LEVEL MEASURING

WITH MAGNETIC GAUGE

www.aramakco.com

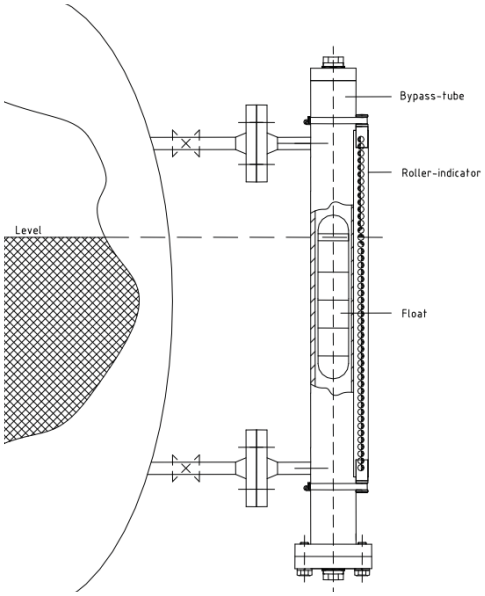
Introductions

The ARAMAK magnetic liquid level gauge used to determine the volume of liquid contained within a tank. Because the magnetic level high pressure applications and hazardous locations are protected from the danger of a chemical spill due to glass failure.

The magnetic level gauge made in 2 Type :

1– Economical

2- Heavy duty



Applications

Typical industries:

- Oil and gas production
- Petrochemical
- Chemical
- Power generation
- Water and wastewater treatment
- Food and beverage
- Pharmaceutical
- Pulp and paper
- Biotech
- Semiconductor

Typical applications:

- Oil
- Water
- High and low pressure separators
- Oil and water interface
- Acids - hydrofluoric, hydrochloric, nitric, sulfuric, etc.
- Refined petrochemical - gasoline, propane, butane, ethylene, etc.
- Solvents - acetone, toluene, xylene, naphtha
- Gas condensate
- Heat transfer fluids - diathermy, thermion and glycol
- Black, green and red liquor
- Refrigerants
- Alcohols
- Caustics
- Chlorine
- Steam condensate - boiler feedwater heater boiler drum level control
- Bitumen
- Vacuum tower bottoms
- Ammonia
- Liquid Sulphur
- Most liquid to liquid interfaces

Mounting Type

Side Mounted Magnetic Level Gauge

- Highly visible level indication with no process fluid in con- tact with the glass
- All construction in house by code certified welders
- Float designed and weighted for maximum accuracy
- Transmitter and switch options which can be installed, adjusted and maintained with no process interruption
- Safe for corrosive, flammable, toxic, high-temperature and high- pressure applications
- Rugged design- low or no maintenance

Top Mount Magnetic Level Gauge

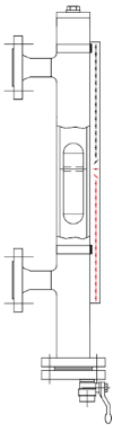
- Magnets above float connected with rod
- Slug catcher level
- Optional stilling wells
- Total or interface level measurement
- Underground tanks and sumps
- Fluids with magnetic particles
- Can be used with transmitters and switches

Corrosive/Lightweight Magnetic Level Gauge

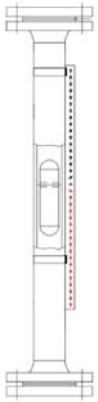
- PVC, CPVC, Polypropylene or PVDF construction (for lightweight MLGs)
- Titanium, Monel and Hastelloy (for corrosive applications)

Heat Traced and High Temperature Insulation Magnetic Level Gauge

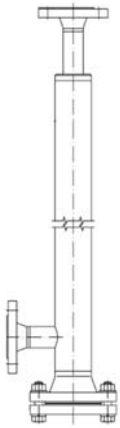
- Electrical or steam heat tracing
- Removable insulation



