

# Isolating and converting a flow meter output

## APPLICATION A167

Type of Company: Cemetery

Location: California

Our customer is a consultant for a cemetery, currently using an older irrigation system. Older systems typically need a booster pump installed to increase, or “boost” the water pressure of the sprinkler system. The pump pulls water from the municipal system and then pushes it into the irrigation system at a higher volume and pressure than the main water line alone. Increased pressure improves the spray distance and performance of the sprinkler heads allowing for better coverage and reduction of annual system water usage.

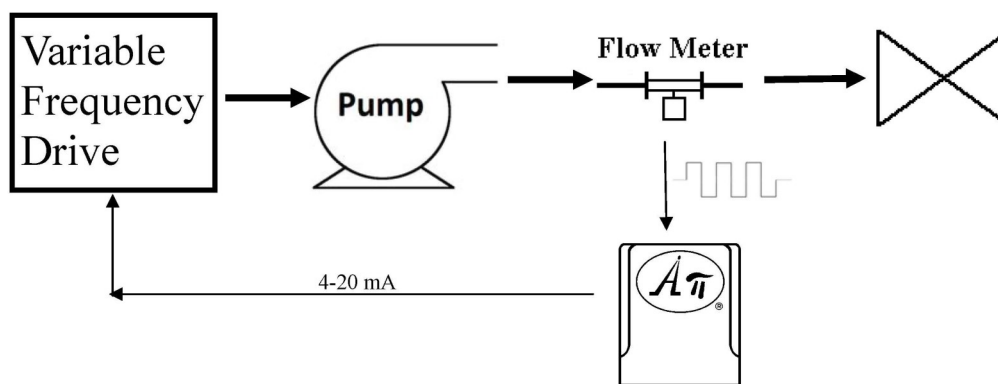


By Luigi Cimadomo - Flickr: P7280579, Wikimedia Commons.

## The Engineering Issue

The system uses a Yaskawa variable frequency drive (VFD) to power the pump and a Data Industrial flow meter to monitor water usage.

- The engineer has a requirement to convert the flow meter’s frequency output signal to a 4-20 mA input signal for the VFD.
- The device not only needs to convert the output from the flow meter but also isolate the signal to the VFD drive.



Since they need both conversion and isolation, they chose an API 7010 G. This module was factory-calibrated for their specific range requirement, making for ease of installation / setup. The unit is “hot swappable” for minimum downtime in the event of power spikes or storms.

**Problem. Solved.**