

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

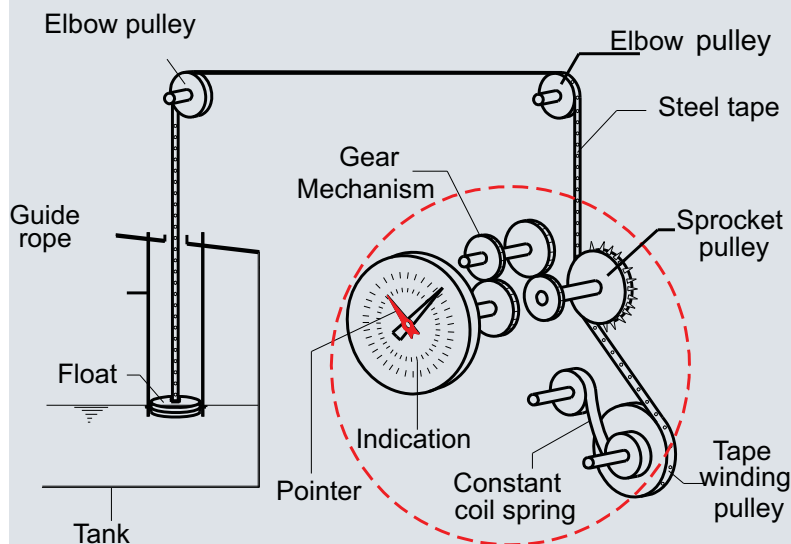
## Construction & Operation

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.

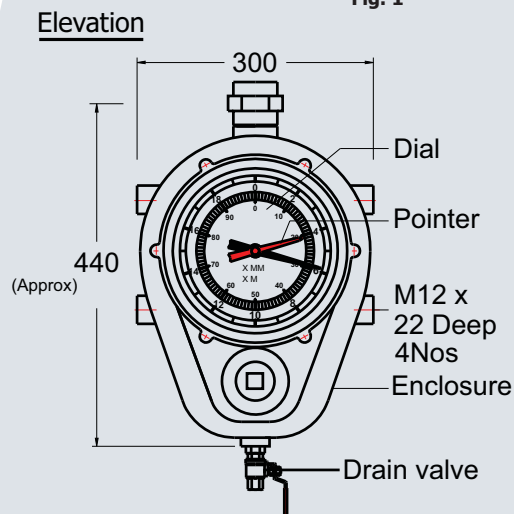
The gauge is provided with guide ropes which have to be firmly anchored to tank bottom to restrict horizontal float movement.

Fig. 2

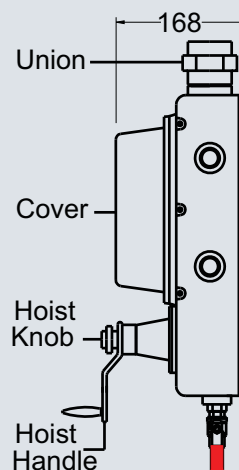


## Schematic Diagram

Fig. 1



## Side view



## Specifications:

Measuring Ranges	: 0-4, 0-8, 0-12, 0-16, 0-20 mtrs
Accuracy	: $\pm 2\text{mm}$
Resolution	: 1mm
Min Liquid Sp. Gr.	: 0.8
Max. Temperature	: $120^{\circ}\text{C}$
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, A105 or SS304/316 x 1-1/2"NB, ANSI flange or -1-1/2" BSP Socket
Float	: 350mm x SS316
Tape	: SS316
Guide Rope	: SS316 x $\varnothing$ 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) or SS304 pipe, Horizontal limb= 800mm,
Tensioner	: Cd pltd CS x CS Encl, SS304 Spring x SS304 Encl, SS316 spring x SS316 enclosure
Tensioner Flange	: 3/4" NB ANSI flange (2 nos)
Anchor	: Weldable - SS316 or SS304 plate (25mm x 6mm thick) Weighted - SS316 or SS304 pipe ( $\varnothing$ 33mm)
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

