FEATURES AND SPECIFICATIONS

U/FTP 4 Pair PowerCat 6A LS0H, Euroclass B2ca -S1a, d1,a1, 500m reel, Violet

Features summary

The PowerCat 6A Shielded Cable is a key component of the PowerCat 6A end-to-end solution.
Molex PowerCat 6A U/FTP Cable is specifically designed to support high speed data network applications such as 10-Gigabyte Ethernet (10GBASE-T). The cable is constructed of 4 screened pairs and a drain wire. This cable minimises alien crosstalk, provides excellent signal isolation and provides superior electromagnetic interference (EMI) protection.
Molex recommends that the full range of PowerCat 6A Shielded products be used in a system to maximise cabling performance. This system is compliant with the latest ISO/IEC 11801 2nd Ed 2.2:2011 and ratified TIA 568-C.2 for the support of cat. 6A and 10GBASE-T

- Reaction to Fire Euroclass – B2ca -s1a d1 a1
- Outstanding signal isolation
- The cable is compliant with ISO/IEC 11801 Ed 2.2:2011 and TIA 568-C.2 and EN 50173:2011
- Enhanced performance 4 pair U/FTP LS0H Cable
- Resistant to alien crosstalk (Alien NEXT) and crosstalk (PS NEXT)
- Colour coded for ease of termination
- Reaction to Fire Euroclas B2ca, -s1a, d1, a1
- RoHS compliant

Commercial Standards

TIA-568-C.2 for category 6A;
ISO/IEC 11801 Ed.2.2: 2011;
EN 50173:2011;
IEC 60332-1 (single vertical cable);
IEC 60754 (halogen and acid materials);
IEC 61034 (no dense smoke)
RoHS compliant

Applications

Category 6A U/FTP Cable is intended for high speed data applications up to 500 MHz including:
IEEE 802.3 10GBASE-T 10 Gb/s
IEEE 802.3 1000BASE-T 1 Gb/s
TIA/EIA-854 1000BASE-TX 1 Gb/s
ATM 155 Mb/s 155 Mb/s

Fire propagation test

Eu Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
Euroclass B2ca -s1a d1 a1 class
DoP no MLXCES-2017-C-024
located on the web:
http://www.molexces.co.uk/about-us/our-compliance/cpr/dop-certificates/

Technical Information

Conductor size [mm]: 23 AWG (0.570±0,005)
Insulated conductor diameter [mm]: 1.350 ±0,05
Color code: Blue x White, Orange x White, Green x White, Brown x White
Pair number: 4
Outside cable diameter [mm]: 7.4±0,5
Individual pair shield: Aluminium foil, providing 100% coverage, foil face out
Drain Wire: Yes
Overall shield: No
Temperature range [°C]
during installation: 0°C to +50°C
during operation: -20°C to +60°C
during storage: -20°C to +60°C
Acceptable bend radius
during installation: 8 x cable size
during operation: 4 x cable size
Pulling force: 100N max
Sheath: LS0H
Flame test: IEC 60332-1
Gas & smoke test: IEC 60754 (halogen&acid gas) and IEC 61034 (dense smoke)
Sheath color LSZH: Violet RAL4005
Shipping weight [kg]: 28.5
Cable length tolerance: +/- 5%

Electrical parameters

Characteristic Impedance [Ohm]:
100±15 @ 1-250 MHz
100±20 @ 250-500 MHz
DC Resistance [Ohm/100m]: 9,38 max.
Resistance unbalance [%]: 2% max.
Capacitance [nF/100m]: ≤ 5.6
Voltage rating [Vdc]: 72 max.
NVP: 74% - printed on a jacket
Delay Skew [nS/100m]: ≤45
Insulation Resistance [MegaOhm•Km]
5000 min. @ 500 Vdc

ORDERING INFORMATION

Order No.	Description
CAA-00413-VL	U/FTP 4 Pair PowerCat 6A LS0H, Euroclass B2ca -S1a, d1,a1, 500m reel, Violet

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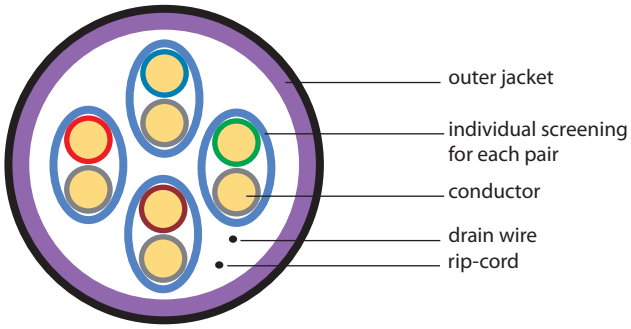
Transmission Properties and Electrical specifications

Frequency	RL	ATT	NEXT	PHASE DELAY	TCL	PS NEXT	ELFEXT	PSELFEXT	PS ANEXT
MHz	≥ dB	≤ dB	≥ dB	≤ ns	≥ dB	≥ dB	≥ dB	≥ dB	≥ dB
1.0	20	2.1	74.3	570.0	40.0	72.3	68.0	65.0	67.0
4.0	23	3.8	65.3	552.0	40.0	63.3	56,0	53.0	67.0
8.0	24.5	5.3	60.8	546.7	40.0	58.8	49.9	46.9	67.0
10.0	25.0	5.9	59.3	545.4	40.0	57.3	48.0	45.0	67.0
16.0	25.0	7.5	56.2	543.0	38.0	54.2	43.9	40.9	67.0
20.0	25.0	8.4	54.8	542.1	37.0	52.8	42.0	39.0	67.0
25.0	24.3	9.4	53.3	541.2	36.0	51.3	40.0	37.0	67.0
31.25	23.6	10.5	51.9	540.4	35.1	49.9	38.1	35.1	67.0
62.5	21.5	15.0	47.4	538.6	32.0	45.4	32.1	29.1	65.6
100	20.1	19.1	44.3	537.6	30.0	42.3	28.0	25.0	62.5
200	18.0	27.6	39.8	536.5	27.0	37.8	22.0	19.0	58.0
250	17.3	31.1	38.3	536.3	26.0	36.3	20.0	17.0	56.5
300	16.8	34.3	37.1	536.1	25.2	35.1	18.5	15.5	55.3
500	15.2	45.3	33.8	535.6	23.0	31.8	14.0	11.0	52.0

U/FTP C6A CABLE



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