Eye bolt kit model 84941
• Air coupler model 815
• Air nipple model 11659
• Volume elbow union model 80202

Note: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.

Note: For lubrication truck and mobile applications, optional deluxe follower plate is available (→ page 74).

Series 20 grease pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Bare pump</th>
<th>Free delivery</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Air inlet NPT (f)</th>
<th>Size NPT (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>918*</td>
<td>Shop and garage</td>
<td>82050</td>
<td>80</td>
<td>1311</td>
<td>50:1</td>
<td>120</td>
<td>54,43</td>
</tr>
<tr>
<td>923*</td>
<td>Shop and garage with elevator</td>
<td>82050</td>
<td>80</td>
<td>1311</td>
<td>50:1</td>
<td>120</td>
<td>54,43</td>
</tr>
<tr>
<td>926*</td>
<td>Shop and garage</td>
<td>82054</td>
<td>80</td>
<td>1311</td>
<td>50:1</td>
<td>400</td>
<td>181,4</td>
</tr>
<tr>
<td>82991</td>
<td>Lube truck model</td>
<td>82050</td>
<td>80</td>
<td>1311</td>
<td>50:1</td>
<td>120</td>
<td>54,43</td>
</tr>
<tr>
<td>83112</td>
<td>Lube truck model</td>
<td>82054</td>
<td>80</td>
<td>1311</td>
<td>50:1</td>
<td>400</td>
<td>181,4</td>
</tr>
</tbody>
</table>

These high-pressure pumps incorporate a 20 cu. in. (327,7 cm³) air motor design.
Grease strainer model 82103

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Series 40 grease pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Bare pump</th>
<th>Free delivery</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Air inlet NPT (f)</th>
<th>Material outlet NPT (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1418*</td>
<td>High-volume shop</td>
<td>84667</td>
<td>90</td>
<td>1,475</td>
<td>50:1</td>
<td>120</td>
<td>54,43</td>
</tr>
<tr>
<td>1426*</td>
<td>High-volume shop</td>
<td>84668</td>
<td>90</td>
<td>1,475</td>
<td>50:1</td>
<td>400</td>
<td>181,4</td>
</tr>
<tr>
<td>84683</td>
<td>High-volume lubrication truck</td>
<td>84668</td>
<td>90</td>
<td>1,475</td>
<td>50:1</td>
<td>400</td>
<td>181,4</td>
</tr>
<tr>
<td>84684</td>
<td>High-volume lubrication truck</td>
<td>84667</td>
<td>90</td>
<td>1,475</td>
<td>50:1</td>
<td>120</td>
<td>54,43</td>
</tr>
<tr>
<td>2740*</td>
<td>Pump with inductor</td>
<td>84668</td>
<td>90</td>
<td>1,475</td>
<td>50:1</td>
<td>400</td>
<td>181,4</td>
</tr>
</tbody>
</table>

These high-output pumps incorporate a 40 cu. in. (655,5 cm³) air motor design with a 4.5 in. (114 mm) stroke for higher volume output and fewer cycles per pound of grease.

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High-pressure pump accessories

Follower plates
Recommended when pumping lubricants that will not seek their own level.

Model 84775
Deluxe universal follower for use with 25 to 50 lb. (11 to 22 kg) containers for 1, 1 3/4, and 1 1/2 in. diameter pump tubes. All rubber unit ensures complete grease dispensing to the bottom of dented or plastic lined drums; wipes pail or drum clean. Metal cap holds insert firmly in place, ensuring seal and maintaining vacuum.

Model 84780
Same as 84775 except for use with 120 lb. (54 kg) containers for 1, 1 1/4 and 2 3/8 in. diameter pump tubes. Used with series 20 and 40 air-operated grease pumps.

Model 83366
Deluxe pressed steel follower plate for 400 lb. (181 kg) drums includes a seal in the hub to prevent channelling of grease past the pump tube.

Drum Covers

Model 46007
Drum cover for 120 lb. (54 kg) or 16 gallon (60 liter) open top refinery containers for all series 20, 25 and 40 pumps.

Model 81523
Drum cover for 400 lb. (181 kg) or 55 gallon (208 liter) open top refinery containers for all series 20, 25 and 40 pumps.

Pump elevator

Model 83447
Pump elevator assembly lifts pump assembly clear of drum for easy, one person drum changes. Helps prevent introduction of foreign material into grease during drum changes. Height with drum is 39 3/8 in. (1 000 mm), 67 1/4 in. (1 708 mm) with elevator raised. Drum not included. For 120 lb. (54 kg) drum.

Follower plates

<table>
<thead>
<tr>
<th>Model</th>
<th>Drum size</th>
<th>Tube ID</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>84775</td>
<td>600 (55)</td>
<td>1, 1 3/4, 1 1/2</td>
<td>Tapered flexible</td>
</tr>
<tr>
<td>84780</td>
<td>120 (16)</td>
<td>1, 1 1/4, 2 3/4</td>
<td>Tapered flexible</td>
</tr>
<tr>
<td>83366</td>
<td>400 (55)</td>
<td>1</td>
<td>Rigid</td>
</tr>
<tr>
<td>275183</td>
<td>35 (5)</td>
<td>1 1/2</td>
<td>Flexible-low cost</td>
</tr>
<tr>
<td>275184</td>
<td>35 (5)</td>
<td>1 3/4</td>
<td>Flexible-low cost</td>
</tr>
</tbody>
</table>
PowerMaster III

Features
• State-of-the-art, fully pneumatic air motors 3 to 4 in. (76.2 to 101.6 mm).
• Full 6 in. (152.4 mm) stroke.
• Modular design for easy repair.
• Pump tubes offer ratios and outputs to fit any application.
• Available to fit any drum or pail size, or bulk tanks.
• Offered in carbon steel, 316 stainless steel or hard chrome plated.
• Full line of priming equipment and mounting devices.

Series III air motors
• Full pneumatic operation for longer life and durability. Only five moving parts.
• Total modular design for ease of service and maintenance.
• Quiet operation.
  – Meets or exceeds OSHA requirements at all recommended operation air pressures.
• Interchangeable with all PowerMaster III pump tubes.
• Acceptability of pump monitors and controls, such as AirBrake.

AirBrake
• Shuts down pump immediately when excessive pump cycle speed (runaway) occurs.
• Prevents pump damage due to a runaway condition.
• Indicates system fault caused by empty container or broken supply line.
•Limits spills due to pump outlet hose failure.
• Sends fault signal to remote alarm locations with optional model 244398 signal kit.
• Can be ordered already installed (refer to pump specification chart).
• Can be added later. Order model 85317.
• Easy to install and set – graduated dial with detents.
• Kit model 273429 upgrades existing AirBrake-equipped pumps to the latest specifications.
• Kit model 273835 – tamper resistant kit.

Pump tubes

Ball foot design
• For light- to medium-viscosity, flowable fluids and materials.
• Three styles
  – stub for bulk mounting
  – 55 gallon (208 liter)
  – 16 gallon (60 liter) drum.
• Ratios from 6:1 to 12:1, outputs to 3.9 gal./min. (14.6 liter/min.).
• Complete interchangeability with all series III air motors.
• Exclusive patented, “leakless” gland assembly kit is available as an accessory.

Shovel foot design, plunger and bushing style
• For medium- to high-viscosity, non–pourable materials, such as grease.
• Available in 400 or 120 lb. (205 or 60 liter) drum lengths or mounts on primer for high-viscosity materials.
• Full range of ratios: 10:1 through 75:1 for all applications.
• Selected fit, hardened steel plunger and bushing is particularly well suited to viscous lubricants.
• Complete interchangeability with all series III air motors.
• Exclusive patented, leakless gland assembly kit (to protect gland seal – the only seal in pump tube) is available as an accessory.

Shovel foot design, packed piston-style
• For medium- to high-viscosity, non-pourable materials.
• Furnished with exclusive, patented, leakless gland assembly.
• Available in 55 or 16 gallon (208 or 60 liter) drum lengths. Also suitable for mounting on priming equipment or standpipe mounting for bulk delivery.
• Complete interchangeability with all series III air motors.
• Full range of ratios 10:1 through 32:1.

PileDriver III flatcheck design
• Large ports reduce resistance for improved flow in real world applications.
• 6 in. (152.4 mm) stroke lets the pump work easier to deliver the same or more volume.
• Proven PileDriver III pump tube and PowerMaster III air motor based design is durable, dependable and easy to maintain over the life of the pump.
• 2.5 in. NPTF (f) and 3 in. NPTF (m) inlet offers flexible mounting options.
### 6:1 3 in. oil pump technical data

<table>
<thead>
<tr>
<th>Spec</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumping ratio</td>
<td>6:1</td>
</tr>
<tr>
<td>Air pressure</td>
<td>30 to 200 psi (2 to 14 bar)</td>
</tr>
<tr>
<td>Maximum output pressure</td>
<td>1 200 psi (84 bar)</td>
</tr>
<tr>
<td>Air inlet</td>
<td>½ NPTF</td>
</tr>
<tr>
<td>Material outlet</td>
<td>¾ NPTF</td>
</tr>
<tr>
<td>Material inlet</td>
<td>Stub 2 NPTF</td>
</tr>
<tr>
<td>Airmotor bore diameter</td>
<td>3 in. (76 mm)</td>
</tr>
<tr>
<td>Stroke</td>
<td>6 in. (152 mm)</td>
</tr>
<tr>
<td>Output per cycle</td>
<td>11.9 cu. in. (195 cm³)</td>
</tr>
<tr>
<td>Cycles</td>
<td>20/gallon (5/liter)</td>
</tr>
<tr>
<td>Wetted parts</td>
<td>Steel, brass, copper, polyurethane, nitrile</td>
</tr>
<tr>
<td>Free flow</td>
<td>12.3 gallon/min. (46.6 liter/min.)</td>
</tr>
<tr>
<td>Overall length (stub)</td>
<td>36 in. (914 mm)</td>
</tr>
<tr>
<td>Overall length</td>
<td>60 ¼ in. (1 546 mm)</td>
</tr>
</tbody>
</table>

### 12:1 4.25 in. oil pump technical data

<table>
<thead>
<tr>
<th>Spec</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumping ratio</td>
<td>12:1</td>
</tr>
<tr>
<td>Air pressure</td>
<td>30 to 200 psi (2 to 14 bar)</td>
</tr>
<tr>
<td>Maximum output pressure</td>
<td>2 400 psi (166 bar)</td>
</tr>
<tr>
<td>Air inlet</td>
<td>½ NPTF</td>
</tr>
<tr>
<td>Material outlet</td>
<td>¾ NPTF</td>
</tr>
<tr>
<td>Material inlet</td>
<td>Stub 2 NPTF</td>
</tr>
<tr>
<td>Airmotor bore diameter</td>
<td>4.25 in. (108 mm)</td>
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<tr>
<td>Stroke</td>
<td>6 in. (152 mm)</td>
</tr>
<tr>
<td>Output per cycle</td>
<td>11.9 cu. in. (195 cm³)</td>
</tr>
<tr>
<td>Cycles</td>
<td>20/gallon (5/liter)</td>
</tr>
<tr>
<td>Wetted parts</td>
<td>Steel, brass, copper, polyurethane, nitrile</td>
</tr>
<tr>
<td>Free flow</td>
<td>12.3 gallon/min. (46.6 liter/min.)</td>
</tr>
<tr>
<td>Overall length (stub)</td>
<td>36 in. (914 mm)</td>
</tr>
<tr>
<td>Overall length</td>
<td>60 ¼ in. (1 546 mm)</td>
</tr>
</tbody>
</table>
12:1 4.25 in. grease pump technical data

Pumping ratio: 12:1
Air pressure: 200 psi (14 bar)
Maximum output pressure: 2 400 psi (166 bar)
Air inlet: \( \frac{3}{8} \) NPTF
Material outlet: \( \frac{3}{4} \) NPTF
Airmotor bore diameter: 4.25 in. (108 mm)
Stroke: 6 in. (152 mm)
Output per cycle: 3 cu. in. (49 cm³)
Cycles: 111/gallon (29/liter)
Wetted parts: Steel, brass, copper, polyurethane, nitrile
Free flow: 3.5 gallon/min. (13.2 liter/min.)
Overall length (55 gal./400 lb./200 liter): 48 7/8 in. (1 229 mm)
Overall length (16 gal./120 lb.): 62 7/8 in. (1 578 mm)

12:1 4.25 in. grease pump performance testing

Mean effective pressure [psi (bar)]
Flow rate [gal./min. (liter/min.)]

