Remote Dispensing Cabinets

Models

FR102PH
FR302DP
FR902DP
FR910PM
Table of Contents

About This Manual .................................................................................................................. 2
Safety Information ................................................................................................................... 3
Locking ................................................................................................................................... 3
Installation ............................................................................................................................... 3
Mechanical Installation ........................................................................................................... 5
Electrical Installation ............................................................................................................. 5
Wiring Diagrams ..................................................................................................................... 6-13
Plumbing Instructions ........................................................................................................... 14
Operating Instructions ......................................................................................................... 14
Fluid Compatibility ............................................................................................................... 16
Wetted Parts ........................................................................................................................... 16
Assembly and Disassembly .................................................................................................. 16-17
Cabinet Exterior Dimensions ............................................................................................... 18-20

Thank You!

Thank you for your purchase of the Fill-Rite® Dispenser Cabinet! Your Fill-Rite product comes with over 80 years of fluid transfer experience behind it, providing you the value that comes with superior performance, user friendly design, long service life, and solid, simple engineering. Experience that gives you peace of mind.

Excellence at Work. Excellence in Life.

About This Manual

From initial concept and design through its final production, your Fill-Rite dispenser is built to provide years of trouble free use. To ensure it provides that service, it is critical that you read this entire manual prior to attempting to install or operate your new dispenser. Become familiar with the terms and diagrams, and pay close attention to the highlighted areas with the following labels:

- **WARNING!** Emphasizes an area in which personal injury or even death could result from failure to follow instructions properly. Mechanical damage may also occur.

- **IMPORTANT!** These boxes contain information that illustrates a point that may save time or may be key to proper operation, or clarifies a step.

- **CAUTION!** Failure to observe a “Caution” can cause damage to the equipment.

At Fill-Rite, your satisfaction with our products is paramount to us. If you have questions or need assistance with your product, please contact us at 1-800-634-2695 (M-F 8 AM–5 PM ET).

Warranty information for your Fill-Rite product can be found at: www.fillrite.com
Safety Information

**WARNING!** To ensure safe and proper operation of your equipment, it is critical to read and adhere to all of the following safety warnings and precautions. Improper installation or use of this product can cause serious bodily injury or death!

1) **NEVER** smoke near the dispenser, or use the dispenser near open flames when dispensing a flammable liquid! Fire can result!
2) A Fill-Rite filter should be used on the dispenser outlet to insure no foreign material is transferred to the fuel tank.
3) Threaded pipe joints and connections should be sealed with the appropriate sealant or sealant tape to minimize the possibility of leaks.
4) Storage tanks should be securely anchored to prevent shifting or tipping when full or empty.
5) To minimize static electricity build up, use only static wire conductive hose when dispensing flammable fluids, and keep the fill nozzle in contact with the container being filled during the filling process.
6) **DO NOT** exceed 50 psi/3.5 BAR line pressure.
7) **DO NOT** install a foot valve or check valve without a pressure relief valve; cracking may result.

**WARNING!** This product must not be used to transfer fluids into any type of aircraft.

**WARNING!** This product is not suited for use with fluids intended for human consumption or fluids containing water.

Locking

Your Fill-Rite pump nozzle can be locked for added security. With the pump turned off, and the nozzle in the stored position, a lock can be inserted through the nozzle rest and the nozzle handle opening. This configuration prevents the nozzle from being removed and the pump being turned on.

Installation

An emergency shut-off valve with fusible link must be installed at the dispenser inlet. All piping must be Schedule 40. Use UL classified gasoline and oil resistant pipe compound on all threaded joints. See page 14 and 15 for sample plumbing diagrams.

**IMPORTANT!** Remote dispensers and tank top pumps must be installed in accordance with local, state, and national electrical code NEC/ANSI/NFPA 70, NFPA 30, NFPA 30A, and NFPA 395.
Additionally, the Fill-Rite Cabinet Dispensers require a safety approved pressure relief valve be incorporated into the installation, either as part of the pump or separately at the dispenser itself. To assure proper operation your dispenser cabinet must be secured to a solid mounting surface. Fill-Rite recommends installing Cabinet Dispensers on either the KITWB Mounting Bracket kit, or the KITPD pedestal.