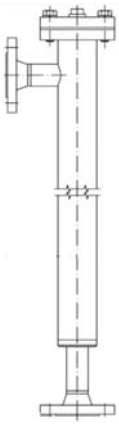
Side-Side



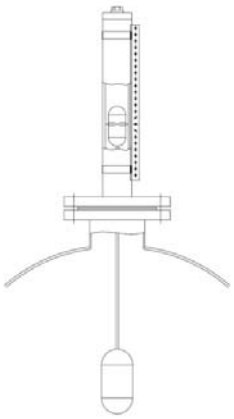
Top-Bottom



Top-Side

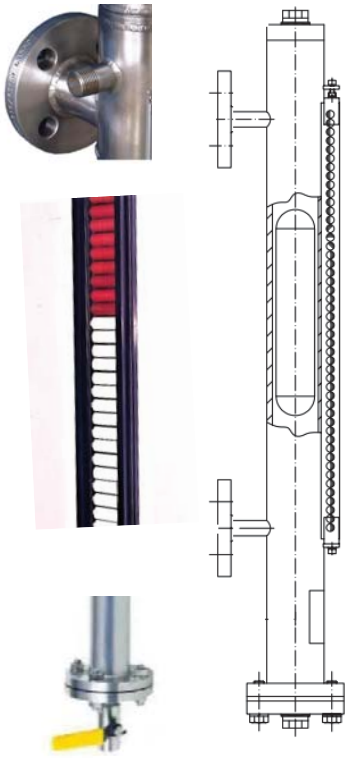


Bottom-Side

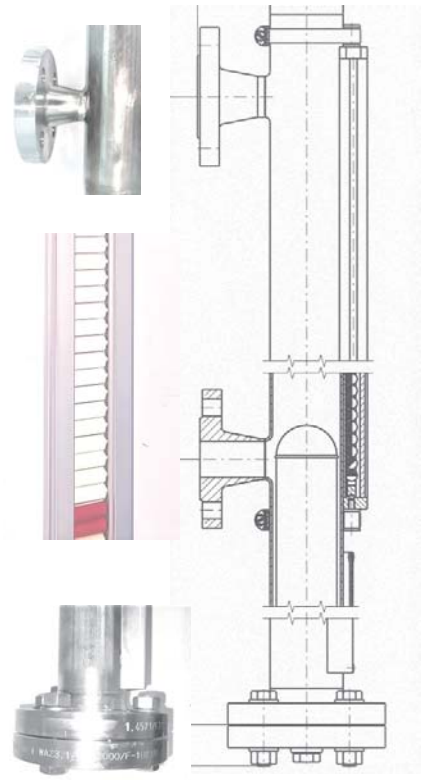


Top Mount

Typical Application



Economic



Standards

The magnetic level gauge made in 2 main type :

1- Economical
2- Heavy duty

Standards

- Measuring length: max. 6 m
- Operating temperature: T = -196 ... +450 °C -
- Operating pressure: P = vacuum to 200 bar
- Limit density: ρ ≥ 340 kg/m3
- Material: stainless steel 304, 316, Inconel
- Wide variety of different process connections and materials
- Explosion-protected versions
- Accuracy transducer: ±1 mm
- Option: transmitter 4 - 20 mA, contacts

Economic

- Measuring length: max. 6 m
- Operating temperature: T = -10 ... +180 °C -
- Operating pressure: P = vacuum to 30 bar(a)
- Material: stainless steel 304 or 316
- Limit density: ρ ≥ 340 kg/m3
- Accuracy transducer: ±1 mm
- Option: transmitter 4 - 20 mA, contacts

Accessories

Steam or electrical heat trace

Used to uniformly heat or cool process fluid

Magnetic traps

Fits in line with process connection
Also available in integral configuration
Air purge for roller

Vibration Isolator Connections

Absorbs large amounts of vibration
Eliminates signal distortion
Recommended for use on compressor and pump skids

