

DIGITAL METERS

USER'S MANUAL



WARNING

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury. Save these instructions in a safe place and on hand so that they can be read when required.

Model No.: 15210601, 15210602, 15210603, 15210604

15211001, 15211002, 15211003, 15211004

A. Machine Description

The digital meter designed by accurate measuring chamber and oval gears inside. Aluminum body, LCD screen make it easy, portable & reliable to install.

The meter can be used for measuring several different fluids, such as oil, diesel & kerosene.

B. Technical Specification

Description	Europe				America			
	15210601	15210603	15211001	15211003	15210602	15210604	15211002	15211004
Flow rate	6~60L/min.		10~100L/min.		2~16gpm		3~26gpm	
Operating pressure (Max)	50bar		30bar		725psi		435psi	
Operating temperature	-10°C ~ +50°C				14°F ~ 122°F			
Accuracy	±0.5%							
Fluid type	Oil		Diesel & kerosene		Oil		Diesel & kerosene	
Screen	5-Digit present total (0.01~999.99)				5-Digit present total(0.01~999.99)			
	5-Digit non-resettable total (1~99999)				5-Digit non-resettable total (1~99999)			
	Unit (Liter, Gallon, Pint, Quart)				Unit (Liter, Gallon, Pint, Quart)			
Inlet and outlet	3/4" BSP	1"BSP	3/4" BSP	1"BSP	3/4" NPT	1"NPT	3/4" NPT	1"NPT
Weight	0.8 Kg				1.8 lbs			
Power supply	1×3V (1×CR2)							

C. Safety Precautions

- Never install them where inflammable!
- Keep the fluid pure is very important.
- Do not use for gasoline!
- Not suitable when used in a retail sale of diesel, oil or kerosene
- Make sure that no air pressure shocks or particles can damage the meter.
- GENERAL SAFETY RULES



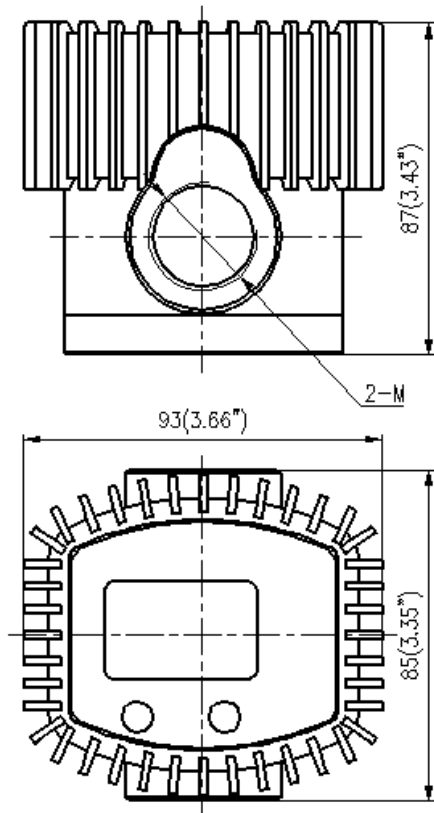
WARNING: Read and understand all instructions.



WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

D. Installation

The digital meter installed by thread joint in the pipeline. It is suggested to install a filter at the inlet to keep the fluid pure. That will prolong the life of the meter. Installation size please refer to Fig.1.



Model No.	M
15210601	3/4" BSP
15210602	3/4" NPT
15210603	1" BSP
15210604	1" NPT
15211001	3/4" BSP
15211002	3/4" NPT
15211003	1" BSP
15211004	1" NPT

Fig. 1

E. Operation

E.1 Function Button Introduction

- ① LCD display
- ② "MOVE" button
- ③ "RESET" button
- ④ "1" button (back of the meter)
- ⑤ "2" button (back of the meter)
- ⑥ battery housing



