



# FSI-B-Series Brass Flow Sensor

Creative Sensor Technology FSI series flow sensors feature proven impeller based technology designed for flow monitoring/flow control applications in irrigation, water conservation and related industries.

The brass bodied sensor with FNPT connections is offered for service in metallic piping systems at points of connection or on pump assemblies.

Designed by the same team who created the original impeller flow sensor, this sensor is a completely new custom cast design. The sensor features a digital output signal proportional to flow. The electrical characteristics of the output signal duplicate existing impeller flow sensor signals making the FSI series sensor compatible with all manufacturer's control products.

The pulse signal will travel up to 2,000 feet without amplification.

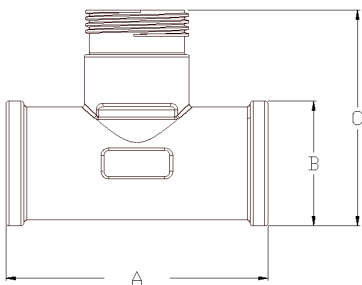
The key elements of this new technology are a proprietary mounting tee, ultra-lightweight impeller and solid state sensing electronics giving the FSI series sensor improved performance.



## Applications

- Flow sensing applications where metallic piping is utilized inside buildings or meter pits
- Flow sensing applications on packaged booster pumps
- Flow sensing applications on fertigation skids
- Flow sensing applications for recycled water or water harvesting systems

## Flow Sensor Dimensions



SIZE	A Length Overall	B Width w/ Retaining Nut	C Height Tee only	D Height w/ Insert & Nut
1"	5.5" 140 mm	2.5" 64 mm	3.75" 95 mm	4.75" 120 mm
1 1/2"	6.188" 157 mm	2.5" 64 mm	4.125" 105 mm	5.125" 130 mm

Allow 3.75" clearance above the branch of the tee to remove flow sensor insert from the tee for service.



## Specifications

### Wetted Materials

- Impeller – HDPE (High Density Polyethylene)
- Shaft – Tungsten Carbide
- O-ring — BUNA N
- Sensor Housing — Type 1 PVC
- Retaining Nut — Lead free Bronze Alloy  
C89833 Federalloy® I-836

### Temperature Range

- 32°F to 140° F (0° to 60° C)

### Output Signal

- Frequency Range 0.3 Hz to 200 Hz

### Transducer Excitation - all electronics versions except – sensor suffix 009

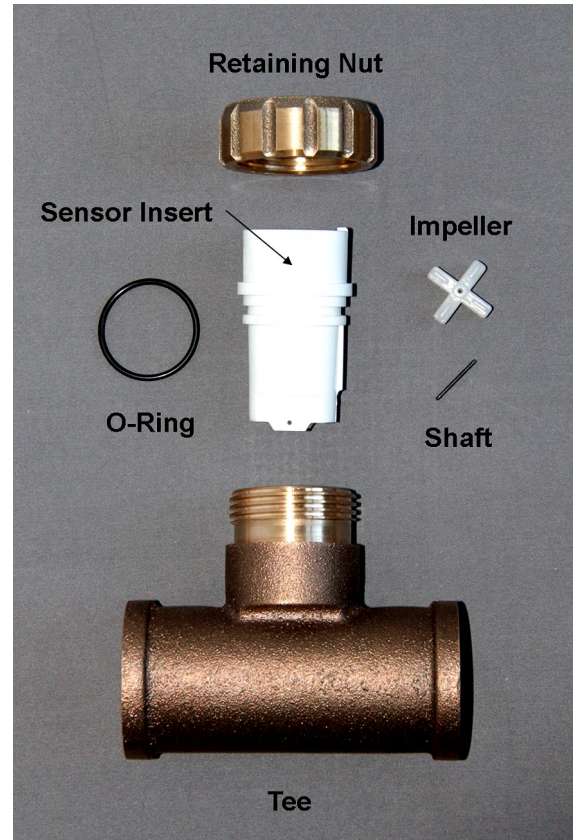
- Quiescent current 120 uA@8 VDC to 35 VDC max.
- Off State (VHigh) = Supply Voltage - (120 uA X Source Resistance)
- On State (VLow) = Max. 0.85 Volts@50mA (10Ω+0.7VDC)

### Flow Range

- 1" — 0.8 to 50 gpm ( 3 to 190 lpm)
- 1.5" — 3 to 90 gpm (90 to 340 lpm)

### Electrical Cable

- Standard electronics –001 version is equipped with 2 single conductor solid copper #18 AWG leads with direct burial insulation.
- Lead length 48 inches.
- Wiring may be extended up to 2,000 feet with direct burial, twisted pair shielded cable.



## Ordering Information

	Description	Part number
	Complete flow sensor	1" FSI-B10-001 1.5" FSI-B15-001
	Flow sensor insert only	FSI-EAB-001
	Impeller Repair Kit	FSI-T00-001