



MAG-GAGE® THE SUPERIOR MAGNETIC LEVEL GAUGE

- Patented Wide-Flag®
Solid Design Magnet
-350° / 1100° F rating
- Standard 2 to 4 week delivery
Expedited delivery available
- Constructed to meet ANSI/ASME
codes B31.1/B31.3 Min. Sch 40
- No Pressurized Floats
- All Welds are GTAW/TIG
No MIG or T-Drilling
- Replaces Sightglasses

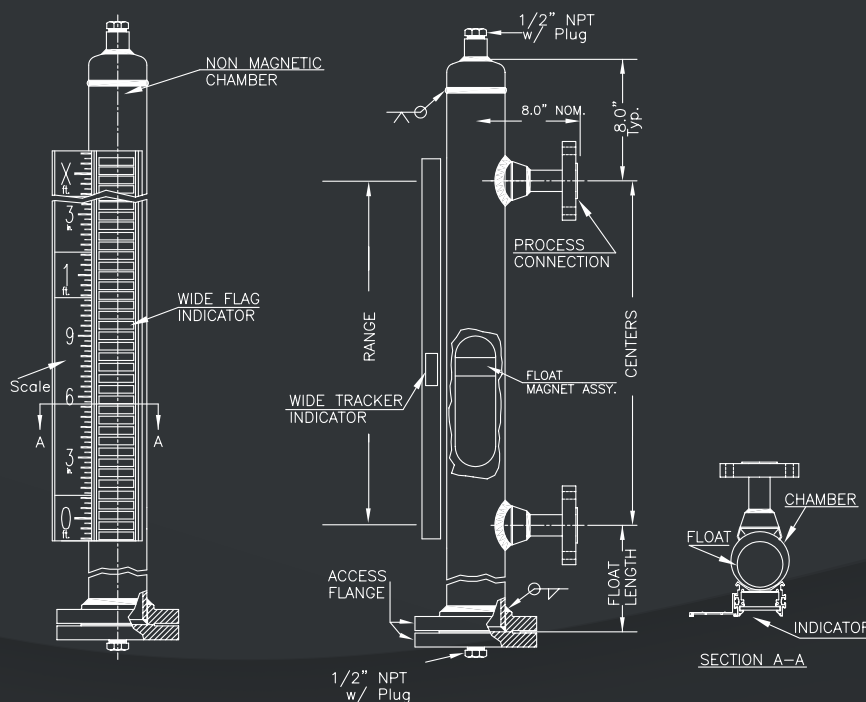


The Process Level Technology Mag-Gage® is a proven method to measure liquid levels. The Mag-Gage® is one of the safest and most economical ways to measure and control your level requirements. It can be installed on almost any shape, size or type of vessel in the industry. In applications of extreme pressure, temperature, vibration and highly corrosive or hazardous material the Mag-Gage® will perform where others fail.

Principles of Operation

The Chamber is constructed of non-magnetic materials, and process connections to mate with those of the tank, vessel or other equipment where the level is to be measured.

The Float is engineered and located inside the Chamber. It is sized and weighed to the specific gravity of the process fluid to be measured. The float contains a 360° Magnetic Assembly which generates a strong uniform magnetic circuit. The magnetic Flux Lines generated by the float interlocks with the indicator. The hermetically sealed Indicator, the Wide Flag® or Wide Tracker® Style, contains its own magnetic assemblies which interlock with the float through the Chamber, providing a strong and reliable design. As the Float moves with the changes in the liquid level, the magnetic attraction between the Indicator and Float will ensure that the Indicator will track the position of the float exactly and the liquid level is measured precisely.



