

## Gachman Level Gauges

- Magnetic
- Reflex
- Glass

## Accessories

- Switches
- Transmitters



*Gauging tomorrow through continuous improvement*

## Gachman Pressure Gauges

- Bourden Tube Sensing
- Liquid filled
- Dry
- Glycerine filled
- Oil Filled



# Glass Level Gauges

## Features:

Glass Level Gauges or commonly identified as Sight Glass Level Gauges are early years design, commonly used for tank fluid level indicator. The main components consists of chamber equipped with highly visible sight glass, connections to tank and isolation valves at both end of the gauge.

Our series of glass level gauges are commonly used in the oil and gas industries and other heavy industries. It's reliable because of its simple working principle. We use high corrosive resistance, high visibility shields such as mica or polytrifluorochloroethylene to maximise readability during operation. All connections are carefully sealed and tested to avoid leakage. Isolation valves on both ends of the connections can be supplied by request as an option for easy replacement of gauge. As part of safety precaution in the event of glass breakage, all of our gauges are equiped with needle valves on both ends of connections.



Model Series	GR-S1	GR-C1	GR-LP	GC-N1	GC-LT
Dimension H (mm)	500-2000	330-440	300-2000	500-1700	300-2000
Pressure	4 MPa Max.				
Temperature	38 to 200°C	15 to 200°C	15 to 200°C	15 to 200°C	-40 to 60°C
Applications	Suitable for water steam	bicolor, suitable for any fluid	low pressure, threaded connection, suitable for any fluid	suitable for non-corrosive fluid	Low temperature application, suitable for any fluid

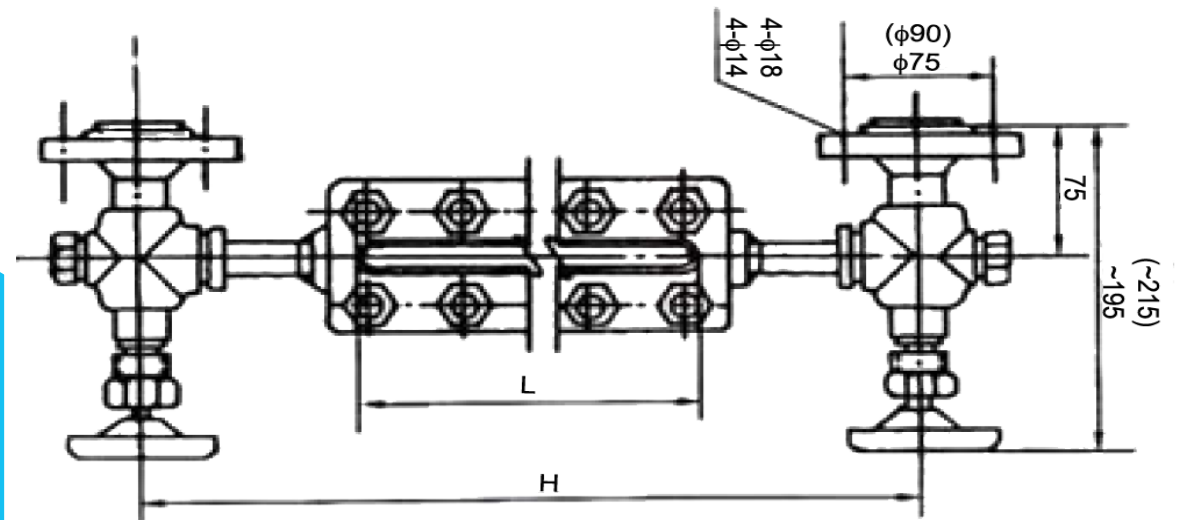


Fig.1

## Materials:

For general Purpose Level Gauges we normally use Carbon steel tubular combined with Stainless Steel needle valve.

Stainless Steel 316 and 304 are also commonly use for better corrosion resistance.

We also offer other types of construction material for the gauges based on customer's request.

Materials such as Monel, Incoloy, Duplex Stainless Steel, Hastelloy, Fibre Glass etc.

# Magnetic Level Gauges



## Introduction:

Our MG Series Liquid Magnetic Level Gauge can be installed on almost any type, design, shape and size of tank or vessel in any industries you can imagine today. Whether it's corrosive liquids or low/high temperature liquids MG series will suit your applications. This is made possible through customisation to suit our client's application by our experienced engineers. All gauges are designed and built according to industrial standards. Coupled with level transmitters and/or transducers, one can easily access all the data from different locations at the comfort of your control room.

