molex PowerCat 6 C6 Cable PVC

Features and Benefits

Molex Premise Networks 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 maximise cabling performance, providing extended frequency response and enhanced bandwidth.

- Enhanced performance 4 pair PVC cable
- Category 6 compliant
- Colour coded for ease of termination
- 500 metre and 305 metre reel
- 60332-1 Fire performance

Commercial Standards

ISO/IEC 11801, EIA/TIA -568-C.2

Fire Propagation Tests:

IEC 60332-1

Technical Information

Mechanical Characteristics

Conductor Size: 23 AWG
Primary Insulation: HDPE

Sheath Type: PVC (RoHs & REACH compliant)
External O.D: 6.3mm ± 0.4mm
Sheath Colour: Grey (RAL 7037)
Average NVP%:   68%

Cable Pulling Directions:
- Reel-in-box:
  Use a steady pulling speed as sudden stopping leads to snags or kinks of the cable on the reel
- Reelex box:
  Place the box at the upright position and keep the box closed during pulling as opening the box while pulling leads to kinks
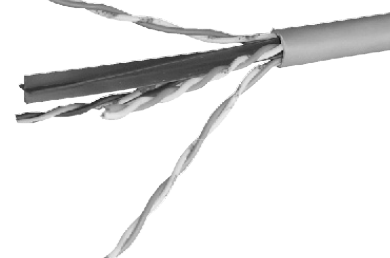
  If cables snag, stop pulling immediately, open the box to check and resolve the issue before pulling again

Maximum Pulling Strength in Newtons (N):
- 1 cable is 100N
- n cables together (for 1<n<8) is nx50+50 (for example, 2 cables: 150N, 3 cables: 200N, etc.)
- 8 or more cables together, 400N

Electrical Characteristics

1.0-250.0MHz Impedance (Ω):
                 100±15
1.0-250.0MHz Delay Skew: (ns/100m)
                 ≤45
DC Resistance (Ω/100m) max.: 9.38
DC Conductor Resistance Unbalance (%):   Maximum 5.0

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Technical Information

Electrical Characteristics

Technical Performance (100) (20):							
Frequency (MHz)	RL ≥dB	ATT ≤dB	NEXT ≥dB	PHASE DELAY ≤ns	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB
1	20.0	2.03	74.3	570.00	72.3	67.8	64.8
4	23.0	3.78	65.3	552.00	63.3	55.8	52.8
8	24.5	5.32	60.8	546.73	58.8	49.7	46.7
10	25.0	5.95	59.3	545.38	57.3	47.8	44.8
16	25.0	7.55	56.2	543.00	54.2	43.7	40.7
20	25.0	8.47	54.8	542.05	52.8	41.8	38.8
25	24.3	9.51	53.3	541.20	41.3	39.8	36.8
31.25	23.6	10.67	51.9	540.44	49.9	37.9	34.9
62.5	21.5	15.38	47.7	538.55	45.4	31.9	28.9
100	20.1	19.80	44.3	537.60	42.3	27.8	24.8
200	18.0	28.98	39.8	536.54	37.8	21.8	18.8
250	17.3	32.85	38.3	536.27	36.3	19.8	16.8

ORDERING INFORMATION

Order No.	Description
CAA-00326	PowerCat 6 C6 Cable 500m reel U/UTP PVC
CAA-00302	PowerCat 6 C6 Cable 305m reel in a box U/UTP PVC

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