

Reflex type level gauge

Model : L100 series

Spec. sheet no. LD01-01

Description

Reflex liquid level gauge has a sturdily constructed body, with the glass and cover securely held by U-bolts to maintain a hermetic seal (see figure below). This type of level gauge features several parallel grooves cut into the glass surface that is in contact with the liquid. The resulting prismatic diffraction causes to appear white by reflection : liquids black by absorption thus the level of even transparent liquids can be clearly observed.

Low-medium and high-pressure type may be used according to application conditions and units may be manufactured using carbon steel, stainless steel or a wide variety of other materials for parts in contact with the liquid. Type L100 reflex gauges have a number of further advantages including light weight, availability of long visible lengths and low price.

Type



General type (Max. 4 MPa)



High pressure type (Max. 24 MPa)

Specification

Material

Carbon steel
LTCS
Stainless steel
A182-F11, 22, 5, 9, 91 and Monel
Titanium
Hastelloy
Alloy-20, etc.

Visible length

90 ~ 3,510 mm

Max. No. of section

10 sections

Vessel connection

¾" or 1" flanged ANSI 150 ~ 2,500 Lb

Option

- Scale plate
 - Unit : Centimeter, Meter
- Vent
 - Needle valve
 - Gate valve
 - Globe valve
 - Nipple and cap
- Drain
 - Needle valve
 - Gate valve
 - Globe valve
 - Nipple and cap
- Bracket
 - Longer than 3,000 mm of C to C

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Main order

Ordering information

1. Base model

- L100** Reflex level gauge
- L110** Large chamber type reflex level gauge
- L120** Zig-zag type reflex level gauge

2. Vessel connection size

ANSI		JIS	
AA	½" 150 Lb RF	JA	15A 10K RF
AB	½" 300 Lb RF	JB	15A 20K RF
AC	½" 600 Lb RF	JC	15A 30K RF
AD	¾" 150 Lb RF	JD	20A 10K RF
AE	¾" 300 Lb RF	JE	20A 20K RF
AF	¾" 600 Lb RF	JF	30A 30K RF
AG	1" 150 Lb RF	JG	25A 10K RF
AH	1" 300 Lb RF	JH	25A 20K RF
AI	1" 600 Lb RF	JI	25A 30K RF
AJ	1½" 150 Lb RF	JJ	40A 10K RF
AK	1½" 300 Lb RF	JK	40A 20K RF
AL	1½" 600 Lb RF	JL	40A 30K RF
AM	2" 150 Lb RF	JM	50A 10K RF
AN	2" 300 Lb RF	JN	50A 20K RF
AO	2" 600 Lb RF	JO	50A 30K RF
AP	½" NPT	JP	½" PT
AQ	¾" NPT	JQ	¾" PT
OH	Other		

3. Vessel connection type

- A** Flanged
- B** Union and screwed
- O** Other

4. Hook-up

- B** Top and bottom
- L** Side and side (Left)
- R** Side and side (Right)
- O** Other

5. Gauge connection

- G** Gland
- U** Union
- S** Screwed
- O** Other

6. Gauge valve

- S** Straight
- O** Off-set
- N** None

7. Center to center (mm)

XXXX

8. Chamber material

- CS** Body - Carbon steel / Cover - Carbon steel
- SS** Body - 304SS / Cover - 304SS
- ZZ** Other

9. Drain end

- D** Dust-proof cap inserted
- P** With plug
- O** Other

10. Option

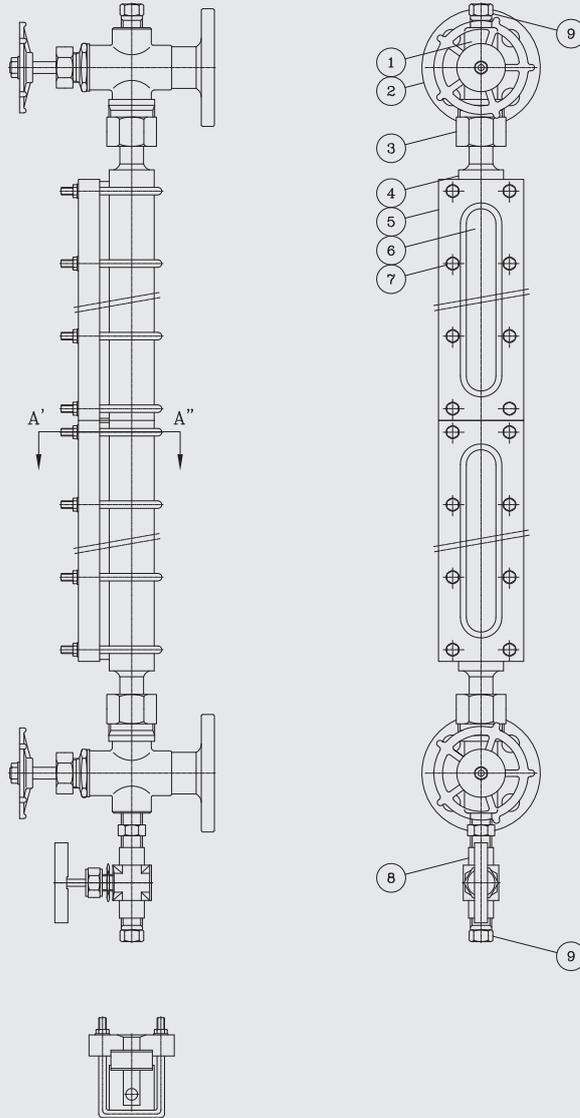
- SP** Scale plate
- LN** Lining
- JK** Jacketing
- NF** Non-frosting
- OH** Other
- NA** None

1	2	3	4	5	6	7	8	9	10
L100	AE	A	B	S	O	XXXX	CS	D	SP

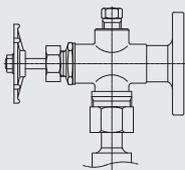
Sample ordering code

Dimension

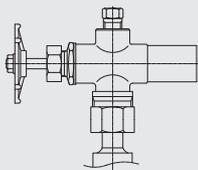
Model : L100 (Reflex type)



Section A'-A''



FLANGE TYPE



SOCKET WELD TYPE

NO.	DESCRIPTION	MATERIAL
1	GAUGE VALVE	A216 WCB/A351 CF8/A351 CF8M
2	VESSEL CONNECTION FLANGE	A105/A182 F304/A182 F316
3	GAUGE CONNECTION	A105/A479 304/A479 316
4	GAUGE BODY	A105/A479 304/A479 316
5	COVER	A105/A479 304/A479 316
6	GLASS	BOLISICATE
7	BOLT	A193 B7/B8
8	DRAIN VALVE	A216 WCB/A351 CF8/A351 CF8M A105/A182 F304/A182 F316
9	PLUG	A105/A479 304/A479 316

Memo

Empty rectangular box for memo content.