INDICATORS



Wide Tracker®



Wide Flag®
(Patented)

Wide Tracker®

- Extra Large Rectangular Indicator
- 1.40" Wide X 1.5 Long
- Bright Yellow (other colors available)
- Dual Magnetic Coupling

Wide Flag®

- Easy to read 1.40" Wide-Flag (Visible from 200+ ft.)
- Patented solid one piece ceramic magnetic flag
- 180 degree rotation
- Temperatures from -350°F to 1100°F
- High contrast Yellow (liquid) and Black (vapor)
- Other color combinations available

Available Enclosures:

Anodized Aluminum or 316 Stainless Steel

Scales

- Scale can be customized to any increments (ft./in., gallons, percent, metric, etc.)
- All scales are photo etched into Stainless Steel - No rusting, fading or stickers falling off
- Large, easy to read markings that allow measurement to be taken from a safe distance

Scales Available In:

- | | |
|--------------------------|----------------------|
| • Feet/Inch Standard | • Wide Acrylic Scale |
| • Metric | • Gallon Scale |
| • % Scale | • +/- Scale |
| • 10 th Scale | • Inch only Scale |



POINT LEVEL SWITCHES



MGS-200EX & MGS-200EX/2

Type	Electrical
Volts	150 VAC / VDC
Current	1.0 AMPS
Power	25 Watts
Contacts	SPDT or DPDT
Deadband	½ inch
MAWT	-40°F to +800°F
Enclosure	NEMA 4X
Connection	¾" FNPT



MGS-700EX & MGS-700EX/2

Type	Electrical
Volts	125/250 VAC
Current	10.0 Amps
Power	2500 Watts
Contacts	SPDT or DPDT
Deadband	½ inch
MAWT	-40°F to +600°F
Enclosure	NEMA 4X
Connection	¾" FNPT

MGS-500EX & MGS-500EX/2

Type	Electrical
Volts	500 VAC/VDC
Current	3.0 AMPS
Power	100 Watts
Contacts	SPDT or DPDT
Deadband	½ inch
MAWT	-40°F to +600°F
Enclosure	NEMA 4X
Connection	¾" FNPT

MGS-900EX & MGS-900EX/2

Type	Electrical
Volts	125/250 VAC
Current	15.0 Amps
Power	3750 Watts
Contacts	SPDT or DPDT
Deadband	½ inch
MAWT	-40°F to +600°F
Enclosure	NEMA 4X
Connection	¾" FNPT



Electrical Area Classification: Class I, Division I, Groups B, C, D

MGS-100: NON-BLEED PNEUMATIC SWITCH

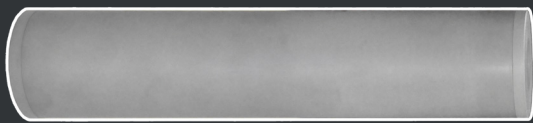


Type	Non-Bleed Pneumatic
Supply Pressure	VAC-200 PSIG
Deadband	½ inch
MAWT	0°F to 200°F
Enclosure	0°F to 200°F
Connection	¼" FNPT



A SUPERIOR MAGNETIC CIRCUIT

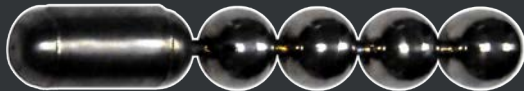
When designing the magnetic circuit between the float and indicator there are many considerations other than just how strong the magnets are in the float. The Mag-Gage® level gages have undergone extensive testing to produce a rigid and high performance design. With a unique construction the indication performs under the most demanding conditions such as high/low temperatures, vibrations, even schedule 160 chambers. Our patented solid magnet Wide Flag® design not only provides highly visible indication but provides a powerful connection with the float. The reliability and repeatability of the Mag-Gage® float and indicator combination is unmatched.



CPVC Float



Kynar Float



Titanium High Pressure Float



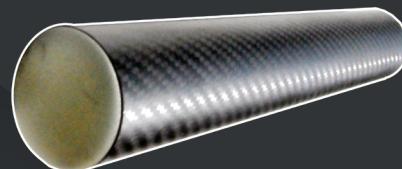
*High Pressure Interface Float
with Field Adjustable Weight*



Standard Stainless Steel Float



Coated Float for Corrosive Process



The Carbon Fiber Float® (Patented)

- All floats are engineered to the specific operating conditions of each application.
- Shell is constructed of stainless steel, titanium, hasteloy, monel, CPVC, PVDF (Kynar), or any other non-magnetic material.
- Magnetic circuit is made of a series of Alnico magnets to provide a light yet effective connection.
- We can handle the highest pressures in the industry with no oversized, pressurized or vented floats. Pressurized floats can be a safety concern and can leak over time.
- PLT uses solid engineering to conquer the demands of high pressures and low gravities.

