Datasheet

Submersible Liquid Level Transmitter

SUP-P260-M3

Supmea®

Committed to process automation solutions

E-mail: info@supmea.com

www.supmea.com

Datasheet

Submersible Liquid Level Transmitter
SUP-P260-M3

The submersible Level Transmitter is designed with a slender structure, highest accuracies, low temperature errors, ensure the suitability of the transmitter for all submerged level measurements. The transmitter provide continuous liquid level measurement by sensing the hydrostatic pressure produced by the height of liquid above the sensor and providing a 4-20 mA output signal compatible with PLC, panel meter, data logger, and other electronic equipment. The transmitter consists of a sensing element, encased in a 316 SS housing with cage and large diameter 316 SS diaphragm seal. The sensor prevents moisture intrusion， along with the integrated lightning protection, suitable for both indoor and outdoor use.

Applications

- Deep well and borehole measurements
- Level measurement in open bodies of water
- Sewage lift and pumping stations
- Settling ponds and rainwater basins
- Ground water monitoring
- Drinking water system
- Vessel and storage systems
- Overfilling and no-load operation monitoring
- Level measurement in rivers and lakes

Features

- Slender Design
- Durable 316 SS construction for reliable, long life in harsh environments
- Good long term stability
- Diaphragm is protected from physical damage and turbulence
- Excellent chemical compatibility for wide application use
- Ingress Protection up to IP 68
- Optional Cases

Product name
Submersible Liquid Level Transmitter

Parameters								
bar	0...0.25	0...0.4	0...0.6	0...1	0...1.6	0...2.5	0...4	0...5
mH2O	0...2.5	0...4	0...6	0...10	0...16	0...25	0...40	0...50
psi	0...3.6	0...5.8	0...7.8	0...14.5	0...23.2	0...36.2	0...58	0...72.5

The given measuring ranges are also available in mbar, kPa and MPa.

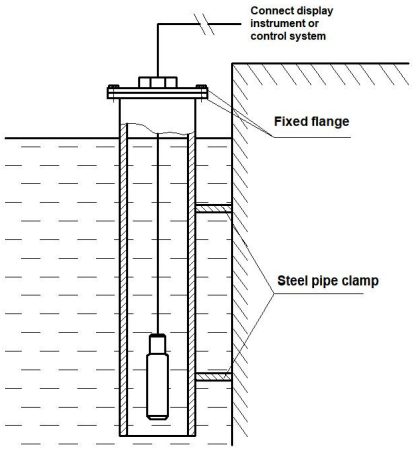
Measure Range	0m-0.5m-50m
Overload Pressure	≤200%FS
Pressure Type	G（Gauge pressure），A（Absolute pressure）
Accuracy	0.5%
Stability	±0.2%FS/Year
Zero Temperature Drift	±0.03%FS/℃
Sensitivity Drift	±0.03%FS/℃
Temp Compensation	-10℃-65℃
Medium Temperature	-20℃-65℃
Power Supply	12VDC-30VDC
Signal Output	4mA-20mA, 0V-5V(Customized)
Load Resistance	Current type：≤（U-12）/0.02(Ω)
Ingress Protection	IP68
Cable Lengths	

