

# AquaSensors AnalogPlus Differential pH Sensor - 1.0 in.

For challenging process applications

## AquaSensors AnalogPlus Differential pH Sensor

### Key features

- 1 inch NPT mounting
- Differential pH sensor designed for continuous use in the most demanding industrial applications
- Replaceable salt bridge extends sensor life
- Offered with NTC300 or PT1000 temperature elements
- Electrode protection options
- Available in choice of materials for a wide range of applications

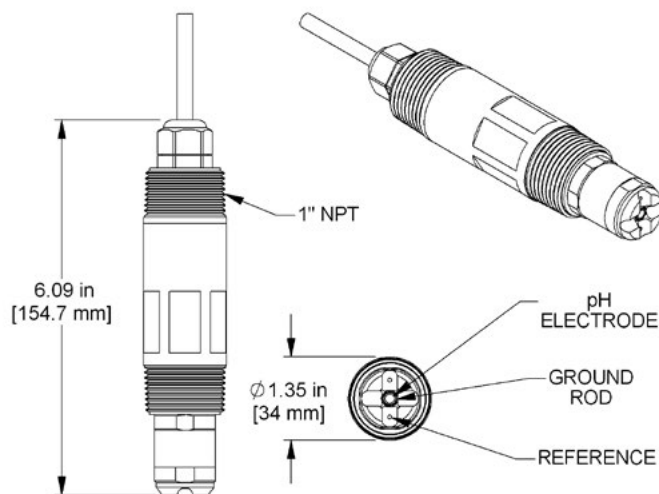
### Markets and applications

- Wastewater treatment



- Pharmaceutical
- Chemical and petrochemical
- High purity water
- Food processing
- Metal finishing

### Engineering drawing



AquaSensors AnalogPlus Differential pH Sensor - 1.0 in.

## Engineering specifications

1. The pH sensor uses a differential electrode technique designed with two electrodes to compare the process value to a stable internal reference standard buffer solution. The standard electrode has non-flowing and fouling-resistant characteristics.
2. The sensor has hex-shaped wrench flats to facilitate mounting, and is 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. The sensor has an integral temperature sensor to automatically compensate measured values for changes in process temperature.
6. The sensor includes a titanium ground electrode (standard) to eliminate ground loop currents in the measuring electrode.

## Product specifications

### AquaSensors AnalogPlus Differential pH Sensor - 1.0 in.

	Range: 0-14 pH
<b>Measurement system performance*</b>	Resolution: 0.01 pH
	Accuracy: 0.1% of reading
	Step response time: 90% in 30 seconds
<b>Operational equipment</b>	<b>PEEK sensor head</b>
	Temperature range: -5°C to 95°C
	Maximum pressure: 100 psig @ 95°C
	Maximum flow rate: 10 ft/second
	<b>CPVC sensor head</b>
	Temperature range: -5°C to 75°C
Maximum pressure: 85 psig @ 95°C	
Maximum flow rate: 10 ft/second	
<b>Construction</b>	Process Electrodes: "G", "HF"
	Ground Rod: Titanium (standard)
	O-rings: Viton™
	Sensor Material: PEEK™ or CPVC
	Weight: 0.5 lbs. (PEEK or CPVC)
<b>Approvals</b>	Meets CE requirements for heavy industrial use

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

## AquaSensors AnalogPlus Differential pH Sensor - 1.0 in.

### 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](http://thermofisher.com/water)



### 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.

**Ordering information**

**AquaSensors AnalogPlus Differential pH Sensor - 1.0 in.**

Description	Cat. No.	
<b>pH Sensor 1.0</b>	<b>SP-b-t-x-y-z-u</b>	
Body material (b)	2	= CPVC
	3	= PEEK
Electrode type (t)	1	= Standard glass
	2	= HF glass
Sensor tip (x)	A	= Protected
Temperature element (y)	8	= NTC300
	9	= PT1000
Ground Rod (z)	E	= Titanium (standard)
Cable length (u)	1	= 10 feet
	3	= 30 feet

**Ordering information**

**AquaSensors AnalogPlus Differential pH Sensor - 1.0 in. Accessories**

Description	Cat. No.
<b>Salt bridge replacements</b>	
PEEK protected	SBS01-1
CPVC protected	SBS03-1
Storage cap with sponge	SBC01
<b>pH solutions</b>	
pH storage solution, 60 mL bottle	RCS03
Standard cell solution, 60 mL bottle	RCS01
Standard cell solution, 500 mL bottle	RCS01-500
4 pH buffer, 475 mL bottle	910104
7 pH buffer, 475 mL bottle	910107
10 pH buffer, 475 mL bottle	910110
<b>Mounting hardware</b>	
1 Inch tee mounting, CPVC	MH3022
1 Inch tee mounting, 316 SS	MH3011
1.5 Inch union mounting, CPVC	MH3042
1.5 Inch union mounting, 316 SS	MH3041
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 pressure	MH1121
Hand rail mounting assembly, swivel/immersion, PVC	MH1242
1 inch immersion mounting with junction box, PVC (7 foot extension is standard)	MH3083

Consult factory for additional configurations and accessories

Find out more at [thermofisher.com/water](http://thermofisher.com/water)