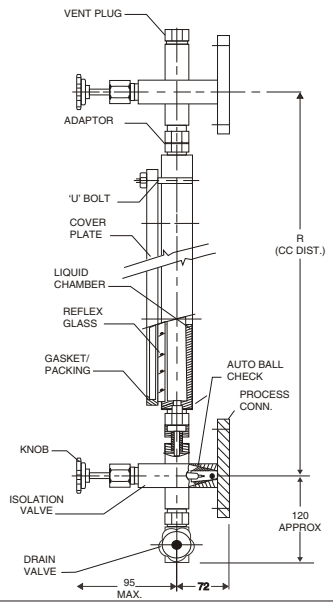
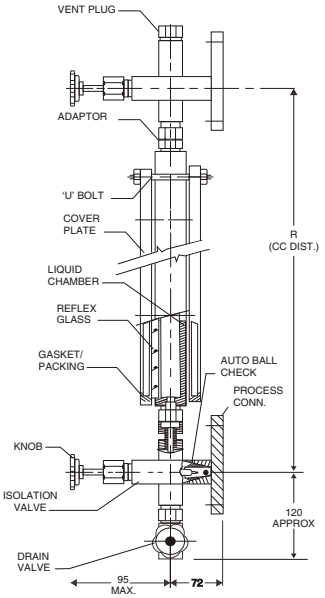
Reflex / Transparent Flat Glass Level Gauge- RFG

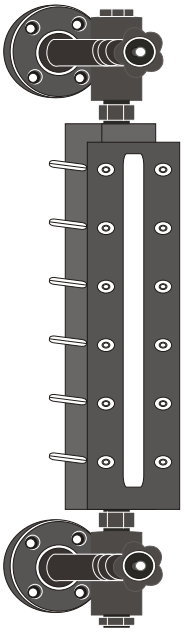
It is designed for safe and positive visual indication of liquid level in vessels under high pressure & temperature conditions. It is a flat glass gauge, which has precision moulded prismatic grooves cut on its inner side, which comes in contact with the medium. Light striking the glass covered by liquid is refracted (absorbed) into the liquid making this portion appear black, whereas light covering the vapour space is reflected back towards the viewer, making it appear silvery-white. Thus, a sharp clear line marks the liquid level.

Fig. 1 : REFLEX



Fi g. 2 : Transparent





Construction & Operation:

Reflex (Fig.1): The liquid chamber is formed by one piece metal body, reflex gauge glass, sealing gasket, cushion and cover plate all held together by u-bolts & nuts.The gauge glass sandwitched between the gasket & cushion is placed on front side for viewing of liquid level & held in the recesses machined in the body and cover plate. This ensures leak proof assembly, prevents gasket / cushion slippages and avoids glass to metal contact. The glass section comes in lengths from 11 5mm to 340mm and as many as 5 can be fitted in a single gauge assembly. Extended ranges can be provided by coupling two gauge assemblies through a coupler or the level gauges can be installed in a staggered manner.The level gauge is usually provided with shut - off valves at either ends to isolate the gauge in the event of glass breakage or replacement.

Transparent (Fig. 2): The construction is similar to Reflex except that the liquid chamber is formed by one piece metal body and a pair of transparent gauge glass plates.

Specifications :

