

ES099 Combo Meter



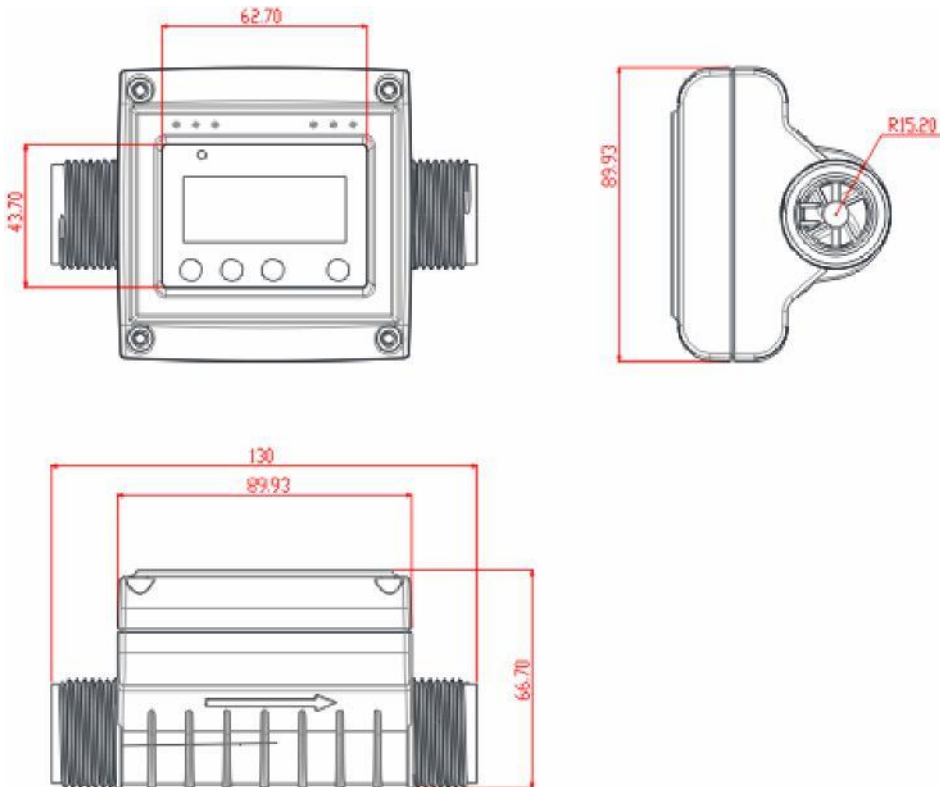
Features :

- Manual TDS / conductivity test
- Automatic TDS / conductivity monitor
- Flow rate indicating
- Flow totalization
- 1" BSP connection
- Battery operated, low battery power alert

Application :

- v' Industrial water treatment system

Mechanism :



1.0 Electrical :

Operating power : 4.5 VDC, 3 x AAA alkaline battery

Operating current : 10 mA (working mode), 30 uA (non-working mode)

2.0 Flow Rate : 3 - 100 liter/min. / 0.8 – 26.4 gallon/min.

Flow totalization : 0.1 – 9999.9 x 1000 liters / 0.1 -9999.9 x 1000 gallons

Accuracy : +/- 5%

3.0 General :

Mounting method : Horizontal to Vertical, the Front Panel can be rotated 90 to 270 degree for better reading

Connection : 1” BSP male

Temperature : 0 to 80°C

Working pressure : Max. 1 MPa

Burst pressure : 3 MPa

Materials : Sensor Body : Polyamide 66 with 50% glass fiber

Turbine : PA composite

Turbine shaft : #304 stainless steel

Turbine holder : POM

TDS/conductivity probe : #304 stainless steel

4.0 Operating Instruction

1. Installing battery

Taking out the screws of the front case, and put three AAA alkaline batteries into the battery holder. The front case can be rotated form 90 to 270 degree for better reading.

2. Setting liter or gallon mode

The default setting of the ES0999 Combo meter is liter. You can switch the mode form liter to gallon by the keep pressing the button “F” when install battery. When a beep sound heard, the setting is switched. The screen shows “gal / min”.

3. Setting TDS or conductivity

The default setting of the ES099 Combo meter is TDS. The screen shows “ppm”. You can switch the mode form TDS to conductivity by the keep pressing the button “S” when install battery. When a beep sound heard, the setting is switched. The screen shows “uS/cm”.

4. Measuring flow

The ES099 Combo meter show real time flow rate when there is water flowing. Press the button “F” can switch the flow rate mode to flow totalization mode to show the accumulated flow volume. Keep pressing the button “F” four seconds can reset the accumulated total volume to be zero. The maximum accumulated

flow volume is 9999.9 x 1000 liters, or 9999.9 x 1000 gallons.

5. Manual measuring TDS / Conductivity

Press the button “A” can measure the TDS or conductivity and keep showing the value on the screen.

The maximum TDS and conductivity can be measured is 1999 ppm and 1999 uS/cm.

6. Automatic TDS/Conductivity monitoring

Press the button “S” can set the TDS or conductivity value to monitor. The increment is 10 ppm for TDS and 15 uS/cm for conductivity. Keep pressing the button “S” can reset the setting to be zero.

Once the setting is done, then go to set automatic monitoring function. Press the button “A” to do manual test first, then press the button “A” again, the ES099 Combo meter get into automatic monitoring function. The screen shows “AUTO” in the middle. The ES099 Combo meter measure the TDS / conductivity for every 40 liters. If the measured value is under the setting value, the green light blinks 30 seconds. If the measured value is over the setting value, the red light keeps blinking, and the alarm generated.

7. Automatic / Manual TDS & Conductivity monitoring

Press the button “A” can switch from automatic mode to manual mode, and also release the alert status caused by automatic monitoring.

8. Low battery power alert

When the battery power is low, the empty battery symbol on the screen blinks. Replacing the battery by new ones can release the alert. The last data will be memorized and restored when battery power is off.