Datasheet

RS PRO RTD Sensor

Stock No.s: 1747511, 1747512, 1747513, 1747515, 1747516, 1747517, 1747518, 1747519, 1747521, 1747522, 1747523, 1747524, 1747525

| ITT SERIES

PROGRAMMABLE TEMPERATURE PROBES - 1/4"BSP - 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).

*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

SPECIFICATIONS

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 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.
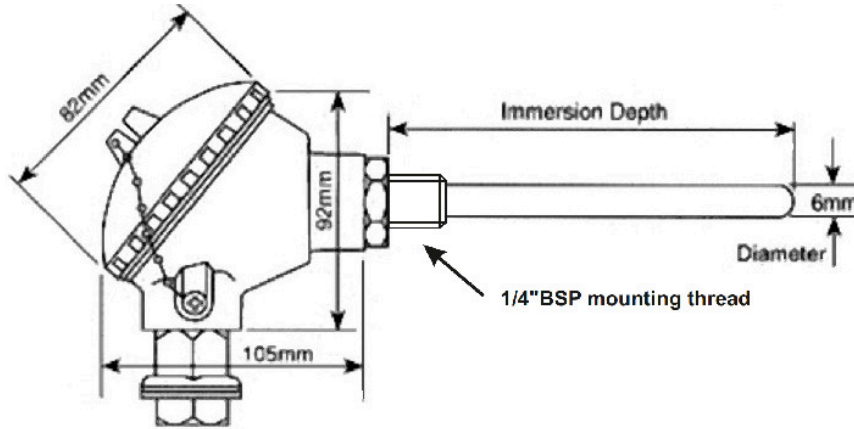The head mounting thread is 1/4"BSP.

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

⬤ DIMENSIONS

All dimensions are in millimeters.

Connection Head

The dimensions of the standard aluminum connection head are shown below

RS Stock No.	Description	RS Stock No.	Description
1747511	PT100 6x100mm 4-20mA	1747518	J type 6x200mm 4-20mA
1747512	PT100 6x150mm 4-20mA	1747519	J type 6x300mm 4-20mA
1747513	PT100 6x200mm 4-20mA	1747521	J type 6x400mm 4-20mA
1747515	PT100 6x250mm 4-20mA	1747522	K type 6x150mm 4-20mA
1747516	PT100 6x300mm 4-20mA	1747523	K type 6x200mm 4-20mA
1747517	PT100 6x400mm 4-20mA	1747524	K type 6x300mm 4-20mA
		1747525	K type 6x400mm 4-20mA

THERMOCOUPLE

RTD 3-WIRE