



Features & Benefits

- Wide range of sensing element types
- Stainless steel end cap
- Water proof potting option
- Longer cable options available, reducing the need for additional junction boxes
- Low cost for applications such as fan coil, VAV or other restricted spaces

Technical Overview

The flying lead range of temperature sensors are designed to measure air temperature in small duct spaces such as VAV boxes, fan coil units or other restricted spaces. The sensing element is housed in a stainless steel probe with 2 meters of screened cable as standard. Units contain either a high quality thermistor, Nickel or Platinum sensing element.

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

The -CVO active output option combines 4 pre-set ranges and selectable output mode, customised output range scaling enabling a choice of outputs and ranges on one unit.

Product Codes

TT-555 Flying Lead Sensor

Sensing Element (add type to above code)

Passive output:

- A (10K3A1) Trend, Cylon, Distech
- B (10K4A1) Andover, Delta Controls
- C (20K6A1) Honeywell
- D (PT100a) Serck
- E (PT1000a) Cylon
- F (NI1000a) Sauter
- G (Ni1000a/TCR(LAN1)) Siemens
- H (SAT1) Satchwell
- K (STA1) Landis & Staefa
- L (TAC1) TAC
- M (2.2K3A1) Johnson Controls
- N (3K3A1) Alerton
- P (30K6A1) Drayton
- Q (50K6A1)
- R (100K6A1) York >40°C
- S (SAT2) Satchwell
- T (SAT3) Satchwell
- W (SIE1) Siebe
- Y (STA2) Landis & Staefa
- Z (10K NTC) Carel

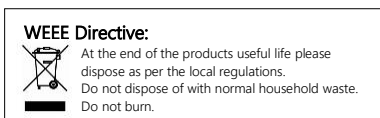
Active output:

- CVO 4-20mA/0-10Vdc selectable output
- CVO-C 4-20mA/0-10Vdc selectable output with custom temp. scaling

Suffix (at extra cost):

- 5M 5m cable
- R Cap potted (waterproof)

Note. The -CVO transmitter is fitted into a double entry housing.



Specification

Output types:

- | | |
|---------------------|-------------------|
| Passive | Resistive |
| Active (selectable) | Current 4-20mA or |
| | Voltage 0-10Vdc |

Accuracy:

- | | |
|------------|------------------|
| Thermistor | ±0.2°C 0 to 70°C |
| PT100a | ±0.2°C @ 25°C |
| PT1000a | ±0.2°C @ 25°C |
| NI1000 | ±0.4°C @ 0°C |
| -CVO | ±0.4°C @ 25°C |

Probe:

- | | |
|------------|----------------------------------|
| Material | Stainless steel |
| Dimensions | 30 x 6mm dia. |
| | (Not including outer heatshrink) |

Cable length

2 meters as standard

Protection:

- | | |
|----------------|------|
| Standard | IP40 |
| With -R option | IP68 |

Ambient range

-10 to +60°C

Weight

80g

Country of origin:

- | | |
|----------------|-------|
| Types A, B & C | China |
| Others | UK |



The TT-555-CVO products referred to in this data sheet meet the requirements of EU Directive 2014/30/EU

All connections to BEMS controllers, data recorders etc. should be made using screened cable. Normally, the screen should be earthed at one end only (usually the controller end) to avoid earth hum loops which can create noise. Low voltage signal and supply cables should be routed separately from high voltage or mains cabling. Separate conduit or cable trays should be used. Where possible, the controller's earth should be connected to a FUNCTIONAL EARTH, rather than the mains safety earth. This will provide better immunity to high frequency noise. Most modern buildings have a separate earth for this purpose.

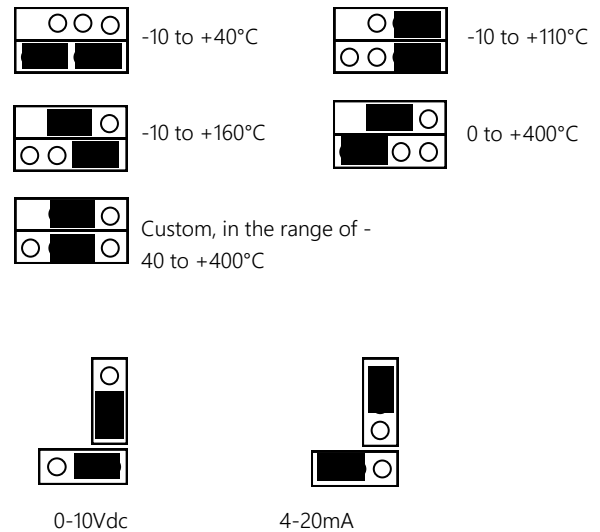
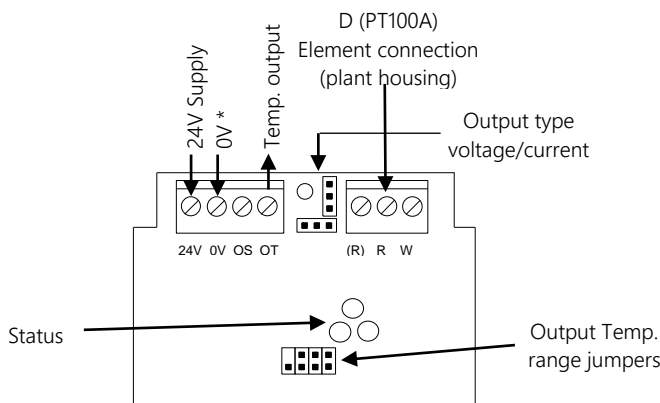
Thermistor:

The pre-stripped 2-wire connections are polarity independent and should be terminated as required. No terminal block is provided.

Platinum and nickel types:

The pre-stripped 2, 3 or 4-wire connections are polarity independent and should be terminated as required. No terminal block is provided.

Active output:



* Not required with 4-20mA output

Notes:

Voltage output Nominal voltage 24Vac/dc.

Current output If using in current output mode, the sensor must only be used with a 24Vdc supply. The sensor may be damaged if supplied with AC.

The selectable output temperature ranges are dependent on sensor type, ambient and application.

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

Element Type Colour Coding

Element code	Element type	Flying lead band colours
A	10K3A1	White
B	10K4A1	Green
C	20K6A1	Red/Blue
D	PT100A	Red/White
E	PT1000A	Black/Blue
F	NI1000A	Yellow/Black
G	NI1000A TCR (LAN1)	Yellow
H	SAT1	White/Yellow
K	STA1	Green/Black
L	TAC1	Blue/Yellow

Element code	Element type	Flying lead band colours
M	2.2K3A1	Green/Blue
N	3K3A1	Red/Yellow
P	30K6A1	Black
Q	50K6A1	Red/Green
R	100K6A1	Blue
S	SAT2	Red/Black
T	SAT3	White/Blue
W	SIE1	Green/White
Y	STA2	Red/Red
Z	NTC 10	White/Black
CVO	4-20mA/0-10Vdc	Red/White

Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.