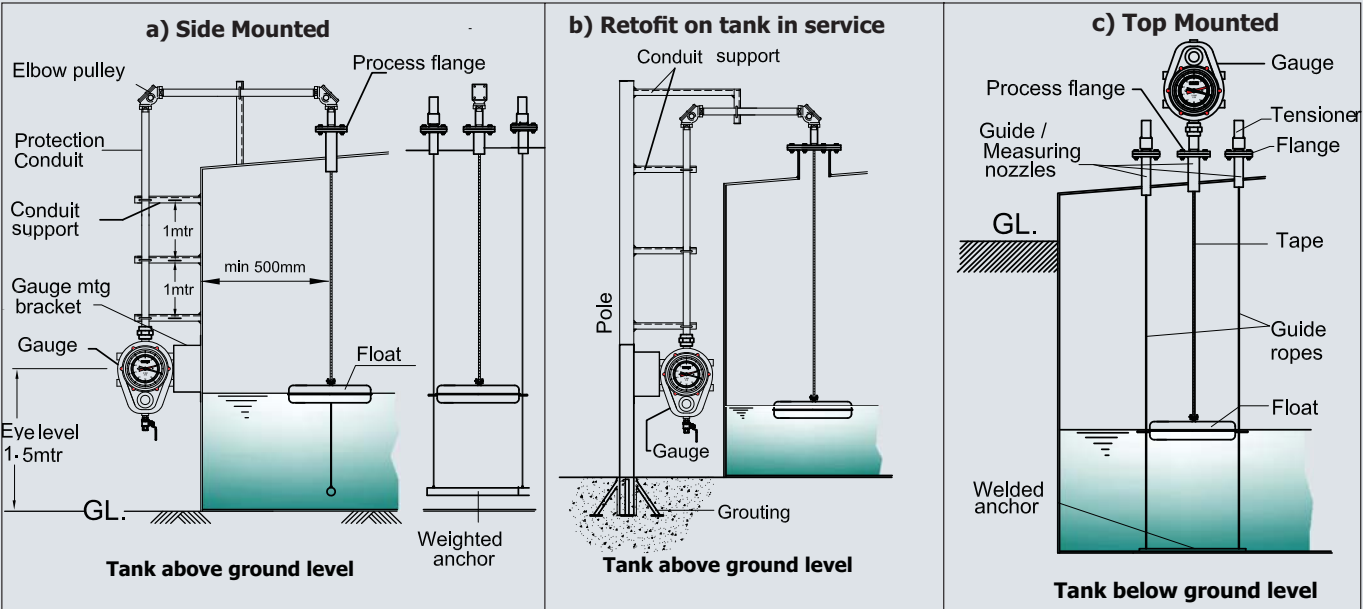
## Installation Note:

- 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.

