

TUBULAR TYPE LEVEL GAUGE

Gauge Valves Sold Separately
Economical Type

BL SERIES – With Protection Support Pipe

PL SERIES – With Protection Support Rod

BLN SERIES – Without Protection Support

BLU SERIES – With/Without Protection Support

BL-Series and PL-Series are normally used on non-pressurized and non-dangerous fluid systems with a glass tube or sight, it also can find the utility in the observation of interface or fluid color. Gauge glass is made heat resistant borosilicate.

Technical Data

Suitable Fluid: Water, Oil, other chemical liquid

Gauge Valve Material: SS304, SS316, and UPVC available

Gauge Tube Material: DURAN® Glass, Teflon FEP, and PVC tube

Seal: Temp. limit: (1) Viton: -20~150°C, (2) EPDM: -40~110°C, (3) PTFE: -100~100°C

Protection Support Pipe Material: Acrylic, SS304, SS316 available

Gauge Valve Function: With or Without ball check

Max. Working Temperature: 120°C or 150°C

Max. Working Pressure: 5~8 kg/cm²

(Please also consider of the function of length and temperature.)

Process Connection: ½"~¾" Male Thread; and ¾"~1" Flange type on request

Process Type: Thread G, NPT, BSPT available

Flange JIS, ANSI, DIN available

Drain Valve Connection: ¼" and ¾" Female Thread G, NPT, BSPT available

Center to Center Length: max. 2500 mm for DURAN® Glass tube
max. 30M for Teflon FEP tube or PVC tube

Additional: Gauge valve sold separately, and add yellow float available (please advise the manufacturer if necessary)



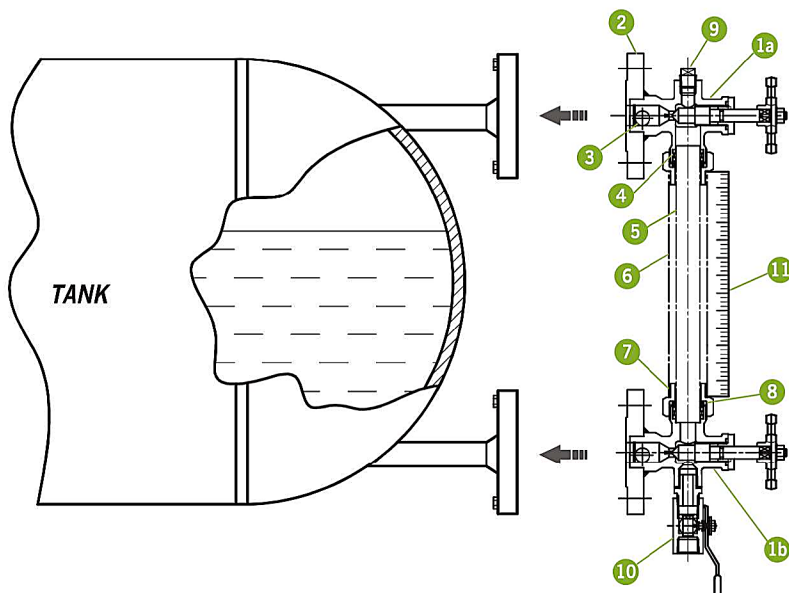
BLV

(Gauge valves
*2 piece/1set)



