

### **FEATURES**

- Insulated hot junction for reduced electrical interference
- Mineral insulation for flexibility
- Durability and high performance
- Conforms to IEC standards
- Flexible, can be bent into shape for easy installation

# RS PRO Type K Thermocouple 250mm Length, 1.5mm Diameter → +1100°C

RS Stock No.: 397-1472



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 K thermocouple temperature sensors or probes that conform to IEC standards. These thermocouple temperature probes have a durable construction and feature a 310 stainless steel mineral insulated flexible sheath that can be bent and formed to suit a wide range of applications. The thermocouple has a single element insulated junction for a reduction in electrical interference. One end of the thermocouple is terminated with a miniature flat pin plug for a quick and easy connection

#### **General Specifications**

| Thermocouple Type             | Type K  |
|-------------------------------|---|
| Temperature Measurement Range | -40°C up to +1100°C   |
| Construction                  | Flexible mineral insulated probe with 310 stainless steel sheath  |
| Measuring Junction            | Insulated hot junction  |
| Application                   | Heat exchangers, power stations, brick and cement kilns, heat treatment and annealing furnaces, thermostats, food thermometers, vehicle diagnostics and in laboratories |

### **Mechanical Specifications**

| Probe Diameter      | 1.5mm           |
|---------------------|-----------------|
| Probe Length        | 250mm           |
| Probe Body Material | Stainless Steel |
| Termination Type    | Miniature Plug  |

#### **Approvals**

| Compliance/Certifications | IEC 584 |
|---------------------------|---------|
| Standards Met             | IEC     |







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



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

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



|              | Conductors | Cores          | Jacket | Reel Length | Allied<br>Code | RS order code |
|--------------|------------|----------------|--------|-------------|----------------|---------------|
| Compensating | :          |                |        |             |                |               |
| VX (KCB)     | 7/0.2mm    | +Green/-White  | Green  | 10 metres   | 70657082       | 827-5609      |
| VX (KCB)     | 7/0.2mm    | +Green/-White  | Green  | 25 metres   | 70641629       | 219-4551      |
| VX (KCB)     | 7/0.2mm    | +Green/-White  | Green  | 50 metres   | 70657080       | 827-5603      |
| VX (KCB)     | 7/0.2mm    | +Green/-White  | Green  | 100 metres  | 70641630       | 219-4573      |
| VX (KCB)     | 7/0.2mm    | +Green/-White  | Green  | 200 metres  | 70657083       | 827-5612      |
|              |            |                |        |             |                |               |
| VX (KCB)     | 13/0.2mm   | +Green/-White  | Green  | 10 metres   | 70657086       | 827-5621      |
| VX (KCB)     | 13/0.2mm   | +Green/-White  | Green  | 25 metres   | 70657087       | 827-5625      |
| VX (KCB)     | 13/0.2mm   | +Green/-White  | Green  | 50 metres   | 70657090       | 827-5634      |
| VX (KCB)     | 13/0.2mm   | +Green/-White  | Green  | 100 metres  | 70651750       | 762-1152      |
|              |            |                |        |             |                |               |
| U (RCA)      | 7/0.2mm    | +Orange/-White | Orange | 10 metres   | 70657096       | 827-5656      |
| U (RCA)      | 7/0.2mm    | +Orange/-White | Orange | 25 metres   | 70646158       | 611-7902      |
| U (RCA)      | 7/0.2mm    | +Orange/-White | Orange | 50 metres   | 70657097       | 827-5659      |
|              |            |                |        |             |                |               |
| U (RCA)      | 13/0.2mm   | +Orange/-White | Orange | 10 metres   | 70641641       | 219-4769      |
| U (RCA)      | 13/0.2mm   | +Orange/-White | Orange | 25 metres   | 70657093       | 827-5643      |
| U (RCA)      | 13/0.2mm   | +Orange/-White | Orange | 50 metres   | 70657094       | 827-5647      |
|              |            |                |        |             |                |               |

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



| T/C Type      | Conductors | Cores        | Jacket | Reel Length | Allied<br>code | RS order code |  |
|---------------|------------|--------------|--------|-------------|----------------|---------------|--|
| Extension:    |            |              |        |             | code           |               |  |
| KX            | 7/0.2mm    | +Yellow/-Red | Yellow | 25 m        | 70656102       | 814-0018      |  |
| KX            | 7/0.2mm    | +Yellow/-Red | Yellow | 100 m       | 70656105       | 814-0027      |  |
| KX            | 7/0.2mm    | +Yellow/-Red | Yellow | 200 m       | 70656103       | 814-0020      |  |
| JX            | 7/0.2mm    | + White/-Red | Black  | 25 m        | 70656096       | 813-9995      |  |
| JX            | 7/0.2mm    | + White/-Red | Black  | 100 m       | 70656098       | 814-0005      |  |
| JX            | 7/0.2mm    | + White/-Red | Black  | 200 m       | 70656099       | 814-0008      |  |
| TX            | 7/0.2mm    | +Blue/-Red   | Blue   | 25 m        | 70656119       | 814-0074      |  |
| TX            | 7/0.2mm    | +Blue/-Red   | Blue   | 100 m       | 70656122       | 814-0083      |  |
| TX            | 7/0.2mm    | +Blue/-Red   | Blue   | 200 m       | 70656123       | 814-0086      |  |
| Compensating: |            |              |        |             |                |               |  |
| VX (KCB)      | 7/0.2mm    | +Yellow/-Red | Yellow | 25 m        | 70656127       | 814-0103      |  |
| VX (KCB)      | 7/0.2mm    | +Yellow/-Red | Yellow | 100 m       | 70656130       | 814-0112      |  |
| VX (KCB)      | 7/0.2mm    | +Yellow/-Red | Yellow | 200 m       | 70656131       | 814-0115      |  |