

The Most Trusted name in Pumps & Meters

FILL-RITE.**PRODUCT DATA SHEET****Series 900 Meter**

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Model 901 Pump Shown

Description of Included Models

Model Number	Description	Shipping Weight
901	Basic Meter with 1" Inlet & Outlet	8 LBS. 3.6 KGS.
9011.5	Basic Meter with 1 1/2" Inlet & Outlet	8 LBS. 3.6 KGS.
901LMK4200	Basic 901 Meter with Pipe Fittings to Add this Meter to Model FR4210	8 LBS. 3.6 KGS.
901LMK300	Basic 901 Meter with Pipe Fittings to Add this Meter to Models 300 and 310	8 LBS. 3.6 KGS.

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Safety Listings

Approval Organization Mark	Organization Description	File Number	Guide Number
	Underwriters Laboratories Inc. , a nationally recognized Independent organization for testing of products to ensure public safety. Also recognized and accepted in Canada.	MH8290	PLRZ

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Available Options

Option	Description	Shipping Weight (lbs.)	Shipping Weight (kgs.)
L	Liter Registration in Place of Standard Gallon Measure	-	-
N	Nickel Plating on Fluid Handling Components	-	-
T	Teflon Coating on Fluid Handling Components	-	-

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Accessories

No accessories are currently being offered for the Series 900 meters.

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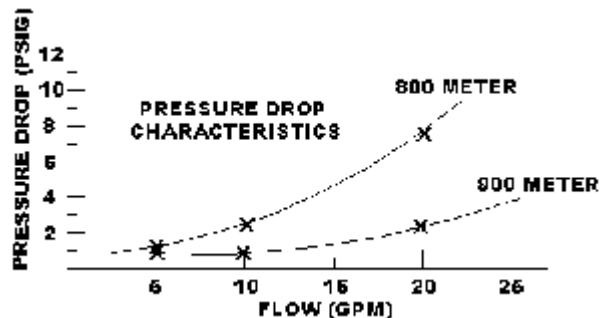
Performance

Recommended Flow Range	6 to 40 GPM (23 to 152 LPM)
Accuracy	± 2%
Maximum Pressure	50 PSIG
Meter Digit Indication	Up to 1,000 Gallons in 1/10th Increments (Resettable)
Totalizer Digit Indication	Up to 1,000,000 Gallons (Non-Resettable)

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Flow Control

- A. This curve represents the expected pressure loss through the **Model 900 Meter** as a function of flow. Any pump used in the system must supply not only the pressure required to move the fluid, but also that required to overcome the pressure drop through the meter.



Fluid Compatibility

The 900 Series meters are compatible with the following fluids:

Diesel Fuel, Gasoline, Kerosene, Mineral Spirits, Heptane and Hexane.

The 900 Series meters are NOT compatible with the following fluids:

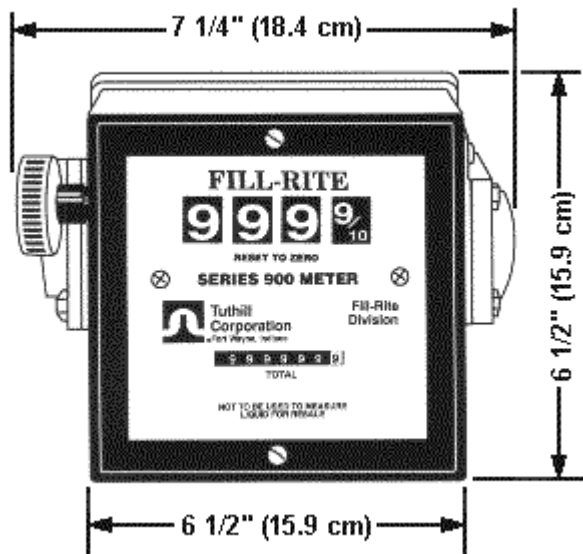
Bleach, Hydrochloric Acid, Ink, Motor Oil and Salt Water.

If in doubt about the compatibility of a specific fluid, contact the supplier of the fluid to check for any adverse reactions to the following wetted materials.

Ryton	300S Stainless Steel	400S Stainless Steel	All
Aluminum			901
Aluminum, Nickel Plated			901N
Aluminum, Teflon Coated			901T
Buna N			901

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Dimensions



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Repair

To insure the ultimate performance, pumps must be set up according to the "INSTALLATION" section of the Owner's Manual packed with the pump

Meters requiring repair should be taken to an authorized repair shop or returned to the factory for service. Meters **MUST** be thoroughly triple-rinsed before being taken in, or shipped, for repair.

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Maintenance

Meters are designed to operate maintenance free. Certain liquids can dry out while in the meter housing, preventing the meter from operating properly when next used. If this happens, the meter should be thoroughly cleaned by running a flushing fluid through the meter in the normal direction of fluid flow, without disassembly. If fluid cannot be "forced" through the meter with 50 PSIG fluid pressure and thus freed, the meter must be disassembled and thoroughly cleaned. Refer to the instructions in the ASSEMBLY/DISASSEMBLY section of the Parts and Technical Service Guide that was packed with your meter

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Frequently Asked Questions

The questions below are linked to the answers for that particular question. Point and click on the question of interest and you will be move to the answer to that question. Buttons are provided to allow you to move back to this question list or to the original INDEX.

1. [When I went to use my meter for the first time this year it was stuck. What can I do?](#)
2. [Can I use this material to sell kerosene from my tank?](#)
3. [What do you mean by a "positive displacement meter?"](#)
4. [How can I be sure my meter is operating properly?](#)
5. [What limits the flow capacity of this meter?](#)

1. When I went to use my meter for the first time this year it was stuck. What can I do?

Although your meter is designed to require little or no maintenance, the residual material left when a fluid dries in the meter can jam the close tolerance disc within the chamber. See the procedure recommended for cleaning the meter above and in the Guide referenced below and packed with the meter. Generally a thorough cleaning will restore the meter to full operation.

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2. Can I use this meter to sell kerosene from my tank?

This meter mechanism is capable of high accuracy, typically 0.5%, if operated under steady flow rate and calibrated at that rate. This capability however does not meet the requirements of the Weights and Measures Departments in most states and they therefore will not approve this meter for use for the resale of liquids like kerosene.

See the Troubleshooting Guide in your Owner's Manual packed with your unit or the copy available "on-line" in the Reference Documents section of this More Info page for things to check.

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3. What do you mean by a "positive displacement meter?"

A positive displacement meter allows a VERY specific volume of fluid to move through the meter with every rotation of the mechanism. Conversely if the mechanism of a positive displacement meter is held, there should be no flow through the meter. That VERY specific volume is determined by the designed size of the meter chamber and allows the rotating meter shaft to be tied to a counter which indicates the count of rotations as the volume of fluid passing through the meter. By varying the gear ratio tying the chamber to the counter, the same chamber can be used for two different units of measure, like gallons and liters.

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4. How can I be sure my meter is operating properly?

After zeroing the meter, fill a container of known volume and compare the indicated volume to the measured volume. As simple as this method seems it is used universally as the absolute calibration means by all requiring accurate meter indication. A container used for this type calibration is described as a "proving can" and the use of a proving can 5X the major unit of calibration is recommended. In the case of the 800 meter, where gallon is the most common unit of measure, a five gallon proving can is recommended and generally can be obtained from the dealer where your meter was purchased.

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5. What limits the flow capacity of this meter?

The forced flow of fluid through the meter results in a pressure differential measured across the meter, and the higher the flow through the meter, the higher that pressure drop across the meter. While the increase in pressure drop is close to linear with the increase of flow over a considerable range, that linearity is lost at the upper flow levels because of the physical size of the chamber and the ports into and out of the chamber. The upper limit where that linearity is lost is normally taken as the upper flow limit of allowed operation. In the case of the 800C that flow level is 20 GPM.

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