Descriptions

The liquid level transmitter is the extension and development of the pressure transmitter technology, according to the principle of linear relationship between the pressure generated by the liquid of different gravity at different heights, to achieve the accurate measurement and transmission of the liquid level height of water, oil and paste.



Working principle

Principle of static pressure measurement: When the liquid level transmitter is put into a certain depth of the measured liquid, the pressure formula of the sensor to the liquid surface is $:P=p \cdot g.H + Po$ type:

P; Pressure on the surface of the transmitter p: density of the measured liquid g: local acceleration of gravity

Po: atmospheric pressure at the liquid surface H: depth at which the transmitter is put into the liquid At the same time, the liquid pressure is introduced into the positive pressure chamber of the sensor through the gas conducting stainless steel, and then the atmospheric pressure Po on the liquid surface is connected with the negative pressure chamber of the sensor to offset the Po on the back of the sensor, so that the sensor can measure the pressure :p·g.H. Obviously, by measuring the pressure P, the liquid level depth can be obtained.

Measuring medium	The fluid in the open container (compatible with the contact mate- rial), can be customized PTFE anticorrosion			
Contact material	Diaphragm 316L stainless steel (in contact with media) Probe hous- ing 304 stainless steel (default)			
Liquid level range	0~0.5 m ~1000 m (each gear of the range is optional)			
Working mode	Static pressure type, input type			
Output signal	to 20mA(delivered by default), 0 to 10V, 0 to 5V, 1 to 10V, 1 to 5V0.5 to 4.5V(customized), RS485 power supply voltage :12 to 36VDC(default), 5VDC(customized)			
Precision class	0.5%fs, 0.25%fs, 0.2%fs, 0.1%fs			
Working condition	Medium temperature -10~50°C(non-crystallization) ambient temper- ature -20~60°C Temperature compensation -10~70°C			
Seismic performance	10g(202000HZ)			
Response frequency	Analog signal output <100Hz(default)			
High-frequency custom- ization	1200Hz, 2400Hz stability :±0.1%FS/ year			
Temperature drift	±0.02%FS/°C(within the temperature compensation range)			
Class of protection	IP68 Maximum power :≤0.5(W)			

Technical Parameter

Part Number Scheme

<u>LLT</u> -1000						
Code	Description	II L	Code	Liquid Level Range	Cable Length	
LLT	Liquid Level Transmitter		1000	0~1000mm	5m	
		I	2000	0~2000mm	5m	
			3000	0~3000mm	5m	
			4000	0~4000mm	5m	
			5000	0~5000mm	5m	
			6000	0~6000mm	6m	
			8000	0~8000mm	8m	
			10000	0~10000mm	10m	
				Other length available		

Wiring Diagram



Installation drawing



