Recorder   Flow   Pressure   Temp   Analyzer   Level

Datasheet

Submersible level transmitter

SUP-P260

Supmea®

Supmea®

Submersible pressure transmitter for level measurement
Model SUP-P260, standard version

The submersible liquid level transmitter uses a high-performance diffused silicon piezoresistive pressure sensor as the measuring element, which accurately measures the hydrostatic pressure proportional to the liquid level depth, and converts it into a standard (current, voltage, RS485) through a signal conditioning circuit.) signal output, establishes the linear correspondence between the output signal and the liquid depth, and realizes the measurement of the liquid depth.

Applications

- Rivers and lakes
- Vessel and storage systems
- Control of sewage lift and pumping stations
- Well monitoring
- Ground water monitoring
- Environmental remediation
- Surface water monitoring
- Down hole
- Water Tanks

Features

- High performance diffused silicon piezoresistive sensor
- Probe input measurement method, easy to install
- Multiple protection structure design, high protection ability
- Various designs, suitable for various industrial conditions
- Choose anti-corrosion stainless steel material, suitable for various occasions

Submersible level transmitter

Principle

Pressure P(liq) on any surface and container walls at depth h, by the liquid of desnity d,

$$P(liq) = d \times g \times h + P(air)$$

Parameters

|	
Power supply	（4~20）mA output（10~32）V （0~10）V output（12~32）V RS485 output（8~32）V
Output	（4~20）mA；（1~5）V；（0~10）V；（0~5）V；RS485
Accuracy	0.5%
Measurement range	0~1m...200mwater bar
Pressure type	Surface pressure
Compensation temperature	（-10~70）℃
Medium temperature	（-10~65）℃
Storage temperature	（-40~85）℃
Zero output temperature drift	±0.3%FS/10℃（（-10~70）℃）
Full-Scale Output Temperature Drift	±0.3%FS/10℃（（-10~70）℃）
Overload pressure	150%FS
long term stability	±0.2%FS/year
Response time	Current and voltage output pressure≤10ms (up to 90%FS); RS485 output pressure≤100ms (up to 90%FS)
Insulation resistance	20MΩ/250VDC
Ingress Protection	Sensor IP68, 2088 wiring part IP65
Load Resistance	(U-9V)/0.02A, U is the power supply voltage

