

# Duct Averaging Temp Sensor

CE

Model TE-705

RoHS



- Probe construction — 3/8" (9mm) bendable thin wall aluminum probe.
- TE-705 incorporates four fast response environmentally sealed sensor modules.
- Available with galvanized steel, NEMA-1 (IP-30) or NEMA-4 (IP-65) powder coated steel enclosure to cover all applications.
- More than 16 types of interchangeable NTC thermistors, precision platinum, nickel or balco RTDs are available for universal compatibility.

The TE-705 provides a rugged, reliable solution for measuring average supply air temperature in large ducts or plenums. The TE-705 bendable aluminum probe averaging temperature sensor incorporates four evenly-spaced sensor modules over 6, 12 or 24 feet (1.8, 3.6 or 7.2 meter) lengths. The sensor modules are environmentally sealed to protect against condensation. The complete assembly acts as a single sensor and any temperature change is averaged across the sensors. Galvanized steel or NEMA-4 (IP-65) powder coated steel enclosures are available. TE-705 is an ideal product for high air flow systems.

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## SPECIFICATIONS:

<b>Platinum RTD sensors:</b>	+/- 0.1% @ 0 C, Alpha : 385 per DIN 43760
<b>Nickel RTD sensors: (#2)</b>	+/- 0.5 C @ 0 C, 5000 PPM/K T.C.R.
<b>Nickel RTD sensors: (#4)</b>	+/- 0.5 F @ 70 F / 21.1 C, 6000 PPM/K T.C.R.
<b>Balco RTD sensors:</b>	+/- 0.5 F @ 70 F / 21.1 C, 4300 PPM/K T.C.R.
<b>Thermistor sensors:</b>	+/- 0.2 C interchangeability @ 77 F / 25 C
<b>Operating Temp:</b>	-40F/-40C to 210F/100C
<b>Probe Material:</b>	3/8" / 9 mm Bendable aluminum
<b>Flange Material:</b>	Galvanized Steel
<b>Steel NEMA-1 / IP-30:</b>	18 Ga. Galvanized Steel
<b>Steel NEMA-4 / IP-65:</b>	18 Ga. Cold Rolled Steel, Baked on Enamel
<b>Warranty:</b>	Five Years (Lifetime on Moisture Migration)
<b>EMC Conformance:</b>	EN 55022, 55024, 61000-3-3, 61000-4-2, 3, 4, 5, 6 & 11
<b>RoHS Compliant</b>	

U.S. PATENT NO. 6592254, 7465087

## ORDERING INFORMATION: TE-705-

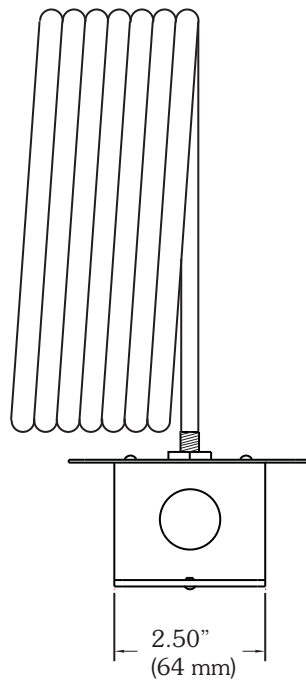
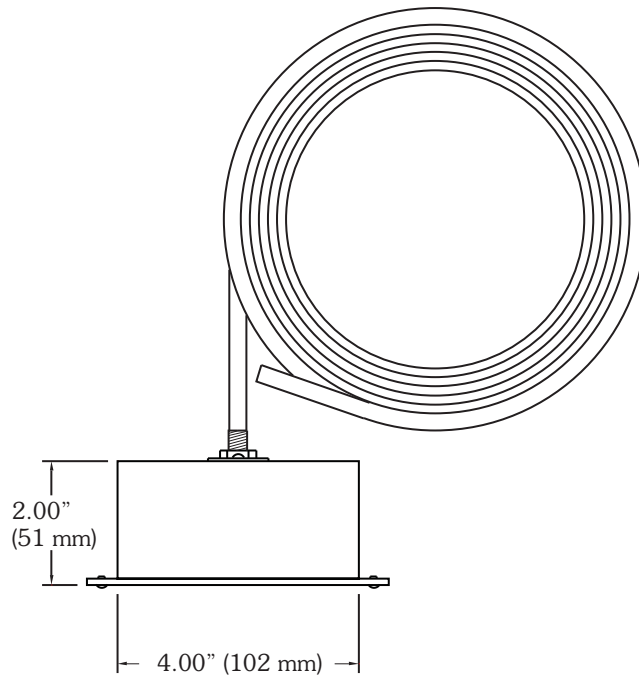
Installation	Sensor*	Probe Length	Probe Type
<b>B</b> Galvanized Steel Enclosure NEMA-1 / IP-30	<b>1</b> 100 ohm Platinum RTD	<b>A</b> 6 feet/1.8 m	<b>1</b> Bendable 3/8" Aluminum
	<b>2</b> 1,000 ohm Nickel RTD (5000 PPM)	<b>B</b> 12 feet/3.6 m	
	<b>3</b> 1,000 ohm Platinum RTD	<b>C</b> 24 feet/7.2 m	
<b>C</b> Painted Steel Enclosure NEMA-4 / IP-65	<b>4</b> 1,000 ohm Nickel RTD (6000 PPM)		
	<b>5</b> 1,000 ohm Balco RTD		
	<b>7</b> 10,000 ohm NTC thermistor (Type III)		
	<b>8</b> 10,000 ohm NTC thermistor (Carel)		
	<b>10</b> 3,000 ohm NTC thermistor		
	<b>12</b> 10,000 ohm NTC thermistor (Type II)		
	<b>13</b> 5,000 ohm NTC thermistor		
	<b>14</b> 1,035 ohm Silicon PTC		
	<b>15</b> 100,000 ohm NTC thermistor		
	<b>16</b> 10,000 ohm NTC thermistor (Eliwell)		
	<b>17</b> 20,000 ohm NTC thermistor		
	<b>18</b> 2,252 ohm NTC thermistor		
	<b>21</b> 1,800 ohm NTC thermistor		

**Example: TE-705-B-10-B-1:** Duct Averaging Temp Sensor, NEMA-1 enclosure, 12' bendable 3/8" aluminum, 3,000 ohm NTC thermistor

\* For sensor compatibility, please refer to TI.700-10.

\*\* For a complete Resistance vs. Temperature tables, please refer to TI.700-11.

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**MAMAC Systems is the leading global manufacturer of sensors, transducers, control peripherals and web browser based IP appliances. MAMAC products are used for HVAC and environmental controls, remote monitoring, alarming, energy metering and industrial automation.**

**All MAMAC products are manufactured in the USA.**

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