Large chamber type level gauge

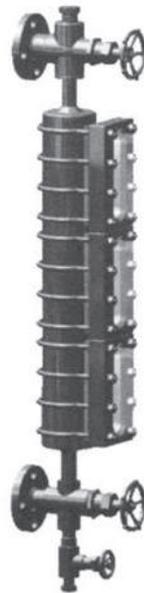
Model : L110 (Reflex type)
L210 (Transparent type)

Spec. sheet no. LD01-02

Description

When liquids boil, bubbling makes the surface level indistinct. In this type of gauge, the larger volume of the liquid chamber reduces bubbling, there by facilitating level reading. It is also frequently used for dense, viscous liquid. The body is made of A106 Gr.B or stainless steel pressure pipe, and is fitted for high-viscosity fluids and slurry, the liquid path at valves, and at joints of the gauge body, is normally so restricted that changes in liquid level cannot be readily observed. It is therefore possible to use connecting pipes and valves like those shown in the photographs above. Which are of the same diameter as the liquid chamber.

CE



Model : L110
(Reflex type)



Model : L210
(Transparent type)

Model

Model - L110 (Reflex type)

Chamber material

Carbon steel, Stainless steel

Max. pressure

4 MPa

Vessel connection

$\frac{3}{4}$ ", 1", 1½" and 2"

Model - L210 (Transparent type)

Chamber material

Carbon steel, Stainless steel

Max. pressure

4 MPa

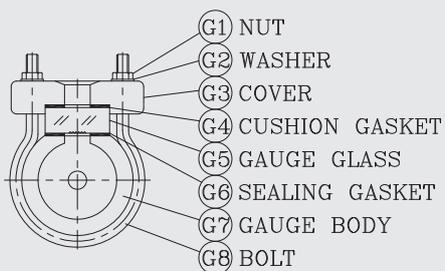
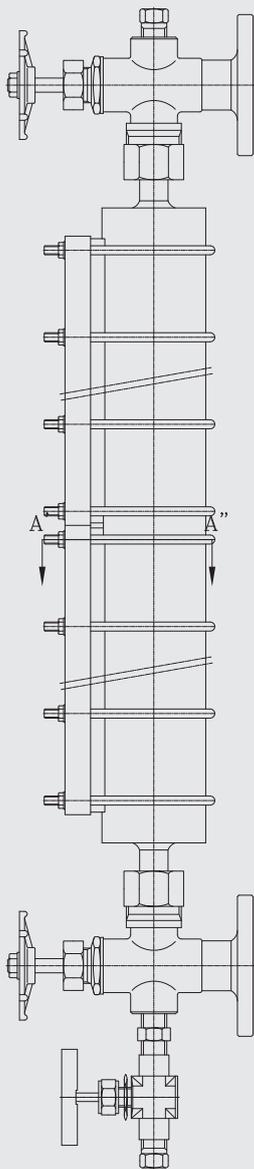
Vessel connection

$\frac{3}{4}$ ", 1", 1½" and 2"

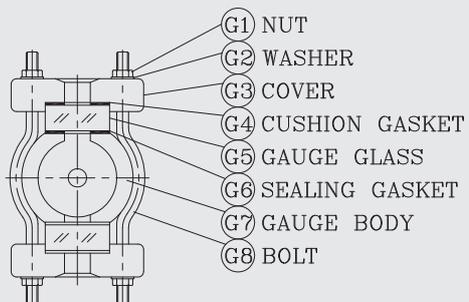
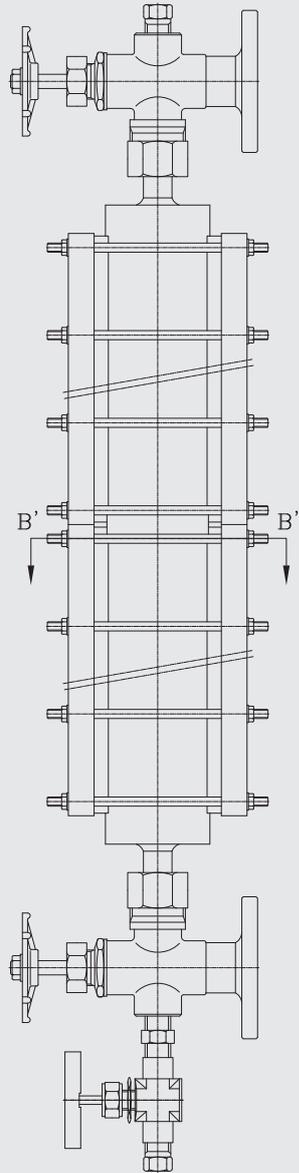
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Dimension



L110 (Reflex type)



L210 (Transparent type)

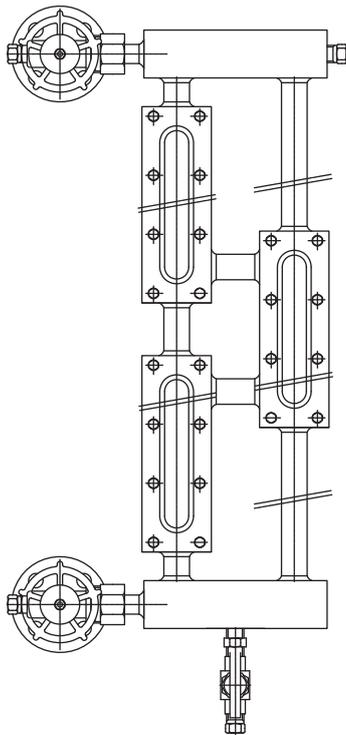
Zig-zag type level gauge

Model : L120 (Reflex type)
L220 (Transparent type)

Spec. sheet no. LD01-03

Description

This level gauge is possible to measure the level point without any dead point between cover & cover, and installed on LPG tank or butan tank.
It's applicable to reflex and transparent type level gauges.



