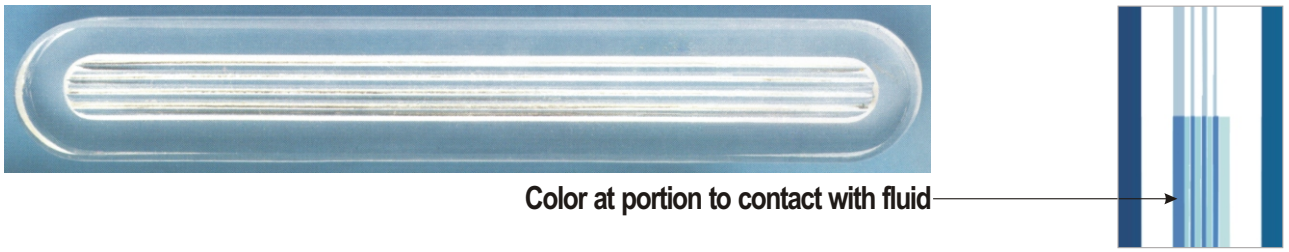
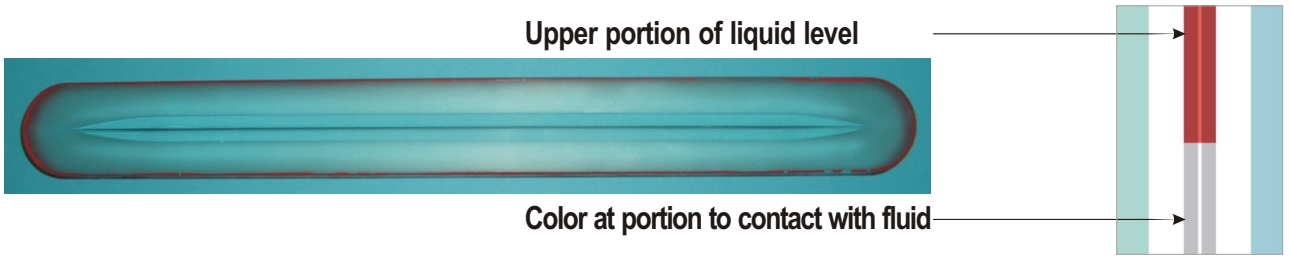
## PRESSURE - TEMPERATURE CHARTS FOR REFLEX GLASS

### INTRODUCTION :

As the Reflex Glass is not used with mica shield, there is rather limited to use the glass according to fluid and its process conditions. When it is take account of the R-Type level gauge for any process conditions, there must make sure that an application conditions are satisfied reciprocally safety working conditions between the glass and the chamber. for maximum working condition of the chamber[=shell], refer to each pages for gauge chamber pressure-temperature charts. this type also have a number of highly advantageous including light weight, availability of longer visible lengths and lower price than the transparent series.




REFLEX GLASS




BI-COLOR REFLEX GLASS

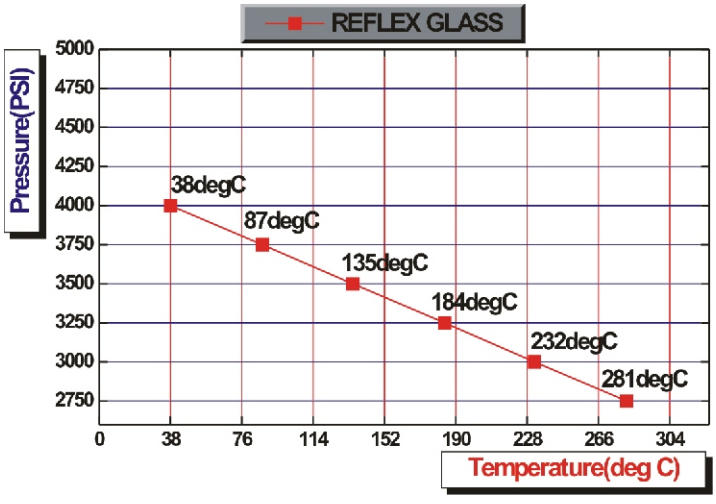
**Reflex Glass Application Conditions**

Saturated steam or hot water in direct contact with reflex sight glass is :

- **Maximum Permissible Pressure : 500 psi[35bar] at 243 °C [470 °F]**

■ The chart shown on the right is range of application with no technically significant glass attack.

