

## Features and Benefits

Molex Premise Networks PowerCat C5E 4 Pair F/UTP cable has been designed to support high speed data transmission systems. This cable is part of the PowerCat System range of products that have been designed based on the PowerSum principle of crosstalk, measurement and test. The cable is constructed of 4 pairs enclosed in laminated aluminium foil with a tin drain wire, encased in a LSOH sheath.

## Technical Information

### Mechanical Characteristics

Conductor size [mm]: 24 AWG  
(0.51mm)  
Insulated conductor diameter [mm]:  
≤ 1.0  
Single pair shield: none  
Pair number: 4  
Cable shield: one-side laminated  
aluminium foil  
Outside cable diameter [mm]: ≤ 6.20  
Maximum Pulling force: 100N

Temperature range  
during installation: 0 to +50°C  
during operation: -20 to +60°C  
Acceptable bend radius  
during installation: 8 x cable size  
during operation: 4 x cable size  
Sheath: LSOH IEC 60332-1  
Sheath colour: purple

### Colour coding

Pair 1: white-blue/blue  
Pair 2: white-orange/orange  
Pair 3: white-green/green  
Pair 4: white-brown/brown

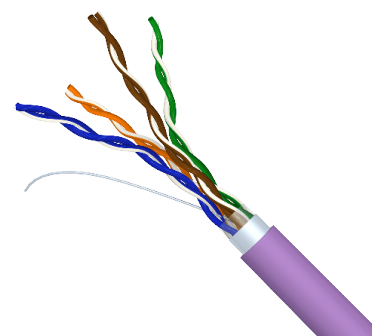
Shipping weight [kg]: 16.5

### Electrical/Optical Characteristics

Resistance [W/km]: 98  
Nominal propagation: value printed on  
a cable

### Transmission parameters:

Insertion Loss [1-100MHz]	$\leq 1.967\sqrt{f} + 0.023(f) + 0.050/\sqrt{f}$	dB/100
Next[1-100MHz]	$\geq 35.3 - 15 \cdot \log(f/100)$	dB
PS NEXT [1-100MHz]	$\geq 32.3 - 15 \cdot \log(f/100)$	dB
ELEXT [1-100MHz]	$\geq 23.8 - 20 \cdot \log(f/100)$	dB
PS ELFECT [1-100MHz]	$\geq 20.8 - 20 \cdot \log(f/100)$	dB
RL [1≤f<10MHz]	20+5·log(f)	dB
RL [10≤f<20MHz]	25	dB
RL [20≤f≤100MHz]	25-7·log(f/20)	dB
Propagation delay [1-100MHz]	534·36/√f	ns/100m
Delay Skew [1-100MHz]	45	ns/100m



## ORDERING INFORMATION

Order No.	SAP No.	Description
39A-504-LS	Consult Molex	PowerCat 5E cable F/UTP LSOH Violet, 305m box

## MOLEX PREMISE NETWORKS

**Americas**  
Tel: 630 969 4550  
www.molexpn.com

**EMEA**  
Tel: 44 (0)2392 205800  
www.molexpn.co.uk

**APAC**  
Tel: 61 3 9971 7111  
www.molexpn.com.au