Meter (m)	1.5	3	5	10	15	20	25	30	40	50	60	80	100
Feet (ft)	5	10	20	30	40	50							

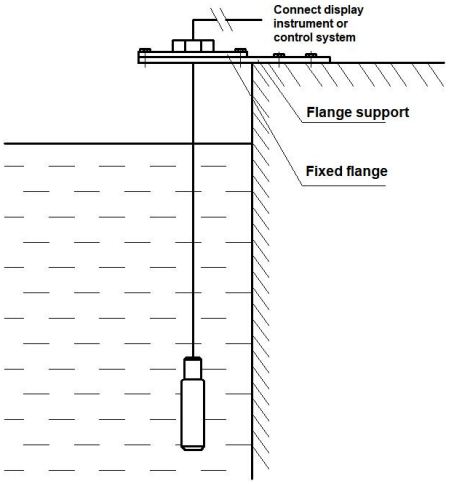
Other cable lengths on request

Installation

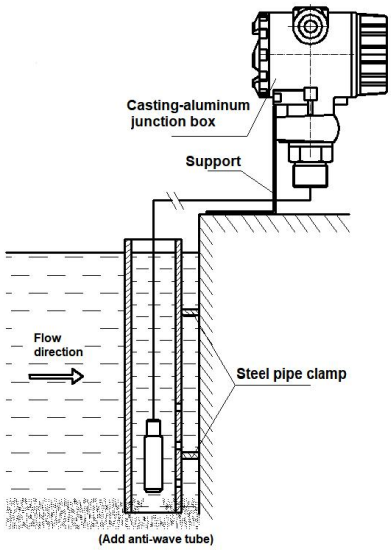
- In the measurement of the reservoir, oil tank and other liquids, in order to prevent the displacement of the transmitter in the long-term measurement, it is recommended to adopt the fixed pipe installation. Fix a steel pipe or plastic pipe with an inner diameter of greater than φ 30mm, and make sure the pipe is connected from top to bottom. Put the transmitter into the pipe at the corresponding depth, and fix the cable and junction box at the outlet of the pipe.



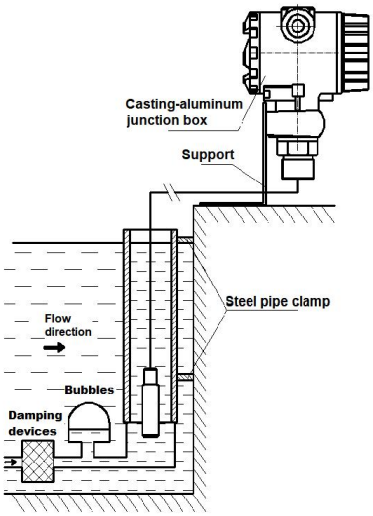
- In the measurement of still liquid, the level transmitter can be directly put into the liquid, and the cable and junction box can be fixed at the outlet.



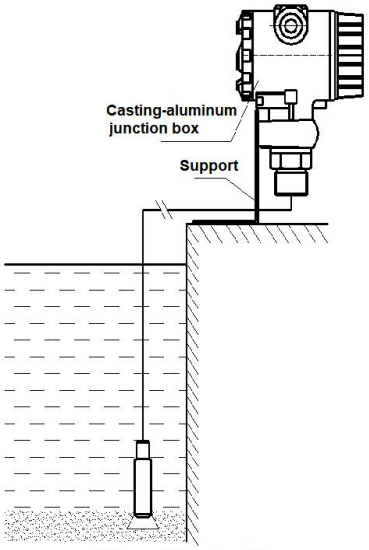
- When measuring the liquid level in the flowing liquid, insert a steel pipe with an inner diameter of about Φ30mm in the liquid, and open two to three holes of about Φ5mm in the high and low positions of the pipe in the reverse direction of the liquid flow to allow the liquid to enter the pipe easily, and the cable and junction box are fixed at the outlet.



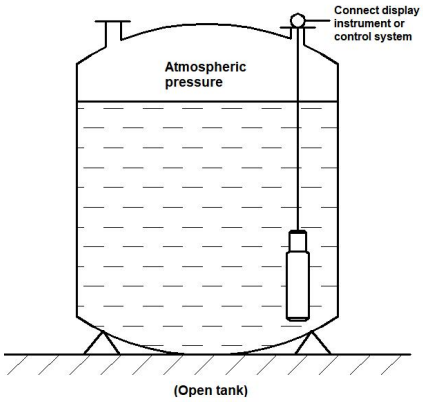
- When measuring liquid level in a fluid with large fluctuations, it is recommended to add damping devices as shown in the figure to reduce the impact of fluctuations on liquid level measurement, and to fix the cable and junction box at the outlet.



- In the liquid level measurement with large silt, it is necessary to install the mounting bracket to prevent the silt from blocking the pressure hole and causing test errors.