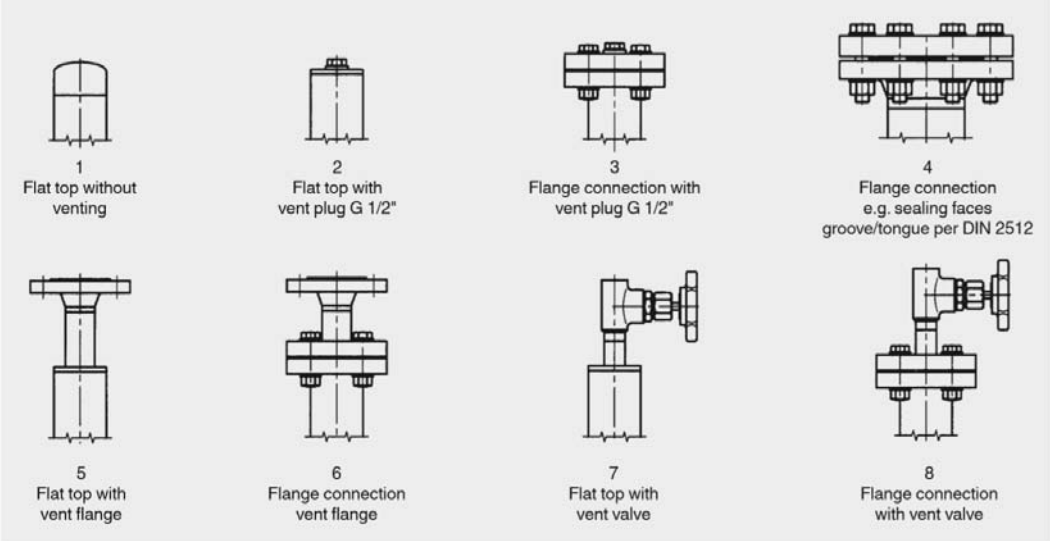
Oversized chambers

Used to uniformly heat or cool process fluid allows vapors to pass floats when a fluid is close to vapor pressure and can be used in fluids with small suspended particles. Also used in conjuction with Teflon S coating for non-stick.

High temperature insulation

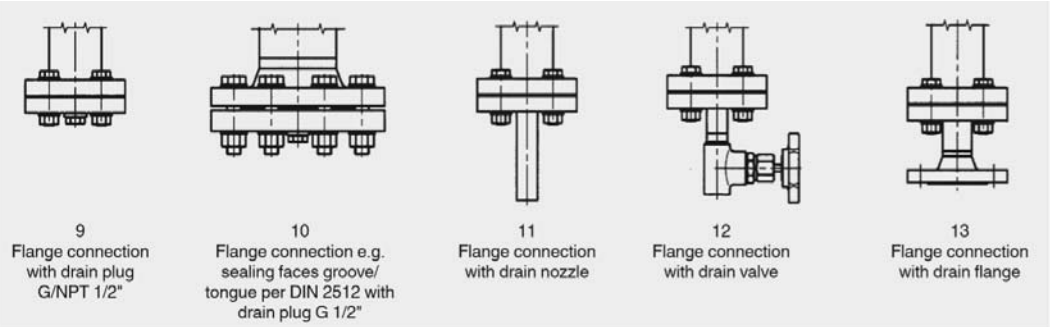
For extreme temperature environments, the ARAMAK magnetic level gauge is factory furnished/fabricated to offer high temperature insulation.

Bypass Chamber end Top



Other ends on request

Bypass Chamber end Bottom



Other ends on request

Ordering Information

MLG	XX	XX	XXXX	XX	XXX	XX	XX	XXX	XXX	XX	XX	XX	XXX	XXX	XXX
Design															
Economic Type	ET														
Standards Type	ST														
Mounting															
Side-Side		SS													
Side-Bottom		SB													
Top-Bottom		TB													
Top Mount		TM													
Special		ST													
Center to Center Distance (mm)															
..... (mm, inside Diameter)			XXXX												
Process Connection:															
½"				I1											
¾"				I2											
1"				I3											
1 ½"				I4											
2"				I5											
Option				I6											
Operating Fluid Density (kg/m3)															
..... (Kg/m3)					XXX										
Connection Rating															
ANSI Class 150						A1									
ANSI Class 300						A2									
ANSI Class 600						A3									
ANSI Class 900						A4									
ANSI Class 1500						A5									
ANSI Class 2500						A6									
PN 10						P1									
PN 16						P2									
PN 25						P3									
PN 40						P4									
PN 63						P5									
PN 100						P6									
PN 160						P7									
NPT-Female						T1									
NPT-Male						T2									
G-Male						T3									
G-Female						T4									
Option						T5									
Chamber and Wetted Part Material															
316 / 316L stainless							I1								
310 stainless steel							I2								
321 stainless steel							I3								

