Float & Tape Level Gauges

Features

- Float and tape gauge are applicable for up to 50 bar pressure and up to 400 deg cent
- NACE, H2S service compatibility applicable
- Applicable for refinery, petrochemical, chemical, power, radioactive, fertilizer, food, pharma, metal industry applications
- Options with switch version available

General

Float and tape Type level Indicator is the version applicable for level indication system in Water, Furnace oil, Chemicals, Acids storage tank level measurement.

Available in two types:
- Guided Type
- Unguided Type

Tank Gauge Installation:

Float and tape gauging is suitable for almost all product applications and tank types

- Accuracy ±2 mm with 400 mm
- Diameter float
- Least Count 1 mm
- Measuring range 0 to 20 meters
- with dial / counter (Optional: 0 to 30 meters with counter)
- Suitable for up to 50 kg/cm² pressure
- Suitable for up to 400 deg cent temperature
- Dial size max up to 500 mm and other on special accuracy and demand

It is an economical mechanical gauge provides high accuracy in mm. Largely used in Refineries, Oil Depots, Chemical and Fertilizer Industries. Useful for medium and large size charged or empty tanks. It may be cone roof, floating roof, underground or gas holding tank. It covers critical applications like corrosive & aggressive acids (using non-metallic wetted parts) & liquids with fumes (using vapor seal).

Less Maintenance:

Once carefully installed gives trouble free operations for a number of years (with periodic maintenance). A specially designed cylindrical body floats on liquid surface on account of its buoyancy. The liquid level is transmitted by means of a tape connected to float on one side and gear mechanism on the other side. Gears rotate the pointer on a dial or counter mechanism to display readings. A drum and spring mechanism provides constant tension on tape to keep it straight and thus balancing the force due to apparent float weight on one side and spring tension on other side.

Float Guide wires:

Guide wires provide stability for the float during turbulent conditions and increased accuracy by reducing the horizontal movement of the float across the surface of the product. Accessories are available to allow in-service installations, such as weighted anchors that maintain tension in the guide wires without the need for welding inside the tank.
Float & Tape Level Gauges

Technical Specifications:

<table>
<thead>
<tr>
<th>Type of Gauge</th>
<th>Guided type ------- FBI/G</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unguided type ------- FBI/U</td>
</tr>
<tr>
<td>Mounting</td>
<td>Top</td>
</tr>
<tr>
<td>Pressure</td>
<td>Upto 50 kg/cm²</td>
</tr>
<tr>
<td>Temperature</td>
<td>Upto 40°C</td>
</tr>
<tr>
<td>Measuring range</td>
<td>Max. upto 25000mm</td>
</tr>
<tr>
<td>Accuracy</td>
<td>1%</td>
</tr>
<tr>
<td>MOC Of Float</td>
<td>SS316, SS316L, PP, PTFE, Monel, Titanium, Alloy 20</td>
</tr>
<tr>
<td>MOC Of Wire (Float &amp; Guide)</td>
<td>SS316, SS316L, SS304L, PTFE</td>
</tr>
<tr>
<td>MOC Of Flange</td>
<td>SS316, SS316L, PP, PTFE, Monel, Titanium, Alloy 20, PVDF</td>
</tr>
<tr>
<td>Dial Counter</td>
<td>150mm up to 500mm</td>
</tr>
<tr>
<td>Dial Counter holder</td>
<td>Die cast aluminium with anticorrosion powder coat</td>
</tr>
<tr>
<td>Dial Enclosure</td>
<td>IP 65</td>
</tr>
<tr>
<td>Anchor plate for Guide &amp; Float Wire</td>
<td>SS304, A106, SS316L</td>
</tr>
<tr>
<td>Process Connection</td>
<td>Flanged</td>
</tr>
</tbody>
</table>

Special Materials

- Steel
- Aluminium
- Stainless steel

Product Type

Due to the float and tape measurement technique, the following are just some of the products suitable for level measurement using a float and tape device:
- Crudes
- Gasoline
- Jet fuel
- AV (Aviation) gas - high octane gas for small aircraft
- Diesel
- Chemicals
- Additives
- Solvents
- Water

G A Drawing Applicable

Indicator system with scale board for long distance viewing and metric dial counter for ground reading purpose

See Enlarged View 'A'

Enlarged View A
### Ordering Information

**Type**
- **GT**: Guided Type
- **UT**: Unguided Type

**MOC of Float**
- **XD**: SS316
- **XE**: SS316L
- **XF**: PP
- **XH**: Monel 500
- **XI**: Titanium
- **XK**: Hastelloy C

**MOC of Wire**
- **WQ**: SS304
- **WR**: SS304L
- **WS**: SS316
- **WT**: SS316L
- **WU**: PP

**Process Connection**
- **Flanged Connection**
  - **F01**: 1/2", 150# RF
  - **F02**: 3/4", 150# RF
  - **F03**: 1", 150# RF
  - **F04**: 1.5", 150# RF
  - **F05**: 2", 150# RF
  - **F09**: 1/2", 300# RF
  - **F10**: 3/4", 300# RF
  - **F11**: 1", 300# RF
  - **F12**: 1.5", 300# RF
  - **F13**: 2", 300# RF

**Range**
- **XX**: Please Specify
- **Z**: NIL

**MOC of Connection**
- **ZA**: CS (A105)
- **ZB**: CS (A106)
- **ZC**: SS 304
- **ZD**: SS 304L
- **ZE**: SS 316
- **ZF**: SS 316L