

## IEC Mineral Insulated Thermocouples – Type 'N'

Includes 2 metre Teflon lead & tails – Inconel<sup>®</sup> Alloy 600 or Nicrosil Alloy sheath



- Superior Type 'N' Mineral insulated Thermocouple to IEC 584.
- Thermoelement in accordance to IEC 60584-1 class 1.
- Nicrosil/Nisil conductors
- Type 'N' recognised for its improved thermal emf stability and higher operating temperature range
- Choice of Inconel<sup>®</sup> Alloy 600, or Nicrosil Alloy sheath
- 1.5mm or 3.0mm diameters in 500mm probe lengths
- Highly flexible, sheath can be bent/formed to suit many applications and processes
- Insulated hot junction
- Probe temperature range, Inconel<sup>®</sup> Alloy 600 sheath: -40°C to +1100°C, Nicrosil: -40°C to +1250°C
- Plain pot seal (200°C)
- 2 metre 7/0.2mm PFA Teflon<sup>®</sup> insulated flat pair cable and tails (colour coded to IEC 584-3)

## Specifications

Sensor type:	Type 'N' with Nickel Chrome Silicon/Nickel Silicon conductors
Construction:	Flexible mineral insulated probe with a choice of Inconel® Alloy 600, or Nicrosil Alloy sheath, plain pot seal & 2-metre-long extension cable
Sheath composition:	Inconel <sup>®</sup> Alloy 600 (Nickel, Chromium, Iron)
	Nicrosil Alloy (Nickel, Chromium, Silicon Alloy)
Element/hot junction:	Single element, hot junction insulated from sheath in order to prevent electrical noise & interference
Termination:	2 metre 7/0.2mm PFA Teflon <sup>®</sup> insulated flat pair cable with tail wires, colour coded in accordance with IEC 584-3
Probe temperature range:	-40°C to +1100°C (Inconel® Alloy 600 sheath) -40°C to +1250°C (Nicosil sheath)
Pot seal rating:	200°C

## Inconel<sup>®</sup> Alloy 600:

Excellent oxidation resistance to 1100°C (not suitable for sulphur bearing atmospheres above 550°C) Typical applications include heat treatment processes, annealing furnaces, chemical reactors, man -made fibre & synthetic material production, steam boilers, paper industry etc.

Т/С	Probe	Probe	Sheath	Cable	Tails:	order
Туре	Dia. (mm)	Length (mm)		jacket	+pos/-neg	Code
N	1.5	500	ALLOY 600	Pink	Pink/White	XF-1085-FAR
N	3.0	500	ALLOY 600	Pink	Pink/White	XF-1086-FAR

## **Nicrosil Alloy:**

Performs well in oxidising and carburising atmospheres to 1250°C, in addition it will withstand reducing sulphur atmospheres to around 500°C and oxidising sulphur atmospheres to around 800°C Typical applications include heat treatment furnaces, metal working, glass industry, pottery & ceramic production, brick & tile industry etc.

T/C	Probe	Probe	Sheath	Cable	Tails:	order
Type	Dia. (mm)	Length (mm)		jacket	+pos/-neg	Code
N	1.5	500	NICROSIL	Pink	Pink/White	XF-1087-FAR
N	3.0	500	NICROSIL	Pink	Pink/White	XF-1088-FAR