

# TC SERIES Turbine Electronic Flow Meter Operating Manual



Widely used in swimming pools, chemicals, large water purifiers farmland irrigation and other industries equipment.



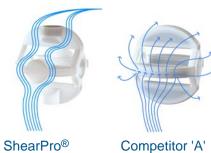
# **TC SERIES**

# **Turbine Electronic Flow Meter**



#### New ShearPro® Design

- Superhydrophobic Design
- Contoured Flow Profile
- Reduced Turbulence
- Reduced Friction
- 78% Less Drag than Old Flat Paddle Design\*



#### **Technical Specifications**

Material	UPVC
Pipe Connection	1", 1.25", 1.5", 2" 2.5", 3"
Mediun	Water / liquid same concentration as water
Accurate Measurement	±2%
Repeatability	±0.5%
Max Working Pressure	20 BAR
Operating Voltage	2.3 - 3.3V
Standby Time (no any operation)	1 Year
Single Measurement	0.00 - 99999
Total Cumulative Measurement	0-29999999
Unit of Measurement	L(liter). GAL(gallon), PTS(pint), QTS(quart)
Single Measurement Reset	CLEAR Key

#### **Flow Range Chart**

Model No	PVC Diameter	Flow Range	K Factor (Pulse/liter water)	Max Pressure	Net Weight
DN25	Inner : 25mm; Outer : 32mm	20-280 L/min	39	2.0MPa	365g
DN32	Inner : 32mm; Outer : 40mm	40-460 L/min	23	2.0MPa	365g
DN40	Inner: 40mm; Outer: 50mm	50-750 L/min	16	2.0MPa	525g
DN50	Inner : 50mm; Outer : 63mm	60-1160 L/min	10	2.0MPa	780g
DN65	Inner : 65mm; Outer : 75mm	80-1980 L/min	7.5	2.0MPa	955g
DN80	Inner: 80mm; Outer: 90mm	100-3000 L/min	0.1	2.0MPa	1440g

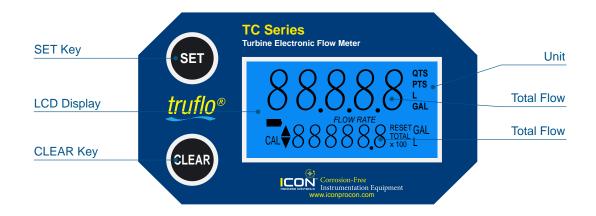
<sup>\*</sup>This flow meter measures the water flow by reading pulses.

For example: Model DN25,39 pulses per liter water, if it shows 195 pulses in the meter, It is equivalent to 5L water.

### **Turbine Electronic Flow Meter**



#### **SIMPLE OPERATION Easy to Control**







SET	SET KEY	Switch Interface between Flow Rate and Total Flow; Factor Setting
CLEAR	CLEAR KEY	Clear the Data of Single, Total Measurement

# INSTRUCTION

# **Clear the Data of Single Measurement**

When m counting or standby mode, press the [CLEAR] key, the LCD will display in full screen (as shown below), release the [CLEAR] button to return to the stand by interface, and the single count number has been cleared.







#### **Turbine Electronic Flow Meter**



#### Clear the Data of Total Measurement

When in counting or stand by mode, short Press the SET [SET] key to switch lo total interface, press and hold the CLEAR] key for more than 5s, the LCD wil display in full screen, after 5s, the LCD screen will automatically return to the standby interface, and the total accumulation has been cleared.



# Switch the Interface between Flow Tate, Total Flow

When in counting or standby mode, press the SET [SET] key to switch the interface between flow rate, total flow (shown as below).





# **Pulse Number Setting**

When in counting or stand by mode, press and hold the SET [SET] key for more than 5 seconds to the setting interface (shown as below), press the CLEAR] key to modify the flashing digit value, press the SET [SET] key to switch the flashing digit, when finish setting, long press the SET [SET] key to save and exit the setting molde, or if you don't have any futher operation, the system will automatically save and exit the setting mode after 30 seconds.