Add "yellow float"
available

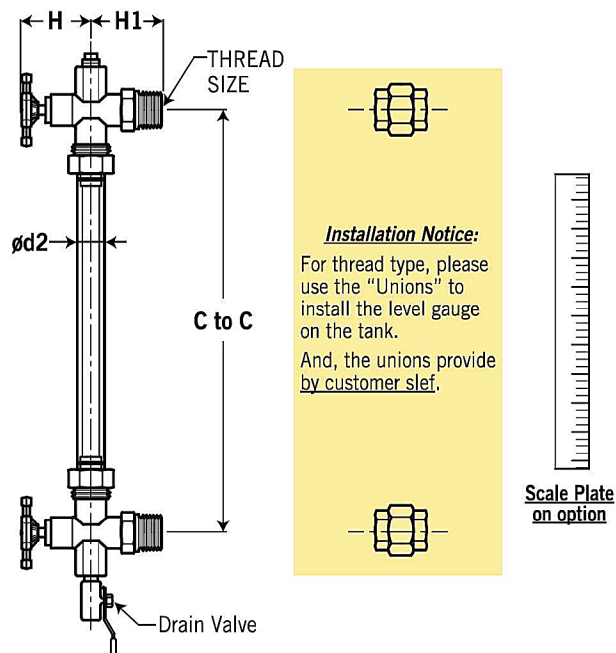
Installation & Parts List



ITEM	PARTS NAME
1a	Upper Gauge Valve
1b	Lower Gauge Valve
2	Process Connection
3	Ball Check
4	Gland Packing
5	Glass Gauge Tube
6	Protector Support
7	Gland Nut
8	Gland Bush
9	Vent Plug
10	Drain Ball Valve
11	Scale Plate (option)

Dimensions-mm

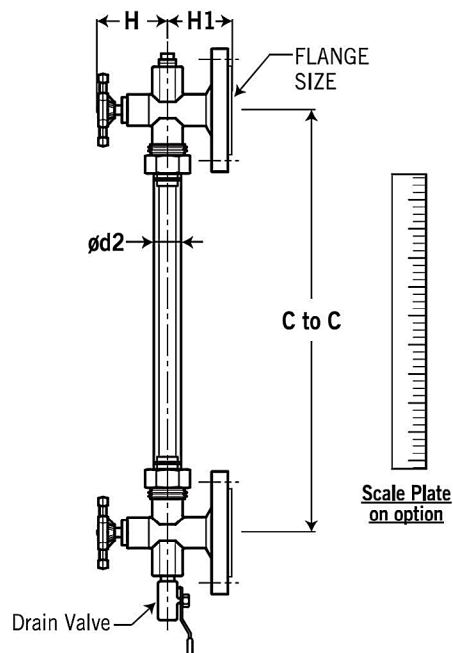
BL-Series:



Thread Type- BLT

Thread Size	H	H1	d2	Drain Valve	Glass Tube Dimensions	FEP Tube Dimensions
1/2"	67	38	30	1/4"	① ø13x2.2t ② ø14x2.2t	---
3/4"	69	47	34	3/8"	③ ø16x2.5t ④ ø20x2.5t	⑤ ø19x1.58t

- Female or Male Thread 「G, NPT, BSPT」 are on request.
- If the thread size is 「1/2"NPT(M)」, the drain valve size is 「1/4"NPT(F)」.

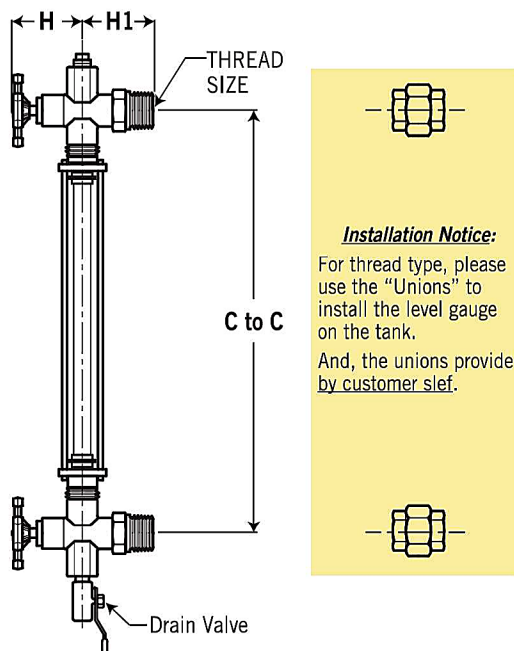


Flange Type- BLF

Flange Size	H	H1	d2	Drain Valve	Glass Tube Dimensions	FEP Tube Dimensions
3/8"	67	47	30	1/4"	① ø13x2.2t ② ø14x2.2t	---
1/2"	67	47	30	1/4"	③ ø16x2.5t ④ ø20x2.5t	⑤ ø19x1.6t
3/4"	69	59	34	3/8"		
1"	69	59	34	3/8"		

- Flange rating JIS, ANSI, DIN are on request.

