Float & Tape Tank Gauge - FTG



It is reliable and accurate level gauge, for continuous level indication of liquid in almost all product applications and tank types. Very commonly used for custody transfer (inventory management)

Salient Features:

- Easy to install or retrofit on existing tanks.
- High accuracy of +2mm
- Local Indicating mechanism of 2 Pointer Dial.
- Seal pot for fuming liquids (optional)
- Minimum maintenance

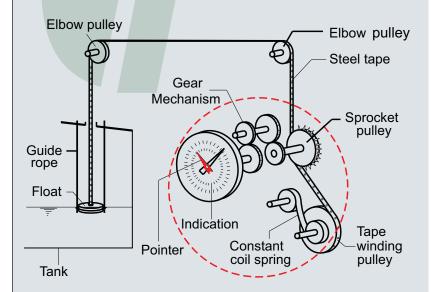
Construction & Operation

Gauge comprises of a float and an enclosure consisting of steel tape wound on storage drum, carrying constant torque spring to maintain tape under continuous tension and corresponding gear mechanism for pointer movement.

The float, attached to SS tape follows liquid level closely in vertical direction during rise in liquid and equi-spaced holes in SS tape engage with sprocket pins and get wound on a storage drum. During fall in liquid level, float weight is balanced by constant torque spring and SS tape gets unwound from sprocket pulley to follow liquid level downwards. This rotation of sprocket pulley is transferred to the pointer through gear mechanism to indicate accurate liquid level in tank.

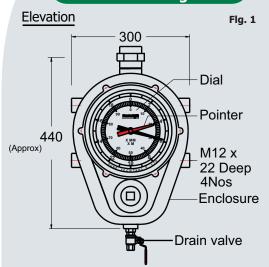
The gauge is provided with guide ropes which have to be firmly anchored to tank bottom to restrict horizontal float movement.



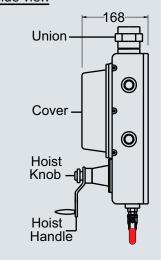




Schematic Diagram



Side view



Specifications:



Measuring Ranges : 0-4, 0-8, 0-12, 0-16, 0-20 mtrs

Accuracy : ±2mm

Resolution : 1mm

Min Density : 0.8 g/cm³

Max. Temperature : 120° C

Max. Pressure : Atmospheric

Installation : Side / Top

Dial Indicating Mechanism : 2 Pointers Dial (mm & mtr indication)

Calibration Dial : Aluminum (OD.210mm) white with graduations & numericals

Dial Cover : Polycarbonate

Pointers : Brass (Red Color) – mm indication, Brass (Black color) – mtrs indication

Enclosure : Epoxy coated Cast Aluminium x IP65

Process Connection : CS x 1-1/2"NB, ANSI flange or -1-1/2" BSP Socket

Float : 350mm x SS316

Tape : SS316

Guide Rope : SS316 x Ø 1.6mm

Elbow Pulley : Cadmium pltd steel pulley with PTFE bush and SS shaft housed in WP Cast Al. encl.

Protection Conduit (side mtd) : 40 NB, Galvanized steel (GI) pipe, Horizontal limb=800mm,

Tensioner : Cadmium pltd SS302 spring housed in CS enclosure

Tensioner Flange : 3/4" NB ANSI flange (2 nos)

Anchor : Weldable- SS316 plate (25mm x 6mm thick)

Weighted-SS316 pipe(Ø33mm)

Drain : 1/4" BSP Ball valve(side mtg) / plug (top mtg)

Gauge Mtg Bracket : Epoxy coated CS

Seal Pot : Aluminium / SS, provided with sealant oil

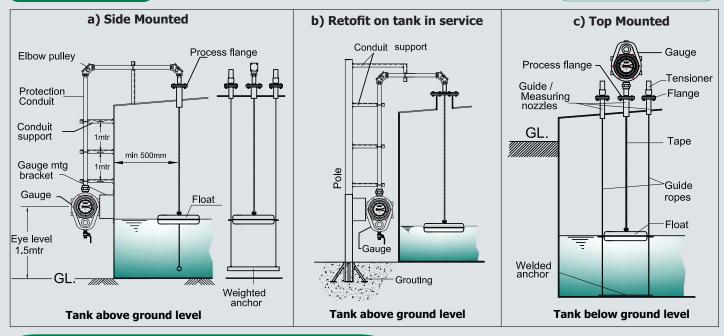
Hoist Mechanism : Provided on demand for high viscous liquid

Installation Notes:

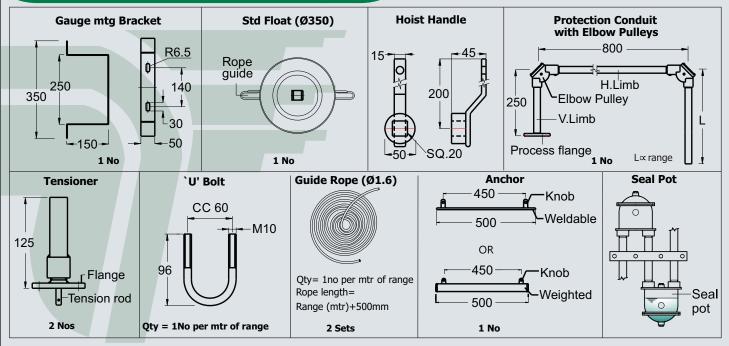
- 1. For retrofit on existing tanks/new non metallic tanks, use weighted anchor.
- 2. For existing tank, gauge body should be mounted on grouted pole (fig 3b) as its welding may not be permissible on tank.

Installation: fig 3

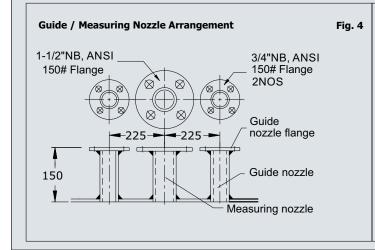


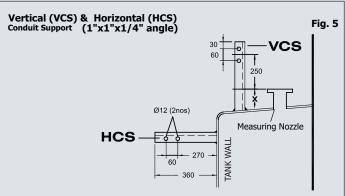


Components and fittings supplied with gauge:



Components to be fabricated by customer(user):





The length (x) of vertical conduit support will depend on the shape of tank top (Flat, round, inclined, conical etc.) and height of your measuring nozzle welded on tank top, to ensure proper fitment of supplied protection conduit.

Model Identification FTG-**Installation** Top Side -S **Measuring Range** В 0-8m 0-12m C D 0-16m 0-20m Ε Others -0 **Float** Ø350mm -Α Others 0 **Process Connection MOCx Size** F CS x 1-1/2"NB ANSI Flange K CS x 1-1/2"BSP Socket (F) -Others -0 **Tensioner** W Without -Cd Pltd Spring + CS. Enclosure T O Others **Anchor type x MOC** Without -W Weldable SS316 1 2 Weighted Ss316 Others 0 **Protection Conduit** Without -W GI pipe -G Others 0 **Seal Pot Assy** Without — 50mm WC -1 200mm WC -2 Others 0 **Ordering Information:** Model No. along with liquid its density, Optg. temp & pressure and tank dimensions **Applications:** Water, Corrosive liquids, Hydrocarbons, Chemicals, Varnishes and other Valuable liquids Pune Techtrol Pvt Ltd [CIN: U31909PN1991PTC063403]

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Custom built specs./options available on demand. We reserve the right to modify design and specifications without prior notice.





CAT/0100/REV 00/12-14