



### Product Overview

A range of high quality Immersion Temperature Sensors to interface with a wide variety of HVAC control equipment. Units are available with a thermistor or PTC elements. For temperature transmitters with active linear outputs refer to the AX-TE-xTX-W datasheet.

A range of custom length probes and pockets are also available

The sensor housing offers IP65 protection against water and particulate ingress and features a stainless steel 150mm probe. A captive M20 gland enables simple cable entry.

### Features

- Large range of mounting & sensor options
- Direct fixing, no extra brackets required
- 60mm, 150mm (standard) & custom Probe Lengths
- UK Made, 3 year Guarantee
- Accurate, high quality elements
- Wide range active output version available

### Product Specifications

Output:	Range of 2 wire thermistor and PTC platinum elements providing variable resistance
Accuracy:	Thermistor: $\pm 0.2^{\circ}\text{C}$ between $0^{\circ}\text{C}$ and $70^{\circ}\text{C}$ Platinum: $\pm 0.35^{\circ}\text{C}$ between $0^{\circ}\text{C}$ and $100^{\circ}\text{C}$ (PT100a and PT1000a)
Materials:	Housing: Flame retardant ABS plastic Probe: Stainless Steel Gland: Flame retardant Polyamide
Ambient Temperature Range:	$-10^{\circ}\text{C}$ to $60^{\circ}\text{C}$ . 0-95% RH
Terminals:	Rising Clamp for $0.5\text{-}1.5\text{mm}^2$ Cable
Cable Entry:	M20 Compression Gland
Housing Dimensions:	92mm diameter x 52mm height
Fixing Holes:	2 off, 5mm holes on 92mm centres
Probe Length:	150mm standard, 60mm and 1m (please enquire for other probe lengths)
Protection:	IP65
Country of Origin:	United Kingdom

### Order Codes

<b>AX-TE-IT</b>	Immersion Temperature Sensor 150mm probe (See element table below for more information)
<b>AX-TE-ISP</b>	316 Stainless Steel Pocket for 150mm probe
	- Add suffix "-65" with part number for 65mm probe
	- Add suffix "-100" with part number for 100mm probe
	- Add suffix "-1M" with part number for 1000mm probe

Thermistor / Element Codes		Replace 'x' with bold code below			
<b>T</b>	Trend, Innotech, Priva, Trane	10K3A1 NTC	<b>50K</b>	Priva	50K6A1 NTC
<b>3K</b>	Alerton	3K3A1 NTC	<b>J</b>	Johnsons	2.2K NTC
<b>A</b>	York, Alerton	10K4A1 NTC	<b>100</b>	Serek	PT100a Platinum
<b>H</b>	Honeywell	20K6A1 NTC	<b>1K</b>	Cylon	PT1000a Platinum
<b>D</b>	Drayton	30K6A1 NTC	<b>N1K</b>	Siemens	Ni1000a Nickel (TCR)
<b>SAT</b>	Satchwell (SAT1)	SAT1 NTC	<b>TAC</b>	TAC	1K87A1 NTC
<b>ST1</b>	Staefa (ST1)	ST1 PTC			

© Copyright Annicom. All Rights Reserved

### Annicom Ltd

Unit 21, Highview, Bordon, Hampshire. GU35 0AX  
Tel: +44 (0)1420 487788 Fax: +44 (0)1420 487799

Email: sales@annicom.com Website: www.annicom.com

# AX-TE-Ix

## Immersion Temperature Sensor



### Installation

The AX-TE-Ix sensor should be installed by a suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations. Field wiring should be installed to satisfy the requirements set out by the manufacturer of the equipment that the sensor is being connected to. As a general rule, screened cable should be used to connect the sensor to a BMS or other controller. Please note that none of the AX-TE-Ix sensors are suitable for use with mains voltage.

The AX-TE-Ix is designed to be installed in conjunction with the Axio range of 316 stainless steel immersion sensor pockets. The sensor probe should be inserted as far as it will go into the sensor pocket and then secured using the grub screw on the pocket. Care should be taken when tightening the retaining screw as excessive force can damage the pocket and the sensor probe.

PLEASE NOTE: The AX-TE-Ix is not designed for direct immersion in fluids. Always use a suitable immersion pocket.

