

LIQUID LEVEL GAUGE

R Series – Reflex Type T Series – Transparent Type B Series – Large Chamber Type

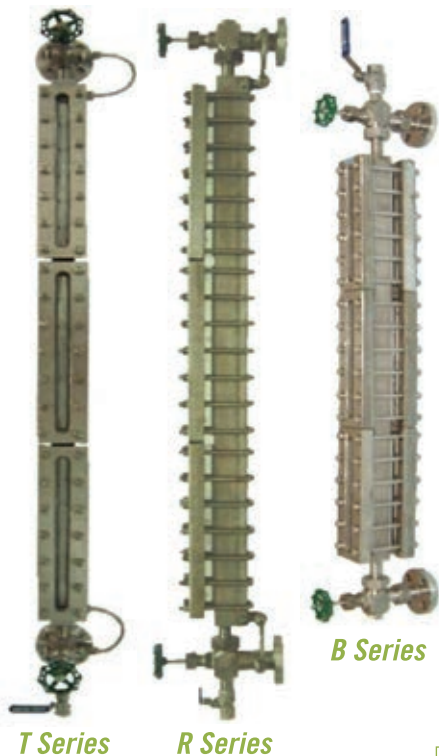
NEW-FLOW glass level gauge are designed in wide range including R series, T series, B series and illuminator type. Which meet various pressure, temperature for application by customer.

Feature

- High Quality
- Low Cost
- Material: Carbon steel, SS304, SS316 are available
- The special materials are available by requested

Valve Type

Approvals:



Standard Type Valve

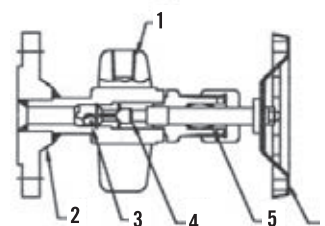
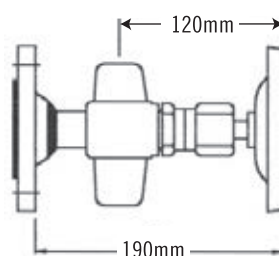


Jacket Type Valve



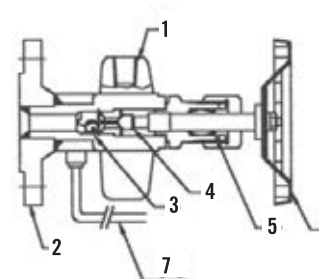
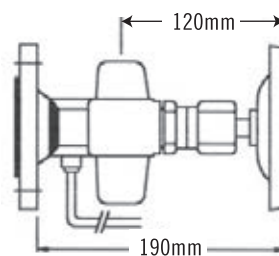
Offset Type Valve

Standard Type (Max. Pressure: 70 kg/cm² @ 38°C)



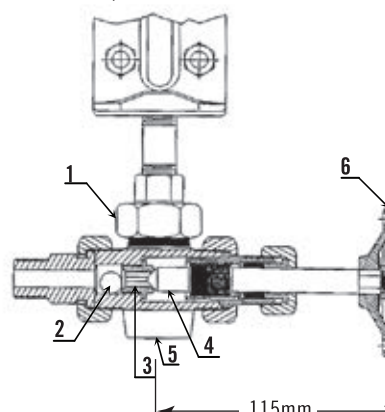
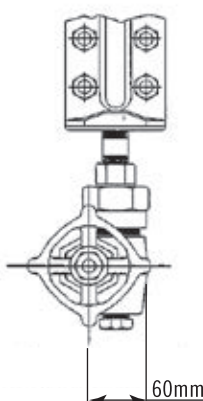
- (1) Body
- (2) Flange
- (3) Ball Check
- (4) Plug stem
- (5) Packing
- (6) Handle wheel

Jacket Type Valve (Max. Pressure: 70 kg/cm² @ 38°C)



- (1) Body
- (2) Flange
- (3) Ball Check
- (4) Plug stem
- (5) Packing
- (6) Handle wheel
- (7) Jacket tube

Offset Valve Type (Max. Pressure: 3000 PSI @ 38°C)



- (1) Unit-Nut
- (2) Ball Check
- (3) Seat
- (4) Stem
- (5) ½" NPT
- (6) Handle Wheel

