

| ITTU SERIES

PROGRAMMABLE TEMPERATURE PROBES - 1/4"NPT - THERMOCOUPLE & 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 aluminum 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 Sensata with details of the probe you are looking for and we will give you a very competitive quotation.

*Requires free software download from https://www.cynergy3.com/sites/default/files/ITT Config upload file for WIN7%2B.zip and ICAB-1 cable

Features

- K or J Type Thermocouples
- PT100 RTD Sensors
- 4-20mA linearised output, configurable to application specific temperature
- 6mm stainless steel sheath



Transmitter Technical

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

Temperature Sensor Style

The standard sensor type is shown in the diagram below. The maximum ranges and factory configured ranges are as below:

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

A free software download is available from the Sensata website which enables the scaling of the 4-20mA output to be customized 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"NPT.

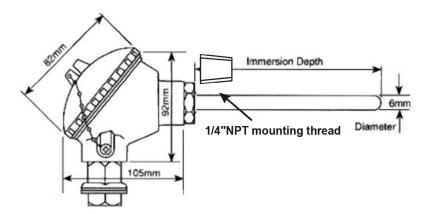
^{*}Requires ICAB-1 USB to serial converter programming cable.



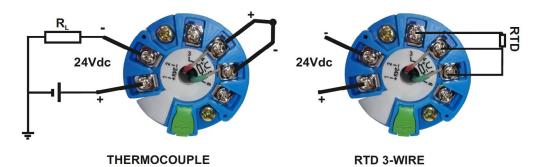
All dimensions are in millimeters.

Connection Head

The dimensions of the standard aluminum connection head are shown below



| Part No. | Description | Part No. | Description |
|-----------|----------------------|-----------|-----------------------|
| ITTUP100A | PT100 6x100mm 4-20mA | ITTUJ200A | J type 6x200mm 4-20mA |
| ITTUP150A | PT100 6x150mm 4-20mA | ITTUJ300A | J type 6x300mm 4-20mA |
| ITTUP200A | PT100 6x200mm 4-20mA | ITTUJ400A | J type 6x400mm 4-20mA |
| ITTUP250A | PT100 6x250mm 4-20mA | ITTUK150A | K type 6x150mm 4-20mA |
| ITTUP300A | PT100 6x300mm 4-20mA | ITTUK200A | K type 6x200mm 4-20mA |
| ITTUP400A | PT100 6x400mm 4-20mA | ITTUK300A | K type 6x300mm 4-20mA |
| | | ITTUK400A | K type 6x400mm 4-20mA |



Made in the UK

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