

# Custom Built Thermocouple Sensors with Miniature Plug

- Sensors made to meet your requirements
- Thermocouple types K, T, J, N and E available
- Sheath diameters from 0.25mm to 3mm
- Wide choice of sheath materials
- UKAS calibration available, please contact us for details
- Generally shipped in 5 to 7 days or sooner



For mating miniature sockets, please see page 64

SECTION 1	Thermocouple Type	Temperature Range (continuous)
<b>K</b>	Nickel Chromium vs Nickel Aluminium	0°C to +1100°C
<b>T</b>	Copper vs Constantan	-185°C to +400°C
<b>J</b>	Iron vs Constantan	+50°C to +800°C
<b>N</b>	Nicrosil vs Nisil	0°C to +1200°C
<b>E</b>	Nickel Chromium vs Constantan	0°C to +800°C

SECTION 2	Sheath Material	Maximum Temperature
<b>118</b>	321 Stainless Steel (Types K, J, T & E)	800°C
<b>125</b>	310 Stainless Steel (Type K)	1100°C
<b>176</b>	Inconel 600 (Types K & N)	1100°C
<b>114</b>	Nicrobell D (Types K & N)	1250°C
<b>156</b>	Hastelloy X (Type K)	1220°C

SECTION 3	Sheath Diameter (mm)	Sheath Diameter (inches)
<b>Standard Sizes</b>	0.25mm	0.010"
	0.5mm	0.020"
	1.0mm	0.039"
	1.5mm	0.059"
	2.0mm	0.079"
	3.0mm	0.118"

SECTION 4	Types of Sensing Junction	
<b>2I</b>		INSULATED (2ID for a Duplex element)
<b>2G</b>		GROUNDED (2GD for a Duplex element)

SECTION 5	Termination
<b>3P6M</b>	

SECTION 6	Optional Stainless Steel Adjustable Compression Fittings	
Dia.	1/8" BSPT	1/4" BSPT
0.5mm	ACF80S	—
1.0mm	ACF01S	ACF76S
1.5mm	ACF02S	ACF69S
2.0mm	ACF04S	ACF53S
3.0mm	ACF05S	ACF59S

For our full range of fittings, please see pages 72 and 73

## Order Code - Example

Type N°	Thermocouple Type (See section 1)	Sheath Length in mm	Sheath Material (See section 2)	Sheath Diameter (See section 3)	Sensing Junction (See section 4)	Termination (See section 5)	Compression Fitting (Optional, see section 6)
<b>12</b>	<b>- K</b>	<b>- 250</b>	<b>- 118</b>	<b>- 3.0</b>	<b>- 2I</b>	<b>- 3P6M</b>	<b>- ACF05S</b>