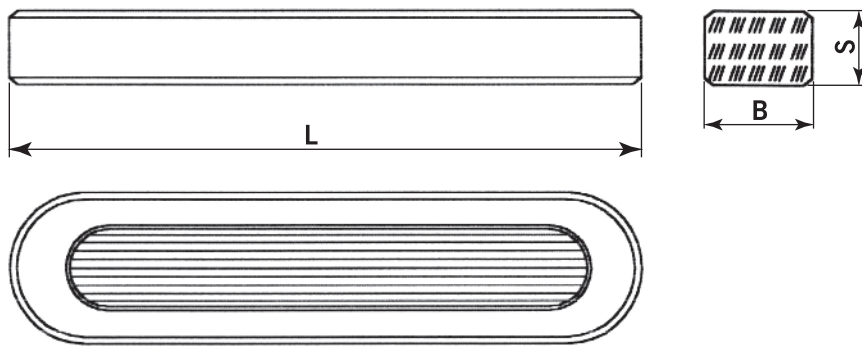


ILLUMINATOR Type (only for transparent type)

illuminator Protection: EEx ia II C T4/T5/T6
21 special LED's provide dazzle free illumination.
Electrical Data and Components; General:

- Supply: AC or DC
- Operating Voltage: 24V
- Power Consumption: Max. 2W
- Temperature Resistant: -10°C to +90°C

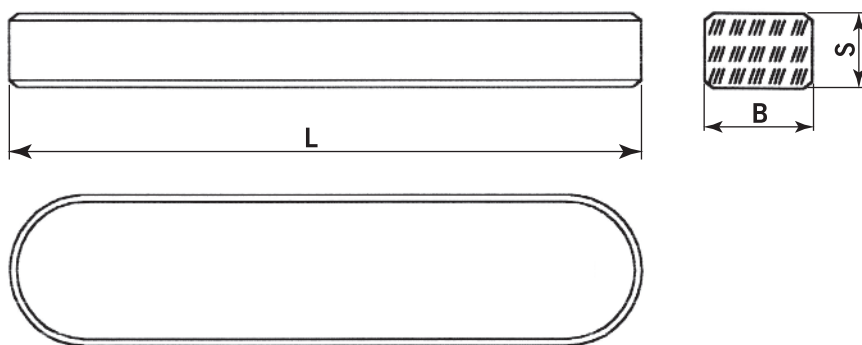
Glass for Reflex type



Dimensions-mm

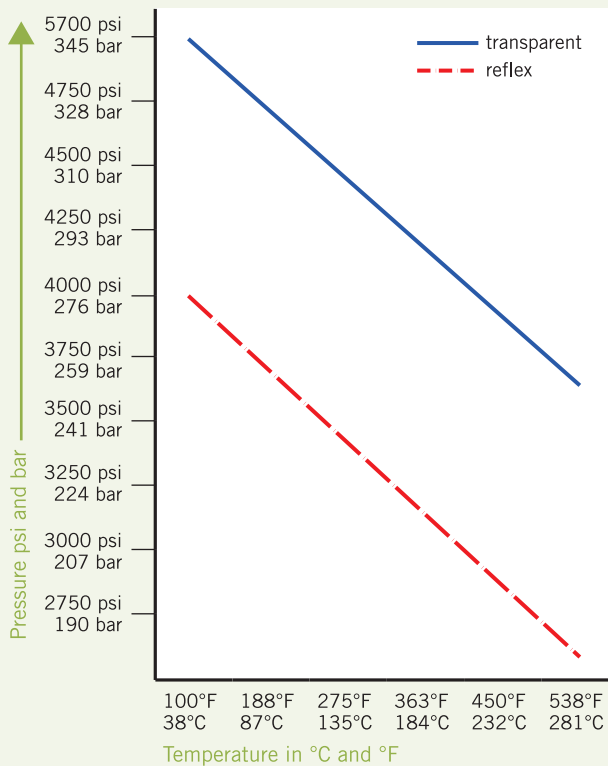
No.	L	B	S
3	165	34	17
4	190	34	17
5	220	34	17
6	250	34	17
7	280	34	17
7½	300	34	17
8	320	34	17
9	340	34	17
10	400	34	17

