



X 25 Year System Warranty

X Category 6A compliant

X "S" foil screen

X Supplied on 500m reels

## Features

- 25 Year System Warranty
- Specified to 500MHz
- Supplied on 500m reels
- Supports 10 Gigabit Ethernet Application
- Category 6A compliant
- "S" foil screen
- External Grade Polyethylene Outer Sheath

## Product Overview

Excel External Category 6A Screened (U/FTP) Cable designed to offer performance with the protection to allow it to be installed externally. Ideal for connecting external equipment such as IP Cameras or Wireless Access Points using a cable that can be installed into external ducts and pathways.

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.

Excel external grade Category 6A cables are jacketed in Black UV and moisture resistant polyethylene. 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 ■ 1.2/2.4Gbps 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
Conductor diameter	0.56 ± 0.01 mm
Insulation	Foamed Polyethylene
Insulation diameter	1.30 ± 0.05 mm
Insulation minimum thickness	0.34 mm
Screen applied to 2 pairs unit	Aluminium Foil Tape - wrapped in an "S" shape around the 2 pairs
Outer Sheath	Black Polyethylene UV and Moisture Resistant
Outer Diameter	6.75 ± 0.3 mm
Installation Temperature Range	-10°C to +60°C
Operating Temperature Range	-20°C to +60°C
Minimum Bend Radius during installation	55 mm
Minimum Bend Radius during operation	25 mm
Dielectric Strength	AC 1.7 kV for 2s
NVP	76%
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°C

## Part Number Information

Part No.	Description
100-980	Category 6a U/FTP S Foil Cable External Grade, 500 metre drum

## 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](mailto:sales@excel-networking.com)