### Trend sensor scaling

The following sensor scaling is for the AX-TE-IT passive sensor. If using SET to configure the controller, the AX-TE-IT has the same characteristics as a Trend Thermistor.

Prior to commissioning, ensure that the universal input jumper is set to T to accept a thermistor input.

If the sensor is being scaled manually the following information should be used for IQ2xx controllers with firmware V2.1 and above, IQ3 and IQ4 series controllers. For scaling on older controllers, please refer to the engineering data in the AXIO catalogue.

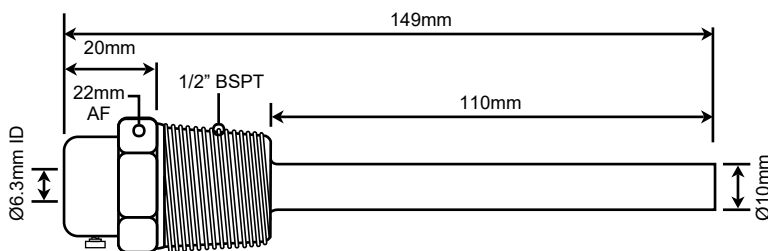
### Sensor Type Module Settings

Set the sensor type scaling mode to 5 - characterise

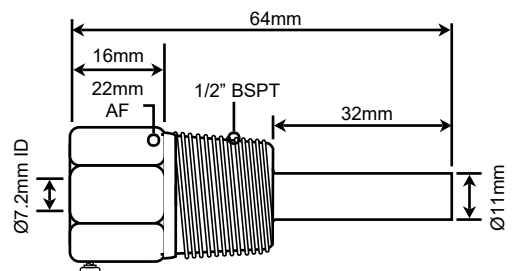
Y = 1	I2 = 0.555	I8 = 1.992	I14 = 8.33	I20 = 9.711	O6 = 79.8	O12 = 79.8	O18 = 79.8
E = 3	I3 = 0.636	I9 = 2.648	I15 = 8.795	O1 = 110	O7 = 69.8	O13 = 69.8	O19 = 69.8
U = 115	I4 = 0.73	I10 = 3.475	I16 = 9.066	O2 = 105	O8 = 59.8	O14 = 59.8	O20 = 59.8
L = -35	I5 = 0.839	I11 = 4.462	I17 = 9.288	O3 = 100	O9 = 49.9	O15 = 49.9	
P = 20	I6 = 1.116	I12 = 6.656	I18 = 9.465	O4 = 95	O10 = 39.9	O16 = 39.9	
I1 = 0.486	I7 = 1.49	I13 = 7.656	I19 = 9.604	O5 = 90	O11 = 30	O17 = 30	

### Pocket Dimension Drawings

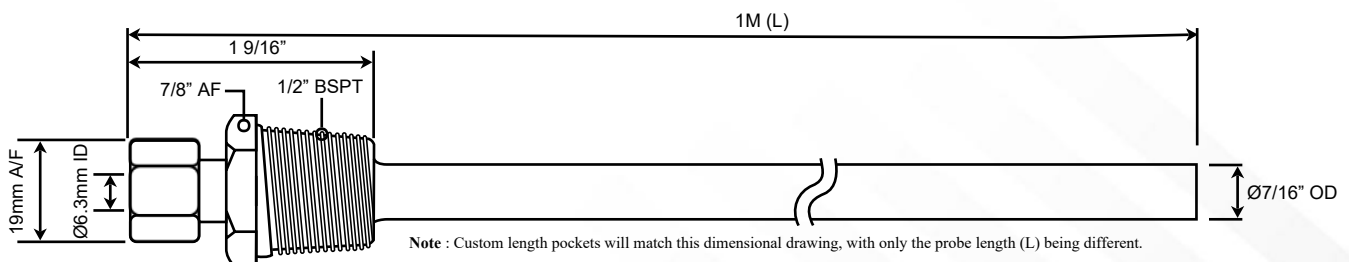
AX-TE-ISP (150mm)



AX-TE-ISP-65 (60mm)



AX-TE-ISP-1M



Every effort has been taken in the production of this data sheet to ensure accuracy. Axio do not accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Axio has a policy of continuous improvement and reserves the right to change this specification without notice.