Glass for Transparent type



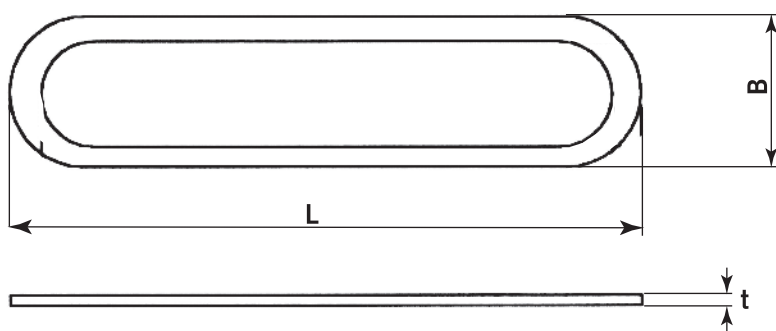
Dimensions-mm

No.	L	B	S
3	165	34	17
4	190	34	17
5	220	34	17
6	250	34	17
7	280	34	17
7½	300	34	17
8	320	34	17
9	340	34	17
10	400	34	17



Application Conditions	Maximum Permissible Pressure		Maximum Permissible Temperature	
	Bar	Psi	°C	°F
Saturated steam or hot water in direct contact with reflex or transparent sight glasses.	35	500	243	470
Saturated steam or hot water in contact with transparent sight glasses protected with mica.	103	1500	320	608
Non-corrosive, non-steam service and no technically significant glass attack, with reflex or transparent glasses.	280	4000	38	100
Transparent sight glasses in contact with medias with no technically significant glass attack.	345	5000	38	100
High pressure transparent sight glasses in special armatures (gauges).	414	6000	38	100

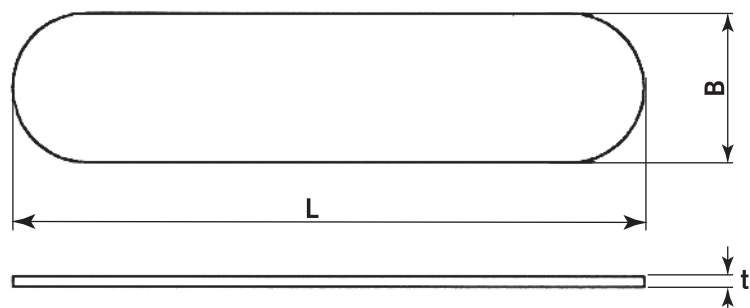
Sealing Gasket



Dimensions-mm

No.	L	B	t
3	165	34	≅ 1.5~1.8
4	190	34	≅ 1.5~1.8
5	220	34	≅ 1.5~1.8
6	250	34	≅ 1.5~1.8
7	280	34	≅ 1.5~1.8
7½	300	34	≅ 1.5~1.8
8	320	34	≅ 1.5~1.8
9	340	34	≅ 1.5~1.8
10	400	34	≅ 1.5~1.8

Mica Shields



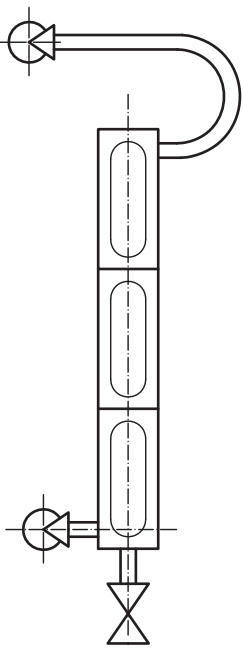
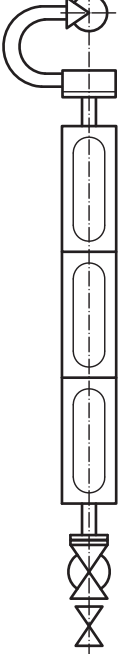
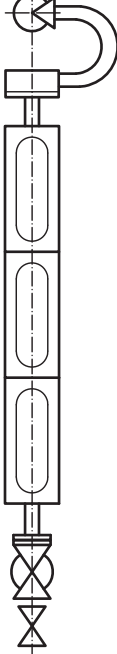
Dimensions-mm

No.	L	B	t
3	165	34	≅ 0.2
4	190	34	≅ 0.2
5	220	34	≅ 0.2
6	250	34	≅ 0.2
7	280	34	≅ 0.2
7½	300	34	≅ 0.2
8	320	34	≅ 0.2
9	340	34	≅ 0.2
10	400	34	≅ 0.2

