



Level



Pressure



Flow



Temperature



Liquid Analysis



Registration



Systems Components



Services



Solutions

Prosonic S FDU90

Inexpensive volume measurement at storm water basins with ultrasonic level sensor



In the city of Weinheim, located in the German state of Baden-Württemberg, the Bergstrasse Sewage Authority operations, following a performance evaluation, was proven to have one of the best treatment efficiencies.

To do justice to this claim in all disciplines, the Bergstrasse sewage authority puts its trust in ultrasonic measuring technology and instruments from Endress+Hauser.

The Weinheim city drainage system in numbers:
243 km long canal network, 11 sewage pumping stations, 6 flood basins, 2 stormwater detention basins, 230,000 residents served by the treatment plant

In wastewater treatment plants and sewer systems, numerous measurements are performed in hostile environments. One example is the level and volume measurement in storm water basins.

During heavy rain, the storm water basin provides storage space, relieving the treatment plant. This relief structure then directs flow to the treatment plant. If the basin is full to capacity, any overflow must be directed into a body of water, known as the receiving water.

Customer needs:

- reliable, inexpensive volume measurement at the storm water basin



Endress+Hauser 

People for Process Automation

Inexpensive volume measurement with ultrasonic level instrument

Solution and Equipment

The Prosonic S FDU90 is designed specifically for small measurement ranges up to 3 meters of liquid depth and is therefore predestined for measurements in open ponds, flumes, weirs belonging to a sewer system. The low profile and reduced block distance to 7 cm also allows use in confined spaces. In addition to flush mounting with G1½" thread, there is the possibility of a direct wall mounting with G1" thread or with available brackets. Other necessary accessories are available which can also help in saving money.

A novelty is the optional submergence shield that protects the sensor membrane from contamination and allows a reliable evaluation of flood events in conjunction with the Prosonic S FMU90 evaluation.

Benefits with Prosonic S

- Suitable for use in hostile environments (ATEX II 2G)
- Simultaneous level and flow measurement in open channels and weirs with a sensor
- Bright and chemically-resistant PVDF prevents heating of the sensor under sunlight
- Suitable for harsh environmental conditions thanks to the separate transmitter
- Built-in heater to prevent ice formation on the sensor (optional)



“The Prosonic S FDU90 sensor is ideal for level measurement at rain overflow basins. The weather-resistant sensors are reliable and are equipped with special features, like a flood sleeve to protect signal processing.”



Peter Holzschuh,
Pumping stations
department
Bergstrasse Sewage
Authority