

# Techtrol Vertical Level Control for Boiler - VLC

It is a versatile magnetic float operated device, top mounted in external chambers of steam boilers / pressure vessels and most suited for reliable automatic on-off control of boiler feed pumps, burner cut-outs or lock-outs, high or low level alarms or their combinations.

## Salient Features :

- Bistable switch action.
- Adjustable multiple switch mechanisms.
- Process temperature upto 250°C.
- Working steam pressure upto 25 kg/cm<sup>2</sup> .
- IBR Approved for Steam Boiler.

## Construction :

The float mounted in the external chamber, moves upward or downward, depending on rising or falling of liquid in the boiler/ vessel. This initiates the float stem, carrying a primary magnet at its upper end, to slide up or down, inside a non-magnetic central tube and cause the secondary magnet to actuate air-break contacts for onward operation of auxiliary devices. A maximum of 3 switch mechanisms can be provided, which are housed in a weatherproof enclosure and clamped onto central tube, to provide a control range of 150mm.

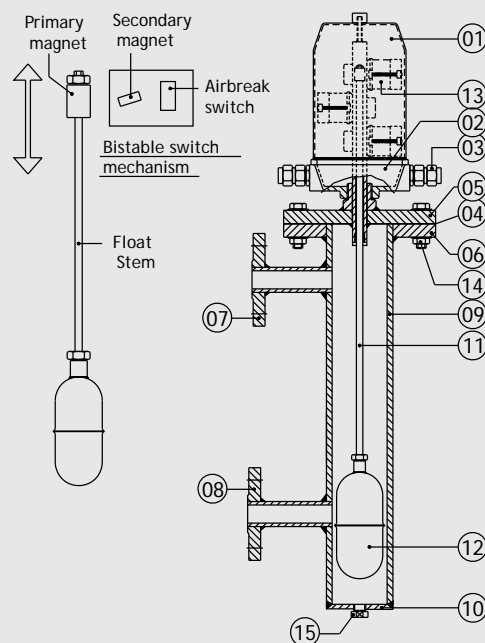
## Specifications :

Switch Enclosure	:	Cast Al Base + CS Pwdr ctd Cover
Cable Entry	:	1/2" NPT Gland (Brass)
Switch Mechanism	:	Adjustable, Airbreakswitch x 5A, 230VAC (SPDT)
Switch Action	:	Bistable
No.of Switch Mechanisms	:	Max Three (Adjustable)
Control Range	:	150 mm (Approx)
Operating Differential	:	25±5mm
Terminals	:	To suit 2.5mm <sup>2</sup> conductor
Float & Stem	:	SS316
Float Size	:	Ø65 x 165 mm
Chamber	:	CS with End Plate or Dish End
Process Connections	:	25NB T 'H' or ASME 300# Flange.
Gasket	:	CAF, CNAF, SS304 spiral wound
CC Distances	:	200, 216, 300, 400 or 500 mm
Drain	:	1/2"NPT Plug or Globe Valve
Max Temperature	:	Standard - 250°C High Temp- 300°C with Radiating Fins
Test Pressure	:	upto 50 kg/cm <sup>2</sup>
Min Liquid Density	:	0.8 g/cm <sup>3</sup>



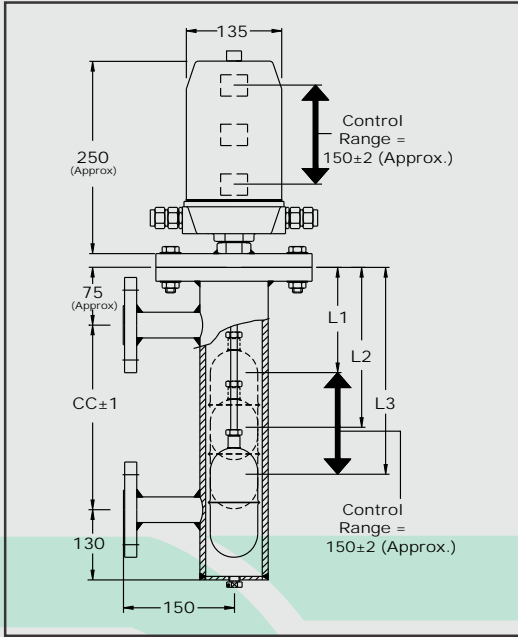
**IBR**

**Fig. 1**

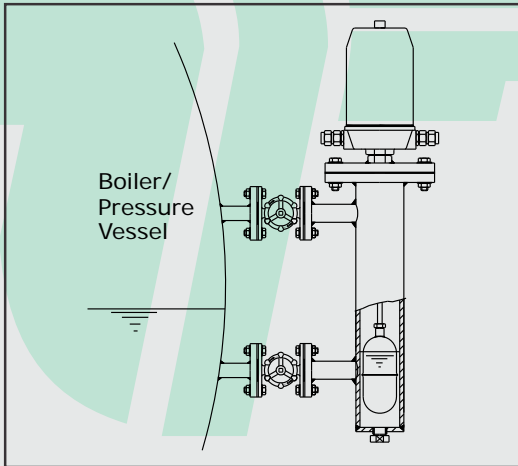


- |                      |                          |
|----------------------|--------------------------|
| 01) Switch enclosure | 08) Water side conn      |
| 02) Base             | 09) Chamber              |
| 03) Cable Entry      | 10) Chamber end cap      |
| 04) Gasket           | 11) Float stem           |
| 05) Switch flange    | 12) Float                |
| 06) Chamber flange   | 13) Airbreak switch assy |
| 07) Steam side conn  | 14) Bolts & nuts         |
|                      | 15) Plug                 |

