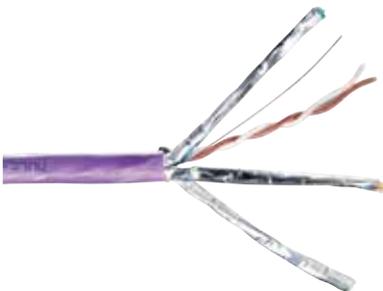molex

PowerCat 6A U/FTP LS0H Cable
Cca-s1a,d0,a1 Easy-pull box ❯

Molex PowerCat 6A U/FTP LS0H cable is supplied in an easy pull box for the support of Category 6A shielded installations.

The cable is constructed of four screened pairs with a drain wire and enclosed in a Cca-s1a, do,a1 rated sheath compliant with the EU and GB Construction Products Regulation (CPR).
Molex recommends that the full range of PowerCat C6A Shielded products be used in a system to maximize cabling performance. The system is compliant with ISO/ IEC 11801:2017 and ANSI/TIA-568.2-D for the support of 10GBASE-T.

Available in UK / EU only.

FEATURES AND ADVANTAGES

Supplied in 305m easy-pull boxes for convenient handling and speedy installation

Robust signal isolation required for C6A transmission performance

Color coded for ease of termination

Reaction to Fire Euroclass Cca-s1a,d0,a1

APPLICATIONS

PowerCat 6A U/FTP easy-pull cable is compliant with ANSI 568.2-D and ISO 11801:2017 Category 6A in the following configurations:

• Two connector permanent link and channel when installed with PowerCat 6A DataGate Jack part nos: KSJ-00096-02 and KSJ-00096-04 and Molex C6A shielded patch cords.

• Two, three and four connector permanent link and channel when installed with PowerCat 6A Keystone Jack part nos: KSJ-00079, KSJ-00088, KSJ-00092 and KSJ-00095 and Molex C6A shielded patch cords.

www.molexces.com/products/copper/cat6a/

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SPECIFICATIONS

Commercial Standards

ISO 11801:2017,
ANSI/TIA-568.2-D-2018,
IEC 60332-1, IEC 61034-1&2,
IEC 60754-1 & 2
IEC 60332-3-22 (3A)

Fire Propagation Tests

EU Regulation 305/2011 (CPR)
EN 50575:2014+A:2016
Euroclass: Cca-s1a,d0,a1

Mechanical

Conductor Size: 0.55+/-0.005mm
Primary Insulation: Polyethylene
Sheath Type: LS0H
Screen material: Al-foil
Drain wire: Tinned copper
External O.D: 7.4 +/-0.3mm
Sheath Color: Violet RAL4005
Average NVP%: 74% (nom.)
Minimum bend radius: 8 x o.d.
Maximum Pulling force: 80N
Operating Temperature:
-20° to +70°C
Installation Temperature:
 0° to + 50°C

Electrical

1.0-250 MHz Impedance (Ω):
100 ± 15
200 - 250MHz Impedance (Ω):
100+/-22
300- 500MHz Impedance (Ω):
100+/-25
DC Resistance (Ω/100m) max.: 9.38
**DC Conductor Resistance Unbalance
(%):** Maximum 5.0

Physical

Shipping weight 305m easy-pull box:
17kg

PoE
**Our PowerCat 6A system is suitable
for the most demanding PoE
applications:**

IEEE 802.3bt from Type 1 to Type 4, and
CISCO UPoE+

HD Base-T PoH up to 100W

RP3 compliant as defined by EN 50174-
2:2018, ISO/IEC 14763-2:2019 and AS/
NZS 14763.2:2020

Notes:

For new installations of PoE Type
3 / Class 5 and above that wish to
be eligible for the Molex 25 year
Application Assurance Warranty, we
require Category 6A cable to be used
throughout.

To confirm your PoE / RP3 cabling
design is eligible for the Molex 25 year
Application Assurance Warranty, your
design must be verified and validated
with the Molex PoE Calculator. Read
more

https://www.molexces.com/poe-
calculator

Molex recommends that the PoE
feature on an individual switch port are
power disabled prior to unplugging the
associated powered Device.

Molex recommends that the full range
of PowerCat 6A products be used in a
system to maximize cabling and PoE
performance

Details on Molex requirements for
Warranty can be found at:

https://www.molexces.com/about-us/
our-warranty/

www.molexces.com/products/copper/cat6a/

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PowerCat 6A U/FTP LS0H Cable Cca-s1a,d0,a1 Easy-pull box ❯

TRANSMISSION PROPERTIES

Transmission Frequency MHz	1	4	10	16	20	31.25	62.5	100	200	250	300	500
NEXTA dB/100m	74.3	65.3	59.3	56.2	54.8	51.9	47.4	44.3	39.8	38.3	37.1	33.8
Characteristic Impedance ohm	100+/- 15								100+/- 22		100+/- 25	
Attenuation dB/100m	2.1	3.8	5.9	7.5	8.4	10.5	15	19.1	27.6	31.1	34.3	45.3
Return Loss dB/100m	20	23	25	25	25	23.6	21.5	20.1	18	17.3	16.8	15.2
ACRF dB/100m	67.8	55.8	47.8	43.7	41.8	37.9	31.9	27.8	21.8	19.8	18.3	13.8
PSNEXTA dB/100m	72.3	63.3	57.3	54.2	52.8	49.9	45.4	42.3	37.8	36.3	33.3	31.8
PSACRF dB/100m	64.8	52.8	44.8	40.7	38.8	34.9	28.9	24.8	18.8	16.8	15.3	10.8
Delay ns/100m	570	552	545	543	542	540	539	538	537	536	536	536
Skew ns/100m	45											

ORDERING INFORMATION

Order No.	SAP No.	Description
CAA-00453-VL	183020068	PowerCat 6A U/FTP LS0H Cca-s1a,d0,a1 Violet 305m easy-pull box

www.molexces.com/products/copper/cat6a/