<table>
<thead>
<tr>
<th>Flow rate [gal./min. (liter/min.)]</th>
<th>0</th>
<th>1 (0.4)</th>
<th>2 (0.8)</th>
<th>3 (1.1)</th>
<th>4 (1.5)</th>
<th>5 (1.9)</th>
<th>6 (2.3)</th>
<th>7 (2.7)</th>
<th>8 (3.0)</th>
<th>9 (3.4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean effective pressure [psi (bar)]</td>
<td>0</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
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<td>70 psi (5 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
</tr>
</tbody>
</table>

50:1 4.25 in. grease pump technical data

Pumping ratio: 50:1
Air pressure: 150 psi (10 bar)
Maximum output pressure: 7 500 psi (517 bar)
Air inlet: \( \frac{3}{8} \) NPTF
Material outlet: \( \frac{3}{4} \) NPTF
Airmotor bore diameter: 4.25 in. (108 mm)
Stroke: 6 in. (152 mm)
Output per cycle: 3 cu. in. (49 cm³)
Cycles: 78/gallon (20/liter)
Wetted parts: Steel, brass, copper, polyurethane, nitrile
Free flow: 1 gallon/min. (3.7 liter/min.)
Overall length (55 gal./400 lb./200 liter): 62 7/8 in. (1 578 mm)
Overall length (16 gal./120 lb.): 55 7/8 in. (1 410 mm)

50:1 4.25 in. grease pump performance testing

Mean effective pressure [psi (bar)]
Flow rate [gal./min. (liter/min.)]

<table>
<thead>
<tr>
<th>Flow rate [gal./min. (liter/min.)]</th>
<th>0</th>
<th>0.2</th>
<th>0.4</th>
<th>0.6</th>
<th>0.8</th>
<th>1.0</th>
<th>1.2</th>
<th>1.4</th>
<th>1.6</th>
<th>1.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean effective pressure [psi (bar)]</td>
<td>0</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
</tr>
</tbody>
</table>

75:1 4.25 in. grease pump technical data

Pumping ratio: 75:1
Air pressure: 100 psi (7 bar)
Maximum output pressure: 7 500 psi (517 bar)
Air inlet: \( \frac{3}{8} \) NPTF
Material outlet: \( \frac{3}{4} \) NPTF
Airmotor bore diameter: 4.25 in. (108 mm)
Stroke: 6 in. (152 mm)
Output per cycle: 2.1 cu. in. (34 cm³)
Cycles: 111/gallon (29/liter)
Wetted parts: Steel, brass, copper, polyurethane, nitrile
Free flow: 0.7 gallon/min. (2.6 liter/min.)
Overall length (55 gal./400 lb./200 liter): 62 7/8 in. (1 229 mm)
Overall length (16 gal./120 lb.): 55 7/8 in. (1 410 mm)

75:1 4.25 in. grease pump performance testing

Mean effective pressure [psi (bar)]
Flow rate [gal./min. (liter/min.)]

<table>
<thead>
<tr>
<th>Flow rate [gal./min. (liter/min.)]</th>
<th>0</th>
<th>0.1</th>
<th>0.2</th>
<th>0.3</th>
<th>0.4</th>
<th>0.5</th>
<th>0.6</th>
<th>0.7</th>
<th>0.8</th>
<th>0.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean effective pressure [psi (bar)]</td>
<td>0</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>70 psi (5 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
<td>100 psi (7 bar)</td>
</tr>
</tbody>
</table>
### 1.5:1 3 in. oil pump technical data

- **Pumping ratio**: 1.5:1
- **Air pressure**: 30 to 200 psi (2 to 14 bar)
- **Maximum output pressure**: 300 psi (21 bar)
- **Air inlet**: ½ NPTF
- **Material outlet**: 1 ½ NPTF
- **Material inlet**: Stub 2.5 NPTF (f); 3 NPTF (m)
- **Airmotor bore diameter**: 3 in. (76 mm)
- **Stroke**: 6 in. (152 mm)
- **Output per cycle**: 46 cu. in. (754 cm³)
- **Cycles**: 5/gallon (1/liter)
- **Wetted parts**: Steel, brass, copper, polyurethane, nitrile
- **Free flow**: 14.9 gallon/min. (56.5 liter/min.)
- **Overall length (stub)**: 44 ⅞ in. (1 121 mm)

![1.5:1 3 in. oil pump performance testing](image)

### 3:1 4.25 in. oil pump technical data

- **Pumping ratio**: 3:1
- **Air pressure**: 30 to 200 psi (2 to 14 bar)
- **Maximum output pressure**: 600 psi (41 bar)
- **Air inlet**: ½ NPTF
- **Material outlet**: 1 ½ NPTF
- **Material inlet**: Stub 2.5 NPTF (f); 3 NPTF (m)
- **Airmotor bore diameter**: 4.25 in. (108 mm)
- **Stroke**: 6 in. (152 mm)
- **Output per cycle**: 46 cu. in. (754 cm³)
- **Cycles**: 5/gallon (1/liter)
- **Wetted parts**: Steel, brass, copper, polyurethane, nitrile
- **Free flow**: 14.9 gallon/min. (56.5 liter/min.)
- **Overall length (stub)**: 44 ⅞ in. (1 121 mm)

![3:1 4.25 in. oil pump performance testing](image)

### 7:1 6 in. oil pump technical data

- **Pumping ratio**: 7:1
- **Air pressure**: 30 to 100 psi (2 to 7 bar)
- **Maximum output pressure**: 700 psi (48 bar)
- **Air inlet**: ¾ NPTF
- **Material outlet**: 1 ½ NPTF
- **Material inlet**: Stub 2.5 NPTF (f); 3 NPTF (m)
- **Airmotor bore diameter**: 6 in. (152 mm)
- **Stroke**: 6 in. (152 mm)
- **Output per cycle**: 46 cu. in. (754 cm³)
- **Cycles**: 5/gallon (1/liter)
- **Wetted parts**: Steel, brass, copper, polyurethane, nitrile
- **Free flow**: 14.9 gallon/min. (56.5 liter/min.)
- **Overall length (stub)**: 43 ⅛ in. (1 099 mm)

![7:1 6 in. oil pump performance testing](image)
PowerMaster III air-operated oil pumps

Model 2001 12:1 55 gallon (208 liter) pump
Package includes:
• Powermaster III 4.25 in. air motor model 84804
• Powermaster III ball type pump tube 55 gallon (208 liter) model 84985
• Air coupler model 655008
• Air nipple model 653112

Model 2001 12:1 stub pump
Package includes:
• Powermaster III 4.25 in. air motor model 84804
• Powermaster III stub pump tube model 84986
• Air coupler model 655008
• Air nipple model 653112

Model 2052 6:1 55 gallon (208 liter) pump
Package includes:
• Powermaster III 3 in. air motor model 84803
• Powermaster III ball type pump tube 55 gallon (208 liter) model 84985
• Air coupler model 655008
• Air nipple model 653112

Model 2051 6:1 stub pump
Package includes:
• Powermaster III 3 in. air motor model 84803
• Powermaster III stub pump tube model 84986
• Air coupler model 655008
• Air nipple model 653112
PowerMaster III grease pumps

Model 2004 75:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube 400 lb. (181 kg) model 84997
- Air coupler model 655008
- Air nipple model 653112

Model 2008 75:1 120 lb. (54 kg) pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube 120 lb. (54 kg) model 84998
- Air coupler model 655008
- Air nipple model 653112

Model 2010 50:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube 400 lb. (181 kg) model 84995
- Air coupler model 655008
- Air nipple model 653112

Model 2011 50:1 120 lb. (54 kg) pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube 120 lb. (54 kg) model 84996
- Air coupler model 655008
- Air nipple model 653112

Model 2028 12:1 stub pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube stub model 84918
- Air coupler model 655008
- Air nipple model 653112

Model 2029 12:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube 400 lb. (181 kg) model 84919
- Air coupler model 655008
- Air nipple model 653112

Model 2710 50:1 400 lb. (181 kg) inductor pump [103 in. (2.62 m) raised height]
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PowerMaster III shovel type pump tube 400 lb. (181 kg) model 84995
- Air coupler model 655008
- Air nipple model 653112
- Primer/follower assembly model 274680 – 7 ft. (2.13 m) air hose model 273304
- 7 ft. (2.13 m) grease hose model 274727
- Air regulator for hoist model 602003
- Air gauge model 274843

Model 2790 50:1 400 lb. (181 kg) inductor pump with air brake run away control [103 in. (2.62 m) raised height]
Package includes:
- PowerMaster III 4.25 in. air motor with air brake model 94804
- PowerMaster III shovel type pump tube 400 lb. (181 kg) model 84995
- Air coupler model 655008
- Air nipple model 653112
- Primer/follower assembly model 274680 – 7 ft. (2.13 m) grease hose model 274727
- Air regulator for hoist model 602003
- Air gauge model 274843

PowerMaster III special pump

<table>
<thead>
<tr>
<th>Model</th>
<th>Air motor</th>
<th>Pump tube</th>
<th>Tube size</th>
<th>Tube type</th>
<th>Ratio</th>
<th>Size</th>
<th>Maximum air pressure</th>
<th>Maximum pressure</th>
<th>Free delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>84991</td>
<td>400</td>
<td>181,4</td>
<td>Shovel</td>
<td>24:1</td>
<td>3/4</td>
<td>200</td>
<td>4 800</td>
<td>331</td>
</tr>
</tbody>
</table>

Model 2710
Pumps and accessories – PowerMaster II

PowerMaster II

Features

• Gives years of dependable trouble-free operation.
• Costs much less to operate – costs much less to maintain.
• High-volume output
  – Air motor has extra-long stroke for powerful, uniform delivery on both up and down strokes.
• Shovel-type pump tube used to add mechanical priming to normal suction when needed.
• Sturdy construction
  – Plunger and bushing of hardened steel for longer life, greater wear resistance.
• Pump outlet body of all-steel construction designed to withstand pulsation and extreme pressure. All wearing parts are tough, heat-treated steel.
• Plunger, bushing and air valve mating parts are micro-lapped to close tolerances. Prevents by-passing of lubricant and bleeding of air. Eliminates need to replace washers and packings.

• Trouble-free, positive performance
  – Air motor operation has no springs to wear out, rust or lose tension.
  – Air valve is stall-proof, leak-proof and pre-lubricated. Double-acting mechanisms ensure dependable low-surge operation with minimum air consumption.
• Large air passages allow unrestricted venting.
• Simplified maintenance
  – Modular design of pump tube allows for easy disassembly.

Model 1901

Model 1904

Model 1914
6:1 3 in. oil pump technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumping ratio</td>
<td>6:1</td>
</tr>
<tr>
<td>Air pressure</td>
<td>200 psi (14 bar)</td>
</tr>
<tr>
<td>Maximum output pressure</td>
<td>1,200 psi (84 bar)</td>
</tr>
<tr>
<td>Air inlet</td>
<td>1/2 NPTF</td>
</tr>
<tr>
<td>Material outlet</td>
<td>3/4 NPTF</td>
</tr>
<tr>
<td>Material inlet</td>
<td>Stub 2 NPTF</td>
</tr>
<tr>
<td>Airmotor bore diameter</td>
<td>3 in. (76 mm)</td>
</tr>
<tr>
<td>Stroke</td>
<td>4.25 in. (114 mm)</td>
</tr>
<tr>
<td>Output per cycle</td>
<td>9 cu. in. (148 cm³)</td>
</tr>
<tr>
<td>Cycles</td>
<td>26/gallon (7/liter)</td>
</tr>
<tr>
<td>Wetted parts</td>
<td>Steel, brass, copper, polyurethane, nitrile</td>
</tr>
<tr>
<td>Free flow</td>
<td>12.6 gallon/min. (47.7 liter/min.)</td>
</tr>
</tbody>
</table>

12:1 4.25 in. oil pump technical data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumping ratio</td>
<td>12:1</td>
</tr>
<tr>
<td>Air pressure</td>
<td>200 psi (14 bar)</td>
</tr>
<tr>
<td>Maximum output pressure</td>
<td>2,400 psi (166 bar)</td>
</tr>
<tr>
<td>Air inlet</td>
<td>1/2 NPTF</td>
</tr>
<tr>
<td>Material outlet</td>
<td>3/4 NPTF</td>
</tr>
<tr>
<td>Material inlet</td>
<td>Stub 2 NPTF</td>
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<tr>
<td>Airmotor bore diameter</td>
<td>4.25 in. (108 mm)</td>
</tr>
<tr>
<td>Stroke</td>
<td>4.5 in. (114 mm)</td>
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<tr>
<td>Output per cycle</td>
<td>9 cu. in. (148 cm³)</td>
</tr>
<tr>
<td>Cycles</td>
<td>26/gallon (7/liter)</td>
</tr>
<tr>
<td>Wetted parts</td>
<td>Steel, brass, copper, polyurethane, nitrile</td>
</tr>
<tr>
<td>Free flow</td>
<td>12.6 gallon/min. (47.7 liter/min.)</td>
</tr>
</tbody>
</table>
### 50:1 4.25 in. grease pump technical data

- **Pumping ratio**: 50:1
- **Air pressure**: 150 psi (10 bar)
- **Maximum output pressure**: 7 500 psi (517 bar)
- **Air inlet**: 1/2 NPTF
- **Material outlet**: 3/4 NPTF
- **Airmotor bore diameter**: 4.25 in. (108 mm)
- **Stroke**: 4.5 in. (114 mm)
- **Output per cycle**: 2.3 cu. in. (38 cm³)
- **Cycles**: 101/gallon (26/liter)
- **Wetted parts**: Steel, brass, copper, polyurethane, nitrile
- **Free flow (70 cycles/min.)**: 0.7 gallon/min. (2.6 liter/min.)

