





X 25 Year System Warranty

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

# **Features**

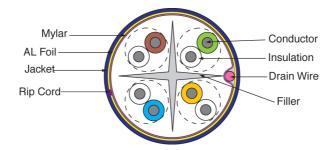
- 25 Year System Warranty
- Central 'X' filler
- 23AWG conductor
- No.3 cabling system by market share, as reported by BSRIA
- '305-0' metre marked

- LSOH Outer Sheath
- Overall Foil Tape Screen
- Supplied various reel sizes
- Category 6 Compliant TIA-568-C.2-2009 EN50173-1 ISO/IEC 11801

### **Product Overview**

Excel Category 6 F/UTP - foil screened - cables are manufactured and tested to the TIA-568-C.2, EN50173-1 and ISO/IEC 11801 Category 6 specifications. Each cable consists of 8 colour coded 23AWG polyethylene insulated, solid bare copper, 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 Electromagnetic Interference (EMI) which can occur when data is transmitted at high frequencies.

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 reel 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 on partly used reels.



# **Specification**

Overall Diameter	7.20mm
Installation Temperature Range	0°c to +50°c
Operating Temperature Range	-10°c to +60°c
Minimum Bend Radius	4 x overall diameter installed, 8x during installation
Cable weight	5.08 Kg/100m
305m Reel Weight	18.5 Kg (inc. reel)
Reel Dimensions	400mm Diameter x 254mm
Cable jacket tested to	IEC 62321, US EPA 3540C, BS EN 14582
LSOH Properties	ISO IEC 332-1
Nominal Velocity of Propagation (NVP)	72%

## 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**

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Freq. MHz	Insertion Loss (dB)		NEXT (dB)		RL (dB)		ACR-F (dB)		PS NEXT (dB)		PS ACR-F (dB)	
Std.	Excel*	Std.	Excel*	Std.	Excel*	Std.	Excel*	Std.	Excel*	Std.	Excel*	
1	-	-	-	-	20	28.6	-	-	-	-	-	-
4	3.8	3.4	66.3	86.5	23	35.8	56	96.7	63.3	82.4	53	85.7
10	6	5.4	60.3	77.6	25	43.2	48	87.3	57.3	75.4	45	77.1
16	7.6	6.9	57.2	76.7	25	41.5	43.9	78.8	54.3	68.5	40.9	72.6
20	8.5	7.7	55.8	73.7	25	47.1	42	76.8	52.8	67.4	39	70.7
31.25	10.7	9.7	52.9	73	23.6	44.4	38.1	68.6	49.9	69.6	35.1	69.1
62.5	15.5	13.9	48.4	65.7	21.5	42.7	32.1	62.3	45.4	57.9	29.1	63.6
100	19.9	17.7	45.3	69.1	20.1	35	28	60.6	42.3	58.2	25	53.5
200	29.1	25.2	40.8	54	18	28.4	22	63.6	37.8	49.7	19	45.4
250	33	28.3	39.3	53.8	17.3	23.4	20	46.5	36.3	53.2	17	44.8

<sup>\*</sup> Typical Result

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

# Part Number Information

Part No.	Description					
100-076	Category 6 Screened (F/UTP) Cable LSOH, Violet 305m reel					
100-076/LTGN-500	Category 6 Screened (F/UTP) Cable LSOH, Light Green 500m reel					
100-076/LTGN-400	Category 6 Screened (F/UTP) Cable LSOH, Light Green 400m reel					
100-076/LTGN-250	Category 6 Screened (F/UTP) 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



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