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 ft/s (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 ft/s, 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 Material:
• Housing: Die-cast powder-coated aluminum.
Enclosure Rating: NEMA 4X (IP66).
Weight:
• IEFS-0SX: 6 lb (2721 g);
• IEFS-0LB: 12 lb (5443 g);
• IEFS-1XX: 15 lb (6804 g).

Example | IEFS-0SB | BAF | IEFS-0SB-BAF | Price |
--- | --- | --- | --- | --- |
| **Series IEFS** | **IEFS** | **Hot-Tap** | **Material** | **Price** |
| **Size/Material** | **IEFS** | **0SB** | **BAF** | **IEFS-0SB-BAF** | **Price** |
| **0SB** | **0SB** | **3 to 10"** | **No Hot-Tap** | **Brass** | +250.00① |
| **0SS** | **0SS** | **3 to 10"** | **No Hot-Tap** | **SS** | +201.00① |
| **0LB** | **0LB** | **10 to 48"** | **No Hot-Tap** | **SS** | +382.00① |
| **0LS** | **0LS** | **10 to 48"** | **Hot-Tap** | **Brass** | +266.00① |
| **1SB** | **1SB** | **3 to 10"** | **Hot-Tap** | **SS** | +472.00① |
| **1SS** | **1SS** | **3 to 10"** | **Hot-Tap** | **SS** | +557.00① |
| **1LB** | **1LB** | **10 to 48"** | **Hot-Tap** | **Brass** | +780.00① |
| **1LS** | **1LS** | **10 to 48"** | **Hot-Tap** | **SS** | +780.00① |
| **Options** | **BAF** | **2" Brass Adapter Fittings (IEFS-0XX only)** | **IEFS-0SB-BAF** | **+$57.00①** |
| **2AF** | **2" SS Adapter Fittings (IEFS-0XX only)** | **+$76.50①** |
| **SAF** | **316 SS Valve Assembly (IEFS-1XX only)** | **+$899.00①** |
| **SVA** | **No Valve Assembly (deduct price) (IEFS-1XX only)** | **-$90.00①** |
| **NFA** | **Reverse Flow Output** | **+$172.00①** |
| **BPT** | **1-1/2" Brass BPT Adapter (2 piece) (IEFS-0XX only)** | **+$38.25①** |
| **SPT** | **1-1/2" SS BPT Adapter (2 piece) (IEFS-0XX only)** | **+$54.50①** |
| **IMM** | **Immersible (Urethane potted electrical components)** | **+$175.00①** |
| **L0P** | **Low Power (12 to 25 VDC @ 40 mA)** | **-$90.00①** |
| **EXT** | **12" Extension (IEFS-XLX only)** | **+$349.00①** |

① Items are subject to Schedule B discounts.

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