### 75:1 4.25 in. grease pump technical data

- **Pumping ratio**: 75:1
- **Air pressure**: 100 psi (7 bar)
- **Maximum output pressure**: 7 500 psi (517 bar)
- **Air inlet**: 1/2 NPTF
- **Material outlet**: 3/4 NPTF
- **Airmotor bore diameter**: 4.25 in. (108 mm)
- **Stroke**: 4.5 in. (114 mm)
- **Output per cycle**: 1.6 cu. in. (26 cm³)
- **Cycles**: 144/gallon (39/liter)
- **Wetted parts**: Steel, brass, copper, polyurethane, nitrile
- **Free flow**: 0.5 gallon/min. (1.8 liter/min.)

---

PowerMaster II pumps include model 12018 3/4 NPTF (m) x 1/2 NPTF (F) in the outlet.

---

### 50:1 4.25 in. grease pump performance testing

<table>
<thead>
<tr>
<th>Mean effective pressure [psi (bar)]</th>
<th>Air consumption [scfm (Sm³/min.)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 000 (483)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>9 000 (621)</td>
<td>100 psi (7 bar)</td>
</tr>
<tr>
<td>5 000 (345)</td>
<td>70 psi (5 bar)</td>
</tr>
<tr>
<td>3 000 (207)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>1 000 (69)</td>
<td>10 psi (0.6)</td>
</tr>
</tbody>
</table>

### 75:1 4.25 in. grease pump performance testing

<table>
<thead>
<tr>
<th>Mean effective pressure [psi (bar)]</th>
<th>Air consumption [scfm (Sm³/min.)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 000 (483)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>9 000 (621)</td>
<td>100 psi (7 bar)</td>
</tr>
<tr>
<td>5 000 (345)</td>
<td>70 psi (5 bar)</td>
</tr>
<tr>
<td>3 000 (207)</td>
<td>40 psi (3 bar)</td>
</tr>
<tr>
<td>1 000 (69)</td>
<td>10 psi (0.6)</td>
</tr>
</tbody>
</table>
PowerMaster II air-operated oil pumps

Model 1901 12:1 55 gallon (208 liter) pump
Package includes:
- PowerMaster II 4.25 in. air motor model 82730
- PowerMaster II ball type pump tube 55 gallon (208 liter) model 82790
- Air coupler model 655008
- Air nipple model 653112

Model 1901 Model 1914

Model 1952 6:1 55 gallon (208 liter) pump
Package includes:
- PowerMaster II 3 in. air motor model 82895
- PowerMaster II ball type pump tube 55 gallon (208 liter) model 82790
- Air coupler model 655008
- Air nipple model 653112

Model 1951 6:1 stub pump
Package includes:
- PowerMaster II 4.25 in. air motor model 82730
- PowerMaster II stub pump tube model 84335
- Air coupler model 655008
- Air nipple model 653112

Model 1904 75:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster II shovel type pump tube 120 lb. (54 kg) model 82883 *
- Air coupler model 655008
- Air nipple model 653112

Model 1907 75:1 120 lb. (54 kg) pump
Package includes:
- PowerMaster II 4.25 in. air motor model 82730
- PowerMaster II shovel type pump tube 120 lb. (54 kg) model 83271 *
- Air coupler model 655008
- Air nipple model 653112

Model 1910 50:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster II shovel type pump tube 400 lb. (181 kg) model 83271 *
- Air coupler model 655008
- Air nipple model 653112

PowerMaster II grease pumps

Model 1904 75:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster II 4.25 in. air motor model 82730
- PowerMaster II shovel type pump tube 400 lb. (181 kg) model 82793 *
- Air coupler model 655008
- Air nipple model 653112

Model 1910 50:1 400 lb. (181 kg) pump
Package includes:
- PowerMaster II 4.25 in. air motor model 82730
- PowerMaster II shovel type pump tube 400 lb. (181 kg) model 83271 *
- Air coupler model 655008
- Air nipple model 653112

PowerMaster II special pump

<table>
<thead>
<tr>
<th>Model</th>
<th>Air motor</th>
<th>Pump tube</th>
<th>Tube size</th>
<th>Tube type</th>
<th>Ratio</th>
<th>Size NPT</th>
<th>Maximum air pressure</th>
<th>Maximum pressure</th>
<th>Free delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1931</td>
<td>82737</td>
<td>82790</td>
<td>55</td>
<td>208</td>
<td>Ball</td>
<td>4:1</td>
<td>1/4</td>
<td>200</td>
<td>800</td>
</tr>
<tr>
<td>1940</td>
<td>82737</td>
<td>86365*</td>
<td>55</td>
<td>208</td>
<td>Ball</td>
<td>4:1</td>
<td>1/4</td>
<td>200</td>
<td>800</td>
</tr>
<tr>
<td>1932</td>
<td>82737</td>
<td>82791*</td>
<td>55</td>
<td>208</td>
<td>Shovel</td>
<td>8:1</td>
<td>1/4</td>
<td>200</td>
<td>1500</td>
</tr>
<tr>
<td>1933</td>
<td>82737</td>
<td>82792*</td>
<td>55</td>
<td>208</td>
<td>Shovel</td>
<td>13:1</td>
<td>1/4</td>
<td>200</td>
<td>2600</td>
</tr>
<tr>
<td>1902</td>
<td>82737</td>
<td>82790</td>
<td>55</td>
<td>208</td>
<td>Shovel</td>
<td>24:1</td>
<td>1/4</td>
<td>200</td>
<td>4800</td>
</tr>
<tr>
<td>1935</td>
<td>82737</td>
<td>87151*</td>
<td>400</td>
<td>181 kg</td>
<td>Shovel</td>
<td>50:1</td>
<td>1/4</td>
<td>150</td>
<td>7500</td>
</tr>
<tr>
<td>1903</td>
<td>82730</td>
<td>82792</td>
<td>400</td>
<td>181 kg</td>
<td>Shovel</td>
<td>40:1</td>
<td>1/4</td>
<td>200</td>
<td>8000</td>
</tr>
<tr>
<td>1907</td>
<td>82730</td>
<td>82841*</td>
<td>120</td>
<td>54 kg</td>
<td>Shovel</td>
<td>40:1</td>
<td>1/4</td>
<td>200</td>
<td>8000</td>
</tr>
</tbody>
</table>

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov
PowerMaster II and III pump accessories

Model 84826 wall mounting bracket kit
For PowerMaster II or III air motor assemblies.

Model 16177 foot valve adapter
For extending length of drum pumps with models 82790 and 82773 * PowerMaster II pump tubes or models 84984 and 84985 PowerMaster III pump tubes. Install when standard tubes will not reach bottom of tank for addition of 1 1/2 in. NPTF (m) extension pipe (customer furnished).

Model 83132 bung bushing
Screws in bung opening of 400 lb. (181 kg) drums and custom-built tanks to secure any PowerMaster II and III pumps. Plated to resist rust. Threaded 2 in. NPT (m).

Model 1709 single post pump elevator
For description and specifications (→ page 90).

Model 84945 suction kit
For transfer of product from drums, bulk tanks or reservoirs. Includes bung bushing suction tube, hose and coupling assembly.

Note: 2 x 1 in. (50.8 x 25.4 mm) bell reducer required for use with model 1914, not included.

Model 82439 low-level cutoff
Automatically shuts off flow of oil; keeps supply lines primed. Recommended when dispensing oil through metering devices to conform with standards of the National Conference of Weights and Measures. Assembles to 1 1/2 in. NPT standpipe which assembles to pump.

Thermal pressure protection

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Application</th>
<th>Pre-set relief pressure</th>
<th>Size NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>282876</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1</td>
<td>1 000</td>
<td>68</td>
</tr>
<tr>
<td>282957</td>
<td>Valve only</td>
<td>3:1, 5:1, 6:1, 10:1, 12:1</td>
<td>1 500</td>
<td>103</td>
</tr>
<tr>
<td>277601-1</td>
<td>Kit with valve,</td>
<td>PMV 5:1 and 6:1*</td>
<td>900</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>hose, adapters</td>
<td></td>
<td></td>
<td>Integrated</td>
</tr>
<tr>
<td>277601-2</td>
<td>Kit with valve,</td>
<td>PMV 10:1*</td>
<td>1 500</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>hose, adapters</td>
<td></td>
<td></td>
<td>Integrated</td>
</tr>
</tbody>
</table>

Other accessories

Model 83732 standpipe adapter kit
Necessary to assemble PowerMaster II or III pumps to model 83727 standpipe assembly for pumping from bulk tanks.

Model 83727 standpipe assembly
Mounts PowerMaster II or III pump on floor to accept suction line from bulk tank. Inlet 3 in. NPTF, 7 1/2 in. (190 mm) height; 8 in. (203 mm) diameter.

Note: PowerMaster II and III requires model 83732 standpipe assembly adapter kit.

Model 83131 tie rod kit
For bung opening 400 lb. (181 kg) drums. Tie rods and eye-bolts 5/8 in. (15.88 mm) diameter steel plated to resist rust.

Mounting brackets

Model 84723 cover panel kit
Metal cover fits over tie rod ends and encloses moving plunger rod. Prohibits foreign matter from attaching to pump plunger and causing premature wear.

Model 66764 air exhaust muffler
3/4 in. NPT (m) fits PowerMaster II air motor models 82895, 82730 and 82736 * . Two required for each air motor.

* Adapt PMV kits to PowerMaster III stub pump tube (model 84986) with a 300 lb. (136 kg) malleable iron 2 x 1.5 in. (50.8 x 38.1 mm) reducing coupling.
Pump hoists

Model 1709 single post elevator
Ideal for contractor use. Can be mounted on truck body or used in maintenance shop for fast power-operated drum changing. Lifts any Lincoln pump from one 400 or 120 lb. (181 or 54 kg) drum and lowers it into another. Can serve one or a cluster of four drum pumps from one location.

Model 2716 single post primer
For use with PowerMaster III series 2000 pumps. Air-operated single post pump hoist for 55 gallon (208 liter) drums performs several functions in applications of low- to medium-viscosity materials. Facilitates drum changeovers. Includes follower and wiper which uses normal suction to help maintain pump prime.

PowerMaster III pump hoist technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>1709</th>
<th>2716</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>Lowered</td>
<td>70.5 in. (1,8 m)</td>
</tr>
<tr>
<td></td>
<td>Raised</td>
<td>108.5 in. (2,8 m)</td>
</tr>
<tr>
<td>Operating air pressure</td>
<td>50 to 200 psi (3,45 to 13,8 bar)</td>
<td>40 to 200 psi (2,75 to 13,8 bar)</td>
</tr>
<tr>
<td>Beam Length</td>
<td>19 in. (0.5 m)</td>
<td>19 in. (0.5 m)</td>
</tr>
<tr>
<td>Rotation</td>
<td>360°</td>
<td>360°</td>
</tr>
<tr>
<td>Lift capacity</td>
<td>400 lb. (181 kg)</td>
<td>400 lb. (181 kg)</td>
</tr>
</tbody>
</table>

PowerMaster II pump hoist technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>1716</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>Lowered</td>
</tr>
<tr>
<td></td>
<td>Raised</td>
</tr>
<tr>
<td>Operating air pressure</td>
<td>40 to 200 psi (2,75 to 13,8 bar)</td>
</tr>
<tr>
<td>Beam Length</td>
<td>19 in. (0.5 m)</td>
</tr>
<tr>
<td>Rotation</td>
<td>360°</td>
</tr>
<tr>
<td>Lift capacity</td>
<td>400 lb. (181 kg)</td>
</tr>
</tbody>
</table>
Drum dollies

**Model 84377**
400 lb. (55 gal.) drum dolly
Use with any 400 lb. (181 kg) drum. 23 1/4 in. ID, height 5 1/4 in. (133.4 mm), hard rubber wheels: 1 in. (25.4 mm) wide, 2 1/2 in. (63.5 mm) dia. Capacity: 650 lbs. (294 kg)

**Model 84192**
120 lb. (16 gal.) [54 kg (60 liter)] band dolly
Band-type dolly for use with 120 lb. (54 kg) refinery containers; caster model 66060.

**Model 66060 caster for roll-a-round base units**
Standard equipment on Lincoln drum and band dollies.

**Model 80895 roll-a-round base**
Use with 120 lb. (54 kg) refinery containers. Four ball-bearing swivel casters and screw clamps.

**Model 674 hand truck**
All steel, rugged construction with 6 in. (152.4 mm) diameter wheels. Finished in Lincoln red. 41 high x 15 in. wide (1041 high x 381 mm wide). For use with 120 lb. (54 kg) or 16 gallon (60 liter) drum.

