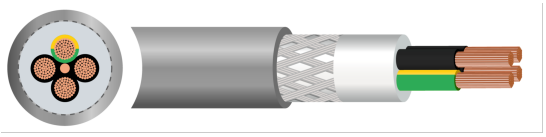
Powerchain CY Cable - 0.5mm² to 6mm²



Description

Powerchain CY cables are high-flexibility, multi-core control cables designed for continuous motion within standard drag chains and automation systems. The "CY" designation signifies a specific construction: the "C" refers to a tinned copper wire braid (TCWB) screen, and the "Y" indicates the use of Polyvinyl Chloride (PVC) for both the insulation and the outer sheath. This configuration ensures critical electromagnetic compatibility (EMC), suppressing external electrical interference and protecting signal integrity in environments where data or control lines run in close proximity to power lines.

Powerchain CY cables are engineered to withstand the dynamic stresses of automated machinery, these cables typically employ Class 6 extra-fine-wire copper conductors, allowing for consistent flexing across a single axis without the risk of conductor fatigue. While the PVC jacket provides a versatile and cost-effective solution for dry or moist indoor environments, it is generally less resistant to extreme mechanical abrasion or aggressive chemicals than the Polyurethane (PUR) sheathing found in "CP" variants. They are rated for a standard operating voltage of 300/500V and typically maintain a minimum bending radius of 8 times the overall diameter when flexed.

In industrial settings, Powerchain CY cables are primarily utilised for signal transmission, measurement, and regulation in CNC machines, robotics, and conveyor control panels. Their primary role is to facilitate interference-free data and power delivery to moving components, such as sensors and small motors, where precision and reliability are paramount. Because they are designed for standard industrial use, they are often the preferred choice for indoor production lines where extreme mechanical protection (like steel braiding) is secondary to signal protection as provided by the braiding.

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

Temperature Limits
Fixed: -40°C to +70°C
Flexing: -5°C to +70°C

Core Colours

Green Yellow and Black numbered

Standards

- BS EN/IEC 60332-1
- VDE 0482-332-1-2
- BS EN/IEC 60228

Construction

- **Conductor**: Class 6 extra flexible copper
- **Insulation**: Polyvinyl Chloride (PVC)
- **Bedding**: Polyvinyl Chloride (PVC)
- **Braiding**: Tinned Copper Wire Braiding (TCWB)
- **Outer Sheath**: Polyvinyl Chloride (PVC)
- **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

Powerchain CY Cable - 0.5mm² to 6mm² - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
PCHAINCY2X/5	0.50	2	7.70	100
PCHAINCY3X/5	0.50	3	8.00	105
PCHAINCY4X/5	0.50	4	9.00	130
PCHAINCY5X/5	0.50	5	9.70	150
PCHAINCY7X/5	0.50	7	11.20	210
PCHAINCY12X/5	0.50	12	13.20	270
PCHAINCY18X/5	0.50	18	15.50	385
PCHAINCY25X/5	0.50	25	18.60	545
PCHAINCY2X/75	0.75	2	8.30	115
PCHAINCY3X/75	0.75	3	8.90	135
PCHAINCY4X/75	0.75	4	9.30	150
PCHAINCY5X/75	0.75	5	10.20	175
PCHAINCY7X/75	0.75	7	12.00	235
PCHAINCY12X/75	0.75	12	14.20	330
PCHAINCY18X/75	0.75	18	17.20	480
PCHAINCY25X/75	0.75	25	20.20	655
PCHAINCY2X1	1	2	8.50	130
PCHAINCY3X1	1	3	9.10	145
PCHAINCY4X1	1	4	10.00	175
PCHAINCY5X1	1	5	10.70	200
PCHAINCY7X1	1	7	12.70	285
PCHAINCY12X1	1	12	15.00	380
PCHAINCY18X1	1	18	18.10	550
PCHAINCY25X1	1	25	21.10	755
PCHAINCY2X1/5	1.5	2	9.70	165
PCHAINCY3X1/5	1.5	3	10.20	180
PCHAINCY4X1/5	1.5	4	11.30	230
PCHAINCY5X1/5	1.5	5	12.00	260
PCHAINCY7X1/5	1.5	7	14.20	360
PCHAINCY12X1/5	1.5	12	17.60	535
PCHAINCY18X1/5	1.5	18	20.30	730
PCHAINCY25X1/5	1.5	25	24.10	1020
PCHAINCY2X2/5	2.5	2	11.20	225
PCHAINCY3X2/5	2.5	3	11.70	260
PCHAINCY4X2/5	2.5	4	12.90	310
PCHAINCY5X2/5	2.5	5	14.10	370
PCHAINCY7X2/5	2.5	7	17.20	535
PCHAINCY12X2/5	2.5	12	20.50	760

Reference	Conductor Size (mm2)	No Of Cores	Overall Diameter(mm)	Weight(Kg/Km)
PCHAINCY3X4	4	3	13.80	375
PCHAINCY4X4	4	4	15.20	455
PCHAINCY5X4	4	5	17.20	580
PCHAINCY3X6	6	3	15.20	470
PCHAINCY4X6	6	4	17.20	595
PCHAINCY5X6	6	5	18.80	720

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