ES099A Combo Meter

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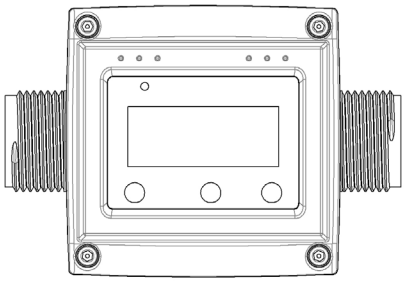
Features :

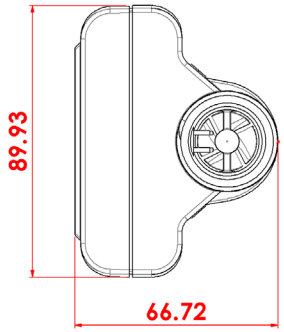
- ☐ Manual TDS / conductivity test
- ☐ Automatic TDS / conductivity monitor
- ☐ Flow rate indicating
- ☐ Flow totalization
- ☐ 1” BSP, or 3/4” BSP(with adapters)
- ☐ Battery operated, low battery power alert

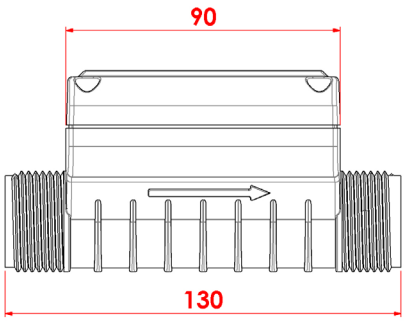
Application :

- ✓ Industrial water treatment system for
  Demineralized water, Deionized water, Reverse Osmosis water

Mechanism : (unit : cm)







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 : 1 – 1,999,999 liters / 1 – 1,999,999 gallons

Accuracy : +/- 10%

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, or 3/4” BSP (with adapters)

Temperature : 0 to 80℃

Working pressure : Max. 1 MPa

Burst pressure : 3 MPa

Materials : Sensor Body : PA6 with 50% glass fiber

Turbine : PA composite

Turbine shaft : #304 stainless steel

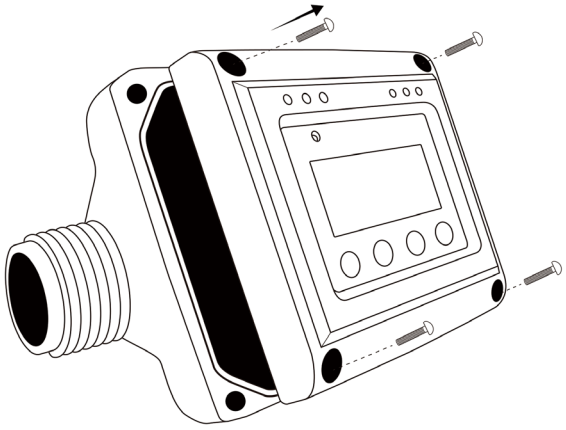
Turbine holder : POM

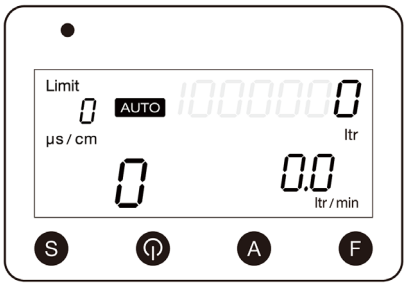
TDS/conductivity probe : #304 stainless steel

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 from 90, 180 to 270 degree for better reading.





2. Setting liter or gallon mode

   The default setting of the ES099A Combo meter is liter. You can switch the mode from 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. Turn on and turn off
   Keep pressing the “ ⏻ “ button for three seconds will turn on or turn off the Combo meter.

4. Setting TDS or conductivity
   The default setting of the ES099 Combo meter is a conductivity mode. The screen shows “uS/cm”. You can switch the mode between the conductivity and TDS (Total Dissolved Solid) by the pressing the button “ ⏻ ” .

5. Measuring flow
   The ES099A Combo meter show real time flow rate and accumulated volume. The maximum accumulated volume is 1999999 liters(gallons).

6. 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.

7. 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 ES099A Combo meter get into automatic monitoring function. The screen shows “AUTO” in the middle. The ES099A Combo meter measure the TDS / conductivity for every 10 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.

8. Automatic / Manual mode
   Press the button “A” can switch between the automatic and manual mode for the TDS/Conductivity measuring.

9. Release the alert
   By pressing the button “A” to choose the mode to be manual mode will release the alert status.

10. 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.

11. Specification :
    Flow Rate : 3 - 100 liter/min. / 0.8 – 26.4 gallon/min.
    Mounting method : Horizontal to Vertical, the Front Panel can be rotated 90 to 270 degree

Connection : 1” BSP male

Temperature : 0 to 80℃

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