

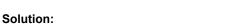
Application Reference

Reliable Technology for Open Channel Flow Measurement



Application Problem:

Open channel flow instruments require accurate measurement of the surface level of a liquid. A flume, channel or structure which has a known characteristic flow per measured head, together with the measured liquid level, accurately define the flow rate through the system. Traditional systems use a stilling well and pressure level measurement system to measure the liquid level in the structure. Sedimentation and buildup will over time cover the sensing part of a pressure measurement system, leading to inaccurate or completely failed measurement. Buildup can also block passages to a stilling well, making any level measurement inaccurate or false. Regular cleaning of measurement systems and stilling wells is required to ensure operation.



Hawk uses a non-contact Acoustic Wave sensor, positioned directly over the channel or flow structure, or above the stilling well if required, to provide maintenance free, reliable measurement of the liquid level. The Hawk Sultan Flow instrument calculates flow through a range of standard measurement structures, and can also be individually tailored to a non-standard flow characteristic. Measurements are temperature compensated, and sensors are available covering a broad range of water, waste-water, irrigation and environmental monitoring applications. Powerful measurement pulses keep sensor facings clean of moisture and condensation, ensuring maximum performance in all conditions. Continuous and switched outputs are included, as well as local totalizing of flow, and the ability to provide pulsing outputs per flow volume to external counting devices.



Remote system Amplifier:
AWFR234SUXXXX
Transducer for water applications <2m:
AWRT30T6TB20XC6XF
Transducer for water applications 2-5m:
AWRT30T4XXXC6XF
With C04-4 cone.
Transducer for waste water applications:
AWRT20T4XXXC6XF
With C04-4 cone.

Hawk is a world leader in level, position and flow measurement, providing cutting edge equipment to the global industrial market. We have 30 years of experience and a record of success in a wide range of areas including mining/mineral processing, water supply/waste water, bulk material handling and chemical. Our on-going commitment is to provide industry leading technology and cost effective solutions.









Transducer for water

AWRT30T6TB20XC6XF

applications <2m: