

---

# Sensor in state of the art compact boiler module

## THE SITUATION

Grundfos is always looking for ways to optimize their products making them more compact, efficient, and enabling saving through simplification of the assembly process. Grundfos has found a need for more compact boilermodules, which are able to control the production of domestic hot water in a reliable, accurate and fast way, as well as enabling diagnostics on the critical central heating circuit.

## THE GRUNDFOS SOLUTION

At Grundfos Sensor A/S a Vortex based Sensor (VFS) has been developed which combines flow and temperature measurement in one sensor. The VFS enables fast and accurate response to hot water consumption, increases hot water efficiency and prevents scoldering by combing flow and temperature.

When making Integrated Water Circuits more compact a reduction in the number of sensors used can be a way for reaching this goal. By using the VFS which combines flow and temperature measurement you make two other sensors obsolete by taking the best of both worlds

## THE OUTCOME

The mix of the Grundfos Pump Circuit and Grundfos' Vortex Flow Sensor has resulted in the Multipurpose IWC, which saves cost through elimination of solitary temperature sensors and enables more compact boiler systems. The integration of a temperature sensor enables better control of the burner and lowers the power consumption. By using the VFS it is possible to achieve faster and more accurate response to hot water consumption and since the VFS is a steadystate flowsensor it is possible to operate on the hot water side to increase hot water efficiency without any clogging or drift over time.

---

### TOPIC:

Only steadystate flowsensor able to operate on hot water side to increase Hot Water Efficiency. Combisensor (flow and temperature) enables fast and accurate response to hot water consumption.

---

### LOCATION:

---

### COMPANY:

Grundfos Sensor A/S

---