

Series 3411LG: BPL

By-Pass Level Indicator

Side mounted / Top mounted

BPL



Working Principle & Operation

Magnetic level gauge consists float containing properly centered special magnet, has greater magnetizing force than the outside mounted flapper magnet of the indicator system. Attached to the chamber is a series of bi-colored flapper each containing magnet. As the liquid rises in the tank or vessel the same level comes in float chamber, due to buoyancy force flow starts moving within the chamber, which cause bi-colored flapper flip to the opposite sides or 180°, providing a visual display of the liquid and protects against the false actuation.

Features

- Enhanced protection due to metallic chamber
- Can be used for the level measurement for the atmospheric & pressurized condition
- Better reliability at high temperature & pressure
- Clear visibility of level for longer duration
- Easy to set contacts at different desired levels (optional)
- Transmitter output 4 - 20 MA (optional)

Applications

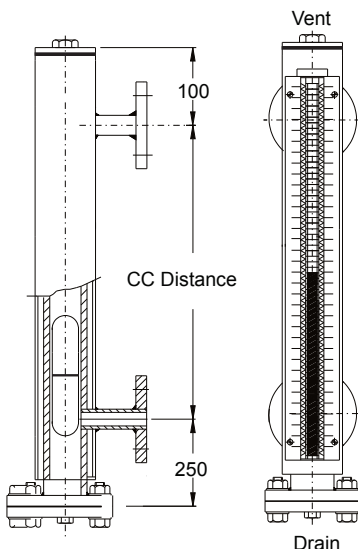
- Processing tanks & under ground tanks
- Custody transfer
- Pharmaceutical & beverage plants
- Chemical & fertilizer plant

Specifications

Standard Version

Chamber	: AISI 316 SS
Float	: AISI 316 SS
Mounting	: Top or Side
Top side vent	: Welded flat top with Plug
Bottom side drain	: Dual Flange & Plug (for Side Mounted) / Flange (for Top Mounted)
Process connection	: Flanged or Screwed
C-C distance (± 3 mm)	: 300 to 6000 mm
Flag display length (L)	: 300 to 6000 mm
Flag color	: White & Red
Scale material	: Aluminium
Max. Operating pressure	: 10 kg/cm ²
Max. Operating temperature	: -20 to 150°C
Indicator roller	: Metallic
Specific gravity	: 0.75 (Min.)

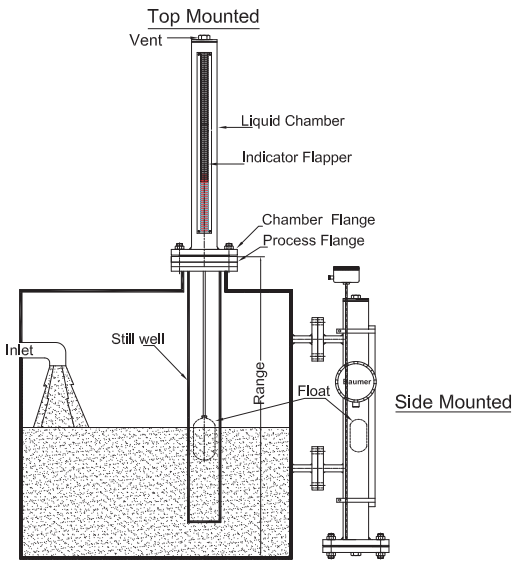
Dimensions - Standard Version



- Notes :
- Drawings are not to scale.
 - All Dimensions are in mm

Note: Design and Specifications subject to change without prior notice.

Mounting Type - Top or Side



How To Order - Ordering Example: 3411LG: BPL.T.SS.T2.P2.F.F.T.2NPM.800mm.A.RW.2.ST

Basic Model	3411LG : BPL
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Code	Mounting	Code	Mounting
T	Top	S	Side

Code	Wetted Parts		
SS3	Float / Chamber / Process Connection - AISI 304 SS	SSL	Float / Chamber / Process Connection - AISI 316L SS
SS	Float / Chamber / Process Connection - AISI 316 SS	PP	Float / Chamber / Process Connection - Polypropylene
IY	Chamber / Process Connection - Incoloy*	MON	Chamber / Process Connection - Monel [#]