MAG-GAGE® LIQUID LEVEL ORDERING GUIDE

Standard Specifications

- Non-Magnetic Chamber material
- All Flanges, Fittings and Pipe meet ASME/ANSI Standards
- Fabricated/Welded to B31.1/B31.3 code

Scale

- Feet and Inches, ¼" divisions
- Photo etched and backfilled on stainless steel
- Metric, Percentage, or Volumetric available
- Optional 3½" Acrylic scales

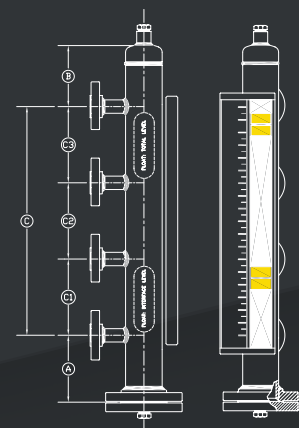
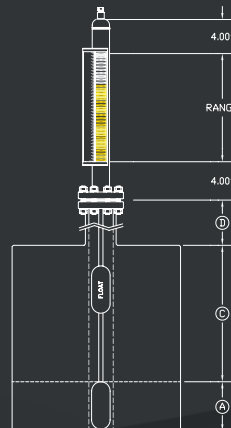
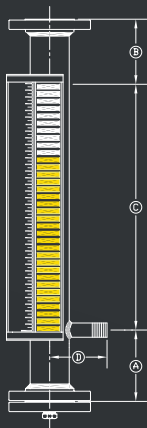
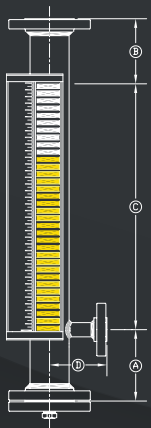
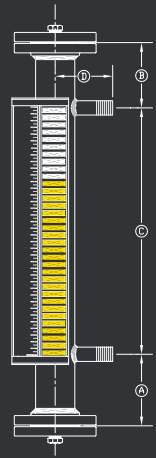
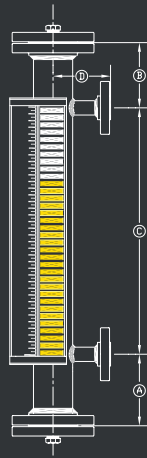
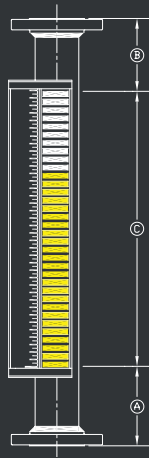
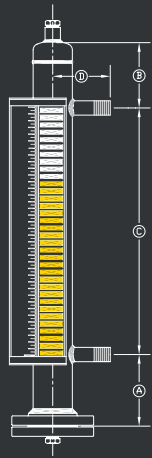
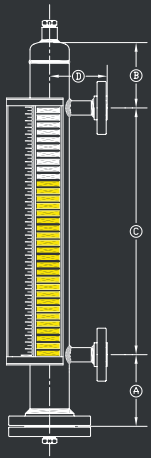
Float Chamber

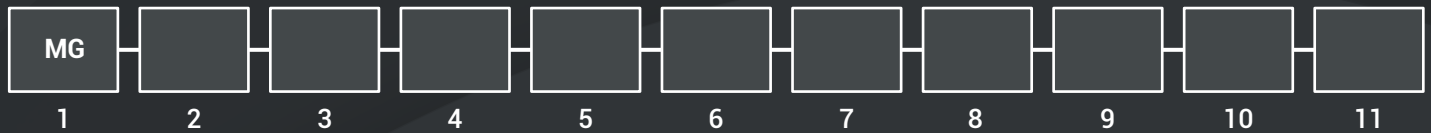
- 2" to 3" pipe W/RF Flanges - Sch 40
- ½" FNPT vent and drain connections
- All flanges and fittings rated for process conditions
- Connections: ½" through 8" plus
- Pressure ratings vacuum to 5000 PSIG
- Temperature Rating: -350°F to +1100°F
- Specific gravity range: 0.28 and up
- Lengths from 4.0" to 50 feet

