

## Electromagnetic Flow Sensors

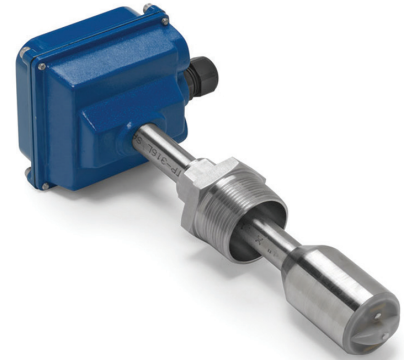
The complete lack of moving parts of these insertion electromagnetic flow sensors is the source of their reliability. Brass and stainless steel electromagnetic flow sensors withstand a variety of temperature, pressure, and chemical conditions. The EX-Series electromagnetic flow sensors have no rotor to stop turning in dirty water and there are no bearings to wear out. Like all electromagnetic flow sensors, when used in chemical injection applications, these meters should be installed upstream of the chemical line (or far enough downstream to allow complete mixing of fluids before the meter).

A rapidly reversing magnetic field is produced in the electromagnetic flow sensor's lower housing. As the fluid moves through this field, a voltage is generated that is measured by the electromagnetic flow sensor and translated into a frequency signal proportional to flow rate. This square wave signal can be sent directly to a PLC or other control or can be converted using a blind 4-20mA output or flow rate and totalizer display with the electromagnetic flow sensor.

Designed for modularity and versatility, the EX100/200 series, insertion electromagnetic flow sensors, have an opto isolated square wave pulse output, which can be combined with the appropriate transmitter or indicator depending on the application. For 4-20mA analog output and digital of the electromagnetic flow sensor's rate and total measurement the FT420 Pulse and 4-20mA converter can be used. For a 4-20mA analog output only, the AO55, blind 4-20mA converter, can be connected to the electromagnetic flow sensor. Both the FT420 or AO55 converter can be directly mounted to the electromagnetic flow sensor or wall mounted in a more convenient location. If the EX100/200 series, electromagnetic flow sensors, are being used with a programmable controller, the output signal can be fed direct with no other conditioning required.

The electromagnetic flow sensors male adapters mate with standard 1-1/2 inch (101/201) or 2 inch (115/215) FNPT threaded fittings such as saddles and weldolets. The EX115 and 215 electromagnetic flow sensors include an isolation valve, allowing hot-tap installation, or installation and removal under pressure; a bronze ball valve is standard, with a 316 stainless steel valve option if needed.

- Depth adjustable sensors
- Fits any 1-1/2 inch pipe fitting and adjusts to pipe sizes 3-48 inches
- Meter extends only about 1/8 of pipe diameter, minimizing potential for clogging with debris
- Optional 4-20mA flow rate and totalizer display
- Hot-tap option available
- Brass or 316 stainless steel



EX100B Electromagnetic Flow Sensor



FT420M/FT420W serves as an optional output for the EX100\*

\*See website for more details

## Specifications

### Instrument Specifications

Accuracy	+1% of full scale
Output	Square wave pulse, opto isolated, 500 Hz @ 20 ft/sec, 6 mA max
Empty Pipe Detection	Software, flow defaults to zero
Flow Range	0.28 - 20 ft/sec (0.08 - 6.09 m/sec)
Maximum Pipe Pressure	200 PSI (13.8 bar)
Temperature	Ambient 0 to 180° F (-17 to 82° C) • Fluid 32 to 200° F (0 to 93° C)
Minimum Conductivity	20 microsiemens/cm
Installation Fitting Size	EX101/201: 1-1/2 inch FNPT EX115/215: 2 inch FNPT
Power	12 - 25 Vdc, 250 mA
Materials	Mechanical: 316 SS/Brass Electrodes: Hastelloy Electrode plate: PVDF Housing: powder-coated aluminum Valve Assembly (115/215 Only): Bronze with bronze ball valve O-rings (115/215 Only): EPDM
Weight	EX101: 3 lbs (1.36 kg) EX201: 3.4 lbs (1.54 kg)
Dimensions	EX101: 4 inch square x 12 inch long (10cm square x 30.5cm long) EX201: 4 inch square x 17 inch long (10cm square x 43.2cm long)
<b>For Ordering information and Options; please visit <a href="http://www.globalw.com/products/EX100.html">www.globalw.com/products/EX100.html</a></b>	