

Immersion Well Temperature Sensors



Thermistor/RTD



4 to 20 mA

Description

Siemens Immersion Well Temperature Sensors monitor and transmit changes in liquid temperature to the HVAC control system. The sensor resistance varies proportionally to the actual temperature being measured.

All sensors are fully assembled with stainless steel thermowells, and are available in 2.5-inch, 4-inch and 6-inch insertion depths.

Multiple output signals are available to ensure compatibility with most common HVAC control systems.

Features

- Variety of sensing elements.
- Suitable for hot or chilled fluids.
- Responsive to temperature changes.
- Accurate and reliable indication of temperature.
- Familiar installation requires no special tools.

Specifications

Output Signals	100k Ω Thermistor 10k Ω Type 2 Thermistor 10k Ω Type 3 Thermistor 1k Ω @ 32°F Ni RTD 1k Ω @ 70°F Ni RTD 1k Ω Pt RTD (375a) 1k Ω Pt RTD (385a) 4 to 20 mA <ul style="list-style-type: none">• 20°F to 70°F• 30°F to 250°F• 32°F to 212°F
Well Material	300 Series Stainless Steel Lead-free
External Connection Threads	1/2-inch – 14 NPT
Conduit Connection Threads	1/2-inch – 14 NPSMI

NOTE: Not for use in potable water systems.

Table 1. Product Ordering Information.

Output Signal	Insertion Depth	Measuring Range	Accuracy	Product Number
100K Ω Thermistor	2.5 inches	0°F to 250°F (-18°C to 121°C)	$\pm 0.50^{\circ}\text{F}$ ($\pm 0.28^{\circ}\text{C}$) @ 77°F (25°C)	536-777-25
	4 inches			536-777-40
	6 inches			536-777-60
10K Ω Type II Thermistor	2.5 inches		$\pm 0.4^{\circ}\text{F}$ ($\pm 0.22^{\circ}\text{C}$) @ 77°F (25°C)	QAE2030.005
	4 inches			QAE2030.010
	6 inches			QAE2030.015
10K Ω Type III Thermistor	2.5 inches			QAE2032.005
	4 inches			QAE2032.010
	6 inches			QAE2032.015
1K Ω @ 32°F Ni RTD	2.5 inches		$\pm 0.72^{\circ}\text{F}$ ($\pm 0.4^{\circ}\text{C}$) @ 32°F (0°C)	QAE2020.005
	4 inches			QAE2020.010
	6 inches			QAE2020.015
1K Ω @ 70°F Ni RTD	2.5 inches			QAE2021.005
	4 inches			QAE2021.010
	6 inches			QAE2021.015
1K Ω Pt RTD (375a)	2.5 inches		$\pm 0.54^{\circ}\text{F}$ ($\pm 0.3^{\circ}\text{C}$) @ 32°F (0°C)	544-577-25
	4 inches			544-577-40
	6 inches			544-577-60
1K Ω Pt RTD (385a)	2.5 inches			QAE2012.005
	4 inches			QAE2012.010
	6 inches			QAE2012.015
4 to 20 mA	2.5 inches	20°F to 70°F (-7° to 21°C)		536-774-25
	4 inches			536-774-40
	6 inches			536-774-60
	2.5 inches	30°F to 250°F (-1°C to 121°C)	536-767-25	
	4 inches		536-767-40	
	6 inches		536-767-60	
	2.5 inches	32°F to 212°F (0°C to 100°C)	544-562-25	
	4 inches		544-562-40	
	6 inches		544-562-60	

Table 2. Accessories Information.

Description		Part Number
Repair Kits*	Repair Kit, 4 to 20 mA, 30°F to 250°F	536-767-RK
	Repair Kit, 4 to 20mA, 20°F to 70°F	536-774-RK
	Repair Kit, 100k ohm Thermistor	536-777-RK
	Repair Kit, 4 to 20 mA, 32°F to 212°F	544-562-RK
	Repair Kit, PT 1k Ohm RTD (375)	544-577-RK
	Repair Kit, PT 1k Ohm RTD (385)	AQE2012
	Repair Kit, NI 1k Ohm @ 32°F RTD	AQE2020
	Repair Kit, 10k Ohm Type 2 Thermistor	AQE2030
	Repair Kit, 10k Ohm Type 3 Thermistor	AQE2032
Thermowells	Immersion Well, 2.5-inch	AQE2000.005
	Immersion Well, 4-inch	AQE2000.010
	Immersion Well, 6-inch	AQE2000.015

* Repair kits include replacement sensing element, temperature transmitter (4 to 20 mA models only), and related hardware.

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