These two mounting options are designed specifically for use with the Fill-Rite Cabinet Dispensers, and feature pre-drilled openings located for plumbing, wiring, and fastening. They also include the necessary hardware to fasten the cabinet correctly and securely in place. See your Fill-Rite Distributor for more information on these mounting kits.

**KITWB Wall Bracket**

**KITPD Pedestal**
Mechanical Installation

1. Install the pump (if not included) securely to the top of the fuel tank per the instructions included with the pump.
2. Install mounting plate or pedestal as applicable for your installation. Refer to the mounting plate “Tank Mounting” section of the mounting plate instructions.
3. Remove the dispenser cover to allow inside access to the bottom of the dispenser (see bracket / pedestal instructions for specific screw locations).
4. Place dispenser on mounting plate or pedestal; using the 4 – 1/2 x 13 screws, and grommet washers, attach the dispenser securely to the mounting surface through the 4 holes located in bottom of the dispenser cabinet base (figure 1).
5. Installations must include an Emergency Shut-Off Valve (not supplied) to the dispenser inlet. Position valve so it can be rigidly mounted and is not dependent on the dispenser for support.
6. Carefully measure and install pipe between the pump and Emergency Shut Off Valve. The pipe is not intended to support the pump or the dispenser in any manner.

NOTE: Dimensional drawings for installation purposes are located on pages 18 – 20.

CAUTION! Threaded pipe joints and connections should be sealed with the appropriate sealant or sealant tape to minimize the possibility of leaks.

Electrical Installation

WARNING! Overall dispenser installation and electrical wiring should be performed ONLY by a licensed electrician and service personnel in compliance with local, state, and national electrical code NEC/ANSI/NFPA 70, NFPA30, NFPA 30A, and NFPA 395 as appropriate to the intended use of the dispenser. Threaded rigid conduit, sealed fittings, and conductor seal should be used. The pump must be properly grounded. Improper installation or use of this dispenser can result in serious bodily injury, or death!

CAUTION! All electrical appliances should operate at the rated nameplate voltage. Power should be supplied to this dispenser from a dedicated 20 amp circuit breaker. No other equipment should be powered by this circuit. Wiring must be of sufficient size to carry the correct current for the pump. Voltage drop will vary with distance to pump and size of wire; refer to the National Electrical Code (NEC), or local codes, for voltage drop compensation to be sure you are using the correct size wire for your application.
FR102PH Wiring Diagram (110 VAC 60Hz)
FR102PH Wiring Diagram (220 VAC 60 Hz)
IMPORTANT! Voltage selector switch on pump must be set to 220 VAC for 220 VAC installations (see pump manual for details). Pump comes from factory set to 110 VAC.
FR302DP Wiring Diagram (220 VAC 60 Hz)

**WARNING!** DO NOT attempt to wire the Intrinsic Safety Barrier or the 900DP meter to 220 VAC in any way. Damage and potential destruction to those components will result.

**IMPORTANT!** When wired to 220 VAC, the voltage selector switch on the pump end (Figure 1) **MUST** be switched to the 220 VAC position.

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**220 VOLT PUMP WIRING DIAGRAM**

AUX LEAD RATED 1.0 AMP

- AUX, ORANGE
- AC, BLACK
- AC, WHITE
- GRN, GREEN

**Pump Wiring (220 VAC)**

**Intrinsic Safety Barrier Wiring (110 VAC)**

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**Figure 1**

Voltage Selector Switch
FR902DP Wiring Diagram (110 VAC 60Hz)
FR902DP Wiring Diagram (220 VAC 60Hz)
FR910PM Wiring Diagram (110 VAC 60Hz)
FR910PM Wiring Diagram (220 VAC 60Hz)
Plumbing Instructions

**IMPORTANT!** Remote dispensers and tank top pumps must be installed in accordance with all local, state, and national electrical code NEC/ANSI/NFPA 70, NFPA 30, NFPA 30A, and NFPA 395.

