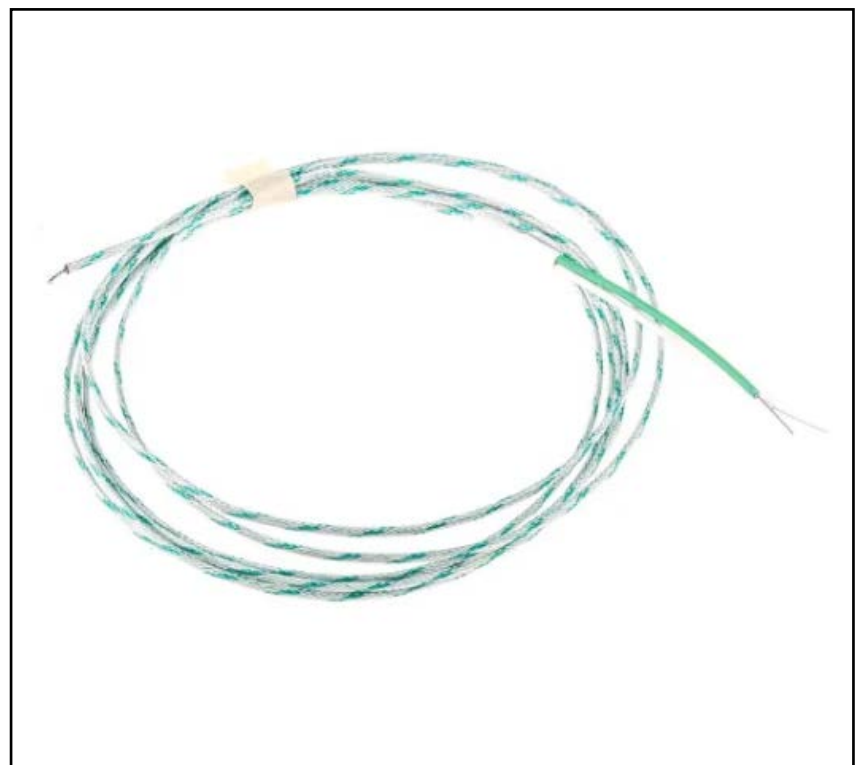


## FEATURES

- **Welded, exposed junction for fast response times**
- **Glassfibre insulated cable**
- **Conforms to IEC 60584**

## RS PRO Type K Thermocouple 0.3mm Diameter → +400°C

RS Stock No.: 621-2170



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

From RS Pro a range of Type J, K, T & N wire type thermocouple temperature sensors conforming to IEC 60584 standards. These thermocouples have a welded exposed hot junction for a fast response time and cable conductors surrounded by a glassfibre insulation.

## General Specifications

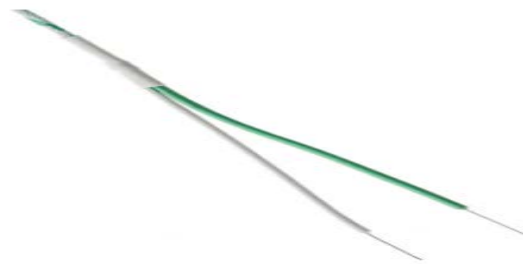
|                                      |   |
|--------------------------------------|---|
| <b>Thermocouple Type</b>             | Type K  |
| <b>Temperature Measurement Range</b> | -50°C to 1000°C   |
| <b>Construction</b>                  | Fine Wire Sensor  |
| <b>Measuring Junction</b>            | Exposed   |
| <b>Accuracy</b>                      | ±1.5°C  |
| <b>Output</b>                        | 100°C =4.096mV  |
| <b>Response Time</b>                 | 0.7s  |
| <b>Seebeck Coefficient</b>           | 41µV/°C   |
| <b>Maximum Voltage</b>               | 48.838mV  |
| <b>Transmitter</b>                   | None  |
| <b>Calibration Availability</b>      | Yes   |
| <b>Application</b>                   | Universal, measurement simple and economic, ideal for testing measures temperature or laboratory. |

## Mechanical Specifications

|                                     |             |
|-------------------------------------|-------------|
| <b>Probe Diameter</b>               | 0.3mm       |
| <b>Insulation / Sheath Material</b> | Glass Fibre |
| <b>Termination Type</b>             | Cable Gland |
| <b>Terminal Head</b>                | 17mm x 11mm |
| <b>Compensating Cable Length</b>    | 2m          |
| <b>Cable Insulation</b>             | PVC         |
| <b>Weight</b>                       | 8.33g       |