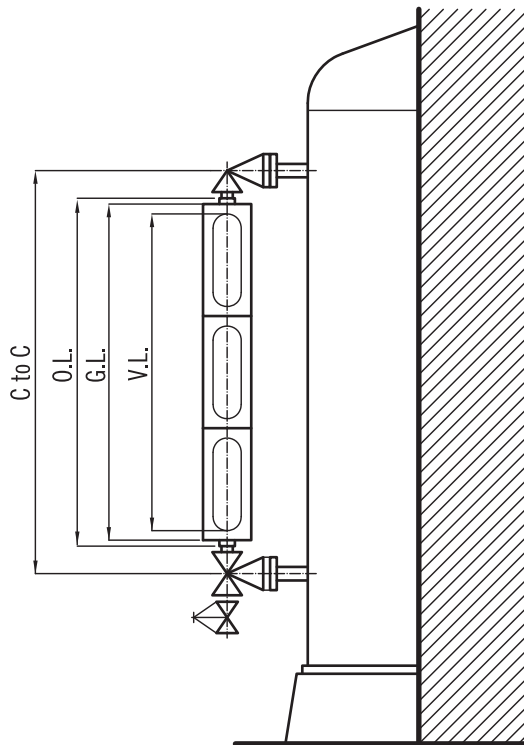
Installed Methods- Process Connection

Top Bottom	Bottom-Left Side	Bottom-Right Side	Top-Left Side	Top-Right Side
A. 	B. 	C. 	D. 	E.
Left to Left Side	Right to Right Side	Left Bend Top	Right Bend Top	Right Bend Right Side
F. 	G. 	H. 	I. 	J.

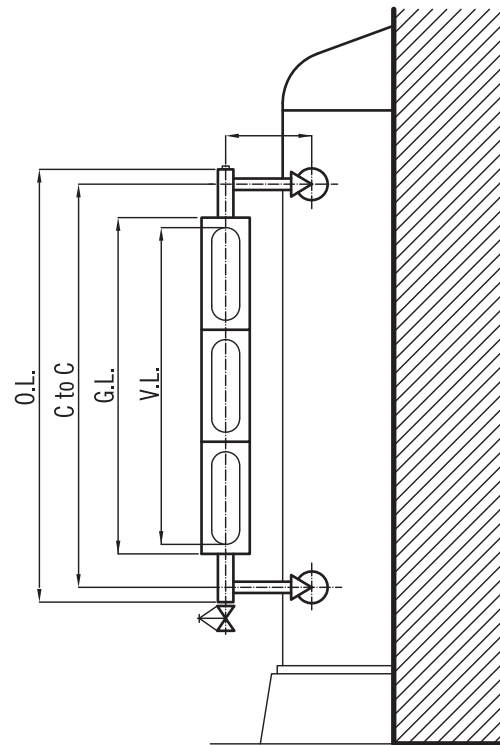
Installed Methods- Process Connection

Left Bend Left Side	Bottom. Flanged Left Bend Top	Bottom. Flanged Right Bend Top
<p>K.</p> 	<p>L.</p> 	<p>M.</p> 

Sample Hook-Up Drawing



Top-Bottom Hook-Up



Right to Right Side Hook-Up

• R Series – Reflex Type Liquid Level Gauge

The Reflex type level gauge is constructed by a solid one-piece chamber made from bar stock with ductile steel covers, hard glass, steel bolts and nuts. The material are available with carbon steel, SS304, SS316 and SS316L. The special material are available by requested. The level gauge provide from one up to five section. As the reflex level gauge is used, liquid section appears black color and steam or gas section appears with white color.

The R Series level gauge is designed to suit for the equipment in the chemical plant. Power plant and other industries to measure the liquid level. NEW-FLOW provides - R (standard type), RJ (jacket type) and RN (Non-frosting type) for customer to application by requested.

