

Datasheet

Suspended solid sensor
SUP-PSS-9010

Datasheet

Suspended solid sensor

The sensor is based on the method of combination of infrared absorption scattered light. Infrared light which the photosource sends out scattered by suspended particles in the sample. And finally converted to electrical signals by photoelectric detector and getting the suspended solids concentration of the sample after treatment by analog and digital signals.
The product is widely used in sewage plant, water plant, water station, surface water, farming, industry and other fields

Applications

- Water Plant
- Water Station
- Surface Water
- Farming
- Industry



Suspended solid sensor

Features

- Self-developed optical path and receiving structure,
- Real-time Compensation Algorithm
- Long-term stable online monitoring
- Comes with cleaning brush
- High accuracy turbidity measurement

Principle

Infrared absorption scattered light method

Parameters	
Measurement Range	0.01 - 500mg/L, 0.01-20000mg/L, 0.01-50000mg/L, 0.01-120000mg/L
Measurement Accuracy	Less than ± 5% of the measured value (depending on sludge homogeneity)
Repeatability	±2%
Resolution Ratio	0.01~1 mg/L，It depends on different ranges
Pressure Range	≤0.4Mpa
Flow velocity	≤2.5m/s、8.2ft/s
Material	Main Body: SUS316L/Titanium Alloy /PVC Upper and Lower Cover：POM；Cable: PUR
Power Supply	12VDC
Communication Protocol	MODBUS　RS485
Operating Temperature	0~45℃（not freeze）
Response time	1s
Level of Protection Cable	IP68/NEMA6P
Length	Standard 10-Meter Cable, Max Length: 100 Meters

Wiring

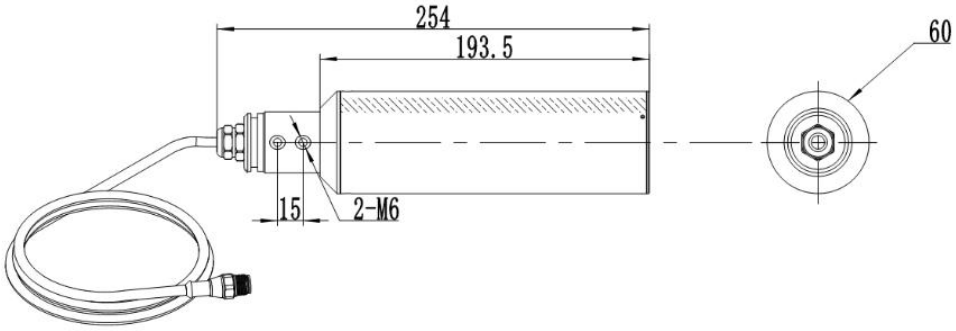
The sensor is properly connected with the following core definitions:

No.	Color	Wiring definition
1	Brown	+12VDC
2	Black	AGND
3	Blue	RS485 A
4	White	RS485 B
5	Yellow + Green	Ground lead

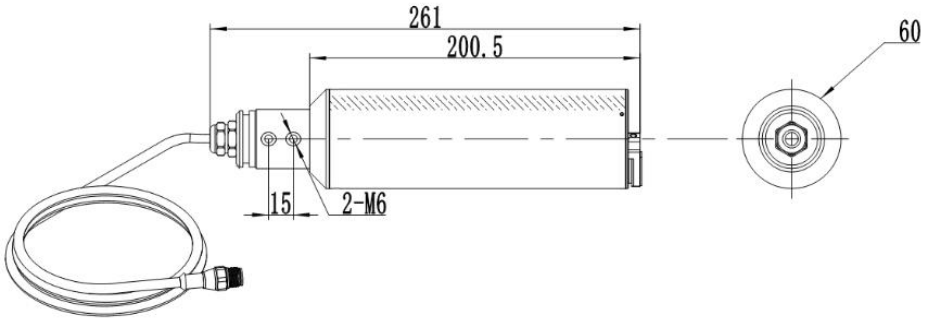
Dimension

SUS316L/Titanium Alloy External Dimension：

No automatic cleaning device:

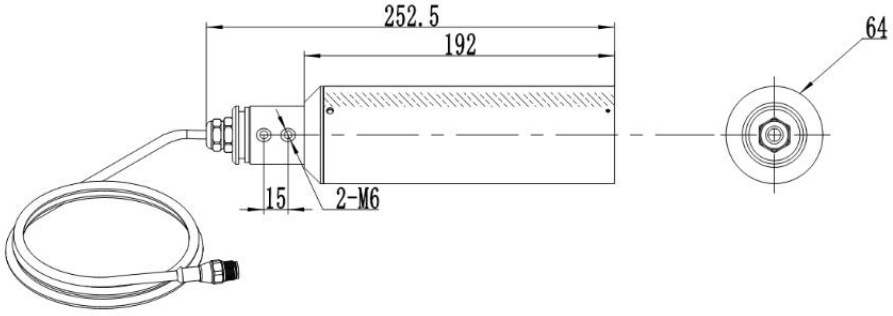


With automatic cleaning device:



PVC External Dimension：

No automatic cleaning device:



With automatic cleaning device:

