



**Continuous Innovation Increases Pump Life and Simplifies Pump Installation, Operation and Service**

**FlowMaster II Features**

- Increases pump life and simplifies pump installation, operation and service
- Common crankcase design for all FlowMaster motors (hydraulic, AC or DC electric)
- Less susceptible to grease contamination
- Pump and reservoir combination models are level sensor and shut-off system ready
- Culmination of years of design and performance improvements makes this a premium-choice pump for single-line parallel lubrication systems
- Two year warranty

**FlowMaster II Improvements**

**Crankcase Improvements**

- 4-bolt hole pattern for all FlowMaster motors
- Dual bearing load support
- O-ring seals for all motors
- Wider bolt-hole pattern for easier top mounting of pump
- All FlowMaster II pumps will fit existing reservoirs
- Dual support ribs for increased strength
- Inner crankcase seal allows for easy and clean motor replacements without loss of crankcase oil
- Increased depth of pump tube and crankcase interface for added strength
- Integrated crankcase oil drain for easier oil change



FlowMaster II crankcase

**Follower Improvements**

- 2" (51 mm) closed foam seal resists grease by-pass
- Larger side bearing surface virtually eliminates tilting of the follower plate
- Improved vent tube seal
- Sturdy construction greatly enhances sealing properties
- Grease level-sensor ready



Follower

**Reservoir Improvements**

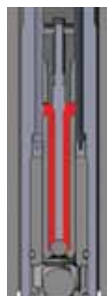
- Reservoir design incorporates 1" (25.4 mm) fill and 1¼" (32 mm) overflow ports
- Accommodates new 2" (51 mm) follower
- Lids are adjusted for top-mounting FlowMaster II pumps
- Lids can be easily converted to grease level system operation
- Each reservoir includes two lifting eye bolts for safety
- Rigid pressure outlet connection fittings are replaced by a single flexible hose



Reservoir

**Upper Ball Check Design**

- Ball check spring has been removed from flow path allowing 70% more annular flow area
- Reduces clogging problems caused by contamination from unfiltered grease
- Grease has a clear flow path, reducing downtime and costly repairs



New ball check

# Centro-Matic® Automatic Lubrication Systems

## FlowMaster II Pump



### Electric FlowMaster II Pump

- 19:1 gear ratio results in lower current draw
- Gear sets can be changed for different ratios
- 18" (457 mm) wire motor leads with Deutsch connectors for easier installation
- Wire leads are sheathed for protection from the elements and rub areas

### Hydraulic FlowMaster II Pump

- Four-bolt motor design with dual bearing drive shaft support virtually eliminates motor loosening
- O-ring motor-to-crankcase seal virtually eliminates oil leaks
- Same hydraulic manifold and controls as on FlowMaster I models

### Model Numbers and Specifications

Discontinued model (reference only)	FlowMaster II model	Power and gear ratio	Size		Description
			lb.	kg.	
85471	85728	24 V DC electric, 19:1	60	27	Reservoir and pump
85487	85723	Hydraulic	60	27	Reservoir and pump
86258	85722	Hydraulic	60	27	Reservoir and pump
85677	85726	Hydraulic	90	41	Reservoir and pump
85220	85727	Hydraulic	120	54	Reservoir and pump
85518	85724 <sup>1) 2)</sup>	Hydraulic	60	27	Reservoir and pump
85585	85725	Hydraulic	90	41	Reservoir and pump
85473	85730	24 V DC electric, 19:1	120	54	Reservoir and pump
85472	85729	24 V DC electric, 19:1	90	41	Reservoir and pump
85482	85734	Hydraulic	400	181	Pump
85481	85732	Hydraulic	60	27	Pump
85480	85733	Hydraulic	120/90	54/41	Pump
85587	85736	24 V DC electric, 19:1	35	16	Pump
85554	85737	24 V DC electric, 19:1	60	27	Pump
85591	85739	24 V DC electric, 19:1	400	181	Pump
85483	85731	Hydraulic	35	16	Pump
85566	85738	24 V DC electric, 19:1	120/90	54/41	Pump
85484	85735	Hydraulic	60	27	Pump
85676	85742 <sup>1)</sup>	Hydraulic	120/90	54/41	Pump
85678	85741 <sup>1)</sup>	Hydraulic	60	27	Pump
85599	85743	115 to 230 V AC electric, 1 ph, 19:1	120/90	54/41	Pump
85598	85744	115 to 230 V AC electric, 1 ph, 19:1	400	181	Pump
85850	85745	220 to 420 V AC, 50 Hz, 3 ph, 19:1 230 to 460 V AC, 60 Hz, 3 ph, 19:1	120/90	54/41	Pump
85851	85746	220 to 420 V AC, 50 Hz, 3 ph, 19:1 230 to 460 V AC, 60 Hz, 3 ph, 19:1	400	181	Pump
85569	85747	24 V DC electric, 17.8:1	35	16	Pump
85552	85748	24 V DC electric, 34:1	35	16	Pump
85553	85749	24 V DC electric, 34:1	120/90	54/41	Pump.
274873	85750	24 V DC electric, 7:1	35	16	Pump
274874	85751	24 V DC electric, 7:1	35	16	Pump
276041	85752	12 V DC electric, 19:1	35	16	Pump
276360	85753	12 V DC electric, 19:1	35	16	Pump
85592	85754	12 V DC electric, 19:1	60	27	Pump
277560	85740	24 V DC electric, 19:1	55	25	Pump

<sup>1</sup> Fixed hydraulic control valves. Call Technical Service for information.

<sup>2</sup> Developed for the fracking industry. Call Technical Service for details.



### Lincoln's New Design Automatically Shuts Off Grease Fill Supply To The Reservoir

Lincoln's advanced grease level gauge design with automatic overflow shut-off option is unlike any other system in the industry.

- The system senses the position of the follower in the reservoir (i.e., grease level) and sends the signal to a level gauge which can be mounted at the fill station.
- Grease level can be determined at all times.
- The level indicator signal can also be integrated into on-board systems.
- The system can prevent dangerous and costly overfills when used with the automatic shut-off valve system.
- The sensor and follower plate automatically signals a high pressure shut-off valve to the reservoir before overflowing occurs.
- Reduces maintenance time allowing personnel to do other jobs.

Unlike other shut-off systems, the Lincoln system does not use pressurized technology. Therefore, the reservoir is not completely welded together and, thus, the system does not need to adhere to the governmental pressurized-vessel regulations in some countries (Australia).

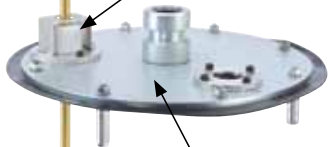
Overflow spillage is a common result of ground filling large grease reservoirs located in remote or hard-to-reach areas of machines. The Lincoln automatic shut-off system prevents this type of overflow avoiding safety hazards which can result in injury and potential costly fines. As a result, it is easy to see how this system will pay for itself. This system is completely retrofitable to all FlowMaster pump and bucket combinations with a follower.

When filling the reservoir, a high-pressure shut-off valve activates when the reservoir is full, stalling the supply pump. After the supply pump is turned off, a pressure relief button on the control box opens to relieve supply line pressure so it can be safely uncoupled.

Deutsch connector links the sensor to the controller



"Floating" magnet detects grease level



Level sensor

Special follower plate [also available in 2 in. (50.8 mm) foam version]



FlowMaster pump and reservoir with 2" (50.8 mm) foam follower and level sensor