





- X 25 Year System Warranty
- X EC Verified
- X Category 6 Compliant TIA/EIA 568-B.2-1 EN50173-1 ISO/IEC 11801

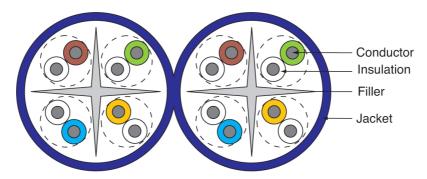
#### **Features**

- 25 Year System Warranty
- Category 6 compliant
- Central 'X' filler
- 23AWG conductor
- '305-0' metre marked
- Category 6 Compliant TIA/EIA 568-B.2-1 EN50173-1 ISO/IEC 11801
- EC Verified
- LSOH outer sheath
- Backward Compatible
- Fast Feed Reelex Packaging
- Independently component tested
- No.2 cabling system by market share, as reported by BSRIA

### **Product Overview**

Excel Category 6 Unscreened Twisted Pair (UTP) Twin LSOH 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 two sets of 8 colour coded 23AWG polyethylene insulated conductors. These are twisted together to form two sets of 4 pairs with varying lay lengths. These pairs are then formed around a central 'X' shaped polyethylene 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 metre marking.



## **Specification**

- P	
Overall Dimension	5.86 x 12.02 mm
Installation Temperature Range	0°c to +60°c
Nominal Velocity of Propagation (NVP)	69%
Installation Temperature	0°c to 50°c
Operation Temperature Range	-10°c to +75°c
Bend Radius	45 mm minimum
Standard of flame retardancy	IEC 60332-1-[1,2] (2004-07)
Cable jacket tested to	IEC 62321, US EPA 3540C, BS EN 14582

#### **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	eq Insertion Loss (dB)		NEXT (dB)		RL (dB)		ACR-F (dB)		PS NEXT (dB)		PS ACR-F (dB)	
MHz	Standard	Excel*	Standard	Excel*	Standard	Excel*	Standard	Excel*	Standard	Excel*	Standard	Excel*
1	-	-	-	-	20	28	-	-	-	-	-	-
4	3.8	3.6	66.3	83.7	23	37.2	56	83.4	63.3	77.7	53	73.3
10	6	5.7	60.3	67.6	25	41.8	48	75	57.3	66.5	45	63.7
16	7.6	7.3	57.2	70.1	25	48.4	43.9	70.6	54.3	66.8	40.9	57.2
20	8.5	8.2	55.8	71.9	25	46.3	42	64.9	52.8	63.9	39	55.1
31.25	10.7	10.3	52.9	63.4	23.6	38.2	38.1	66.1	49.9	61.6	35.1	55.9
62.5	15.5	14.7	48.4	60.9	21.5	35.8	32.1	46.6	45.4	59.4	29.1	45.2
100	19.9	18.8	45.3	56.2	20.1	29.5	28	43.1	42.3	54.3	25	39.3
200	29.1	27.2	40.8	55.1	18	24.9	22	38.9	37.8	51	19	34.9
250	33	30.2	39.3	50.9	17.3	23.8	20	29.3	36.3	50.5	17	26.3

<sup>\*</sup>Typical Result

Nominal velocity of propagation (NVP 69%)

# **Typical Applications**

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

## **Part Number Information**

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Part No.	Description				
100-103	Category 6 UTP Twin Cable LSOH, White, 500m reel				

## **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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