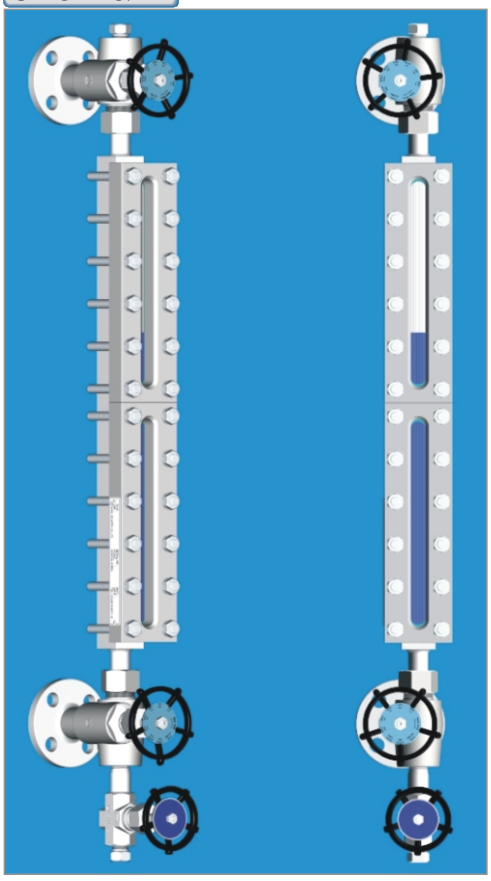
■ Reflex Glasses can be used with all media except steam at service conditions up to 5800 psi[400bar] or temperature up to 750 °F [400 °C].



## GENERAL DESCRIPTION

Reflex Liquid Level Gauge use the R - form sight glasses. One side surface of Reflex Glass to use flat glass has several grooves for reflecting prism. The principle of the Reflex Glass is based on the difference in the refractive indices of liquid and gas or in particular of water and steam. Liquid level shows conspicuously dark hard color for Liquid space and light white for empty space. These Reflex series are not used with the Mica shield. Thus, **SAM IL** does not recommend these series for Caustic, Hydrofluoric, Distilled Water or other liquid corrosive to glass.
The Reflex Gauge is assembled firmly with gasket, reflex glass, cushion gasket and gauge cover on the body by U-Bolts for SRG-1 & 2 and Stud Bolts for SRG-3 & 4, in order.

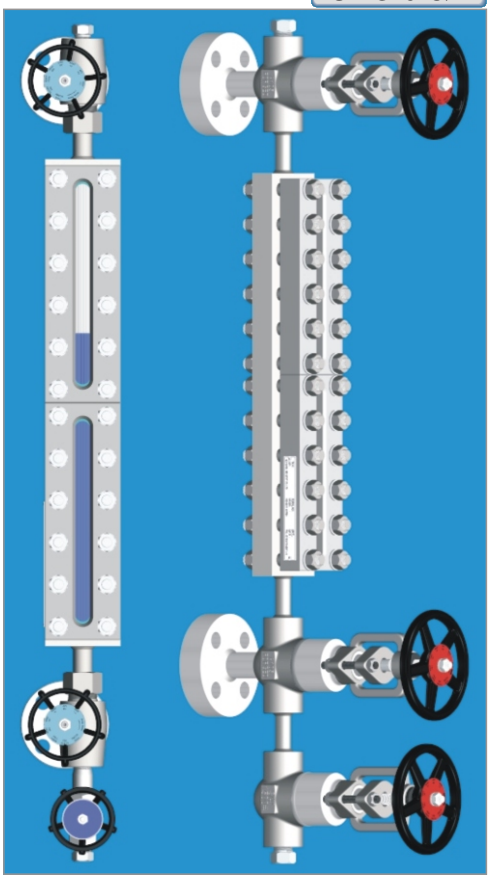
**SRG-1 & 2**



## OPTIONS

- **Scale Plate**
  - units : Cm, Liter
- **Vent**
  - Needle Valve
  - Gate Valve
  - Globe Valve
  - Nipple & Cap
- **Drain**
  - Needle Valve
  - Gate Valve
  - Globe Valve
  - Nipple & Cap
- **Bracket**
  - Longer than 3000 mm of C to C
- **Gauge Valve**
  - Hand Wheel with Chain
  - Arm Lever

