

Thermocouple TX Overall Screen Armoured Cable



Description

The Thermocouple TX Overall Screen Armoured Cable range, supplied by Cleveland Cable Company, comprises specialized instrumentation extension cables designed for transmitting precise temperature measurement data from Type T thermocouple sensors. Manufactured in compliance with international and British specifications including IEC 60584-3, BS4937, and ANSI MC 96.1, these cables carry a standard instrumentation voltage rating of 300V. The internal construction consists of matched extension alloys—a positive plain copper (Cu) wire and a negative copper-nickel (CuNi) wire—insulated with flame-retardant PVC. To eliminate electromagnetic interference and signal distortion, the cores are bound by an overall aluminium/polyester foil screen with a tinned copper drain wire, enclosed in an inner PVC bedding, reinforced with a heavy-duty Galvanised Steel Wire Armour (SWA) layer, and completed with a robust black PVC outer sheath.

Engineered for dependable use across heavy industrial sectors, this cable is designed for environments subject to elevated levels of electrical noise, crosstalk, and severe mechanical stress. It is ideal for power stations, oil refineries, chemical processing plants, and heavy manufacturing facilities where continuous, accurate temperature monitoring is critical. The integrated steel wire armour delivers superior mechanical protection against impact, tensile pull, and external crushing. Additionally, the rugged outer sheath provides durable resistance to weathering, UV radiation, and chemical ingress, maintaining operational integrity within a temperature range of -30°C to +105°C.

For general installation, these armoured cables are suitable for direct burial in trenches within free-draining soils, as well as pulling through underground plastic ducts and conduits. 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 connect instrumentation networks. During installation, standard parameters dictate that a minimum bending radius of 15 times the cable's overall diameter must be maintained after fixed installation to ensure continuous structural and electrical performance.

Key Features

Core Colours

Positive: Orange

Negative: White

Standards

Construction

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



Thermocouple TX Overall Screen Armoured Cable - Dimensions

Reference	Conductor Size (mm ²)	No Of Pairs	Stranding(mm)	Overall Diameter(Lower)	Overall Diameter(Upper)	Weight(Kg/Km)
TCOUPXOSA3X2X0/5	0.5	3	1/0.8	11.40	13.30	230
TCOUPXOSA7X2X0/5	0.5	7	1/0.8	14.00	16.20	320
TCOUPXOSA12X2X0/5	0.5	12	1/0.8	17.30	19.70	475
TCOUPXOSA19X2X0/5	0.5	19	1/0.8	20.50	23.70	660
TCOUPXOSA27X2X0/5	0.5	27	1/0.8	23.10	26.70	830
TCOUPXOSA1X2X1	1	1	14/0.3	9.70	11.30	180
TCOUPXOSA1X2X1	1.34	1	1/1.3	9.80	11.20	190

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