



X 25 Year System Warranty

X EC Verified

X Category 6 Compliant • TIA-568-C.2-2009 • EN50173-1 • ISO/IEC 11801

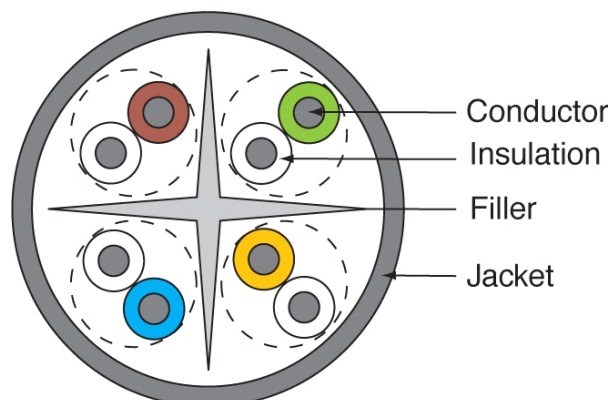
## Features

- 25 Year System Warranty
- Category 6 compliant
- Central 'X' filler
- 23AWG conductor
- '305-0' metre marked
- Category 6 Compliant • TIA-568-C.2-2009 • EN50173-1 • ISO/IEC 11801
- EC Verified
- PVC Outer Sheath
- Backward Compatible
- Fast Feed Reelex Packaging
- Independently component tested

## 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 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 our new 305 to 0 metre marked system. As the cable is dispensed from the box the sequential marking counts down from 305 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.



## Specification

Overall Diameter	6.2mm
Installation Temperature Range	0°c to +50°c
Nominal Velocity of Propagation (NVP)	69%
Operating Temperature Range	-20°c to +60°c
Minimum Bend Radius	4 x overall diameter installed, 8x during installation
Cable weight	4.10 Kg/100m
305m Reel 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)

## 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 up to 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 MHz	Insertion Loss (dB)		NEXT (dB)		RL (dB)		ACR-F (dB)		PS NEXT (dB)		PS ACR-F (dB)	
	Excel*	Standard	Excel*	Standard	Excel*	Standard	Excel*	Standard	Excel*	Standard	Excel*	
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

\*Typical Result

Nominal velocity of propagation (NVP 69%)

## Typical Applications

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

## Part Number Information

Part No.	Description
100-070	Category 6 (U/UTP) Unscreened Cable PVC - 305m Box - Grey

## 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)

**excel**  
without compromise.