



Category 5e F/UTP PVC and LSZH Communications Cable

Product Type:

Data Cable

Application:

Concordia Category 5e F/UTP PVC and LSZH cables are designed to support horizontal networking applications over channel distances up to 100 metres. The cable meets the specified performance for Category 5e F/UTP cables and supports all CLASS D applications as defined within ISO/IEC 11801 2nd Edition.

Standards:

- ISO/IEC 11801 2nd Edition
- TIA/EIA 568-C.2
- EN 50173, EN50288-3-1
- IEC 61156-5, IEC60332-1-2,
- For LSZH cables : IEC61034, IEC60754-2

Construction:

Conductor:	Solid plain annealed copper
Insulation:	Polyethylene
Cable:	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Screen	Pairs Overall shielded with aluminum-polyester foil with a tinned copper drain wire in contact with the aluminium side of the tape
Sheath:	PVC, Grey LSZH : Violet
Diameter:	6.25mm

Electrical properties at 20°C

Characteristic Impedance (1-100MHz)	100 ± 15Ω	
DC loop resistance	≤ 19.0Ω/100m	
Resistance unbalance	≤ 2%	
Capacitance unbalance to pair to earth	≤ 1600 pF/km	
Nominal velocity of propagation	67%	
Propagation delay @ 4MHz	≤ 552ns / 100m	
Delay skew	≤ 45ns/100metres	
Test voltage (d.c. for 1 minute) Conductor/Conductor & Conductor/Screen	1000V	
Insulation resistance (500V d.c)	≥ 5000MΩ.km	
Transfer Impedance	at 1MHz	≤ 50mΩ/m
	At 10MHz	≤ 100mΩ/m
	At 30MHz	≤ 200mΩ/m
Coupling Attenuation	≥ 55dB	

Transmission line performance at 20°C

Frequency MHz	Attenuation dB/100m	NEXT dB	ACR dB/100m	PSNEXT dB	ELFEXT dB/100m	PSELFEXT dB/100m	Return Loss
1	2.1	65.3	63.2	62.3	63.8	60.8	20.0
4	4.0	56.3	52.3	53.3	51.8	48.8	23.1
10	6.3	50.3	44.0	47.3	43.8	40.8	24.5
16	8.0	47.3	39.3	44.2	39.7	36.7	25.0
20	9.0	45.8	46.8	42.8	37.8	34.8	25.0
31.25	11.4	42.9	31.5	39.9	33.9	30.9	23.6
62.5	16.5	38.4	21.9	35.4	27.9	24.9	21.5
100	21.3	35.3	14.0	32.3	23.8	20.8	20.1

Mechanical Characteristics:

Temperature Range:	
Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C
Minimum bend radii:	
Installation	8 x Cable Diameter
Installed	4 x Cable Diameter
Maximum tensile force:	
During Installation	100N

Fire Performance:

Category 5e F/UTP PVC cables exceed the requirements of:

- IEC 60332-1

Category 5e F/UTP LSZH cables exceed the requirements of:

- IEC 60332-1
- IEC61034
- IEC 660754-2

Other Relevant Information:

- Pair colour code:
 - Pair 1: Orange and White/Orange
 - Pair 2: Blue and White/Blue
 - Pair 3: Brown and White/Brown
 - Pair 4: Green and White/Green

Packaging:

Part No.	Description	Packaging
CAT5FTPLSZHVI305	Concord Cat5e F/UTP LSZH Violet	305m reel in a box
CAT5FTPGY305	Concord Cat5e F/UTP PVC Grey	305m reel in a box