Foxboro® 244LVP LevelStar
HART Level Transmitter

The cost effective solution.
The 244LVP LevelStar is designed to measure continuously level, interface or density for process and tank control. The 244LVP is the proven alternative solution to guided micro wave or radar sensors. Process wetted parts consist of stainless steel 316L (1.4404) or Hastelloy C for the optimal adaption to the process at the lowest price. It is very rugged, has a long life cycle and requires no maintenance. The process connections are as DN 50 or DN 80 respectively 2” or 3” ANSI Class 300.
The 244LVP LevelStar joins the experience of Foxboro with most advanced FDT / DTM technology.

Summary
The Foxboro® 244LVP 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.
In Process

• Nominal widths DN 50 and DN 80 (2 inch, 3 inch)
• Process temperature -50 to +150°C (-58 to +302°F)
• Process pressure vacuum to 40 bar / ANSI Class 300
• Level measuring range 0 to 50 mm up to 0 to 3 m / 0 to 2 inch up to 0 to 10 feet
• At given level:
  – Measuring of density
  – Position of interface of two liquids
• Material (process wetted) Stainless Steel 1.4404 or 1.4571
• 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, FM, ...

Electronic

• 2-wire transmitter
• Output Signal linear or customized
• Power Supply 12 to 42 V DC
• Communication HART:
  Analog 4 to 20 mA
  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
• Upper part with LCD turnable to the operator

Influence in the Process

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Influence</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>Vibrations</td>
<td>minimized due to Smart Smoothing + 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</td>
</tr>
<tr>
<td>Vessel material</td>
<td>no influence</td>
</tr>
<tr>
<td>Deposits on vessel</td>
<td>no influence</td>
</tr>
<tr>
<td>Deposits on displacer</td>
<td>very little influence</td>
</tr>
</tbody>
</table>