Indicator

- Bright colored
- Can be seen from 200 ft. or more
- 1.4" wide
- Hermetically Sealed

Chamber Styles





1	Model	2	Material		
MG: Mag-Gage®		<div> 4S: 304/304L SS 4T: Teflon Lined 304 SS MO: Monel CP: CPVC 4C: 304 SS/CS 4H: Halar Coated 304 SS TT: Titanium PV: PVC 6S: 316/316L SS NS: Non-Stick Coating HB: Hastelloy B KY: Kynar (PVDF) 6C: 316 SS/CS AL: Aluminum HC: Hastelloy C PP: Polypropylene 2S: 321 SS A2: Alloy 20 ZR: Zirconium CM: Other material </div>			

3	Style	4	Process Connection	5	Flange Rating
Specify Options		Specify Size		01: 150# 09: 900# 50: 5000# 03: 300# 15: 1500# 06: 600# 25: 2500#	

6	Specific Gravity	7	Pressure	8	Temperature	9	Length
Specify		Unit in PSIG		Unit in Fahrenheit		Specify	

10	Indicator	11	Options	
WF: Wide Flag SWF: SS Wide Flag WT: Wide Tracker SWT: Single Wide Tracker		<div> Chamber WN: Weld Neck Flanges LJ: Lap Joint Flanges RJ: Ring Joint Flanges BW: All Butt Weld Construction NM: NACE MR0175/MRO103 Temperature Controls CI: Low Temp. Cryogenic Insulation IB: High Temp. Insulation Blanket EH: Electrical Heat Tracing FP: Freeze Protection ST: Steam Tracing FE: Frost Extension Valves GV: Gate Valves VD: Vent & Drain Valves </div> <div> Indication and Scale MS: Metric Scale PS: Percent Scale VS: Volumetric Scale AS: 3 ½ " Acrylic Scale FE: Non Frost Extension DI: Dual Indication IF: Interface Indication AR: Level Arrow Indicators IL: Illuma-Mag™ IG: Indicator Guard HDC: Heavy Duty Mounting Clamps Testing HY: Hydrostatic NDE: 100% Non-destructive Testing (Die Penetration, X-Ray) PMI: Positive Material Identification </div>		

MAG-TRANS® PREMIER LEVEL TRANSMITTER

The Mag-Trans® 2523 Series Level Transmitter is the next generation in Magnetostrictive Level Sensing Technology. It contains a dual compartment enclosure attached to the piezomagnetic wave guide sensor. The output is reliable, repeatable, fast and accurate.

- Standardized Dual Compartment
- Stainless Steel Enclosure Option
- Two Wire: Loop Powered
 - 10-30 Vdc (24 Vdc Nominal)
- Graphic Display:
 - Inch-Metric-Percent
 - Scroll-Tile
- HART – Protocol
- PACTware
- Local Programming
- Repeatable
- Reliable
- Variable Range
- Process Temperatures: -50°F to +800°F
- Class 1, DIV 1, GRP B, C, D



Specifications

Accuracy	+/- 0.015
Repeatability	.001% Full Span
Linearity	.020% Full Span
Refresh Rate	25x per second
Damping	1.0-25.0 Seconds
Electrical Classification	Class 1, Div 1, Grp B, C, D

Input	10-30 Vdc (24 Vdc Nominal)
Output	4-20mA, HART
Software	HART/PACTware
Display	LCD-Graphic
Process Temperature	800°F
Ambient Temperature	-25°F to 175°F



