







- X 25 Year System Warranty
- X EC Verified
- X Category 6 Compliant TIA/EIA 568-B.2-1 EN50173-1 ISO/IEC 11801
- X CPR compliant to Dca s2,d2,a1

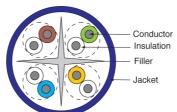
#### **Features**

- 25 Year System Warranty
- LSOH outer sheath
- Fast Feed Reelex Packaging or Reel
- Category 6 Compliant TIA/EIA 568-B.2-1 EN50173-1 ISO/IEC 11801
- EC Verified
- 23AWG conductor
- Metre marked
- CPR compliant to Dca

#### **Product Overview**

Excel Category 6 UTP cables are manufactured and tested to the TIA/EIA 568-B.2-1, EN50173-1 and ISO/ IEC 11801 Category 6 specifications. Each cable consists of 8 colour coded 23AWG polyethylene insulated conductors. These are twisted together to form 4 pairs with varying lay lengths. These pairs are then formed around a central 'X' shaped LSOH cross filler. This filler assists in maintaining and enhancing the cables performance.

The printing detail along the outer sheath includes the cable part code, specification detail and our 305/500 to 0 metre marked system. As the cable is dispensed from the box the sequential marking counts down from 305/500 to 0 metres, as well as reducing waste and accounting easily for cables installed, this innovative print legend finally removes the guesswork from assessing the amount of cable remaining in partly used boxes. The print legend on the cable now also includes information regarding the DOP Number, Test and classification of the cable for traceability.



#### **Specification**

Overall Diameter	6.2 ± 0.3mm		
Installation Temperature Range	0°c to +60°c		
Nominal Velocity of Propagation (NVP)	69%		
Operating Temperature Range	-20°c to +75°c		
Bend Radius	4 x overall diameter installed, 8x during installation		
Cable weight	10 Kg/100m		
305m Weight	13.2 Kg (inc. box)		
Box Dimensions	255mm wide x 415mm high x 415mm deep		
Standard of flame retardancy	IEC 60332-1-[1,2] (2004-07), IEC 60754-(1,2),		
CPR Euroclass	EN 50575:2014 +A1:2016 Dca s2,d2,a1		
Smoke Emmisions	EN50399, IEC 61034-(1,2)		
Cable jacket tested to	IEC 62321, US EPA 3540C		
Resistance/100m	$7.7 \pm 0.3 \Omega$		

### **Performance Overview**

Excel Category 6 cables are manufactured and tested to the Category 6 performance standards defined by the TIA, ISO and EN standards bodies. A range of performance characteristics are tested upto 250MHz including return loss, attenuation and near and far end crosstalk (NEXT and FEXT) for which both worst case and power sum tests are completed. Actual performance far exceeds the required standard - when tested in isolation and in circuit - resulting in significant headroom for even the most demanding of applications.

As well as providing link and channel compliance with the aforementioned specification - when installed with Excel category 6 components - the cable is also backward compatible with Category 5 and 5e components.

# **Typical Performance Test Data**

Freq	Max. IL (dB)	Min. NEXT (dB)	Min. RL (dB)	Min. ACR-F (dB)	Min. PS NEXT (dB)	Min. PS ACR-F (dB)
MHz	Standard	Standard	Standard	Standard	Standard	Standard
1	2.8	66.0	20	66	64.0	64.0
4	3.8	66.3	23	56	63.3	53
10	6	60.3	25	48	57.3	45
16	7.6	57.2	25	43.9	54.3	40.9
20	8.5	55.8	25	42	52.8	39
31.25	10.7	52.9	23.6	38.1	49.9	35.1
62.5	15.5	48.4	21.5	32.1	45.4	29.1
100	19.9	45.3	20.1	28	42.3	25
200	29.1	40.8	18	22	37.8	19
250	33	39.3	17.3	20	36.3	17

# **Typical Applications**

- 1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet
- 622 Mbps ATM
- 155 Mbps ATM
- Composite Video

#### **Part Number Information**

Part No.	Description
100-071	Category 6 (U/UTP) Unscreened Cable LSOH - 305m Box - Violet
100-071-500	Category 6 (U/UTP) Unscreened Cable LSOH - 500m Reel - Violet

# **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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