

Centeron™ Magnetic Liquid Level Monitor

Installation Guide

Required Equipment:

GM series Centeron Monitor
040010 series Threaded Adapter
040009 series Magnetic Liquid Level Gauge (with four 1/4-28 X 5/8" screws and a gasket)
GSHS series sensor assembly (with two #6-32 self tapping screws and a wire tie)

Tools:

Pipe wrench to remove existing tank cap (if necessary)
#2 Phillips screwdriver
Flashlight (to inspect for obstructions in tank)

Warning: Tanks may contain flammable liquid or vapor, extinguish all flames and smoking material before performing the Monitor installation procedure.

Warning: This level measurement system must only be used in non-pressurized (vented tank) applications.

Mounting

After the Centeron Controller has been successfully setup, the Monitor can be mounted to the tank by following these instructions:

Step 1.

Select a mounting bung on the top of the tank that will allow free travel of the float mechanism. Verify that there is adequate clearance to prevent the float mechanism from contacting obstructions such as walls, baffles, reinforcements, and other measurement equipment inside the tank. Remove all materials from the desired bung.

Step 2.

Install the Threaded Adapter into the desired bung. Securely tighten the Threaded Adapter. Stop rotating the Adapter when one of the four sides is parallel to the desired direction of travel for the float mechanism. Place a gasket on top of the Threaded Adapter and install the float gauge being careful to orient the float mechanism for the desired direction of travel. Install and tighten the four mounting screws evenly in several steps to 35 +/-15 inch-pounds torque using a crossing pattern.

Note: Over-tightening may cause damage to head and gasket.

Note: For maximum accuracy, adjust the tank so that it is level to within +/- 5 degrees. A bubble level may be used for this task.

Step 3.

Install the Level Sensor and Wiring Harness Assembly on the Float Gauge using the two supplied #6-32 screws. Tighten the dial mounting screws to 5 inch-pounds torque.

Step 4.

Connect the wiring harness to the Centeron Propane Level Monitor. Place the Monitor on top of the tank. A large magnet in the base will hold the Monitor securely on a steel tank. Use the supplied nylon wire tie to secure the wire in a convenient location. Repeat Steps 1–4 for additional Monitors.

Warning: For maximum Monitor reception, mount the Monitor within 500 feet of the Controller, avoid mounting inside a fully closed metal building or in a metal enclosure, and avoid close proximity to large electrical equipment. See Instruction Manual for more RF Guidelines.

Activation

Step 5.

Following Monitor mounting, the unit(s) can be activated.

- To activate the Monitor, pull the external slide magnet completely out of the top of the Monitor housing. This will activate the Monitor to make measurements and radio transmissions on a programmed interval (per customer specifications).

Note: The installer can limit the number of Controller calls during multiple Monitor installations by removing each additional Monitor magnet within 30 seconds of the last one.

Note: Do not discard the magnet completely—keep it accessible for future use if needed. Do not store the magnet in the monitor upper housing slot since this will de-activate the monitor.

- Once the external slide magnet is removed from the Monitor, the Controller should flicker one green light to indicate that it successfully received a Monitor transmission.

Note: A second installer could verify this by watching the Controller during Monitor activation.

- The Controller will then wait 30 seconds to receive additional Monitors before calling the Data Collection System.

Step 6.

To activate additional Monitors, repeat Step 5. See Monitor Instruction Manual for further details if installation is unsuccessful.

FCC Notice

These products generate and use radio frequency energy. If not installed and used in accordance with the manufacturer's instructions, they may cause interference to radio and television reception. These products have been tested and found to comply with the specifications in Part 15 of the FCC rules for Class B Devices.

Caution: Robertshaw Industrial Products Division does not support field changes or modifications to any Centeron™ Level Monitoring System Equipment unless they are specifically covered in the instruction manual. All adjustments must be made at the factory under the specific guidelines set forth in our manufacturing processes. Any modifications to the equipment will void the manufacturers' warranty and could void the user's authority to operate the equipment and render the equipment in violation of FCC Part 15, Subpart C, 15.247.

These devices comply with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Intrinsic Safety

The Centeron Magnetic Liquid Level Monitor is designed to comply with UL Standards for Intrinsically Safe Apparatus for use in Class I, Division 1, Group D locations. The Centeron Magnetic Liquid Level Monitor conforms to UL 913 and has been certified to CAN/CSA Standard C22.2 No. 157.

Warning: Substitution of components may impair intrinsic safety.

Avertissement: La substitution de composants peut compromettre la sécurité intrinsèque.

Battery Information

Warning: To prevent ignition of a hazardous atmosphere, the battery must only be changed in an area known to be nonhazardous.

Avertissement: Afin de prévenir l'inflammation d'atmosphères dangereuses, ne changer la batterie que dans des emplacements désignés non-dangereux.

Warning: Use Duracell Ultra DL123A Lithium Manganese Dioxide 3 volt battery only.

Robertshaw

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Document #040012A0001

Revision: A

Dated 10/04/01

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