

The Growco GTG Series servo tank gauges are designed in the most advanced technology with integrated circuitry utilizing stringent military processing technology to ensure high precision and rugged construction for long term reliability. These tank gauges use industry standard communication protocols which make them to have easy access to the DCS systems or other common control devices. The GTG Series are used widely for tanks in the oil storage tanks terminals, refineries, petrochemical complex as well as industries such as foodstuff, chemical, water treatments plants, etc.

➤ **FEATURES:**

- Unique design of the patented technology, processing quality of military standards;
- Ability to measure the liquid level, interface (water level), temperature, density, volume & mass;
- High Accuracies. The measurement accuracy of liquid level is +/-1mm, the measurement accuracy of oil-water interface level is +/-2 mm, the temperature accuracy is +/-0.2°C while the density accuracy* is +/-0.5kg/m³;
- Built-in temperature measuring chip, real-time temperature correction;
- Advanced single chip control with unique control algorithms;
- Built-in anti-lightning module;
- Use power supply of 24 VDC;
- The local display functions;
- Remote control operation functions which can set the level of various parameters through remote control;
- Light weight;
- Simple installation with DN80 flange size;



Typical Photograph of GTG Series

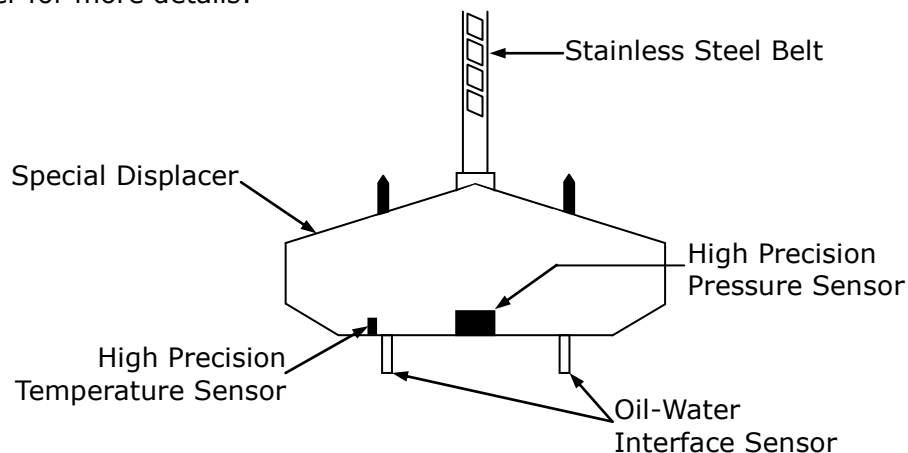
*Note: *based on a minimum height of 5m of product level*

TYPICAL SPECIFICATIONS:

- Liquid level accuracy : $\pm 1\text{mm}$
- Oil-water interface accuracy: $\pm 2\text{mm}$
- Temperature accuracy : $\pm 0.2^\circ\text{C}$
- Density accuracy* : $\pm 0.5\text{kg/m}^3$
- Pressure accuracy : $\pm 0.01\%$
- Measuring height : 32m
- Environment temperature: -40 to $+70^\circ\text{C}$
- Classifications : Ex[ia]ia II BT4
- Enclosure : IP65
- Electrical supply : 24VDC
- Power : $< 10\text{W}$
- Standard Output : RS485
- Options : 4 -20mA, HART, BPM, MODBUS
- Can be connected up to 256 units of our GTG series tank gauges
- Approximate Weight: $< 6\text{Kg}$ (Aluminum alloy)
- Approximate Size : 285mm \times 154mm \times 281mm
- Cable outlet : 2 \times 1/2NPT

➤ PRINCIPLE OF OPERATION:

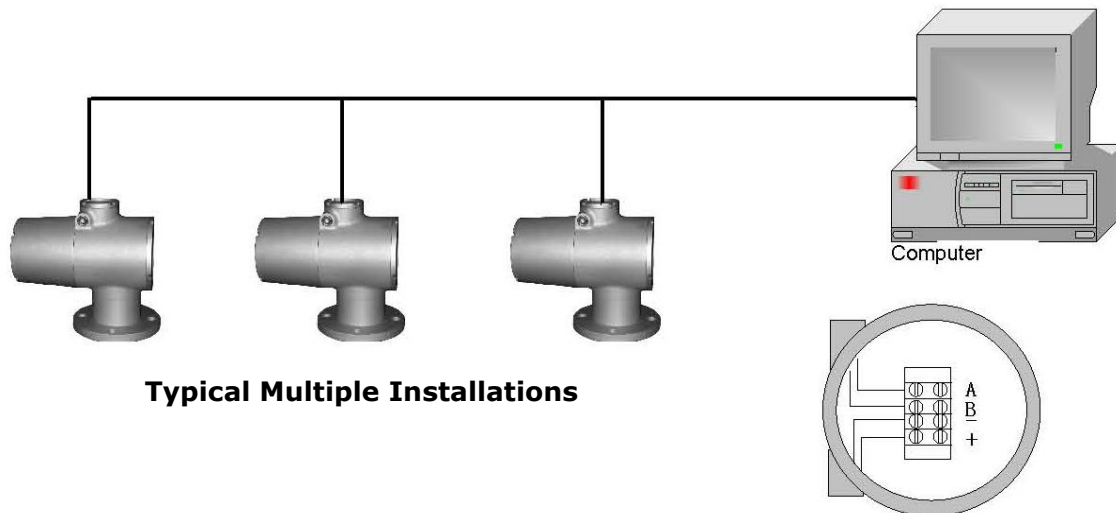
The Growco GTG Series servo tank gauges are designed in the most advanced technology with integrated circuitry utilizing stringent military processing technology to ensure high precision and rugged construction for long term reliability. It comes with a special displacer with options for various types of sensors to the temperatures, density and oil-water interface besides the liquid level. This special displacer is not dependent on the buoyancy of the float (which are commonly used by our competitors) but lies on the principle that liquids of different dielectric constants. It is currently the best available choice in tank gauges technologies replacing the traditional mechanical level gauges, radar gauges or other type of gauges. Please see below diagram on our special displacer for more details:



