The 244LD LevelStar is designed to measure continuously level, interface or density for process and tank control. Its outstanding technical data makes it one of the best Level Transmitters in the market. The latest FDT/DTM technology is used to offer online recalibration and diagnostic. The transmitter theory is based on Archimedes buoyancy principle. It is very rugged, has a long life cycle and requires no maintenance. A wide range of materials allows the optimal adaption to the process. The 244LD LevelStar is extremely reliable and very precise even at extreme process temperature and pressure.

The 244LD LevelStar joins the experience of Foxboro® with most advanced FDT/DTM technology and is the premium product in the Foxboro level transmitter portfolio.

Summary

The Foxboro 244LD LevelStar is for measurement of level, interface or density of liquids, with high accuracy, even under difficult conditions such as high pressure, high temperature and corrosive liquids, even in explosive atmospheres.

Business Value

The extensive product line gives you solutions for almost every application.

Ruggedized design and high reliability, easy configuration via digital communication and local LCD, long design life and freedom from maintenance reduces the effective costs running your plant and increases its profitability.
244LD Level Star

In Process
- Process temperature
  -196 to +500°C (-320 to +932°F)
- Process pressure vacuum to 500 bar/ANSI Class 2500
- Measuring range
  0 to 50 mm up to 0 to 10 m / 0 to 2 inch up to 0 to 30 feet
- Material (process wetted)
  Steel 1.0460, Stainless Steel 1.4404 or Hastelloy C
- Accuracy ±0.2 %
- Sensor with no moving parts
- Reliable interface measurement – also at diffuse interface
- Rel. Humidity up to 100%, condensation permitted
- Electrical Classification Explosion Proof and Intrinsically Safe acc. to ATEX and FM
- Optional Heating Jacket

Electronic
- Output Signal linear or customized
- Communication
  - HART: Analog 4 to 20 mA
  - Profibus-PA and Foundation Fieldbus: based on Fieldbus protocol IEC 1158-2 according to FISCO, Base current 10.5 mA ±0.5 mA
- Two-wire transmitter,
  Power supply 12 to 42 V DC
- Protection of housing IP 66
- Temperature -40 to +85°C

Operation
- On the Instrument with push buttons and LCD display for configuration
- Digital with HART Hand Terminal or FDT/DTM Software for calibration and configuration
- LCD Display for Measured values, Status and configuration

Mounted e.g. at side of vessel, with displacer chamber 204DC and displacer 204DE

Influence in the Process

<table>
<thead>
<tr>
<th>Influence</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>very little influence</td>
</tr>
<tr>
<td>Pressure</td>
<td>very little influence</td>
</tr>
<tr>
<td>Steam, Fog</td>
<td>no influence</td>
</tr>
<tr>
<td>Dielectric constant</td>
<td>no influence</td>
</tr>
<tr>
<td>Foam</td>
<td>no influence</td>
</tr>
<tr>
<td>Vibration</td>
<td>minimized due to Smart Smoothing and Damping</td>
</tr>
<tr>
<td>Motion of Fluid</td>
<td>very little influence (if necessary use protecting tube or displacer chamber)</td>
</tr>
<tr>
<td>Diffuse Interface</td>
<td>no influence</td>
</tr>
<tr>
<td>Displacer stroke</td>
<td>Zero (no position alteration at liquid level change)</td>
</tr>
<tr>
<td>Corrosive Fluids</td>
<td>no influence (instruments are delivered in resistant materials)</td>
</tr>
<tr>
<td>Vessel material</td>
<td>no influence</td>
</tr>
<tr>
<td>Deposits on vessels</td>
<td>no influence</td>
</tr>
<tr>
<td>Deposits on displacer</td>
<td>very little influence</td>
</tr>
</tbody>
</table>