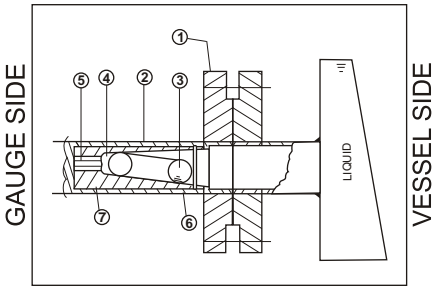
Gauge Classification	: Standard Chamber,Large Chamber or Weld Pad.
Gauge Glass	: Tempered borosilicate (Imported) in 30mm width as standard.
Cushion	: CAF
Gasket	: CAF,PTFE,
Body (Liquid Chamber)	: MS, CS (EN -8), ASTM A-105, SS304, SS316 or PP
Cover Plate	: MS, CS (EN-8), ASTM A-105, SS304, SS316 or PP
Bolts! Nuts	: MS or Graded Alloy Steel for high temperature service
CC Distance	: 300, 320, 400, 450, 500 MM
Gauge Connection	: Straight Through / Hook -Up
Process Connection (PC)	: Flanged to BS, ASA, ANSI, DIN J Screwed to BS or NPT
Orientation of PC	: Top \ Bottom : Left, Right .Rear, Vertical
isolating valves	: Integral Offset Needle Valve
Vent	: Plug
Drain	: Needle / Valve
Calibrated Scale (Optional)	: Al / SS linearly calibrated for level values in mm(LC=10mm)
Special Features	: Autoball Check
Max. Test Pressure (Kg/cm sq)	: 0-65 Kg/cm²
Max. Temperature (°C)	: 0-400°C

Features

- Tempered Borosilicate Glass, resistant to chemicals, thermal & mechnical shocks.
- Large Chamber for boiling, foaming, flashing or surging liquids.
- With offset needle valve, the centreline of the gauge and drain connections offset 22 mm from the centreline of vessel connections. Hence by removing the vent/ drain plugs, the interior of a top & bottom connected gauge glass may be cleaned without removing the gauge.
- Safety Ball check.

Function of Autoball Check

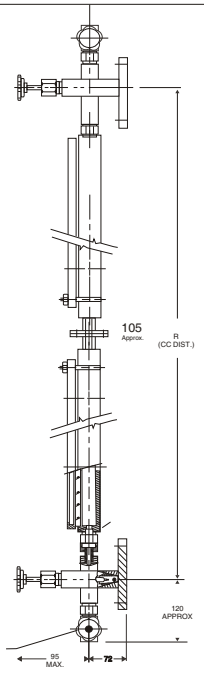
Autobail "check facility is provided to prevent " liquid loss" from vessel during breakage of gauge glass. It consists of a capsule located along the 'neck' of the gauge and contains a 'ball', which moves freely along its inner race, between the stopper & orifice. During breakage, the pressure on 'ball' from gauge side will be atmospheric, whereas higher pressure from the vessel side ("operating pressure + liquid column") will cause the ball to move and block the orifice whereby liquid loss will be minimized.



1. PROCESS FLANGE, 2. NECK,
3. BALL,
4. ORIFICE, 5. NEEDLE,
6. BALL STOPPER,
7. CHECK CAPSULE

TABLE - MODELS AVAILABLE (with IBR CERTIFICATE IN FORM III C)

MODEL NO.	CC DIST (R) (mm.)	GAUGE GLASS (mm.)	VISIBILITY (V)	FLANGE RATING
RLGB112300	300	220	210	20 NB. ASA # 300
RLGB032320	320	250	230	20 NB. ASA # 300
RLGB112385	385	250	230	20 NB. ASA # 300
RLGB112400	400	280	260	20 NB. ASA # 300
RLGB112450	450	280	260	20 NB. ASA # 300
RLGB112500	500	340	320	20 NB. ASA # 300



Model No.

RLG / TLG — [ ] — [ ] — [ ] — [ ] — [ ]

- With IBR T.C.- B / Non Ibr — N
- 20 NB Side Flanges-0 / 25 NB Side Flanges-1
- Side Flanges As Per
  - BS 10 Table J - 1
  - ANSI B 16.5 #150 - 2
  - ANSI B 16.5 #300 - 3
  - PN-40 – 4
- MOC
  - MS - 0
  - CS (en-8) - 1
  - ASTM A 105 - 2
  - SS 304 - 3
  - SS 316 - 4
  - PP - 5
- CC Of Side flanges

Operating Information

Specify → Liquid,
CC Distance of side flanges,
Operating Temperature & Pressure

Custom built Specifications options available on demand

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