

Tubular Level Gauges

General

Features

- Tubular level gauge applicable upto 10 kg/cm² and upto 150 deg cent
- Forged bodies
- Toughened borosilicate glass with designs to suit pressure and temperature rating
- For applicability in critical acidic, non acidic, and in high temperature zone
- Available with C Channel options with SS, CS, MS with anticorrosion powder coat, MS
- NACE, H2S service compatibility applicable
- CE applicability
- Also available with 1.6 to 4 mm lining PTFE / PFA with SS
- Applicable for refinery, petrochemical, chemical, power, radioactive, fertilizer, food, pharma, metal industry applications

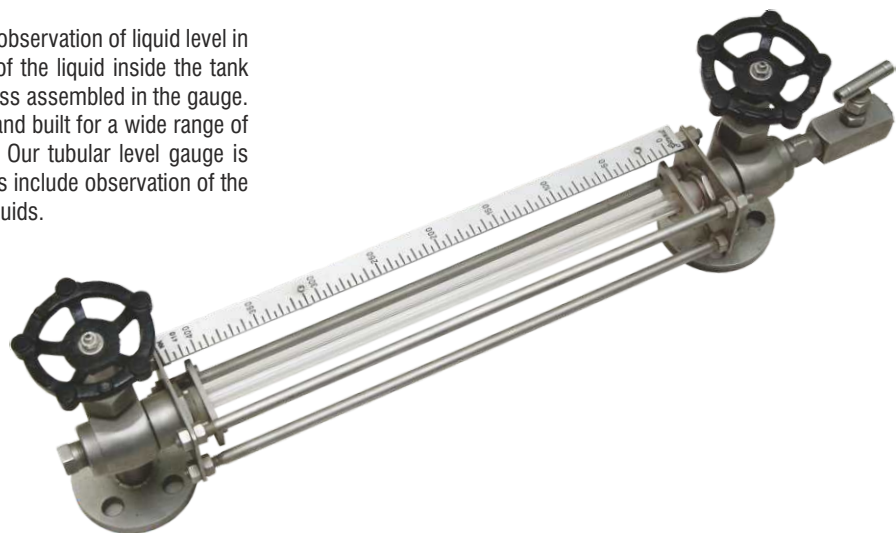


Concept and Principle of operation

The tubular type level gauge is the simplest shape of direct reading level apparatus for maximum pressure up to 10 bar and maximum temperature of 150°C. The gauge glass is built in the protective tube. Check balls inserted in the upper and lower valve to stop flow instantaneously when the glass is broken. The protector having a circular form is constructed to prevent glass breakage from external sources. For glass tube gauges only of center to center dimensions in excess of 2.000 mm, it is possible to manufacture any required c to c by using coupling in the middle of the gauge. Depending on the nature of the liquid, tubes made from various PFA, Acrylic or Vinyl tube are also available. Tubular glass with a linear red coating on the back is available to make level observation more clear.

This Liquid Level Gauge provides direct observation of liquid level in a tank/ vessel. Rising and falling level of the liquid inside the tank /vessel can be observed through the glass assembled in the gauge. Tubular Liquid Level Gauges, designed and built for a wide range of temperature and pressure applications. Our tubular level gauge is used to make, besides other applications include observation of the level of corrosion-proof and chromatic liquids.

The most advantage of this type is for easy level reading of boiling liquids restricting in temperature application rating. When liquids are boiling, their bubbles make the surface level indistinct. The manual adjustment of isolation valve at the input of the media entering the chamber reduces the bubbling. Therefore the level gauge ease to read the level or bubbling liquids. It also provides advantages for highly dense and viscous liquids, as the body is made of seamless pipe. This level gauge is designed and manufactured for easy and accurate reading the liquid level of highly foamy liquids. The gauge has a relatively spacious internal area where foamy liquid is held from forming foams.



Technical Specifications: Technical Data

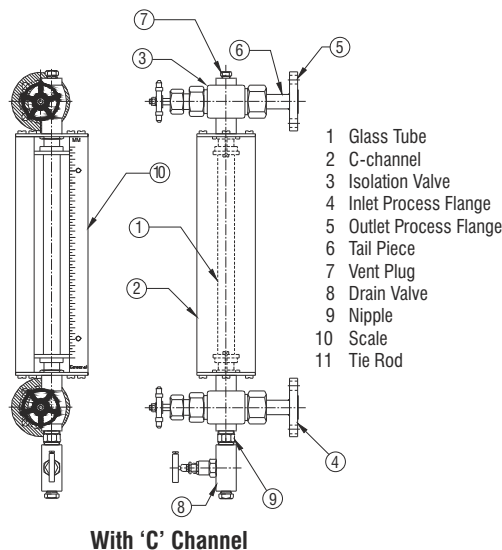
Type of Gauge	Tubular Level Gauge - TULG
Mounting	Top-Bottom
Pressure	Upto 10 kg/cm ²
Temperature	Upto 150°C
CCD	Max. upto 2000mm
MOC of Wetted Parts	CS, SS304, SS304L, SS316, SS316L, PP and other on request
Glass Tube	OD 16mm or 19mm
Glass Protection	a) M.S. Tie Rods b) SS Tie Rod c) MS powder Coated 'C' Channel d) SS 'C' Channel
Process Connection	Screwed / Flanged / Socket Weld and other on request
Isolation Valve	Auto Ball Check Valve a) Screwed Bonnet offset construction b) Material Construction as per wetted part
Vent	1/2" Plugged / 1/2" Needle Valve / 1/2" Ball Valve / 1/2" Gate Valve / 1/2" Globe Valve
Drain	1/2" Plugged / 1/2" Needle Valve / 1/2" Ball Valve / 1/2" Gate Valve / 1/2" Globe Valve
Calibration Scale	Aluminium, Aluminium with powder coated, SS304, SS316, Acrylic
Special	P.T.F.E. lined on wetted part - Flange orientation