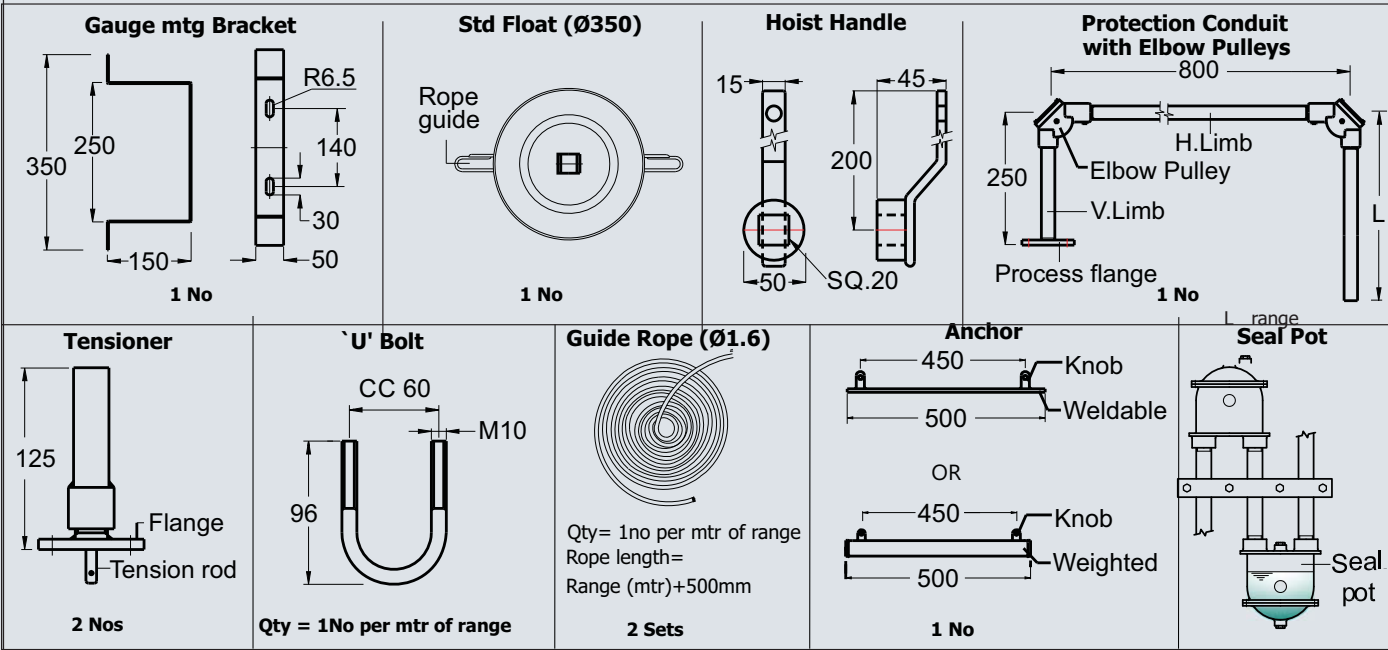
# Float & Tape Tank Gauge-USTT Series



Installation fig3



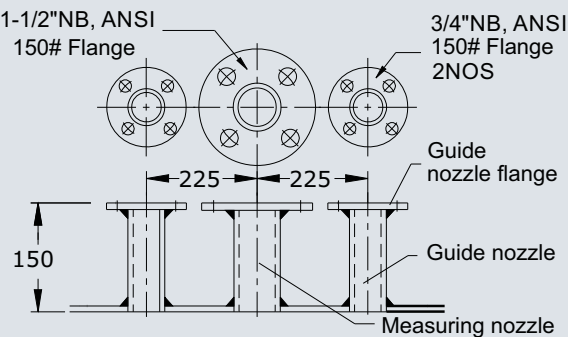
Components and fitting supplied with gauge:



Components to be fabroacted by customer (user):

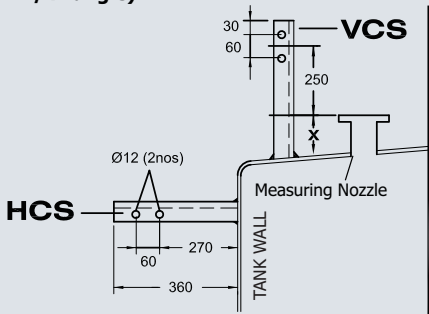
Guide / Measuring Nozzle Arrangement

Fig. 4



Vertical (VCS) & Horizontal (HCS) Conduit Support (1"x1"x1/4" angle)

Fig. 5



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.

# Float & Tape Tank Gauge-USTT Series



## Model Identification

USTT-									
Installation									
Top	T								
Side	S								
Measuring Range									
0 - 4 m		A							
0 - 8 m		B							
0 - 12 m		C							
0 - 16 m		D							
0 - 20 m		E							
Others		O							
Float									
Ø 350 mm		A							
Others		O							
Process Connection MOC									
CS				C					
ASTM A 105				A					
SS304				N					
SS316				S					
Others				O					
Pr. Connection Size									
1-1/2" NB ANSI 150 # flange					1				
1-1/2" BSP Socket (F)					2				
Others					O				
Tensioner									
Without					W				
CS cadmium plated spring + CS Enclosure					T				
SS304 spring + SS304 Enclosure					N				
SS316 spring + SS316 Enclosure					S				
Others					O				
Anchor Type x MOC									
Without					W				
Weldable SS316					1				
Weighted SS316					2				
Weldable SS304					3				
Weighted SS304					4				
Others					O				
Protection Conduit									
Without					W				
GI pipe					G				
SS304 Pipe					N				
Others					O				
Seal Pot Assembly									
Without					W				
50 mmWC					1				
200 mmWC					2				
Others					O				

## Applications

Water, corrosive liquids, hydrocarbons, chemicals , varnishes and other valuable liquids

## Order Information

Model No. alongwith liquid & its sp. gr., Optg Temp & Pressure and Tank Dimensions