



VLIT2500A

Description

VLIT-2500A combines the rugged, all stainless steel construction of the popular magnetic level indicator with an RF Capacitance transmitter providing a continuous, high resolution 4-20 mA or 0-5 VDC/0-10 VDC output to compliment its high visibility local tank indication. VLIT's second chamber contains the separate transmitter operating independently of the indicator float thus providing a truly redundant measurement system. The metal flag indicator rack is magnetically coupled to a metal ball float assembly moving vertically within the separate, pressure-tight stainless steel chamber that can be connected to the tank in an wide variety of configurations. The indicator is magnetically isolated from the liquid and pressure to provide a clean and highly visible continuous level reading that is invulnerable to media contamination.

Principle of Operation

The high contrast black and gold or red and silver flags in the external indicator strip are flipped to their "color side" as the magnetic ball float passes. The flags remain magnetically interlocked in their "color position" until the float inverts them to their original position as the liquid level falls. Liquid level is indicated by the interface between the "color" and "noncolor" portions of the column. The VLIT-2500A can also be equipped with separate point level switch outputs for alarm and valve control functions, integral isolation valves, custom indicator scales and indicator flag colors.

Key Features

- Independent indicator and transmitter output
- Fully isolated indicator chamber
- Simple transmitter calibration for different fluids
- Solid-state transmitter
- All 316 Stainless and Teflon[®] construction
- Lengths up to 18 feet
- Metal or polycarbonate indicator flags in various color combinations

Electrical

- Power Supply: 11-30 VDC (24 VDC Nominal)
- Output: 4-20 mA / 0-5 VDC selectable (0-10 VDC optional) proportional to liquid level
- Power consumption: 1.3 VA
- Linearity: $\pm 0.5\%$ of actual
- Response time: 0.5 seconds
- Independent switch contacts: SPST 100VA, SPDT 30VA



Environmental

- Ambient Electronics Temp.: -40° to +160°F (-40° to +71°C)
- Process Temp.: -40° to 400° F (-40° to 200°C)
- Pressure: 400 psig (27 bar)
- Wetted Parts Material: 316L SS
- Seals: Viton[®] (Standard), PTFE, Buna, Silicone

Applications

- Water & chemical storage
- DI water systems
- Mixing tanks
- Pharmaceutical and Biotech vessels
- WFI skids








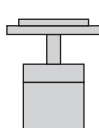
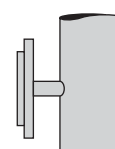
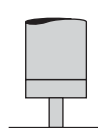

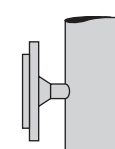




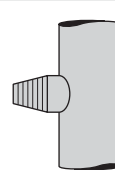

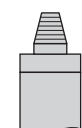
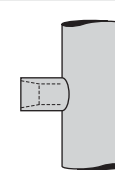
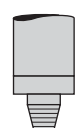
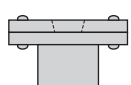
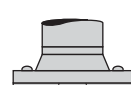
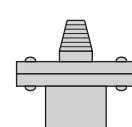
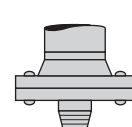
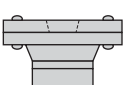
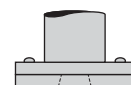
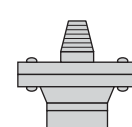
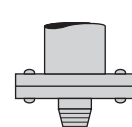
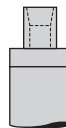
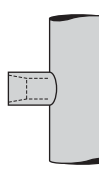
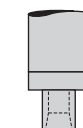
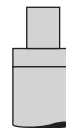
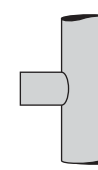
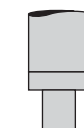
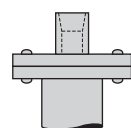
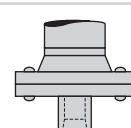
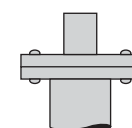
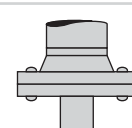
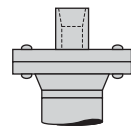
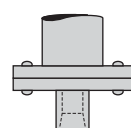
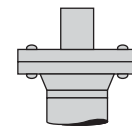
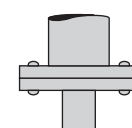
L070 also available in other flange sizes and mounting. Both series are available with optional hastelloy float and body material. Consult factory for details.

