

### **FEATURES**

- Meets IEC 584 standards
- Durable glass fibre insulated cable
- Grounded hot
  junction
- Easy to install washer termination

# RS PRO Type K Thermocouple 2m Length, 6mm Diameter → +350°C

**RS Stock No.: 621-2271** 



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 Type K and Type J thermocouple temperature sensors conforming to IEC 584 standards. These durable thermocouples have a rugged design with a 2 m long glass fibre insulated wire surrounded by a 316 stainless steel braid. The probe is terminated with a stainless steel washer with a 6 mm internal diameter for measuring surface temperatures. These thermocouple temperature sensors have a grounded hot junction for a fast response time.

#### **General Specifications**

| Thermocouple Type             | Туре К   |
|-------------------------------|--|
| Temperature Measurement Range | 0°C to 350°C   |
| Construction                  | Fine Wire Sensor   |
| Measuring Junction            | Grounded   |
| Accuracy                      | ±1.5°C   |
| Output                        | 100°C =4.096mV   |
| Response Time                 | 0.7s   |
| Seebeck Coefficient           | 41µV/°C  |
| Maximum Voltage               | 48.843mV   |
| Transmitter                   | None   |
| Calibration Availability      | Yes  |
| Application                   | Contact temperature with fixing screw, low profile temperature detection |

#### Mechanical Specifications

| Probe Diameter               | 6mm             |
|------------------------------|-----------------|
| Probe length                 | 2m              |
| Insulation / Sheath Material | Glass Fibre     |
| Termination Type             | Cable Gland     |
| Probe Body Material          | Stainless Steel |
| Terminal Head                | 17mm x 11mm     |
| Compensating Cable Length    | 2m              |
| Cable Insulation             | PVC             |



Approvals

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



| Т/С<br>Туре | Conductors | Length   | Termination | +Positive<br>tail wire | -Negative<br>tail wire code | Allied<br>Code | RS order<br>Code |
|-------------|------------|----------|-------------|------------------------|-----------------------------|----------------|------------------|
| 'K'         | 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         |
| า           | 1/0.2mm    | 1 metre  | Mini plug   | Black                  | White                       | 70643599       | 363-0244         |
| า           | 1/0.2mm    | 2 metre  | Mini plug   | Black                  | White                       |                | 123-6308         |
| า           | 1/0.2mm    | 5 metre  | Mini plug   | Black                  | White                       |                | 123-6309         |
| า           | 1/0.2mm    | 10 metre | Mini plug   | Black                  | White                       |                | 123-6310         |
| Ϋ́          | 1/0.2mm    | 1 metre  | Mini plug   | Brown                  | White                       | 70643601       | 363-0266         |
| Ψ΄          | 1/0.2mm    | 2 metre  | Mini plug   | Brown                  | White                       |                | 123-6311         |
| Ψ΄          | 1/0.2mm    | 5 metre  | Mini plug   | Brown                  | White                       |                | 123-6312         |
| Τ΄          | 1/0.2mm    | 10 metre | Mini plug   | Brown                  | White                       |                | 123-6313         |



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

|            | Conductors | Cores         | Jacket | Reel Length | Allied<br>Code | RS order code |  |  |  |
|------------|------------|---------------|--------|-------------|----------------|---------------|--|--|--|
| Extension: |            |               |        |             |                |               |  |  |  |
| 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      |  |  |  |
|            |            |               |        |             |                |               |  |  |  |
|            |            |               |        |             |                |               |  |  |  |
| ТΧ         | 7/0.2mm    | +Brown/-White | Brown  | 10 metres   | 70641637       | 219-4703      |  |  |  |
| ТΧ         | 7/0.2mm    | +Brown/-White | Brown  | 25 metres   | 70641734       | 236-3870      |  |  |  |
| ТΧ         | 7/0.2mm    | +Brown/-White | Brown  | 50 metres   | 70657095       | 827-5653      |  |  |  |
| ТΧ         | 7/0.2mm    | +Brown/-White | Brown  | 100 metres  | 70651749       | 762-1146      |  |  |  |
| ТΧ         | 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     | Conductors |                |        | eel Length  | Allied c       |                    |
| KX           | 1/0.2mm    | +Yellow/-Red   | -      | 5 metres    | 706561         |                    |
| KX           | 1/0.2mm    | +Yellow/-Red   | -      | 0 metres    | 706561         |                    |
| KX           | 1/0.2mm    | +Yellow/-Red   | 1      | 00 metres   | 706561         | 09 <b>814-0042</b> |
| кх           | 7/0.2mm    | +Yellow/-Red   | 2      | 5 metres    | 706561         | 10 <b>814-0046</b> |
| кх           | 7/0.2mm    | +Yellow/-Red   | 5      | 0 metres    | 706561         | 13 814-0055        |
| кх           | 7/0.2mm    | +Yellow/-Red   | 1      | 00 metres   | 706561         | 14 <b>814-0058</b> |
| кх           | 1/0.200    | Wellow/ Bod    | 2      | 5 metres    | 706561         | 04 <b>814-0024</b> |
|              | 1/0.3mm    | +Yellow/-Red   | -      |             |                |                    |
| KX           | 1/0.3mm    | +Yellow/-Red   | -      | 0 metres    | 706561         |                    |
| KX           | 1/0.3mm    | +Yellow/-Red   | 1      | 00 metres   | 706561         | 08 <b>814-0036</b> |
| ТХ           | 1/0.3mm    | +Blue/-Red     | 2      | 5 metres    | 706561         | 21 <b>814-0080</b> |
| ТХ           | 1/0.3mm    | +Blue/-Red     | 5      | 0 metres    | 706561         | 26 <b>814-0099</b> |
| ТХ           | 1/0.3mm    | +Blue/-Red     | 1      | 00 metres   | 706561         | 24 <b>814-0092</b> |
| тх           | 1/0.2mm    | +Blue/-Red     | 2      | 5 metres    | 706561         | 25 <b>814-0096</b> |
|              |            |                |        |             |                |                    |
| TX           | 1/0.2mm    | +Blue/-Red     | -      | 0 metres    | 706561         |                    |
| тх           | 1/0.2mm    | +Blue/-Red     | 1      | 00 metres   | 706561         | 29 <b>814-0109</b> |



| T/C Type    | Conductors    | Cores        | Jacket | Reel Length | Allied<br>code | RS order code |  |  |
|-------------|---------------|--------------|--------|-------------|----------------|---------------|--|--|
| Extension:  | 7/0.2         | (Vallaw/ Dad | Veller | 25          | 70050100       | 014 0010      |  |  |
| KX          | 7/0.2mm       | +Yellow/-Red | Yellow | 25 m        | 70656102       | 814-0018      |  |  |
| KX          | 7/0.2mm       | +Yellow/-Red | Yellow | 100 m       | 70656105       | 814-0027      |  |  |
| кх          | 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      |  |  |
| XL          | 7/0.2mm       | + White/-Red | Black  | 200 m       | 70656099       | 814-0008      |  |  |
| тх          | 7/0.2mm       | +Blue/-Red   | Blue   | 25 m        | 70656119       | 814-0074      |  |  |
| ТХ          | 7/0.2mm       | +Blue/-Red   | Blue   | 100 m       | 70656122       | 814-0083      |  |  |
| ТХ          | 7/0.2mm       | +Blue/-Red   | Blue   | 200 m       | 70656123       | 814-0086      |  |  |
| Compensatir | 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      |  |  |