



GRUNDFOS Direct Sensors™ in Swiss Temperature Control Units, Chillers and Control Systems from REGLOPLAS

The situation

REGLOPLAS is a BRAND known for Swiss quality within Temperature Control Units for more than 50 years. REGLOPLAS offers equipment synonymously with precision, long service life and versatility for it's customers.

REGLOPLAS was looking for a flow sensor, which could be used up to 160°C to standardize their usage of components. The market offered many solutions, but none of them were industrialized to the level that REGLOPLAS were looking for, and which REGLOPLAS was comfortable with integrating.

The Grundfos solution

GRUNDFOS Direct Sensors™ had for some years worked with increasing the operating temperature of it's sensors. "Our sensors made out of composite have since we started selling in 2005 been able to go up to 100°C. When we first entered the Temperature Control market we soon learnt, that 120°C was minimum expectation level for the majority of the market", MD Klaus Kattenhøj. When Our Sales Manager Igor Radovic returned from the visit at REGLOPLAS, we were told that to be considered a supplier to REGLOPLAS we

Topic:

Temperature Control Units, Chillers and Control Systems

Location:

Worldwide

Company:

Regloplas AG

needed to develop a solution that could operate up to 160°C. With more than a million sensors in the field operating up to 120°C, we were confident that we at least could try to establish a solution”, Chief Engineer, Dr. Per Andersen. “We made some short term tests, and soon found that after changing some electronic components and using PPS for insert material, that the real limiting factor was our seals.” T-KAM Olivier Legrand. We not only had to test the sensor with new O-rings etc, but we also had to make an entire new test area, which could go up to 160°C”

The outcome

GRUNDFOS Direct Sensors™ started selling the 160°C sensors to a few selected customers from the end of 2017 after having made several short term tests. We however, did not know for sure that we had a volume solution, before the end of 2018, where the sensors had been operating 1 year under stressful conditions including rapid temperature cycles. And what is better, than to use your customers solutions for the testing.

The 160°C solution has opened up the market for sensors into the majority of the Temperature Control Unit market from 2019.

Quotes

Mr. Kuhn, Director Research & Development, Regloplas AG:

“The cooperation with GRUNDFOS was a complete success. Together we developed a flow sensor for up to 160°C water application. Regloplas uses this sensor now in high quantity for pressurized water units and especially for the manifold system called “multiflow” (see photos). The unique “multiflow” is increasingly used for casting machines and injection molding machines.”

Additional images



Innovation tour and follow up on 160°C longevity test facility running on REGLOPLAS units at Grundfos.

