

## HIGH BIT RATE DATA CABLE FOR LOCAL AREA NETWORKS U-FTP 4 Pairs - LSZH - Category 6a.

### Standards reference :

IEC61156-5, IEC60332-1, ISO/IEC 11801, EN 50173 AND ANSI/TIA/EIA 568-B-2.1



### Application / Features

This category 6a U-FTP cable is dedicated to very high bit rate transmissions including 10 GIGABIT ETHERNET.

This cable is characterized up to 500 MHz.

### Design

1. Solid annealed copper conductors 23 AWG
2. Coloured polyethylene insulation
3. Wires twisted in pairs with aluminized screen (aluminium on outer side) on each pair
4. Tinned copper drain wire
5. Ripcord
6. White LSZH flam-retardant sheath (4 pairs : diameter 7.9 mm / weight 60 kg/km).

### Transmission performance

Frequency MHz	Attenuation dB/100m Max.	NEXT dB Min.	PSNEXT dB Min.	ELFEXT dB/100m Min.	PSELFEXT dB/100m Min.	RETURN LOSS dB Min.
1 *	2.0	75.3	72.3	68.0	65.0	20.0
4	3.7	66.3	63.3	56.0	53.0	23.0
10	5.9	60.3	57.3	48.0	45.0	25.0
16	7.4	57.2	54.2	43.9	40.9	25.0
20	8.3	55.8	52.8	42.0	39.0	25.0
31.25	10.4	52.9	49.9	38.1	35.1	23.6
62.5	14.9	48.4	45.4	32.1	29.1	21.5
100	19.0	45.3	42.3	28.0	25.0	20.1
155	24.0	42.4	39.4	24.2	21.2	18.8
200	27.5	40.8	37.8	22.0	19.0	18.0
250	31.0	39.3	36.3	20.0	17.0	17.3
300	34.2	38.1	35.1	18.5	15.5	16.8
500	50.1	34.8	32.8	14.0	11.0	15.2

\* Typical values

### Electrical characteristics @ 20°C

Mean impedance from 10 to 250 MHz	100 ± 5	Ω
Nominal Velocity of Propagation (NVP)	74	%
Delay skew	< 25	ns/100m
Loop resistance d.c.	≤ 164	Ω/km
Dielectric strength – 1 mn	1000	V d.c.
Insulation resistance	≥ 5000	MΩ.km
Coupling attenuation :		
- 30 to 100 MHz	≥ 55	dB
- 100 to 1000 MHz	55-20log(f/100)	
Nominal / Maximum service voltage	125 / 200	V
Maximum service intensity	0.25	A

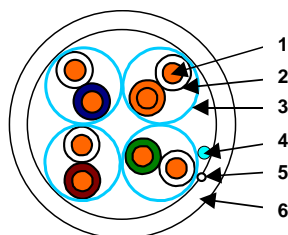
Note : DATA cables are not suitable for low impedance applications as : heating, lighting, etc... Their packing is marked according to the European Low Voltage Directive (73/23/CEE) 19 February 1973 modified by the directive 93/68/CEE (22 July 1993).

### Other characteristics

Storage temperature	-20°C to +70°C
Service temperature	-20°C to +60°C
Laying temperature	-5°C to +50°C (between -5°C and +5°C, prior storage 24 h at 20 °C recommended)
Fire behaviour	Compliant to IEC 60332-1 and NFC32070 category C2.

### Identification

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



**HIGH BIT RATE DATA CABLE FOR LOCAL AREA NETWORKS  
U- FTP 4 Pairs - LSZH - Category 6a.****Packaging**

	4 pairs
Standard delivery lengths	1000 m
Packing	Lost drum

No reproduction without the written consent of Silec Cable – Silec Cable reserves the right to change the specifications for improvement without notice. Silec trademark is a registered trademark.

**Telecom Cables / Commercial**

Phone : +33 1 41 98 09 21 - Fax +33 1 49 98 09 29 - Email : [contact@sileccable.com](mailto:contact@sileccable.com)

Head office : Rue de Varennes Prolongée - 77876 MONTEREAU CEDEX - France

Phone : + 33 1 60 57 30 00 Fax : + 33 1 60 57 30 15 [www.sileccable.com](http://www.sileccable.com)

SAS au capital de 60 037 000 € - 484 920 194 RCS Montereau