Wiring

## 2088 Type Electrical Connection Diagram
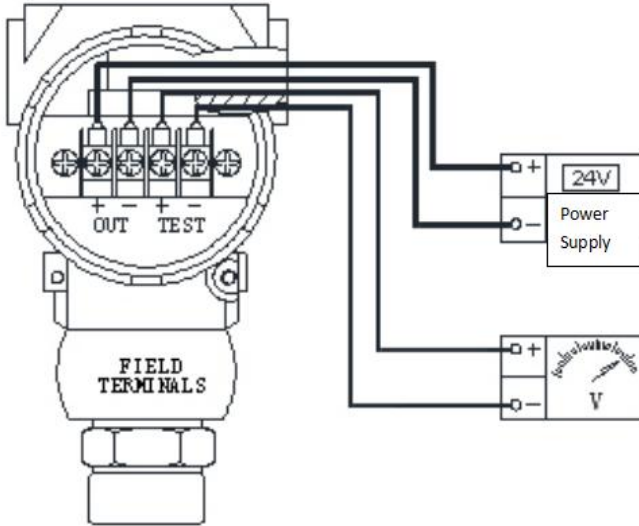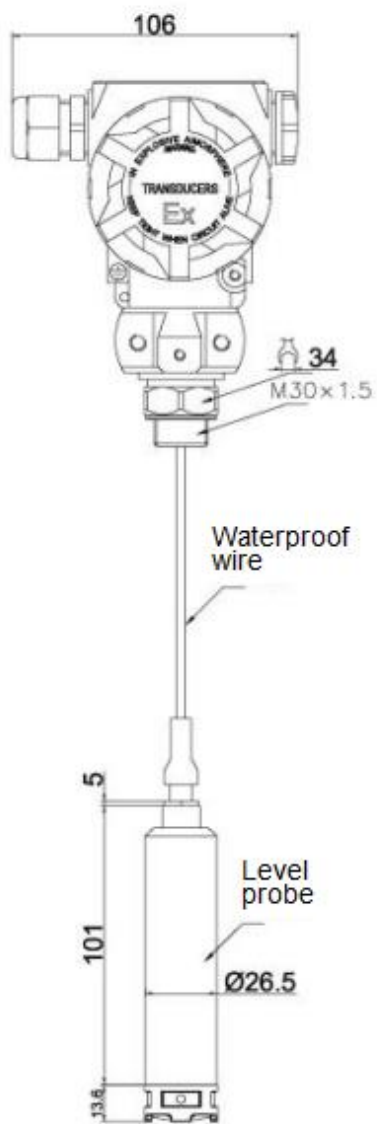
2-wire current output
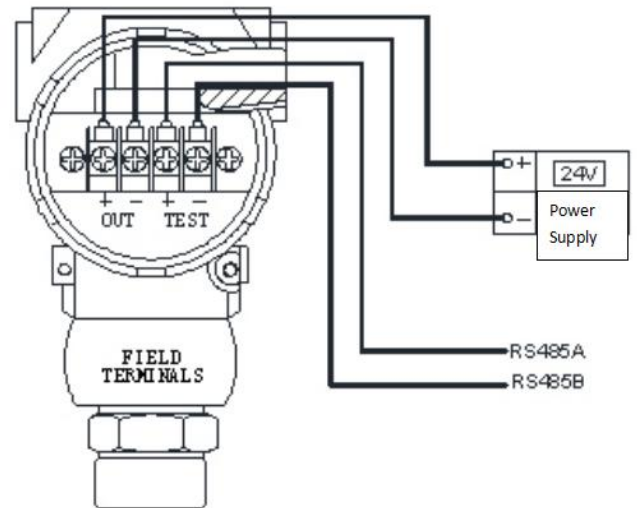
RS485 output
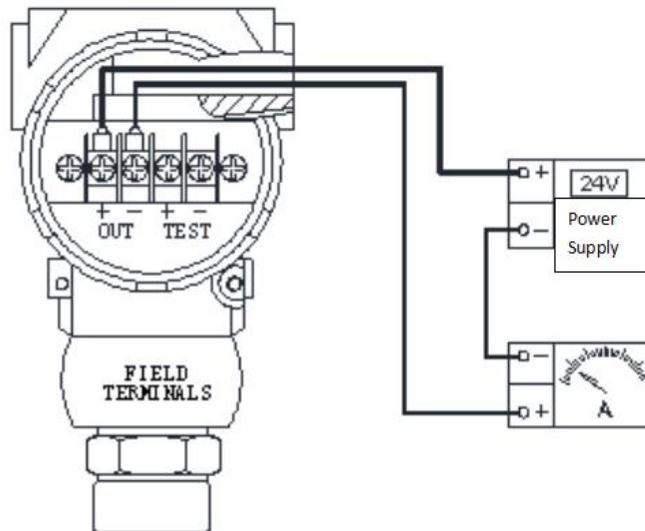
voltage output

Leaded electrical connection

Output type	color	Description
current	Red wire	24VDC
	Blue wire	current output
voltage	Red wire	24VDC
	Blue wire	negative power supply
	Yellow wire	voltage output +
RS485	Red wire	24VDC
	Black wire	negative power supply
	Blue wire	485A
	Yellow wire	485B