Model : L120 (Reflex type)



Model : L220 (Transparent type)

Specification

Model : L120 (Reflex type)

Material

Carbon steel, Stainless steel

Max. pressure

10 MPa

Vessel connection

1/2", 3/4" and 1"

Model : L220 (Transparent type)

Material

Carbon steel, Stainless steel

Max. pressure

10 MPa

Vessel connection

1/2", 3/4" and 1"

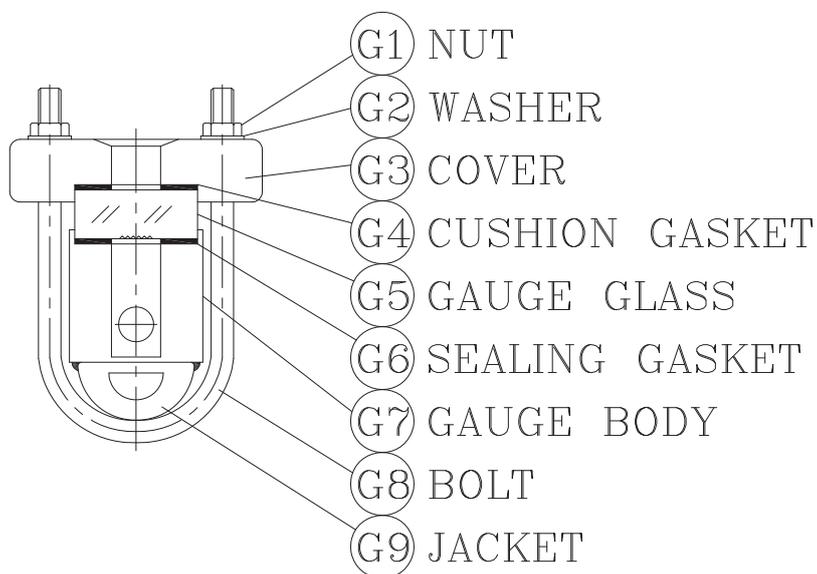
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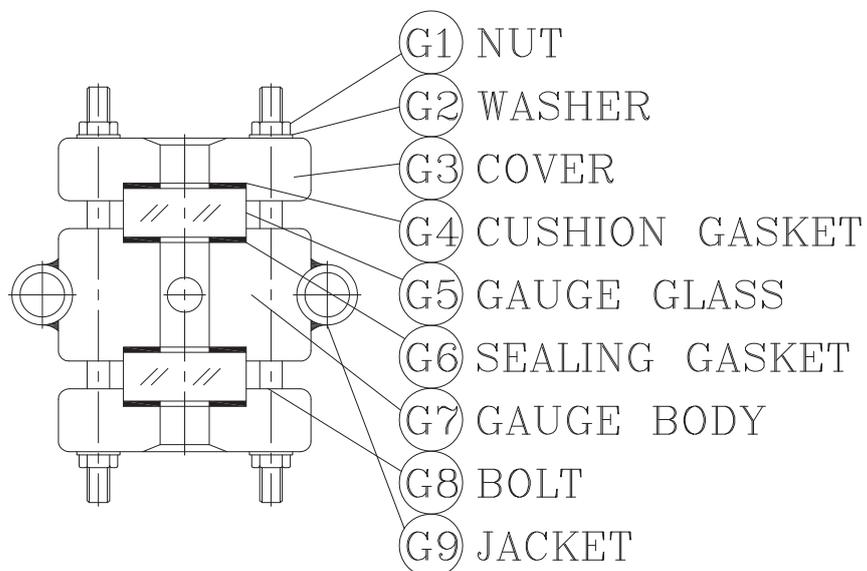
Optional
Jacket type level gauge for L100 and L200

Spec. sheet no. LD01-04

Model : L100 (Jacket type)



Model : L200 (Jacket type)



Optional Non-frosting type level gauge for L100 and L200

Spec. sheet no. LD01-05

Description

Non-frosting type liquid level gauge is used for protection from the frost. Reflex type and transparent type are provided material, application method, gauge valve are entirely same to general use. Generally, for low temperature liquid to be used for refrigerator, the whole surface of liquid level body and cover are frosted, general liquid level gauges is covered with heavy frost and glass surface is entirely invisible. For the sake of this, non-frosting liquid level gauges is provided with methacrylate transparent plate which has high level. So this crosses frosting strata or keeping cool materials, is easily visible the liquid level position clearly. H dimension of lift table, please designate applicable for working temperature or thickness of keeping cool materials.



L100 - NF

Dimensions

Temperature (°C)	Material	Acryl height (mm)
0 ~ -20	killed steel S-25C STPG 38 304SS	75
-20 ~ -45	Al killed steel ASTM-A350-LF2 STPL 39 304SS	100
-46 ~ -100	3.5% Ni steel ASTM-A350-LF3 STPL 46 304SS	150
-101 ~ -160	Austenite Stainless steel 316SS	200



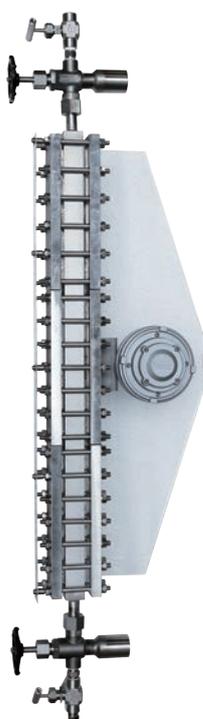
L200 - NF

Optional Illuminator type level gauge for L100 and L200

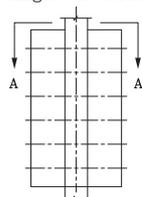
Spec. sheet no. LD01-06

Description

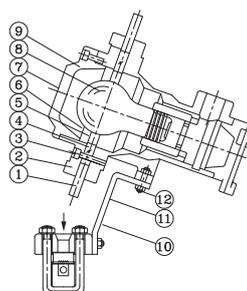
Complete range of size : single and double section WISE explosion-proof illuminator are made in single and double section styles for transparent and reflex gauges. Double section illuminator require only one bulb for complete illumination of two gauge sections.



