

FLOW RATE CHART BATTERY POWERED ELECTROMAGNETIC FLOW METER

The Mc Mag³⁰⁰⁰ uses Faraday's Law of Electromagnetic Induction to measure water velocity. Faraday's Law states: "a conductor, moving through a magnetic field, produces a voltage".

The magnitude of the voltage is directly proportional to the velocity at which the fluid moves through the magnetic field. Electromagnetic coils inside the Mc Mag³⁰⁰⁰ sensor produce magnetic fields, and electrodes on the sensor's surface measure the voltage generated by the moving fluid. The determined velocity is then calculated with the pipe inside diameter to produce a volumetric flow rate (accuracy statement).

As flow rates are very important to all electromagnetic flow meters, it is important to understand how minimum and maximum flow rates per line size affects the accuracy of the meter.

Below are the minimum and maximum flow rates for the Mc Mag³⁰⁰⁰ and the respective accuracies.

FLOW MEASUREMENT:

Method: Electromagnetic

Accuracy: ±2% of reading with default calibration; ±1% with custom Factory calibration

Flow rate: Specification accuracy: 1 f/s to 15 f/s (0.3 m/s to 4.57 m/s);

Maximum Converter Flow Rate: 33 f/s (10 m/s)

Reverse Flow: Reverse flow indication only

See chart below for flow rates per pipe size:

Nominal Pipe Size (Inches)	Min. Flow	Max. Flow
	Flow Rate: GPM	Flow Rate: GPM
4	40	600
6	90	1350
8	150	2350
10	240	3700
12	350	5300

For higher or lower flow rates than listed above, please consult factory.