FCI Continuous Float Level Transmitter uses the magnetic inside of the floating ball following as the change of liquid level to change divider circuit composed by the resistor inside of the rod and the magnetic reed switch, thus converted into divider signal which can be turned by transmitter into standard industrial signal of 4~20mA so as to test the liquid level. The smaller the clearance of the magnetic reed switch is, the higher the accuracy is. This liquid level meter can also be used for long-distance indication if combined with other secondary instrument. It is a reliable indicator with simple principle.
Selection instruction of continuous float level transmitter

When users select Continuous Float Level Transmitter, please refer to the following five steps in selection instruction. The Continuous Float Level Transmitter is a kind of customized product. To make the user easily select the right model, various types of flanges, threads, floating ball specifications, junction boxes and material properties are specially sorted out. The user can make a selection in the corresponding model selection table.

Continuous Float Level Transmitter

Step 1: Follow the model selection table of floating ball to select the proper floating ball, such as S3, P2 and so on.

Step 2: Follow table below to select the right connection size, at the same time, the connection mode of the bracket installation is also available.

<table>
<thead>
<tr>
<th>Resolution</th>
<th>A: 5mm; B: 8mm; C: 10mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosions-proof or not</td>
<td>E: yes; O: no</td>
</tr>
<tr>
<td>On-site display</td>
<td>S: yes; O: no</td>
</tr>
</tbody>
</table>

Step 3: Follow the selection instruction of junction box to select the right junction box.

Step 4: 1) Resolution A: 5mm; B: 8mm; C: 10mm
2) Explosions-proof or not E: yes; O: no
3) On-site display S: yes; O: no

Step 5: Select scale based on actual need, 0000-6000mm

Step 5: The total insertion depth, unit mm

The relationship between wetted materials and liquid properties

The user should also pay attention to the relationship between the liquid receiving materials such as floating ball and the liquid characteristics when selecting the type, select corresponding specification of float according to the working temperature, pressure, gravity, acid and alkali etc. properties of the tested liquid.

- **Temperature**: the maximum temperature of PVC is 80°C, the maximum temperature of PP is 80°C; the maximum temperature of PVDF is 150°C, the maximum temperature of SUS 304/316L floating ball is 200°C.
- **Pressure**: the maximum pressure resistance of plastic floating ball is 5kg/cm², the maximum pressure resistance of SUS floating ball is 40kg/cm².
- **Viscosity**: for viscous liquid, it is better to choose float with big diameter and small gravity to overcome the surface tension.
- **Acid and alkali characteristic**: polypropylene is suitable for strong acid and alkali occasion while choose PVDF in strong acid and alkali occasion of above 80°C temperature.
- **Alcohol and oil etc**: it is suggested to use stainless SUS, and use food grade of SUS316L in food industry.
- **Gravity**: float's gravity S.G should be less than tested liquid's, otherwise the float can not be lifted.

Product features

- Plastic material such as PR PVC, NBR, PVDF, can be used in strong acid and alkaline places;
- Metal material such as SUS 304/316L, can be used in the place where the high temperature is up to 200°C and high pressure is up to 64kg/cm²;
Metal floating ball has specifications of Φ45, Φ52, Φ75 and so on;
Plastic has Φ48 and Φ55. Specific gravity ranges from 0.5 to 0.8g/cm³;
Output two-wire system: 4 - 20mA or resistor three-wire, supply voltage is 5 ~ 30VDC;
Junction box: Stainless steel, aluminum alloy, PC, PP;
Connection has thread types like PT, PF, NPT, BSP; flange types such as JIS, DIN, ANSI and so on available;
The protection level of outgoing line or junction box is IP65;
Special specification can be customized according to the user’s requirement.

### Model selection of magnetic floating ball

<table>
<thead>
<tr>
<th>Size</th>
<th>ΦxHxd (mm)</th>
<th>Material</th>
<th>Density (g/cm³)</th>
<th>Max temp (°C)</th>
<th>Max Pressure (Kg/cm²)</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>S5</td>
<td>Φ40×H36×d15.5</td>
<td>SUS304, 316L</td>
<td>0.7</td>
<td>150</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>Φ40×H50×d15.5</td>
<td>SUS304, 316L</td>
<td>0.7</td>
<td>150</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>Φ45×H56×d15.5</td>
<td>SUS304, 316L</td>
<td>0.7</td>
<td>150</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>S9</td>
<td>Φ52×H52×d15.5</td>
<td>SUS304, 316L</td>
<td>0.65</td>
<td>150</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>Φ52×H62×d15.5</td>
<td>SUS304, 316L</td>
<td>0.65</td>
<td>150</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>S11</td>
<td>Φ75×H75×d15.5</td>
<td>SUS304, 316L</td>
<td>0.55</td>
<td>150</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>S12</td>
<td>Φ125×H125×d15.5</td>
<td>SUS304, 316L</td>
<td>0.45</td>
<td>150</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>Φ40×H52×d20</td>
<td>PP</td>
<td>0.65</td>
<td>75</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>P3</td>
<td>Φ48×H52×d20</td>
<td>PP</td>
<td>0.65</td>
<td>75</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>F1</td>
<td>Φ55×H70×d23</td>
<td>PVDF</td>
<td>0.85</td>
<td>150</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>F2</td>
<td>Φ40×H52×d20</td>
<td>PVDF</td>
<td>1.0</td>
<td>150</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

* Special specifications of floating ball can be customized.

### Selection diagram of junction box

NG type
NF type
SA type
PI type
F2 type
PR type
EA type
F3 type