

# Thermocouple wire Type KAP301

## Radiation Resistant, High Temperature thermocouples type K and N




Radiation resistant Kapton insulated thermocouple wires are available from Allectra ex stock.

These KAP301 cables have an improved quality, the insulation withstands temperatures up to 300°C, the use in radiation environment is possible.

- Thermocouple wire Type K **301-KAP-TCK**
- Thermocouple wire Type N **301-KAP-TCN**

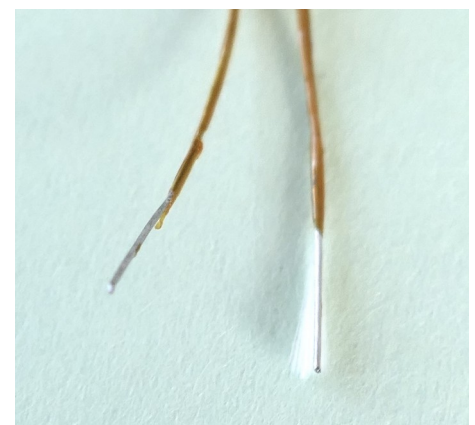


Various types of KAP301 wires

Specifications	
Vacuum	UHV (<math>10^{-10}</math> mbar)
Radiation Resistance	$10^9$ Rad = $10^7$ Gy
Temperature Range	4K ... 300°C (insulation)
Measurement range	Type K: -270 ... +1300°C Type N: -270 ... +1300°C
Thermoelement class	Class 1 according DIN/IEC 584 +/- 1.5K (@ 40...375°C) +/-0.004 x t (@ 375...750°C)
Construction	Twisted pair wires, with additional outer insulation
Conductor	2x 0.25mm Thermocouple wires Positive wire with glass marker
OD (Typical value)	0.95mm
Min. Bend radius	7.5 x diameter (long term)
Disruptive Voltage	>12KV DC in vacuum (wires to an external ground)



Double Insulated Thermocouple wire



The glass marker for the positive wire is well visible here

These thermocouple cables are offered on spools with 1m/ 5m / 10m / 50m / 100m or custom lengths.

For temperature measurement, the two wires just have to be drilled together to form the thermocouple. Spot welding is also possible.

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All data given in this sheet are carefully checked but subject to change at any time.