

Thimble Sensors

Features



- Thimbles available in a range of materials
- 2m Flying lead, screened as standard

Specification

Output types:

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

Accuracy:

Thermistor	±0.2°C (0°C to 70°C)
PT100a	±0.2°C @ 25°C
PT1000a	±0.2°C @ 25°C
NI1000	±0.4°C @ 0°C

Housing materials:

- Standard ABS (flame retardant)
- Brass
- S/S
- Aluminium
- Brilliant white

Dimensions:

Overall	35mm x 22mm dia. (max.)
Thread	M16 x 1.5mm x 25mm
Internal	11mm x 20mm

Ambient range -10°C to +60°C

Connections 2m flying lead, screened

Country of origin UK

Product Codes

TT-518-A	(10K3A1) Trend, Seachange, Honeywell Aquatrol
TT-518-B	(10K4A1) Andover, Delta Controls, York <40°C, Siebe
TT-518-C	(20K6A1) Honeywell
TT-518-D	(PT100a) Serck
TT-518-E	(PT1000a) Cylon
TT-518-F	(NI1000a) Sauter
TT-518-G	(Ni1000a/TCR(LAN1)) Siemens, Landis & Staefa
TT-518-H	(SAT1) Satchwell
TT-518-K	(STA1) Landis & Staefa
TT-518-L	(TAC1) TAC
TT-518-M	(2.2K3A1) Johnson Controls
TT-518-N	(3K3A1) Alerton
TT-518-P	(30K6A1) Drayton
TT-518-Q	(50K6A1) Ambiflex
TT-518-S	(SAT2) Satchwell
TT-518-T	(SAT3) Satchwell
TT-518-W	(SIE1) Siebe
TT-518-Y	(STA2) Landis & Staefa

Active output:

TT-518-CVO

4-20mA/0-10Vdc selectable output

TT-518-CVO-C

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

Options (at extra cost):

-AL	Aluminium thimble
-SS	Stainless steel thimble
-BR	Brass thimble
-BW	Brilliant white thimble
-5m	5 Meter cable

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

Technical Overview

The TT-518 range of thimble temperature sensor are used for measuring air temperature in indoor spaces. Units contain either a high quality thermistor, Platinum or Nickel sensing element. Sensor types compatible with most controls manufacturers' equipment are available.

The TT-518-CVO (active output), combines 4 pre-set ranges and selectable output mode, customised output range scaling enabling a choice of outputs and ranges on one unit.

Installation

1. Drill a suitable hole in the mounting surface.
2. Pass the flying lead and threaded part of body through the hole. Secure with the fixing nut provided.
3. Make connections as required.

Connections

Thermistor:

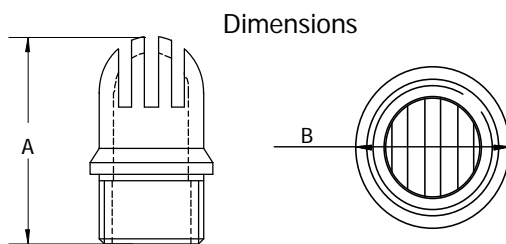
The pre-stripped 2-wair connections are polarity independent and should be terminated as required. No terminal block is provided.

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.

4-20mA/0-10Vdc:

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



A = Plastic 45mm, others 30mm

B = Plastic 22mm, others 19mm

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
H	6.11
I	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
9	12.49	20.0
10	14.00	17.5
11	15.71	15.0
12	17.67	12.5
13	19.90	10.0
14	22.47	7.5
15	25.40	5.0
16	28.79	2.5
17	32.66	0.0
18	37.18	-2.5
19	42.35	-5.0
20	55.30	-10.0

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