

Retrofitting a McCrometer Transmitter to a McCrometer Propellor Flow Meter

Many jurisdictions in the Western United States require the use of totalizing irrigation water meters at irrigation installations to monitor and regulate water use. There are many instances where the specific brand and type mandated by regulatory agencies is the McCrometer Propellor Flow Meter.

Agri-Inject markets the Reflex Variable Rate Fertigation system for the precision application of agricultural chemicals. In many applications, the Reflex system modulates chemical application rate in proportion to irrigation water flow rate. To that end, the Reflex system requires an electronic input indicative of instantaneous water flow rate.

McCrometer manufactures and markets a device, a transmitter, that enables a standard totalizing Propellor Flow Meter to provide an instantaneous electronic flow meter signal in addition to the standard mechanical analog totalizing function. The transmitter is easily retrofitted to an existing Propellor Flow Meter while the Propellor Flow Meter is installed in the irrigation water pipe. The installation of a transmitter in no way alters the function, capability, range, or accuracy of the existing installed Propellor Flow Meter.

Agri-Inject advocates for the installation of a transmitter onto an existing installed McCrometer Propellor Flow Meter in instances where a grower needs an electronic flow signal. By using the existing flow meter, the grower can avoid the purchase, installation, and maintenance costs and complications associated with an additional flow meter, and can instead leverage functionality from a device he already owns. As the transmitter retrofit does not change the original intended function of the McCrometer Propellor Flow Meter and further that the transmitter retrofit uses parts manufactured by McCrometer specifically for this purpose, Agri-Inject requests that regulatory agencies allow these retrofits.

In many jurisdictions, the totalizing water flow meter is, in essence, performing the function of a “custody transfer metering device”. As such these flow meters are often equipped with a tamper evident seal after installation and calibration. The addition of a transmitter to an existing sealed flow meter requires breaking the tamper evident seal. Where flow meters are installed with tamper evident seals, Agri-Inject strongly encourages growers to seek permission and guidance from the appropriate regulatory authority before installing a transmitter.