## Features:

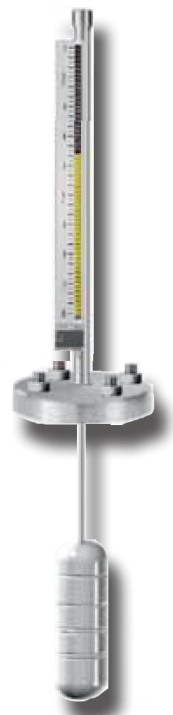
- Extremely safe for operator and the environment
- Huge operating temperature range
- Applicable to liquid with specific gravities as low as 0.35
- High visibility indicator which can be seen from distance
- High magnetic floaters
- Solid construction with no leaks or breakage
- Working pressure up to 16 MPa
- Protection class IP65
- Explosion proof option

## Working Principles:

MG consist of a chamber containing a magnetic float that weighted to the specific gravity of the process fluid one requires to measure. This float is carefully engineered to provide sufficient magnetic field in order to counteract with the magnetic assemble outside the chamber. The magnetic assembly is coated with high visibility indicator which display the level of fluid in the vessel while the float changes in position. In Gachman, we ensure that the interaction between the float and the magnetic assembly outside the the chamber is kept on track with each other through out the life of the gauge. Hence, accurate and precise reading of the liquid level in the vessel at all time even in extreme vibrating conditions.

## Applications:

- Offshore and onshore production platform
- Refinery Plants
- Power Plants
- Pulp and Paper processing plant
- Pharmaceutical plant
- Industrial utilities
- Food and beverages industries
- Chemical processing plant
- Waste treatment plant
- Manufacturing industries



# Magnetic Level Gauges

## Model MG-1

Most commonly used Magnetic Level Gauge for any industries, economy yet reliable. The top and bottom of the vent and drain plug is usually 1/2" NPT to ASME B1.20.1. It can be replaced by a needle valve, ball valve or bellow sealed valve depending on the applications.

Parameters:

- Pressure ratings: 1~16 MPa
- Liquid Density:  $\leq 0.5 \text{ g/cm}^3$
- Liquid Temperature:  $-20 \sim 200^\circ\text{C}$
- Length: 15m Max.
- Accuracy:  $\pm 5\text{mm}$
- Protection Class: IP65
- Explosion proof option Ex ia IIC T4
- Flange connection
- Jacketed option available for high viscosity liquid.
- Can be coupled with switch and transducer for remote operations.
- Available in Top mounted option.

## Model MG-1C

Similar to MG-1 except MG-1C comes with a bi-color indicator.

Parameters:

- Pressure ratings: 1~16 MPa
- Liquid Density:  $\leq 0.5 \text{ g/cm}^3$
- Liquid Temperature:  $-20 \sim 200^\circ\text{C}$
- Length: 0.02 ~ 15m Max.
- Accuracy:  $\pm 5\text{mm}$
- Protection Class: IP65
- Explosion proof option Ex ia IIC T4
- Flange connection and can be mounted on top or on the side of the vessel.
- Easy viewing thanks to the bi-color indicator
- Jacketed option available for high viscosity liquid.
- Can be coupled with switch and transducer for remote operations.
- Available in Top mounted option.

