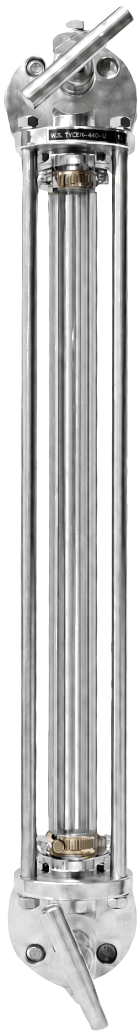
LEVEL MEASUREMENT

Tubular Level Gauge

Direct reading instrument for accurate liquid level measurement in low pressurized vessels.



01 / Product overview

Design and Operation

Operating Principle

The Tubular Level Gauge is a highly reliable and economical instrument designed for direct liquid level measurement in tanks and vessels. It features a robust frame (either a 'C' channel or tie rods) connected to the process via threaded or flanged connections. A toughened borosilicate glass tube is securely fixed between two valves, providing direct visual indication of the process fluid. The liquid level inside the glass tube corresponds exactly to the level within the tank.

Salient Features

- 360° visibility with tie rod guard for enhanced glass protection.
- Glass removal and replacement can be performed while keeping other parts connected.
- Frost-free extension prevents frost formation on the gauge glass in low-temperature applications.
- Autoball check mechanism significantly reduces liquid leakage in the event of glass breakage.
- Toughened borosilicate glass tube ensures durability and clarity.
- Wide variety of materials of construction (SS, PTFE, PP, PVDF) to suit specific application requirements.
- Optional LED illuminator available for reading in low light conditions.

Technical Specifications

Parameter	Specification
Mounting	Side-Side
Body Material	Carbon Steel, SS316/ SS316L, PTFE (Others on request)
C-C Distance	Up to 3000 mm
Process Connection	Threaded or Flanged
Drain & Vent	Flanged & Valve
Scale MOC	SS316L
Gaskets	PTFE
Sight Glass	Toughened Borosilicate
Max. Temperature	100°C
Max. Pressure	2 bar (PP, PVDF, PTFE); 10 bar (SS, CS)
End Blocks	CS, SS 304, SS 316, PP
Glass Protection	SS/ MS Tie Rods or 'C' Channels

Specification Control: All flanged connections are Class 150 (ASME) / PN16 (EN) unless otherwise specified. Final values for pressure, temperature, and material compatibility are defined by the approved order data sheet and nameplate.

Primary Applications

The ITLG model is suitable for a wide range of industries including Chemical, Petro-Chemical, Fertilizer, Power Generation, and Pharmaceutical plants. It is also widely used in water and wastewater treatment, cooling and filtration systems, chemical dosing systems, automobile applications, and liquid sewerage tanks.

02 / Configuration

Model Selection Guide

Configure the ITLG Tubular Level Gauge using the selection codes below. For custom requirements or materials not listed, please consult the factory.

MODEL CODE STRUCTURE

ITLG - X_1 - X_2 - X_3 - X_4 - X_5 - X_6 - X_7 - X_8 - X_9 - X_{10} - X_{11} - X_{12}

Base Configuration

Code	X1: C-C Distance
XXXX	Specify Distance in mm

Code	X2: Protection Guards
A	SS304 'C' Channels
B	MS 'C' Channels
C	SS Tie Rod
D	MS Tie Rod

Code	X3: MOC
SS	SS316/SS316L
CS	CS
PT	PTFE
PP	PP
PF	PVDF

Code	X4: Orientation
L	Left
R	Right
B	Back
V	Vertical

Process Connection

Code	X5: Connection Type
SO	Slip on Flange
WN	Weld Neck Flange
SW	Socket Weld Flange
RWN	RTJ Weld Neck Flange
TH	Threaded Flange
M	Threaded NPT-M
N	Threaded NPT-F

Code	X6: Connection Size
A	1/2" (ASME)
B	3/4" (ASME)
C	1" (ASME)
1	DN 15 (EN)
2	DN 20 (EN)
3	DN 25 (EN)

Vent & Drain

Code	X7/X10: Vent/Drain Type
PV	Plug Valve
NV	Needle Valve
BV	Ball Valve
SO	Slip on Flange
WN	Weld Neck Flange

Code	X8/X11: Valve Connection
N	NPT
B	BSPT
-	None (for Flanged)

Code	X9/X12: Vent/Drain Size
A	1/2" (ASME)
B	3/4" (ASME)
1	DN 15 (EN)
2	DN 20 (EN)

Ordering Example:

ITLG - 0800 - A - SS - L - SO - B - NV - N - A - NV - N - A

Model ITLG, 800mm C-C Distance, SS304 'C' Channels, SS316/SS316L MOC, Left Orientation, Slip on Flange (Process), 3/4" (ASME) Process Size, Needle Valve (Vent), NPT Vent Connection, 1/2" (ASME) Vent Size, Needle Valve (Drain), NPT Drain Connection, 1/2" (ASME) Drain Size.

Optional Accessories: Check Valve, Protection Extension, Valve Jacket, Valve Control, Autoball Check, Illuminator, Frost-Free Extension, Steam Jacketing, Spring Loaded or Weighted Valve.

03 / Support and Document Control

Support and Ordering

Why Choose Globe United?

With our manufacturing presence in SAIF Zone, Sharjah, UAE, we deliver premium industrial solutions worldwide.

- Variety of graded raw material sourced globally
- Over 10 years of operational excellence
- Instant availability of spare parts
- Prompt site service support within the UAE and GCC

Quality Assurance

Globe United Tubular Level Gauges undergo rigorous inspection to ensure compliance with project specifications. Standard testing includes 100% Hydrotesting and EN 10204 3.1 Certification.

Available per project specification:

- EN 10204 3.2 Certification
- Radiographic Testing (RT)
- Positive Material Identification (PMI via OES or XRF)
- Hardness Testing (NACE MR0175 / ISO 15156)

Contact Information

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