## Approvals

|                                  |                |
|----------------------------------|----------------|
| <b>Compliance/Certifications</b> | IEC 60584      |
| <b>Standards Met</b>             | RoHS Compliant |



| T/C Type | Conductors | Length   | Termination | +Positive tail wire | -Negative tail wire code | Allied Code | RS order Code   |
|----------|------------|----------|-------------|---------------------|--------------------------|-------------|-----------------|
| 'K'      | 1/0.2mm    | 1 metre  | Mini plug   | Green               | White                    | 70643600    | <b>363-0250</b> |
| 'K'      | 1/0.2mm    | 2 metre  | Mini plug   | Green               | White                    |             | <b>110-4482</b> |
| 'K'      | 1/0.2mm    | 5 metre  | Mini plug   | Green               | White                    |             | <b>123-6306</b> |
| 'K'      | 1/0.2mm    | 10 metre | Mini plug   | Green               | White                    |             | <b>123-6307</b> |
| 'J'      | 1/0.2mm    | 1 metre  | Mini plug   | Black               | White                    | 70643599    | <b>363-0244</b> |
| 'J'      | 1/0.2mm    | 2 metre  | Mini plug   | Black               | White                    |             | <b>123-6308</b> |
| 'J'      | 1/0.2mm    | 5 metre  | Mini plug   | Black               | White                    |             | <b>123-6309</b> |
| 'J'      | 1/0.2mm    | 10 metre | Mini plug   | Black               | White                    |             | <b>123-6310</b> |
| 'T'      | 1/0.2mm    | 1 metre  | Mini plug   | Brown               | White                    | 70643601    | <b>363-0266</b> |
| 'T'      | 1/0.2mm    | 2 metre  | Mini plug   | Brown               | White                    |             | <b>123-6311</b> |
| 'T'      | 1/0.2mm    | 5 metre  | Mini plug   | Brown               | White                    |             | <b>123-6312</b> |
| 'T'      | 1/0.2mm    | 10 metre | Mini plug   | Brown               | White                    |             | <b>123-6313</b> |

| T/C Type | Conductors | Cores         | Reel Length | Allied code | RS order code   |
|----------|------------|---------------|-------------|-------------|-----------------|
| J        | 1/0.2mm    | +Black/-White | 25 metres   | 70657194    | <b>827-5980</b> |
| J        | 1/0.2mm    | +Black/-White | 50 metres   | 70657195    | <b>827-5984</b> |
| J        | 1/0.315mm  | +Black/-White | 25 metres   | 70657198    | <b>827-5993</b> |
| J        | 1/0.315mm  | +Black/-White | 50 metres   | 70657199    | <b>827-5996</b> |
| K        | 1/0.315mm  | +Green/-White | 25 metres   | 70657200    | <b>827-6000</b> |
| K        | 1/0.315mm  | +Green/-White | 50 metres   | 70657205    | <b>827-6019</b> |
| T        | 1/0.315mm  | +Brown/-White | 25 metres   | 70657208    | <b>827-6028</b> |
| T        | 1/0.315mm  | +Brown/-White | 50 metres   | 70657206    | <b>827-6022</b> |
| J        | 1/0.508mm  | +Black/-White | 25 metres   | 70657197    | <b>827-5990</b> |
| J        | 1/0.508mm  | +Black/-White | 50 metres   | 70657201    | <b>827-6003</b> |
| K        | 1/0.508mm  | +Green/-White | 25 metres   | 70657203    | <b>827-6012</b> |
| K        | 1/0.508mm  | +Green/-White | 50 metres   | 70657204    | <b>827-6016</b> |
| J        | 7/0.2mm    | +Black/-White | 25 metres   | 70657202    | <b>827-6006</b> |
| K        | 7/0.2mm    | +Green/-White | 25 metres   | 70657207    | <b>827-6025</b> |
| T        | 7/0.2mm    | +Brown/-White | 25 metres   | 70657209    | <b>827-6031</b> |
| N        | 7/0.2mm    | +Pink/-White  | 25 metres   | 70657210    | <b>827-6034</b> |

