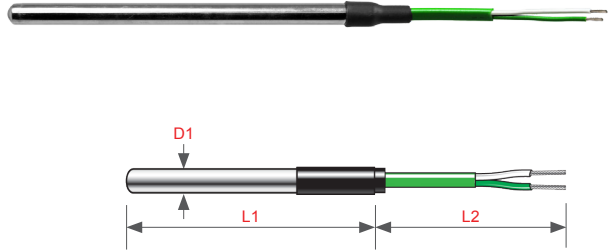


## TPC Fabricated Thermocouple Sensor with Crimp Seal Supplied with Heatshrink Strain Relief

Low-cost, fabricated thermocouple sensors available as standard with a 3.0mm, 4.0mm, 4.5mm, 6.0mm or 8.0mm diameter probe. The 316 stainless steel rigid probe has a plain crimped end seal with a PVC heatshrink seal which also acts as a cable strain relief. The temperature rating of the sensor is governed by the temperature rating of the extension cable. For example, a sensor with PVC cable is suitable for use up to +105°C; a sensor with fibreglass cable is suitable for use up to +400°C.

- 3.0 mm, 4.0mm, 4.5mm, 6.0mm or 8.0mm Ø probe
- Accuracy to IEC 60584.2 Class 2 (Class 1 also available)
- IEC 60584.3 colour coded extension cables and connectors
- Ex-stock options available
- In-house calibration service also available



Note: Type K thermocouple shown for illustrative purposes only



|          |   |             |
|----------|---|-------------|
| <b>1</b> | <b>Sensor Type</b>  | <b>Code</b> |
|          | Fabricated Thermocouple Sensor with Crimp Seal and Heatshrink Strain Relief | <b>TPC</b>  |

|          |  |                                    |             |
|----------|--|------------------------------------|-------------|
| <b>2</b> | <b>Conductor/Thermocouple Type (IEC 60584.2)</b> | <b>Conductor Temperature Range</b> | <b>Code</b> |
|          | <b>K</b> Nickel Chromium vs. Nickel Aluminium    | 0°C to +1100°C                     | <b>K</b>    |
|          | <b>J</b> Iron vs. Constantan                     | -50°C to +750°C                    | <b>J</b>    |
|          | <b>T</b> Copper vs. Constantan                   | -200°C to +350°C                   | <b>T</b>    |
|          | <b>N</b> Nicrosil vs. Nisil                      | 0°C to +1200°C                     | <b>N</b>    |
|          | <b>E</b> Nickel Chromium vs. Constantan          | -200°C to +900°C                   | <b>E</b>    |





|          |                              |                          |             |
|----------|------------------------------|--------------------------|-------------|
| <b>3</b> | <b>Metal Sheath Material</b> | <b>Temperature Range</b> | <b>Code</b> |
|          | 316 Stainless Steel          | 0°C to +800°C            | <b>316</b>  |

|          |                            |             |
|----------|----------------------------|-------------|
| <b>4</b> | <b>Probe Diameter (D1)</b> | <b>Code</b> |
|          | 3.0mm                      | <b>3.0</b>  |
|          | 4.0mm                      | <b>4.0</b>  |
|          | 4.5mm                      | <b>4.5</b>  |
|          | 6.0mm                      | <b>6.0</b>  |
|          | 8.0mm                      | <b>8.0</b>  |

Imperial sizes also available. Contact sales for further information.


|          |                                  |  |             |
|----------|----------------------------------|--|-------------|
| <b>5</b> | <b>Sensing Junction</b>          | <b>Number of Channels</b>  | <b>Code</b> |
|          | Insulated (isolated, ungrounded) | <br>Simplex/insulated example | Simplex     |
|          | Grounded (non-isolated)          | <br>Simplex/grounded example  |             |
|          |                                  |  | <b>I</b>    |
|          |                                  |  | <b>G</b>    |

|          |   |                 |
|----------|---|-----------------|
| <b>6</b> | <b>Probe Length (mm) (L1)</b>                                       | <b>Code</b>     |
|          | As required to suit your application (stock sensors also available) | <b>e.g. 300</b> |


|          |   |  |             |
|----------|---|--|-------------|
| <b>7</b> | <b>Extension Cable Length (mm) (L2)</b>           | <b>Cable Insulation</b>  | <b>Code</b> |
|          | As required to suit your application (e.g. 500mm) |  Heat Resistant PVC, 7/0.2mm Ø (+105°C) *     | <b>CP10</b> |
|          |   |  PFA, 7/0.2mm Ø (+260°C)                      | <b>CT45</b> |
|          |   |  Fibreglass, 7/0.2mm Ø (+400°C)               | <b>CG32</b> |
|          |   |  Fibreglass (St/St Braid), 7/0.2mm Ø (+400°C) | <b>CG39</b> |

See pages 44-51 for our full range of Thermocouple cable.

\* 6.0mm and 8.0mm probe diameters only

|   |   |             |
|---|---|-------------|
| <b>8</b>  | <b>Optional Thermocouple Connector (supplied attached to cable)</b> | <b>Code</b> |
|  | Miniature Thermocouple Plug (K, J, T, N, E)                         | <b>FMP</b>  |
|   | Miniature Thermocouple Socket (K, J, T, N, E)                       | <b>FMJ</b>  |
|   | Standard Thermocouple Plug (K, J, T, N, E)                          | <b>RSP</b>  |
|   | Standard Thermocouple Socket (K, J, T, N, E)                        | <b>RSJ</b>  |

See pages 53-58 for our full range of Thermocouple connectors.

|   |   |               |                  |                  |                  |
|---|---|---------------|------------------|------------------|------------------|
|  | <b>Optional 316 Stainless Steel Compression Fittings (to suit probe diameter)</b> | <b>Code</b>   |                  |                  |                  |
|   |   |               | <b>1/8" BSPT</b> | <b>1/4" BSPT</b> | <b>1/2" BSPT</b> |
|   |   | 3.0mm         | <b>CF30AS</b>    | <b>CF30CS</b>    | <b>CF30ES</b>    |
|   |   | 4.0mm         | <b>CF40AS</b>    | <b>CF40CS</b>    | <b>CF40ES</b>    |
|   |   | 4.5mm         | <b>CF45AS</b>    | <b>CF45CS</b>    | <b>CF45ES</b>    |
|   |   | 6.0mm         | <b>CF60AS</b>    | <b>CF60CS</b>    | <b>CF60ES</b>    |
| 8.0mm   | -   | <b>CF80CS</b> | <b>CF80ES</b>    |                  |                  |

Brass adjustable compression fittings also available. See page 63 for our full range.

**Important Note: the temperature rating of the sensor is governed by the temperature rating of the extension cable (option 7)**

|                             |          |          |          |          |          |          |              |          |          |
|-----------------------------|----------|----------|----------|----------|----------|----------|--------------|----------|----------|
| <b>Order Code (example)</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b>     | <b>8</b> | <b>9</b> |
|                             | TPC      | - K      | - 316    | - 6.0    | - I      | - 500    | - 500mm CP10 | - FMP    | - CF60AS |