



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 PVC sensor with socket connections is offered for service in PVC piping systems.

Designed by the same team who created the original impeller flow sensor, this sensor is a completely new custom molded 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.

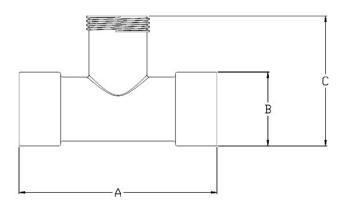
The key elements of this new technology are a proprietary mounting tee, ultra-lightweight impeller and solid state sensing electronics giving the FSI series sensor improved performance.



Applications

- Flow sensing applications in PVC piping systems above and below grade
- Flow sensing input to irrigation control systems
- Flow sensing input to pump monitoring or control systems
- Flow sensing applications for water recycling, water harvesting or water reclamation applications

Flow Sensor Dimensions



| SIZE | A | B | C |
|--------|----------|----------|----------|
| | LENGTH | DIAMETER | HEIGHT |
| 1" | 5.625" | 1.710" | 3.487" |
| | (143 mm) | (43 mm) | (88 mm) |
| 1 1/2" | 6.188" | 2.310" | 4.065" |
| | (157 mm) | (58 mm) | (103 mm) |
| 2" | 7.00" | 2.875" | 4.573" |
| | (178 mm) | (73 mm) | (116 mm) |

Allow 334" clearance above the branch of the tee to remove flow sensor insert for service.



Specifications

Flow Range

- 0.25 to 15 FPS
- Pressure Rating
- 240 PSI Maximum working pressure
- **Temperature Range**
- 32°F to 140° F (0° to 60° C)

Wetted Materials

- Impeller HDPE (High Density Polyethylene)
- Mounting Tee Type 1 PVC
- O-ring BUNA N
- Retaining Nut Type 1 PVC
- Sensor Insert Type 1 PVC
- Shaft Tungsten Čarbide

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 µA X Source Resistance)
- On State (VLow) = Max. 0.85 Volts@50mA (10Ω+0.7VDC)

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

Ordering Information

| d'a | Description | Size | Part number |
|---------------|-------------------------|------------------------------|---|
| A Contraction | Complete flow sensor | 1 inch 11⁄2inch 2 inch | FSI-T10-001 FSI-T15-001 FSI-T20-001 |
| | Flow sensor insert only | - | FSI-EA0-001 |
| | Impeller Repair Kit | | FSI-T00-001 |