Technical Data

Center to Center length: By customer requested

Connection Vessel: ½" or ¼" female or male

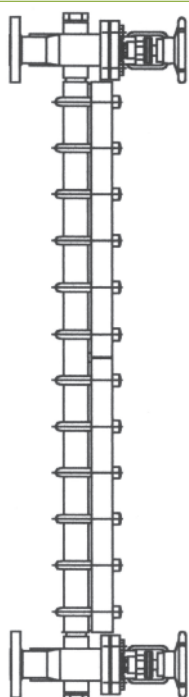
Process Rating: Thread or Flange end available

Covers: Ductile, SS304 and SS316 are available by requested

Sight Glass: Borosilicate glass

Gasket: High quality material are made by requested

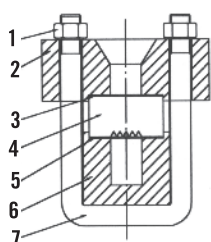
U-Bolt and Nuts: Alloy steel, SS304 and SS316 are available



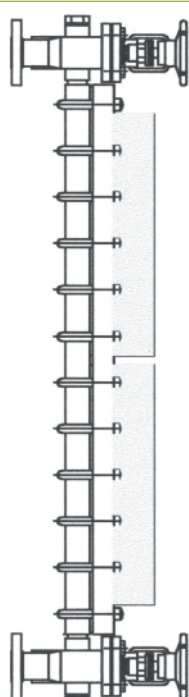
Model: R
Standard Type

- **Temperature Range:** 2°C ~ 280°C
- **Pressure Range:** up to 40 kg/cm² (standard);
optoin up to 70 kg/cm² available.
- **With Gauge Valve:** Union nut or Nipple between
gauge valve and vessel body.
- **Process Connection:** Thread or Flange
according to JIS, ANSI and DN specification.

Parts List



1. Nut for U-bolt
2. Cover
3. Packing
4. Gauge Glass
5. Packing
6. Body
7. U-bolt

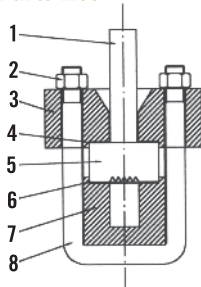


Model: RN
Non-Frosting Type

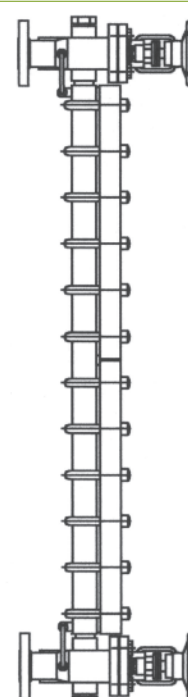
Using in low temperature application to prevent the frost build up does not obscure reading of the liquid level.

- **Temperature Range:** -10°C ~ -100°C
- **Pressure Range:** up to 20 kg/cm²

Parts List



1. Plastic Extension Plate
2. Nut for U-bolt
3. Gauge Cover
4. Gasket
5. Gauge Glass
6. Gasket
7. Gauge Body
8. U-bolt

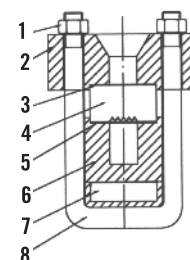


Model: RJ
Jacket Type

Jacket type— Heating or Cooling
This type is built with a jacket pass through steam or cooling water into the jacket. It can keep temperature in the vessel to avoid liquid crystallization or vaporization. So the liquid can be indicated clearly.

- **Temperature Range:** 2°C ~ 280°C
- **Pressure Range:** up to 40 kg/cm² (standard);
optoin up to 70 kg/cm² available.

Parts List



1. Nut for U-bolt
2. Cover
3. Packing
4. Gauge Glass
5. Packing
6. Body
7. Jacket
8. U-bolt

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• T Series – Transparent Type Liquid Level Gauge

The Transparent type level gauge is constructed by a solid one-piece chamber made from bar stock with ductile steel covers, hard glass, steel bolts and nuts. The material are available with carbon steel, SS304, SS316 and SS316L. The special material are available by requested. The level gauge provide from one up to five section. As the transparent level gauge is used, liquid section appears black color and steam or gas section appears with white color. The T Series level gauge is designed to suit for the equipment in the chemical plant. Power plant and other industries to measure the liquid level. NEW-FLOW provides - T (standard type), TJ (jacket type) and TN (Non-frosting type) for customer to application by requested.

