

DAYTECH DT-VLS100 Series Datasheet

Vibrating Fork Level Switch



Features

- Intelligent Vibrating Fork Point Level Switch.
- User programmable tune setting by simple button.
- Power supply: AC 20-250V 50Hz or DC 20-60V (<1Watt).
- Relay Output: SPDT 4A / 250VAC, 60VDC.
- PNP / NPN Output: <=400mA.
- Medium Density: Liquids >0.6g/cm³, Solids >0.1g/cm³
- Response Time: < 3 seconds at 25mm submersed
- Optional fork lengths of 100mm and 168mm, custom designs available to suit your application
- Power and Switch status LEDs.
- Robust, reliable and easy to operate. Tough powder coated cast aluminium, UV resistant and built to withstand harsh conditions.
- Intelligent signal processing and automatic compensation for fluid density with switching sensitivity per user tuning.
- Process Temp range from -30°C to 150°C.
- Ambient Temperature -30°C to 70°C
- Process Operating Pressure: 20 Bar max
- Process connection: M60 OR 2" BSP (enquire for other options).
- 316SS wetted parts, Rugged IP66, Cast Aluminium Powder Coated Housing.
- CE Certification.



Applications

- Liquid Level measurement
- Water, oil or corrosive liquids
- Granular Bulk solids (i.e. grain, granulated plastics, pellets, animal feed etc)
- Tank or silo level monitoring
- Pond or dam level monitoring
- Process industries and mining
- Water and Wastewater treatment, irrigation, agriculture
- High reliability and level alarming applications



Description

The DAYTECH DT-VLS100 Series Vibrating Fork Level Switch is designed for reliable, safe, simple and robust performance in point level switching applications. These vibronic sensors are ideal for liquid level switching and granular solids level switching applications. The series is widely used in pond, dam, well, tank or silo level measurement for water treatment, pumping stations, irrigation, agricultural, food & beverage, mining, oil and gas, process and environmental applications with proven performance. These sensors utilise a 316SS tuning fork, that literally vibrates frequency, when it comes into contact with the liquid or solid medium, the vibration frequency changes and the electronics in the sensor switches.

Standard features include user pushbutton automatic tuning for medium density, simply push the SET button when the vibrating fork is in the medium and the sensor's on board electronic chip will tune the vibronic switching point accordingly. The advanced features of the DT-VLS-100, mean the sensor is remarkably simple to setup and operate. Your level sensing application will be reliably up and running with a push of a button. The vibronic sensor can be user tuned for point level measurement of liquids or bulk solids, presenting a robust solution for tank, dam, pond, silo, hopper or bin level measurement applications.

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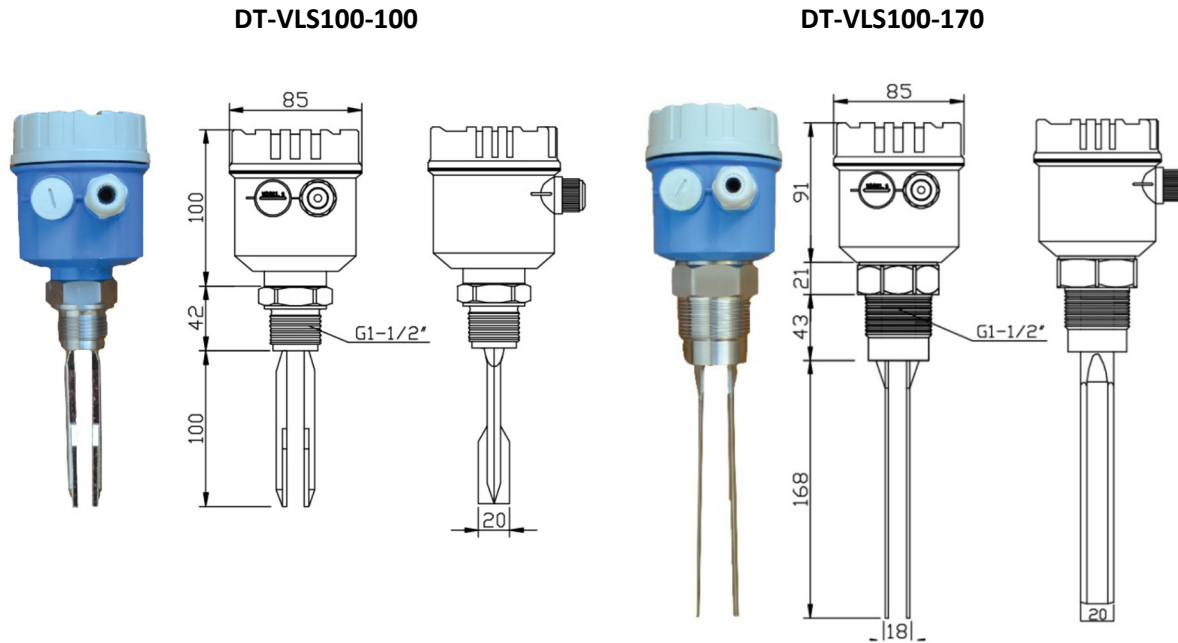
sales@daytech.io

