

X 25 Year System Warranty

X Innovative Figure 8 Design

X Characterised to 350MHz

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

## Features

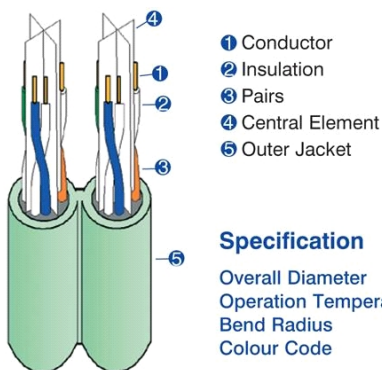
- 25 Year System Warranty
- Characterised to 350MHz
- 23AWG conductor
- Overall foil tape screen
- '500-0' metre marked
- Category 6 Compliant • TIA/EIA 568-B.2-1 • EN50173-1 • ISO/IEC 11801
- Innovative Figure 8 Design
- Category 6 compliant
- LSOH outer sheath
- Central 'X' filler
- 2 x 4 pair dual construction

## Product Overview

Excel Dual Category 6 F/UTP - foil screened - cables are manufactured and tested to the TIA/EIA 568-B.2-1, EN50173-1 and ISO/IEC 11801 Category 6 specifications. Each cable 'leg' 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. A clear Mylar tape is then wrapped around this unit and a foil tape screen with 24AWG drain wire applied. The foil screen provides protection from emissions (E.M.I.) which can occur when data is transmitted at high frequencies. A low smoke zero halogen outer sheath is then applied.

Two of these 4 pair units are then extruded together to form a dual 'figure of 8' finished cable. A small web of LSOH compound joins the two 4 pair units together and provides a quick and easy method of separating the cables for termination.

The printing detail along the outer sheath of one of the cable legs includes the cable part code, specification detail and our new metre marked system. As the cable is dispensed from the drum the sequential marking counts down, 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 on partly used drums.



### Specification

- Overall Diameter 2 x 7.20 mm
- Operation Temperature Range -10°C to +75°C
- Bend Radius 4 x overall diameter installed, 8x installing
- Colour Code Blue/White, Orange/White, Green/White, Brown/White, per 4 pair cable

## Performance / Specification Table

Frequency (MHz)	Return loss (dB)	Attenuation (dB/100m)	NEXT (dB)	PSNEXT (dB)	FLEXT (dB/100m)	PSELFEXT (dB/100m)	Delay (ns/100m)
1	20	2	66	64	67.8	64.8	570
4	23	3.8	65.3	63.3	55.8	52.8	552
10	25	6	59.3	57.3	47.8	44.8	545.4
16	25	7.6	56.2	54.2	43.7	40.7	543
20	25	8.5	54.8	52.8	41.8	38.8	542
31.25	23.6	10.7	51.9	49.9	37.9	34.9	540.4
62.5	21.5	15.4	47.4	45.4	31.9	28.9	538.6
100	20.1	19.8	44.3	42.3	27.8	24.8	537.6
150	18.8	24.7	41.7	39.7	24.3	21.3	536.9
200	18	29	39.8	37.8	21.8	18.8	536.5
250	17.3	32.8	38.3	36.3	19.8	16.8	536.3

### Performance Overview

Excel Category 6 cables are manufactured and tested to the Category 6 performance standards defined by the EIA/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 Applications

■ 100 Base-TX ■ Token Ring ■ 1000 Base-TX Gigabit Ethernet ■ 155 Mbps ATM ■ Composite Video ■ 622 Mbps ATM

### Specification

#### UV and Moisture Resistant Polyethylene Outer Sheath

Nominal Overall Diameter	7.20mm + 7.20mm
Operating Temperature Range	-10°c to +75°c
Bend Radius	4 x overall diameter installed, 8x during installation
Conductor	Solid Copper
Conductor Insulator	Solid Polyethylene
'X' Shaped Central Filler	Polyethylene
Nominal Velocity of Propagation (NVP)	72%

### Part Number Information

Part No.	Description
100-077/LTGN	Dual Category 6 Cable LSOH, Light Green 500m reel
100-077/LTGN-400	Dual Category 6 Cable LSOH, Light Green 400m reel
100-077/LTGN-250	Dual Category 6 Cable LSOH, Light Green 250m 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](mailto:sales@excel-networking.com)