FIELD COMM GROUP
Connecting the World of
Process Automation

HART
COMMUNICATION PROTOCOL



PACTware™



MAG-TRANS® ORDERING GUIDE



1	Model	2	Length	3	Mounting Location	4	Dual Compartment Housing Material
	MT 2523		Unit in Inches		BML: Bottom Left TML: Top Left BMR: Bottom Right TMR: Top Right		ALE: Epoxy Coated Aluminum SSE: All 316 Stainless Steel

5	Probe Material	6	Temperature	7	Options
	6S: 316 Stainless Steel		Unit in Fahrenheit		HT: High Temp RD: Remote Display FM: FM Approved US/Canada FRD: Field Mounted Loop Powered Indicator FRDS: All Stainless Steel FRD

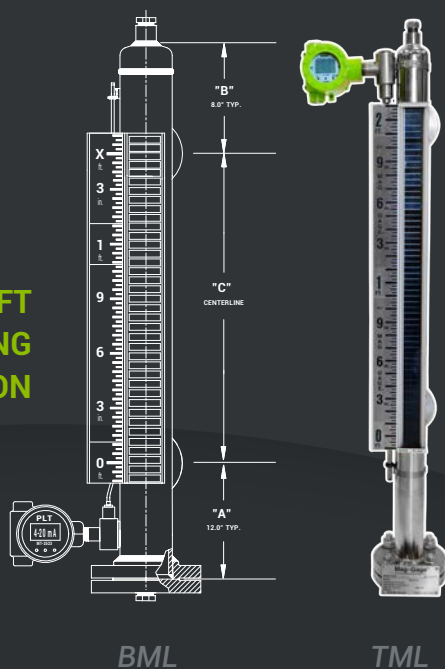


FRD: Field Mounted, Loop Powered Indicator - Can be externally mounted anywhere within power loop. Epoxy Coated Aluminum or 316 SS Class1, Div1, Group B, C, D