|                   | Conductors | Cores         | Jacket | Reel Length | Allied Code | RS order code   |
|-------------------|------------|---------------|--------|-------------|-------------|-----------------|
| <b>Extension:</b> |            |               |        |             |             |                 |
| KX                | 7/0.2mm    | +Green/-White | Green  | 10 metres   | 70657084    | <b>827-5615</b> |
| KX                | 7/0.2mm    | +Green/-White | Green  | 25 metres   | 70641729    | <b>236-3820</b> |
| KX                | 7/0.2mm    | +Green/-White | Green  | 50 metres   | 70657085    | <b>827-5619</b> |
| KX                | 7/0.2mm    | +Green/-White | Green  | 100 metres  | 70646156    | <b>611-7889</b> |
| KX                | 7/0.2mm    | +Green/-White | Green  | 200 metres  | 70657088    | <b>827-5628</b> |
| JX                | 7/0.2mm    | +Black/-White | Black  | 10 metres   | 70641640    | <b>219-4753</b> |
| JX                | 7/0.2mm    | +Black/-White | Black  | 25 metres   | 70657078    | <b>827-5592</b> |
| JX                | 7/0.2mm    | +Black/-White | Black  | 50 metres   | 70657079    | <b>827-5596</b> |
| JX                | 7/0.2mm    | +Black/-White | Black  | 100 metres  | 70641737    | <b>236-3915</b> |
| JX                | 7/0.2mm    | +Black/-White | Black  | 200 metres  | 70657081    | <b>827-5606</b> |
| TX                | 7/0.2mm    | +Brown/-White | Brown  | 10 metres   | 70641637    | <b>219-4703</b> |
| TX                | 7/0.2mm    | +Brown/-White | Brown  | 25 metres   | 70641734    | <b>236-3870</b> |
| TX                | 7/0.2mm    | +Brown/-White | Brown  | 50 metres   | 70657095    | <b>827-5653</b> |
| TX                | 7/0.2mm    | +Brown/-White | Brown  | 100 metres  | 70651749    | <b>762-1146</b> |
| TX                | 7/0.2mm    | +Brown/-White | Brown  | 200 metres  | 70657098    | <b>827-5662</b> |
| NX                | 7/0.2mm    | +Pink/-White  | Pink   | 10 metres   | 70641635    | <b>219-4668</b> |
| NX                | 7/0.2mm    | +Pink/-White  | Pink   | 25 metres   | 70657091    | <b>827-5637</b> |
| NX                | 7/0.2mm    | +Pink/-White  | Pink   | 50 metres   | 70657089    | <b>827-5631</b> |
| NX                | 7/0.2mm    | +Pink/-White  | Pink   | 100 metres  | 70657092    | <b>827-5640</b> |

