

Lincoln introduces three new Centro-Matic products

- FlowMaster II pump
- Grease level sensor
- Grease filter



Lincoln's new FlowMaster II pump

Continuous innovation 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.



Crankcase improvements

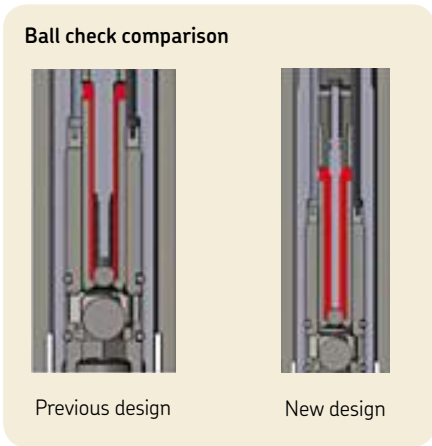
- 4-bolt hole pattern for all FlowMaster motors
- Dual bearing load support
- O-ring seals for all motors
- Wider bolt-hole pattern for easier top mounting of pump
- All FlowMaster II pumps will fit existing reservoirs.
- Dual support ribs for increased strength
- Inner seal allows for easy and clean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

FlowMaster II crankcase



Existing crankcase





Follower improvements

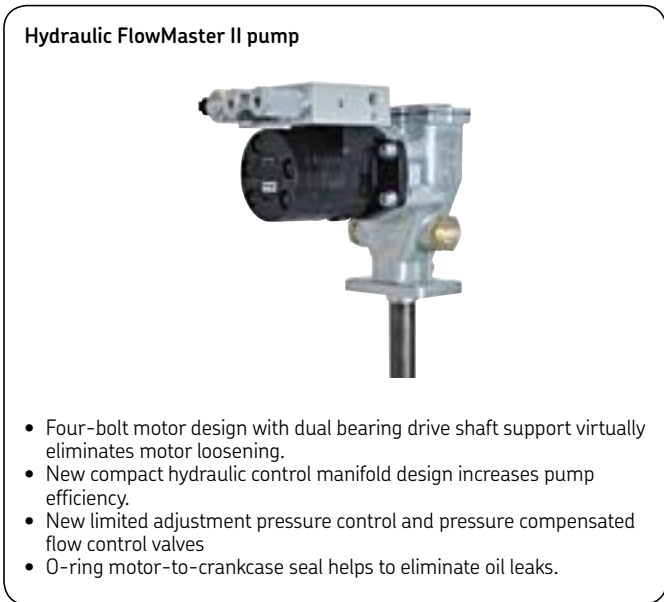
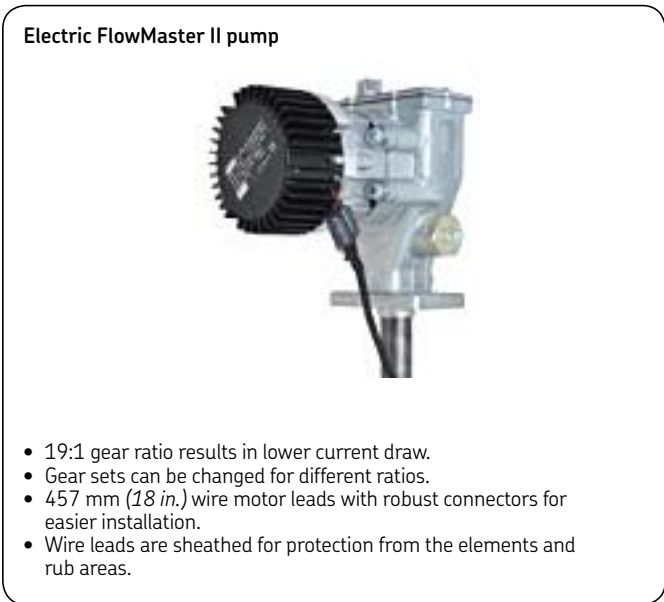
- 2 in. (50,8 mm) closed foam seal resists grease bypass.
- Larger side bearing surface greatly reduces tilting of the follower plate.
- Improved vent tube seal
- Sturdy construction greatly enhances sealing properties.
- Grease level sensor-ready

Reservoir improvements

- Reservoir design incorporates 1 in. (25,4 mm) fill and 1 1/4 in. (32 mm) overflow ports.
- Accommodates new 2 in. (50,8 mm) follower.
- Lids are designed 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.

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.



