

## FEATURES

- Welded, exposed junction
- Class 1 tolerance
- Waterproof plug

## RS PRO Type K Thermocouple 1m Length, 1.2mm Diameter → +450°C

RS Stock No.: 409-4920



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 fine wire thermocouple temperature sensors with a Class 1 tolerance for optimum accuracy. These bare wire thermocouple temperature sensors have a durable construction with PTFE or glass fibre insulation. One end of the wire is terminated with a moulded plug that provides a quick and easy connection that is also waterproof. The exposed junctions of these Type K thermocouples means they have both increased sensitivity and a fast response time.

## General Specifications

<b>Thermocouple Type</b>	Type K
<b>Temperature Measurement Range</b>	-100°C to 450°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>	0.1s
<b>Seebeck Coefficient</b>	41µV / °C
<b>Transmitter</b>	None
<b>Calibration Availability</b>	Yes
<b>Application</b>	Construction, paper, electronic and packaging industries.

## Mechanical Specifications

<b>Probe Diameter</b>	1.2mm
<b>Probe Length</b>	1mm
<b>Probe Body Material</b>	Nickel Aluminium, Nickel Chrome
<b>Process Connection</b>	Moulded 2pin Plug
<b>Insulation / Sheath Material</b>	Glass Fibre
<b>Termination Type</b>	Miniature Plug
<b>Compensating Cable Length</b>	1m
<b>Cable Insulation</b>	Glass Fibre

## Approvals

<b>Compliance/Certifications</b>	EN61340
<b>Standards Met</b>	IEC



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	814-0030
KX	1/0.2mm	+Yellow/-Red	50 metres	70656111	814-0049
KX	1/0.2mm	+Yellow/-Red	100 metres	70656109	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 code	RS order code
<b>Extension:</b>						
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
<b>Compensating:</b>						
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