

## Neptune ProCoder Model:

To read the Neptune ProCoder register, first look at the mechanical wheel bank.



**Wheel Bank Reading** – This reading shows all of the water that has passed through the meter in its lifetime, and is measured in gallons. This reading is used for billing purposes. Charges are based on units of 100 gallons of water used, so be sure to read the first five digits of the meter, from left to right, to determine usage. You can calculate how much water is used in a given period by recording the reading at the beginning of the period and again at the end of the period. The total water used during that period is calculated as follows:

End Reading – Beginning reading = Total gallons of water used during that period.

Example:

Initial Reading for January 1, 2020: 9,234.14 gallons

Final reading for February 1, 2020: 11,438.23 gallons

Gallons of water used during the example period:

$$11,438.23 - 9,234.14 \text{ gallons} = 2,204.09 \text{ gallons used.}$$

For billing purposes, the gallons used should be divided by 100, for a total usage of 22 during this period.

$$2,204.09 \text{ gallons used} / 100 = 22 \text{ usage}$$

Next, look at the Sweep Hand:



**Sweep Hand Dial** – This dial shows the rate of water that is passing through the meter at the moment. The sweep hand can be used for leak detection. One rotation of the sweep hand represents 0.1 (1 tenth) gallon being used at that moment. If all water in the building is turned off and the sweep hand is still spinning on the meter, water is still flowing through the meter. Since all water is turned off, there must be a leak somewhere in your system.

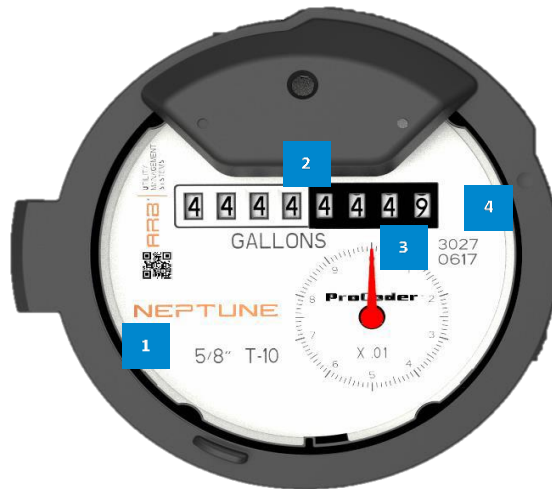
For more detailed information about the Neptune ProCoder water meter, please see the manufacturers instructions below.



# How to Read the Neptune® ProCoder™ Register

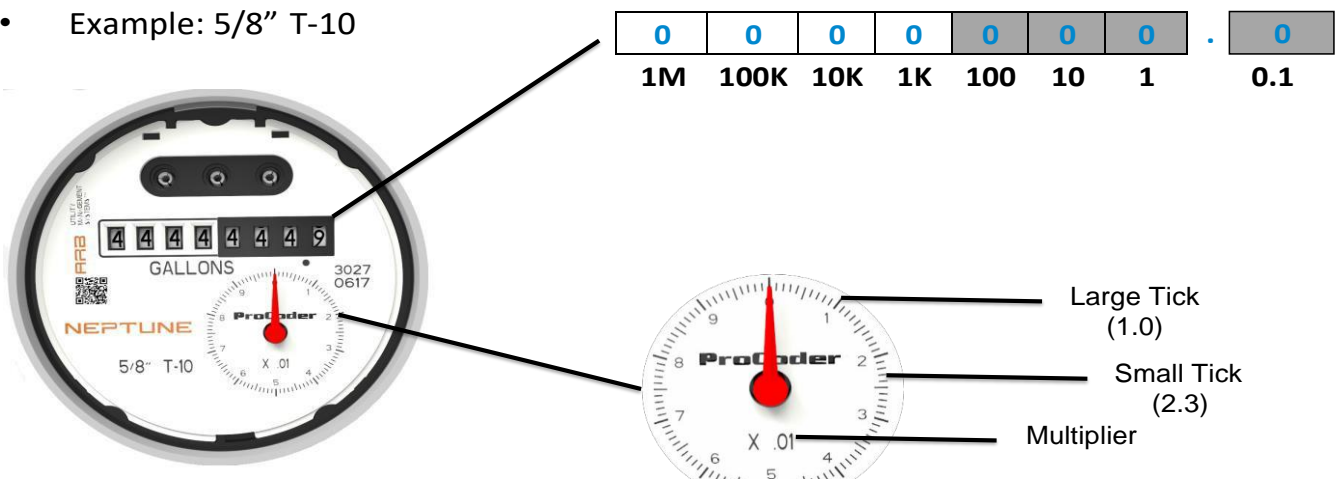
Below is the face of the ProCoder™ register.

