

WMP101 Electromagnetic Flowmeter

Flowmeters for full-pipe municipal or industrial water and wastewater applications.



- Simple as a mechanical meter
- No moving parts for low maintenance & long life
- Minimal straight pipe required
- Built-in rate & total indicator
- Corrosion resistant

Specifications

Pipe Sizes: 1, 2, or 3 inch full port
Flow Range: 1 inch: 2.3-110 GPM (0.145-6.94 l/s), 2 inch: 6-300 GPM (0.375-18.9 l/s), 3 inch: 14-670 GPM (0.88-42.3 l/s)
Fittings: 1 inch NPTF, 2 or 3 inch flange clamps with optional 2 or 3 inch NPTF fitting kit
Pressure: 150 PSI or 10.3 bar working pressure @ 70° F (21° C)
Accuracy:
 +1% of reading from 10% to 100% of max flow
 +3% of reading from cutoff to 10% of max flow
Materials:
 Body: Glass-filled polypropylene
 Electronics Housing: Die cast aluminum, powder coated
 Electrodes: 316 stainless steel
 Display cover: polyethylene
Rate Display: 6-digits in units of GPM (standard), CFS, CFM, Liters/second, Liters/minute, or Cubic Meters/Minute
Totalizer Display: 8-digits in units of CU Feet (standard), Acre-feet, Acre-Inch, Gallons x 1000, CU Meters, or Megaliters
Security: Cross-drilled screws and tamper-evident seal (Optional)
Power:
 101: 10-30 VDC @ 60 mA max (15 mA average). NOTE: Using an unregulated power supply >18 Vdc may damage the meter due to AC line input voltage fluctuation.
 104: 6 AA Alkaline cells, replaceable, Estimated life is 1 year depending on usage
Pulse Output Signal (WMP101 only): Current sinking pulse, opto-isolated, 32 VDC @ 10 mA max
Pulse Rate (WMP101 only): 1 unit/pulse out, pulse width of 10ms depending on unit selection, high frequency - 1 inch 80 pulses/gal, 2 inch 30 pulses/gal, 3 inch 13 pulses/gal, pulse width 1.1 ms, min-max frequency, 3-150 hz
Empty Pipe Detection: Hardware/software, conductivity-based
Conductivity: >20 microSiemens/cm
Environmental: NEMA 4X standard
Electrical Connection (WMP101 only): 5 pin male circular connector, mates to industry standard cable
Operating Temperature Range: 10 to 130° F (-12 to 54° C)
Weight: 4 lbs (1.8kg) (instrument only), 6 lbs (2.7 kg) (instrument with clamp kit)
Dimensions:
 1 inch: 4.3x5.38x5.5 inch (11x13.67x14 cm) (WxLxH)
 2 inch: 4.63x6.03x5.5 inch (11.76x15.32x14 cm) (WxLxH)
 3 inch: 4.63x7.3x7.3 inch (11.76x18.54x18.54 cm) (WxLxH)

Description

The WMP-Series are a full-bore, plastic-bodied electromagnetic flowmeters designed for flow and usage monitoring applications in 1, 2, or 3 inch pipes. The polypropylene flow tube offers corrosion resistance to a wide range of chemicals. The flowmeter's light weight and clamp flanges allow them to be easily installed or removed from the pipe for inspection. There are multiple adapters available to allow the electromagnetic flowmeters to fit into a wide variety of pipe mounting configurations.

With no moving parts, the electromagnetic flowmeters permit unobstructed flow, minimizing flow disturbances and hence, straight pipe requirements. The flowmeters can be used in piping configurations where there is little space between the meter and an elbow or valve. The WMP-Series meters are resistant to wear from sand and debris found in ground or surface water. Since there are no bearings or propeller to wear out, downtime and maintenance and repair costs are kept to a minimum. Because they have no mechanical parts in the flow stream, the meter tolerates high flows without damage.

The meters are used for tracking flow rate and total flow in usage monitoring applications, for instance, in compliance with regulatory requirements. These would include wells, industrial wastewater, heap leach mining discharge, cooling tower deduct metering, turf and landscape applications, and other water reclamation operations. In the event of DC power loss, or when changing the battery, the flowmeter is designed to retain the internal settings and flow total.

Options and Accessories

- WMP101-100 1 inch Electromagnetic Flowmeter
- WMP101-200 2 inch Electromagnetic Flowmeter
- WMP101-300 3 inch Electromagnetic Flowmeter
- WMP104-100 1 inch Flowmeter, Battery Powered
- WMP104-200 2 inch Flowmeter, Battery Powered
- WMP104-300 3 inch Flowmeter, Battery Powered

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.

