OPW 200TG AST Mechanical Tank Gauge

The OPW 200TG Tank Gauge is designed for reading liquid levels in horizontal or vertical above ground storage tanks. The 200TG Tank Gauge provides an accurate numerical counter readout, eliminating the need for any on-site manual gauging.



Dimensions:

| | in. | cm |
|---|--------------------------------------|-------|
| А | 8 ¹ / ₄ | 21 |
| В | 10 ¹ / ₄ | 26 |
| С | 9 | 22.75 |
| D | 6 ³ / ₄ | 17.25 |
| E | 1 ¹ / ₂ | 3.75 |

Replacement Parts:

| Part # | Description | |
|---------|-------------|--|
| C05165M | Float | |
| H15325M | Lens | |
| H15267M | Lens Gasket | |
| H14909M | Lid Gasket | |



Underwriters Laboratory Listed UL Listing MH29367. Liquid level gauges which are intended to be used on above ground storage tanks and monitor the level of petroleum-based flammable or combustible fluids.

Materials

Enclosure: Powder-coated aluminum Swivel Base: Hard-coat aluminum Float: 304 stainless steel Lenses: Tempered borosilicate Gears: Acetal Gaskets & O-Rings: Nitrile* All Hardware: Stainless steel Accuracy: + or - 2"

Features

- Vapor-Tight allows for standard tank pressure testing and sealing up to 25-psig (1.72 bar).
- Angled Face improves visibility from ground on large diameter tanks. May be read easily up to 30 feet away (9.14 m).
- Swivel Adaptor Base allows for 360° of rotation of gauge face for easy viewing wherever needed.
- Easy Installation 2" NPT-threaded base reduces labor time, and comes standard with female thread. A H11421RS may be purchased for male threaded applications.
- Corrosion-Resistant Construction powder-coated die cast-aluminum body assures for long service life in many fluids.
- Drop Tube prevents float entanglement in the tank, and gives the gauge a more accurate reading when turbulence is present (Drop Tubes sold separately. They are recommended for use in tanks with high turbulence, and where other piping and structures inside the tank may cause entanglement).

Ordering Specifications:

| Product # | Description | lb. | kg |
|-------------|---|------|------|
| 200TG-ENG | English Unit Tank Gauge up to 18 ft. | 7.75 | 3.52 |
| 200TG-ENG40 | English Unit Tank Gauge - 40 ft. | 7.75 | 3.52 |
| 200TG-MET | Metric Unit Tank Gauge up to 6 m | 7.75 | 3.52 |
| 200TGMET40 | Metric Unit Tank Gauge - 12 m | 7.75 | 3.52 |

 Float Buoyancy – designed to float in all approved fuels with a specific gravity of 0.65 and greater.

200TG

- Tank Height unit designed for use on any horizontal or vertical aboveground tank up to 18 feet (5.5 m) in depth. Specials available upon request.
- Numbering black letters on white background for ultimate contrast and better visibility. Characters stand over 1" (25 mm) tall.
- Unit Measurement Can be purchased in metric units to read in meters, 1/10, 1/100, or in English units to read in feet and inches.
- Maintenance No annual maintenance required.
- U.S. Patent No.: 6,523,404 Other patents pending.
- Compatible Fuels
 – see chart on page 292.
- Temperature Rating 120°F to -40°F (49°C to -40°C)

200TG Tank Gauge Instruction Sheet Order Number: H14912PA

(Ancillary Equipment)

| Product # | Description | lb. | kg |
|-----------|---------------------------|-----|------|
| H11421RS | 2" NPT Male x Male Nipple | 1.5 | 0.68 |
| | | | |

CARB CERTIFIED AST EQUIPMENT

| 61T-0208 | 2" Dia. x 8' Long Drop Tube | 2.67 | 1.21 |
|----------|------------------------------|------|------|
| 61T-0212 | 2" Dia. x 12' Long Drop Tube | 4.00 | 1.81 |
| 61T-0216 | 2" Dia. x 16' Long Drop Tube | 5.33 | 2.42 |



OPW Installation and Maintenance Instructions OPW 200TG Mechanical AST Liquid Level Gauge

IMPORTANT: Please read these warnings and use the assembly instructions completely and carefully before starting. Failure to do so may cause product failure, or result in environmental contamination due to liquid leakage into the soil, creating hazardous spill conditions.

IMPORTANT: The OPW 200TG Tank Gauges are preassembled for your convenience and ease of use. Check to make sure the unit is intact and undamaged and all parts have been supplied. Never substitute parts for those supplied. Doing so may cause product failure.