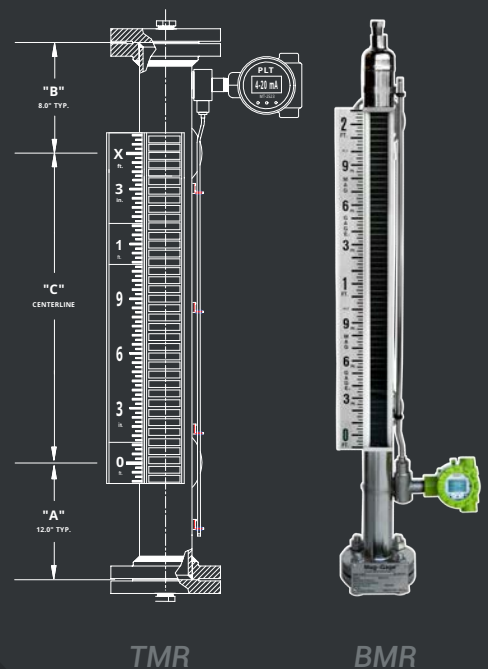
FRDS: All 316 Stainless Steel

Installation Options

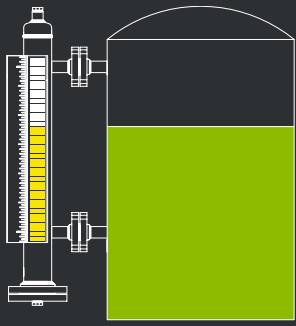
LEFT MOUNTING POSITION



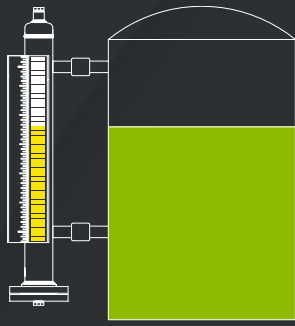
RIGHT MOUNTING POSITION



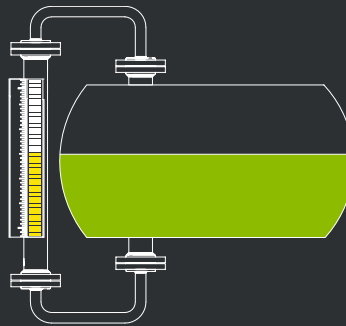
GENERAL INSTALLATIONS



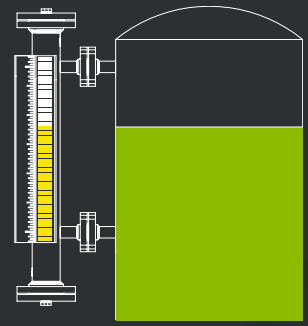
Style A



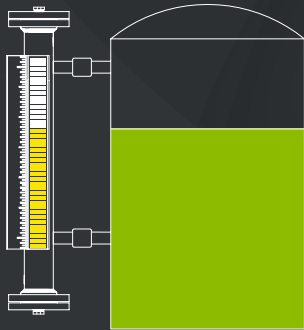
Style B



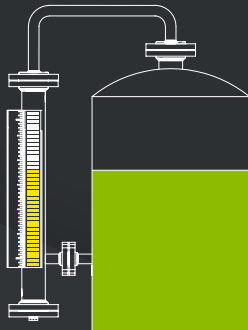
Style C



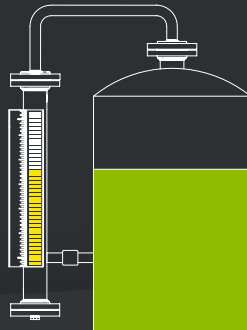
Style D



Style E



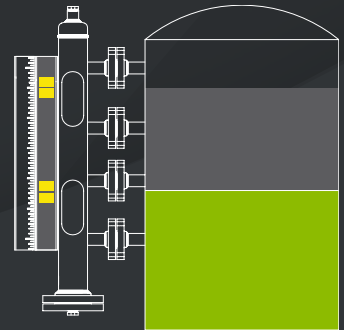
Style F



Style G



Style H



Style X

Applications

- Acetic Acid
- Ammonia
- Asphalt Settler
- Benzene
- Blow case
- Boiler Steam Drum
- Butane
- Caustics
- Cooling Towers
- Deionized Water
- Dow Therm
- Drip Pot
- Feedwater Heaters
- Flare Drums
- Freon
- Glycol
- Hydraulic Oil
- Hydrazine
- Hydrochloric Acid
- Hydrofluoric Acid
- Hydrogen Sulfide
- Interface (i.e. oil/water)
- Jet Fuel
- LPG
- Liquid Carbon Dioxide
- Liquid Ethylene
- Molten Sulfur
- Phosgene
- Propylene
- Propane
- Seal Oil Pots
- Slop Oil
- Sour Oil
- Sump Tank
- Underground Storage
- and more...

Other Products



Bypass



IT2523



Seal Pot



Day Tanks

OPTIONS AND CUSTOMIZATIONS



SANITARY MAG-GAGE®

Tri-colored flags



DUAL CHAMBER

*Options: MAG-TRANS®,
Guided Wave Radar*

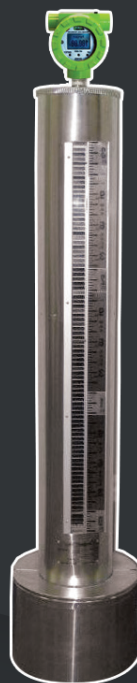


PLASTICS

Options: CPVC, KYNAR, Others



HIGH TEMPERATURE INSULATION



CRYOGENIC INSULATION



INTEGRAL SIGHTGLASS

INQUIRIES

Upon product inquiry, a thorough analysis of the customer's application and product specifications is performed. Promptly after the initial inquiry, PLT issues a quotation in complete compliance with the application/specifications previously submitted.

DELIVERABLES

After purchase date, a standard shipping term between 2 to 4 weeks will be issued with all standard orders. Requests for a faster delivery, or immediate (24 hour) delivery can be accommodated. Any delivery requirements are to be given with initial inquiry in order to ensure on time delivery.



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MAG-GAGE®

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MADE IN USA