

ITT Series

Programmable Temperature Probes - Thermocouple and PT100 Assemblies



These temperature probe assemblies are all constructed using a stainless steel sheath containing either a J or K type thermocouple or a P100 RTD sensor element.

The aluminium head contains a programmable 4-20mA transmitter which, although pre-programmed for the standard temperature range of the sensor can be changed by the user* so that the 4-20mA output corresponds to any temperature range within the sensors' capabilities.

A wide range of accessories can be chosen, from plastic and metal cable glands to compression fittings and stainless steel pockets (not supplied).

Please contact our sales department with details of the probe you are looking for and we will give you a very competitive quotation.

*Requires free software download and ICAB-1 cable

Transmitter Technical Specification

Power Supply	12-35 Vdc 2-wire system
Output	4-20mA
Output Load R_L	500 Ω maximum, typically 250 Ω
Typical Accuracy	RTD overall 0.1%, thermocouple overall 0.2%
Temperature Drift	≤ 25 ppm/°C FS
Op. /Ambient Temp	-20 to +50 °C
Storage Temp	-40 to 120 °C

- **K or J Type Thermocouples**
- **Pt100 RTD Sensors**
- **4-20mA linearised output, configurable to application specific temperature range**
- **6mm stainless steel sheath**

Temperature Sensor Style

The standard sensor type is shown in the diagram below.

The maximum ranges and factory configured ranges are as below as below:-

Sensor type	Max. range	Pre-configured range
J-Type	0 to 1200°C	0-600°C = 4-20mA
K-Type	0 to 1350°C	0-1000°C = 4-20mA
RTD type	-200 to +850°C	0-200°C = 4-20mA.

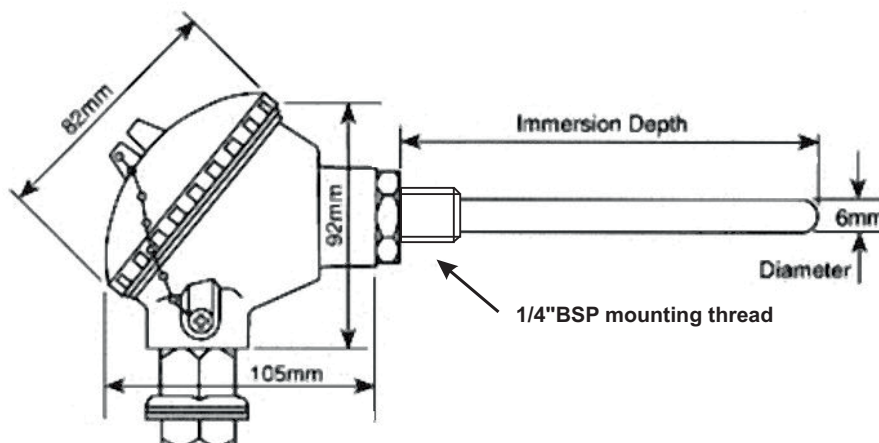
A free software download is available from the website which enables the scaling of the 4-20mA output to be customised to suit your specific application*.

The sheath length ranges from 100mm to 400mm for the PT100 sensor version and from 150mm to 400mm for the thermocouple sensor version. This style of thermocouple allows any standard 6mm compression fitting to be used, making it easy to fit the sensors to any process connection. The head mounting thread is 1/4"BSP.

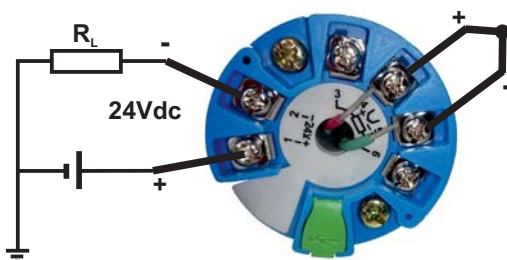
*Requires ICAB-1 USB to serial converter programming cable

Connection Head

The dimensions of the standard aluminium connection head are shown below:



Part No.	Description	Part No.	Description
ITTP100A	PT100 6x100mm 4-20mA	ITTJ200A	J type 6x200mm 4-20mA
ITTP150A	PT100 6x150mm 4-20mA	ITTJ300A	J type 6x300mm 4-20mA
ITTP200A	PT100 6x200mm 4-20mA	ITTJ400A	J type 6x400mm 4-20mA
ITTP250A	PT100 6x250mm 4-20mA	ITTK150A	K type 6x150mm 4-20mA
ITTP300A	PT100 6x300mm 4-20mA	ITTK200A	K type 6x200mm 4-20mA
ITTP400A	PT100 6x400mm 4-20mA	ITTK300A	K type 6x300mm 4-20mA
		ITTK400A	K type 6x400mm 4-20mA



THERMOCOUPLE



RTD 3-WIRE