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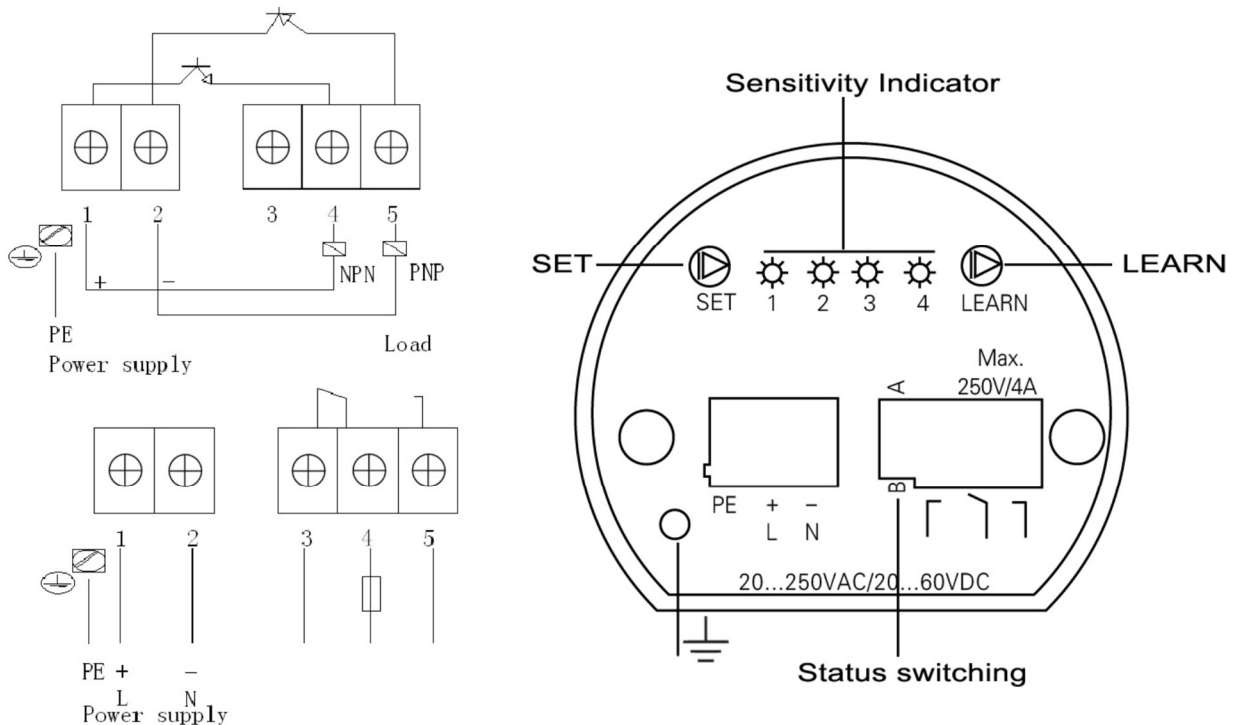
Vibrating Fork Level Switch



