



Duct Averaging Temp Sensors

Model TE-705



- Two probe construction options— 3/8" (9mm) bendable thin wall aluminum probe or multiple sensor modules interconnected with plenum rated cable.
- TE-705-A incorporates rugged aluminum sensor strain reliefs, four fast response environmentally sealed sensor modules and plenum rated cable for reliable performance and low cost installation.
- Available with plastic, galvanized steel or NEMA-4 / IP-65 steel enclosure to cover all applications.
- More than 12 types of interchangeable NTC thermistors, precision platinum, nickel or balco RTD's are available for universal compatibility.

TE-705-A incorporates four even spaced sensor modules over 6, 12 or 24 ft / 1.8, 3.6 or 7.2 meter lengths. The modules are interconnected with plenum rated cable strain relieved across the sensor with a patented aluminum bracket. The sensor modules are environmentally sealed and corrosion free plastic, galvanized steel or NEMA-4/IP-65 steel enclosures are available. TE-705-A provides a cost effective and reliable solution for measuring average supply air temperature in large ducts or plenums. TE-705-B bendable aluminum probe averaging temperature sensor also has four evenly spaced sensors and galvanized steel or NEMA-4 / IP_65 enclosure. TE-705-B is an ideal product for high air flow systems.



7400 Flying Cloud Drive • Minneapolis, MN 55344-3720 • USA
800-843-5116 • 952-835-1626 • Fax 952-829-5331
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 Armiger 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
Chin Hin Hang Building
Singapore • 388421
65-3927273 • Fax 65-3927276

SPECIFICATIONS:

Platinum RTD sensors:	+/- 0.1% @ 0 C, Alpha : 385 per DIN 43760
Nickel RTD sensors:	+/- 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/ 0 C
Probe Material:	1/4" / 6.3mm O.D, 0.020" / 0.5mm wall 304 Stainless Steel
Flange Material:	304 Stainless Steel
Bulkhead Fitting:	Brass with poly compression sleeve
Plastic Enclosure:	Polycarbonate 30% glass filled, rated UL 94V-5-0
Steel NEMA-1 / IP-30:	18 Ga. Galvanized Steel
Steel NEMA-4 / IP-65:	18 Ga. Cold Rolled Steel, Powder coated

ORDERING INFORMATION: TE-705

Installation	Sensor*	Probe Length	Probe Type
A Polycarb plastic Enclosure ¹	1 100 ohm Platinum RTD	A 6 feet/1.8 m	1 Bendable 3/8" Aluminum
B Galvanized steel Enclosure NEMA-1 / IP-30	3 1000 ohm Platinum RTD	B 12 feet/3.6 m	2 Multiple sensors, plenum cable
C Painted Steel Enclosure NEMA-4 / IP-65	4 1000 ohm Nickel RTD	C 24 feet/7.2 m	
	5 1000 ohm Balco RTD		
	7 10,000 ohm thermistor		
	10 3,000 ohm thermistor		
	12 10,000 ohm thermistor		
	13 5,000 ohm thermistor		
	15 100,000 ohm thermistor		
	17 20,000 ohm thermistor		
	18 2,252 ohm thermistor		
	21 1,800 ohm thermistor		

¹ Available with the multiple sensor, plenum cable style only.

Example: TE-705-B-10-B-2: Duct averaging sensor, 12 feet flexible plenum cable multiple sensor probe, 3000 ohm thermistor, NEMA-1 enclosure.

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

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

