Creative Sensor Technology

Flow Sensors & Accessories

- Conserve Water & Reduce Costs
- Best Technology for Irrigation Use
- Compatible with All Controllers
- Reliability Backed by Lifetime Warranty

Residential | **Sportsturf** | **Commercial**







Why add flow sensors to your controller?

Flow sensors, aka flow meters, measure the flow of water through irrigation systems. They are installed in the main line at the point of connection (POC) with the water source, usually with an master valve (MV) that can close off the flow if a problem occurs. The Flow sensor's output signal goes to an irrigation controller, or other control device.

The controller monitors the water flow to conserve water and reduce waste in several ways:

- **Detect leaks** – Controllers learn expected flow rates. Higher than normal flows mean broken sprinkler heads, cracked risers, or stuck valves, wasting water. The controller closes the master valve shutting off flow, then sends an alarm message by text or email, **pro-actively preventing problems.**
- **Notice changes in flow conditions** – Monitoring flow helps the water manager spot changes in application rates caused by changes in water pressure, **preventing overwatering, underwatering and weakening plants.**
- **Identify unscheduled water flow** – Controllers learn when water should be running. If they read flow when the controller should be off, they close the master valve and send an alarm, **saving water & money**.
- **Protect plant life** – Measuring flow protects plant material from wilting or dying because a zone valve failed to operate, or drip emitters or filters are plugged. Flow sensors **detect problems early. Healthy plants - happy customers.**
- **Create flow logs and management reports** – Water managers can create use reports to comply with water supply regulations.

Why use CST flow sensors?

CST Flow Sensors have been specifically designed for irrigation service. They use the proven impeller technology producing a two-wire digital signal proportional to the flow rate that is compatible with most irrigation controllers.

What makes CST sensors different?

- An ultra-lightweight impeller, custom molded housings and unique electronic detection circuits that allow them to detect lower flows than any other impeller sensor.
- Higher operating pressure ratings than other flow sensors.
- Electronics designed and built for the harsh underground environment of irrigation systems.
- Reliability proven by 10 years of irrigation service and backed by a lifetime warranty against electronic failure.



FSI SERIES

FSI-Tee type PVC sensors socket weld to PVC pipe.

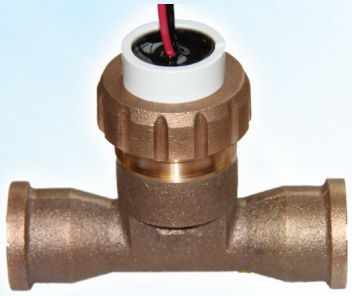
Size	Model number	Flow range in GPM
1 inch	FSI-T10-001	0.8 to 52
1 1/2 inch	FSI-T15-001	1.8 to 108
2 inch	FSI-T20-001	2.8 to 170



FSI-Saddle type sensors for larger diameter PVC pipe

Drill a 1 3/4 " hole in the pipe and attach the saddle around the pipe. Easier to install than socket weld or flanged fittings

Size	Model number	Flow range in GPM
3 inch	FSI-S30-001	6 to 300
4 inch	FSI-S40-001	10 to 480
6 inch	FSI-S60-001	45 to 1100



FSI-brass type sensors for metallic piping systems

Feature threaded connections for use inside buildings or where lead-free brass is specified

Size	Model number	Flow range in GPM
1 inch	FSI-B10-001	0.8 to 50
1 1/2 inch	FSI-B15-001	3 to 90

Measure flow rates as low as 0.2 gpm and as high as 20 gpm. The ELF combines professional grade quality and performance at a residential price.



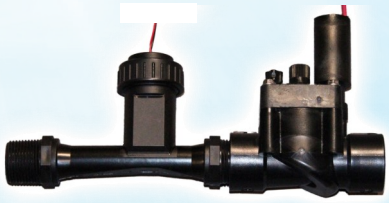
ELF-T75-P01 ¾ inch PVC tee type with socket connections



ELF-T10 N01 1 inch male thread Noryl tee

Design of tee straightens the water flow through the sensor eliminating the need for straight pipe before & after the sensor

A threaded master valve may be connected to the downstream side of the flow sensor allowing the combination to fit in one rectangular valve box



SP3 SCALED PULSE OUTPUTS AVAILABLE

All CST flow sensors; FSI series PVC Tees, PVC saddles, and Brass Tees and both ELF Tees are now available with optional scaled pulse circuits. Order the model with **SP3** as the suffix to get scaled pulses for use with Hunter Hydrawise controllers.





All sensors with the SP3 circuit have three wire connections, colored Red, White, and Blue.

Connecting Devices

CST transmitters are designed to make adding flow sensors easier. They overcome the obstacles found in new and retrofit installations. Made to the same rugged standards as our flow sensors they feature LED indicators to make installing and troubleshooting easier.



More than one point of connection (POC)? Use the **Combiflow CBF-102-00** to combine the signals from two different flow sensors into one input. Sensors don't have to be the same size or type. If either POC is flowing water, or they both are, the Combiflow scales the signal into a single output.



More than one controller or device sharing the same point of connection (POC)? Use the **Isoflow** to isolate the signal from the flow sensor and split it into two or more outputs. The **ISO2 ISF-302-00** has two outputs while the **ISO4 ISF-304-00** has four. Both models have the ability to sense which controllers are operating and block the flow to the others so they don't send false alarms. In addition, the **ISO4** also isolates the master valve when more than one controller is operating at once.



Trying to retrofit flow sensors to an existing system but can't get wires back to the controller without cutting pavement or hardscapes? Use the Pathway **PWY-400-S01** system to use existing zone wire as a network to send flow data and master valve.

Control from the POC to the controller location. The **Pathway** can make the existing zone valve wire and common operate the zone valve, new master valve and new flow sensor as if you installed new wire. Pathway is a quick and cost effective way to add flow monitoring and control to existing irrigation systems.

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For more detailed information, specifications, installation guides or design details, visit our website at www.creativesensortechnology.com.