

## Product Information D3

## Differential Pressure and Level Sensor D3



## Range of applications

- Hydraulic level measurement in environments with temperature fluctuations
- Differential pressure measurement in tanks up to 100 °C (212 °F)
- Hydraulic level, volume and mass measurement in process vessels

## Application examples

- Hygienic differential pressure and level monitoring for products in food, pharma and the food and beverage industry
- Pressure drop measurement in pipelines

## Hygienic design/Process connection

- Hygienic process connection with 1/2" NPT
- Conforming to 3-A sanitary standard (the version with 3/8" NPT has 3-A sanitary materials are FDA certified)
- Sensor completely made of stainless steel
- Complete overview of process connections see order code
- The Anderson Hesse 3-A Hygiene system offers a flow-optimized hygienic and easy-maintenance installation solution for sensors.

## Features

- CE-ERP clearing up to 100 °C (212 °F) for 60 minutes max.
- On-site differential pressure measurement with 2 analog outputs (differential pressure and/or in total pressure as required)
- The intuitive user interface makes setup and configuration easy
- Due to the modular system, sensor components can be replaced in the field
- Improved temperature compensation enables temperature independent differential pressure and/or level measurement
- Configurable on-site integrated display in HART protocol - including functions of 10.1 and units of measure
- Direct display of volume and mass measurement values as required
- The default and user-selectable tank geometries and product characteristics can be defined
- Proven flow IP 68K through patented dual wiring unit
- Dual loop output with HART 7.5 communication and graphical LCD display
- Large selection of measurement ranges

## Optional accessories

- Optional remote kit provides a separate version of the sensor and display
- Optional Pt 100 module (not available)

## Measuring principle of the pressure sensor

In the D3 system, each sensor uses an internal piezo electric signal converter and temperature sensor to measure the pressure and temperature of the liquid. The electrical signal of the pressure converter and the resistance of the temperature sensor are measured and converted to a compensated pressure value in the pressure factory. Both signals are transferred digitally to the head. They are then output in extended (and 4...20mA and HART 7.5) signal for the differential pressure and 0...5...20mA signal for the in- or total pressure.

## Approvals



## Differential pressure sensor D3 with two remote pressure transmitters



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