



# AVK SMART WATER DIGITAL MONITORING

AVK Smart Water is a new concept consisting of battery - operated wireless sensors which are data-collection ready, and a software platform for visualising the complex data, turning it into valuable insights.

The sensors are developed for AVK core products such as gate valves, fittings, and hydrants. When installed, the sensors will provide data directly from applications in the water distribution network and send the data to the dedicated software platform. This digital monitoring solution makes it possible to optimise the operation of a water network by:

- Saving resources
- Reducing water loss
- Optimising the general planning and operation activities within the network

**Monitor with state-of-the-art Technology**  
By installing AVK Smart Water sensors in the

distribution network, utilities can achieve a transparent network that makes it possible to remotely monitor and diagnose problems, prioritise, and manage maintenance issues, and optimise the entire network's efficiency.

AVK Smart Water sensors include:

- VIDI Positioner for valves and hydrants
- VIDI Open/Close
- VIDI Flow, VIDI Pressure and VIDI Temperature
- VIDI Level

The sensors send data to VIDI Cloud, a software platform developed and provided by AVK Smart Water. Through an API, the sensors can also send data into your preferred IT system. This makes it easier to compare data and compile a complete overview of the distribution network.

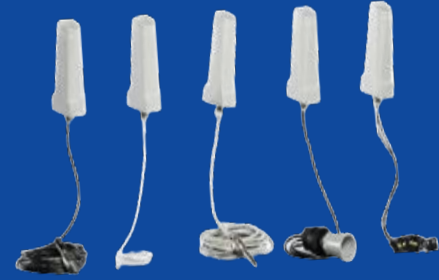
Through digital monitoring, AVK Smart Water paves the way for:

- Reduced water loss from leaks
- Increased workflow efficiency
- A clearer overview of network conditions



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There are many ways that AVK's Smart Water can monitor networks, including:

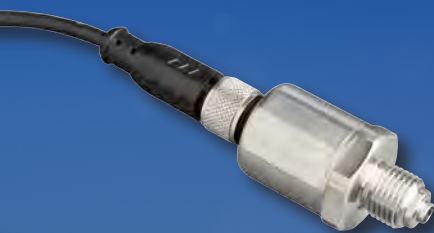
#### **VIDI Flow**

VIDI Flow provides regular data sets detailing how much water is flowing in or out, depending on where it is installed. By using VIDI Flow to measure the water flow, utilities can detect anomalies earlier and improve the resilience of the distribution network.



#### **Increase the Quality of Data with VIDI Positioner**

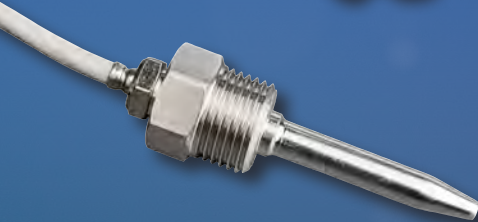
VIDI Positioner will provide utilities with valuable insights by digitally monitoring the position of valves. With its open/close feature, VIDI Positioner can detect whether the valve is opened, closed, or any percentage in between.



#### **Increase Water Supply Efficiency with VIDI Pressure**

VIDI Pressure helps utilities monitor the pressure level in the water distribution network. With the information from VIDI Pressure sensors utilities will know when to regulate pressure, and thereby:

- Reduce stress on infrastructure
- Extend assets' lifetime
- Minimise maintenance costs
- Reduce water loss
- Minimise risk of water contamination
- Reduce energy consumption



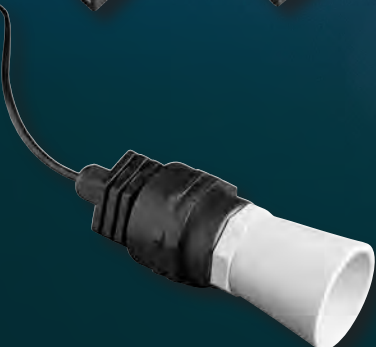
#### **VIDI Temperature**

A huge part of ensuring clean drinking water depends on a controlled temperature all the way from the suppliers to consumers. VIDI Temperature can track water conditions within the network, so that utilities can make informed decisions based on data directly from the water pipes about whether the temperature is too high or too low.



#### **VIDI Open/Close**

VIDI Open/Close can be used with several valve types, for example, on a regular gate valve with a handwheel or on a swing check valve with a lever. The most beneficial place to install an open/close sensor is on critical valves that need monitoring 24/7. With the VIDI Open/Close sensor installed on these key assets, utilities will receive regular and reliable information about the open/close position of these assets.



#### **VIDI Level**

VIDI Level makes it possible to remotely monitor sand traps, helping utilities avoid unnecessary inspections while giving a clear view of sand levels. A VIDI Level sensor can be used in different applications such as:

- Level of sand in sand traps
- Level of water or wastewater in buffer tanks or basins
- Level of water in pits, wells, and chambers
- Level of water in lakes and streams