

## **OPERATING INSTRUCTIONS**

### **PUMPWATCH CFX20 Volumetric Measure**

#### **BEFORE USE**

The PUMPWATCH CFX 99 Measure and transport trolley are an integral unit. Do not dispense fuel into the measure until it is securely suspended from the trolley.

Before commencing any measurement test, a wetting run is required. (See Note 1)

#### **DIRECTIONS FOR USE**

##### Preparation

1. Hang the empty measure from the H-frame
2. Place the measure and trolley in a stable position near the dispenser. The trolley legs should be in the lower position (This allows the dispenser nozzle to be inserted more easily into the filling funnel).
3. Level the measure by centring the spirit level behind the measuring tube. This is done by adjusting the screw attached to the H-frame. (It is only necessary to level the measure in this direction)
4. Before dispensing fuel ensure that all three valves are in the closed position. (As Shown – also see Note 3) These are the outlet tube valve, the measurement tube valve and the main discharge valve.



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#### **Measurement**

5. Drain the dispenser nozzle and place it in the filling funnel so that the tip of the nozzle is located as far down as possible in the neck of the vessel.
6. Dispense the required litres into the measure according to the dispenser meter. (Fuel and foam may reach passed the neck and into the funnel as it approaches the required delivery)
7. Open the valve on the outlet tube connecting the vessel to the measurement tube
8. Wait approximately 30 seconds while the fuel contained in the funnel and neck of the vessel flows into the measurement tube. Avoid disturbing the vessel during this time.
9. Close the outlet tube valve
10. Read the fuel level in the measurement tube on the millilitre and percentage volumes scales, and note the results.



#### **Discharge and Drainage**

11. Wheel the measure to the storage tank fill pipe and adjust the trolley legs to the Upper Position so as to raise the measure. (The resulting extra height allows easier discharge of fuel from the measure). This is done by lifting the measure until the trolley toe nears the ground and pulling the pin near the left handle of the trolley.



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12. Insert the discharge hose into the storage tank fill pipes.



13. Open the main outlet discharge valve first. Wait 5 to 10 seconds before opening the measurement tube valve (as shown).

After the main flow has ceased, allow the main vessel and the measurement tube to drain for approximately 30 or 45 seconds, as appropriate for the fuel being measured. This time may be observed by clipping the discharge hose to the H-frame and leaving the valves opened. In this way the draining fuel is caught in the bow of the hose.



14. When all testing is complete reset the valve handles at 45° for 10 seconds to ensure that all fuel is drained and released from the ball of valve. Working down, start with the transfer tube valve, then measurement tube valve and finally the main discharge valve.



15. Close the discharge valves.  
To do another test adjust the trolley legs to the lower position. The unit is now ready to be moved to the next testing point.

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Note 1

Follow the normal directions for use to carry out the wetting run – there is no need to note the results of this test. This ensures repeatability between tests.

Note 2

When filling the vessel it may be convenient to reverse the handgrip on the nozzle handle when holding it in the funnel as shown at 'Point 5'.

Note 3

Each valve is open when the handle is parallel to the tube on which it is mounted. The valve is closed when in a perpendicular position.

Note 3

The automatic dispenser cut off will stop the flow of fuel when it reaches the nozzle. To avoid this cut off and to maintain a full flow for the entire duration of the test, the nozzle should be raised up but still pointed into the neck of the measure as the level begins to enter the funnel.

Note 4

Where storage tank fill pipes are less accessible and the fuel level in the storage tank fill pipe is below ground level, longer drain hoses may be used (Order Code XXXXX) in a siphon mode, with the discharge end of the hose inserted in the fill pipe so that the discharge is below the level of the main outlet discharge valve.

Note 5

The bottom discharge and drainage feature of the PUMPWATCH CFX 99 measure minimises health hazards to the operator from volatile fractions in petrol vapour as these drain through the discharge hose directly into the storage tank.

Discharging in this way also avoids the splashing that often occurs when a traditional measure is discharged into a funnel.

Note 6

The bottom discharge feature minimises manual handling by the operator who is no longer obliged to lift or carry a measure full of fuel when emptying it after a test or when moving them around a service station.