



Category 6_A S/FTP LSZH cables are 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 6_A S/FTP LSZH exceed the minimum specified performance for Category 6_A S/FTP cables and support all CLASS EA applications as defined within ISO/IEC 11801 (2nd Edition): 2010 such as 10GBASE-T (Gigabit Ethernet), 2G FCBASE-T, 4G FCBASE-T and 1000BASE-T (Gigabit Ethernet).

Features

- 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

Specification

CONSTRUCTION

Conductor	A single strand of 23AWG (0.56mm) solid copper
Insulation	Expanded Polyethylene
Cable	8 insulated wires formed into 4 pairs. Each pair is individually screened with an aluminised polyester tape. (The aluminium side of the tape faces outwards and is in continuous contact with the tinned copper drain wire).
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	7.5mm ± 0.3mm

Electrical properties at 20°C

Characteristic Impedance (1-100MHz) (100-250MHz)	100 ± 15Ω 100 ± 18Ω
DC loop resistance	≤ 19.0Ω/100m
Resistance unbalance	≤ 2%
Capacitance unbalance to earth	≤ 1600 pF/km
Delay Skew	≤ 40ns/100m @ 100MHz
Nominal velocity of propagation	78%
Propagation delay (Nominal)	≤ 534ns/100m
Test voltage (d.c. for 1 minute) Conductor/Conductor	1000V
Insulation resistance (500V d.c)	≥ 500MΩ.km
Coupling attenuation	≥ 55dB

CONSTRUCTION

Mechanical Characteristics

Temperature Range

Operation	-20°C to + 60°C
Installation	0°C to +50°C
Storage	-20°C to + 70°C

Maximum Tensile Force

During Installation	100N
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Minimum Bend Radii

Installation	8 x Cable Diameter
Installed	4 x Cable Diameter

Transmission line performance at 20°C

FREQUENCY MHZ	ATTENUATION DB/100M	NEXT DB	ACR MIN DB	PSNEXT MIN DB	ELFEXT MIN DB	PSELFEXT MIN DB	PSANEXT MIN DB	RETURN LOSS
1	1.8	95.0	93.2	95.0	68.0	65.0	-	-
4	3.8	66.3	62.5	66.3	58.0	55.0	76.5	23
10	5.9	60.3	54.4	60.3	50.0	47.0	72.5	25
20	8.4	55.8	47.4	55.8	44.0	41.0	69.5	25
62.5	15.0	48.4	33.4	48.4	34.1	31.1	64.5	21.5
100	19.1	45.3	26.2	45.3	30.0	27.0	62.5	20.1
250	31.1	29.3	8.2	39.3	22.0	19.0	56.5	17.3
500	45.3	34.8	-10.5	34.8	16.0	13.0	52.0	17.3

Standards Compliance

The Category 6 S/FTP 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

Category 6 S/FTP LSZH cables exceed the requirements of:

- IEC 60332-1-2
- IEC 60754-2
- IEC 61034

Ordering Information

DESCRIPTION

Category 6A S/FTP LSZH 305m Reel

Category 6A S/FTP LSZH 500m Reel

PART NO.

SFTP6A305LSZH

SFTP6A500LSZH



Further Information

- For additional information please contact your sales representative
- Downloaded from <http://www.fibrefab.com/products/copper-structured-cabling/cat-6a-class-ea/cat-6a-sftp-low-smoke-zero-halogen-cable/>
- FibreFab reserves the right to make changes to the product specifications in this datasheet at any time without notice
- Information in this document is correct as of May 13, 2014

Europe

- +44 870 127 3330
- sales@fibrefab.com

Americas

- +1 410 242 9026
- sales@fiberfabinc.com

Middle East & Africa

- +971 4 443 0168
- mea@optronicsnet.com

Asia Pacific

- +86 755 2561 3694
- asia@fibrefab.com