

## FEATURES

- Adjustable bayonet probe
- Rugged 316 stainless steel sheath for resistance to corrosion
- Grounded hot junction
- Fast response time
- Robust glass fibre stainless steel over braid wire

## RS PRO Type J Thermocouple 20mm Length, 6mm Diameter → +600°C

RS Stock No.: 324-1894



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 thermocouple temperature sensors that conform to IEC 60584 standards. These Type J thermocouples have a durable design with glass fibre insulated wires surrounded by a stainless steel braid and a probe enclosed in a rugged 316 stainless sheath. The end of the probe is fitted with a spring loaded latch mounting 2 slot bayonet connector. This connector allows the thermocouple to be fitted securely. The grounded hot junction of this thermocouple allows it to have a fast response time

## General Specifications

|                                      |   |
|--------------------------------------|---|
| <b>Thermocouple Type</b>             | Type J  |
| <b>Temperature Measurement Range</b> | 0°C to 600°C  |
| <b>Construction</b>                  | Bayonet lock 2 nick type A Ø10.5 x 14 mm, assembly on 250 mm long compression spring  |
| <b>Measuring Junction</b>            | Grounded  |
| <b>Response Time</b>                 | 0.7s  |
| <b>Application</b>                   | General purpose. High temperature Oxidizing environment, applications where the thermocouple sensor tip is fitted directly into a drilled hole or recess in machinery. Typical applications include temperature measurement in the plastics and rubber industry where they are used in extrusion and moulding machinery |

## Mechanical Specifications

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| <b>Probe Diameter</b>               | 6mm                                 |
| <b>Probe Length</b>                 | 20mm                                |
| <b>Probe Body Material</b>          | 316Stainless Steel                  |
| <b>Insulation / Sheath Material</b> | Glass Fibre                         |
| <b>Termination Type</b>             | Cable                               |
| <b>Compensating Cable Length</b>    | 2.5m                                |
| <b>Cable Insulation</b>             | Exterminable insulation steel braid |

## Approvals

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



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### Other Dimensions :

| Diameter \ Lock | 5        | 6               | 8        |
|-----------------|----------|-----------------|----------|
| <b>A</b>        | 324-1844 | <b>324-1894</b> |          |
| B               | 324-1850 | 324-1901        | 324-1945 |
| C               | 324-1866 | 324-1917        | 324-1951 |
| D               | 324-1872 |                 | 324-1967 |
| E               |          | 324-1939        | 324-1973 |

| 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    | 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    | 1 metre  | Mini plug   | Black               | White                    | 70643599    | 363-0244      |
| 'J'      | 1/0.2mm    | 2 metre  | Mini plug   | Black               | White                    |             | 123-6308      |
| 'J'      | 1/0.2mm    | 5 metre  | Mini plug   | Black               | White                    |             | 123-6309      |
| 'J'      | 1/0.2mm    | 10 metre | Mini plug   | Black               | White                    |             | 123-6310      |
| 'T'      | 1/0.2mm    | 1 metre  | Mini plug   | Brown               | White                    | 70643601    | 363-0266      |
| 'T'      | 1/0.2mm    | 2 metre  | Mini plug   | Brown               | White                    |             | 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 |
|----------|------------|---------------|-------------|-------------|---------------|
| 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      |
| K        | 1/0.315mm  | +Green/-White | 25 metres   | 70657200    | 827-6000      |
| K        | 1/0.315mm  | +Green/-White | 50 metres   | 70657205    | 827-6019      |
| T        | 1/0.315mm  | +Brown/-White | 25 metres   | 70657208    | 827-6028      |
| T        | 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      |
| K        | 1/0.508mm  | +Green/-White | 25 metres   | 70657203    | 827-6012      |
| K        | 1/0.508mm  | +Green/-White | 50 metres   | 70657204    | 827-6016      |
| J        | 7/0.2mm    | +Black/-White | 25 metres   | 70657202    | 827-6006      |
| K        | 7/0.2mm    | +Green/-White | 25 metres   | 70657207    | 827-6025      |
| T        | 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 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        | 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> |

| 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> |