*Note: *based on a minimum height of 5m of product level*

TYPICAL ARRANGEMENT OF MULTIPLE INSTALLATIONS:-

The Growco GTG Series servo tank gauges which use 24 VDC power supply can also be connected with the computers of RS485 communication equipment. In order to prevent interference, power cables and signal wires are to be connected into separate cable conduits. Below is the typical arrangement of multiple installations of the Growco GTG series servo tank gauges:

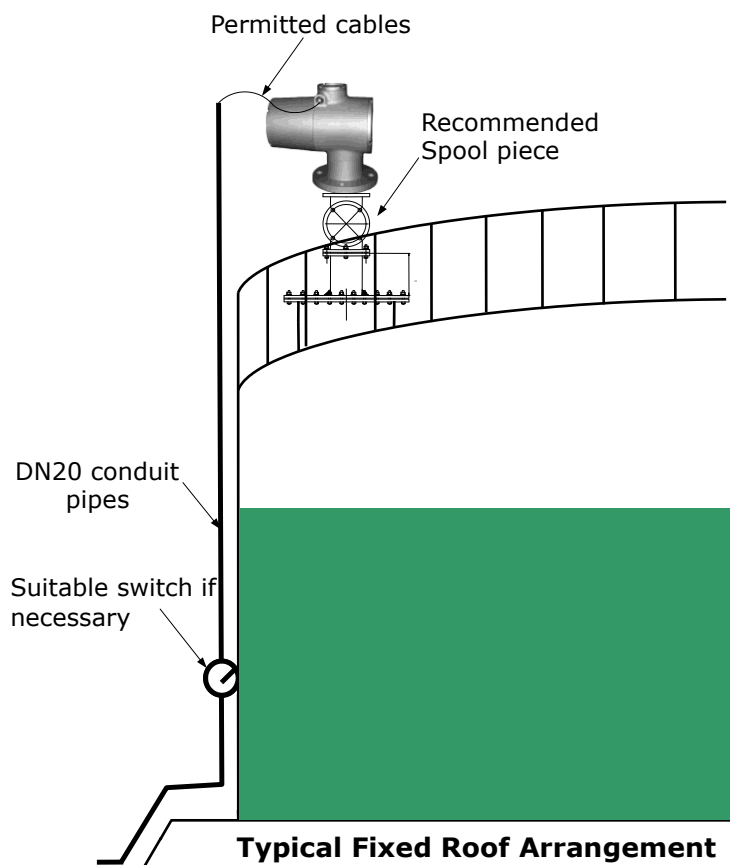


Typical Multiple Installations

GROWCO GTG SERIES SERVO TANK GAUGES: SOME POSSIBLE INSTALLATIONS ARRANGEMENTS

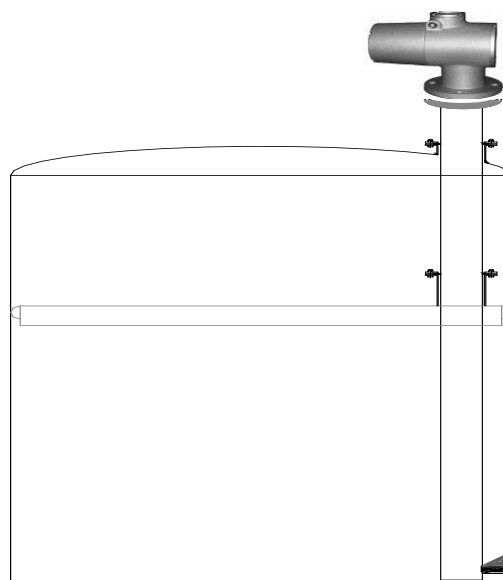
The Growco GTG series tank gauges can be installed on the vertical fixed roof tanks, vertical floating roof tanks, horizontal tanks, spherical tank and other tanks.

1. The installation on the fixed roof tanks are recommended to use stilling wells when the condition permits for better performance.



Typical Fixed Roof Arrangement

2. The installation for floating roof tanks must be installed with proper stilling wells as shown (right) to prevent problem to the special displacers.



Typical Floating Roof Arrangement

Modelling codes:

GTG-Series:

Code Measurement Parameters:

- A Liquid Level Only.
- B Liquid Level, Water Level, Temperature, Density, Volume, Mass.

Code Classification:

- 1 Classification: Ex[ia]ia II BT4

For example: GTG-A-1 is for Liquid Level Only in Ex[ia]ia II BT4 classification type with standard communication output only.

Note: Communication Output Option price adders for 4-20 mA or HART or BPM or MODBUS.

➤ **NOTICE WHEN ORDERING:**

- Describe its application.
- Specify its model
- Specify working & max. Pressures.
- Specify product & max. viscosity.
- Specify min. & max. temperatures.
- Specify tanks heights & diameters
- Specify type of tanks (i.e., fixed roof, floating roof, etc)
- Specify voltage
- Other useful details or contact us

TOTAL MEASUREMENT SOLUTIONS PROVIDER
Member of Singapore Manufacturing Federation(Since1932)



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