*For option code IY & MON - Titanium float

Code	Temperature Range						
T1	0 to 80°C*	T2	-20 to 120°C (Standard)	T3	-20 to 300°C	T4	-20 to 400°C

*For option code PP

Code	Pressure Range								
P1	0 to 3 kg/cm ² *	P2	0 to 10 kg/cm ² (Standard)	P3	0 to 35 kg/cm ²	P4	0 to 50 kg/cm ²	P5	0 to 110 kg/cm ² [#]

*For option code PP [#]For option code P5 - Titanium float

Code	Gasket	Code	Gasket	Code	Gasket	Code	Gasket
F	CAF (Standard)	P	PTFE	G	Graphoil	SS3	SS304 Spiral Wound Graphite Filler

Code	Top Side Vent	Code	Top Side Vent	Code	Top Side Vent
F	Welded Flat Top+Plug - ½" NPT (M) (Std)	I	Welded Flat Top + Valve - ½" NPT (F)	C	Customized Design (Non - Standard)

Code	Bottom Side Drain	Code	Bottom Side Drain
K	Dual Flange + Plug - ½"NPT (M) (Standard)	N	Dual Flange + Valve - ½" NPT (M)
T	Single Flanged (for Top Mounted)	C	Customized Design (Non - Standard)

Code		Process Connection	
Screwed Connections		Flanged Connections (As per ANSI B 16.5)	
2NPM	½" NPT (M)	2BSM	½" BSP (M)
2NPF	1/2" NPT (F)	2BSF	1/2" BSP (F)
34NPM	3/4" NPT (M)	34BSM	3/4" BSP (M)
34NPF	3/4" NPT (F)	34BSF	3/4" BSP (F)
1NPM	1" NPT (M)	1BSM	1" BSP (M)
1NPF	1" NPT (F)	1BSF	1" BSP (F)
C	Customized Design	B09	½" 150# RF
		B10	1/2" 300# RF
		B11	1/2" 600# RF
		B15	3/4" 150# RF
		B16	3/4" 300# RF
		B17	3/4" 600# RF
		B21	1" 150# RF
		B22	1" 300# RF
		B23	1" 600# RF
		B33	1½" 150# RF
		B34	1½" 300# RF
		B35	1½" 600# RF
		B39	2" 150# RF
		B40	2" 300# RF
		B41	2" 600# RF
		B51	3" 150# RF
		B52	3" 300# RF
		B53	3" 600# RF
		C33	4" 150# RF*
		C34	4" 300# RF*
		C35	4" 600# RF*

Note : Screwed connection is applicable for Side Mounting only. * For Top Mounting option

Code	Center To Center Distance
XX	Please specify in mm (e.g. Write 800 for 800 mm Center to Center Distance)

Code	Material Of Scale	Code	Material Of Scale	Code	Material Of Scale
A	Aluminium (standard)	S	AISI 304 SS	C	Acrylic

Code	Indicator	Code	Indicator	Code	Indicator
RW	Bicolor Flappers (White & Red)	BW	Bicolor Flappers (White & Blue)	CP	Follower Capsule (Max 150°)

Code	No. Of Magnetic Switches						
1	One	2	Two	3	Three	4	Four

Code	Magnetic Switch with Housing		
A	SPST (Reed Switch, 1A 230 VAC)	C	SPDT (Micro Switch , Ex-proof IP66, 3A 230 VAC)
B	SPDT (Micro Switch , WP IP65 Housing, 3A 230 VAC)	D	SPDT (Bistable Switch , WP IP65 Housing, 5A 230VAC)

Code	Transmitter
LT	Transmitter With 4-20 mA Output

Code	Still Well (for Top Mounting)		
WC	Still Well - Carbon Steel	WS	Still Well - AISI 304 SS
		WL	Still Well - AISI SS 316

Code	Options	Code	Options	Code	Options	Code	Options
IV	Isolation Valve	MF	Matching Flange	ST	SS Tag Plate	MTC	Material Test Certificates **

For non standard products / optional items, please contact factory for delivery and minimum quantity of order.

** Material test certificates will be provided for wetted parts only with chemical composition testing.

For others, please consult factory.