Technical Data

Center to Center length: By customer requested

Connection Vessel: ½" or ¼" female or male

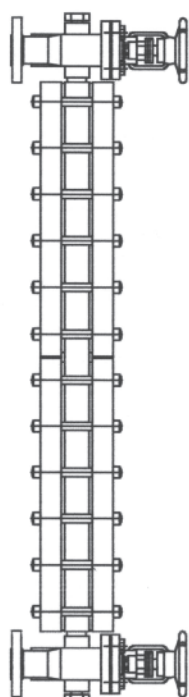
Process Rating: Thread or Flange end available

Covers: Ductile, SS304 and SS316 are available by requested

Sight Glass: Borosilicate glass

Gasket: High quality material are made by requested

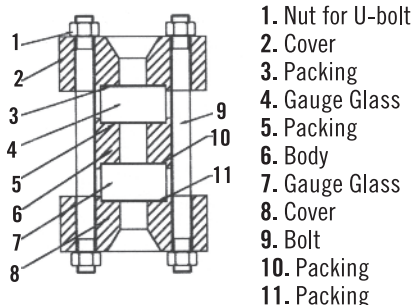
U-Bolt and Nuts: Alloy steel, SS304 and SS316 are available



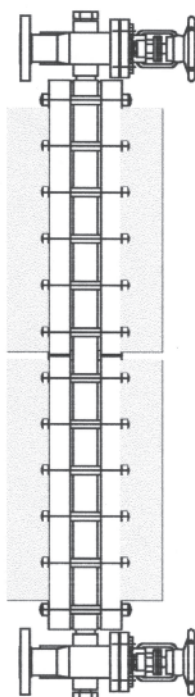
Model: T
Standard Type

- **Temperature Range:** 2°C ~ 280°C
- **Pressure Range:** up to 40 kg/cm² (standard);
optoin up to 70 kg/cm² available.
- **Without Gauge Valve:** ½" or ¾"NPT
- **With Gauge Valve:** Union nut or Nipple between
gauge valve and vessel body.
- **Process Connection:** Thread or Flange
according to JIS, ANSI and DN specification.
- **Transparent type is not suitable for**
colorless liquid.

Parts List



1. Nut for U-bolt
2. Cover
3. Packing
4. Gauge Glass
5. Packing
6. Body
7. Gauge Glass
8. Cover
9. Bolt
10. Packing
11. Packing

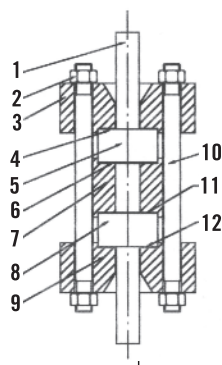


Model: TN
Non-Frosting Type

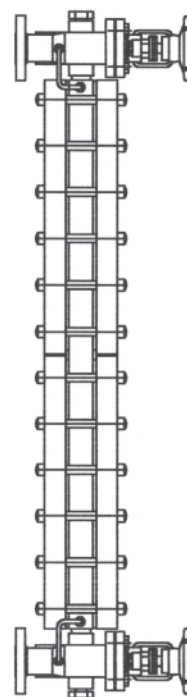
Using in low temperature application to prevent the frost build up does not obscure reading of the liquid level.

- **Temperature Range:** -10°C ~ -100°C
- **Pressure Range:** up to 20 kg/cm²

Parts List



1. Plastic
Extension Plate
2. Nut for U-bolt
3. Gauge Cover
4. Gasket
5. Gauge Glass
6. Packing
7. Body
8. Gauge Glass
9. Cover
10. U-bolt
11. Packing
12. Packing



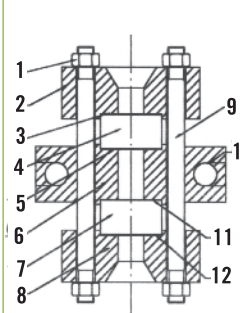
Model: TJ
Jacket Type

Jacket type— Heating or Cooling

This type is built with a jacket pass through steam or cooling water into the jacket. It can keep temperature in the vessel to avoid liquid crystallization or vaporization. So the liquid can be indicated clearly.

