FSI-S-SP3 Series
Pulse Output PVC 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 related industries. The term sensor is used because this measurement device produces an output signal rather than a visual display of flow..

The PVC saddle type sensor may be used on schedule 40 and 80 and all class rated PVC piping systems.

The SP3 version features a scaled output signal where 1 pulse = 10 gallons of flow.



This signal is compatible with all Hunter Hydrawise irrigation controllers and other devices that require pulse type inputs.

The flow sensor insert, held in place with a retaining nut, contains the detection circuitry and carries the unique four-bladed impeller on a transverse axle. The insert and mounting saddle are fabricated to form an integrated measurement chamber resulting in highly accurate, repeatable flow measurements through a wide range of velocities. The axle and impeller along with the sealing o-ring are replaceable in the field.

Advantages of impeller sensors over water meters

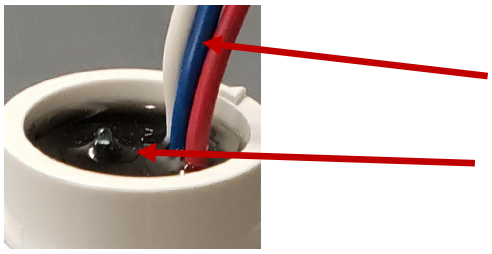
- Measures a much wider range of flows
- Operates without pressure loss
- Higher pressure rating - 240 psi
- Easy to install, no special fittings required
- Simple to clean or service



The insert mounts in a housing that controls the depth and alignment of the impeller, unlike insert type sensors that may be mis-aligned or set to the wrong depth. The housing is permanently attached to the PVC saddle therefore no additional mounting hardware is required.

Flow Range : 1/4 to 12 FPS equivalent to	6 to 300 gpm (23 -1135 L/min)	in 3 inch sensor
	10 to 480 gpm (38 -1817 L/min)	in 4 inch sensor
	45 to 1080 GPM (170-4090 L/Min)	in a 6 inch sensor

Easy to Identify



- SP3 sensors have three wire leads with red, white and blue insulation
- SP3 sensors have a green LED located in the epoxy at the top of the sensor

Creative Sensor Technology, Inc.
www.creativesensortechnology.com
Email; info@creativesensortechnology.com Ph: 508-763-8100

Specifications

Flow Range
- 0.25 to 12 FPS

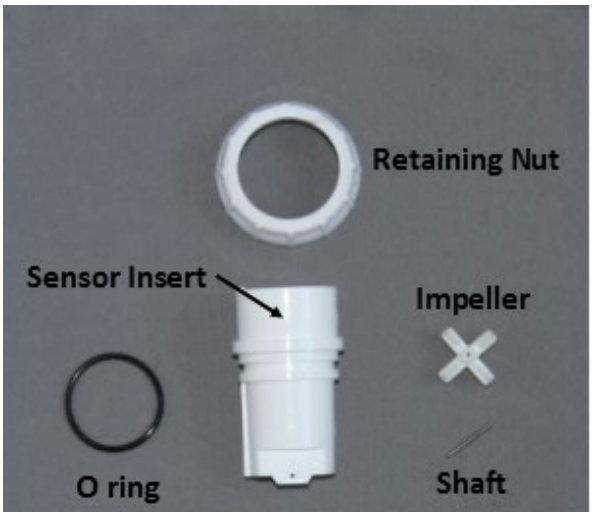
Pressure Rating
- 150 PSI Maximum working pressure

Temperature Range
- 32ºF to 140º F (0º to 60º C)

Wetted Materials
- Impeller – HDPE (High Density Polyethylene)
- Mounting saddle - Type 1 PVC
- O-ring — BUNA N
- Retaining Nut — Type 1 PVC
- Sensor Insert — Type 1 PVC
- Shaft – Tungsten Carbide

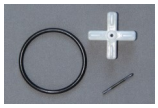
Output Signal
- **Range:**
  0.0 Hz to 240 PPM (4 Hz)
- **Transducer excitation**
  24 VAC - 5 mA RMS (typ.)
- **Signal Output (open-drain FET)**
  Vmax. (switch open) = 45 VDC
  Imax. (switch closed) = 50 mA
  Vlow (switch closed) = 1.0 V @ 50mA (typ.)

Electrical Cable
- SP3 electronics –SP3 version is equipped with 3 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 triad shielded cable.





Ordering Information

	Description	Size	Part
	Complete flow sensor	3 inch 4 inch 6 inch	FSI-S30-SP3 FSI-S40-SP3 FSI-S60-SP3
	Flow sensor insert only * add saddle size 3, 4 or 6 as shown		FSI-EA0-SP3* FSI-EAO-SP3 S30 FSI-EAO-SP3 S40 FSI-EAO-SP3 S60
	Impeller Repair Kit		FSI -T00-001

Creative Sensor Technology, Inc.
www.creativesensortechnology.com
Email: info@creativesensortechnology.com Ph: 508-763-8100