Submersible Water Level Transmitter

GLT501

DESCRIPTION ////

GLT501 submersible water level transmitter is designed based on the principle that the static pressure of the measured liquid is proportional to the height of the liquid. It adopts the Piezoresistive Effect of diffused silicon or ceramic sensitive components, converts static pressure into electric signal, and with dedicated digital circuit, goes through the processes of signal amplifier, linearity compensation, anti-interference, and anti-surge protection, outputs the integrated products of industry standard signal.
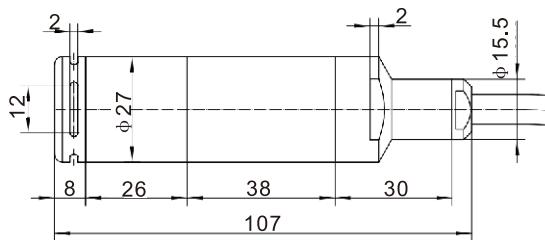
FEATURES ////

- Optional output signals;
- Fully welded, long service life;
- Anti-interference, anti-surge protection;
- 316L stainless steel isolation diaphragm, integrated design;
- Lightning protection，comply with Standard IEC61000-4-5/Level-4;

APPLICATION ////

- Waterworks, chemical factory
- Sewege treatment
- Deep well, dam
- Flood protection, irrigation

DIMENSION ////

Model	Output signal	
GLT501	4…20 mA	
	0…5V DC	
	0…10V DC	
	0.5…4.5VDC proportional	
	0.5…4.5VDC	
	I2C(customized)	
	RS485(customized)	

Dimensions: 2, 2, φ15.5, 12, φ27, 8, 26, 38, 30, 107

SPECIFICATION ////

H_2O	Range	0…1	0…3	0…5	0…10	0…20	0…50
	Overload	3	10	10	25	50	100

H_2O	Range	0…10	0…20	0…50			
	Overload	30	50	100			

Output signal		Total current consumption (signal current)	Power supply	
			Standard configuration	Optional
Current（2-wire）	4～20mA	Max. 25mA	DC 8...30V	
Voltage（3-wire）	0～10V	2.5mA	DC 14...30V	
	0～5V		DC 8...30V	
	1～5V		DC 8...30V	
	0.5～4.5V		DC 8...30V	
Proportional voltage(3-wire)	0.5～4.5V	2.5mA	DC 5V±10%	
Digital output	4...20mA+RS485		DC 8...30V	
	RS485		DC 8...30V	DC 3...5V
	I2C		DC 3...5V	

Accuracy Comply with Standard JJG 860、JJ G882	Range	Standard configuration	Optional
	Range≧10H2O	0.5%FS	0.25%FS;0.1%FS
	Range≧3H2O	0.5%FS	0.25%FS
	3H2O > Range≧1H2O	1%FS	0.5%FS

Long-term stability(%FS/Year)	≤0.2%FS/Year@0.5%FS

Temperature drift			Standard	Optional
	Zero temperature drift	Range < 10H2O	±0.05%FS/℃	
		Range≥10H2O	±0.03%FS/℃	±0.02%FS/℃
	Full scale drift	Range < 10H2O	±0.05%FS/℃	
		Range≥10H2O	±0.03%FS/℃	±0.02%FS/℃

Temperature range			Standard	Optional
	Operating temperature		-20℃～85℃	-40℃～125℃
	Compensated temperature	Range≤10H2O	0℃～50℃	-10℃～80℃
		Range＞10H2O	0℃～70℃	-10℃～80℃
	Storage temperature		-40℃～125℃	

Response time		Range	Standard	Optional
	Boot time		100ms	10ms
	Response time		10ms	1ms
	Settling time	Range ≥10H2O	15s	
		Range < 10H2O	1min	

Load Resistance（Ω）	Current（2-wire）	≤（Voltage-8V）/0.02A
	Voltage（3-wire）	>Maximum output signal/1mA
	Proportional voltage（3-wire）	>10K

Anti-vibration	10g（IEC 60068-2-6, under resonance conditions）
Impact resistance	500g（Standard IEC 60068-2-27，Mechnical shock)
Service life	1 million pressure cycles

Housing shell material		Standard	Optional
	Diaphragm material	316L	Tantalum, C-276, TC4, Al2O3
	Shell material	304SS	316L, Tc4

GLT501	Plastic water inlet cap submersible water level transmitter								
	Code	**Probe material**							
	A1	304SS							
		Code	**Range**						
		1	0~1						
		3	0~3						
		5	0~5						
		10	0~10						
		20	0~20						
		50	0~50						
			Code	Pressure type					
			G	Gauge					
			A	Absolute					
				Code	Output				
				E	4-20mA				
				K	0.5-4.5V				
				F	0-5V				
				J	0-10V				
				V	IIC(Customizable）				
				H	RS485(Customizable）				
					Code	**Power supply**			
					V1	8-30VDC（2-wire）			
					V2	12-30VDC（3-wire）			
					V3	14-30VDC			
					V4	3-5VDC			
					V5	5VDC			
						Code	**Accuracy**		
						A1	0.5%FS		
						A2	0.25%FS		
						A3	0.1%FS		
							Code	**Wire material**	
							B1	PVC	
							B2	PU	
								Code	Medium temperature
								T1	0℃～50℃
								T2	0℃～85℃
									Code	**Unit**
									U1	H_2O
GLT501	A1	5	G	E	V1	A1	B1	T1	U1	