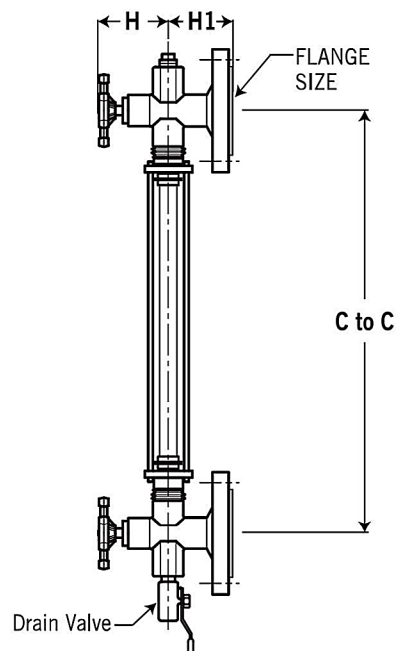
PL-Series:



Thread Type- PLT

Thread Size	H	H1	Drain Valve	Glass Tube Dimensions	FEP Tube Dimensions
3/4"	69	47	3/8"	③ ø16x2.5t ④ ø20x2.5t	⑤ ø19x1.6t

- Female or Male Thread 「G, NPT, BSPT」 are on request.
- If the thread size is 「3/4"NPT(M)」, the drain valve size is 「3/8"NPT(F)」.
- With adapter to 1/2"NPT(M) is on request.

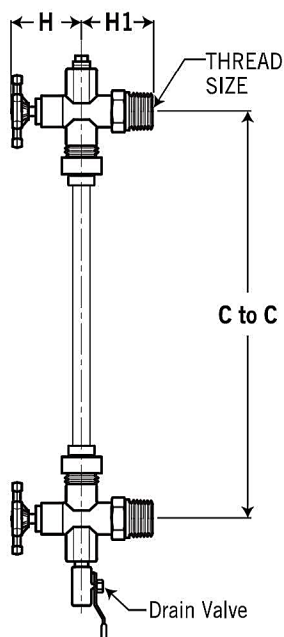


Flange Type- PLF

Flange Size	H	H1	Drain Valve	Glass Tube Dimensions	FEP Tube Dimensions
3/4"	69	59	3/8"	③ ø16x2.5t ④ ø20x2.5t	⑤ ø19x1.6t
1"	69	59	3/8"		

- Flange rating JIS, ANSI, DIN are on request.

BLN-Series:



Installation Notice:

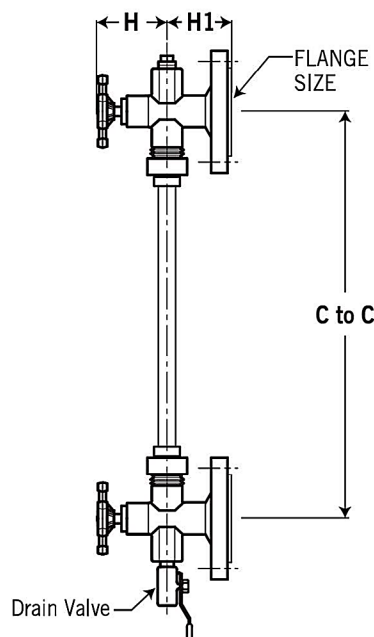
For thread type, please use the "Unions" to install the level gauge on the tank.

And, the unions provide by customer self.

Thread Type- BLNT

Thread Size	H	H1	Drain Valve	FEP Tube Dimensions
3/4"	69	47	3/8"	⑤ ϕ19x1.6t

- Female or Male Thread 「G, NPT, BSPT」 are on request.
- If the thread size is 「3/4"NPT(M)」, the drain valve size is 「3/8"NPT(F)」.
- With adapter to 1/2"NPT(M) is on request.

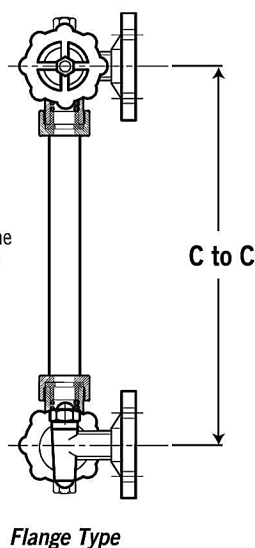
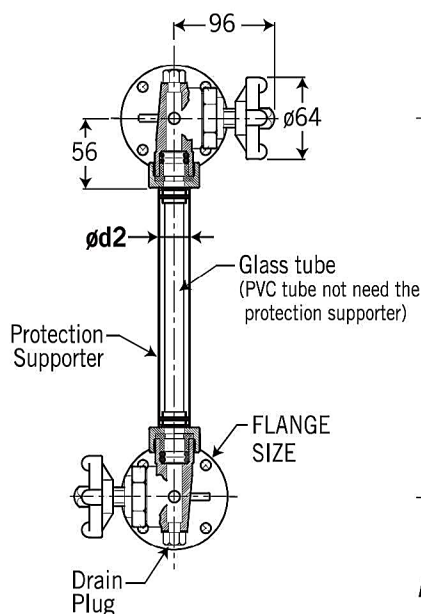


