

## Product Information 03

FOOD

# D3 Differential Pressure & Level Transmitter NEW

**Range of applications**

- Level measurement vessels with continuous process temperatures up to 120°C (247°F)
- DDM as 121°C (250°F) for 1 hour when ambient is below 60°C (140°F)
- Differential pressure measurement across filters

**Application examples**

- Level monitoring in sugar culture vessels
- Level monitoring in fermentation vessels
- Scale feed monitoring in factor lines
- Level monitoring in filter tanks
- Pressure drop measurement across filters

**Keynote design/Process connection**

- Four flush, 2-4 installation for clarity Anderson flush fitting, DDM universal, or bare spot connections
- Conforming to 2-4 sanitary standard 3A-DG with Tri-Clamp® (DMC) design
- Product contacting material compliant to FDA
- Sensor and product contact surface made of stainless steel
- Available with over 100 integral hygiene connections, more available through GEMMAge adapters

**Features**

- Intuitive user interface makes set-up and configuration easy
- Electronic differential provides 2 analog outputs differential pressure and top or bottom pressure
- State of the art temperature compensation minimizes error in dynamic temperature applications
- Fully electronic differential allows field replacement of components and reparability
- Improved leak table allows volume and mass output when tank and product information are input
- Available in volume (mass and pressure)
- Pressure flush to ring, seal groove (IP68) top row protection
- Dual ring output with graphical LCD display

**Optional features**

- Optional digital remote for making display easier to view
- Optional PLC module contact available
- Wide range of rings and fittings available

**Measuring principle of the pressure sensor**

In the D3 system each sensor uses capacitance/force transducer to measure the difference between the atmosphere and process pressure. Additionally, a temperature sensor measures the temperature of the measurement fluid to provide an output compensation. The resistance temperature signal and the voltage signal from the transducer are inputs to a correction algorithm which provides a pressure output in digital form. The digital signal is transferred from each sensor to the head where the microprocessor determines the difference and converts the output to a 4-20mA signal for the difference and one for the head pressure or total system pressure depending on the user's selection.

1. DMK temperature of 121°C (250°F) for 1 hour when ambient is below 60°C (140°F)

**Authorizations****Differential Transmitter D3****Differential Transmitter D3**