

- X 3rd Party Verified
- X Supports Gigabit Ethernet
- X 25 Year System Warranty
- X Metre Marked 305-0

**Features**

- 3rd Party Verified
- 25 Year System Warranty
- Category 5e compliant
- Choice of Colour
- Supports Gigabit Ethernet
- Metre Marked 305-0
- LSOH IEC 60332-1 Sheath
- Available in double box with outer carton for added protection

**Product Overview**

Excel Category 5e Unscreened LSOH Cables are manufactured and tested to the ISO 11801, EN 50173 and ANSI/TIA-568-C standards for enhanced performance Category 5 cables.

Each cable consists of 8 colour coded polyethylene insulated conductors. These are twisted together to form 4 pairs with varying lay lengths. These pairs are jacketed in a violet low smoke zero halogen material, which complies with the requirements of IEC332-1. The printing detail on the sheath, includes the cables part number, specification details and a unique 305-0 metre marking within each box supplied, allowing for quick and easy measurement of cable installed and the amount remaining within the box.

**Performance Overview**

Excel Category 5e cables are manufactured and tested to the Category 5 enhanced standards as defined by the TIA and ISO standards' bodies. Swept frequency tests are applied to each critical performance characteristic, such as near end cross talk (NEXT) and far end cross talk (FEXT). Both Worst Case and Power Sum Test methods are applied. Actual performance exceeds the required standard by a considerable margin ensuring sufficient headroom for even the most demanding applications.

**Specification**

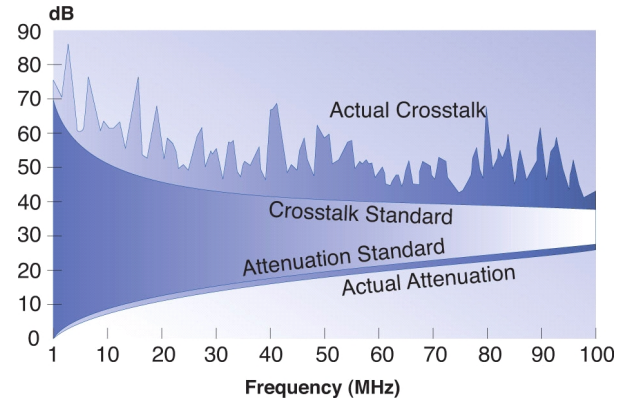
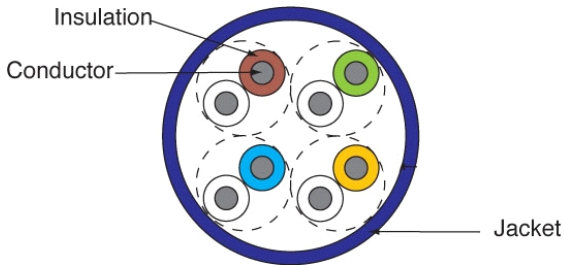
Nominal Overall Diameter	5.2mm
Operation Temperature Range	-20°c to +60°c
Bend Radius	4 x overall diameter installed, 8x installing
Conductor	24AWG Solid Copper
Conductor Insulation	Polyethylene
Dielectric Strength	1.0 kV d.c. or 0.7 kV a.c. for 1 min / 2.5 kV d.c. or 1.7 kV a.c. for 2 s
NVP	70%

**Typical Applications**

- 10Base-T Ethernet ■ 155 Mbps ATM ■ 100BASE-TX Fast Ethernet ■ 622 Mbps ATM ■ 1000BASE-T Gigabit Ethernet ■ Token Ring

## Cable Colour References

Part Number	Colour Reference (approximate)
100-066	Pantone 668C - Violet
100-057	Pantone 1595C - Orange
100-060	Pure White
100-061	Pantone 1797C - Red
100-062	Pantone 7462C - Blue
100-063	Pantone 3298C - Green
100-064	Pantone 122C - Yellow



## Performance / Specification Table

Frequency (MHz)	Insertion Loss (dB)	NEXT (dB)	Return Loss (dB)	ACR-N (dB)	ACR-F (dB)	PS NEXT (dB)	PS ACR-F (dB)
1.0	2	62	20	60	64	62	64
4.0	3.8	53	23	49.2	52	53	51
10.0	6.5	47	25	40.5	44	47.3	44
16.0	8.2	44	25	35.8	39.9	44.2	40.9
20.0	9.2	43	25	33.8	38	42.8	39
31.25	11.7	40	23.6	38.3	34.1	39.9	35.1
62.5	17	35	21.5	18	28.1	35.4	29.1
100.0	22	32	20.1	10	24	32.3	25

Impedance (1-100 MHz) =  $100 \pm 15\Omega$

## Performance Standards

ISO/IEC 11801:2011 (Ed. 2.2)	Information technology - Generic cabling for customer premises
IEC 61156-5:2009 (EEd. 2.0)	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 50288-3-1:2013	Multi-element metallic cables used in analogue and digital communication and controlSectional specification for unscreened cables characterised up to 100 MHz. Horizontal and building backbone cables
ANSI/TIA-568-C.2:2009	Balanced Twisted-Pair Telecommunications Cabling and Components Standards

## Standards for flammability, acidity, and smoke

IEC 60332-1-[1,2]:2004	Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame
IEC 60754-[1,2]	Test on gases evolved during combustion of materials from cables
IEC 61034-[1,2]	Measurement of smoke density of cables burning under defined conditions
EN 50267-2-2 (superseded by IEC 60754-[1,2])	Common test methods for cables under fire conditions - Tests on gases evolved during combustion of materials from cables - Part 2-2: Procedures - Determination of degree of acidity of gases for materials by measuring pH and conductivity
Def Stan 02 - 713	Determination Of The Toxicity Index Of The Products Of Combustion From Small Specimens Of Materials - Toxicity Compliant

## Part Number Information

Part No.	Description
100-066	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - Violet
100-057	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - Orange
100-060	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - White
100-061	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - Red
100-062	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - Blue
100-063	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - Green
100-064	Category 5e (U/UTP) Unscreened Cable LSOH - 305m Box - Yellow

## 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)

