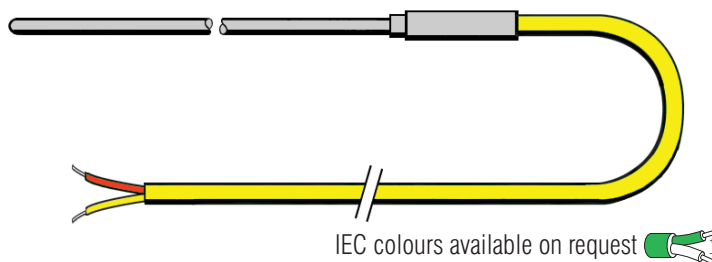


# Custom Built Thermocouple Sensors with Pot Seal


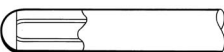
- Sensors made to meet your requirements
- Thermocouple types K, T, J, N and E available
- Sheath diameters from **0.25mm to 3mm**
- Wide choice of sheath materials
- Calibration available, please contact us for details
- Generally shipped in 5 to 7 days or sooner



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 (2I for a Duplex element)
<b>2G</b>		GROUNDED (2G for a Duplex element)

SECTION 5	Extension Cables (please specify length in metres)
<b>A30</b>	PVC Insulation (105°C)
<b>B50</b>	Teflon Insulation (250°C)
<b>C40</b>	Fibreglass Insulation (480°C)
<b>C60</b>	Fibreglass Insulation with Stainless Steel Overbraid (480°C)

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

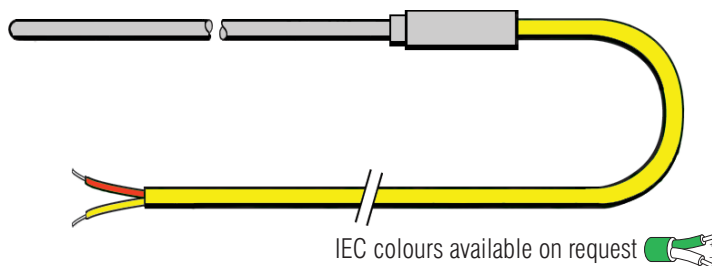
*For our full range of fittings, please see pages 72 and 73*

## Order Code - Example

Type No	Thermocouple Type (See section 1)	Sheath Length in mm	Sheath Material (See section 2)	Sheath Dia. (See section 3)	Sensing Junction (See section 4)	Termination (pot seal)	Extension Cable (See section 5)	Compression Fitting (Optional, see section 6)
<b>12</b>	<b>- K</b>	<b>- 450</b>	<b>- 118</b>	<b>- 3.0</b>	<b>- 2I</b>	<b>- 3P2L</b>	<b>- 2m A30KX</b>	<b>- ACF05S</b>

# Custom Built Thermocouple Sensors with Pot Seal

- Sensors made to meet your requirements
- Thermocouple types K, T, J, N and E available
- Sheath diameters from **4.5mm to 10.8mm**
- Wide choice of sheath materials
- Calibration available, please contact us for details
- Generally shipped in 5 to 7 days or sooner



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>	4.5mm	0.177"
	5.5mm*	0.216"
	6.0mm	0.236"
	8.0mm	0.315"
	10.8mm*	0.425"

\* 5.5mm and 10.8mm sheaths are thick wall for heavy duty use

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	Extension Cables (please specify length in metres)
<b>A30</b>	PVC Insulation (105°C)
<b>B50</b>	Teflon Insulation (250°C)
<b>C40</b>	Fibreglass Insulation (480°C)
<b>C60</b>	Fibreglass Insulation with Stainless Steel Overbraid (480°C)

SECTION 6	Optional Stainless Steel Adjustable Compression Fittings	
Dia.	1/4" BSPT	1/2" BSPT
4.5mm	ACF10S	ACF11S
5.5mm	ACF13S	ACF14S
6.0mm	ACF16S	ACF17S
8.0mm	ACF27S	ACF56S
10.8mm	—	ACF41S

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

## Order Code - Example

Type N <sup>o</sup>	Thermocouple Type (See section 1)	Sheath Length in mm	Sheath Material (See section 2)	Sheath Dia. (See section 3)	Sensing Junction (See section 4)	Termination (pot seal)	Extension Cable (See section 5)	Compression Fitting (Optional, see section 6)
<b>12</b>	<b>- J</b>	<b>- 500</b>	<b>- 118</b>	<b>- 6.0</b>	<b>- 2I</b>	<b>- 3P4CL</b>	<b>- 2m A30JX</b>	<b>- ACF17S</b>