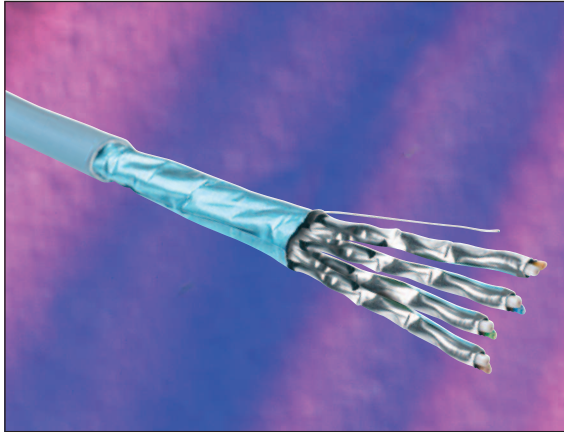


## Excel Category 6a Shielded Twisted Pair (F/FTP) Cable – LSOH



25 Year System Warranty

Lightweight, Compact Design

Category 6a compliant

EC verified

### Features

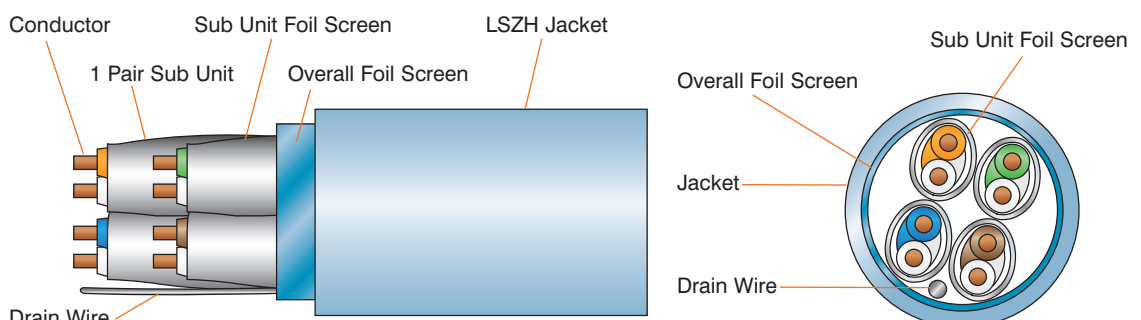
- Specified to 500MHz
- Category 6a compliant
- Suitable for 10 Gigabit, 10GBase-T, Ethernet applications
- Individual and overall foil screen
- Compact, but robust, design
- Low Smoke Zero Halogen Outer Sheath
- 25 year system warranty

### Product Overview

Excel Category 6a – Augmented Category 6 – cables, and associated connectors, take the performance capabilities of copper infrastructure to new levels. Designed to the current ISO and EIA/TIA standards for Class Ea augmented Category 6a performance these products are intended to deliver reliable, high network performance over link distances of upto 90 metres, including support of emerging applications such as 10GBase-T, 10 Gigabit Ethernet.

Each cable consists of 4 pairs individually wrapped in a covering of high quality, strong, aluminium/polyester foil tape providing an individual screen for each pair. These sub units are then cabled together, with the pairs set to different lay lengths to ensure optimum performance, an overall 360 degree foil tape screen plus drain wire is applied to provide further immunity to outside noise and to mitigate any risk of alien cross talk.

Excel Category 6a cables are jacketed in an Ice Blue low smoke zero halogen (LSZH) compound compliant with flame retardant standards as defined in IEC 60332-1, and smoke emission standards IEC61034. Supplied on 500 metre plywood drums, each cable has a print legend identifying the specification, part code and sequential metre marking which counts down from 500 metres to 1 metre, on each drum to reduce waste.