Fig. 4

LCD Display

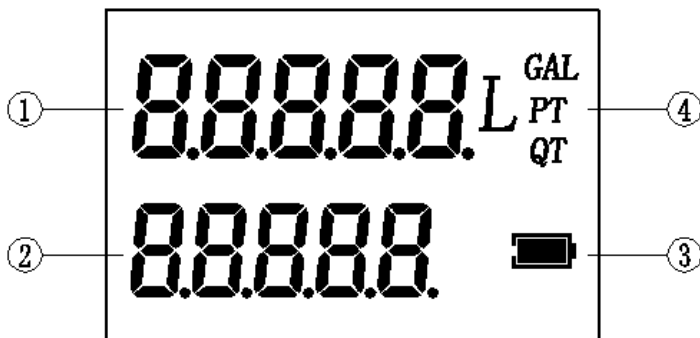


Fig.3



Fig. 2

- ① present total
- ② non-resettable total
- ③ low battery indicator
- ④ unit

E.2 Operation Instruction

a. Before putting into operation

- Check the technical data of the installation match with those of the meter. For example, connection, pressure, flow rate range, medium, etc.
- Formula :

Proper correction factor

$$=(\text{actual value} / \text{display value}) \times \text{current correction factor}$$

- Set the proper correction factor by the above formula.(refer to **b** for correct factor)
- Check all connections to avoid leakage.

b. Button usage, calibration and measurement unit change

- Reset the present total (See Fig. 4)
 - 1) When the meter is on standby, press the RESET key.
 - 2) The display shows all the segments.
 - 3) The meter resets the present total already.

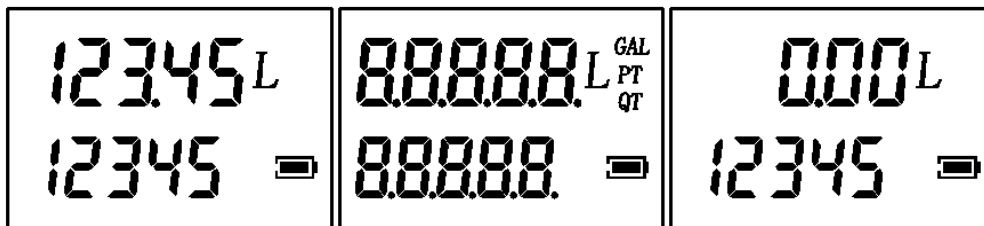


Fig. 4

- Show current correction factor (See Fig. 5)
 Wait for the meter to go to standby, press the MOVE and RESET keys together. Keep these pressed, LCD shows the current correction factor.

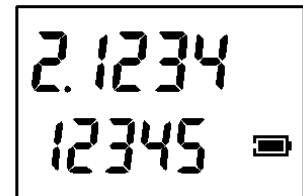
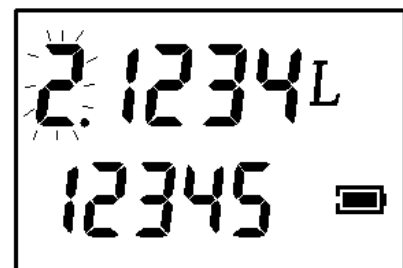


Fig. 5

- Calibration and change unit (See Fig. 6)
 - 1) Wait for the meter to go to standby, press the "2 button", keep it pressed until the digit flash in ① zone, it means the meter is in calibration and changing unit mode.

Fig. 6



- 2) Press the RESET key to choose the right digit from 0 to 9. Press the MOVE key to start the next digit or unit. So the digit of correction factor can be changed one by one. When change the unit, it can switch among four types of units, L, GAL, PT and QT.
- 3) Make sure the correction factor and unit are all right, press the 2 key, keep it pressed until quit calibration and unit change mode.

F. Maintenance

Battery replacement

- When the battery signal is flashing on the LCD (see fig. 7), it means the meter is in low battery. In this condition, the meter continues to work correctly, but the flashing icon warns the user that it is advisable to change the battery.

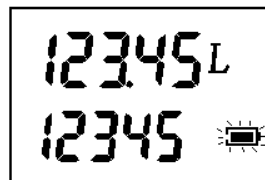


Fig. 7

- Remove the Rubber protection, screw off the screw on the battery cover, then open the battery box to change the battery.
After that, install the battery cover, tighten the screw, fix on the rubber protection to finish the battery change.



- Battery type: 1 × CR2(3V)

G. Diagram and Parts list

No.	Description	No.	Description
1	Rubber Protection	11	Self tapping screw
2	Protection board for LCD Display	12	Meter Body
3	Meter Cover	13	Self tapping screw
4	Battery	14	Shaft
5	Battery Cover	15	Magnet
6	Self tapping screw	16	Pin
7	Self tapping screw	17	Oval Gear
8	Electrical board	18	O ring
9	Spring slice for battery	19	Bottom plate
10	Fix board	20	Hexagon Screw

