

Category 5e F/UTP Low Smoke Zero Halogen Cable

V.3.0

Description

FibreFab's Category 5e F/UTP LSZH cable is designed to deliver a robust standards based performance ensuring optimum bandwidth for today's high speed network applications. The cable is designed to support horizontal networking applications over distances up to 100 metres.

Each Category 5e F/UTP LSZH exceeds the minimum specified performance for Category 5e F/UTP cables and supports all CLASS D applications as defined within ISO/IEC 11801 (2nd Edition):2010 including 1000BASE-T (Gigabit Ethernet), ATM-155, 100BASE-Tx, Token Ring 100Mbs-1, and 1G FCBASE-T.

Construction

Conductor	A single strand of 24AWG (0.51mm) solid copper
Insulation	Polyethylene
Cable	8 insulated wires formed into 4 pairs. The 4 pairs are subsequently cabled together to form a cohesive unit.
Screen	An aluminised polyester tape screen applied with a 15% minimum overlap (The aluminium side is in continuous contact with the tinned copper drain wire)
Sheath	A uniform layer of Violet coloured Low Smoke Zero Halogen (LSZH) compound (RAL 4005)
Diameter	5.0mm

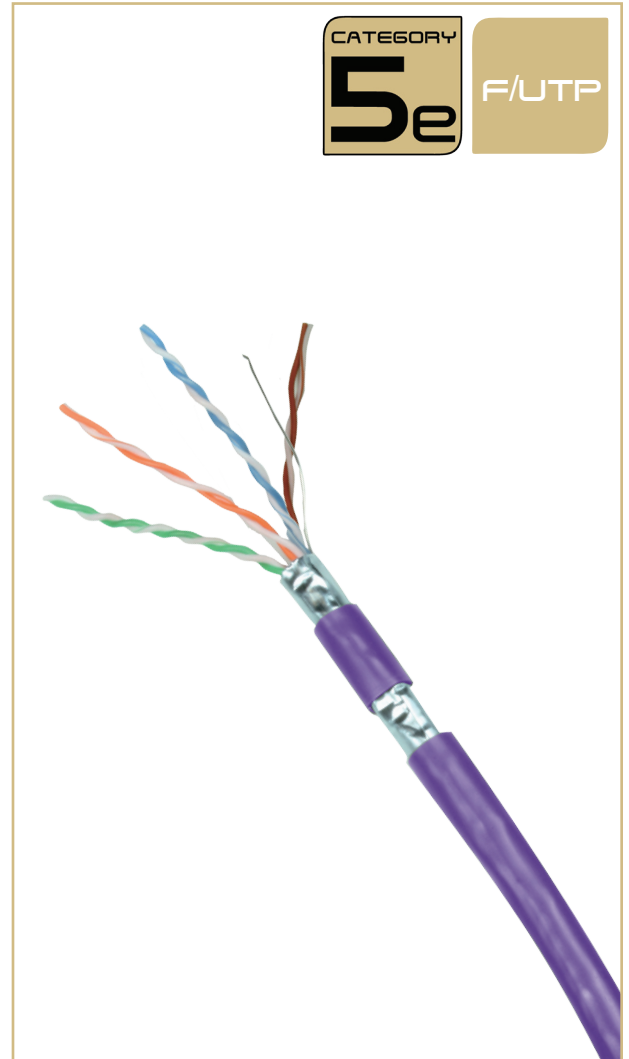
Applicable Standards

The Category 5e F/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- ▶ **ISO/IEC 11801 2nd Edition**
- ▶ **ANSI/TIA 568-C.2**
- ▶ **EN 50173**
- ▶ **IEC 61156-5**
- ▶ **EN 50288-3-1**

Other Relevant Information

- ▶ **RoHS compliant 2002/95/EC**
- ▶ **REACH / SVHC compliant regulation (EC) No. 1907/2006**
- ▶ **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



Electrical properties at 20°C

Characteristic Impedance (1-100MHz)	100 ± 15Ω
DC loop resistance	≤ 19.0Ω/100m
Resistance unbalance	≤ 2%
Capacitance unbalance to earth	≤ 1600 pF/km
Nominal velocity of propagation	67%
Propagation delay (Nominal)	≤ 535ns/100m
Test voltage (d.c. for 1 minute) Conductor/Conductor	1000V
Insulation resistance (500V d.c.)	≥ 500MΩ.km
Coupling attenuation	≥ 40dB

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

Fire Performance

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

- ▶ **IEC 60332-1-2**
- ▶ **IEC 60754-2**
- ▶ **IEC 61034**

Mechanical Characteristics

Temperature Range		Minimum Bend Radii	
Operation	-20°C to + 60°C	Installation	8 x Cable Diameter
Installation	0°C to +50°C	Installed	4 x Cable Diameter
Storage	-20°C to + 70°C		
Maximum Tensile Force			
During Installation	100N		

Ordering Information

DESCRIPTION	PART NO.
Category 5e F/UTP LSZH 305m Box	FUTP5E305LSZH
Category 5e F/UTP LSZH 500m Box	FUTP5E500LSZH