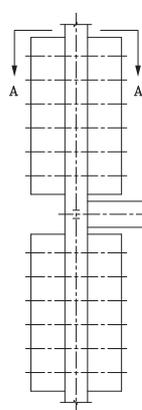
Single Section



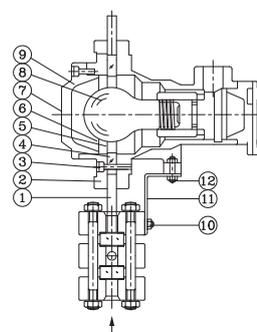
For Reflex Gauge A-A' VIEW



Double Section



For Transparent Gauge A-A' VIEW



Specification

Electricity

Voltage : AC 110 ~ 240 V, 50 Hz, 60 Hz

Bulb light : 30 ~ 100 W

Certificates

KCS Ex d IIC T6 IP65

ATEX II 2G Ex d IIC T6 Gb

IECEx Ex d IIC T6 Gb

No.	Description	Material	Q'ty
1	Reflector	Methacrylate	1
2	Cover	AC 4C	1
3	Bolt	Sus 304	1
4	Glass plate	Glass	3
5	O-ring	NBR	1
6	Gasket	T #1,000	1
7	Cover	AC 4C	1
8	Bulb light		1
9	Light housing	AC 4C	
10	Bolt	SS41	2
11	Holder	SS412	1
12	Bolt nut	SS412	2

Transparent type level gauge

Model : L200 series

Spec. sheet no. LD02-01

Description

Designed for a wide range of pressure and temperature applications. The transparent type level gauge is suitable for observation of the level of corrosive and colored liquids. The type is preferably used for reservoir tanks that require a comparatively long visible length. This type of level gauge utilizes two pieces of tempered flat gauge glasses, each of which is placed in front and rear of gauge body and is sandwiched by gauge covers and tightened by bolts from both sides of the gauge.

Type



Chamber material

Carbon steel, Stainless steel

Max. pressure

4 MPa

Vessel connection

½" ~ 1"



Chamber material

Carbon steel, Stainless steel

Max. pressure

10 MPa

Vessel connection

½" ~ 1"



Chamber material

Carbon steel, Stainless steel

Max. pressure

24 MPa

Vessel connection

½" ~ 1"

Specification

Material

Carbon steel
LTCS
Stainless steel
A182-F11, 22, 5, 9, 91 and Monel
Titanium
Hastelloy
Alloy-20, etc.

Visible length

90 ~ 3,510 mm

Max. No. of section

10 sections

Vessel connection

¾" or 1" flanged ANSI 150 ~ 2,500 Lb

Main order

Ordering information

1. Base model

- L200** Transparent type level gauge
- L210** Large chamber type transparent level gauge
- L220** Zig-zag type transparent level gauge

2. Vessel connection size

ANSI		JIS	
AA	½" 150 Lb RF	JA	15A 10K RF
AB	½" 300 Lb RF	JB	15A 20K RF
AC	½" 600 Lb RF	JC	15A 30K RF
AD	¾" 150 Lb RF	JD	20A 10K RF
AE	¾" 300 Lb RF	JE	20A 20K RF
AF	¾" 600 Lb RF	JF	30A 30K RF
AG	1" 150 Lb RF	JG	25A 10K RF
AH	1" 300 Lb RF	JH	25A 20K RF
AI	1" 600 Lb RF	JI	25A 30K RF
AJ	1½" 150 Lb RF	JJ	40A 10K RF
AK	1½" 300 Lb RF	JK	40A 20K RF
AL	1½" 600 Lb RF	JL	40A 30K RF
AM	2" 150 Lb RF	JM	50A 10K RF
AN	2" 300 Lb RF	JN	50A 20K RF
AO	2" 600 Lb RF	JO	50A 30K RF
AP	½" NPT	JP	½" PT
AQ	¾" NPT	JQ	¾" PT
OH	Other		

3. Vessel connection type

- A** Flanged
- B** Union and screwed
- O** Other

4. Hook-up

- B** Top and bottom
- L** Side and side (Left)
- R** Side and side (Right)
- O** Other

5. Gauge connection

- G** Gland
- U** Union
- S** Screwed
- O** Other

6. Gauge valve

- S** Straight
- O** Off-set
- N** None

7. Center to center (mm)

XXXX

8. Chamber material

- CS** Body - Carbon steel / Cover - Carbon steel
- SS** Body - 304SS / Cover - 304SS
- ZZ** Other

9. Drain end

- D** Dust-proof cap inserted
- P** With plug
- O** Other

10. Option

- SP** Scale plate
- IL** Illuminator
- LN** Lining
- JK** Jacketing
- NF** Non-frosting
- OH** Other
- NA** None

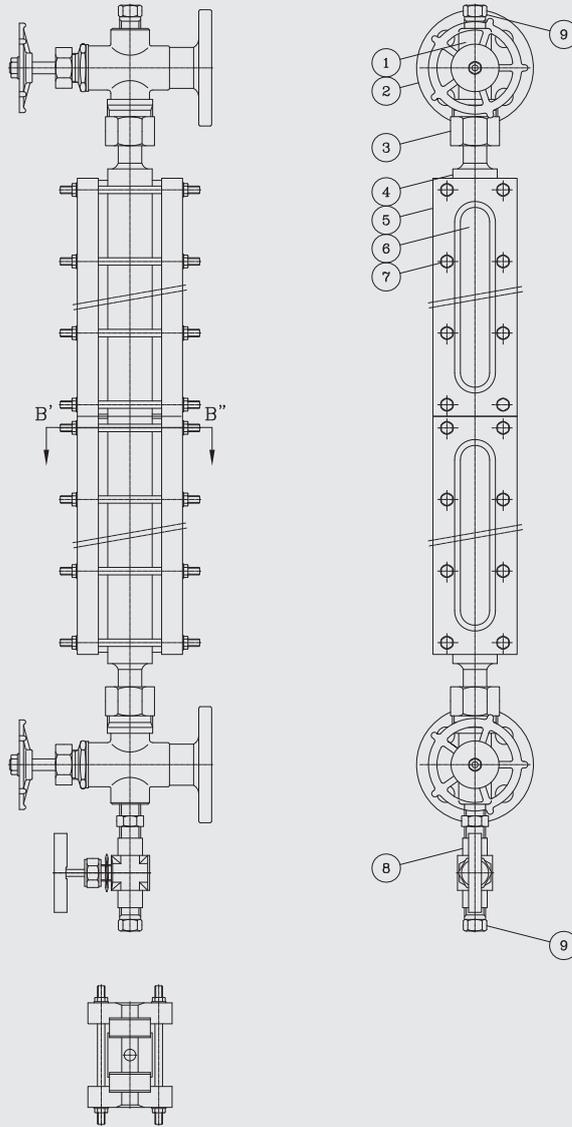
1	2	3	4	5	6	7	8	9	10
L200	AE	A	B	S	O	XXXX	CS	P	SP

