

Borehole monitoring

One of the most common ways to determine if water is located in an area is to drill, sink or dig a borehole and to use level instrumentation to determine the water level.

Borehole monitoring may be as simple as taking a measurement with a dip tape to see how far below the surface the water table starts.



Yet, more meaningful data on how deep the water reservoir reaches and on its historical performance in terms of water extraction and precipitation is desirable. To know not only where the water table is, but also to know how it responds seasonally and after storms, rain or water extraction is essential to provide a stable water supply.

Therefore level probes respectively submersible pressure transmitters are used very commonly for borehole monitoring.

These hydrostatic level transmitters may be mounted below the surface of the groundwater to allow borehole monitoring. They do not only show where the water level is in relation to the surface, thus not only measuring its distance, but also the drawdown effects of extracting water, the recovery time of the reservoir and how it is effected by local precipitation due to rain or snow.

Boreholes for monitoring, deep bore wells and monitoring wells are often very small in diameter so the submersible pressure transmitter needs to be very slim, so it can be lowered down a small diameter hole and follow any eventual curves in the tubing underground.

Hydrostatic, submersible level transmitters are therefore ideal for this application, as they can be manufactured with a very small diameter body and with a rounded or tapered top and bottom to help them moving their way down a narrow diameter borehole or a stilling tube mounted in bigger wells.



Please find further information on this topic on our information platform www.wika.com/hydrostatic-level

Application Note



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