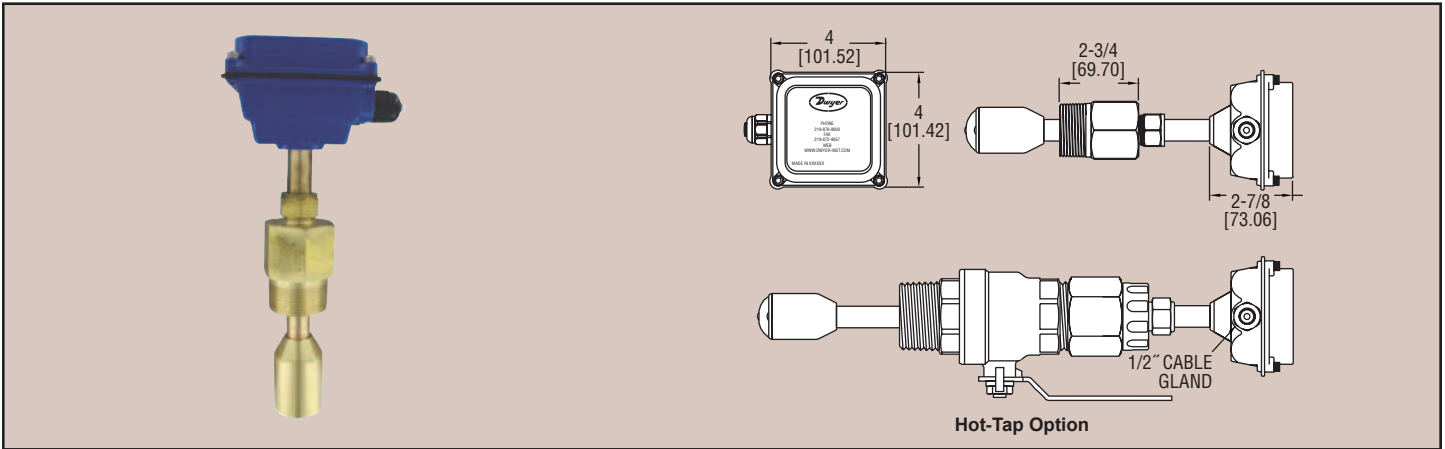




Series
IEFS

Insertion Electromagnetic Flow Sensor

No Moving Parts, Hot-Tap Option, 3 to 48" Field Adjustable Insertion



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:

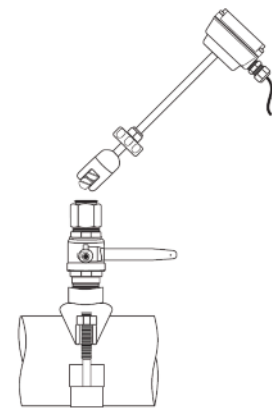
IEFS-0SX: 6 lb (2721 g);

IEFS-0LB: 12 lb (5443 g);

IEFS-1XX: 15 lb (6804 g).

Example	IEFS	0SB	BAF	IEFS-DSB-BAT		
Series IEFS	IEFS			Insertion Electromagnetic Flow Sensor		
Size/Material				Size	Hot-Tap	Material
				0SB	3 to 10"	No Hot-Tap
0SS	3 to 10"	No Hot-Tap	SS			
0LB	10 to 48"	Hot-Tap	Brass			
0LS	10 to 48"	Hot-Tap	SS			
1SB	3 to 10"	No Hot-Tap	Brass			
1SS	3 to 10"	No Hot-Tap	SS*			
1LB	10 to 48"	Hot-Tap	Brass			
1LS	10 to 48"	Hot-Tap	SS*			
Options				2" Brass Adapter Fittings (IEFS-0XX only)		
		BAF		2" SS Adapter Fittings (IEFS-0XX only)		
		SAF		316 SSS Valve Assembly (IEFS-1XX only)		
		SVA		No Valve Assembly (deduct price) (IEFS-1XX only)		
		NVA		Reverse Flow Output		
		RFO		1-1/2" Brass BPT Adapter (2 piece) (IEFS-0XX only)		
		BPT		1-1/2" SS BPT Adapter (2 piece) (IEFS-0XX only)		
		SPT		Immersible (Urethane potted electrical components)		
		IMM		Low Power (12 to 25 VDC @ 40 mA)		
		LOP		12" Extension (IEFS-XLX only)		
		EXT				

*SS is stem and fitting. For SS valve order SVA option.



Hot-Tap Option
(Shown installed on pipe)