

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 15 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.

**MAMAC SYSTEMS**[®]

8189 Century Boulevard • Minneapolis, MN 55317-8002 • USA
800-843-5116 • 952-556-4900 • Fax 952-556-4997
sales@mamacsys.com • www.mamacsys.com

Baird House, Units 6 & 7
Pensnett Estate • Kingswinford
West Midlands • DY6 7YA • United Kingdom
01384-271113 • Fax 01384-271114

4 Arminger Court, Unit 2
Holden Hill • S.A. 5088 • Australia
08-8395-4333 • Fax 08-8395-4433

155 McIntosh Drive, Units 5 & 6 • Markham
Ontario • L3R 0N6 • Canada
905-474-9215 • Fax 905-474-0876

No. 22 Lorong 21A Geylang # 11-02
Prosper Industrial Building
Singapore • 388421
656-3927273 • Fax 656-3927276

TE-705

SPECIFICATIONS:

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

U.S. PATENT NO. 6592254, 7465087

ORDERING INFORMATION: TE-705-

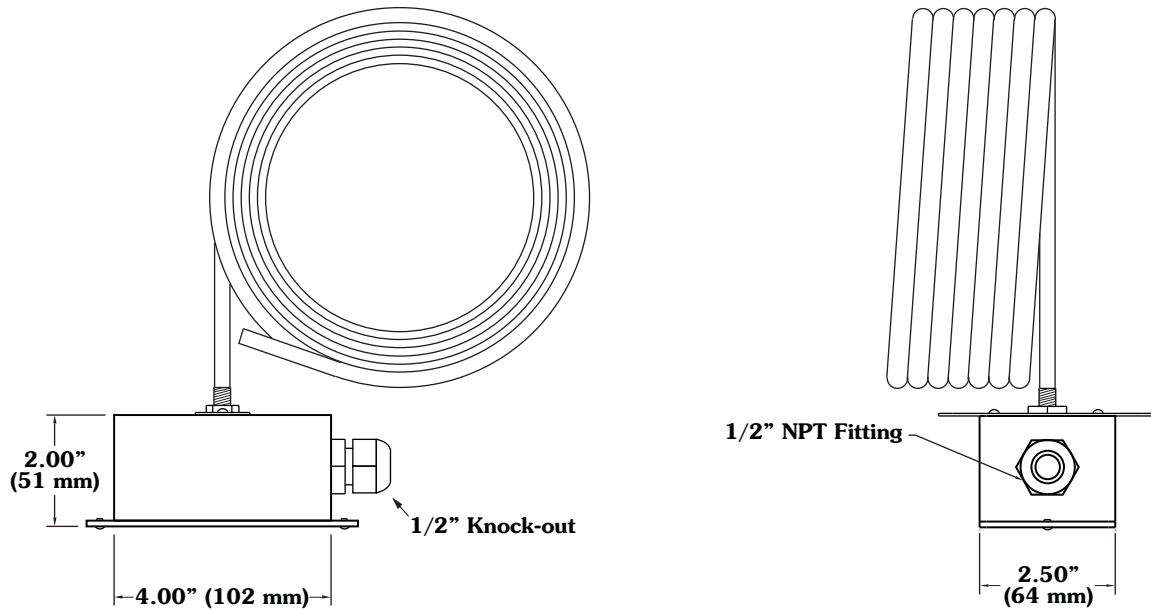
Installation	Sensor*	Probe Length	Probe Type
B Galvanized Steel Enclosure NEMA-1 / IP-30	1 100 ohm Platinum RTD 2 1,000 ohm Nickel RTD (5000 PPM) 3 1,000 ohm Platinum RTD	A 6 feet/1.8 m B 12 feet/3.6 m C 24 feet/7.2 m	1 Bendable 3/8" Aluminum
C Painted Steel Enclosure NEMA-4 / IP-65	4 1,000 ohm Nickel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

TE-705



WARRANTY: MAMAC Systems, Inc. warrants its products to be free of defects in material and workmanship for a period of five (5) years from date of shipment. If a unit is malfunctioning, it must be returned to the factory for evaluation. A return authorization number (RMA) will be issued by the customer service department and this number must be written or prominently displayed on the shipping boxes and all related documents. The defective part should be shipped freight pre-paid to the factory. Upon examination by MAMAC Systems, Inc., if the unit is found to be defective, it will be repaired or replaced at no charge to the customer. However, this warranty is void if the unit shows evidence of being tampered with, damaged during installation, misapplied, misused, or used in any other operating condition outside of the unit's published specifications.

MAMAC Systems, Inc. makes no other warranties or representations of any kind whatsoever, expressed or implied, except that of title. All implied warranties including any warranty of merchantability and fitness for a particular purpose are hereby disclaimed. User is responsible to determine suitability for intended use.

LIMITATIONS OF LIABILITY: The remedies of buyer set forth herein are exclusive and the total liability of MAMAC Systems, Inc. with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the product upon which liability is based. **In no event shall MAMAC Systems, Inc. be liable for consequential, incidental or special damages.** MAMAC Systems, Inc. reserves the right to change any specifications without notice to improve performance, reliability, or function of our products.

Every precaution for accuracy has been taken in the preparation of this manual, however, MAMAC Systems, Inc. neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the product in accordance with the information contained in the manual.



8189 Century Boulevard • Minneapolis, MN 55317-8002 • USA
800-843-5116 • 952-556-4900 • Fax 952-556-4997
sales@mamacsys.com • www.mamacsys.com

Baird House, Units 6 & 7
Pensnett Estate • Kingswinford
West Midlands • DY6 7YA • United Kingdom
01384-271113 • Fax 01384-271114

4 Arminger Court, Unit 2
Holden Hill • S.A. 5088 • Australia
08-8395-4333 • Fax 08-8395-4433

155 McIntosh Drive, Units 5 & 6 • Markham
Ontario • L3R 0N6 • Canada
905-474-9215 • Fax 905-474-0876

No. 22 Lorong 21A Geylang # 11-02
Prosper Industrial Building
Singapore • 388421
656-3927273 • Fax 656-3927276