## Construction

Conductor	23AWG, Solid Plain Copper
Insulation	Foamed Polyethylene
Screen applied to 1 pair unit	Aluminium Foil Tape
Screen applied to 4 pair unit	Aluminium Foil Tape
Outer Sheath	Flame resistant, Low Smoke Zero Halogen
Outer Diameter	8.0mm +/- 0.3mm
Installation Temperature Range	0°C to +60°C
Operating Temperature Range	-10°C to +60°C
Minimum Bend Radius during installation	70mm
Minimum Bend Radius during operation	40mm
Flame Retardance	IEC 60332-1
Smoke Emission	IEC 61034
Average weight per metre	58.202g
NVP	71%

## Performance Overview

Excel Category 6a cables are designed, manufactured and tested in accordance with the draft ISO and EIA/TIA standards for augmented Category 6. As such they are suitable for the support of high speed enterprise LAN and datacenter applications such as 10 Gigabit Ethernet.

The use of high quality foil tape screens in the design of this cable ensure that correctly installed systems are immune to performance concerns sometimes found in high speed, high frequency copper cable networks. Cables designed with pair and overall screening such as this act against Alien Crosstalk, the inducement of noise from one 4 pair cable to an adjoining (or number of adjoining cables) as well as protecting against signal loss through emissions and enabling immunity from disturbance's which could potentially be received from external sources such as other cables or electronic devices.

Frequency (MHz)	Ins. Loss (dB/100m)	Return Loss (dB)	Pair to Pair		Power Sum				Po. Delay (ns/100)
			NEXT	ELFEXT	NEXT	ELFEXT	NEXT	ELFEXT	
			(dB/100m)		(dB/100m)				
	Max.	Min.	Min.	Min.	Min.	Min.	Min.	Min.	Max.
1	2.1	2.0	76.3	71.8	74.3	69.8	75.0	75.0	570
10	6.0	25.0	61.3	51.8	59.3	49.8	72.5	58.2	538
16	7.6	25.0	58.2	47.7	56.2	45.7	70.5	54.1	536
20	8.5	25.0	56.8	45.8	54.8	43.8	69.5	52.2	536
31.25	10.8	23.6	53.9	41.9	51.9	39.9	67.6	48.3	535
62.5	15.5	21.5	49.4	35.9	47.4	33.9	64.5	42.3	535
100	19.9	20.1	46.3	31.8	44.3	29.8	62.5	38.2	534
200	29.2	18.0	41.8	25.8	39.8	23.8	58.0	32.2	534
250	33.0	17.3	40.3	23.8	38.3	21.8	56.5	30.2	534
300	36.6	16.8	39.1	22.3	37.1	20.3	55.3	28.7	534
400	43.2	15.9	37.3	19.8	35.3	17.8	53.5	26.2	534
450	46.3	15.5	36.5	18.7	34.5	16.7	52.7	25.1	534
500	49.2	15.2	35.8	17.8	33.8	15.8	52.0	24.2	534

Nominal velocity of propagation (NVP 65%)

**Note 1:** All tests include 401 points swept frequency measurements.

**Note 2:** All electrical characteristics are given at 20°C

## System Warranty

When installed with Excel Category 6a cables and components by an accredited Excel Cabling Partner, this product is supported by a comprehensive 25 year warranty programme.

## Typical Applications

- IEEE802.3 1000 Base-TX Gigabit Ethernet
- IEEE802.3an 10G Base-T Gigabit Ethernet
- 1.2/2.4Gbps ATM
- Digital and analogue video

## Part Number Information

Part No.	Description
100-150	Excel Category 6a F/FTP Cable, Ice Blue LSZH, 500 metre drum

**EC verified.** This product has been tested by the Delta EC Cabling Group and complies with the following standards - ISO/IEC 11801:2002 amendment 1 Class Ea, ISO/IEC TR 24750, ANSI/EIA/TIA-568-b.2-10 and ANSI/TIA/EIA TSB-155. For copies of test certification please contact your local Excel distributor, or visit [www.excel-networking.com](http://www.excel-networking.com) or [www.delta.dk](http://www.delta.dk). Delta technical report N312480, Danak -19J1944 screened 4 connector channel model.



Excel is a complete, end-to-end networking solution, offering exceptional performance and support, manufactured to European quality standards and covered by one warranty.

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