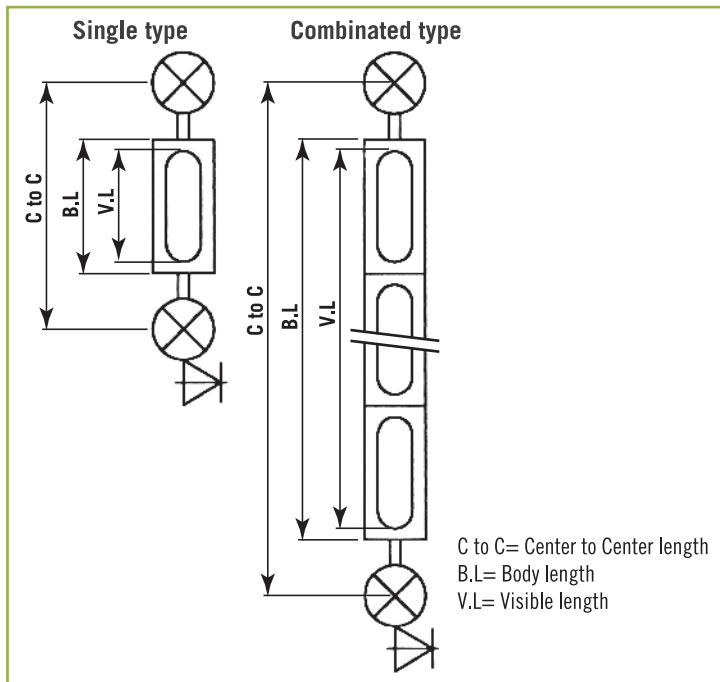
- **Temperature Range:** -10°C ~ 280°C
- **Pressure Range:** up to 40 kg/cm² (standard);
optoin up to 70 kg/cm² available.

Parts List



1. Nut for U-bolt
2. Cover
3. Packing
4. Gauge Glass
5. Packing
6. Body
7. Gauge Glass
8. Cover
9. Bolt
10. Jacket Pipe
11. Packing
12. Packing

• **T Series – Transparent Type Liquid Level Gauge Installation Mode**



Ordering Information

LG	Code	Model
	T	Standard Type TN Non-Frosting Type TJ Jacket Type
	Code	Connection Size
		(1) 1/2" (2) 3/4" (3) 1" (4) 1 1/2" (5) 2"
	Code	Connection Rating
		(A) NPT-M (B) ANSI 150# (C) ANSI 300# (D) PN16 (E) PN40 (F) option
	Code	Body Material
		(1) SS304 (2) SS316 (3) Carbon Steel (4) option
	Code	Gauge Valve Material
		(1) SS304 (2) SS316 (3) Carbon Steel (4) option
	Code	Valve Type
		(A) Standard Type (B) Offset Type (C) Jacket Type (D) option (E) Without
	Code	Gasket Material
		(1) Non-Asbestos (2) Teflon (3) option
	Code	The Function of Gauge Valve
		(A) With Ball Check (B) Without Ball Check
	Code	Center to Center Length (C to C)
		Please directly fill out the length you required.
	Code	Process Connection Methods
		Please refer to the table of Installed Methods and fill out the code (A.~M.) of your request.
	Code	illuminator (EE ia II C T4/T5/T6)
	A	With B Without
	Code	illuminator Power Supply
	O	Without 1 24VDC
	2	110VAC 3 220VAC
	Code	Scale Plate
	A	Yes
	B	Without
LG		Complete Ordering Code

• B Series – Large Chamber Type Liquid Level Gauge

The Large Chamber level gauge is constructed by a big chamber made with ductile steel covers, hard glass, steel bolts and nuts. The large chamber type level gauge is specifically designed to provide an easy observation for the level of viscous liquid and provide an easy flushing to vessel of the level gauge when it's on requested.

The B series can provide end connection up to 2" thread or flange, according to the specification of JIS, ANSI, DIN all materials in the B series are available with carbon steel, SS304, SS316 and SS316L. The special materials are available by requested.

Technical Data

Center to Center length: By customer requested

Connection Vessel: Up to 2" pipe size

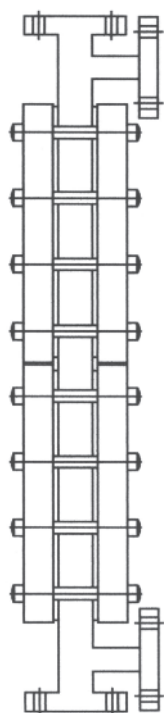
Process Rating: Thread or Flange end available

Covers: Ductile, SS304 and SS316 are available by requested

Sight Glass: Borosilicate glass

Gasket: High quality material are made by requested

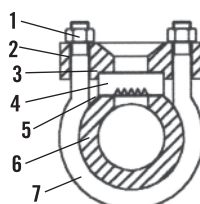
U-Bolt and Nuts: Alloy steel, SS304 and SS316 are available