**SRG-3 & 4**



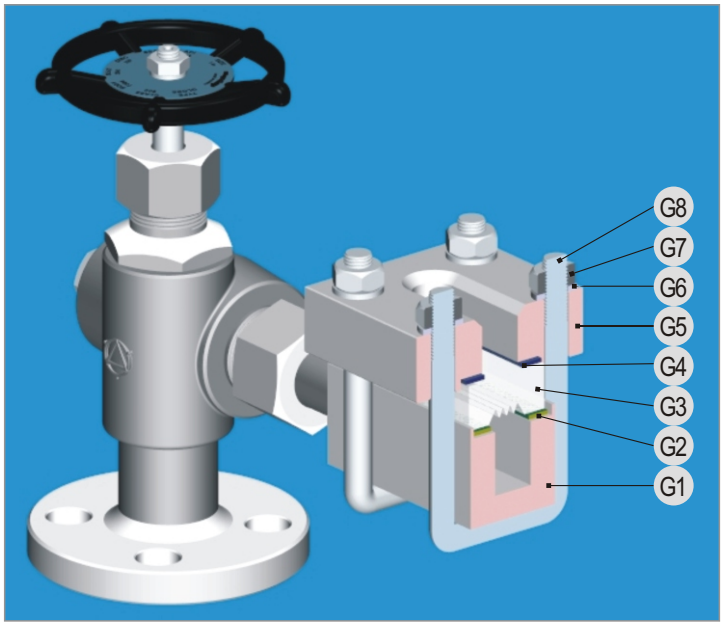
## SPECIFICATIONS

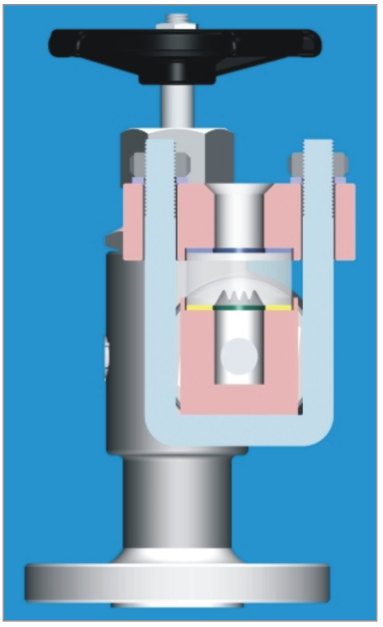
- **MATERIAL** : C.S, LTCS, Stainless Steel, A182-F11, 22, 5, 9, 91 & Monel, Titanium, Hastelloy, Alloy-20, etc.
- **VISIBLE LENGTH** : 90 to 3510 mm.
- **MAX. NO. OF SECTION** : 10 Sections.
- **VESSEL CONNECTION** : 3/4" or 1" Flanged ANSI 150# ~ 2500#.
- **GAUGE BODY & GAUGE VALVE CON'N** : Not Rotatable & 360° Rotatable [turn to page **G-9**].
- **SHELL TEST PRESSURE** : 1.5 Times at the Max. Working Pressure.

**Others, except the above specification are available on request by customer.**

Reflex Gauge Glasses are designed for the direct observation of Liquid level in the tanks or drums.

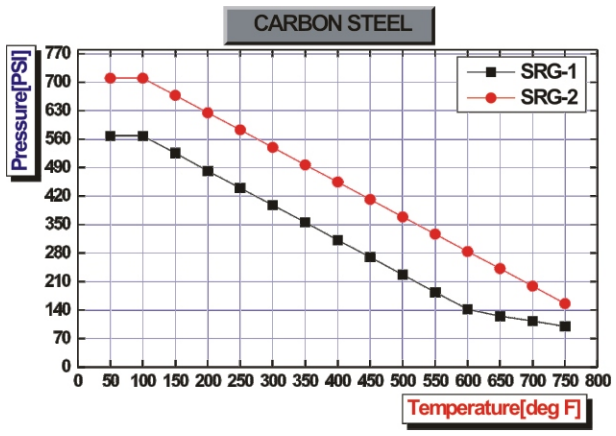
## SECTION FOR MODEL : SRG-1 & 2

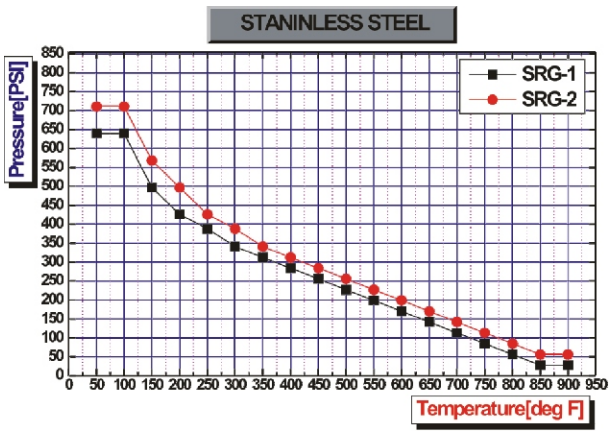


| NO. | PARTS | MATERIAL | NO. | PART | MATERIAL |
|---|---|---|---|---|---|
| G1 | Gauge Body | C.S, Stainless Steel | G5 | Gauge Cover | C.S |
| G2 | Sealing Gasket | Graphite, Non-Asbestos | G6 | Washer | SWRH-62B |
| G3 | Reflex Glass | Borosilicate | G7 | Nuts | A194 Gr.2H |
| G4 | Cushion Gasket | Non-Asbestos | G8 | U - Bolts | A193 Gr.B7 |

- SAM IL has been carried out actual shell test and simulation using software for FEA and we found the safety ranges for Pressure - Temperature rating by the models.




**GAUGE CHAMBER PRESSURE - TEMPERATURE CHARTS FOR SAFETY OPERATING**

Others, except the above materials of part are available on request by customer.