Dimension
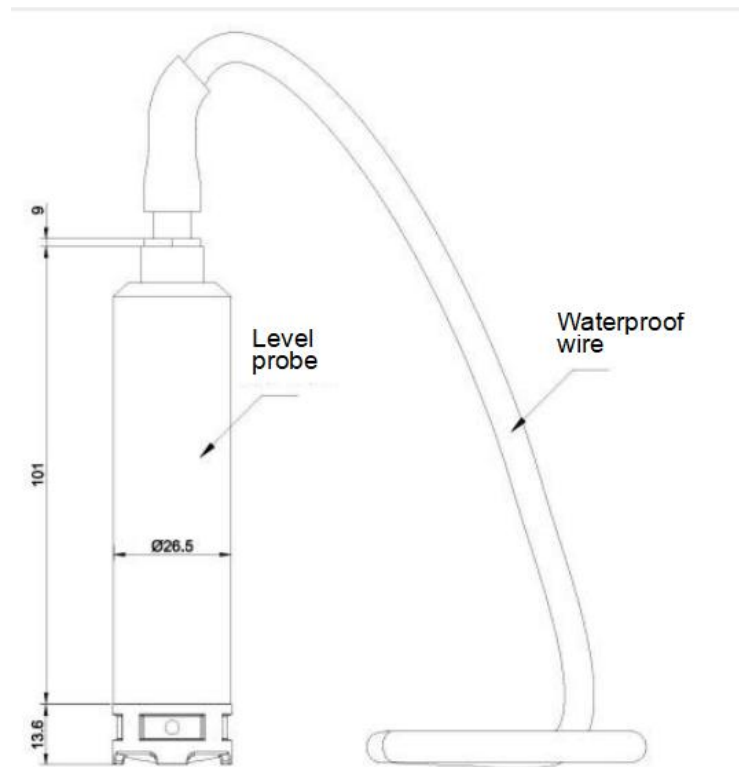
direct lead type

2088 type without display
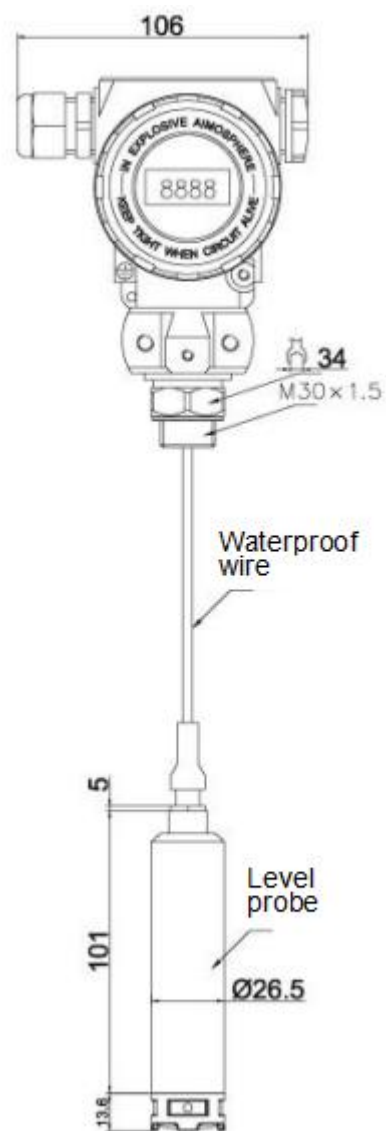
2088 type with display

Supmea®

Ordering code

SUP-P260-R(0-5)-J5-O0-D0-CS5-CT1-V1-AT0										Description
SUP-P260 -	-	-	-	-	-	-	-	-	-	
Range	R(XX - XX)									0～0.5m...200m
Accuracy		J5								0.5%
Output			O0							/
			O1							4-20mA output
			O2							（1～5）V
			O3							（0～5）V
			OZ							Other
Communication				D0						/
				D1						RS485
Cable length					CS5					5m
					CSXX					XXm
Cable material						CT1				PE
						CT2				PU
Power supply							V1			24VDC
							V3			12VDC
Accessory Type								AT0		/
								AT1		Install filter screen (anti-clogging head)