Lincoln's new FlowMaster II

Model numbers and specifications

Current model ¹⁾	FlowMaster II model	Power and gear ratio	Size		Description
			lb.	kg	
86258	85722	hydraulic	60	27	Reservoir and pump
85487	85723	hydraulic	60	27	Reservoir and pump
85518	85724	hydraulic	60	27	Reservoir and pump
85585	85725	hydraulic	90	41	Reservoir and pump
85677	85726	hydraulic	90	41	Reservoir and pump
85220	85727	hydraulic	120	54	Reservoir and pump
85763	–	24 V DC electric, 19:1	60	27	Reservoir and pump ¹⁾
85471	85728	24 V DC electric, 19:1	60	27	Reservoir and pump
85472	85729	24 V DC electric, 19:1	90	41	Reservoir and pump
85473	85730	24 V DC electric, 19:1	120	54	Reservoir and pump
85483	85731	hydraulic	35	16	Pump
85481	85732	hydraulic	60	27	Pump
85480	85733	hydraulic	120	54	Pump
85482	85734	hydraulic	400	181	Pum
85484	85735	hydraulic	60	27	Pump
85678	85741	hydraulic	60	27	Pump
85676	85742	hydraulic	120	54	Pump
274873	85750	24 V DC electric, 7:1	35	16	Pump
274874	85751	24 V DC electric, 7:1	35	16	Pump
85569	85747	24 V DC electric, 17,8:1	35	16	Pump
85587	85736	24 V DC electric, 19:1	35	16	Pump
85554	85737	24 V DC electric, 19:1	60	27	Pump
85566	85738	24 V DC electric, 19:1	120	54	Pump
85591	85739	24 V DC electric, 19:1	400	181	Pump
277560	85740	24 V DC electric, 19:1	55	25	Pump
276041	85752	24 V DC electric, 19:1	35	16	Pump
276360	85753	24 V DC electric, 19:1	35	16	Pump
85592	85754	24 V DC electric, 19:1	60	27	Pump
85552	85748	24 V DC electric, 34:1	35	16	Pump
85553	85749	24 V DC electric, 34:1	120	54	Pump
85599	85743	115 to 230 V DC electric, 1 ph, 19:1	120	54	Pump
85598	85744	115 to 230 V DC electric, 1 ph, 19:1	400	181	Pump
85850	85745	380 to 420 V DC electric, 3 ph, 19:1	120	54	Pump
85851	85746	380 to 420 V DC electric, 3 ph, 19:1	400	181	Pump

¹⁾ Includes grease level sensor

NOTE

For all systems described in this brochure, see important product usage information on the back cover.

FlowMaster reservoir level sensor and overflow prevention system



FlowMaster pump and reservoir with follower and level sensor



FlowMaster pump and reservoir with 50,8 mm (2 in.) foam follower and level sensor

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 unique to 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 existing systems.
- The system helps to eliminate dangerous and costly overfills when used with the automatic shut-off valve system.
- Reduces maintenance time allowing personnel to do other jobs.

The Lincoln system does not use pressurized technology. Therefore, the reservoir is not completely welded together and eliminates the need to adhere to the governmental pressurized-vessel regulations in some countries (Australia).

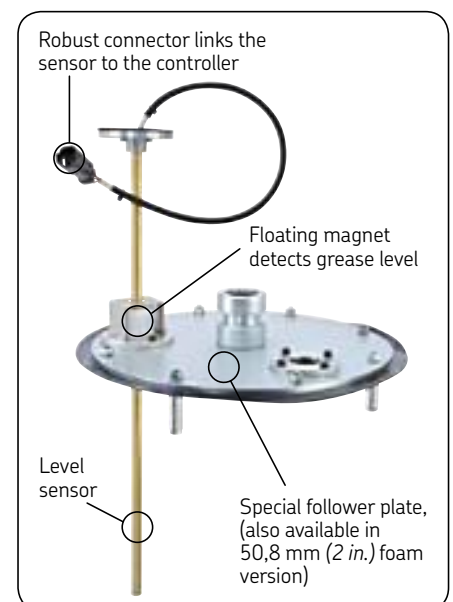
Overflow spillage is a common result of filling large, hard-to-reach grease reservoirs from a fill-access point on the ground. The Lincoln automatic shut-off system virtually eliminates this type of overflow that can create safety hazards and costly fines.

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.



Over-filled reservoir with no overflow prevention system



FlowMaster reservoir level sensor and overflow prevention system



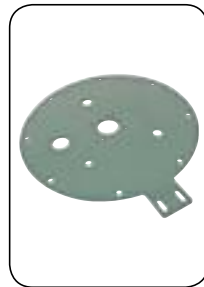
Control box with grease-level gauge (24 V DC), "full" light and momentary switch for shut-off valve.



