



- X Category 6A component compliant
- X Lightweight, Compact Round Design
- X Low Smoke Zero Halogen Outer Sheath
- X 25 Year System Warranty
- X CPR compliant to Eca

Features

- Category 6A component compliant
- Lightweight, Compact Round Design
- Conventional unscreened construction
- Specified to 500MHz
- Suitable for 10 Gigabit, Ethernet applications
- Low Smoke Zero Halogen Outer Sheath
- Compact, but robust, design
- 25 Year System Warranty
- CPR compliant to Eca

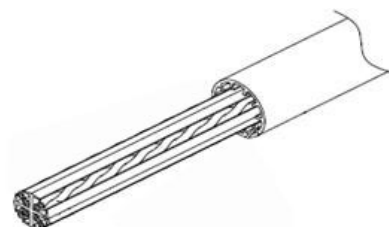
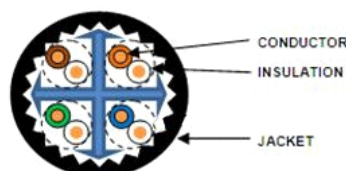
Product Overview

Excel Category 6A cables, and associated connectors, take the performance capabilities of copper infrastructure to new levels. Designed to the current ISO EN and TIA standards for Class EA / Category 6A performance these products are intended to deliver reliable, high network performance over permanent link distances of up to 90 metres and channels up to 100m, including applications such as 10GBASE-T, 10 Gigabit Ethernet.

Each cable consists of 4 unscreened twisted pairs which are formed around a specifically designed X filler, manufactured from lightweight flexible polyethelene. The use of a X filler to separate and maintain the position of conductors within high frequency unscreened cable designs has become standard practice following their introduction into Category 6 cables some years ago. By controlling - and making consistent - the spacing and positioning of each pair in relation to the others within the cable performance levels can be assured and issues such as crosstalk within and between cables can be addressed.

The term 'Alien Crosstalk' refers to the influence on the signal from a source external to the jacket sheath. i.e. it is the crosstalk from the other Category 6A cables. This revised design is now round and uses a saw tooth inner shape to the sheath to increase the air gap from adjacent cables. These resulting air gaps drastically reduce the risks of Alien Crosstalk. The risks are further mitigated by following good installation practices - refer to the Excel Installation Guide.

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

- 10Base-T Ethernet
- 100BASE-TX Fast Ethernet
- 1000BASE-T Gigabit Ethernet
- 10GBASE-T 10 Gigabit Ethernet
- 1.2/2.4Gbs ATM
- Digital and analogue video

Construction

Conductor size	23AWG
Conductor type	Solid bare copper
Conductor diameter	0.56 ± 0.01 mm
Insulation type	Polyethylene
Insulation diameter	1.04 ± 0.05 mm
Insulation minimum thickness	0.22 mm
Central element	Polyethylene cross filler
Outer Sheath	Flame resistant, Low Smoke Zero Halogen
Overall Diameter	8.3 ± 0.3 mm
Installation & Operating Temperature Range	-10 °C to +60 °C
Minimum Bend Radius during installation	66 mm
Minimum Bend Radius during operation	33 mm
Smoke Emission	IEC 61034
Impedance	100 Ohms
Cable weight	48 kg/km
NVP	66.7%

Generic Cabling and Cabling Components Standards

Reference	Description
ISO/IEC 11801:2002 (Ed. 2.2)	Information technology -- Generic cabling for customer premises
IEC 61156-5 ed2.0	Multicore and symmetrical pair/quad cables for digital communications - Part 5: Symmetrical pair/quad cables with transmission characteristics up to 1 000 MHz - Horizontal floor wiring - Sectional specification
EN 50173-1:2011	Information technology. Generic cabling systems. General requirements
EN 50173-2:2007+A1:2010	Information technology. Generic cabling systems. Office premises
EN 50288-11-1:2012	Multi-element metallic cables used in analogue and digital communication and control. Sectional specification for un-screened cables characterised up to 500 MHz. Horizontal and building backbone cables.
ANSI/TIA-568-C.2:2009	Balanced Twisted-Pair Telecommunications Cabling and Components Standards - including all cable alien crosstalk parameters (PS ANEXT and PS AACR-F)

Standards for Flammability

Reference	Description
IEC 60332-1-[1,2]:2004	Tests on electric and optical fibre cables under fire conditions Part 1.1 & 1.2
IEC 60754-[1,2]	Test on gases evolved during combustion of materials from cables Part 1 & 2
IEC 61034-[1,2]	Measurement of smoke density of cables burning under defined conditions - Part 1 & 2

Part Number Information

Part No.	Description
100-189	Category 6A (U/UTP) Cable LSOH - 500m

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

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