

HAZARDOUS Room, Duct & Immersion Platinum RTD

The ACI Hazardous Platinum RTD Series features a 1/2" NPT Process threaded fitting and 1/4" diameter stainless steel probe with 22 AWG Etched Teflon colored lead wires. The sensors in this series are manufactured using ACI's proven double encapsulation process to eliminate the effects of moisture upon the sensors and to increase response times using our high quality, thermally conductive epoxy. The Hazardous sensors come standard with a heavy duty Feraloy® Iron or Aluminum Connection Head depending on the configuration ordered. These sensors can be used in Wall Mounted (Room), Duct, and Immersion style configurations and include an O-Ring Seal, Ground Screw, and weather resistant finish. The "INW" Immersion sensor without thermowell can be used with an existing thermowell or paired with any of the Machined thermowells (See Accessories) when higher flow rates, temperatures, pressure rating or corrosion resistance is required. NIST Certificates are also available as shown on the back of the product data sheet. This product should be installed by a trained professional with knowledge of local codes and regulations.

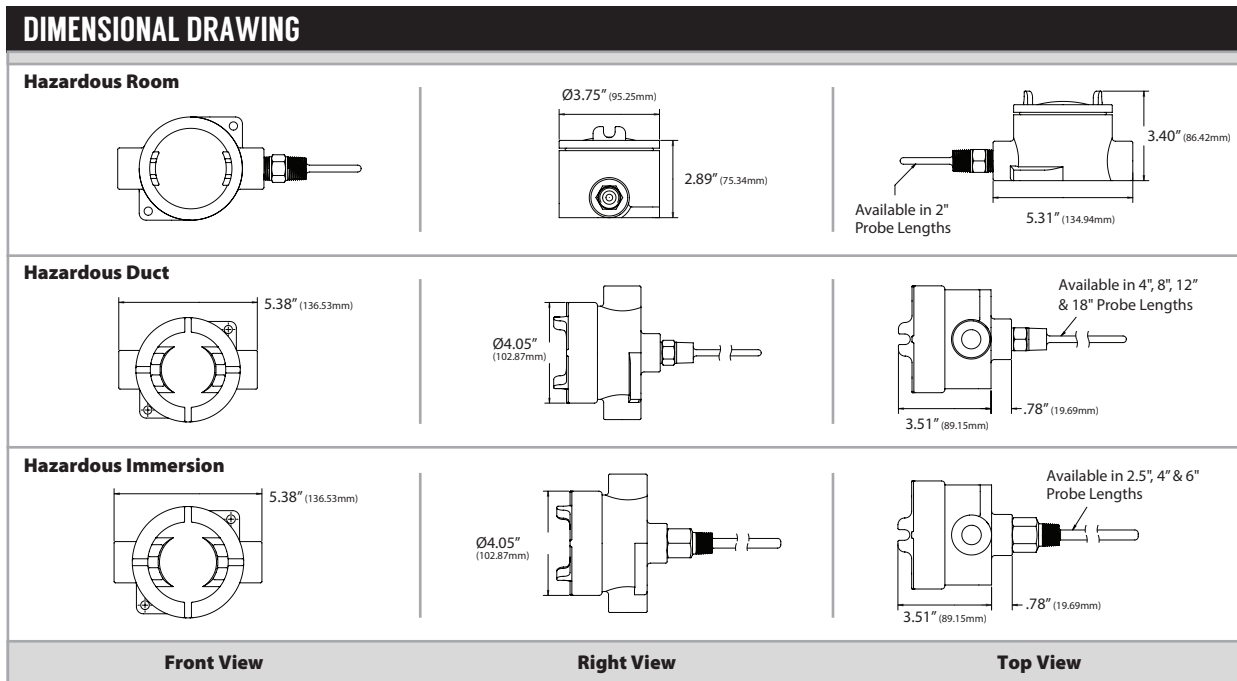
Applications: Hazardous Atmospheres, Industrial Sensor Applications, Process control, Exhaust Systems

The ACI Hazardous Platinum RTD Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

