

Product Information L3

FOOD

Pressure, Level and Volume Sensor L3

Range of applications

- Hydrostatic level measurement in dynamic temperature environments
- Pressure measurement in pipes and vessels up to 110 °C (230 °F)
- Hydrostatic level, volume and mass measurement in inventory silo's

Application examples

- Hygienic pressure and level monitoring for brewing, dairy, and food and beverage processing

Hygienic design/Process connection

- Hygienic process connection with CLEANadapt
- Conforming to 3-A Sanitary Standard for versions with DIRECTadapt
- All wetted materials are FDA-conform
- Sensor completely made of stainless steel
- Complete overview of process connections: see order code
- By using the Negele weld-in sleeve EMZ or the build-in system EHG a flow optimized, hygienic and easy cleanable measurement point will be achieved.

Features

- CIP-/SIP-cleaning up to 135 °C (275 °F) for 60 minutes max.
- Patented dual o-ring seals provide IP69K ingress protection
- Intuitive user interface makes set-up and configuration easy
- User adjustable potential free switch
- Field repairable and reconfigurable through modular design
- State of the art temperature compensation allows temperature resistant pressure, level and volume measurement
- On board interface or HART protocol allows reconfiguration including 10:1 turndown and the units
- Optional displaying volume and mass values directly
- Predefined and customer specific tank tables as well as product informations adjustable
- Standard HART 7.0 communication and graphical LC display
- Wide range of measurement ranges

Options/Accessories

- Optional remote kit provides a separate version of the sensor and display
- Optional M12 molded cordset available

Measuring principle of the pressure sensor

This unit utilizes an internal piezoelectric transducer and an RTD temperature element to measure the pressure and temperature of the internal actuating fluid. The mV signal of the transducer and resistance of the RTD are measured and converted to a compensated pressure value by way of the signal acquisition board in the stem. This signal is digitally communicated to the head where the signal is converted to industry standard 4...20 mA and HART 7.0 signals.

For relative sensors the back of the diaphragm is vented and the output is relative to the atmospheric conditions.

Authorizations



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L3 Remote version

