PRODUCT DATA SHEET No. 2

TRANSPARENT LEVEL GAUGE SERIES 1000

simco
Liquid Level Gauges and Valves

Issue 3
May 2016

General Description

Simco Transparent level gauges are different in design / function to a reflex gauge as they consist of two flat transparent glasses where the light can enter / exit from the back to the front of the gauge thus illuminating the liquid level which is contained in the chamber separating the two glasses. The liquid level is indicated by the different transparency of the two media.

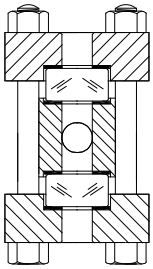
A source of light (Illuminator) may located at the back of the transparent level gauge, light from the illuminator passes through the process fluid and is then viewed by to the observer so that a level measurement can seen.

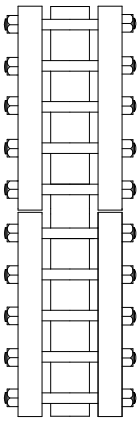
This type of gauge is used for measuring both total and interface liquid level of fluids in a vessel and also allows the use of Mica shields on the glass for excellent protection in steam service (if the environment is corrosive then Kel-F shields should be used instead).

Series 1000 Transparent gauges are available in nine standard lengths and constructed with a single piece chamber.

Series 1000 Transparent Gauge

Cross sectional and side view





Isolation Valves / Gauge Cocks

Simco isolation valves have been specifically designed for use with liquid level gauges and are available in a variety of materials, for temperature and pressure ranges to meet most specifications. Valves are available in both straight and offset pattern designs with outside screw and yolk (OS&Y) or inside screw configurations and have a selection of vessel and gauge connections to fit a variety of mounting requirements.

A standard feature with Simco Valves is the automatic safety ball checks. In the event of the glass breaking the ball check seats to prevent the loss of vessel contents. All valves may be repacked under pressure with the back seating arrangement ensuring complete shut off. A typical selection of valve types / arrangements can be seen below with other arrangements available on request.

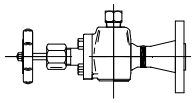
Example 1

Type 16 Offset Pattern Inside Screw

Flanged Vessel Connection

Gauge Connection NPT

Vent / Drain Connection NPT Plugged



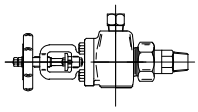
Example 2

Type 26 Offset Pattern (OS&Y)

Union Vessel Connection

Gauge con.. NPT - Drain / Vent NPT Plugged

Vent / Drain Connection NPT Plugged



Typical Material Specifications

Chamber / Cover / Flanges

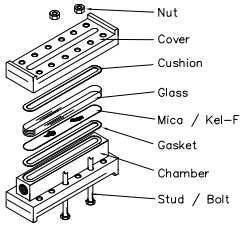
A105N, A350 LF2, 304 / 304L, 316 / 316L, F44, F51, F55

Bolting

Carbon Steel -A193 2H A194 (Zinc Plated & Passivated)

Carbon Steel -A193 2H A194 (Hot Dip Galvanized)

Stainless Steel -A193 B8M / A194 8M



Typical Vessel Connection

Threaded - ½", ¾" NPT (Union connections avail.)

Flanged - ½", ¾", 1", 1.5", 2" & 3"

ANSI Class 150#, 300#,

Typical Gauge Connection

Threaded - ½", ¾" NPT (Union connections avail.)

Socket Welded - ½", ¾"

Butt Welded - ½", ¾"

Typical Vent / Drain Connection

Threaded - ½", ¾" NPT

Flanged - ½" & ¾" ANSI Class 150# & 300#

Selection of Available Accessories

Non-Frosting Extention

For low temperature applications protecting against the build up of frost.

Calibrated Scale

Manufactured from traffolyte / 316 stainless steel and engraved with units which reflect individual clients requirements.

Illuminator

Standard bulb type illuminators c/w Perspex light diffuser or alternate LED type illuminators are available with ATEX & IEC certification.

Protective Shields for Glass

The instrument glass may be protected from corrosive process medums through the incorporation of Mica or Kel-F shields.

For more information contact Simco Engineers directly through the web site www.simco-engineers.com or alternatively e-mail sales@simco-engineers.com