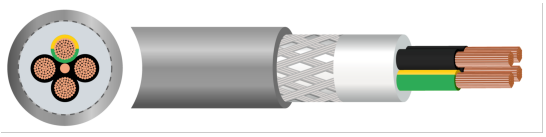
Powerchain CP Cable - 0.75mm² to 16mm²



Description

Powerchain CP cables are high-performance, multicore control and power cables engineered specifically for continuous motion within cable drag chains and robotic systems. These cables are defined by their "CP" construction: the "C" denotes a tinned copper wire braid (TCWB) screen for electromagnetic compatibility (EMC), which suppresses electrical interference, while the "P" refers to a robust Polyurethane (PUR) outer sheath. This PUR jacket provides exceptional resistance to mechanical abrasion, tearing, and mineral oils, making the cables suitable for the demanding environments found in modern manufacturing.

Designed for extreme flexibility, these cables typically utilise Class 6 extra-fine-wire copper conductors. This construction allows them to endure millions of bending cycles at tight radii without suffering from fatigue or conductor breakage. Their operational temperature range is broad, often maintaining flexibility from -50°C up to +80°C, which ensures reliability in both high-speed automated assembly lines and heavy-duty industrial machinery.

In practice, Powerchain CP cables are the industry standard for connecting frequency converters to servo motors and providing power to moving machine parts in CNC centres, laser cutting equipment, and material handling systems. Their primary function is to maintain signal integrity and power delivery in applications where traditional stationary cables would fail due to repetitive stress. By combining high-density shielding with high-grade insulation, they prevent cross-talk and data corruption in the sensitive feedback loops required for precision automation.

Key Features

Voltage Rating
300/500 Volts

Minimum Bending Radius
Fixed: 4 x overall diameter
Flexing: 8 x overall diameter

Flame Retardancy
BS EN/IEC 60332-1-2

Temperature Limits
Fixed: -50°C to +80°C
Flexing: -35°C to +80°C

Core Colours

Green Yellow and Black numbered.

Standards

- BS EN/IEC 60332-1-2
- BS EN/IEC 60811-404
- VDE 0482-332-1-2

Construction

- **Conductor**: Class 6 extra flexible copper
- **Insulation**: Thermoplastic Elastomer/Polypropylene (TPE/PP)
- **Inner Sheath**: Polyurethane (PUR)
- **Braiding**: Tinned Copper Wire Braiding (TCWB)
- **Outer Sheath**: Polyurethane (PUR)
- **Sheath Colour**: Grey

Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

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.

ISO/IEC 17025 Accredited Testing Laboratory

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

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