Flange Type- BLNF

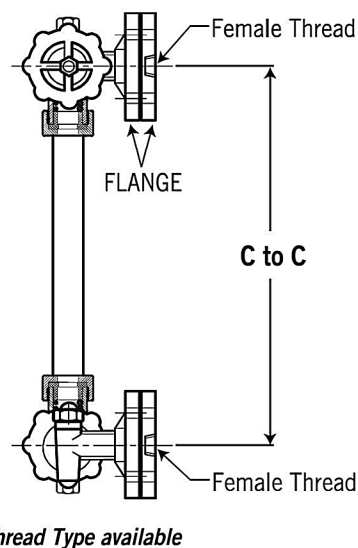
Flange Size	H	H1	Drain Valve	FEP Tube Dimensions
3/4"	69	59	3/8"	⑤ ϕ19x1.6t
1"	69	59	3/8"	

- Flange rating JIS, ANSI, DIN are on request.

BLU-Series:



Flange Type



Thread Type available

Flange Size	Glass Tube Dimensions	PVC Tube Dimensions
3/4"	⑥ ϕ18x2.5t	⑦ ϕ19.8x2.4t
1"		

- Flange rating only JIS 10K & 150# FF
- Protection supporter only for glass tube.

Ordering Information

Model	BLT	with protection support pipe; Thread type				BLNT	without protection support; Thread type <i>(Teflon FEP tube only)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	BLF	with protection support pipe; Flange type				BLNF	without protection support; Flange type <i>(Teflon FEP tube only)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	PLT	with protection support rod; Thread type				BLV	only gauge valves (2 pieces/1 set)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	PLF	with protection support rod; Flange type				BLU	with or without protection support pipe; Flange type only																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	Code	Connection Size <i>(*Please refer to the previous page for the dimensions/size applicable to each model.)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Thread	(A) ½"NPT(M) (B) ¾"NPT(M) (C) G½"(M) (D) G¾"(M) (E) ½"BSPT(M) (F) ¾"BSPT(M)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Flange	(G) ½" JIS 10K (H) ¾" JIS 10K (I) 1" JIS 10K (J) ½" ANSI 150# (K) ¾" ANSI 150# (L) 1" ANSI 150# (O) option																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Code	Gauge Valve Material																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1	SS304		2	SS316		3	UPVC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Code	Gauge Tube Material																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	1	DURAN® Glass		2	Teflon FEP		3	PVC tube (N) Without gauge tube <i>(only for model BLV)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Code	Gauge Tube Dimensions <i>(unit=mm)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		(1) ø13 x 2.2t (2) ø14 x 2.2t (3) ø16 x 2.5t (4) ø20 x 2.5t (5) ø19 x 1.6 <i>(only for Teflon FEP tube)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		(6) ø18 x 2.5t (7) ø19.8 x 2.4t <i>(only for PVC tube)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Code	Seal Material																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		(1) Viton (2) EPDM (3) PTFE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Code	The Function of Gauge Valve																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		(A) With Ball Check (B) Without Ball Check																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Code	Drain Valve Type																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		(1) Ball Valve (2) Plug (3) Needle Valve (N) Without for BLU-Series																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Code	Vent Valve Type																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	(1) Ball Valve (2) Plug (3) Needle Valve (N) Without for BLU-Series																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Code	Center to Center Length (C to C)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Please fill out the required length. <i>(max. 2500mm for glass tube / max. 30M for FEP tube)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Code	Protection Supporter Material																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
W	Acrylic																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
S4	SS304																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
S6	SS316																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
N	Without <i>(for BLN, BLV, and BLU with PVC tube)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Code	Scale Plate																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
A	With <i>(only for BLT & BLF)</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
B	Without																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												