

**Industrial Application      Model: LG – 1 to 9**

These level gauges are particularly suitable for liquids:

- Colourless
- Very Fluid
- Non-corrosive for glasses (e.g. ammoniacal solutions, trichlorethylene, water steam up to 32bar and higher pressure is upon request etc.)

Bi-colour level gauge will parallel glasses.

**Working Principle:**

It is a variation of transparent level gauge, however equipped with two reflex glasses and a back illuminator, fitted with suitable coloured fitters. The reading is given by the contrast between the bright colour (usually: red) of fitters in the lower part containing liquid and the colour of upper part of visible window.

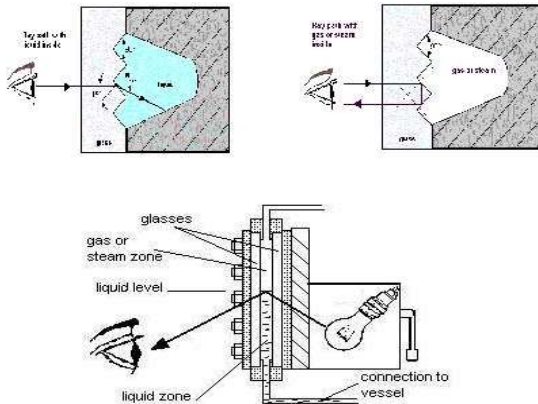
The drawing shows a typical Reflex Glass Level Gauge. This instrument consists of a metal body, machined to have an internal chamber and one or more front windows (on one side only of the gauge). On each window a special high resistance plate reflex glass is fitted with sealing joint and metal cover plates held by bolts and nuts. The chamber is connected to vessel with cross fittings and flanged, threaded or welded ends. Usually, between the instrument and its connecting ends, valves are fitted to consent shut-off piping and to disassemble the level gauge without to empty the vessel. Drain valves can also be fitted to cross fittings device.



To avoid leakage in case of glass breakage, safety ball-check device can be provided.

**Working Principle:**

Reflex level gauges working principle is based on the light refraction and reflection laws. Reflex level gauges use glasses having the face fitted towards the chamber shaped to have prismatic grooves with section angle of 90°. When in operation, the chamber is filled with liquid in the lower zone and gases or vapors in the upper zone; the liquid level is distinguished by different brightness of the glass in the liquid and in the gas/vapor zone. The reflex level gauges do not need a specific illumination: the day environmental light is enough. Only during the night an artificial light must be provided. The different brightness in the two zones is obtained as explained below:



Size	C to C Distance		Length of body	Visible length	Length of glass	Weight
	NX	NY				
	CC min	CC min	B	V	G	kg
1	272	221	165	93	115	12.30
2	297	246	190	118	140	13.10
3	322	271	215	143	165	14.20
4	347	296	240	188	190	15.00
5	377	326	270	198	220	16.30
6	407	356	300	228	250	17.30
7	437	386	330	258	280	18.40
8	477	426	370	298	320	20.00
9	497	446	390	318	340	20.75
2x4	552	501	445	373	190	22.35
2x5	612	561	505	433	330	25.00
2x6	672	621	565	493	250	27.10
2x7	732	681	625	553	280	29.25
2x8	812	761	705	633	320	32.20
2x9	852	801	745	673	340	33.85
3x6	937	886	830	758	250	36.75
3x7	1027	976	920	848	280	40.10
3x8	1147	1096	1040	968	320	44.65
3x9	1207	1156	1100	1028	340	47.15
4x7	1322	1271	1215	1143	280	50.85
4x8	1482	1431	1375	1303	320	57.00
4x9	1562	1511	1455	1383	340	60.10
5x7	1617	1566	1510	1438	280	61.65
5x8	1817	1766	1710	1638	320	69.35
5x9	1917	1866	1810	1738	340	73.20
6x8	2152	2101	2045	1973	320	81.70
6x9	2272	2221	2165	2093	340	86.30
7x9	2627	2576	2520	2448	340	99.45