The Series IEFS Insertion Electromagnetic Flow Sensor comes in brass or stainless steel allowing it to handle a wide range of pressures and temperatures, as well as a variety of available saddle fittings, Series SDF, to fit pipe sizes 3 to 24”. The IEFS-1XX has an isolation valve which allows hot-tap installation. Additional options for this flow meter include adapter fittings and a reverse flow output. The Series IEFS is great for “dirty” water applications or any application where moving parts may be an issue.

PRINCIPLE OF OPERATION
The IEFS is a liquid flow meter that uses a magnetic field to measure flow. As conductive fluids flow through the magnetic field, a voltage is generated which is measured and translated into a pulse frequency output signal. This signal can then be used with the Series BAT to produce a 4 to 20 mA analog signal, or the Series RTI to display rate and total.

APPLICATIONS
• Conductive Liquids
• Municipal
• Industrial
• Irrigation

ACCESSORIES
• Series BAT, Blind Analog Transmitter, converts pulse output to 4 to 20 mA analog output. Unit is loop powered, fits on the enclosure of the meter, and is field spannable.
• Series RTI, Rate Total Indicator, converts pulse output to 4 to 20 mA analog output with local flow rate and totalization display. Unit is loop powered, can fit on the enclosure of the meter, and provides a high/low flow alarm.
• Series PWD, Pulse Divider, for use with pacing electronic metering pumps. Unit divides the input frequency to any number from 1 to 9999 with the use of rotary switches to suit a number of metering pump inputs.

SPECIFICATIONS
Service: Compatible clean or dirty non-coating, conductive liquids.
Range: 0.28 to 20 fps (0.08 to 6.09 m/s).
Wetted Materials:
Body Shaft/Fitting: 316 SS or brass; Electrodes: Hastelloy®; Electrode Cap: PVDF; Valve Assembly: (IEFS-1XX) Bronze (SS optional) with bronze ball valve; O-ring: EPDM.
Accuracy: ±1% FS.
Temperature Limits:
Process: 32 to 200°F (0 to 93°C); Ambient: 0 to 160°F (-17 to 72°C).
Process Connection:
IEFS-0XX: 1-1/2˝ male NPT; IEFS-1XX: 2˝ male NPT.
Pressure Limit: 200 psi (13.8 bar).
Output: Current sinking, square wave pulse, opto-isolated, 550 Hz @ 20 fps, 30 VDC @ 6 mA max.
Power Requirements: 12 to 25 VDC @ 250 mA; Low Power: 12 to 25 VDC @ 40 mA.
Electrical Connection: Terminal block.
Conductivity: ≥ 20 microSiemens/cm.
Enclosure Rating: NEMA 4X (IP66).
Weight:
IEFS-0SX: 6 lb (2721 g); IEFS-0LB: 12 lb (5443 g); IEFS-1XX: 15 lb (6804 g).

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| 2˝ Brass Adapter Fittings (IEFS-0XX only) | 2˝ SS Adapter Fittings (IEFS-0XX only) | 316 SSS Valve Assembly (IEFS-1XX only) | No Valve Assembly (deduct price) (IEFS-1XX only) | Reverse Flow Output | 1-1/2˝ Brass BPT Adapter (2 piece) (IEFS-0XX only) | 1-1/2˝ SS BPT Adapter (2 piece) (IEFS-0XX only) | Immersible (Urethane potted electrical components) | Low Power (12 to 25 VDC @ 40 mA) | 12˝ Extension (IEFS-XLX only) | *SS is stem and fitting. For SS valve order SVA option.

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