Precision Pressure Sensor

- Robust and accurate sensor for measurement of tank level
- Absolute gauging technique - sensor completely sealed
- Integrated temperature measurement and self calibration
- Made in Inconel - housing material resistive to any media
- Flush diaphragm and low movement - not affected by sludge or sediments
Technical data

Measuring data

- **Measuring principle**: Absolute pressure [no vent tube]
- **Pressure ranges (absolute)**:
  - 0.7...2.5 bar / 10...30 psi
  - 0.7...3.5 bar / 10...50 psi
  - 0.7...5.5 bar / 10...80 psi
- **Overpressure**: 5 x FRO

**Measuring accuracy**

- **Typical system accuracy (pressure)**: Better than \( +0.03\% \text{ of FRO} + 0.02\% \text{ of reading} \)
- **Sensitivity**: 3mV/V
- **Repeatability**: \( < 0.5 \text{ x error of measurement} \)
- **Accuracy [temperature]**: Better than \( +0.2^\circ \text{C} \) [Pt 1000 Class A]

Ambient conditions

- **Operating temperature range**: \(-40...+125^\circ \text{C} \) / \(-40...+260^\circ \text{F} \)

Product conditions

- **Media**: Measures all liquids, pastes and slurries

Materials

- **Diaphragm**: Inconel 625
- **Housing and flange**: Incoloy 825

Power supply and output

- **Connection**: Bayonet type 6 way shell size 10 or moulded cable, cut to fit EEx ia IIC T4...T6
- **Signal output**: 1...10 mV

Certificates and approvals

- **Ex approval**: EEx ia IIC T4...T6
- **Type approvals**: All major classification societies

Cargo level monitoring

With integrated temperature sensor and self calibration functionality, the P-105 offers reliable tank readings. As the pressure sensor is submerged, it is unaffected by foaming and heavy condensation.

Made in Inconel, the sensor is suitable for installation in tanks carrying acids. P-105 is also used in combination with level radars as a hybrid installation.