**Model 84963 flange mounting assembly**
For rigid mounting of PowerMaster III pumps to the top of fabricated bulk tanks.

**Model 86214* gland protection sleeves**
For all ball foot design pump tubes.

**Model 84722 muffler adapter kit**
Replaces standard built-in muffler on series III air motors. Pipes exhaust away from pump. Converts exhaust port to 3/4 in. NPT (f) thread.

**Drum covers**

**Model 81538**
Standard 16 gallon (60 liter) drum cover for mounting PowerMaster II and III drum pumps to full open drums.

**Model 81412**
Standard 55 gallon (208 liter) drum cover for mounting PowerMaster II and III series drum pumps on full open drums.

**Model 83166**
Same as model 81412 except includes a port for installation of material agitator.

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*A WARNING
California Proposition 65:
Cancer and reproductive harm
www.P65Warnings.ca.gov*
Follower plates
Recommended when pumping lubricants that will not seek their own level.

Model 84775
Deluxe universal follower for use with 25 to 50 lb. (11 to 22 kg) containers for 1, 1 1/4, and 1 1/2 in. diameter pump tubes. All rubber unit ensures complete grease dispensing to the bottom of dented or plastic lined drums; wipes pail or drum clean. Metal cap holds insert firmly in place, ensuring seal and maintaining vacuum.

Model 84780
Same as model 84775 except for use with 120 lb. (54 kg) containers for 1, 1 1/4, and 2 1/8 in. diameter pump tubes.

Model 83369
For 400 lb. (181 kg) drums. Diameter 21 5/8 in.

Model 81482 400 lb. (181 kg)
Includes mounting flange and tie rods for mounting any PowerMaster II pump. Includes model 84318 drum cover and model 84273 adapter flange.

Model 84768
Same as 81482 except for PowerMaster III pumps.

Model 84291 120 lb. (54 kg)
Same as model 81482, except for 120 lb. (54 kg) drums. Includes model 84299 drum cover and model 84273 adapter flange.

Model 84767
Same as 84291 except for PowerMaster III pumps.

Model 84273 flange mounting assembly
For rigidly mounting any PowerMaster II stub pump or drum pump to top of a fabricated bulk tank.

Model 84963
Same as 84273 except for PowerMaster III pumps.

Model 83119 tie rod assembly
Same as model 83131 except for 120 lb. (54 kg) drums.

Model 360248 drum locator
Positions and secures 400 lb. (181 kg) drums when truck is in motion. Two identical angles in a circular segment with an 11 1/2 in. radius. Holes provided for fastening angle to platform. Welding optional.
Hydraulic PowerMaster motor

Ideal for mining, heavy construction and ink applications

Rugged design with minimum moving parts, maximum reliability and durability in heavy-duty applications

- Two motor sizes available
- Expands pumping capability to higher pressure and higher volume applications
- Internal logic provides smooth changeover for each stroke
- No need for external pressure or limit switches and solenoid valves
- Responds immediately to changes in grease volume and pressure demands
- Versatile – designed to deliver effectively in transfer and automated lubrication
- Use with Lincoln's PowerMaster and PileDriver pump tube

Hydraulic PowerMaster motor technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Model 86400</th>
<th>Model 86300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder diameter</td>
<td>3 1/2 in. (89 mm)</td>
<td>2 in. (51 mm)</td>
</tr>
<tr>
<td>Piston rod diameter</td>
<td>2 1/2 in. (64 mm)</td>
<td>1 7/16 in. (37 mm)</td>
</tr>
<tr>
<td>Stroke length</td>
<td>6 in. (152 mm)</td>
<td>6 in. (152 mm)</td>
</tr>
<tr>
<td>Operating pressure range*</td>
<td>300 to 1 500 psi (21 to 103 bar)</td>
<td>300 to 1 500 psi (21 to 103 bar)</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-30 to +200 °F (−34 to +93 °C)</td>
<td>-30 to +200 °F (−34 to +93 °C)</td>
</tr>
<tr>
<td>Fluid consumption rate</td>
<td>57.7 cu. in./cycle or 1 gal./4 cycles</td>
<td>18.8 cu. in./cycle or 1 gal./12 cycles</td>
</tr>
<tr>
<td></td>
<td>(945.5 cm³/cycle or 3.8 liter/4 cycles)</td>
<td>(308 cm³/cycle or 3.8 liter/12 cycles)</td>
</tr>
<tr>
<td>Hydraulic fluid inlet</td>
<td>SAE 10 (female)</td>
<td>SAE 8 (female)</td>
</tr>
<tr>
<td>Hydraulic fluid outlet</td>
<td>SAE 12 (female)</td>
<td>SAE 10 (female)</td>
</tr>
<tr>
<td>Max. recommended speed (continuous)</td>
<td>55 cycles/min.</td>
<td>75 cycles/min.</td>
</tr>
<tr>
<td>Wetted part materials</td>
<td>Steel, bronze, polyurethane, nitrile</td>
<td>Steel, bronze, polyurethane, nitrile</td>
</tr>
</tbody>
</table>

* Refer to tables on pg. 98 for maximum operating pressure with specific pump tubes.
### PowerMaster III models with model 86400 motor

<table>
<thead>
<tr>
<th>Pump tube model</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Maximum delivery pressure</th>
<th>Maximum hydraulic inlet pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>psi</td>
</tr>
<tr>
<td>84984</td>
<td>4:1</td>
<td>16</td>
<td>60</td>
<td>4 000</td>
</tr>
<tr>
<td>84985</td>
<td>4:1</td>
<td>55</td>
<td>208</td>
<td>4 000</td>
</tr>
<tr>
<td>84986</td>
<td>4:1</td>
<td>Stub</td>
<td>Stub</td>
<td>4 000</td>
</tr>
</tbody>
</table>

### PowerMaster III models with model 86300 motor

<table>
<thead>
<tr>
<th>Pump tube model</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Maximum delivery pressure</th>
<th>Maximum hydraulic inlet pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>psi</td>
</tr>
<tr>
<td>84984</td>
<td>1.5:1</td>
<td>16</td>
<td>60</td>
<td>2 250</td>
</tr>
<tr>
<td>84985</td>
<td>1.5:1</td>
<td>55</td>
<td>208</td>
<td>2 250</td>
</tr>
<tr>
<td>84986</td>
<td>1.5:1</td>
<td>Stub</td>
<td>Stub</td>
<td>2 250</td>
</tr>
</tbody>
</table>

### PileDriver III models with model 86400 motor

<table>
<thead>
<tr>
<th>Pump tube model</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Maximum delivery pressure</th>
<th>Maximum hydraulic inlet pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>psi</td>
</tr>
<tr>
<td>85922</td>
<td>1.2:1</td>
<td>Stub</td>
<td>Stub</td>
<td>1 800</td>
</tr>
</tbody>
</table>

### PileDriver III models with model 86300 motor

<table>
<thead>
<tr>
<th>Pump tube model</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Maximum delivery pressure</th>
<th>Maximum hydraulic inlet pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>psi</td>
</tr>
<tr>
<td>85922</td>
<td>0.4:1</td>
<td>Stub</td>
<td>Stub</td>
<td>600</td>
</tr>
</tbody>
</table>
Hydraulic motor for PowerMaster III pump tubes

- Designed for oil, ATF and gear oil
- Safe to use where electric or pneumatic motors may be hazardous.
- Virtually eliminate concerns about air supply condition and exhaust emissions.
- Efficiently generates high material pressure and flow rate with minimum hydraulic power consumption.
- Few internal moving parts. No mechanical linkages or solenoids to fail or wear out.
- An internal changeover circuit requires no external signal for reciprocating action.
- Balanced cylinder design eliminates need for separate stroke adjustments.
- All key components are machined from steel or aluminum to insure long service life in the toughest applications.
- Hydro-PowerMaster was designed and is manufactured under the strict conditions of an ISO 9001 registered quality system.

### Hydro-PowerMaster technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Cylinder diameter</th>
<th>Piston rod diameter</th>
<th>Stroke length</th>
<th>Hydraulic fluid inlet (F)</th>
<th>Hydraulic fluid outlet (F)</th>
<th>Operating pressure range</th>
<th>Operating temperature range</th>
<th>Fluid flow consumption rate per cycle</th>
<th>Recommended continuous speed</th>
<th>Wetted parts materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>85300</td>
<td>2 in. (5 cm)</td>
<td>1 3/8 in. (3.5 cm)</td>
<td>6 in. (15 cm)</td>
<td>SAE 8</td>
<td>SAE 10</td>
<td>300 to 1 500 psi (20.4 to 103 bar)</td>
<td>–30 to +200 °F (–34 to +93 °C)</td>
<td>18.8 cu. in. (308.1 cm³)</td>
<td>75 cycles/minute</td>
<td>Steel, aluminum, bronze, nitrile, PTFE, polyurethane</td>
</tr>
</tbody>
</table>

### PowerMaster III special pump

<table>
<thead>
<tr>
<th>Motor</th>
<th>Pump tube</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Size NPT (f)</th>
<th>Maximum hydraulic pressure</th>
<th>Maximum pressure</th>
<th>Free delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85300</td>
<td>84985</td>
<td>1.5:1</td>
<td>55</td>
<td>3/4</td>
<td>1 500</td>
<td>103</td>
<td>3.9</td>
</tr>
<tr>
<td>85300</td>
<td>84984</td>
<td>1.5:1</td>
<td>16</td>
<td>3/4</td>
<td>1 500</td>
<td>103</td>
<td>3.9</td>
</tr>
<tr>
<td>85300</td>
<td>84986</td>
<td>1.5:1</td>
<td>stub</td>
<td>3/4</td>
<td>1 500</td>
<td>103</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Must order hydraulic motor and pump tube separately.

CAUTION: Do not exceed maximum hydraulic inlet pressure listed for each motor/pump tube combination.
Hydraulic PowerMaster motor

Ideal for mining, heavy construction and portable lubrication trucks

Rugged design with minimum moving parts, maximum reliability and durability in heavy-duty applications

- Two motor sizes available
- Expands pumping capability to higher pressure and higher volume applications
- Internal logic provides smooth changeover for each stroke
- No need for external pressure or limit switches and solenoid valves
- Responds immediately to changes in grease volume and pressure demands
- Versatile – designed to deliver effectively in transfer and automated lubrication
- Use with Lincoln’s PowerMaster and PileDriver pump tube

Hydraulic PowerMaster motor technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>86400</th>
<th>86300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder diameter</td>
<td>3 1/2 in. (89 mm)</td>
<td>2 in. (51 mm)</td>
</tr>
<tr>
<td>Piston rod diameter</td>
<td>2 1/2 in. (64 mm)</td>
<td>1 7/16 in. (37 mm)</td>
</tr>
<tr>
<td>Stroke length</td>
<td>6 in. (152 mm)</td>
<td>6 in. (152 mm)</td>
</tr>
<tr>
<td>Operating pressure range*</td>
<td>300 to 1,500 psi (21 to 103 bar)</td>
<td>300 to 1,500 psi (21 to 103 bar)</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>−30 to +200 °F (−34 to +93 °C)</td>
<td>−30 to +200 °F (−34 to +93 °C)</td>
</tr>
<tr>
<td>Fluid consumption rate</td>
<td>57.7 cu. in./cycle or 1 gal./4 cycles (945.5 cm³/cycle or 3.8 liter/4 cycles)</td>
<td>18.8 cu. in./cycle or 1 gal./12 cycles (308 cm³/cycle or 3.8 liter/12 cycles)</td>
</tr>
<tr>
<td>Hydraulic fluid inlet</td>
<td>SAE 10 (female)</td>
<td>SAE 8 (female)</td>
</tr>
<tr>
<td>Hydraulic fluid outlet</td>
<td>SAE 12 (female)</td>
<td>SAE 10 (female)</td>
</tr>
<tr>
<td>Max. recommended speed (continuous)</td>
<td>75 cycles/min.</td>
<td>75 cycles/min.</td>
</tr>
<tr>
<td>Wetted part materials</td>
<td>Steel, bronze, polyurethane, nitrile</td>
<td>Steel, bronze, polyurethane, nitrile</td>
</tr>
</tbody>
</table>

*Refer to tables on pg. 101 for maximum operating pressure with specific pump tubes.
### PowerMaster III models with model 86400 motor

<table>
<thead>
<tr>
<th>Pump tube model</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Maximum delivery pressure</th>
<th>Maximum hydraulic inlet pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>psi</td>
</tr>
<tr>
<td>84991</td>
<td>8:1</td>
<td>55</td>
<td>208</td>
<td>7 200</td>
</tr>
<tr>
<td>84992</td>
<td>8:1</td>
<td>16</td>
<td>60</td>
<td>7 200</td>
</tr>
<tr>
<td>84993</td>
<td>14:1</td>
<td>55</td>
<td>208</td>
<td>7 000</td>
</tr>
<tr>
<td>84994</td>
<td>14:1</td>
<td>16</td>
<td>60</td>
<td>7 000</td>
</tr>
<tr>
<td>84995</td>
<td>17:1</td>
<td>55</td>
<td>208</td>
<td>7 650</td>
</tr>
<tr>
<td>84996</td>
<td>17:1</td>
<td>16</td>
<td>60</td>
<td>7 650</td>
</tr>
<tr>
<td>84997</td>
<td>23:1</td>
<td>55</td>
<td>208</td>
<td>6 900</td>
</tr>
<tr>
<td>84998</td>
<td>23:1</td>
<td>16</td>
<td>60</td>
<td>6 900</td>
</tr>
</tbody>
</table>

