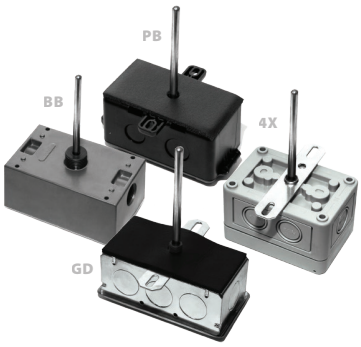


DUCT

Duct Sensor, Nickel RTD

The ACI Nickel Duct Series features a 1/4" diameter stainless steel probe with two, 22 AWG Etched Teflon colored lead wires to differentiate the different sensor types. The Nickel sensors are manufactured using ACI's proven double encapsulation process to eliminate the effects of moisture on the sensors as well as increased thermal response times from our high quality, thermally conductive epoxy. The duct style sensor is a single point sensor designed to be used in smaller duct applications and includes an insulation pad for sealing the duct and dampening vibration. For best results, the sensor length should be determined by the width or diameter of your duct such that the tip of the probe is in the approximate center of the duct. Our standard enclosure options include the galvanized junction box "-GD" or plastic duct enclosure with the hinged cover "-PB". On larger ducts, you may want to refer to our Rigid or Bendable Copper Averaging sensor for increased sensing points and better temperature control. This series can be ordered with optional NEMA/IP rated weather proof enclosures and NIST Certificates as referenced in the ordering grid.

Applications: Roof Top Units, Air Handlers, Monitoring Supply/Discharge/Return/Mixed Air Temperatures

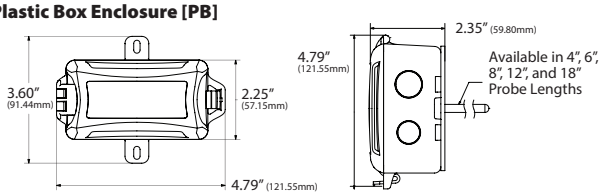
The ACI Nickel Duct Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website.

PRODUCT SPECIFICATIONS

Sensor Type | Sensor Curve:	Nickel RTD | PTC (Positive Temperature Coeffcient)
Number Sensing Points | Number Wires:	One | Two (Non-Polarity Sensitive)
Sensor Output @ 21.1°C (70°F) | Lead Wire Colors:	1000 Ohms nominal | Red/Red
Sensor Accuracy:	**-40°C (-40°F):** +/- 1.52°C (+/- 2.73°F) | **0°C (32°F):** +/- 0.4°C (+/- 0.72°F) **21.1°C (70°F):** +/- 0.17°C (+/- 0.34°F)) | **54.4°C (130°F):** +/- 0.56°C (1.00°F) **121°C (250°F):** +/- 1.25°C (+/- 2.25°F)
Din Standard | Temperature Coeffcient (0-100°C):	Din 43760 | 6370 ppm/°C
Sensor Stability:	8 Seconds nominal
Response Time (63% Step Change):	+/- 0.05% after 1000 Hours @ 150°C (302°F)
Self-Heating | Maximum Operating Current:	0.3°C/mW (Still Air) | 5 mA
Enclosure Specifications (Operating Temperature Range, Material, Flammability, NEMA/IP Ratings):	**"-GD" Enclosure:** -40 to 115°C (-40 to 239°F); Galvanized Steel; NEMA 1 (IP10) **"-PB" Enclosure:** -30 to 90°C (-22 to 194°F); ABS Plastic; UL94-HB; Plenum Rated **"-BB" Enclosure:** Aluminum, -40 to 121°C (-40 to 250°F), Plenum Rated, NEMA 3R **"-4X" Enclosure:** -40 to 70°C (-40 to 158°F); Polystyrene Plastic; UL94-V2; NEMA 4X (IP 66)
Storage Temperature Range:	-40 to 85°C (-40 to 185°F)
Sensor Operation Temperature Range:	-40 to 250°F (-40 to 121°C)
Operating Humidity Range:	10 to 95% RH, non-condensing
Probe Material:	304 Stainless Steel
Fitting Material | Flammability Rating:	Polyamide 66 (High Performance Nylon) | UL94-HB
Foam Pad Material | Flammability Rating:	Neoprene/EPDM/SBR Polymer | UL94-HBF; FMVSS-302; MIL-R-6130C
Lead Length | Conductor Size:	**4", 6" & 8" Sensors:** 14" (35.6cm) | **12"or 18" Sensors:** 24" (61cm) | 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
Probe Diameter:	0.250" (6.35mm)
Agency Approvals:	CE, RoHS2, WEEE

