GL-400 Liquid Level Transmitter

Features

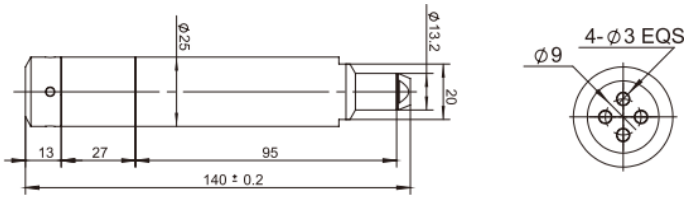


- ✓ Dry ceramic capacitive element, long-term stable
- ✓ High overload capacity, corrosion resistant
- ✓ Accuracy (TEB.) up to 0.05 %FS
- ✓ Level & temperature in one probe
- ✓ RS485 (Modbus-RTU)
- ✓ Reverse polarity & over-voltage protected
- ✓ Surge & EMI resistant
- ✓ Full-scale digital calibration, full-range temp. compensation

Introduction

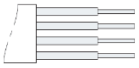
The GL-400 is a high-precision submersible level and temperature transmitter. A dry-type ceramic capacitive sensing element is used to measure the hydrostatic water level, and the same probe simultaneously records the water temperature; therefore, both the level and temperature refer to the same measurement point. Full-scale digital linearization and temperature compensation are applied across the entire compensation range, and the correlation coefficients are stored in non-volatile memory. Mixed-signal processing, power supply monitoring, and a watchdog function protect the electronic components, ensuring that permanently installed devices maintain their calibration status and automatically recover without manual intervention following a power failure.

The instrument offers a measurement range from 2 to 10 meters of water column (mH_2O) and is suitable for measuring water level and temperature in shallow water or open tanks. With a choice of 316L or titanium alloy housings, the fully sealed design allows the device to remain submerged during operation, while the ceramic sensing element provides high overload capacity and corrosion resistance. Typical users include hydrological observation stations, water supply companies, and environmental monitoring projects.



Ø25 mm body, 140 mm overall length; cable length customized.

Electrical Definition

Cable		
Definition		Wire color
	V+	Red
	GND	Yellow
	RS485A	Blue
	RS485B	Green

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Specifications

Item	Parameter
Accuracy (TEB.)	±0.25 %FS (0~2 mH_2O); ±0.05 %FS (0~10 mH_2O)
Range	0~2 mH_2O ... 10 mH_2O
Long-term stability	< 0.05 %FS/year
Overload capability	5 × FS
Temp. accuracy	±0.2 °C (0~70 °C)
Temp. resolution	0.05 °C
Compensation temp.	0°C~70 °C
Operating temp.	-10°C~80 °C
Drift of temp.	Zero: < 0.005 %FS/°C; F.S: < 0.005 %FS/°C
Storage temp.	-40~125 °C
Power supply	9~30 V DC (typ. 24 V)
Power protection	Reverse polarity and over-voltage protection
Output	RS485 / Modbus-RTU
Seal material	FKM
Sensor material	Alumina ceramic, gold-plated
Housing material	Stainless steel 316L or titanium alloy TC4
Cable material	Polyurethane or PVC
Cable	Ø7.6 mm, shielded, length customized
Protection level	IP68
Insulation	100 MΩ @ 50 V

Order Guide

GL-400	Liquid Level Transmitter				
	Code1	Measuring range			
	[0~X]mH2O	X = 2 ... 10			
		Code2	Output signal		
		R1	RS485 / Modbus-RTU		
			Code3	Material of structural components	
			SS	SS 316L housing & process connection	
			TC	TC4 housing & process connection	
				Code4	Cable material
				PU	Polyurethane
				PV	PVC
					Code5	Cable length
					L	Cable length in m, e.g. L10=10 m
GL-400	[0-10]mH2O	R1	SS	PU	L10

Completed Sample: GL-400-[0-10]mH2O-R1-SS-PU-L10

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