More Precision.

capaNCDT
High resolution capacitive displacement sensors and systems.
System structure

capaNCDT 6350 is a single-channel measurement system with modular designed signal conditioning electronics installed in an aluminium housing. The sensor operates using a high power DSP (Digital Signal Processor) and achieves up to 50kHz (-3dB) bandwidth at the analogue output. The capaNCDT 6350 series is used for demanding measurement tasks and can be used with nearly all capaNCDT sensors. The system can be adjusted to suit particular target geometries using special tuning.

A measuring system consists of:
- capacitive displacement sensor
- sensor cable
- signal conditioning electronics

Accessories:
- power supply cable and signal output cable
- power supply
- synchronisation cable

Block diagram

Controller DT 6350
Power supply: 24 VDC
Output: 0-10 V

- One of the fastest capacitive controllers in the world, ideal for the measurement of high dynamic processes
- Bandwidth 50kHz
- High functionality due to integrated DSP
- High zero point stability & accuracy
- Unmatched temperature stability
- Simple measuring range change (50 / 100 / 200 %) using DIP switch
- Selectable cable length (0.5 / 1 / 2m) without recalibration
Measuring Range Change

The standard measuring range of the sensor can be adjusted using DIP switches in the controller. If the measuring range is halved for the complete output voltage, the resolution increases. The resolution is reduced correspondingly if the measuring range is doubled.
High performance sensors made by Micro-Epsilon

Sensors and systems for displacement and position

Sensors and measurement devices for non-contact temperature measurement

2D/3D profile sensors (laser scanner)

Measurement and inspection systems for quality assurance

Optical micrometers and optical fibers

Color recognition sensors and LED analyzers