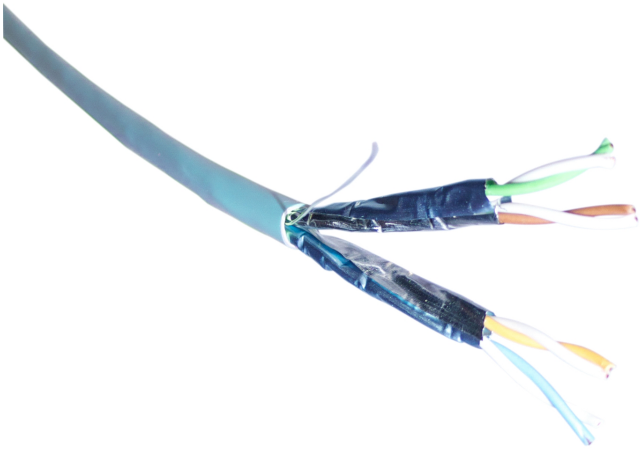
Excel Category 6A Screened Twisted Pair (U/FTP) S-Foil Cable - LSOH



- 25 Year System Warranty
- Category 6A compliant
- "S" foil screen
- Supplied in 305 metre boxes on 500m reels
- CPR compliant to Dca

Features

- 25 Year System Warranty
- Specified to 500MHz
- Supplied in 305 metre boxes on 500m reels
- Supports 10 Gigabit Ethernet Application
- Category 6A compliant
- "S" foil screen
- Low Smoke Zero Halogen Outer Sheath
- CPR compliant to Dca

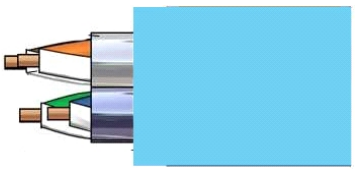
Product Overview

Excel Category 6A - Augmented Category 6 - cables, and associated connectors, take the performance capabilities of copper infrastructure to new levels. The cable has been designed to exceed the ISO/IEC, TIA and CENELEC for Category 6A/Augmented Category 6 component requirements. This delivers Class EA/ Augmented Category 6 link performance over distances of up 90 metres which supports the applications including 10GBASE-T, 10 Gigabit Ethernet.

Each cable consists of two sets of two pairs are wrapped together in an "S" configuration with high quality, strong, aluminium/polyester foil tape providing screening for each pair. The "S" Foil configuration ensures separation of the pairs that ensures the performance. By using two sets of two pairs has resulted in a reduced diameter and weight cable. The smaller cable diameter has reduced the cable cross-sectional area by 14.5%. This design change has been instigated to benefit the installer and end user in many direct and indirect ways. Reducing the size and weight means the cable occupies less space in the containment which in turn improves airflow in under floor installations. Less weight means that the containment can be of lighter construction. It also means that handling the cable on site is easier. Smaller diameter cable means that there is waste packaging to dispose of. The individual pairs are set to different lay lengths to ensure optimum performance. To assist with handling and installation the cable can either be supplied on 500m reels or in 305m boxes.

Excel Category 6A cables are jacketed in an Ice Blue low smoke zero halogen (LSOH) compound and available in versions compliant with flame retardant standards as defined in IEC 60332-1 and IEC 60332-3-24, 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.





Typical Applications

■ 1000BASE-T Gigabit Ethernet ■ 10GBASE-T 10 Gigabit Ethernet ■ 1.2/2.4Gbs ATM ■ Digital and analogue video ■ IEEE 802.3af Power over Ethernet (PoE) ■ IEEE 802.3at Power over Ethernet Plus (PoE+)

Cable Specifications

Conductor	23AWG, Solid Plain Copper
Insulation	Foamed Polyethylene
Screen applied to 2 pairs unit	Aluminium Foil Tape - wrapped in an "S" shape around the 2 pairs
Outer Sheath	Flame resistant, Low Smoke Zero Halogen
Outer Diameter	6.70 mm +/- 0.3mm
Installation Temperature Range	0°C to +60°C
Operating Temperature Range	-20°C to +60°C
Minimum Bend Radius during installation	54mm
Minimum Bend Radius during operation	27mm
Flame Retardance	IEC 60332-1 or IEC 60332-3-24
Smoke Emission	IEC 61034
Average weight per metre	0.06 Kg/m
500m Drum Weight	29.72 Kg
500m Drum Dimension	380mm Diameter x 484mm Width
305m Box Weight	16.1 kg
305m Box Dimensions	257mm Width x 480mm Deep x 480mm High
Dielectric Strength	AC 1.7 kV for 2s
NVP	76%
DC Loop Resistance	< 14.5 Ω/100 m
Mutual Capacitance	<46 nF/km at 1kHz
Construction	IEC 61156-5 ed2.0 Augmented Category 6A

Freq. (MHz)	Ins. Loss (dB/100m) Max.	RL (dB) Min.	NEXT (dB/100m) Min.	ACR-F (dB/100m) Min.	PS NEXT (dB/100m) Min.	PS ACR-F (dB/100m) Min.	Delay Skew (ns/100m) Max.	Prop. Delay (ns/100m) Max.
1	-	20.0	-	-	-	-	-	-
4	3.8	23.0	66.3	56.0	63.3	53.0	45	552.0
10	5.9	25.0	60.3	48.0	57.3	45.0	45	545.4
16	7.5	25.0	57.2	43.9	54.2	40.9	45	543.0
20	8.4	25.0	55.8	42.0	52.8	39.0	45	542.0
31.25	10.5	24.3	52.9	38.1	49.9	35.1	45	540.4
62.5	15	23.6	48.4	32.1	45.4	29.1	45	538.6
100	19.1	21.5	45.3	28.0	42.3	25.0	45	537.6
200	27.6	18.0	40.8	22.2	37.8	19.0	45	536.5
250	31.1	17.3	39.3	20.0	36.6	17.0	45	536.3
300	34.3	17.3	38.1	18.5	35.1	15.5	45	536.1
400	40.1	17.3	36.3	16.0	33.3	13.0	45	535.8
500	45.3	17.3	34.8	14.0	31.8	11.0	45	535.6

Nominal velocity of propagation (NVP 76%) Note 1: All tests include 401 points swept frequency measurements.
Note 2: All electrical characteristics are given at 20℃

Part Number Information

Part No.	Description
100-191	Category 6A (U/FTP) S-Foil Cable LSOH - 500m - Ice Blue
100-191-305M	Category 6A (U/FTP) S-Foil Cable LSOH 305m Box - Ice Blue
Z-100-191-500M-F2	Category 6A (U/FTP) S-Foil Cable LS0H - 500M - Ice Blue - IEC 60332-3-24 Compliant

System Warranty

The Excel System Warranty provides a 25-year product and applications assurance of compliance with the industry performance standard appropriate to the class of cabling installed. The warranty may be applied for by an accredited Excel Partner who has designed, supplied and installed the said system.



Excel is a world-class premium performing end-to-end infrastructure solution - designed, manufactured, supported and delivered - without compromise.

Contact us at **sales@excel-networking.com**

excel without compromise.

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