WARNING-DANGER: Using electrically operated equipment near gasoline or gasoline vapors may result in a fire or explosion, causing personal injury and property damage. Be sure that the working area is free from such hazards, and always use proper precautions. NOTE: At all times when product is in the storage tank keep the riser pipe capped, so the vapors cannot escape into the environment.

Notice: OPW products must be used in compliance with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials, and specification are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation.

Standard Product Warranty

OPW warrants that products sold by it are free from defects in materials and workmanship for a period of one year from the date of manufacture by OPW (ECO products two years from date of manufacture.) Proof of purchase may be required. As the exclusive remedy under this limited warranty, OPW, will at its sole discretion, repair, replace, or issue credit for future orders for any product that may prove defective within the one year date of manufacture period (repairs, replacements, or credits may be subject to prorated warranty for remainder of the original warranty period, complete proper warranty claim documentation required.) This warranty shall not apply to any product that has been altered in any way, which has been repaired by any party other than a service representative authorized by OPW, or when failure is due to misuse, or improper installation or maintenance. OPW shall have no liability whatsoever for special, incidental or consequential damages to any party, and shall have no liability for the cost of labor, freight, excavation, clean up, downtime, removal, reinstallation, loss of profit, or any other cost or charges.

For any product certified to California 2001 standards, OPW warrants that product sold by it are free from defects in material and workmanship for a period of one year from date of manufacture or one year from date of registration of installation not to exceed 15 months from date of manufacture by OPW.

THIS WARRANTY IS IN LIEU OF ALL OTHER

WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

200TG Specifications:

Accuracy: ±2 inches Specific Gravity of Fluid: 0.65 to 1.025. Temperature Range: -40°F to 120°F (-40°C to 59°C) Materials: Enclosure/Base – Powder-Coated Aluminum, Float – Stainless Steel, Lens – Tempered Borosilicate, Gears – Acetal, Gaskets/O-Rings – Nitrile, Hardware – Stainless Steel

Torque Specifications:

Swivel Base: 80 ft-lbs maximum. (As a general rule, hand tight plus 1½ turns is adequate.) Cover Bolts: 15-20 ft-lbs. Lens Screws: Tighten evenly; be careful not to over-tighten.

Replacement Parts:

Lid Gasket: P/N H14909M Lens: P/N H14358M Float: P/N C05165M Cover Bolt P/N: H14911M



Figure 1 200TG Installation Instructions

1. For maximum accuracy, calibration should be undertaken when the tank is half full. Using a

dipstick, measure and record tank fluid level in feet and inches. If tank is empty, record level as 3.75 inches.

- 2. Remove tank gauge from packaging. Be sure to keep the cable taut before installation.
- 3. If installing a drop tube, drill a 5/16" vent hole within 6 inches from the top of the drop tube. NOTE: Drop tubes are highly recommended for use in tanks that have any components near the tank gauge operating space in which the float and cable could become entangled, or in any tanks in which there is a high amount of turbulence. OPW offers a line of 61T Drop Tubes specifically for the 200TG tank gauge.
- Remove the eight (8) bolts from the top of the gauge. Place them, the cover and the lid gasket in a safe place. Be careful not to damage the lid gasket.
- 5. While supporting the float, remove the cardboard insert that is holding the drive gear in place. See Figure 2.

WARNING: When this cardboard piece is removed the spool is no longer secured. It is necessary to hold the float to prevent the spool from tangling. This insert must be removed for operation of the gauge.



- Figure 2
- Apply pipe dope to threads on swivel base to ensure a tight seal. Pipe dope to be a non-hardening, assoline resistant pipe thread sealant compound.
- 7. Slowly lower the float into the desired tank opening. Remember to keep the cable taut at all times.
- 8. Thread swivel base onto desired tank opening and tighten to 80 ft-lbs.
- 9. Rotate tank gauge to desired orientation for best visibility.





Figure 3

11. Place the lid gasket back into the groove, being careful not to damage it and keep it clean from debris. No sealant is necessary for this gasket. Add the cover and secure it tightly with the eight (8) bolts, using a crossing pattern, torque the bolts to 15-20 ftlbs.

Annual Maintenance:

Using a dip stick, measure the liquid level of the tank and check this value with the value displayed on the tank gauge. The values should be within ±2 inches of each other. Recalibrate if necessary.

Remove cover and visually inspect the internal parts for signs of wear, tangles in the spool, and corrosion. Replace parts if necessary.



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