DIMENSIONAL DRAWING, WEIGHTS

Plastic Box Enclosure [PB]



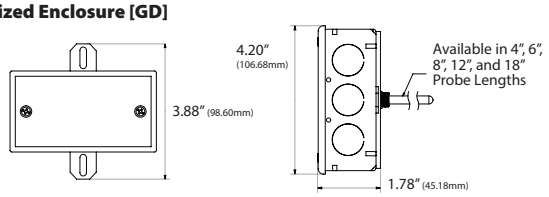
xx = Sensor Type | **yy** = Insertion Length

Plastic Box Enclosure [PB] Weights

ACI Model #	4″ (Probe Length)	6″ (Probe Length)	8″ (Insertion Length)
A/xx-D-yy-PB	0.24 lbs. (0.109 kg)	0.25 lbs. (0.113 kg)	0.26 lbs. (0.117 kg)

ACI Model #	12″ (Probe Length)	18″ (Probe Length)
A/xx-D-yy-PB	0.28 lbs. (0.127 kg)	0.30 lbs. (0.136 kg)

Galvanized Enclosure [GD]

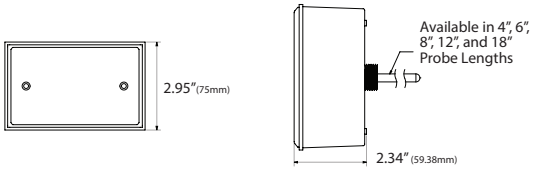


Galvanized Enclosure [GD] Weights

ACI Model #	4″ (Probe Length)	6″ (Probe Length)	8″ (Insertion Length)
A/xx-D-yy-GD	0.66 lbs. (0.299 kg)	0.67 lbs. (0.303 kg)	0.68 lbs. (0.308 kg)

ACI Model #	12″ (Probe Length)	18″ (Probe Length)
A/xx-D-yy-GD	0.70 lbs. (0.317 kg)	0.74 lbs. (0.336 kg)

Bell Box Enclosure [BB]

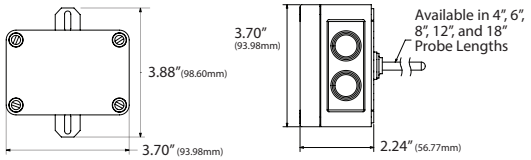


Bell Box Enclosure [BB] Weights

ACI Model #	4″ (Probe Length)	6″ (Probe Length)	8″ (Insertion Length)
A/xx-D-yy-BB	0.70 lbs. (0.317 kg)	0.71 lbs. (0.322 kg)	0.72 lbs. (0.326 kg)

ACI Model #	12″ (Probe Length)	18″ (Probe Length)
A/xx-D-yy-BB	0.74 lbs. (0.336 kg)	0.78 lbs. (0.354 kg)

NEMA 4X Enclosure [4X]



NEMA 4X Enclosure [4X] Weights

ACI Model #	4″ (Probe Length)	6″ (Probe Length)	8″ (Insertion Length)
A/xx-D-yy-4X	0.34 lbs. (0.154 kg)	0.35 lbs. (0.159 kg)	0.36 lbs. (0.163 kg)

ACI Model #	12″ (Probe Length)	18″ (Probe Length)
A/xx-D-yy-4X	0.38 lbs. (0.172 kg)	0.40 lbs. (0.181 kg)

Standard Views | **Product Weights**

CUSTOM ORDERING

Model # Example: A/ (A.) | 1K-NI (B.) | D (C.) | 8″ (D.) | GD (E.) | NIST (F.)

		MODEL #
A. Sensor Series *No Selection Required*	**A/**	**A/**
B. Model Series *No Selection Required*	**1K-NI**	**1K-NI**
C. Configuration *No Selection Required*	**D** = Duct	**D**
D. Probe Length *Select One (1)*	**4″** = 4″ Probe | **6″** = 6″ Probe | **8″** = 8″ Probe | **12″** = 12″ Probe | **18″** = 18″ Probe	
E. Enclosure *Select One (1)*	**GD** = Galvanized | **PB** = Plastic | **BB** = Aluminum, NEMA 3R | **4X** = NEMA 4X	
F. NIST *Select One (1)*	**----** = No NIST Certificate | **NIST** = NIST Certificate (3 Points)	