Ordering Information

22 % Cr duplex	I4								
Alloy 400	I5								
Alloy 625	I6								
Alloy 800	I7								
Alloy C276	I8								
PTFE	P1								
PVC	P2								
PTFE	P3								
Polyethylene	P4								
Polypropylene	P5								
Other	P6								
Float Material									
Titanium		I0							
316 / 316L stainless		I1							
304 / 304 L stainless		I2							
PTFE		P1							
PVC		P2							
PTFE		P3							
Polyethylene		P4							
Polypropylene		P5							
Other		P6							
Chamber End Top (Fig.)									
Flat Without End			FV0						
Flat with 1/2" vent Plug			FP1						
Flat with 3/4" vent Plug			FP2						
Flat with 1" vent Plug			FP3						
Flanged with 1/2" vent Plug			FV1						
Flanged with 3/4" vent Plug			FV2						
Flanged with 1" vent Plug			FV3						
High pressure Flanged			HV1						
Flat top with vent Flanged			FF1						
Flanged top with vent Flanged			FF1						
Flat Top with 1/2" vent valve			PP1						
Flat Top with 3/4" vent valve			PP2						
Flat Top with 1" vent valve			PP3						
Flange Top with 1/2" vent valve			PF1						
Flange Top with 3/4" vent valve			PF2						
Flange Top with 1" vent valve			PF3						
Other			PP0						
Chamber End Bottom (Fig.)									
Flanged with 1/2" Drain Plug				FV0					
Flanged with 3/4" Drain Plug				FP1					
Flanged with 1" Drain Plug				FP2					
High pressure Flanged				FP3					
Flanged Bottom with Drain Flanged				FV1					

Ordering Information

Flange Bottom with 1/2" vent valve	FV3					
Other	PP0					
Transmitter						
Not Applicable		I0				
4-20 mA , 24 VDC, Loop powered		I1				
4-20 mA HART , 24 VDC, Loop powered		I2				
4-20 mA HART, Exia, 24 VDC, Loop powered		I3				
4-20 mA Exd , 24 VDC, Loop powered		I4				
4-20 mA HART, Exd , 24 VDC, Loop powered		I5				
Other		I6				
Switch						
Not Applicable			S1			
1 SPST, Reed switch, 1A @ 24VDC			S2			
1 SPDT, Reed switch, 1A @ 24VDC			S3			
2 SPST, Reed switch, 1A @ 24VDC			S4			
2 SPDT, Reed switch, 1A @ 24VDC			S5			
1 SPDT, SNAP Action, 4A @ 24VDC			S6			
2 SPDT, SNAP Action, 4A @ 24VDC			S7			
1 SPST, Reed switch, 1A @ 24VDC, Ex			E1			
1 SPDT, Reed switch, 1A @ 24VDC, Ex			E2			
2 SPST, Reed switch, 1A @ 24VDC, Ex			E3			
2 SPDT, Reed switch, 1A @ 24VDC, Ex			E4			
Other			O1			
Isolating Valve						
Not Applicable				0		
Gate Valve Stainless Steel				BC		
Ball Valve Stainless Steel				BS		
Other				O1		
Certification						
Material certificates					C0	
Material NACE MR0175					C1	
Material NACE MR0103					C2	
Internal Pressure Test					C3	
100% dimensional check					C4	
Hardness survey					C5	
Impact testing @ –196 °C (–320.8 °F)					C6	
Others					C7	
Added requirements						
Manufactured to customer drawing						DW
Heated or Cooling Jacket						HJ
Electrical Heat Trace						ET
External Chamber						EC
Vibration Isolator						VI
Others						OT

Contact us

Instrumentation manufacturer & designer

Tel : 021-46069694

Aramakco.com

Info@aramakco.com

Sales@aramakco.com