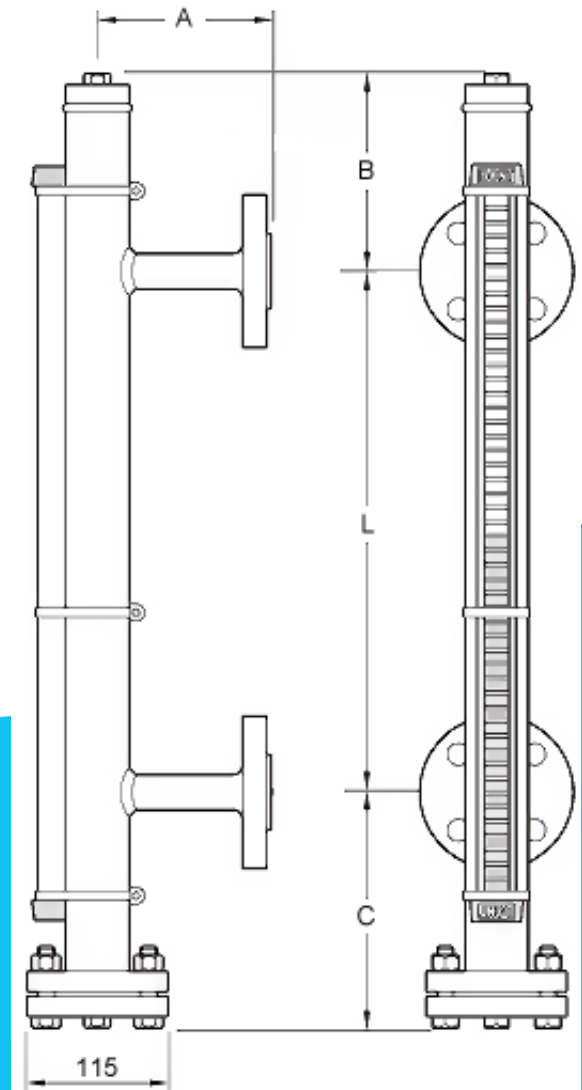


Fig.2

# Magnetic Level Gauges

## TYPES

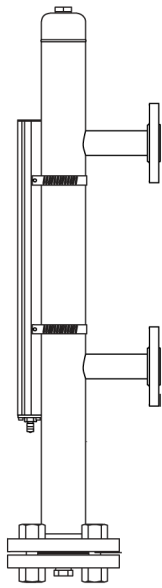


Fig.3  
Type A

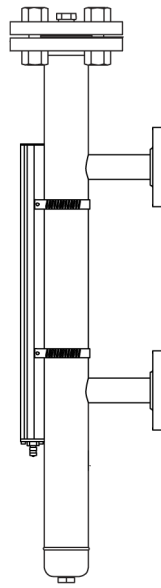


Fig.4  
Type B

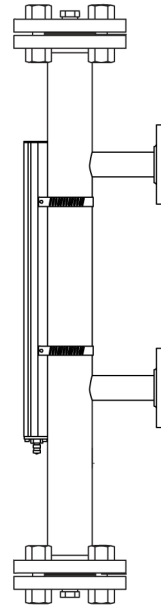


Fig.5  
Type C

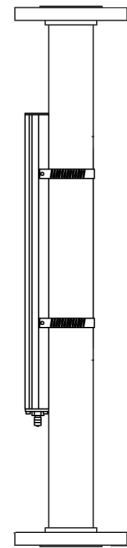


Fig.6  
Type D

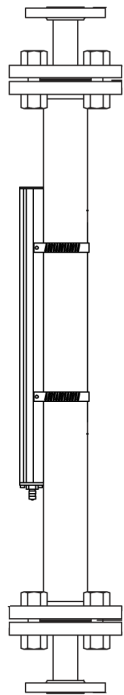


Fig.7  
Type E

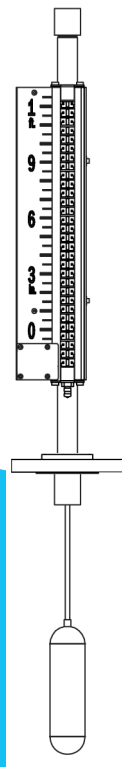


Fig.8  
\*Type F1

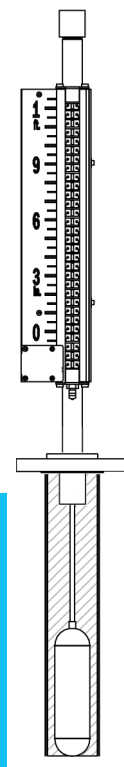


Fig.9  
\*Type F2

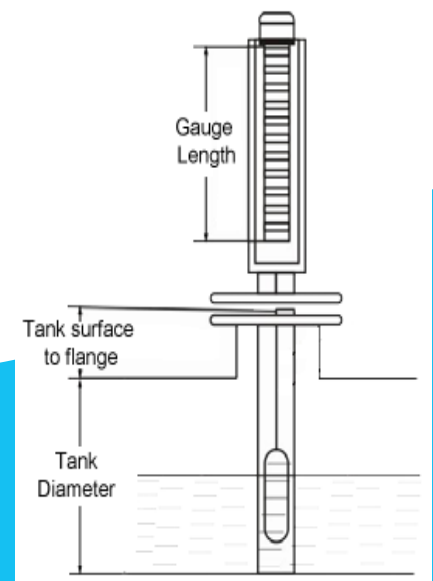


Fig.10

\* denotes Top mounted type