AquaSensors AnalogPlus Conductivity/ Resistivity Sensor - 1.0 in.

1.0 inch general purpose

For challenging process applications

Thermo Scientific™ AquaSensors™ AnalogPlus™ Conductivity/Resistivity Sensor - 1.0 in.

AquaSensors AnalogPlus Conductivity/ Resistivity Sensor - 1.0 in.

Key features

- Two-electrode conductivity sensors designed for continuous use in the most demanding industrial applications
- 0 to 2000 µS/cm measurement range (1.0 cell)
- 0 to 18.2 MΩ/cm measurement range (0.01 cell)
- Titanium electrodes (0.01, 0.1 and 1.0 cell constants)
- Offered in PEEK™ for high temperature applications
- Offered in CPVC where higher cost materials are not required

Markets and applications

- Food processing
- Pharmaceutical
- Water production
- Reverse osmosis filters
- Ultrafiltration
- Distilled water
- Semiconductor
- Power generation

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Engineering specifications

1. The conductivity sensor has two electrodes manufactured to exacting tolerances using durable metals.
2. Hex-shaped wrench flats help to facilitate mounting, and are constructed of a material with exceptional chemical resistance and mechanical strength. This material enables the sensor to be installed in metal fittings without leakage usually caused by heating and cooling cycles when dissimilar materials are threaded together.
3. The sensor has 1 inch NPT threads on both ends to mount into a standard 1 inch pipe tee, a 1.5 inch union mounting, or immersion hardware assembly.
4. The built-in electronics of the sensor are completely encapsulated and O-ring sealed for protection from moisture and humidity.
5. An integral temperature sensor automatically compensates measured values for changes in process temperature.
6. The sensor is the Thermo Scientific AquaSensors AnalogPlus conductivity.

AquaSensors AnalogPlus Conductivity/Resistivity Sensor

Global support

With experience that comes from supporting our customers for over 35 years throughout the world, our water quality specialists and customer support teams offer a quick, thorough and professional response to any problem encountered.

Focus on user benefits

We work closely with you to define your needs, and ensure you are using the monitor in a way that improves your bottom line. For more information, contact your local water quality specialists or visit: **thermofisher.com/water**

Product specifications

AquaSensors AnalogPlus Conductivity/Resistivity Sensor	
Measurement system performance*	Range:
	0.01 Cell: 18.2 MΩ/cm to 50 µS/cm
	0.1 Cell: 0 to 500 µS/cm
	1.0 Cell: 0 to 2000 µS/cm
	Resolution: 4 or 5 significant digits
	Accuracy: 0.1% of reading
	Step response time: 90% in 30 seconds
Operational equipment	**PEEK sensor head**
	Temperature range: -5°C to 95°C
	Maximum pressure: 150 psig @ 95°C
	Maximum flow rate: 10 ft/second
	CPVC sensor head
	Temperature range: -5°C to 75°C
	Maximum pressure: 150 psig @ 75°C
	Maximum flow rate: 10 ft/second
Construction	Cell constants**: 0.01 for resistivity, 0.1 and 1.0 for conductivity
	Electrode material: Titanium
	O-rings: Viton™ (other materials available)
	Sensor Material: PEEK or CPVC
	Weight: 0.5 lbs. (PEEK or CPVC)
Approvals	Meets CE requirements for heavy industrial use

*Note: Typical at 25°C with 20 feet of cable.

AquaSensors AV88 AnalogPlus Universal Analyzer
Connects to any AnalogPlus Sensor using plug-in module. 2 line display and 7 key navigation. Data reporting with up to 2 current outputs. 2 Form C relays.

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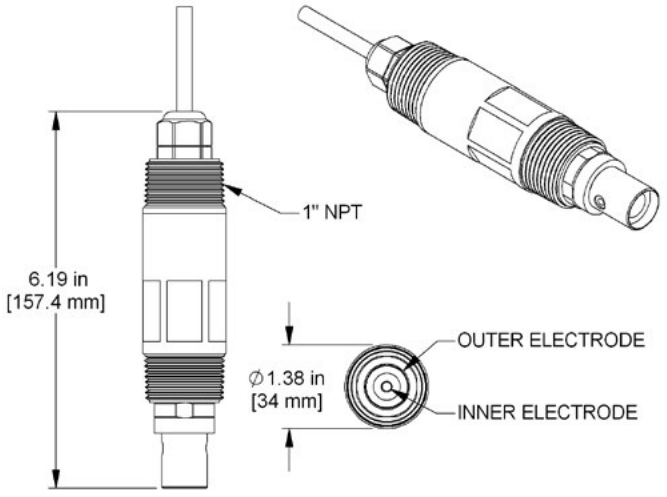
Ordering information

AquaSensors AnalogPlus Conductivity/Resistivity Sensor			
Description			**Cat. No.**
Conductivity sensor			**SC-b-c-x-z-u**
Body material (b)	2 3	= =	CPVC PEEK
Electrode type (c)	1	=	Titanium
Sensor tip (x)	A B D	= = =	0.10 cell constant (500 µS/cm range; PEEK material recommended) 1.0 cell constant (2000 µS/cm range) 0.01 cell constant (resistivity to 50 µS/cm range; PEEK material required)
Electrode spacing (z)	1	=	Concentric
Cable length (u)	1 3	= =	10 feet (3m) 30 feet (9m)

Engineering drawing



Ordering information

AquaSensors AnalogPlus Conductivity/Resistivity Sensor Accessories	
Description	**Cat. No.**
Standard solutions	
1000 µS/cm calibration solution	SOL1000
2000 µS/cm calibration solution	SOL2000
5000 µS/cm calibration solution	SOL5000
Mounting hardware	
1 Inch tee mounting, CPVC	MH3022
1 Inch tee mounting, 316 SS	MH3011
1.5 Inch union mounting, CPVC	MH3042-COND
1.5 Inch ball valve, CPVC, low pressure	MH1112
1.5 Inch ball valve, 316 SS, low pressure	MH1111
1.5 Inch ball valve, CPVC, high pressure	MH1122
1.5 Inch ball valve, 316 SS, high ressure	MH1121
Hand rail mounting assembly, swivel/immersion, PVC	MH1242
1 inch immersion mounting with junction box, PVC (7 foot extension is standard)	MH3083

Other conductivity sensors and mounting hardware options available upon request. Consult factory for details.

Find out more at **thermofisher.com/water**

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