

# PowerCat 6 4 Pair Bulk Cable UTP

**molex**

**Molex PowerCat 6 (C6) 4 Pair U/UTP cable has been designed to support high speed data transmission systems such as Gigabit Ethernet. The cable is part of the PowerCat 6 range of products that are designed to comply with the Category 6 specification.**

We recommend that the full range of PowerCat 6 products are used in a system to maximize cabling performance, providing extended frequency response and enhanced bandwidth.

## Features and Advantages

Compliant to ANSI/TIA-568.2-D Category 6 cable specifications

Supports ultrahigh speed data networks such as Gigabit Ethernet (1000 Base-T & 1000 Base-TX) and beyond

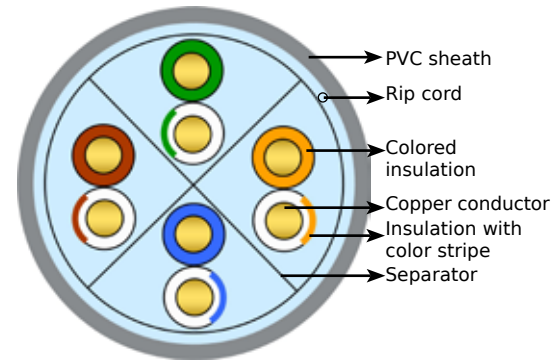
Incorporates central spine maintaining pair separation during installation to ensure premium performance after installation

CM/CMR FRPVC rated cable

Supplied in convenient 305m "Reel in a box"

UL listed

RoHS compliant



## Specifications

### MECHANICAL

Bending Radius: < 4 X Cable Diameter  
at  $-20^{\circ}\text{C} \pm 1^{\circ}\text{C}$   
Pulling Force: 11.5kg  
Temperature Range:  $-20^{\circ}$  to  $+70^{\circ}\text{C}$

### Construction

Conductor: 23 AWG Solid bare Copper  
0.555 $\pm$ 0.01mm  
Insulation: High Density Polyethylene Solid  
Pairs: 2 Insulated conductors twisted together  
Sheath: CM rated PVC  
Cable Diameter: 6.0  $\pm$  0.2mm

### ELECTRICAL

Conductor Resistance: < 9.38 Ohm/100m  
Mutual Capacitance: < 5.6nF/100m  
Resistance Unbalance: 5% Max  
Capacitance Unbalance: 330pF/100m  
Delay Skew: < 45nS

### PHYSICAL

Color code  
Pair: 1-2, White-Orange Stripe and Orange  
Pair: 3-6, White-Green Stripe and Green  
Pair 4-5: White-Blue Stripe and Blue  
Pair 7-8: White-Brown Stripe and Brown

### COMMERCIAL STANDARDS

ANSI/TIA-568.2-D  
ISO/IEC 11801  
IEC-60332-1

### APPROVALS

UL Listed  
ETL Verified

[www.molexces.com](http://www.molexces.com)

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## Transmission characteristics per 100m

Frequency MHz	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PSACR (dB)
1	2.0	20.0	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23.0	65.3	63.3	55.8	52.8	61.5	59.5
8	5.3	24.5	60.8	58.8	49.7	46.7	55.5	53.5
10	6.0	25.0	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25.0	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25.0	54.8	52.8	41.8	38.8	46.3	44.3
25	9.5	24.3	53.3	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.6	51.9	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.5	47.4	45.4	31.9	28.9	32.0	30.0
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29.0	18.0	39.8	37.8	21.8	18.8	10.8	8.8
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5

## Ordering Information

Order No.	SAP No.	Description
CAA-00076	Consult Molex	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Blue
CAA-00176	Consult Molex	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Gray
CAA-00394	Consult Molex	PowerCat 6 4 Pair Cable, CMR Rated, 305m, Reel in a Box - Blue
CAA-00076-YL	181740085	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Yellow
CAA-00076-RD	181740072	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Red
CAA-00076-GR	181740094	PowerCat 6 4 Pair Cable, CM Rated, 305m, Reel in a Box - Green

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