

# WMX101 Electromagnetic Flowmeter

Flanged electromagnetic flow meters for full-pipe municipal or industrial applications.



- Simple and economical as a mechanical meter
- No moving parts for low maintenance & long life
- Minimal straight pipe required
- Pulse output for loggers, PLC's, or telemetry

## Specifications

*Pipe Sizes:* 4, 6, 8, or 10 inch

*Flow Range:*

- 4" 12-1000 GPM (0.75-63 L/s)
- 6" 32-2400 GPM (2-151.4 L/s)
- 8" 60-4400 GPM (3.8-277.6 L/s)
- 10" 95-7000 GPM (6-441.6 L/s)

*Accuracy:*

- ±1% of reading from 10% to 100% of max flow
- ±2% of reading from cutoff to 10% of max flow

*Fittings:* AWWA 150 lb. drilling

*Pressure:* 150 PSI (10.3 bar) working pressure

*Operating Temperature:* 10° to 130° F (-12° to 55° C)

*Storage Temperature:* -40° to 158° F (-40° to 70° C)

*Materials:*

- Body: Welded steel, epoxy-coated
- Liner: Dual durometer rubber
- Electronics Housing: Die cast aluminum, powder coated
- Electrodes: 316 stainless steel

*Rate Display:* 5-digits in units of GPM (standard), MGD, Liters/minute, Liter/second, CFM, CMH, Mega Liter/day

*Totalizer Display:* 8-digits in units of Gallons, Gallons x 1000, Liter, Liter x 1000, Mega Liter, CU Feet, CU Feet x 1000, CU Meters, CU Meter x 1000

*Power:*

- 101\*: 8-32 Vdc @ 30 mA, with auxiliary battery for continuous operation during power failures
- 104: 2 Lithium 3.6V "D" batteries, replaceable, 1 year life under continuous use

*Output Signal:*

- 101: Current sinking pulse, opto-isolated, 30 Vdc at 10 mA max
- 104: Pulse output available only with addition of DC30 output cable

*Pulse Rates:* High Frequency (default); 10 units/pulse; 100 units/pulse; 1000 units/pulse

*Empty Pipe Detection:* Hardware/software, conductivity-based

*Environmental:* NEMA 4X standard, (IP68/NEMA 6P Option)

\* NOTE: Using an unregulated power supply >18 Vdc may damage the meter due to AC line input voltage fluctuation.

## Description

The WMX101-Series flanged electromagnetic flow meters are the perfect replacement for your old 4 to 10 inch industrial mechanical turbine or propeller flow meters. Because the meters have no moving parts and have electrodes designed to discourage fouling, they perform well and require much less frequent maintenance in applications where debris would impede propeller meters. The meters do not have rotors which stop turning or bearings which wear out. WMX101-Series meters are also designed to work with minimal straight pipe run requirements, which is great when you have very little space between the meter and an elbow.

The meters' electronics are housed in a rugged NEMA 4X aluminum enclosure with a 2-line LCD that clearly displays the flow rate and totalizer. The display housing is fitted with tamper-evident features. An optional IP68 (NEMA 6P) rated housing is available for applications where the meter may be under water up to a depth of 9.8 ft (3 m) for prolonged periods of time.

The WMX101 meters are externally powered with 8-32 Vdc at 30 mA max (see NOTE in Specifications). A tamper-sealed shielded power/pulse output cable is included. Two Lithium 3.6V "AA" batteries provide power during power failures, allowing the meter to continue recording without interruption during an outage.

The WMX104 meters are battery-operated meters for use when pulse output is not required or line power is not readily available. Two Lithium 3.6V "D" batteries provide power and are replaceable with an approximate 1-year life under continuous use, or more depending on the duty cycle.

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## Options and Accessories

WMX101-XXX 4 to 10 inch Electromagnetic Flowmeter

WMX104-XXX 4 to 10 inch Electromagnetic Flowmeter,  
Battery Operated

NOTE: The Electromagnetic Flowmeters listed above are set up with a rate of US GPM and a total of cubic feet. These units cannot be changed in the field. Other rate and total display units such as CFM, Liters/minute, and Liters/second are available, see specifications above. Please specify rate and totalizer display units when you order.