Sample
ordering code

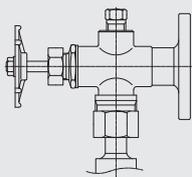
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Dimension

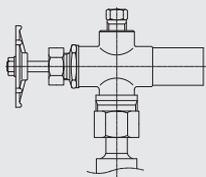
Model : L200 (Transparent type)



Section B'-B''



FLANGE TYPE



SOCKET WELD TYPE

NO.	DESCRIPTION	MATERIAL
1	GAUGE VALVE	A216 WCB/A351 CF8/A351 CF8M
2	VESSEL CONNECTION FLANGE	A105/A182 F304/A182 F316
3	GAUGE CONNECTION	A105/A479 304/A479 316
4	GAUGE BODY	A105/A479 304/A479 316
5	COVER	A105/A479 304/A479 316
6	GLASS	BOLISICATE
7	BOLT	A193 B7/B8
8	DRAIN VALVE	A216 WCB/A351 CF8/A351 CF8M A105/A182 F304/A182 F316
9	PLUG	A105/A479 304/A479 316

Memo

A large, empty rectangular box with a thin black border, intended for writing a memo.

Magnetic float type level gauge

Model : L300 series

Spec. sheet no. LD03-01

L300 (Chamber size-50A)

Standard specification

Chamber size

2B (50A)

Schedule

SCH. 10S, 20S, 40S, etc

Flange rating

150 ~ 900 Lb

Material

304SS, 316SS, 316L SS, PVC, etc.

Indicator method

Magnetic

Max. pressure

6 MPa

Max. temperature

300 °C

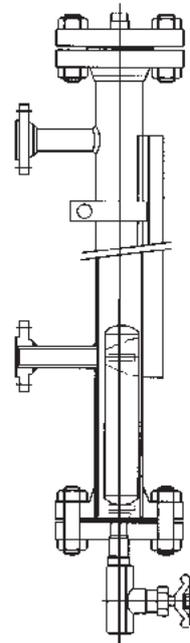
Specific gravity

Min. 0.45

Viscosity

Max. 50 CP

CE



L300 (Chamber size-65A)

Standard specification

Chamber size

2½B (65A)

Schedule

SCH. 10S, 20S, 40S, 80S, etc

Flange rating

150 ~ 1,500 Lb

Material

304SS, 316SS, 316L SS, etc.

Indicator method

Magnetic

Max. pressure

15 MPa

Max. temperature

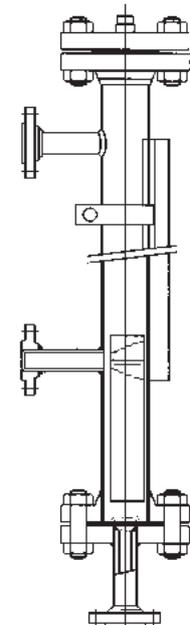
300 °C

Specific gravity

Min. 0.45

Viscosity

Max. 50 CP



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Main order

Ordering information

1. Base model

L300 Magnetic float type level gauge

2. Vessel connection size

ANSI

AA ½" 150 Lb RF
AB ½" 300 Lb RF
AC ½" 600 Lb RF
AD ¾" 150 Lb RF
AE ¾" 300 Lb RF
AF ¾" 600 Lb RF
AG 1" 150 Lb RF
AH 1" 300 Lb RF
AI 1" 600 Lb RF
AJ 1½" 150 Lb RF
AK 1½" 300 Lb RF
AL 1½" 600 Lb RF
AM 2" 150 Lb RF
AN 2" 300 Lb RF
AO 2" 600 Lb RF
AP ½" NPT
AQ ¾" NPT
OH Other

JIS

JA 15A 10K RF
JB 15A 20K RF
JC 15A 30K RF
JD 20A 10K RF
JE 20A 20K RF
JF 30A 30K RF
JG 25A 10K RF
JH 25A 20K RF
JI 25A 30K RF
JJ 40A 10K RF
JK 40A 20K RF
JL 40A 30K RF
JM 50A 10K RF
JN 50A 20K RF
JO 50A 30K RF
JP ½" PT
JQ ¾" PT

3. Chamber material

S1 Body - 304SS / Float - Titanium
S2 Body - 316SS / Float - Titanium
ZZ Other

4. Center to center (mm)

XXXX

5. Chamber size

5 50A
6 65A
Z Other

6. Chamber lining

P PTFE
E ETFE
F PFA
O Other
N None

7. Drain end

D Dust-proof cap inserted
P With plug
O Other

8. Level switch

Y Yes
N No

9. Level transmitter

Y Yes
N No

10. Float material

T Titanium (Standard)
S 316SS
O Other

11. Option 1

LS Level switch (LMS-20)
LT Level transmitter (LEXIS-60)
LN Lining
NO None

12. Option 2

F Non-frosting
J Jacket
U Underground tanks
N None

1	2	3	4	5	6	7	8	9	10	11	12
L300	JG	S2	XXXX	5	P	D	Y	Y	T	LT	N

Sample ordering code

Optional Magnetic float type level gauge with lining for L300

Spec. sheet no. LD03-03

Chamber size

50A, 65A

Chamber thickness

SCH. 10S, 20S, 40S, etc.

