

## Thermocouple KX Extension Overall Screen 250V Cable



### Description

The Thermocouple KX Overall Screened Extension Cable range, supplied by Cleveland Cable Company, comprises specialized instrumentation extension cables designed for transmitting precise temperature measurement data from Type K thermocouple sensors. Manufactured in compliance with international and British specifications including IEC 60584-3, ANSI MC 96.1, and BS EN 50288-7, these cables carry a standard instrumentation voltage rating of 300V.

The internal construction consists of matched extension-grade alloys—a positive Nickel-Chromium (Chromel) wire and a negative Nickel-Aluminium (Alumel) wire—insulated with flame-retardant PVC or Low Smoke Halogen-Free (LSZH) compounds. To eliminate external electromagnetic interference and prevent signal distortion across long distances, the twisted pairs are bound by a high-performance overall aluminium/polyester foil tape screen with a tinned copper drain wire and completed with a robust outer jacket.

Engineered for dependable use across industrial sectors, this unarmoured cable is designed for environments subject to high levels of electrical noise and electrical crosstalk where mechanical risks are minimal. It is ideal for power stations, oil refineries, processing plants, and automation facilities where continuous, accurate temperature monitoring from remote probes is critical. The integrated overall shield protects the weak thermoelectric signal from electrical interference generated by nearby machinery and power lines. At the same time, the specialized outer sheath delivers reliable resistance against weathering, UV radiation, and moisture ingress, maintaining operational integrity within a temperature range of -20°C to +105°C.

For general installation, these unarmoured overall screened cables are suitable for pulling through underground plastic ducts and conduits, or for routing within indoor containment systems. They are also widely deployed above ground for fixed routing on open-air structures, external building walls, and industrial indoor or outdoor cable trays to securely connect field-mounted sensors to control room panels.

### Key Features



**Voltage Rating**  
250 Volts



**Flame Retardancy**  
BS EN/IEC 60332-1-2



**Temperature Limits**  
Operating temperature: -20°C To +60°C

### Core Colours

Positive: Green

Negative: White

### Standards

- BS EN/IEC 60332-1-2
- BS EN/IEC 60584-3
- NF C 32-070

### Construction

- **Conductor:** Positive: Nickel Chromium  
Negative: Nickel Aluminium
- **Insulation:** Flame Retardant Polyvinyl Chloride (PVC-FR)
- **Insulation Screen:** Overall Aluminium/Polyester Tape Screen (AL/PET)
- **Drain Wire:** Tinned Copper
- **Outer Sheath:** Flame Retardant Polyvinyl Chloride (PVC-FR)
- **Sheath Colour:** Green

### QA Lab

#### Cleveland Cable Test & Training Lab

Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing. Where applicable, cables are independently tested and certified by BASEC to ensure full compliance.



#### CPR

Cleveland Cable Company is committed to compliance with the Construction Products Regulation (CPR). Where applicable, all cables manufactured after 1st July 2017 have been assessed in accordance with CPR requirements, with full supporting documentation available.



### Our Sustainability Commitment

We are committed to the journey to Net Zero as a business partner, an employer and a community member.

By thinking and acting sustainably, we deliver excellent customer service while reducing carbon emissions in collaboration with our customers and suppliers.



#### ecovadis

Cleveland Cable Company has been independently assessed by EcoVadis, a globally recognised provider of business sustainability ratings. Our score places us among the top 35% of companies evaluated worldwide, reflecting our strong commitment to environmental, social, and ethical performance

#### ecovadis

## Thermocouple KX Extension Overall Screen 250V Cable - Dimensions

Reference	Conductor Size (mm <sup>2</sup> )	No Of Pairs	Stranding(mm)	Overall Diameter(Lower)	Overall Diameter(Upper)	Weight(Kg/Km)
TCOUPKSXOS3X2X/5	0.50	3	1/0.80	9.30	9.40	95
TCOUPKSXOS7X2X/5	0.50	7	1/0.80	12.10	12.20	160
TCOUPKSXOS12X2X/5	0.50	12	1/0.80	15.20	15.30	250
TCOUPKSXOS19X2X/5	0.50	19	1/0.80	16.30	19.00	385
TCOUPKSXOS27X2X/5	0.50	27	1/0.80	19.20	22.20	515
TCOUPKSXOS1X2X1	1	1	14/0.30	6.30	7.40	70
TCOUPKSXOS1X2X1/34	1.34	1	1/1.30	6.30	7.40	75

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