Dimensions



Wiring and Functionality



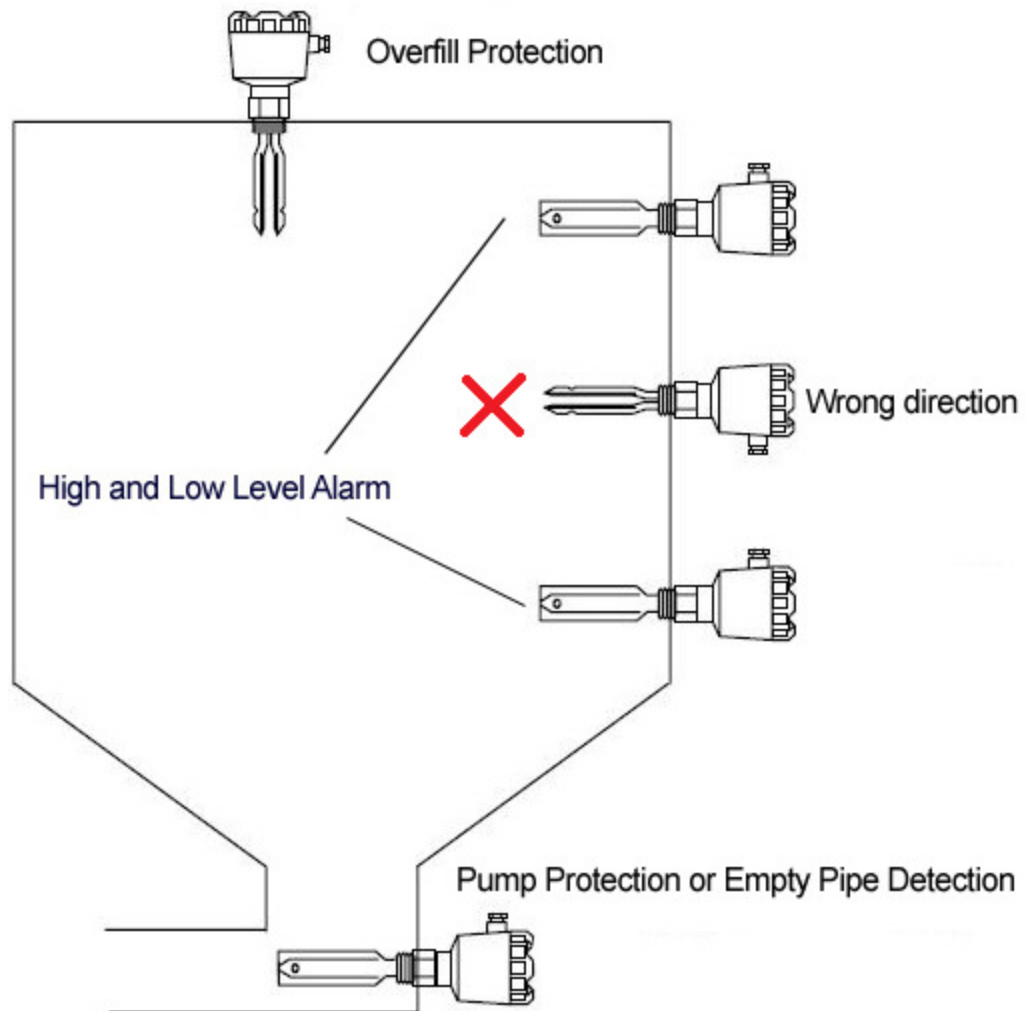
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Installation Examples



Selection Guide

Order DT-VFL100-100 for fork length of 100mm. Order DT-VFL100-170 for 168mm fork Length.

Please contact our sales and engineering team for application assistance.

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Technical Specifications

Parameter	Value	Notes
Measurement Range	Point Level Switching – immersion minimum 25mm	
Operating Pressure	Process: 20 Bar Display Unit / Housing: atmospheric pressure	
Response Time	< 3 seconds at min 25mm immersion	
Ambient Conditions	Temperature: -30°C to 70°C Humidity: ≤90%RH	
Process Temperature	-30°C to 150°C	
Medium Density	Liquids >0.6g/cm ³ Solids >0.1g/cm ³	
Media Compatibility	Medium compatible with 316SS, refer chemical compatibility chart. Optional corrosion resistant probe.	
Optional fork lengths	100mm and 168mm or custom designs	
LED Indicators	Power and Switch Status	
Medium Tuning	Via SET pushbutton, automatically tunes for medium density.	
Power supply	AC 20-250V 50Hz or DC 20-60V	
Load Power	<1 Watt	
SPDT Relay Output:	4A / 250VAC, 4A 60VDC	
PNP / NPN Output	≤400mA.	
Electrical Connection	1 x M20 IP66 gland for cable connection 1 x M20 IP66 blank for optional cable connection	
Process Connection	20Bar, M60 OR 2" BSP (enquire for other options)	
Compliance Certification	CE, complies with AUS/NZ standards	
IP Rating	IP66	

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