Construction and Dimensional Cross Sectional Overview

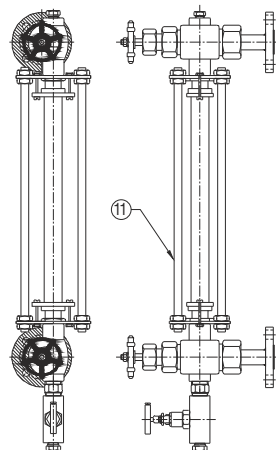
The gauge consists of a body having machined to have a liquid where high temperature are liable to occur, the glass is heavy borosilicate glasses are used. These tubular gauges preferably used for all applications with the simplest solution keeping the temperature and pressure rating known.

The tubular level gauge is assembled firmly with heavy toughened borosilicate glass with tie rods or C Channel, special packing arrangement is made to ship larger CCD with tie rods and or with C Channel, as the delicacy with glass oriented design is subjected to damage in transit.

The most advantage of this type is that it has no invisible sections (dead band). Our standard overlapped section is 10 mm as minimum and the gauge is so designed that supporting brackets can be equipped to protect a long multiple connected gauge from distortion of fall down. The scale plate to mount alongside the gauge may be available on request by customers to observe the liquid level more accurately.



With 'C' Channel



With Tie Rods



With 'C' Channel



With Tie Rods

Ordering Information

Ordering Information

TULG 1000-F03-ZE-VD-16-YZ-UW-QU-RU-SO-XX-Z



Centre to Centre Distance	
1000	Indicate the required Centre to Centre Distance in mm.

Process Connection			
Flanged Connection			
F01	1/2", 150# RF	F11	1", 300# RF
F02	3/4", 150# RF	F12	1.5", 300# RF
F03	1", 150# RF	F13	2", 300# RF
F04	1.5", 150# RF	F19	1", 600# RF
F05	2", 150# RF	F20	1.5", 600# RF
F09	1/2", 300# RF	F21	2", 600# RF
F10	3/4", 300# RF	XX	Any Other*
Threaded Connection			
B04	1/2"BSP (M)	N04	1/2"NPT (M)
B05	3/4"BSP (M)	N05	3/4"NPT (M)
B06	1"BSP (M)	N06	1"NPT (M)
B07	1.5"BSP (M)	N07	1.5"NPT (M)
B08	2"BSP (M)	N08	2"NPT (M)
XX	Any Other*		

MOC of Connection	
ZA	CS (A105)
ZB	CS (A106)
ZC	SS 304
ZD	SS 304L
ZE	SS 316
ZF	SS 316L
ZI	PP
XX	Any Other*

MOC of Wetted Parts	
VA	CS
VB	SS 304
VC	SS 304L
VD	SS 316
VE	SS 316L
VF	PP
XX	Any Other*

Special Features	
PE	PTFE Lined, CS Flange
PF	PTFE Lined, SS304 Flange
PG	PTFE Lined, SS304L Flange
PH	PTFE Lined, SS316 Flange
PI	PTFE Lined, SS316L Flange
XX	Any Other*
Z	NIL

Calibrated Scale	
SO	Aluminium with power coat
SP	Aluminium
SQ	SS304
SR	SS316
SS	Acrylic

Drain			
RU	1/2" NPT (F), Plug	RX	1/2" Ball Valve
RV	3/4" NPT (F), Plug	RY	1/2" Gate Valve
RW	1/2" Needle Valve	RZ	1/2" Globe Valve

Vent			
QU	1/2" NPT (F), Plug	WX	1/2" Ball Valve
QV	3/4" NPT (F), Plug	QY	1/2" Gate Valve
QW	1/2" Needle Valve	QZ	1/2" Globe Valve

Isolation Valves	
UW	Screwed Bonnet Offset Construction
N	Needle Valves

Glass Protection	
VZ	M.S. Tie Rods
WZ	SS Tie Rods
XZ	MS Powder Coated 'C' Channels
YZ	SS 'C' Channels

Glass Tube	
16	16 mm O.D.
19	19 mm O.D.