Flange rating

ANSI 150 ~ ANSI 600 Lb

Chamber material

304SS, 316SS

Lining parts

Inside of chamber

Lining material

Teflon, Rubber

Indicator method

Magnetic

Max. pressure

2.0 MPa

Max. temperature

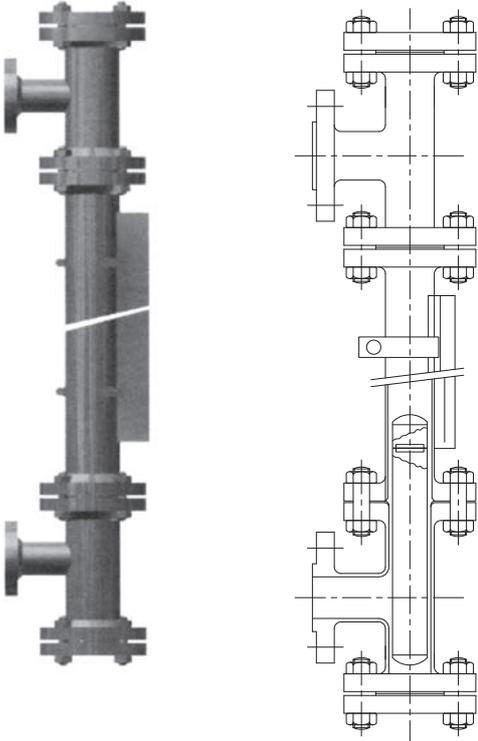
130°C

Specific gravity

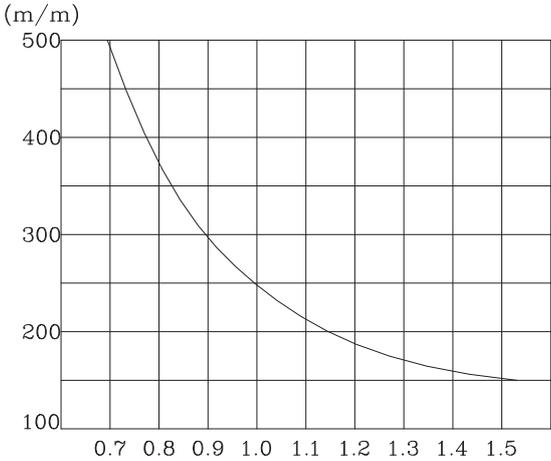
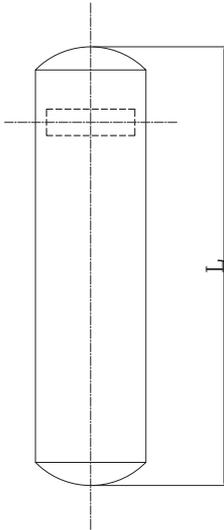
Min. 0.45

Viscosity

Max. 50 CP



Float length



Memo

Empty rectangular box for memo content.

Tubular gauge

Model : L400

Spec. sheet no. LD04-01

Description

Tubular liquid level gauge is the simplest in structure and the most widely used. It is used at free pressures of 0.5 MPa and below, and is available with glass tubes of from 19 mm in diameter.



Valve material

Carbon steel, Stainless steel

Valve type

Straight type

Size

½" ~ 1" flanged



Valve material

Carbon steel, Stainless steel

Valve type

Straight type

Size

½" ~ ¾" screwed



Valve material

PVC

Valve type

Straight type

Size

½" ~ 1" flanged

Specification

Upper and under gauge valve body with stainless steel ball check for automatic shut-off in the event of rupture on the downstream side of the seat.

Working pressure

Max. 0.48 MPa

Working temperature

Max. 100 °C

Hydro test pressure

0.73 MPa

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Main order

Ordering information

1. Base model

L400 Tubular gauge

2. Vessel connection size

ANSI		JIS	
AA	½" 150 Lb RF	JA	15A 10K RF
AB	½" 300 Lb RF	JB	15A 20K RF
AC	¾" 150 Lb RF	JC	20A 10K RF
AD	¾" 300 Lb RF	JD	20A 20K RF
AE	1" 150 Lb RF	JE	25A 10K RF
AF	1" 300 Lb RF	JF	25A 20K RF
AG	1½" 150 Lb RF	JG	40A 10K RF
AH	1½" 300 Lb RF	JH	40A 20K RF
AI	2" 150 Lb RF	JI	50A 10K RF
AJ	2" 300 Lb RF	JJ	50A 20K RF
AK	½" NPT	JK	½" PT
AL	¾" NPT	JL	¾" PT
OH	Other		

3. Valve and tube material

SCT Valve - Carbon steel / Tube - Teflon
S1T Valve - 304SS / Tube - Teflon
S2T Valve - 316SS / Tube - Teflon
ZZZ Other