#### **PULSE SETTING INTERFACE**

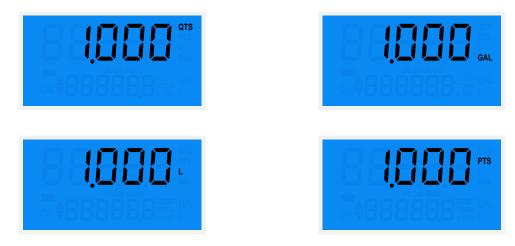
For example: The current value is 1000, which means 1000 pulses correspond to 1 L

## **Measurement Unit Setting**

When in counting or stand by mode, press and hold the SET [SET] + CLEAR] keys for more than 5 seconds to the unit setting interface, press the CLEAR] key to switch the unit between L, GAL, QTS, PTS (shown as below), when finish setting, long press the SET [SET] key to save and exit, or if you don't have any futher operation, the system will automatically save and exit the setting mode after 30 seconds.

# **Turbine Electronic Flow Meter**





Note: the Factory Default Measurement Unit is L (liter).

# Quickly view the numbers of pulses and total flow

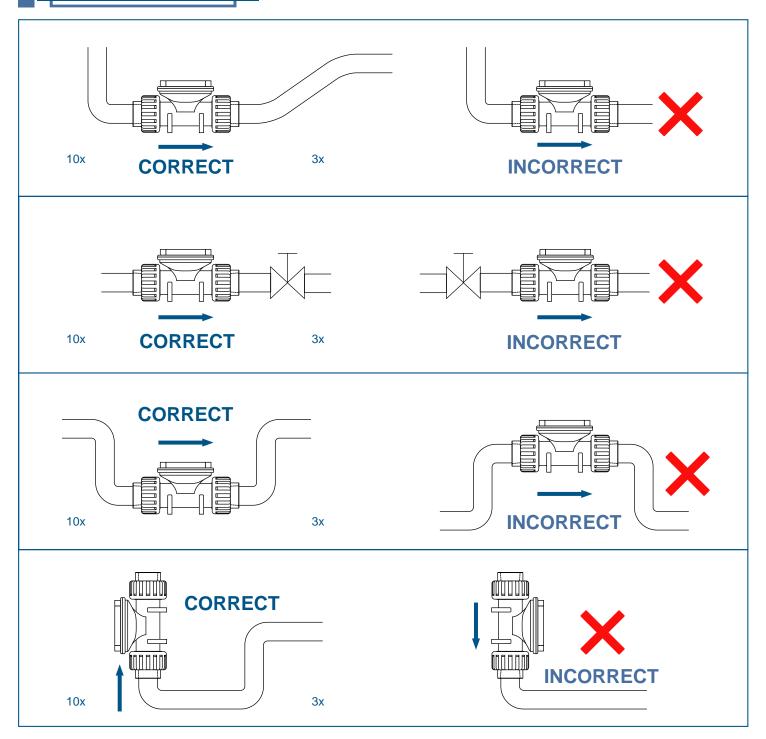
When in counting or standby mode, press and hold the SET [SET] + CLEAR] keys for less than 5s, it shows the pulses and total flow (shown as below)



**PULSE AND TOTAL FLOW INTERFACE** 



#### **Installation Positions**



Please make sure the pipe is filled with the fluid under normal operation.

TC Series can be installed in a horizontal or vertical direction.

Please ensure enough length of straight pipe to avoid turbulence that can effect readings.

#### Note: Min 10x Pipe Diameters Upstream 3x Pipe Diameters Downstream.

A Plastic Basket Strainer, Bag Filter or Y Strainer Filtering Device upstream to Avoid the Paddle Wheel from being damaged by the solids or fibers - max 10% Particle Size - Not to Exceed .5mm Cross Section or Length.

Please do not flush the pipe after the Flow Meter is installed with Compressed Air this may damage the ceramic shaft and will Void Warranty