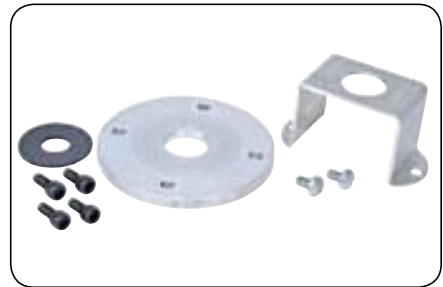
507 bar (7 350 psi) shut-off valve is designed to prevent overflow during reservoir filling.



689,5 bar (10 000 psi) high-pressure gauge before shut-off valve



Special FlowMaster reservoir lid to accept sensor



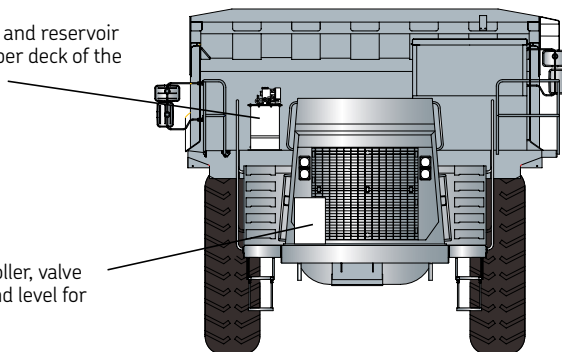
Follower magnet bracket kit



Cable assembly between sensor and controller

Schematic of pump and shut-off enclosure mounted on haul truck

27 kg (60 lb.) pump and reservoir mounted on the upper deck of the truck



Enclosure for controller, valve and gauge, at ground level for easy filling

NOTE

Make sure fill coupling is capable of handling high pressure.

Model	Description
280450	Controller
283005	507 bar (7 350 psi) high-pressure shut-off valve
274524	Sensor for standard 27 kg (60 lb.) follower
277659	Sensor for 50,8 mm (2 in.) 27 kg (60 lb.) foam follower
274312	Standard 27/41 kg (60/90 lb.) follower with sensor bracket
85706	50,8 mm (2 in.) 27/41 kg (60/90 lb.) foam follower with sensor bracket
280441	Sensor-ready lid for 27/41 kg (60/90 lb.) reservoir with standard follower
277703	Sensor-ready lid for 27/41 kg (60/90 lb.) reservoir with 50,8 mm (2 in.) foam follower
278092	Sensor for standard 41/54 kg (90/120 lb.) follower
277654	Sensor for 50,8 mm (2 in.) 41/54 kg (90/120 lb.) foam follower
278094	Standard 54 kg (120 lb.) follower with sensor bracket
278095	50,8 mm (2 in.) 54 kg (120 lb.) foam follower with sensor bracket
280442	Sensor-ready lid for 54 kg (120 lb.) reservoir with standard follower
278096	Sensor-ready lid for 54 kg (120 lb.) reservoir with 50,8 mm (2 in.) foam follower
280414	10 m (30 ft.) controller cable
278097	Follower magnet bracket kit (for all followers)
85763	27 kg (60 lb.) 24 V DC FlowMaster pump and bucket with sensor and 50,8 mm (2 in.) foam follower
274872	689,5 bar (10 000 psi) high-pressure gauge; 1/4 in. NPT; 63,5 mm (2 1/2 in.) face

Note: standard follower, sensor and lid must be used together. 50,8 mm. (2 in.) foam follower, sensor and lid must be used together. Do not mix.

Lincoln's Centro-Matic fill filter

High-pressure, high-flow filter designed specifically for the mining, off-highway and industrial markets

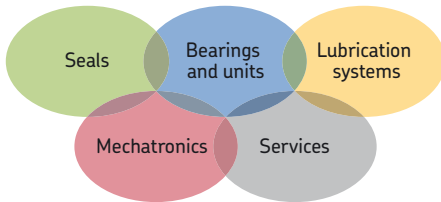
Features

- Clogged filter indicator with quick reset.
 - Red indicator pin is triggered when the filter element is almost completely clogged.
 - If the filter element becomes completely clogged, the grease will safely vent to the atmosphere, preventing contaminated grease from entering the reservoir.
- Promotes cost-effective preventative maintenance.
- Custom-designed filter element.
- Allows for easy and quick cleaning or replacement.
- Virtually crush-proof element; available in both 250 and 470 micron steel screen sizes.
- Durable ductile iron body construction
- 310 bar (4 500 psi) pressure rating
- 38 liter/min. (10 gal./min.) maximum flow rate.
- Three mounting points for stability.



Available filter models

Model	Description
276492	250 micron filter
276492A	470 micron filter
282007	250 micron filter element
282008	470 micron filter element



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! Important information on product usage

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

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