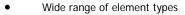
Flying Lead Sensors









Specification

Output types:

Thermistor Resistive PT100a Resistive PT1000a Resistive NI1000a Resistive

Active 4-20mA or 0-10Vdc (selectable)

Accuracy:

 $\begin{array}{lll} \mbox{Thermistor} & \pm 0.2 \mbox{°C} \mbox{ (0 to } 70 \mbox{°C)} \\ \mbox{PT100a} & \pm 0.35 \mbox{°C} \mbox{ (0 to } 100 \mbox{°C)} \\ \mbox{PT1000a} & \pm 0.35 \mbox{°C} \mbox{ (0 to } 100 \mbox{°C)} \\ \mbox{NI1000a} & \pm 0.35 \mbox{°C} \mbox{ (0 to } 100 \mbox{°C)} \\ \end{array}$

Probe:

Material Acetal resin

Dimensions 25mm x 6mm dia. (not including

outer heat shrink)

Protection:

Without potting IP40
With potting IP67

Ambient range -10 to 60°C

Lead length 2m flying lead, screened

Country of origin UK

Product	Codes
---------	-------

TT-555-A (10K3A1) Trend, Seachange, Honeywell

Aquatrol

TT-555-B (10K4A1) Andover, Delta Controls, York

<40°C, Siebe

TT-555-C (20K6A1) Honeywell
TT-555-D (PT100a) Serck
TT-555-E (PT1000a) Cylon

TT-555-F (NI1000a) Sauter

TT-555-G (Ni1000a/TCR(LAN1)) Siemens, Landis &

Staefa

TT-555-H (SAT1) Satchwell
TT-555-K (STA1) Sauter
TT-555-L (TAC1) TAC

TT-555-M (2.2K3A1) Johnson Controls

TT-555-N (3K3A1) Alerton
TT-555-P (30K6A1) Drayton
TT-555-Q (50K6A1) Ambiflex
TT-555-S (SAT2) Satchwell
TT-555-T (SAT3) Satchwell
TT-555-W (SIE1) Siebe

TT-555-Y (STA2) Siemens, Landis & Staefa

Active output:

TT-555-CVO

4-20mA/0-10Vdc selectable output

TT-555-CVO-C

4-20mA/0-10Vdc selectable output custom temp.

scaling

Suffixes (at extra cost):

-5m

5 Meter cable length

-R

End cap potted for waterproofing

NB The CVO transmitters are fitted into a double entry plant housing.

See page 2 for element type colour coding



© 2009 Sontay Limited. All rights reserved.

Technical Overview

The TT-555 range of flying lead temp. sensors are used for the detection of air temp., especially in fan-coil units etc. Units contain either a high quality thermistor, Platinum or Nickel sensing element or an active output, which are compatible with most controls manufactures equipment. The sensing element is housed in a acetal resin probe, with 2 metres of screened cable as standard.

Longer cable lengths are available to order (at extra cost) along with a potted variant for low temperature applications and water submersion.

Connections

Thermistor types:

The pre-striped two wire connections are polarity independent and should be terminated as required. No terminal block is provided.

Platinum and Nickel types:

The pre-striped two, three or four wire connections are polarity independent and should be terminated as required. No terminal block is provided.

4-20mA/0-10Vdc:

For full connection and specification please refer to the TT-CVO datasheet.

Element Type Colour Coding

Element	Element type	Flying lead
code		band colours
Α	10K3A1	White
В	10K4A1	Green
С	20K6A1	Red/Blue
D	PT100A	Red/White
E	PT1000A	Black/Blue
F	NI1000A	Yellow/Yellow
G	NI1000A TCR (LAN1)	Yellow/Yellow
Н	SAT1	White/White
K	STA1	Green/Black
L	TAC1	Blue/Yellow
M	2.2K3A1	Green/Blue
N	3K3A1	Red/Yellow
Р	30K6A1	Black/Black
Q	50K6A1	Red/Green
S	SAT2	Red/Yellow
Т	SAT3	White/White
w	SIE1	Green/Green
Υ	STA2	Red/Yellow
Z	NTC 10	Green/Yellow
cvo	4-20mA/0-10Vdc	Red/White

Trend Scaling

IQ1xx and early IQ2x series (without type 5, characterise) Thermistor A (10K3A1 TYPE 2 linearise thermistor volts)

(-10 to +40°)	
Brange	-10
Trange	40
F	8.47
G	7.42
Н	6.11
1	4.73
J	3.48

Q2xx and early IQ3 series (with type 5, characterise)

(-10 to +40°C)				
	Resistance input	Temp. Output		
1	5.32	40.0		
2	5.89	37.5		
3	6.53	35.0		
4	7.24	32.5		
5	8.05	30.0		
6	8.96	27.5		
7	10.00	25.0		
8	11.16	22.5		
0	12 /0	20.0		

12.49 20.0 10 14.00 17.5 11 15.71 15.0 12 17.67 12.5 13 19.90 10.0 7.5 14 22.47 15 25.40 5.0 16 28.79 2.5 17 32.66 0.0 18 37.18 -2.5

-5.0

-10.0

Upper 40.0 Lower -10.0 Exp 3 Points used 20 Input type 3(kohms)

42.35

55.30

19

20

UK Sales Tel: 0845 345 7253 Page 2 of 2 International Tel: +44 1732 861225