Your Fill-Rite dispenser cabinet should be installed in a manner that does not use the plumbing to support the cabinet in any way. Safety and Emergency equipment should be installed per local, state, and national plumbing for flammable fuels guidelines. The following plumbing diagrams are suggestion for typical installation scenarios.

**Typical Wall Bracket Mount Plumbing**

![Diagram of typical wall bracket mount plumbing](image)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Remote Pump (for use with FR102PH, FR902DP, FR910PM)</td>
</tr>
<tr>
<td>2</td>
<td>Electrical Conduit (Threaded rigid conduit, sealed fittings, conductor seal)</td>
</tr>
<tr>
<td>3</td>
<td>Wall Mounted Cabinet Dispenser (FR902DP, FR910PM)</td>
</tr>
<tr>
<td>4</td>
<td>Fluid Inlet Pipe (Threaded pipe joints and connections should be sealed)</td>
</tr>
<tr>
<td>5</td>
<td>Safety Breakaway Valve</td>
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</tbody>
</table>

**CAUTION!** Threaded pipe joints and connections should be sealed with the appropriate sealant or sealant tape to minimize the possibility of leaks.
CAUTION! Threaded pipe joints and connections should be sealed with the appropriate sealant or sealant tape to minimize the possibility of leaks.
For accurate measurement and to prevent dispenser damage, dispenser and piping must always be filled with liquid and be free of air. Where applicable, the meter portion of your dispenser should be calibrated per instructions in the meter manual prior to its use.

1. Reset register to “0”.
2. Remove nozzle from holder and turn the power on by lifting the switch handle.
3. Dispenser is ready for use. Insert nozzle into container to be filled and start flow of liquid. Do not exceed 50 PSI of line pressure. When desired amount of liquid has been dispensed, stop the flow at the nozzle. Turn the power off by pushing the switch handle down. Return the nozzle to its holder.

**Fluid Compatibility**

<table>
<thead>
<tr>
<th>Model</th>
<th>Gasoline</th>
<th>Diesel</th>
<th>Bio-Diesel</th>
<th>Kerosene</th>
<th>Lube Oil (60w and less)</th>
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<tbody>
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**Wetted Parts**

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</tbody>
</table>

**Assembly and Disassembly**

**WARNING!** TURN ALL POWER OFF TO THE DISPENSER AND PUMP AT THE BREAKER PRIOR TO PERFORMING ANY SERVICE. Release any pressure in the piping, hoses, and nozzle prior to performing any service. Failure to comply with these warnings can result in explosion, fire, bodily injury, and possibly death.

Cabinets consist of three major pieces:

1) Base / back plate (internal equipment installed on it)
2) Cabinet walls that enclose the internal components
3) Cabinet top
Assembly and Disassembly (cont’d)

Access to the internal components is gained by removing the top and side panels.

1. Remove the screws on the front and sides of the cabinet. The screws are located around the perimeter at the top. The front screws pass through the sun visor over the display on metering cabinets.

2. Gently lift the top off of the cabinet and set aside.

3. If removal of the sides is required, disconnect any wire and mechanical connections to the internal components that would not allow the cabinet to be lifted off.

Access Panels

The Fill-Rite Dispenser Cabinets have removable panels located on the side to allow easy access to the electrical wiring.

Repairs

Dispensers needing repairs should be taken to an authorized repair facility. The dispenser MUST be triple rinsed for safety before returning for repairs.
FR102PH Dispenser Cabinet Measurements

- Nozzle Boot
- Power Switch
- Nozzle Rest
- Hose Hook

Dimensions:
- Height: 52.07 inches
- Width: 16.00 inches
FR302DP and FR902DP Cabinet Measurements

Nozzle Boot
Power Switch
Nozzle Rest
Hose Hook

57.74
FR910PM Precision Meter Cabinet Dimensions

Nozzle Boot
Power Switch
Nozzle Rest
Hose Hook

Nozzle Boot
Power Switch
Nozzle Rest
Hose Hook

57.74

16.00