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov*

### PowerMaster III models with model 86300 motor

<table>
<thead>
<tr>
<th>Pump tube model</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Maximum delivery pressure</th>
<th>Maximum hydraulic inlet pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>psi</td>
</tr>
<tr>
<td>84991</td>
<td>2.7:1</td>
<td>55</td>
<td>208</td>
<td>4 000</td>
</tr>
<tr>
<td>84992</td>
<td>2.7:1</td>
<td>16</td>
<td>60</td>
<td>4 000</td>
</tr>
<tr>
<td>84993</td>
<td>4.5:1</td>
<td>55</td>
<td>208</td>
<td>6 750</td>
</tr>
<tr>
<td>84994</td>
<td>4.5:1</td>
<td>16</td>
<td>60</td>
<td>6 750</td>
</tr>
<tr>
<td>84995</td>
<td>5.5:1</td>
<td>55</td>
<td>208</td>
<td>7 500</td>
</tr>
<tr>
<td>84996</td>
<td>5.5:1</td>
<td>16</td>
<td>60</td>
<td>7 500</td>
</tr>
<tr>
<td>84997</td>
<td>8:1</td>
<td>55</td>
<td>208</td>
<td>7 200</td>
</tr>
<tr>
<td>84998</td>
<td>8:1</td>
<td>16</td>
<td>60</td>
<td>7 200</td>
</tr>
</tbody>
</table>

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov*
Hydraulic motor for PowerMaster III pump tubes

- Designed for grease
- Safe to use where electric or pneumatic motors may be hazardous.
- Virtually eliminate concerns about air supply condition and exhaust emissions.
- Efficiently generates high material pressure and flow rate with minimum hydraulic power consumption.
- Few internal moving parts. No mechanical linkages or solenoids to fail or wear out.
- An internal changeover circuit requires no external signal for reciprocating action.

- Balanced cylinder design eliminates need for separate stroke adjustments.
- All key components are machined from steel or aluminum to insure long service life in the toughest applications.
- Hydro-PowerMaster was designed and is manufactured under the strict conditions of an ISO 9001 registered quality system.

Hydro-PowerMaster technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>85300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder diameter</td>
<td>2 in. (5 cm)</td>
</tr>
<tr>
<td>Piston rod diameter</td>
<td>1-3/8 in. (3.5 cm)</td>
</tr>
<tr>
<td>Stroke length</td>
<td>6 in. (15 cm)</td>
</tr>
<tr>
<td>Hydraulic fluid inlet (F)</td>
<td>SAE 8</td>
</tr>
<tr>
<td>Hydraulic fluid outlet (F)</td>
<td>SAE 10</td>
</tr>
<tr>
<td>Operating pressure range</td>
<td>300 to 1 500 psi (20.4 to 103 bar)</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>–30 to +200 °F (–34 to +93 °C)</td>
</tr>
<tr>
<td>Fluid flow consumption rate per cycle</td>
<td>18.8 cu. in. (308.1 cm³)</td>
</tr>
<tr>
<td>Recommended continuous speed</td>
<td>75 cycles/minute</td>
</tr>
<tr>
<td>Wetted parts materials</td>
<td>Steel, aluminum, bronze, nitrile, PTFE, polyurethane</td>
</tr>
</tbody>
</table>

PowerMaster III hydraulic-powered pumps

<table>
<thead>
<tr>
<th>Motor</th>
<th>Pump tube</th>
<th>Ratio</th>
<th>Drum size</th>
<th>Size NPT (f)</th>
<th>Maximum hydraulic pressure psi/bar</th>
<th>Maximum pressure psi/bar</th>
<th>Free delivery gal./min. liter/min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>85300</td>
<td>84991</td>
<td>3:1</td>
<td>55</td>
<td>208,2</td>
<td>¾</td>
<td>1 500/103</td>
<td>4 500/310</td>
</tr>
<tr>
<td>85300</td>
<td>84992</td>
<td>3:1</td>
<td>16</td>
<td>60,57</td>
<td>¾</td>
<td>1 500/103</td>
<td>4 500/310</td>
</tr>
<tr>
<td>85300</td>
<td>84993</td>
<td>4:5:1</td>
<td>55</td>
<td>208,2</td>
<td>¾</td>
<td>1 500/103</td>
<td>6 750/466</td>
</tr>
<tr>
<td>85300</td>
<td>84994</td>
<td>4:5:1</td>
<td>16</td>
<td>60,57</td>
<td>¾</td>
<td>1 500/103</td>
<td>6 750/466</td>
</tr>
<tr>
<td>85300</td>
<td>84995</td>
<td>5:1</td>
<td>55</td>
<td>208,2</td>
<td>¾</td>
<td>1 500/103</td>
<td>7 500/517</td>
</tr>
<tr>
<td>85300</td>
<td>84996</td>
<td>5:1</td>
<td>16</td>
<td>60,57</td>
<td>¾</td>
<td>1 500/103</td>
<td>7 500/517</td>
</tr>
<tr>
<td>85300</td>
<td>84997</td>
<td>7:1</td>
<td>55</td>
<td>208,2</td>
<td>¾</td>
<td>1 000/69</td>
<td>7 000/483</td>
</tr>
<tr>
<td>85300</td>
<td>84998</td>
<td>7:1</td>
<td>16</td>
<td>60,57</td>
<td>¾</td>
<td>1 000/69</td>
<td>7 000/483</td>
</tr>
</tbody>
</table>

Must order hydraulic motor and pump tube separately.
CAUTION: Do not exceed maximum hydraulic inlet pressure listed for each motor/pump tube combination.
1/4 to 2 in. air-operated diaphragm 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. 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.

**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

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Pump body</th>
<th>Wetted or soft parts</th>
<th>Size inlet NPT</th>
<th>Size outlet NPT</th>
<th>Free delivery</th>
<th>Air inlet NPT (l)</th>
<th>Maximum pressure</th>
<th>Element particle size</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>85630</td>
<td>1/4 Polyprop</td>
<td>PTFE</td>
<td>1/4</td>
<td>1/4</td>
<td>4</td>
<td>15.1</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/32 0.79</td>
</tr>
<tr>
<td>85631</td>
<td>1/2 Aluminum</td>
<td>Buna-N</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85632</td>
<td>1/2 Aluminum</td>
<td>PTFE</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85633</td>
<td>1/2 Aluminum</td>
<td>Hytrel</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85634</td>
<td>1/2 Polyprop</td>
<td>Santoprene</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85635</td>
<td>1/2 Polyprop</td>
<td>PTFE</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85636</td>
<td>1/2 Polyprop</td>
<td>Buna-N</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85637</td>
<td>1/2 Aluminum</td>
<td>Hytrel</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
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<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
<tr>
<td>85638</td>
<td>1/2 Aluminum</td>
<td>Buna-N</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
<td>1/8 3.17</td>
</tr>
</tbody>
</table>

1) Can be converted to dual 1/2 in. outlet.

### U.L. listed

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Pump body</th>
<th>Wetted or soft parts</th>
<th>Size inlet NPT</th>
<th>Size outlet NPT</th>
<th>Free delivery</th>
<th>Air inlet NPT (l)</th>
<th>Maximum pressure</th>
<th>Element particle size</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>85634</td>
<td>1 U.L.</td>
<td>Aluminum</td>
<td>Buna-N</td>
<td>1</td>
<td>1</td>
<td>45</td>
<td>170.3</td>
<td>1/2</td>
<td>125</td>
<td>8.6</td>
</tr>
<tr>
<td>85635</td>
<td>1 U.L.</td>
<td>Aluminum</td>
<td>PTFE</td>
<td>1</td>
<td>1</td>
<td>45</td>
<td>170.3</td>
<td>1/2</td>
<td>125</td>
<td>8.6</td>
</tr>
</tbody>
</table>

2) 50 psi (3.45 bar) flammable liquids, 125 psi (8.6 bar) others

### Dual inlet

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Pump body</th>
<th>Wetted or soft parts</th>
<th>Size inlet NPT</th>
<th>Size outlet NPT</th>
<th>Free delivery</th>
<th>Air inlet NPT (l)</th>
<th>Maximum pressure</th>
<th>Element particle size</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>85636</td>
<td>1/2</td>
<td>Aluminum</td>
<td>Buna-N</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
</tr>
<tr>
<td>85637</td>
<td>1/2</td>
<td>Polyprop</td>
<td>Buna-N</td>
<td>1/2</td>
<td>1/2</td>
<td>15</td>
<td>56.8</td>
<td>1/4</td>
<td>100</td>
<td>6.89</td>
</tr>
<tr>
<td>85638</td>
<td>1</td>
<td>Aluminum</td>
<td>Buna-N</td>
<td>1</td>
<td>1</td>
<td>42</td>
<td>159</td>
<td>1/2</td>
<td>125</td>
<td>8.6</td>
</tr>
</tbody>
</table>

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

Wall mount brackets

Model 85255 wall mount bracket
Wall mount bracket for 1/4 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 282902 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

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Application</th>
<th>Pre-set relief pressure</th>
<th>Size NPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>282902</td>
<td>Valve only</td>
<td>AODD pumps</td>
<td>150 10</td>
<td>1/2</td>
</tr>
<tr>
<td>277601-4</td>
<td>Kit with valve, hose, adapters</td>
<td>1/2 in. AODD pumps</td>
<td>150 10</td>
<td>Integrated</td>
</tr>
<tr>
<td>277601-5</td>
<td>Kit with valve, hose, adapters</td>
<td>1/2 in. AODD pumps</td>
<td>150 10</td>
<td>Integrated</td>
</tr>
</tbody>
</table>
Lincoln raises the bar for stub-mounted transfer pumps with the model 85922 high-volume pump tube. In combination with PowerMaster air motors, this pump tube offers a wide range of options to provide needed volume and pressure for high-output transfer and multi-reel dispense systems.

- Large ports reduce resistance for improved flows in real world applications.
- 6 in. (152 mm) stroke lets the pump work easier to deliver the same or more volume.
- Proven PileDriver III pump tube and PowerMaster III air motor based design is durable, dependable and easy to maintain over the life of the pump.
- 2.5 in. NPTF (f) and 3 in. NPTF (m) inlet offers flexible mounting options.

Model 2331 1.5:1 stub pump
Package includes:
- PowerMaster III 3 in. air motor model 84803
- PileDriver III stub pump tube model 85922
- Air coupler model 655008
- Air nipple model 653112

Model 2332 3:1 stub pump
Package includes:
- PowerMaster III 4.25 in. air motor model 84804
- PileDriver III stub pump tube model 85922
- Air coupler model 655008
- Air nipple model 653112

Model 2333 7:1 stub pump
Package includes:
- PowerMaster III 6 in. air motor model 84806
- PileDriver III stub pump tube model 85922
- Air coupler model 655012
- Air nipple model 653112
1:1 air-operated piston transfer pumps

Model 384829

1:1 ratio fluid transfer pump designed for quick, reliable and economical transfer from all types of standard containers. This high-volume pump is suitable for use with 16 gal. (60.5 l) and 55 gal. (208 l) drums and bulk storage tanks. Includes a 33 1/2 in. (85 cm) plastic extension tube that can be cut to fit the specific tank or drum depth. Positive-displacement pump starts automatically when the dispense valve is opened and shuts off automatically when the valve is closed. Features a universal suction tube and is capable of use with installed piping, hose and spigot valves, as well as suitable for installation on mobile lube carts.

Model 82230

Transfer pump quickly transfers fluids directly from 55 gal. (208 liter) drums. 2 in. (50.8 mm) bung bushing adjusts to varied drum lengths. Designed to stall against lubricant pressure. Use built in air control valve to adjust fluid output flow. Empties a 55 gal. (208 liter) drum in less than three minutes and has adjustable air flow lever.

Model 82715 PTFE kit

For use with model 82230, to allow compatibility with additional products.

