



  
**KUNDINGER**  
FLUID POWER **AUTOMATION** CONTROLS



# LF Series Sensors

Catalog HY33-2370/US



ENGINEERING YOUR SUCCESS.

### Application

The LF series liquid level sensor belongs to the Parker family of accessories provided to complement electronic control systems. The LF is a variable resistance output, non-contact, float sensor suitable for a variety of applications. The sensor has flying leads with a Deutsch DTM connector. To make the sensor suitable for mobile equipment, we have focused upon properties such as reliability, electromagnetic immunity and ease of installation.

### Properties

#### Reliability

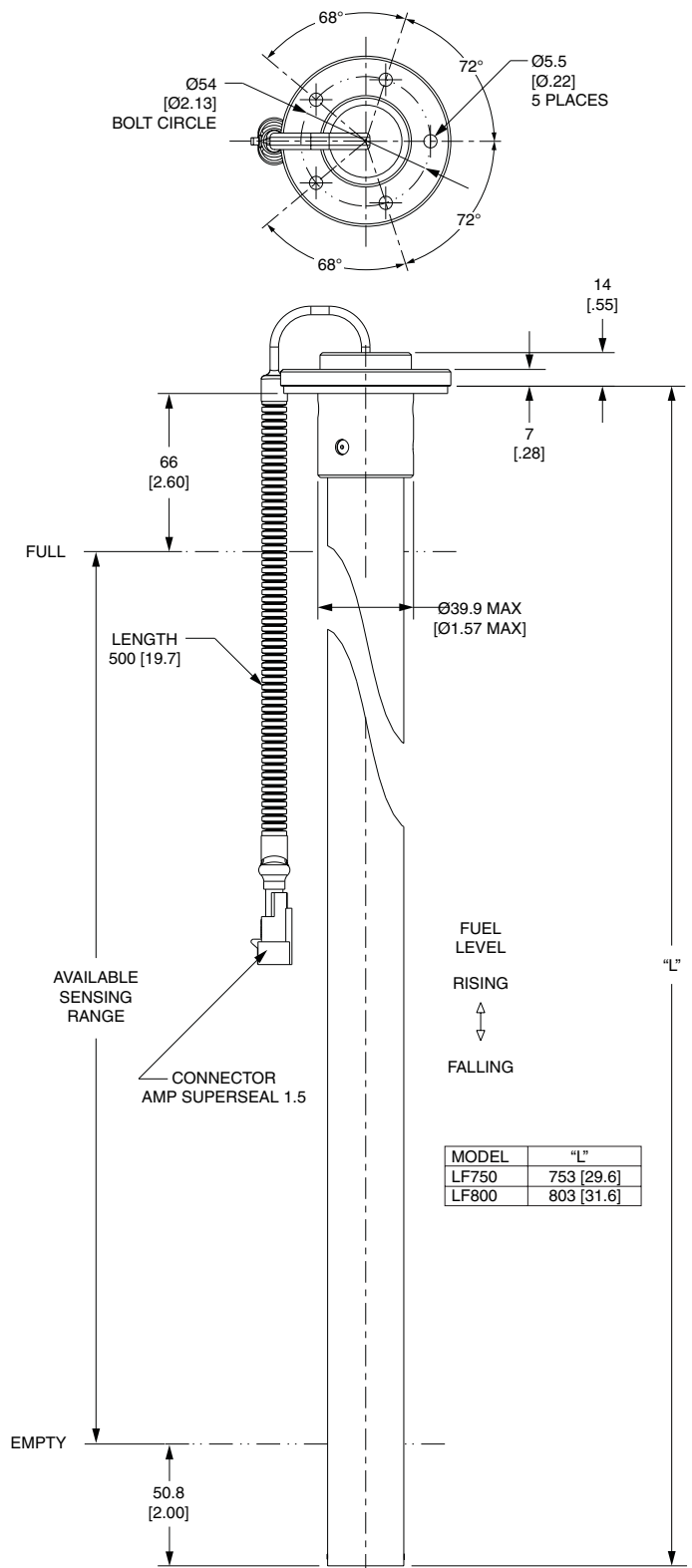
The LF series of liquid level sensors provide a smoothly stepped, variable resistance output over a long distance to enable accurate sensing of all types of liquid levels. The rugged construction allows the sensors to be used in holding tanks, fuel tanks and hydraulic fluid tanks for all types of large, off or on road vehicles.

#### Electromagnetic immunity

The design of the LF has a high level of EMI protection.

#### Installation

The LF series sensor is well designed for the mobile hydraulics industry. The sensing element is housed in an aluminum tube to protect the LF electronics even during installation. The sensor slides into the tank from the top and the non-corrosive plastic flange is held in place with 5 screws. The LF series of sensors use a popular AMP type connector and plastic covered lead wire to provide years of worry free service. These features provide for easy installation and removal, even in field conditions.



**General**

Weight 0.44 kg  
 Temperature range -40°C to 85°C

**Mechanical characteristics**

Tube Aluminum  
 Length 753 mm (LF750)  
 803 mm (LF800)  
 Flange Plastic  
 Mounting pattern SAE 1810, 5-hole  
 Connector AMP Superseal 1.5

**Electrical specifications**

Sensing range Length, less 116.8 mm  
 Resolution 22.5 mm  
 Supply Voltage(Vs) 5 Vdc, pull-up 76.8 ohm  
 Resistance at Full 10 ohm  
 Resistance at Empty 82.21 ohm (LF750)  
 78.51 ohm (LF800)  
 Output range 2.42 - 4.42 V (LF750)  
 2.47 - 4.42 V (LF800)  
 Output current Max. 50.0 mA

**Ordering part number**

LF750 01913ECD  
 LF800 01914ECD

**Environmental protection**

**EMI**

ISO 11452-2 150 V/m  
 ISO 11452-4 100 mA

**ESD**

EN 61000-4-2 7 kV

**Mechanical**

Shock 1m drop  
 Vibration 30 Gs

**Climate**

Sealing (electronics) IP66

**Chemical environment**

Liquids (resistance) standard automotive



**WARNING - USER RESPONSIBILITY**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.
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**OFFER OF SALE**

Please contact your Parker representative for a detailed "Offer of Sale".

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