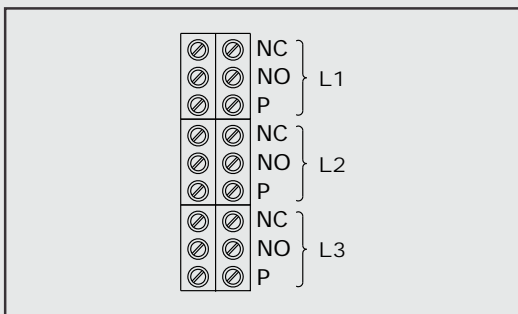
**Schematic Diagram :**



**Installation :**



**Termination :**



**Ordering Information :**

Please specify Model No., Operating Temp., Pressure & Set Point Positions (L1, L2 & L3)

**Model Identification :**

**Approval**

None \_\_\_\_\_ W  
IBR \_\_\_\_\_ B

**Process Flange**

25NB, BS 10 T`H' \_\_\_\_\_ 1  
25 NB ASME 300 # \_\_\_\_\_ 3  
80NB ASME 300 # (w/o chamber) \_\_\_\_\_ 4  
Others \_\_\_\_\_ O

**No. of Levels/Switch Mechanism**

One \_\_\_\_\_ 1  
Two \_\_\_\_\_ 2  
Three \_\_\_\_\_ 3

**Chamber**

Without \_\_\_\_\_ W  
CS Chamber with end plate \_\_\_\_\_ 1  
CS Chamber with dish end \_\_\_\_\_ 2  
Others \_\_\_\_\_ O

**CC Distance**

200 \_\_\_\_\_ 2  
300 \_\_\_\_\_ 3  
400 \_\_\_\_\_ 4  
500 \_\_\_\_\_ 5  
216 \_\_\_\_\_ 6  
Others \_\_\_\_\_ O

**Float & Stem**

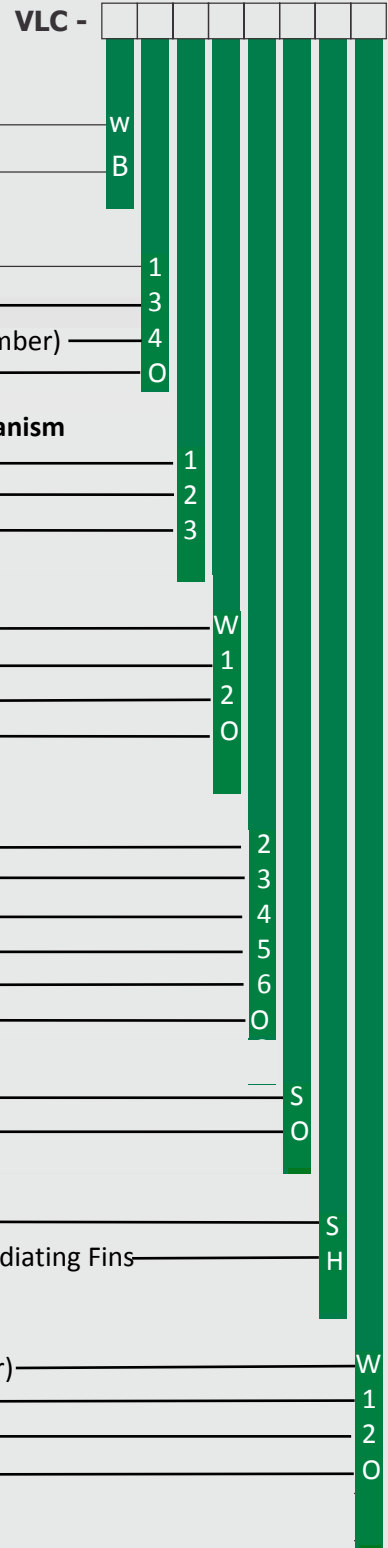
SS316 \_\_\_\_\_ S  
Others \_\_\_\_\_ O

**Temperature**

Standard - 250 °C \_\_\_\_\_ S  
High Temp - 300 °C with Radiating Fins \_\_\_\_\_ H

**Drain**

Without (Without Chamber) \_\_\_\_\_ W  
1/2" NPT Plug \_\_\_\_\_ 1  
1/2" NPT Globe Valve \_\_\_\_\_ 2  
Other \_\_\_\_\_ O



All dimensions in mm except specified