Model: BR, Standard Type

- **Temperature Range:** 2°C ~ 300°C
- **Pressure Range:** up to 40 kg/cm² (standard); optoin up to 70 kg/cm² available.
- **Process Connection:** ½" up to 2"

Parts List



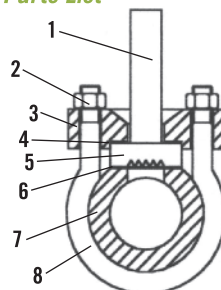
- | | |
|-------------------|-----------|
| 1. Nut for U-bolt | 6. Body |
| 2. Gauge Cover | 7. U-bolt |
| 3. Packing | |
| 4. Gauge Glass | |
| 5. Packing | |

Model: BRN, Non-Frosting Type

Using in low temperature application to prevent the frost build up does not obscure reading of the liquid level.

- **Temperature Range:** -10°C ~ -100°C
- **Pressure Range:** up to 20 kg/cm²;
- **Process Connection:** ½" up to 2"

Parts List

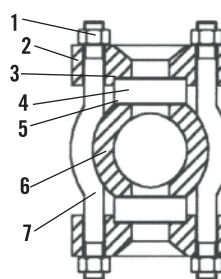


- | | |
|----------------------------|---------------|
| 1. Plastic Extension Plate | 6. Gasket |
| 2. Nut for U-bolt | 7. Gauge Body |
| 3. Gauge Cover | 8. U-bolt |
| 4. Gasket | |
| 5. Gauge Glass | |

Model: BT, Standard Type

- **Temperature Range:** 2°C ~ 300°C
- **Pressure Range:** up to 40 kg/cm² (standard); optoin up to 70 kg/cm² available.
- **Process Connection:** ½" up to 2"

Parts List

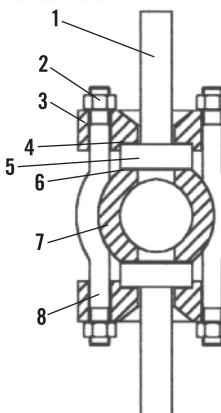


- | | |
|-------------------|---------------|
| 1. Nut for U-bolt | 6. Gauge Body |
| 2. Gauge Cover | 7. Bolt |
| 3. Gasket | |
| 4. Gauge Glass | |
| 5. Gasket | |

Model: BTN, Non-Frosting Type

- **Temperature Range:** -10°C ~ 100°C
- **Pressure Range:** up to 20 kg/cm²;
- **Process Connection:** ½" up to 2"

Parts List



- | | |
|----------------------------|---------------|
| 1. Plastic Extension Plate | 6. Gasket |
| 2. Nut for U-bolt | 7. Gauge Body |
| 3. Gauge Cover | 8. Bolt |
| 4. Gasket | |
| 5. Gauge Glass | |

C to C = Center to Center length
 B.L = Body length
 V.L = Visible length

LG	Code	Model
	BR	Reflex, Standard Type
	BT	Transparent, Standard Type
		BRN Reflex, Non-Frosting Type
		BTN Transparent, Non-Frosting Type
	Code	Connection Size
		(1) ½" ANSI 150# (2) ¾" ANSI 150# (3) 1" ANSI 150# (4) 1" JIS 10K (5) option
	Code	Body Material
		(1) SS304 (2) SS316 (3) Carbon Steel (4) option
	Code	Gauge Valve Material
		(1) SS304 (2) SS316 (3) Carbon Steel (4) option
	Code	Valve Type
		(A) Ball Valve (B) Globe Valve (C) Option (D) Without
	Code	Gasket Material
		(1) Non-Asbestos (2) Teflon (3) option
	Code	The Function of Gauge Valve
		(A) With Ball Check (B) Without Ball Check
	Code	Center to Center Length (C to C)
		Please directly fill out the length you required.
	Code	Process Connection Methods
		Please refer to the table of Installed Methods and fill out the code (A.-M.) of your request.
	Code	illuminator (EEx ia II C T4/T5/T6)
	A	With B Without
	Code	illuminator Power Supply
	O	Without 1 24VDC
	2	110VAC 3 220VAC
	Code	Scale Plate
	A	Yes B Without
LG		Complete Ordering Code