PRODUCT SPECIFICATIONS

Sensor Type Sensor Curve:	Platinum RTD PTC (Positive Temperature Coefficient)
Number Sensing Points:	One
Number Wires:	A/100-2W-EXPL and A/1K-2W-EXPL: Two (Non-Polarity Sensitive) A/100-3W-EXPL and A/1K-3W-EXPL: Three (Polarity Sensitive)
Sensor Output @ 0°C (32°F):	A/100-xW-EXPL Series: 100 Ohms nominal A/1K-xW-EXPL Series: 1000 Ohms nominal
Sensor Tolerance Class Accuracy:	+/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002 * t)) where t is the absolute value of Temperature above or below 0°C in °C -40°C (-40°F): +/- 0.23°C (+/- 0.414°F) 0°C (32°F): +/- 0.15°C (+/- 0.27°F) 200°C (392°F): +/- 0.55°C (+/- 1.00°F)
Din Standard Temperature Coefficient:	DIN EN 60751 (IEC 751) 3850 ppm / °C
Sensor Stability:	+/- 0.03% after 1000 Hours @ 300°C (572°F)
Response Time (63% Step Change):	8 Seconds nominal
Self-Heating Maximum Operating Current:	100 Ohm RTD: 7 mW/°C (Still Air) 5 mA 1K Ohm RTD: 4 mW/°C (Still Air) 3 mA
Enclosure Specifications (Material, Operating Temperature, NEMA Ratings):	"-D" Enclosure: Feraloy® Iron Alloy, -50 to 60°C (-58 to 140°F), NEMA 3, 4, 7ABCD, 9EFG "-I or -INW" Enclosure: Feraloy® Iron Alloy, -50 to 60°C (-58 to 140°F), NEMA 3, 4, 7ABCD, 9EFG "-R" Enclosure: Copper-Free Aluminum, -50 to 60°C (-58 to 140°F), NEMA 3, 4, 7ABCD, 9EFG
Enclosure Explosion Proof Rating:	CL. I, Div. 1 & 2, Groups A, B, C, D
Enclosure Dust-Ignition Proof Rating:	CL. II, Div. 1, Groups E, F, G
Enclosure Raintight Rating:	CL. II, Div. 2, Groups F, G
Enclosure Wet Locations Rating:	CL. III
Enclosure UL CSA Standards:	UL 1203 CSA C22.2 No. 30
Sensor Operating Temperature Range:	-40 to 200°C (-40 to 392°F)
Storage Temperature Range:	-40 to 85°C (-40 to 185°F)
Operating Humidity Range:	10 to 95% RH, non-condensing
Enclosure Hubs Hub Size:	Two 1/2" NPT Female Hubs
Probe Diameter Sensor Threads:	0.250" (6.35mm) 1/2" NPT (National Pipe Tapered) Thread
Probe Material:	304 Stainless Steel
Thermowell Material Thermowell Bore Diameter:	304 Stainless Steel 0.260"
Thermowell Instrument Thread Process Thread:	1/2" NPS (National Pipe Straight) Female Thread 1/2" NPT (National Pipe Tapered) Male Thread
Lead Length Conductor Size:	14" (35.6 cm) or 24" (61 cm) 22 AWG (0.65mm)
Lead Wire Insulation Wire Rating:	Etched Teflon (PTFE) Colored Leads Mil Spec 16878/4 Type E)
Conductor Material:	Silver Plated Copper
Product Dimensions Product Weight:	See table on back of Product Data sheet
Agency Approvals:	CE, RoHS2, WEEE





HAZARDOUS ROOM ORDERING

		Model # Example:	A/	100	2W	R	EXPL	NIST	MODEL #
				A.	B.	C.	D.	E.	F.
A. Sensor Series No Selection Required	A/								A/
B. Model Series Select One (1)	100 = 100 Ohm Platinum RTD 1K = 1K Ohm Platinum RTD								
C. Number of Wires Select One (1)	2W = Two Wires 3W = Three Wires								
D. Configuration No Selection Required	R = Room								R
E. Sensor Model No Selection Required	EXPL = Hazardous Sensor								EXPL
F. NIST Select One (1)	---- = No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)								

HAZARDOUS DUCT ORDERING

		Model # Example:	A/	100	2W	D	4"	EXPL	NIST	MODEL #	
				A.	B.	C.	D.	E.	F.	G.	
A. Sensor Series No Selection Required	A/										A/
B. Model Series Select One (1)	100 = 100 Ohm Platinum RTD 1K = 1K Ohm Platinum RTD										
C. Number of Wires Select One (1)	2W = Two Wires 3W = Three Wires										
D. Configuration No Selection Required	D = Duct										D
E. Duct Probe Length Select One (1)	4" = Duct 4" 8" = Duct 8" 12" = Duct 12" 18" = Duct 18"										
F. Sensor Model No Selection Required	EXPL = Hazardous Sensor										EXPL
G. NIST Select One (1)	---- = No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)										

HAZARDOUS IMMERSION ORDERING

		Model # Example:	A/	100	3W	I	4"	EXPL	NIST	MODEL #	
				A.	B.	C.	D.	E.	F.	G.	
A. Sensor Series No Selection Required	A/										A/
B. Model Series Select One (1)	100 = 100 Ohm Platinum RTD 1K = 1K Ohm Platinum RTD										
C. Number of Wires Select One (1)	2W = Two Wires 3W = Three Wires										
D. Configuration Select One (1)	I = Immersion with Welded Thermowell INW = Immersion without Welded Thermowell										
E. Immersion Length Select One (1)	2.5" = Immersion 2.5" 4" = Immersion 4" 6" = Immersion 6"										
F. Sensor Model No Selection Required	EXPL = Hazardous Sensor										EXPL
G. NIST Select One (1)	---- = No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)										