1:1 piston transfer pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Pump body</th>
<th>Wetted or soft parts</th>
<th>Size inlet NPT</th>
<th>Free delivery per min.</th>
<th>Air inlet NPT (l)</th>
<th>Maximum pressure</th>
<th>Typical automotive use</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>in. in. gal. liter</td>
<td>in. psi bar</td>
<td></td>
<td></td>
<td>Universal/motor and gear oil, ATF, hydraulic fluid transfer</td>
</tr>
<tr>
<td>384829</td>
<td>Carbon steel Metal</td>
<td>Flouroelastomer</td>
<td>–</td>
<td>1 14 53</td>
<td>¼</td>
<td>200 14</td>
<td>55 gal. (208 liter) drum</td>
<td></td>
</tr>
<tr>
<td>82230</td>
<td>55 gal. (208 liter) drum</td>
<td>Aluminum, steel</td>
<td>Buna-N</td>
<td>⅜-11 ⅜-11 A.N.</td>
<td>–</td>
<td>75</td>
<td>⅜</td>
<td>150 10.3</td>
</tr>
</tbody>
</table>

Maximum diameter of suspended solids: Not applicable
Multi-fluid (DEF compatible) transfer pumps

Model 1390 lift-action transfer pump
Transfers DEF and many other fluids from larger fluid drums to convenient containers or directly into equipment and vehicle reservoirs.
Self-priming pump is ready to use right out of the package – place the pump in a barrel or drum using the attached bung adapter, lift the lever and fluid is dispensed.
Recommended for use in automotive, trucking, agriculture and construction applications.

Model 1390 manual barrel pump
- DEF (diesel exhaust fluid) compatible
- Transfers popular shop fluids including acetone, antifreeze, windshield washer, thinners, and much more
- Includes NPT and buttress threads for steel and plastic drums
- Adjustable bung type fits 15-, 16-, 30- and 55-gallon drums
- Welded ground-post for safe dispensing of volatile fluids
- Premium-grade 316 stainless steel
- Easy fluid control; no splashing
- Self-priming
- Meets CA Proposition 65 and EU REACH standards

Model 1392 lever-action transfer pump
DEF-compatible pump featuring polypropylene construction. The telescoping pickup tube makes it suitable for a wide range of tank depths. Unique locking ring enables you to optimize nozzle placement to minimize pump load and simplify operation.
Pump package includes a premium non-kink, six-foot hose with ¼ in. outlet nozzle that fits all standard DEF reservoirs, 45-degree nozzle and a threaded 2-inch bung that mounts securely to bulk DEF tanks.

Model 1392 lever-action DEF transfer pump
- DEF (diesel exhaust fluid) compatible
- Locking ring enables optimal pump positioning
- Nozzle hanger keeps hose within reach and off the floor
- Designed for automotive, trucking, agriculture and construction applications
- Transfers bulk fluid to smaller DEF containers or directly into vehicle reservoirs
- Self-priming pump unit
Transfer pump accessories

Suction kits

Model 84945 suction kit
For transfer of product from drums, bulk tanks or reservoirs. Includes bung bushing suction tube, hose and coupling assembly.

*Note:* 2 x 1 in. (50.8 x 25.4 mm) bell reducer required for use with model 1914, not included.

Model 85256
Same as model 84945 except for use with ¾ in. AODD pump.

Used-fluid overfill warning valves

Float rises with used fluid to activate "whistle" warning at prescribed level.

Model 84815 single wall
For single wall tanks and drums in used fluid systems and above ground tanks.

Model 84824 double wall
Same as model 84815 except for double walled tanks and above ground tanks.

4-way valve

Model 84816
Four port, two position valve used in waste fluid systems. Enables one pump to pump into and out of drum or tank. 1 in. NPT female threads inlet/outlet.
3:1 and 5:1 ratio pump packages

Lincoln pump 3:1 and 5:1 ratio packages include model 600003 regulator, model 600401 gauge, model 815 coupler and model 11659 nipple. Control valve, inline meter or handheld metering control valve must be ordered separately (except model 4283).

Model 4283* 5:1 with 50 ft. (15,24 m) reel and meter

Deluxe assembly includes:
- Model 84934 5:1 ratio pump with bung bushing, universal suction tube with foot valve to fit any size container up to 275 gallons (1041 liter)
- 1½ in. x 50 ft. (12.7 mm x 15.24 m) oil hose reel Alemite model 8078-D with 2 ft. (0.6 m) connecting hose
- Model 967 electronic meter totalizes in liters and gallons with quart, gallon or pint readout.

Note: Pipe, fittings and hardware for installation of overhead reel assembly supplied by others.

Model 4493* value series pump, reel and meter package

- Configured for above-ground tank installations.
- For use with natural and synthetic oils, automatic transmission fluid, gear oil, antifreeze or hydraulic oil throughout the shop.
- Fast, reliable dispensing with model 4491 6 gallon/min. (22 liter/min.) free delivery pump.
- Easy handling, dependable service with the Alemite model 8078 series hose reel's heavy-gauge steel base, brass bushings and extra-wide hose guide.
- Accurate and easy dispensing with model 980 electronic oval gear meter with flexible extension.

- Package includes:
  - Model 4491 3.5:1 pump
  - Alemite model 8078-C reel with 1½ in. x 30 ft. (12.7 mm x 9.15 m) hose and ball stop
  - Model 980 electronic meter (measures in quarts)
  - Air line regulator and gauge
  - Air coupler and nipple
  - 2 ft. (0.6 m) fluid connecting hose from pump to reel and adapter union

* WARNING
California Proposition 65:
Cancer and reproductive harm
www.P65Warnings.ca.gov
3:1 Ratio • Corrosive Fluids

Series 20 pumps 3:1 pressure ratio

Model 84145-9 stainless steel
For pumping synthetic hydraulic oil, anti-freeze or corrosive products. Pump may be coupled to stand pipe, mounted with bracket and suction kit or pump tube extension may be added for bung mounting to bulk tank, 2.5 gallon/min. (9 liter/min.) free delivery. Pump tube constructed of 316 stainless steel and features PTFE packings, air inlet ¼ in. NPT (f), material outlet ½ in. NPT (f) comes with air coupler and plug and model 84147-9 product check assembly.

Model 84080-9 stainless steel
Recommended for use with antifreeze, solvents and windshield washer solution. 316 series stainless steel construction and PTFE packings assures long life. 3:1 ratio pump for transfer of corrosive or toxic fluids. Mounts on 55-gallon (208 liter) bung opening drums. Delivers 2.5 gallon/min. (9 liter/min.). Lasts longer than carbon steel models in corrosive service. Maximum air pressure 125 psi (8.6 bar).

WARNING!
For safe and proper use, always consult instructions accompanying product. See Safety Warning Information for appropriate warnings.
Pumps and accessories – value series transfer pumps

Pumps designed for value

Features

- For pumping oil, ATF and gear oil
- Proven horizontal, valved-piston motor design for simplicity and reliability
- Provides quick dispense, fill or transfer with high-volume output
- Built-in muffler for quiet operation
- Cost-effective solution for oil distributors who need to supply pumps for customers who purchase bulk oil in tanks or drums
- Available as stub pump, 16 or 55 gallon (60 or 208 liter) pump or 50 to 275 gallon (946 to 1 041 liter) tank pump
- Motor’s single-stroke action delivers cost effective, high performance and high flow
- Provides quick dispense and fill of ATF, oil, gear lubrication and other fluid lubricants with the speed of many higher-priced pumps
- Ideal for use with one or two overhead reels in applications such as medium-to-light vehicle service facilities, car dealerships, small contractors, farmers and agriculture equipment dealers

Value series transfer pumps technical data

<table>
<thead>
<tr>
<th>Pump ratio</th>
<th>3.5:1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output per stroke</td>
<td>5.6 in.³ (91 cm³)</td>
</tr>
<tr>
<td>Delivery output</td>
<td>6 gallons/min. (22 liter/min.)</td>
</tr>
<tr>
<td>Pneumatic inlet pressure Max.</td>
<td>120 psi (8.3 bar)</td>
</tr>
<tr>
<td></td>
<td>Min.</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>30 to 120 °F (-1 to +49 °C)</td>
</tr>
<tr>
<td>Weight (empty)</td>
<td>14 lbs. (6 kg)</td>
</tr>
<tr>
<td>Pneumatic port inlet</td>
<td>¾ in.-18 NPTF</td>
</tr>
<tr>
<td>Material port outlet</td>
<td>½ NPTF</td>
</tr>
<tr>
<td>Recommended fluids</td>
<td>Motor oils, transmission fluid, petroleum-based fluids</td>
</tr>
</tbody>
</table>

Pump models

<table>
<thead>
<tr>
<th>Model</th>
<th>Application</th>
<th>Mounting</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gal.</td>
<td>liter</td>
<td>in.</td>
</tr>
<tr>
<td>4490</td>
<td>16 to 55</td>
<td>60 to 208</td>
<td>2 NPT male bung adapter</td>
</tr>
<tr>
<td>4491</td>
<td>250 to 275</td>
<td>946 to 1 041</td>
<td>2 NPT male bung adapter</td>
</tr>
<tr>
<td>4492</td>
<td>stub</td>
<td>oval tank</td>
<td>1.5 NPT male</td>
</tr>
</tbody>
</table>
Low-volume transfer pumps for oil, ATF and gear lubricants

**Model 4475 series 1:1 pump**

The model 4475 pump is a reciprocating-piston, low-pressure single-action pump. Air powers the pump's piston on the dispensing, or working, stroke. An internal spring returns the piston and resets it for the working stroke. It pumps continuously when the dispensing (fluid outlet) valve is open and 20 to 120 psi (1.4 to 8.3 bar) air is supplied to the pump.

### 1:1 value series pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Size</th>
<th>Tube size</th>
<th>Inlet pressure</th>
<th>Output per stroke</th>
<th>Free delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>in.</td>
<td>in.  cm</td>
<td>psi bar</td>
<td>in.³ cm³</td>
<td>gal./min. liter/min.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>in.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4475*</td>
<td>Bare pump</td>
<td>½ NPTF</td>
<td>34 86</td>
<td>120 8.3</td>
<td>2.9 48</td>
<td>Up to 4 Up to 15</td>
</tr>
<tr>
<td>4480*</td>
<td>Spigot pump</td>
<td>Spigot extension with on/off valve</td>
<td>34 86</td>
<td>120 8.3</td>
<td>2.9 48</td>
<td>Upt to 4 Up to 15</td>
</tr>
</tbody>
</table>

* Bung bushing models 261102, 261103, 261104
Ratio is approximately 0.7:1 to 0.8:1 depending on inlet air pressure.
Operation is pneumatic pressure delivery stroke with spring return stroke. Attachment is 2 in. bung, adjustable for 55 and 16 gal. (208.2 and 60.57 liter) drums, bench and portable tank.

### Recommended accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>815</td>
<td>⅜ in. NPT (f) air coupler</td>
</tr>
<tr>
<td>11659</td>
<td>⅜ in. NPT (m) air nipple</td>
</tr>
<tr>
<td>602003</td>
<td>⅜ in. miniature air regulator</td>
</tr>
<tr>
<td>247843*</td>
<td>Air line pressure gauge</td>
</tr>
<tr>
<td>10462</td>
<td>⅜ in. pipe nipple for regulator attachment</td>
</tr>
</tbody>
</table>

Note: Air line controls are a must for safe and effective pump operation.

*WARNING California Proposition 65: Cancer and reproductive harm. [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)
Heavy-duty, air-operated grease pumps

Model 9989* 50:1 25, 50 lb. (11, 22 kg) portable pump with pail cover
Package includes:
- Bare pump model V350035000
  - Drum cover model 275370
- Flexible follower model 84775
- Air coupler/nipple model 5874/5875
- 7 ft. (2.13 m) grease hose model 75084
- Straight swivel model 82399
- Universal swivel model 81387
- Control valve model 740

Model 9917 50:1 120 lb. (54 kg) portable with caster base
Package includes:
- Bare pump model V350120000
  - Drum cover model 46007
- Flexible follower model 84780
- Air coupler/nipple model 5874/5875
- 7 ft. (2.13 m) grease hose model 75084
- Straight swivel model 82399
- Universal swivel model 81387
- Control valve model 740
- Caster base 80895

Model 9917-57 50:1 120 lb. (54 kg) portable without caster base model 80895

Air-operated grease pumps for 120 lb. (54 kg) drums

The following models contain Lincoln’s high-pressure series 20 grease pumps.

Model 917 120 lb. (54 kg) drum
Will dispense 45 oz. (1.3 kg) or 80 cu. in. (1 311 cm³) of NLGI 0 – 2 grease per minute at 150 psi (10 bar). Assures positive prime at lowest temperature. Drum cover model 46007 finished in Lincoln red; roll-a-round base model 80895 base in black; air motor cover in white. Height 43 1/8 in. (1 095 mm). Base 17 in. (432 mm) square. Drum not included.

Model 917–57 120 lb. (54 kg) drum
Same as model 917 without roll-a-round base.

Model 6917 air-operated portable grease pump package
Lincoln’s new heavy-duty portable grease pump delivers the same volume and pressure as the more expensive pumps – but at an affordable price.

- Lincoln’s time-tested, 2 1/2 in. (63.5 mm), 50:1, air-operated, double-acting grease pump ensures dependable, high-output grease delivery.
- Lube the hard-to-reach fittings with the heavy-duty control valve and universal swivel.
- Standard follower wipes 120 lb. (54 kg) drum sides clean and keeps the pump primed.
- Four-wheel dolly maneuvers easily around the shop.