|                      | Conductors | Cores          | Jacket | Reel Length | Allied Code | RS order code   |
|----------------------|------------|----------------|--------|-------------|-------------|-----------------|
| <b>Compensating:</b> |            |                |        |             |             |                 |
| VX (KCB)             | 7/0.2mm    | +Green/-White  | Green  | 10 metres   | 70657082    | <b>827-5609</b> |
| VX (KCB)             | 7/0.2mm    | +Green/-White  | Green  | 25 metres   | 70641629    | <b>219-4551</b> |
| VX (KCB)             | 7/0.2mm    | +Green/-White  | Green  | 50 metres   | 70657080    | <b>827-5603</b> |
| VX (KCB)             | 7/0.2mm    | +Green/-White  | Green  | 100 metres  | 70641630    | <b>219-4573</b> |
| VX (KCB)             | 7/0.2mm    | +Green/-White  | Green  | 200 metres  | 70657083    | <b>827-5612</b> |
| VX (KCB)             | 13/0.2mm   | +Green/-White  | Green  | 10 metres   | 70657086    | <b>827-5621</b> |
| VX (KCB)             | 13/0.2mm   | +Green/-White  | Green  | 25 metres   | 70657087    | <b>827-5625</b> |
| VX (KCB)             | 13/0.2mm   | +Green/-White  | Green  | 50 metres   | 70657090    | <b>827-5634</b> |
| VX (KCB)             | 13/0.2mm   | +Green/-White  | Green  | 100 metres  | 70651750    | <b>762-1152</b> |
| U (RCA)              | 7/0.2mm    | +Orange/-White | Orange | 10 metres   | 70657096    | <b>827-5656</b> |
| U (RCA)              | 7/0.2mm    | +Orange/-White | Orange | 25 metres   | 70646158    | <b>611-7902</b> |
| U (RCA)              | 7/0.2mm    | +Orange/-White | Orange | 50 metres   | 70657097    | <b>827-5659</b> |
| U (RCA)              | 13/0.2mm   | +Orange/-White | Orange | 10 metres   | 70641641    | <b>219-4769</b> |
| U (RCA)              | 13/0.2mm   | +Orange/-White | Orange | 25 metres   | 70657093    | <b>827-5643</b> |
| U (RCA)              | 13/0.2mm   | +Orange/-White | Orange | 50 metres   | 70657094    | <b>827-5647</b> |
| T/C Type             | Conductors | Cores          | Jacket | Reel Length | Allied code | RS order code   |
| <b>Extension:</b>    |            |                |        |             |             |                 |
| KX                   | 7/0.2mm    | +Yellow/-Red   | Yellow | 25 m        | 70656102    | <b>814-0018</b> |
| KX                   | 7/0.2mm    | +Yellow/-Red   | Yellow | 100 m       | 70656105    | <b>814-0027</b> |
| KX                   | 7/0.2mm    | +Yellow/-Red   | Yellow | 200 m       | 70656103    | <b>814-0020</b> |
| JX                   | 7/0.2mm    | + White/-Red   | Black  | 25 m        | 70656096    | <b>813-9995</b> |
| JX                   | 7/0.2mm    | + White/-Red   | Black  | 100 m       | 70656098    | <b>814-0005</b> |
| JX                   | 7/0.2mm    | + White/-Red   | Black  | 200 m       | 70656099    | <b>814-0008</b> |
| TX                   | 7/0.2mm    | +Blue/-Red     | Blue   | 25 m        | 70656119    | <b>814-0074</b> |
| TX                   | 7/0.2mm    | +Blue/-Red     | Blue   | 100 m       | 70656122    | <b>814-0083</b> |
| TX                   | 7/0.2mm    | +Blue/-Red     | Blue   | 200 m       | 70656123    | <b>814-0086</b> |
| <b>Compensating:</b> |            |                |        |             |             |                 |
| VX (KCB)             | 7/0.2mm    | +Yellow/-Red   | Yellow | 25 m        | 70656127    | <b>814-0103</b> |
| VX (KCB)             | 7/0.2mm    | +Yellow/-Red   | Yellow | 100 m       | 70656130    | <b>814-0112</b> |
| VX (KCB)             | 7/0.2mm    | +Yellow/-Red   | Yellow | 200 m       | 70656131    | <b>814-0115</b> |

| T/C Type | Conductors | Cores        | Reel Length | Allied code | RS order code   |
|----------|------------|--------------|-------------|-------------|-----------------|
| KX       | 1/0.2mm    | +Yellow/-Red | 25 metres   | 70656106    | <b>814-0030</b> |
| KX       | 1/0.2mm    | +Yellow/-Red | 50 metres   | 70656111    | <b>814-0049</b> |
| KX       | 1/0.2mm    | +Yellow/-Red | 100 metres  | 70656109    | <b>814-0042</b> |
| KX       | 7/0.2mm    | +Yellow/-Red | 25 metres   | 70656110    | <b>814-0046</b> |
| KX       | 7/0.2mm    | +Yellow/-Red | 50 metres   | 70656113    | <b>814-0055</b> |
| KX       | 7/0.2mm    | +Yellow/-Red | 100 metres  | 70656114    | <b>814-0058</b> |
| KX       | 1/0.3mm    | +Yellow/-Red | 25 metres   | 70656104    | <b>814-0024</b> |
| KX       | 1/0.3mm    | +Yellow/-Red | 50 metres   | 70656107    | <b>814-0033</b> |
| KX       | 1/0.3mm    | +Yellow/-Red | 100 metres  | 70656108    | <b>814-0036</b> |
| TX       | 1/0.3mm    | +Blue/-Red   | 25 metres   | 70656121    | <b>814-0080</b> |
| TX       | 1/0.3mm    | +Blue/-Red   | 50 metres   | 70656126    | <b>814-0099</b> |
| TX       | 1/0.3mm    | +Blue/-Red   | 100 metres  | 70656124    | <b>814-0092</b> |
| TX       | 1/0.2mm    | +Blue/-Red   | 25 metres   | 70656125    | <b>814-0096</b> |
| TX       | 1/0.2mm    | +Blue/-Red   | 50 metres   | 70656128    | <b>814-0106</b> |
| TX       | 1/0.2mm    | +Blue/-Red   | 100 metres  | 70656129    | <b>814-0109</b> |