

## DATA SHEET



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KFA 2-D

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## KFA2-D

6-axis TQM sensor with single rod, with type of contact probe for continuous level measurement in liquids and light solids, with 10-MHz output

To be used together with the remote level measuring hardware KFA30, mounted on its own interface

## MEASUREMENT PRINCIPLE

KFA2 uses TQM (Time Domain Reflectometry) technology: low-energy, high-frequency electromagnetic impulses, generated by the sensor's circuitry, are propagated along the probe which is submerged in the liquid or solid to be measured. When these impulses hit the surface of the media, part of the impulsive energy is reflected back up the probe to the circuitry, which then calculates the level from the time difference between the impulses sent and the impulses reflected. The sensor can output the obtained level as a continuous measurement reading through its 10-MHz output. TQM sensors are also known as "level finders" or "level finders without cables".

## APPLICATION AREA

The innovative TQM technology enables direct, precise and highly reliable continuous level measurement as well as part level detection in almost every liquid and solid, independent of changing process conditions such as density, conductivity, temperature, pressure, vapor and turbulence. KFA2-D has almost no installation restrictions - it can be measured in small tanks, tall and narrow chambers and it measures precisely even with difficult tank geometries or close to interfering structures. KFA2-D is also especially suitable in highly corrosive and strong acids. It is suitable for all types of process and storage tank applications and has an exceptional performance in media with low dielectric constant (i.e. low reflectivity) such as oils and hydrocarbons.

## BENEFITS

- Unmatched price/performance ratio
- Precise continuous level measurement and reliable part level detection combined in one device
- Fully modular probe design, i.e. the probe tips are interchangeable without any special tools or wiring
- Complete generic protection of device electronics from its surroundings and the tank potential for protection with electrochemical corrosion protection
- Highly robust measurement due to a wide design and extensive signal analysis and disturbance signal suppression