4. Center to center (mm)

XXXX

5. Drain end

D Dust-proof cap inserted
P With plug
O Other

6. Gauge valve

S Straight
O Off-set
N None

7. Option

S Scale plate
O Other
N None

1	2	3	4	5	6	7	
L400	AD	S1T	XXXX	P	O	N	Sample ordering code

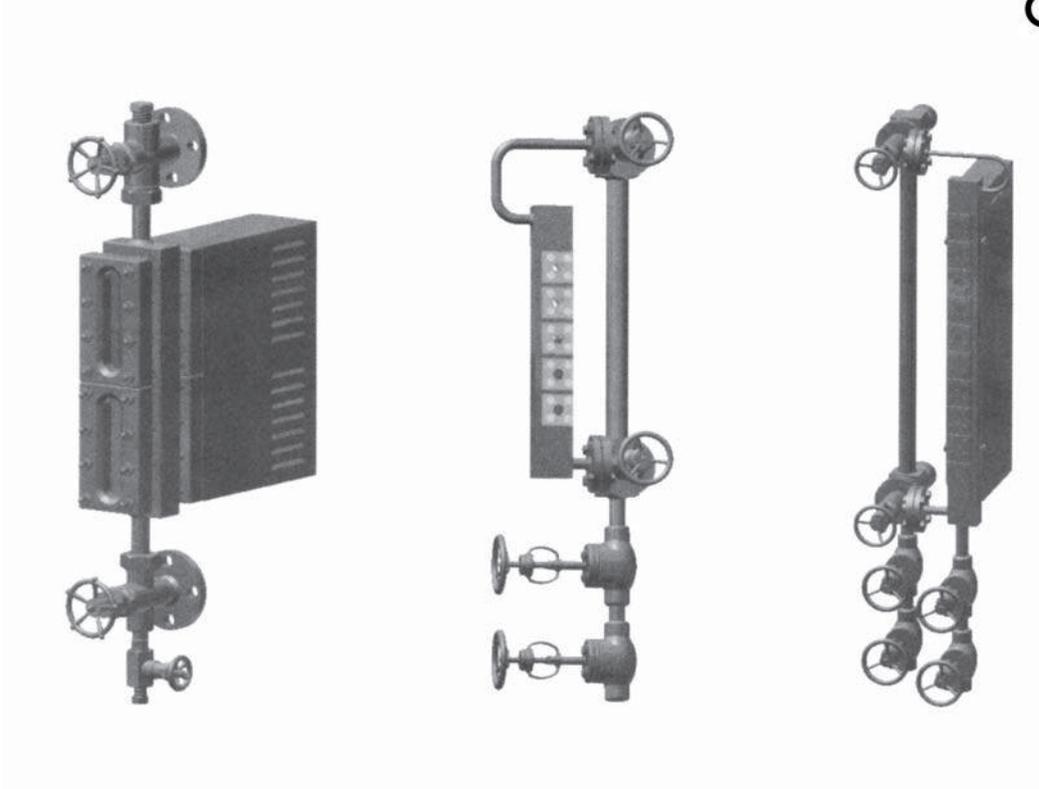
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Two - color type level gauge

Model : L500, L510

Spec. sheet no. LD05-01

CE



Features of two colors water level gauge

■ Distinct water level

The water level is markedly distinct and confirmed from far distance since an illuminator is fitted at the rear of water level gauge by which visible surface is separated into two section, one is red-steam space, and another green-boiler water.

■ Correct water level is indicated

As the two-color separation is based on the principle of optical science, normal water level can be indicated always even in an instantaneous variance of water level.

■ Remote observation possible

The water level appeared on the visible surface can be transferred to the operation (Control) room by fitting several reflex mirrors (To the most convenient place for an operator to watch).

As the most improved method, television observation is utilized, therefore, we have also researched and developed those water level gauges suitable for television observation and obtained good experimental results by changing filter glass of two colors (Red and green) and employed in great numbers.

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Main order

Ordering information

1. Base model

- L500** Two color transparent type level gauge
L510 Two color multi-port type level gauge

2. Vessel connection size

- AR** 1" socket welding
OH Other

3. Hook-up

- TB** Top and bottom
SL Top and bottom, flanged loop (Left)
SR Top and bottom, flanged loop (Right)
OH Other hook-up

4. Gauge valve

- SS** Marker standards
OH Other

5. Center to center (mm)

XXXX

6. Chamber material

- A** A105
C Carbon steel
O Other

7. Illuminator case material

- CS** Carbon steel
SS 304SS
ZZ Other

8. Drain end

- DP** Dust-proof cap inserted
WP With plug
OH Other
NO None

1	2	3	4	5	6	7	8	
L500	AR	OH	SS	XXXX	A	ZZ	NO	Sample ordering code

WISE[®]

Transparent and two-color type level gauge

Model : L500

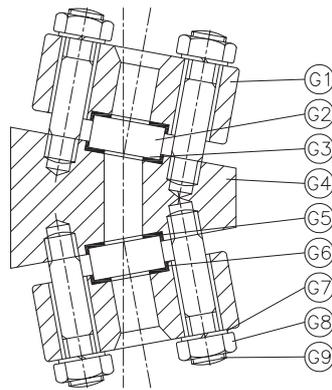
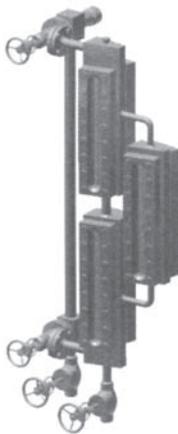
Spec. sheet no. LD05-02

Description

Body of the two color type gauges are V shaped on it's angle, as you see in the following cross sectional view, in order split light from illuminator (installed behind the gauge) into two colors which are green and red.

The cover plates of these models are all provided with rib reinforcement.

Model



- G1. Cover plate
- G2. Gauge glass
- G3. Mica gasket
- G4. Gauge body
- G5. Sealing gasket
- G6. Cushion gasket
- G7. Washer
- G8. Nut
- G9. Bolt

Specification

Size of glass

No.6 ~ No.9

Material

Carbon steel, Stainless steel

Max. pressure

10 MPa

Connection

3/4" or 1" flanged, Socket welds

Max. temperature

Sat. temperature

Dimension

Dimensions

Unit : mm

Model	Side of Gauge mounting against boiler drum		Direction of Gauge Front	Glass No.	Dimensions			
	Left-Hand	Right-Hand			H	l ₁	l ₂	V. L
L500			Front Only	No. 6	510	195	315	225
				No. 7	530	200	330	255
				No. 8	570	220	350	295
				No. 9	590	230	360	315
L500			Free Choice	No. 5	540	270	270	225
				No. 6	570	285	285	225
				No. 7	610	305	305	295
				No. 8	630	315	315	315

Multi-port type two-color level gauge

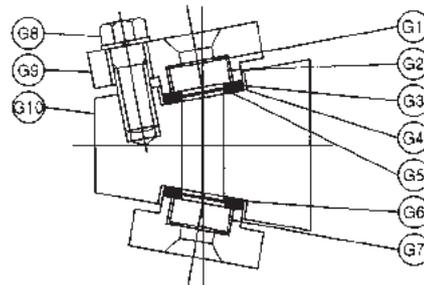
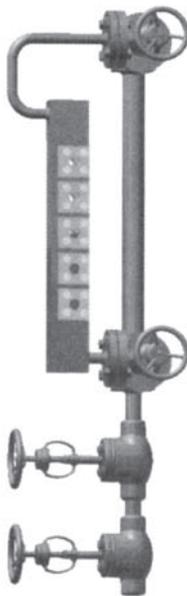
Model : L510

Spec. sheet no. LD05-03

Description

This multi-window two color level gauge is provided with from 5 or 7 round windows or ports and is designed to handle the pressures and temperatures higher than the single window type level gauges. Impacts from external pressure and heat are distributed to each of the ports, thereby eliminating or minimizing the glass breakage and increasing the structural durability.

