



Flow Meter Kits

All Tri Nuclear underwater systems that utilize a pump and or filter cartridges will use a Flow Meter Kit.

Flow Meter Kits are used to determine proper phasing of all 3-phase Tri Nuclear pumps. Flow Meter Kits are also used as a rough gauge of when filters are expended in Tri Nuclear Underwater Filter systems.

Phasing: With the pump submerged the pump is turned on and an initial flow is recorded. The phase is then reversed and flow rate is checked again. Whichever setup indicates the highest flow rate is considered the proper phase.

Filter Loading: When half on the initial flow rate is reached the filter cartridges in use are effectively depleted and should be changed out.

Each Flow Meter Kit has two parts:

- Flow Sensor (Paddlewheel and Cable) - The Flow Sensor is a simple paddlewheel sensor that easily connects to the flow meter fitting on our pumps and comes equipped with 100ft of instrument cable.
- Flow Meter (Black Box) – The Flow Meter is a specially calibrated self-powered analog meter that provides flow indication.

Features:

- No need for external power source
- Simple paddlewheel design
- Suited for underwater use

Specifications:

- Output frequency: 5-6 Hz/fps nominal
- Flow range: 1-50 fps
- Linearity: + 1% full range
- Input signal amplitude: 0.4 V (Peak to Peak Minimum)
- Input Frequency range: 0-200 Hz
- Meter range: 100 micro amps + 2% at full deflection



Typical Flow Meter Kit

Also note that all Flow Sensors can be used with any of the Flow Meter Kits and are interchangeable between all pumps or systems. However, the Flow Meters are specifically calibrated to a certain pump or system. Please see chart below identifying each of the flow meter kits available and the typical pumps/systems they are used with.

Flow Meter Kit Models			
P/N	Range	Pump Model	For System
FM-100	0-200 GPM	PP-40SC PP-100SC	UFV-100 UD-30A UD-36A
FM-260	0-400 GPM	PP-260SC	UFV-260 UD-48A
FM-600	0-1000 GPM	PP-600SC	UF-600 UFV-600
FM-1000	0-2000 GPM	PP-1000SC	UF-1000