Bulletin: IS-712.0
Effective: December 2009

Process Connections

VLIT-2500A

The following are common connection configurations normally stocked by Innovative. Consult the factory for other special connections or materials

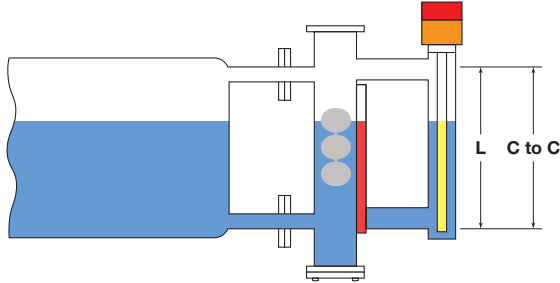
TOP	SIDE	BOTTOM
Fixed and Removable Blind Connections		
 FTB	 SB	 FBB
 RTB1		 RBB1
 RTB2		 RBB2
Fixed and Removable Flanged Connections		
 FTF	 FSF1	 FBF
 RTF1	 FSF2	 RBF1
 RTF2		 RBF2
Fixed NPT Connections		
 FTPF	 FSPM	 FBPF
 FTPM	 FSPF	 FBPM
Removable NPT Connections		
 RTPF1		 RBPF2
 RTPM1		 RBPM2
 RTPF2		 RBPF1
 RTPM2		 RBPM1
Fixed Weld Connections		
 FTWS	 FSWS	 FBWS
 FTWB	 FSWB	 FBWB
Removable Weld Connections		
 RTWS1		 RBWS2
 RTWB1		 RBWB2
 RTWS2		 RBWS1
 RTWB2		 RBWB1

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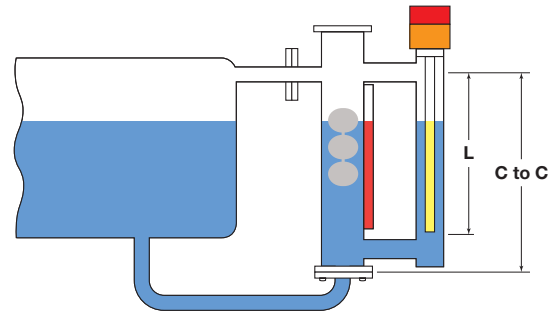
Mounting Configurations

Standard mounting for the VLI are the following combinations of side, top, and bottom connections. These are the positions where the liquid will enter and leave the indicator.

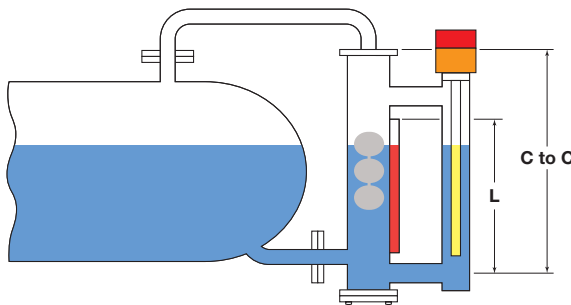
L = length of indication / C to C = center to center



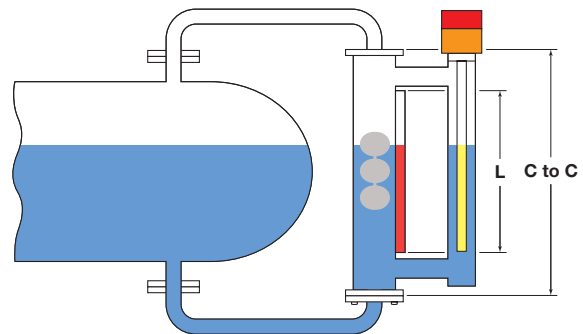
Type SST
Side and Side Process Connections
C to C = L



Type SBT
Side and Bottom Process Connections
C to C = L + 6½" (165 mm)



Type TST
Top and Side Process Connections
C to C = L + 3¾" (95 mm)



Type TBT
Side and Bottom Process Connections
C to C = L + 10¼" (260)

These dimensions are for reference purposes in standard configurations and may vary with special connections, material or specific gravity. The maximum available indication length is 220". The minimum specific gravity is 0.40. Please consult the factory for special designs and calibrations.

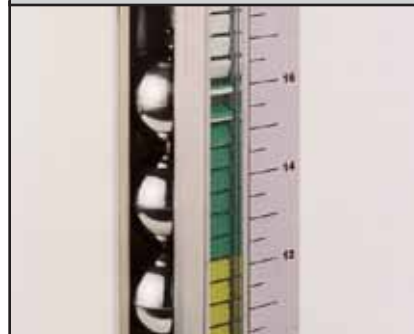
Optional aluminum switch module provides a separate point level switch contact adjustable over the full indicating range. Switch module includes water-tight connection.



Parallel transmitter gives continuous current or voltage output that is independent of the float/indicator movement. Even if the float is damaged, the transmitter will continue to provide a reliable signal.



Custom multi-ball design matches float volume for optimum accuracy in lower density fluids. Custom scales and custom flag color indicators are also available.



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