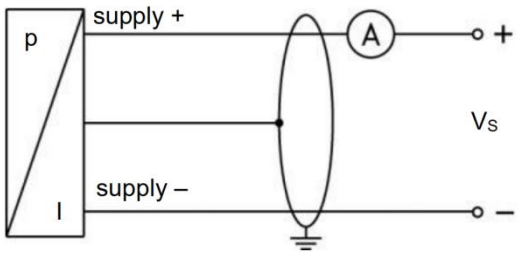


- When measuring the still liquid in an open container, the level transmitter can be directly put into the bottom of the container and the cable and junction box can be fixed at the opening of the container.

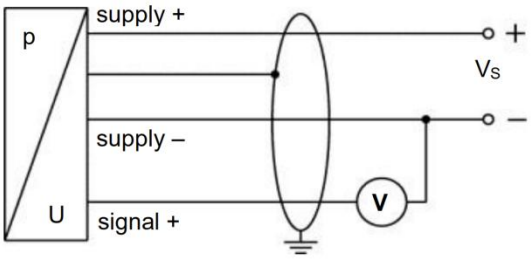


Wiring

2-wire-system (current)

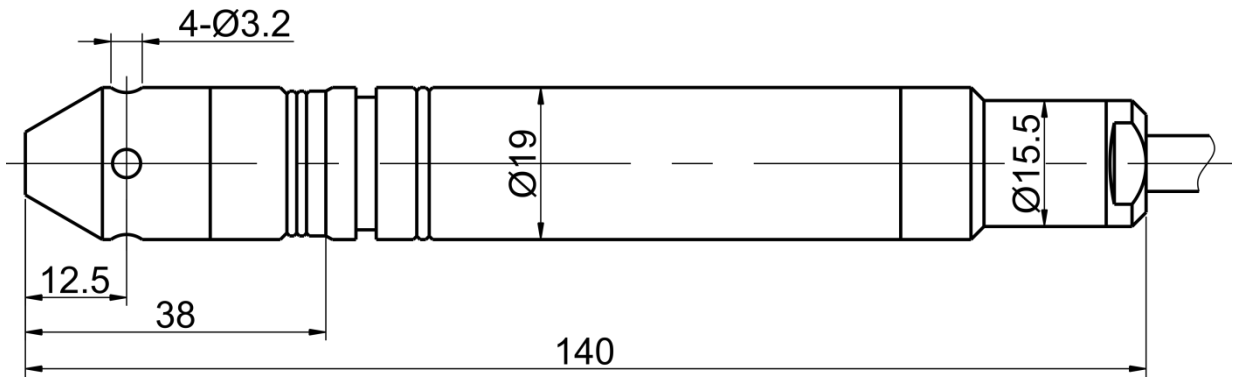


3-wire-system (voltage)



Current output:	Voltage output:	RS485 output:
Red: 24V + Green: Current + Black: GND	Red: 24V + Green: 24V - Yellow: Voltage + Black: GND	Red: 24V + Green: 24V - Yellow: 485A Blue: 485B Black: GND

Dimension



Ordering code

SUP-P260-M3-03-K-A1-M3-1-05-N9								Description
SUP-P260-M3	-	-	-	-	-	-	-	
Measurement Range	03							3m
	05							5m
	07							7m
	10							10m
	20							20m
	50							50m
	1H							100m
	XX							Others
Accuracy		K						Level 0.5
		G						Level 0.25(Only for Measuring Range≥10m)
		X						Others
Output and Power Supply			A1					Two-Wire System 4-20mA
			V1					0-5V，24VDC
			XX					Others
Diaphragm Material				M3				316LSS
				XX				Others
Probe Material and Level of Protection					1			304SS，IP68
					2			316LSS，IP68
					X			Others
Cable Length (Cable Length≥Measurement Range)						05		5m
						10		10m
						20		20m
						50		50m
						1H		100m
						XX		Others
Cable Sheath Material							N9	Polyvinyl Chloride(PVC)
							N2	Polyurethane(PU)
							XX	Others