

MAGNETIC LEVEL GAUGE

SIGMA's Magnetic Level Gauge's operation is based on elementary principles of physics:

- Liquid attains the same level in communicating vessels.
- Opposing magnetic poles attract and like poles repel.
- Last but not the least, Archimedes principle.

Sigma Magnetic level gauge consists of :

- A vertical chamber consisting of a non magnetic tube of suitable diameter and thickness
- A float where-in magnets are placed radially exactly on the liquid level line (floating point)
- Two horizontal stub pipes with specified end connection
- An indicator outside the vertical chamber comprising of a set of flags that contain a set of permanent magnet encapsulated, which can rotate on their horizontal axis or a magnetic follower that moves along in a transparent tube.
- Optional shut off valves at the two stub pipes to isolate the level gauge
- A non magnetic scale with graduations in mm/cm/inches

As the float moves up and down with changing level, the following action takes place:

- In case of the flag type, the flag indicator consists of bicolored flags that are contrastic dark and bright colors. The bright represents the liquid level and the dark color depicts the empty or interface fluid level. The float immerses only on the upper fluid and floats on the lower for which the specific gravity suitability is maintained.
- In case of the follower type, the indicator consists of a encapsulated magnetic follower that follows the rise and fall of the magnetic float.



Specifications

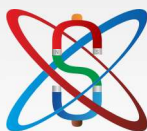
| | |
|--------------------|--|
| Specific Gravity | : 0.6 upwards / specified. |
| Temperature | : 200°C, Pressure: 10 kg/cm ² High Pressure / High Temperature option available |
| Process Connection | : Threaded / Flanged |
| Chamber Material | : SS304 / SS316 / PVC / PP / PVDF / HDPE / Coated / Lined. |
| Float | : SS304 / SS316 / Titanium / Specified |
| Optional | : Shut Off Valve, Insulation Jacket, Transmitters, Level Switch |

Consult SIGMA to check suitability of Gauge for process condition.

Extruded Outlet (Optional)



No sink-in distortion for
interference float travel.



Application Areas of Magnetic Level Gauge

- Acid Tanks
- Ammonia Tanks
- Boiler Feed Water Tanks
- Detergents and Soaps
- Fertilizers and Pesticides
- Fuels and Solvents
- Oil Production and refining
- Scrubber & Storage Tank

Model Number Coding for Magnetic Level Gauge

| MLG | Orientation | Connection | Material of Construction | Additional Features | CC (in mm) |
|----------------------|-----------------------------------|---|---|---|-----------------|
| Magnetic Level Gauge | S - Side Side T - Top Mounting | F- Flanged T- Threaded S-Socket Weld B-Butt Weld | 4-SS304 4L-SS304L 6-SS316 6L-SS316L P-PP V-PVC S-Specified Material | N-None I - Insulation Pad S - Level Switch T - Transmitter J - Jacketed Type T - Teflon Coating V -Valves F-Frost Shield | Example 1200 mm |



Optional : Completely sealed
Corrosion resistant indicating system

Model Decoding example: MLG-S-F-4-S(T)-1200 mm

Magnetic Level Gauge, with

- Side - Side Orientation
- Flanged Connection (specify the Flange rating and size while ordering)
- Material of construction - SS304
- With Level Switch and Transmitter
- CC: 1200 mm

Note

- Model Coding is categorized as per the specification of product, for ease of selection & ordering.
- In case of choosing multiple specification under a specific category, mention the 2nd / 3rd code with a bracket, after the 1st code.
- For ordering IBR approved product, mention "IBR" immediately after the Product code.
- The product conforms to 97/23/EC: Pressure Equipment Directive, Article 3.3 Sound Engineering practice and 2006/95/EC: Low Voltage Directive (LVD)
- In case of doubt, contact SIGMA for assistance in arriving at the model code / for specification.

Note

All the Magnetic Level Gauge mentioned in this catalogue are our standard design. If the standard items do not meet your requirements, we can modify them to meet your specifications and would appreciate the opportunity of making suggestions to cover your application, based on engineering principles. SIGMA reserves the right to modify specification / design from time to time, which is deemed suitable for the product without prior intimation.



Available



IBR Approved
Magnetic Level Gauge