

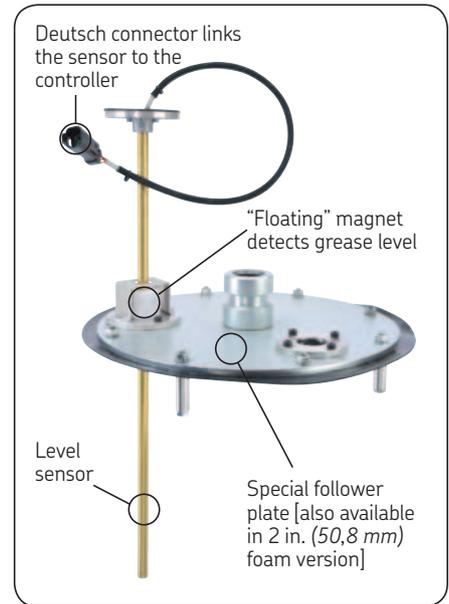
**LINCOLN**

# FlowMaster reservoir level sensor and overflow prevention system



**SKF**

## FlowMaster reservoir level sensor and overflow prevention system



### 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 overfilling 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.



*Over-filled reservoir with no overflow prevention system*



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

\* Available summer 2012

### CAUTION

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



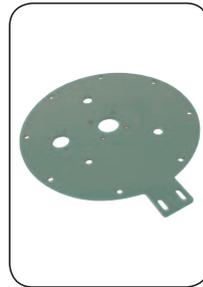
Control box with grease-level gauge (24 VDC), alarm light and momentary switch for shut-off valve.



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



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



Special FlowMaster reservoir lid to accept sensor



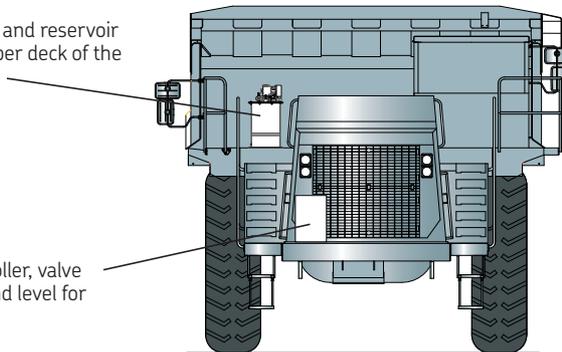
Follower magnet bracket kit



Cable assembly between sensor and controller

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

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



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

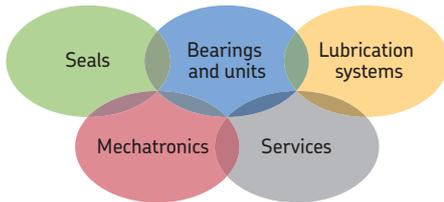
#### WARNING

Make sure fill coupling is capable of handling high pressure.

Model	Description
280450	Controller
283005	7 350 psi (507 bar) high-pressure shut-off valve
274524	Sensor for standard 60 lb. (27 kg) follower
277659	Sensor for 2 in. (50,8 mm) 60 lb. (27 kg) foam follower
274312	Standard 60/90 lb. (27/41 kg) follower with sensor bracket
85706*	2 in. (50,8 mm) 60/90 lb. (27/41 kg) foam follower with sensor bracket
280441*	Sensor-ready lid for 60/90 lb. (27/41 kg) reservoir with standard follower
277703*	Sensor-ready lid for 60/90 lb. (27/41 kg) reservoir with 2 in. (50,8 mm) foam follower
278092	Sensor for standard 90/120 lb. (41/54 kg) follower
277654*	Sensor for 2 in. (50,8 mm) 90/120 lb. (41/54 kg) foam follower
278094*	Standard 120 lb. (54 kg) follower with sensor bracket
278095*	2 in. (50,8 mm) 120 lb. (54 kg) foam follower with sensor bracket
280442*	Sensor-ready lid for 120 lb. (54 kg) reservoir with standard follower
278096*	Sensor-ready lid for 120 lb. (54 kg) reservoir with 2 in. (50,8 mm) foam follower
280414	30 ft. (10 m) controller cable
278097*	Follower magnet bracket kit (for all followers)
85659	60 lb. (27 kg) 24 VDC FlowMaster pump and bucket with sensor
274872	10 000 psi (689,5 bar) high-pressure gauge; 1/4 in. NPT; 2 1/2 in. (63,5 mm) face

\* Available summer 2012

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



### The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

#### 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.

Please contact:  
**Lubrication Business Unit**  
 One Lincoln Way  
 St. Louis, MO 63120 USA  
 Tel. +1.314.679.4200

This brochure was presented by:

© SKF is a registered trademark of the SKF Group.

© Lincoln and FlowMaster are registered trademarks of Lincoln Industrial Corp.

© Deutsch is a copyright of the Deutsch Group.

© SKF Group 2012

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

SKF PUB LS/P2 12938 EN · May 2012 · FORM 444573