Model 346P 120 lb. (54 kg) drum
Same as model 917 except with model 674 hand truck which provides convenient transportation for unit. Hand truck has two semi-pneumatic disc wheels and screw-type clamp which locks unit to truck. Drum not included.

Air-operated grease pumps for 120 lb. (54 kg) drums

<table>
<thead>
<tr>
<th>Model</th>
<th>Bare pump</th>
<th>Drum cover</th>
<th>Base</th>
<th>Follower</th>
<th>Drum size</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>lb.</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>kg</td>
</tr>
<tr>
<td>917–57</td>
<td>82050</td>
<td>46007</td>
<td>–</td>
<td>84780</td>
<td>120</td>
</tr>
<tr>
<td>917</td>
<td>82050</td>
<td>46007</td>
<td>–</td>
<td>84780</td>
<td>54</td>
</tr>
</tbody>
</table>

Delivery kit for unit includes: model 75084 high-pressure hose, model 511659 nipple, model 740 control valve, model 815 air coupler, model 82399 straight swivel and model 81387 universal swivel.

Note: Free delivery 80 cu. in./min. (1 311 cm³/min.)
Air-operated double-acting pumps for 35 lb. (16 kg) pails

Model 987 25 to 50 lb. (11 to 22 kg) pail/60 lb. (27 kg) bulk
For 25 to 30 lb. (11 to 13 kg) refinery containers or 60 lb. (27 kg) bulk. Gasket and air vent in lid assembly makes unit completely dust-proof, leak-proof and spill-proof. Ideal for use in all types of weather; container rust-proofed and finished in Lincoln red. Height 31 3/4 in. (806 mm); inside diameter of container 12 1/2 in. (318 mm).

Model 989 25 to 50 lb. (11 to 22 kg) drum
Steel cover has three thumb screws to clamp securely to any original 25 to 50 lb. (11 to 22 kg) refinery container. Carrying handle provides easy portability. Follower plate assures positive prime at lowest temperatures. Cover rust-proofed and finished in Lincoln red. Bucket not included.

Air-operated double-acting pumps for 35 lb. (16 kg) drums

<table>
<thead>
<tr>
<th>Model</th>
<th>Bare pump</th>
<th>Drum cover</th>
<th>Base</th>
<th>Follower</th>
<th>Drum size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83513</td>
<td>90656</td>
<td>–</td>
<td>Not supplied 1)</td>
<td>25 to 50  11 to 23</td>
</tr>
<tr>
<td>987</td>
<td>82716</td>
<td>91499</td>
<td>–</td>
<td>84775</td>
<td>25 to 50  11 to 23</td>
</tr>
</tbody>
</table>

1) Optional follower plate model 384775 can be used with original 25 to 50 lb. (11 to 23 kg) refinery grease bucket inside model 987 canister.

Delivery kits for all units include: model 75084 high-pressure hose, model 11659 nipple, model 740 control valve, model 815 air coupler, model 82399 straight swivel and model 81387 universal swivel.

Note: Free delivery 80 cu. in./min. (1 311 cm³/min.)

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov*

Follower plates

Model 84775
Deluxe universal follower for use with 25 to 50 lb. (11 to 22 kg) containers for 1, 1 1/4, 1 1/2 in. (25, 32, 38 mm) diameter pump tubes. All rubber unit ensures complete grease dispensing to the bottom of dented or plastic lined drums; wipes pail or drum clean. Metal cap holds insert firmly in place, ensuring seal and maintaining vacuum.

Model 84780
Same as model 84775 except for use with 120 lb. (54 kg) containers for 1, 1 1/4, 2 in. (25, 32, 51 mm) diameter pump tubes. Used with series 20 and 40 air-operated grease pumps.
Value series 40:1 single-acting, air-operated grease pumps

Features and benefits
• Professional quality lubrication at an affordable price
• High pressure
• Portable medium- to light-duty chassis lubrication
• Proven valved piston design
• Simple grease plunger/bushing
• Control valve and universal swivel
• Easy, one-hand operation
• Built for durability and reliability
• Maximum output:
  5 cu. in./2.5 oz. per min. (82 cm³/71 ml)

Model 4417 for 120 lb. (54 kg) drums (drum not included)
Includes 40:1 value series pump, drum cover, high-pressure control valve, universal swivel, coupler, 7 ft. (2.1 m) connecting hose, follower plate and band dolly.

Model 4459 for 25 to 50 lb. (11 to 22 kg) pail (pail not included)
Includes 40:1 value series pump, pail cover, handle, high-pressure control valve, universal swivel, coupler, 7 ft. (2.1 m) connecting hose, follower plate and band dolly.

Model 4489 for 25 to 50 lb. (11 to 22 kg) pail (pail not included)
Same as model 4459 except without band dolly.

Value series 40:1 single-acting, air-operated grease pumps technical data

<table>
<thead>
<tr>
<th>Model</th>
<th>Container size</th>
<th>Ratio</th>
<th>Air motor effective diameter</th>
<th>Air inlet connection</th>
<th>Lube outlet</th>
<th>Volume output/minute</th>
<th>Maximum air pressure</th>
<th>Minimum air pressure</th>
<th>Flexible follower</th>
</tr>
</thead>
<tbody>
<tr>
<td>4417</td>
<td>120 lb. (54 kg)</td>
<td>40:1</td>
<td>2 in. (52 mm)</td>
<td>1/4 NPT (f)</td>
<td>SAE-6 O-ring port</td>
<td>5 in.³ (82 cm³)</td>
<td>100 psi (7 bar)</td>
<td>40 psi (3 bar)</td>
<td>Included with all models</td>
</tr>
<tr>
<td>4459</td>
<td>25 to 50 lb. (11 to 22 kg)</td>
<td>40:1</td>
<td>2 in. (52 mm)</td>
<td>1/4 NPT (f)</td>
<td>SAE-6 O-ring port</td>
<td>5 in.³ (82 cm³)</td>
<td>100 psi (7 bar)</td>
<td>40 psi (3 bar)</td>
<td>Included with all models</td>
</tr>
<tr>
<td>4489</td>
<td>25 to 50 lb. (11 to 22 kg)</td>
<td>No 40:1</td>
<td>2 in. (52 mm)</td>
<td>1/4 NPT (f)</td>
<td>SAE-6 O-ring port</td>
<td>5 in.³ (82 cm³)</td>
<td>100 psi (7 bar)</td>
<td>40 psi (3 bar)</td>
<td>Included with all models</td>
</tr>
</tbody>
</table>

Delivery kit for all models includes high-pressure grease control valve and coupler, universal swivel, 7 ft. (2.1 m) connecting hose.
Air gauges

Model 600401* gauge
Registers pressures up to 200 psi (13.79 bar). Dial diameter 2 in. (50.8 mm). 1/4 in. NPT center back connection. Calibrated both in psi and kg/cm².

Miniature units

Model 600003* miniature regulator
All brass construction with Buna N diaphragm. For 1/4 in. pipe size. Maximum supply pressure: 300 psi (20.68 bar). Reduced pressure range: 0 to 125 psi (0 to 8.62 bar). Operating temperature range: −40 to +180 °F (−40 to +82 °C). Diameter 1 3/8 in. (35 mm), height 2 3/4 in. (70 mm), weight 1/2 lb. (0.23 kg)

Drum dollies

Model 84191 25 to 50 lb. (5 gal.) [11 to 22 kg (20 liter)] band dolly
Band-type dolly for any original 25 to 50 lb. (11 to 22 kg) refinery containers; caster model 66060.

Model 84192 120 lb. (16 gal.) [54 kg (60 liter)] band dolly
Band-type dolly for use with 120 lb. (54 kg) refinery containers; caster model 66060.

Model 84377 drum dolly
Use with any 400 lb. (55 gal.) [181 kg (208 liter)] drum. ID 23 1/4 in. (591 mm), height 5 1/4 in. (133 mm), hard rubber wheels: 1 in. (25.4 mm) wide, 2 1/2 in. (63.5 mm) diameter.

Model 674 hand truck
All steel, rugged construction with 6 in. (152.4 mm) diameter wheels. Finished in Lincoln red. 41 high x 15 in. wide (1 041 high x 381 mm wide). For use with 120 lb. (54 kg) or 16 gallon (60 liter) drum.

Model 80895 roll-a-round base
Use with 120 lb. (54 kg) refinery containers. Four ball-bearing swivel casters and screw clamps.
Pumps and accessories – heavy-duty, air-operated grease pump accessories

**Accessories**

**Model 66060 2 1/2 in. (63.5 mm) caster for roll-a-round base units**
Standard equipment on Lincoln drum and band dollies.

**Model 84941**
Eye bolt kit for all series 20, 25 and 40 pumps, makes drum changing easy. Two part model 84941 kit screws directly onto pump for lifting with pump elevator.

**Model 5841 drum plug wrench**
Simplifies the opening and closing of caps and plugs on fluid drums, eliminating the need for cumbersome makeshift tools, such as screwdrivers and hammers. Suitable for agriculture, construction, industrial, fleet maintenance and vehicle service applications. Compatible with standard metal and plastic caps or plugs on 16- and 55-gallon (60 and 208 l) drums.

- Non-sparking, non-corrosive aluminum construction
- Practical, hard-wearing tool
- Comfortable, textured grip for ease of use
- Fits most steel and plastic caps, including 3/4-inch vent plugs

**Follower plates**
Recommended when pumping lubricants that will not seek their own level.

**Model 84775**
Deluxe universal follower for use with 25 to 50 lb. (11 to 22 kg) containers for 1, 1 1/4, and 1 1/2 in. diameter pump tubes. All rubber unit ensures complete grease dispensing to the bottom of dented or plastic lined drums; wipes pail or drum clean. Metal cap holds insert firmly in place, ensuring seal and maintaining vacuum.

**Model 84780**
For use with 120 lb. (54 kg) containers for 1, 1 1/4, 1 3/8, 1 1/2 and 2 1/8 in. diameter pump tubes. Used with series 20 and 40 air-operated grease pumps.

**Model 4417 for 120 lb. (54 kg) drums (drum not included)**
Includes 40:1 value series pump, drum cover, high-pressure control valve, universal swivel, coupler, 7 ft. (2.1 m) connecting hose, follower plate and band dolly.

**Model 4459 for 25 to 50 lb. (11 to 22 kg) pail (pail not included)**
Includes 40:1 value series pump, pail cover, handle, high-pressure control valve, universal swivel, coupler, 7 ft. (2.1 m) connecting hose, follower plate and band dolly.

**Model 4489 for 25 to 50 lb. (11 to 22 kg) pail (pail not included)**
Same as model 4459 except without band dolly.
Pumps and accessories – manually operated high-pressure grease pumps

**Manually operated high-pressure grease pumps**

**Manual bucket pumps**
These quality-built Lincoln bucket pumps dispense high-pressure lubrication in any weather – even at 0 ºF (–18 ºC).

**Model 1292 grease pump**
Unit clamps on any 25 to 50 lb. (11 to 22 kg) refinery container in 60 seconds. Includes model 275184 flexible follower. Dimensions (h x w): 21 1/2 x 12 1/4 in. (546 x 311 mm). Tube size 1 1/4 in. (32 mm).

**Model 1272**
Large 30 lb. (13 kg) lubricant capacity with easy pumping action, develops a 3 500 psi (241 bar) maximum pressure to lubricate the most closely fitted bearings. Automatic pressure release prevents nozzle drippage, waste and mess. Pump and lid assembly easily removed as a single unit for filling. Order 7 ft. (2 m) hose and coupler assembly (model 81768) separately. Dimensions (h x w x l): 28 x 14 x 9 in. (711 x 356 x 229 mm).

**Model 1275**
All purpose pump dispenses both lubricants and greases. Especially useful for lubrication of trac-roller bearings. Handle slot pin switches for high pressure 5 000 psi (345 bar) or high-volume, low pressure 2 000 psi (138 bar) delivery. 40 lb. (18 kg) capacity steel container filled through pivot cover opening in lid. May also be used for fast, clean refilling of transmissions, differentials, gear cases and final drives. Order 5 ft. (1.5 m) hose (model 79060) and button-head grease coupler (model 80933) separately. Dimensions (h x w x l): 23 1/2 x 11 3/8 x 14 5/8 in. (597 x 289 x 372 mm).

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**WARNING!**
For safe and proper use, always consult instructions accompanying product. See *Safety Warning Information* for appropriate warnings.

