



TO: Larry Flanagan

FROM : Richard Neff

Re: Flow Switches

Larry,

Beginning in 1986 Irrigation Craft used paddle flow switches from almost every available source we could find. All brands had serious problems, so all we could do was pick the switch that bothered us least. We complained to the manufacturers trying to get them to improve their flow switches but to little avail. Worse yet, the prices were high by our estimation.

Two years ago we began looking at calorimetric based switches as we desperately sought to escape the problems we were having, especially in large pipe sizes 3" and up. We purchased and performed field trials with calorimetric flow switches from three manufacturers.

A calorimetric flow switch from one of the largest sensor manufacturers in the world had an 87% failure rate within six months, and 100% within 1 year. That surprised us. The manufacturer took some of the switches back and refunded part of our money.

Another brand of calorimetric flow switches had a failure rate of about 20% within 1 year. The main problem with that flow switch however was the difficult set up. A sharp person must carefully read the instructions repeatedly to make adjustments, and providing telephone support for such a device seemed impossible.

The third calorimetric flow switch was the Captor. In the first year we had a 2% failure rate out of 100 flow switches installed, and one of those two failed sensors we know was the result of a moderately serious electrical transient resulting in tripped circuit breakers. Even more remarkable was the fact that every failure of another brand resulted in a Captor being installed in its place, and not one of those Captor flow switches has failed in 1-1/2 years.

Best of all, the Captor is the simplest flow switch to set and adjust of all the brands. A sharp person could even set this switch without instructions. I feel relaxed about our flow switches for the first time in 13 years. Moreover, our equipment is more flexible because the Captor allows us to tune our controls to meet any possible field condition.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "Richard Neff", written in a cursive style.

Richard Neff