Model



- | | |
|-----------------------|-----------------------|
| G1. Cushion gasket | G6. Protective gasket |
| G2. Gauge glass | G7. Packing strip |
| G3. Protective gasket | G8. Hex. bolt |
| G4. Mica gasket | G9. Gauge cover |
| G5. Sealing gasket | G10. Gauge body |

Specification

No. of ports

No.5 ~ No.15

Max. pressure

21.5 MPa

Max. temperature

Sat. temperature

Material

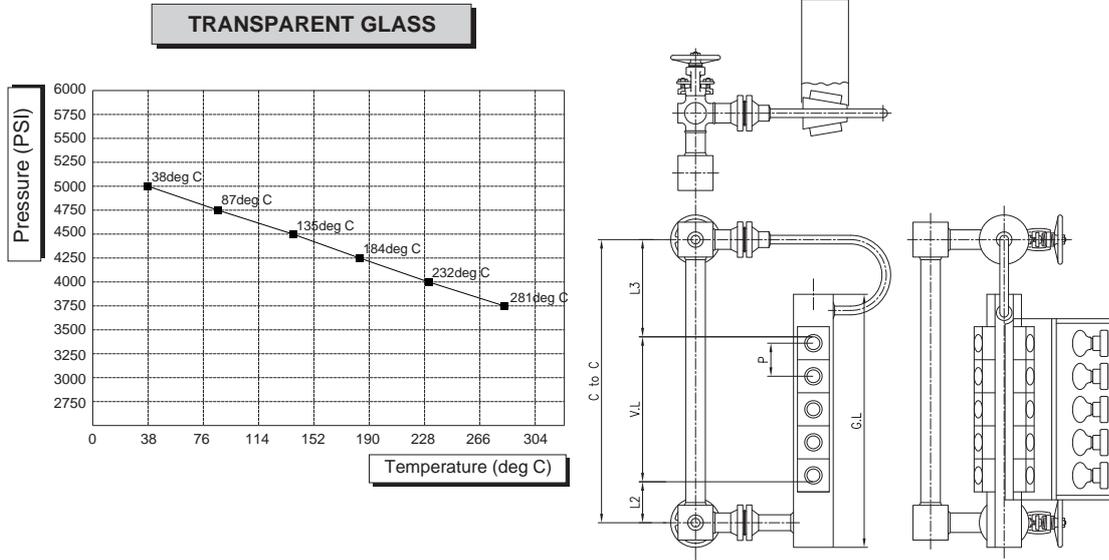
Carbon steel, Stainless steel

Connection

¾" or 1" flanged, Socket welds

Pressure and temperature rating for L510

Spec. sheet no. LD05-04



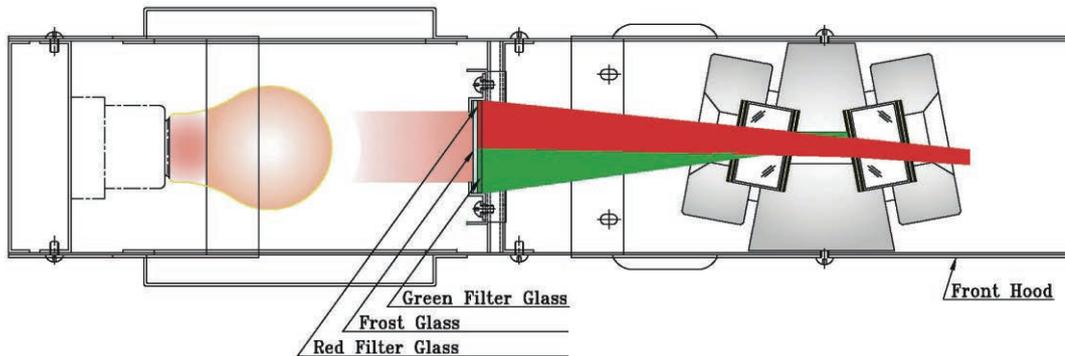
No. of ports	Visual length (VL)	Gauge length (G.L.)	Installation length (C ~ C)	L1	L2	Port pitch (P)
5P	320	480	520	140	60	75
6P	395	555	595	140	60	75
7P	470	630	670	140	60	75
8P	545	705	745	140	60	75
9P	620	780	820	140	60	75
10P	695	855	895	140	60	75
11P	770	930	970	140	60	75
12P	845	1,005	1,042	140	60	75
13P	920	1,080	1,120	140	60	75
14P	995	1,155	1,195	140	60	75
15P	1,070	1,230	1,270	140	60	75

Note : We can also manufacture items with different number of ports to the above.

Construction and functioning

Two-color water level gauge applies the principle of optical science that the reflective index of light is different when it passes through steam space and boiler water section, separating red (steam space) and green (boiler water section). The gauge is of construction that a special lamp, colored glass plate (red, green) and a condensing lens are provided inside the illuminator installed at the rear of water level gauge. The light separated into two colors by passing through the colored plates (red, green) enters into visible window of water level gauge after traveling angle is changed a little by the next condensing lens. Then, when the light passes through the trapezoid chamber which consists of two sheets of gauge glass when it is steam green light reflected in the chamber and does not appear outside interrupted by gauge cover and only red reflected ray appears on the visible face after passed through inside of water level gauge. And when it is boiler water in the chamber, contradictions phenomenon will occur, that is, the red reflected ray does not appear outside interrupted and only green refracted ray appears on the visible face. As mentioned above, the filter glass, a condensing lens, gauge glass are combined in the optically position so that correct water level may appear by instantaneously sensing the level variance.

In the case of steam (Red)



In the case of boiler water (Green)