**Manual grease pumps**

<table>
<thead>
<tr>
<th>Model</th>
<th>Container size</th>
<th>Maximum pressure</th>
<th>Coupler accessories</th>
<th>Hose type</th>
<th>Follower</th>
<th>Output per stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>1292</td>
<td>25 to 50</td>
<td>11 to 22</td>
<td>2 500</td>
<td>172</td>
<td>5852</td>
<td>.303</td>
</tr>
<tr>
<td></td>
<td>lb.</td>
<td>kg</td>
<td>psi</td>
<td>bar</td>
<td></td>
<td>cm³</td>
</tr>
<tr>
<td>1275</td>
<td>40 bulk</td>
<td>18</td>
<td>5 000</td>
<td>345</td>
<td>None</td>
<td>Not supplied</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>None</td>
<td>10</td>
</tr>
<tr>
<td>1272</td>
<td>30 bulk</td>
<td>14</td>
<td>3 500</td>
<td>241</td>
<td>None</td>
<td>Not supplied</td>
</tr>
</tbody>
</table>

1) Using no. 1 multi-purpose grease at 80 ºF (27 ºC)
2) Using no. 1 cup grease at 70 ºF (21 ºC)
Pumps and accessories – manually operated high-pressure grease pumps

**Filler pumps – portable and stationary**

- Fast (less than a minute), positive gun refilling with simple pumping action
- Filler socket assembly eliminates mess, waste and air pockets

**Model 1296 clamp–on carry**

Clamps to any original 25 to 50 lb. (11 to 22 kg) refinery container. Handles medium and light lubricants in any weather. Includes pump, filler socket, model 275183 flexible follower plate and ribbed steel drum cover. Rust resistant. Tube size 1 1/2 in. (38 mm).

**Model 500L stationary 120 lb. (54 kg) drum**

For use with original refinery drums with maximum head diameter of 14 9/16 in. (370 mm) and overall height of 26 5/8 in. (676 mm). Handles all high-pressure lubricants. Includes pump, filler socket and drum cover with one set of adjusting screws to accommodate variations in drum diameter. Red enamel finish; pump head and handle in black. Delivers 1 oz. (28 ml) per stroke.

**Filler pumps**

<table>
<thead>
<tr>
<th>Model</th>
<th>Container size</th>
<th>Follower</th>
<th>Filler socket</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1296*</td>
<td>25 to 50 lb.</td>
<td>11 to 23 kg</td>
<td>275183</td>
<td>20 x 12 5/4 (H x W)</td>
</tr>
<tr>
<td>500L</td>
<td>120 kg</td>
<td>54</td>
<td>None 2)</td>
<td>26 5/8 x 14 5/16 (H x diameter)</td>
</tr>
</tbody>
</table>

1) Requires model 91108 filler nipple
2) For pumping extra heavy lubricants, order follower plate model 84780 for model 500L pump

*WARNING California Proposition 65: Cancer and reproductive harm. www.P65Warnings.ca.gov

**Model 80133 filler socket assembly**

Accepts model 91108 grease gun filler nipple. Attaches to filler pumps for fast, convenient, economical loading. 3/8 in. NPT (f).

**Model 91108 filler nipple**

Enables hand guns to be loaded using filler pump method. Includes ball check. 1/8 in. NPT (m).
Manually operated grease pump accessories

Delivery hose assemblies for bucket pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Swivel</th>
<th>Coupler accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

For contacting hydraulic fittings

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Swivel</th>
<th>Coupler accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>81768</td>
<td>7</td>
<td>2.13</td>
<td>80924 5834</td>
</tr>
</tbody>
</table>

For contacting standard button-head fittings

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Swivel</th>
<th>Coupler accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>81673</td>
<td>7</td>
<td>2.13</td>
<td>80924 81458</td>
</tr>
</tbody>
</table>

For contacting large button-head fittings

<table>
<thead>
<tr>
<th>Model</th>
<th>Size</th>
<th>Swivel</th>
<th>Coupler accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>81168</td>
<td>7</td>
<td>2.13</td>
<td>80924 80933</td>
</tr>
</tbody>
</table>

2,500 psi (155 bar) maximum operating pressure

Drum covers

Model 46007
Drum cover for 120 lb. (54 kg) or 16 gallon (60 liter) open top refinery containers for all series 20, 25 and 40 pumps.
Air-operated gear lube and ATF pumps

Air-operated mobile gear lube dispensers

Fast, clean refilling using efficient Lincoln air-operated pumps.

- 3:1 (model 2435) and 5:1 (model 2535) pump ratios delivers gear oil with minimum consumption.
- Air expeller built into pump tube prevents air from registering through meter.
- Large replaceable swivel casters provide ease of maneuverability (mobile models).
- Baked on enamel finish retards rust and corrosion.
- Includes air coupler model 815 and model 780 shut-off valves. Drum not included.

<table>
<thead>
<tr>
<th>Model</th>
<th>Container</th>
<th>Pump ratio</th>
<th>Meter</th>
<th>Style</th>
<th>Hose size model 73060</th>
<th>Tube size</th>
<th>Nozzle</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2435</td>
<td>120</td>
<td>54</td>
<td>3:1</td>
<td>Drum cover</td>
<td>870 (pint)</td>
<td>25 1/4</td>
<td>654</td>
<td>780</td>
</tr>
<tr>
<td>2535</td>
<td>120</td>
<td>54</td>
<td>5:1</td>
<td>Drum cover</td>
<td>870 (pint)</td>
<td>25 1/4</td>
<td>654</td>
<td>780</td>
</tr>
<tr>
<td>2435LN</td>
<td>120</td>
<td>54</td>
<td>3:1</td>
<td>Drum cover</td>
<td>2873 (liter)</td>
<td>25 1/4</td>
<td>654</td>
<td>780</td>
</tr>
</tbody>
</table>

All models include model 80895 roll-a-round base
### Manual gear lube dispensers

These quality manually operated pumps provide fast, clean refilling of differentials, gear cases and final drives.

- Cast iron pump outlet body and handle (except model 1293) provide durability and longevity.
- Metered models have air expeller built into pump tube (prevents air from registering on meter).
- Large replaceable swivel casters provide ease of maneuverability (mobile models).
- Baked enamel finish. Self-contained units and sealed models prevent contamination or spillage of product being dispensed.
- Smooth, easy pumping action (no crank or gears) dispenses all types of gear lubricants, even in the coldest weather.

#### Model G400 lever-action bucket pump

Fits 5 gallon (19 liter) buckets. Includes pump, 18 in. (457 mm) drum cover and 4 ft. (1.2 m) delivery hose. Perfect for transferring petroleum-based fluids. Model 82757 hose and nozzle upgrade kit for model 1293. Includes model 80999 nozzle assembly and 5 ft. (1.5 m) model 74560 hose.

#### Accessories

- **Model 82757 hose/nozzle kit**
  Hose and nozzle upgrade kit for model 1293. Includes model 80999 nozzle assembly and 5 ft. (1.5 m) model 74560 hose.

- **Model 674 hand truck**
  All steel, rugged construction with 6 in. (152 mm) diameter wheels. Finished in Lincoln red. 41 high x 15 in. wide (1,041 high x 381 mm wide). For use with 120 lb. (54 kg) or 16 gallon (60 liter) drum.

- **Model 80895 roll-a-round base**
  Use with 120 lb. (54 kg) refinery containers. Four ball bearing swivel casters and screw clamps. Included with models listed above.

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### Manual gear lube dispensers

<table>
<thead>
<tr>
<th>Model</th>
<th>Container</th>
<th>Meter</th>
<th>Style</th>
<th>Base</th>
<th>Hose size (model 74560)</th>
<th>Nozzle</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>535</td>
<td>120</td>
<td>54</td>
<td>(pints)</td>
<td>15 ID drum cover</td>
<td>80895 roll-a-round</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>535LN</td>
<td>120</td>
<td>54</td>
<td>2873 (liters)</td>
<td>15 ID drum cover</td>
<td>80895 roll-a-round</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>535-58</td>
<td>120</td>
<td>54</td>
<td>(pints)</td>
<td>15 ID drum cover</td>
<td>–</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>549</td>
<td>120</td>
<td>54</td>
<td>–</td>
<td>15 ID drum cover</td>
<td>80895 roll-a-round</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>549-58</td>
<td>120</td>
<td>54</td>
<td>–</td>
<td>15 ID drum cover</td>
<td>–</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>1253</td>
<td>30 (bulk)</td>
<td>14</td>
<td>(pints)</td>
<td>self contained</td>
<td>1)</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>1254</td>
<td>30 (bulk)</td>
<td>14</td>
<td>–</td>
<td>self contained</td>
<td>1)</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>1293*</td>
<td>5 gal.</td>
<td>19 liter</td>
<td>–</td>
<td>12 ID clamp-on cover</td>
<td>–</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>G400*</td>
<td>5 gal.</td>
<td>19 liter</td>
<td>–</td>
<td>12 ID clamp-on cover</td>
<td>–</td>
<td>5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

1) Interior 9 in. (229 mm) diameter, 13 3/4 in. (349 mm) width
2) 1 pint (0.5 liter) per 7 strokes using SAE 90 gear lubricator at 70 °F (21 °C)
3) 1 oz. (28 ml) per stroke using SAE 90 at 70 °F (21 °C)

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Pumps and accessories – manually operated transfer pumps

**Model 1326 diaphragm action**
Neoprene seals resist wear from abrasive fluids. Double-acting diaphragm delivers 1 gallon/8 strokes (3.8 liter/8 strokes). 8 ft. (2.4 m) hose with discharge nozzle.

**Model 1335**
This close tolerance pump utilizes brass rings for extreme durability and expanded fluid compatibility. Telescoping pick-up tube with standard 2 in. bung. Bung opening tool built into pump head to open sealed refinery container. 6 ft. (1.8 m) hose with discharge nozzle forward facing, two position handle.

**Model 1340 lever-action barrel pump**
Extended pump body improves top-of-barrel clearance while providing excellent flow per stroke [14.0 fl oz. (414 ml) minimum per stroke].
- Removable non-drip spout allows for threaded hose connection
- Telescoping pick-up tube
- Two-tier threaded bung fits standard 2 and 1.5 in. (50.8 and 38.1 mm) drums

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**Model G401 lever-action barrel pump**
Fits 16 to 55 gallon (60.6 to 208 liter) drums. Delivers 10 oz. (283 ml) per stroke. Includes standard bung bushing. Designed for transfer of petroleum-based, non-corrosive liquids. Curved metal spout features threads to fit all garden hoses.

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**Manually operated transfer pumps**

<table>
<thead>
<tr>
<th>Model</th>
<th>Drum size</th>
<th>Bung bushing NPT (m)</th>
<th>Output per stroke</th>
<th>Fluid compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1326</td>
<td>16 to 55</td>
<td>60 to 208</td>
<td>2</td>
<td>16 0,47</td>
</tr>
<tr>
<td>1335*</td>
<td>16 to 55</td>
<td>60 to 208</td>
<td>2</td>
<td>8,5 0,25</td>
</tr>
<tr>
<td>1340*</td>
<td>16 to 55</td>
<td>60 to 208</td>
<td>2 and 1.5</td>
<td>14 0,41</td>
</tr>
<tr>
<td>G401*</td>
<td>16 to 55</td>
<td>60 to 208</td>
<td>2</td>
<td>10 0,28</td>
</tr>
</tbody>
</table>

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For use with non-corrosive fluids, automotive, agricultural and industrial fluids such as motor oil, transmission fluid, gear oil, engine coolant, silicone oils, and more (not suitable for gasoline).
Rotary drum pumps

Model 1385
- Fluid types – oils, diesel, kerosene, coolant, non-corrosive materials, petroleum-based fluids, hydraulic oils, ATF
- Internal check prevents drain-back and assures immediate restart
- Seal-tight telescoping pick-up tube with strainer

Model 1385-H (with hose)
Same as model 1385 except includes heavy-duty ¾ in. x 8 ft. (2.44 m) anti-static hose with non-sparking aluminum nozzle.

Model 1387 (fuel)
- Fluid types – gasoline, diesel, kerosene, coolant, non-corrosive materials, medium-viscosity petroleum-based fluids, hydraulic oils, ATF
- Heavy-duty ¾ in. x 8 ft. (2.44 m) anti-static hose with non-sparking aluminum nozzle
- Flame arrester and anti-siphoning vacuum break
- Seal-tight telescoping pick-up tube with strainer
- FM approved

Model G402 rotary barrel pump
Cast iron pump head for transferring petroleum-based, non-corrosive fluids. Comes with standard bung bushing. Delivers approximately one gallon (3.8 liter) per 18 revolutions of handle.

Rotary drum pumps

<table>
<thead>
<tr>
<th>Model</th>
<th>Output revolutions/gal</th>
<th>Fluid compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1385</td>
<td>11</td>
<td>Motor oil, transmission fluid, fuel oils, engine coolant, diesel, kerosene, hydraulic oil</td>
</tr>
<tr>
<td>1385-H</td>
<td>11</td>
<td>Motor oil, transmission fluid, fuel oils, engine coolant, diesel, kerosene, hydraulic oil</td>
</tr>
<tr>
<td>1387</td>
<td>11</td>
<td>Motor oil, transmission fluid, fuel oils, engine coolant, diesel, kerosene, gasoline, hydraulic oil, ethanol</td>
</tr>
<tr>
<td>G402</td>
<td>18</td>
<td>Motor oil, transmission fluid, fuel oils, engine coolant, diesel, kerosene, hydraulic oil</td>
</tr>
</tbody>
</table>