- 1** Product Size & Type
- 2** Mechanical Wheel Bank
- 3** Sweep Hand
- 4** Date of Manufacture



It is important to know all the components of the ProCoder register and how to interpret them.

- Example: 5/8" T-10



To read the Neptune ProCoder register, look at the mechanical wheel bank first.

0	0	0	0	0	0	0	0
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The wheel bank contains 8 digits for a high resolution direct read. Unit places will depend on the size of the meter and units of measure. The tables below show the eighth digit on the display for each size and type of meter and unit of measure.

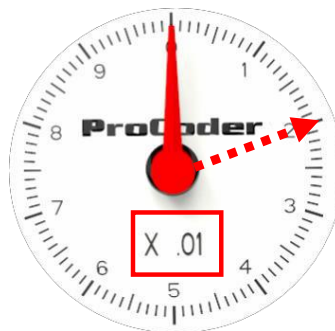
8th Digit on Display					
T-10® (Includes disc side of TRU/FLO®)	Size	G	ft <sup>3</sup>	m <sup>3</sup>	IG
	5/8"	0.1	0.01	0.001	0.1
	3/4"	0.1	0.01	0.001	0.1
	1"	0.1	0.01	0.001	0.1
T-10 (Includes disc side of HPPIII)	1.5"	1	0.1	0.01	1
	2"	1	0.1	0.01	1

8th Digit on Display					
	Size	G	ft <sup>3</sup>	m <sup>3</sup>	IG
HP Turbine (Includes FS Turbine , HPPIII, Turbine side of TRU/FLO )	1.5"	1	0.1	0.01	1
	2"	1	0.1	0.01	1
	3"	1	0.1	0.01	1
	4"	1	0.1	0.01	1
HP Turbine (Includes FS Turbine , HPPIII, Turbine side of TRU/FLO )	6"	10	1	0.1	10
	8"	10	1	0.1	10
	10"	10	1	0.1	10

Next, look at the ProCoder sweep hand to better understand how to read it.



A typical ProCoder sweep hand contains 10 large ticks numbered 0-9. Between each large tick, there are 9 small ticks numbered .1 - .9. Depending on the size and meter type, a multiplier will also be present and located below the red hand. Let's demonstrate how to read the sweep hand.



Read as 2.0

Multiplier is .01

$2.0 \times .01 = .02$  or two hundredths

**Another example:**



Read as 6.7

Multiplier is .01

$6.7 \times .01 = .067$  or sixty-seven thousandths

The tables below show the multiplier based on each size and type of meter and unit of measure.

Sweep Hand Multipliers					
T-10 Meters	Size	G	ft <sup>3</sup>	m <sup>3</sup>	IG
	5/8"	0.01	0.001	0.0001	0.01
	3/4"	0.01	0.001	0.0001	0.01
	1"	0.01	0.001	0.0001	0.01
	1.5"	0.1	0.01	0.001	0.1
	2"	0.1	0.01	0.001	0.1

Sweep Hand Multipliers					
Trident Turbine/ TF 'High Side'	Size	G	ft <sup>3</sup>	m <sup>3</sup>	IG
	3"	1	0.1	0.01	1
	4"	1	0.1	0.01	1
	6"	10	1	0.1	10

Sweep Hand Multipliers					
HP Turbine/ HPPS	Size	G	ft <sup>3</sup>	m <sup>3</sup>	IG
	1.5"	1	0.1	0.01	1
	2"	1	0.1	0.01	1
	3"	1	0.1	0.01	1
	4"	1	0.1	0.01	1
	6"	10	1	0.1	10
	8"	10	1	0.1	10
	10"	10	1	0.1	10

Sweep Hand Multipliers					
HPPIII 'High Side'	Size	G	ft <sup>3</sup>	m <sup>3</sup>	IG
	4"	1	0.1	0.01	1
	6"	10	1	0.1	10
	8"	10	1	0.1	10
10"	10	1	0.1	10	