Technical Data Sheet

Category 6 LS0H Shielded Cable

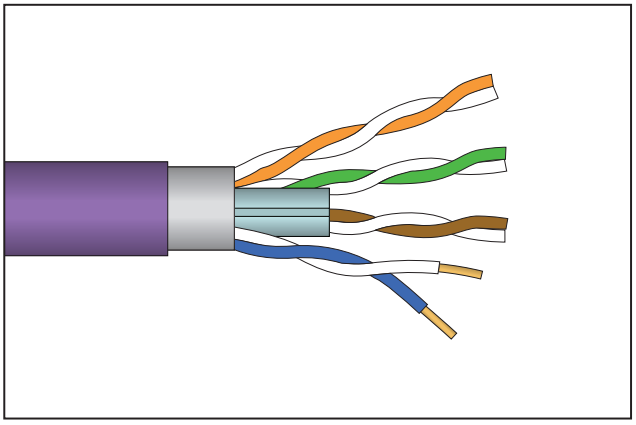
Bulk Copper Cable

Application/Product Description

HellermannTyton Category 6 cables are designed and tested to support Primary (Campus), Secondary (Riser) and Tertiary (Horizontal) applications for 10Base-T (Ethernet), 100Base-T(Fast Ethernet), 1000Base-T(Gigabit Ethernet), PoE and PoE+.

When used with HellermannTyton Category 6 patch panels, outlets and patch leads the combined performance exceeds Category 6/Class E link and channel requirements.

The cable is supplied in 500m lengths with 1 metre markings on the cable on a drum for easy installation.



Category 6 LSOH Shielded Cable

Technical Data

Electrical Characteristics @ 20°C	Specification
DC Loop Resistance	≤165Ω/km
Resistance Unbalance	≤2%
Insulation Resistance (500V)	≥2000MΩxkm
Capacitance at 800Hz	Nom. 43nF/km
Capacitance Unbalance (pair to ground)	≤1500pF/km
Characteristic Impedance (1-100MHz)	(100 ± 15)Ω
Nominal Velocity of Propagation	Approx. 66%
Propagation Delay	Nom. ≤427ns/100m
Delay Skew	Nom. ≤12ns/100m
Test Voltage (DC, 1 min) Core/Core	1000V

Cable Standards

Cable

- BS EN 50173
- ISO 11801:2002 (inc. Amend. A1 & A2)
- ANSI/TIA/EIA 568-C.2
- IEC 61156-5
- BS EN 50288-10-1

Cable Sheath

- IEC 60332-1
- IEC 60754-2
- IEC 61034

This cable complies with the requirements within the Construction Products regulations EN50575:2014+A1:2016 - Power, control and communication cables. Cables for general applications in construction works subject to reaction to fire requirements.

A copy of the Declaration Of Performance is available from HellermannTyton upon request. Please quote the part and serial numbers when contacting sales@htdata.co.uk

Performance Characteristics

Frequency (MHz)		1	100	250
Insertion Loss (dB/100m)	Spec	2.0	19.8	32.8
	Typical	2.0	17.5	28.0
NEXT (dB)	Spec	74.3	44.3	38.3
	Typical	93.0	64.6	58.3
PS-NEXT (dB)	Spec	72.3	42.3	36.3
	Typical	86.0	58.7	51.8
ACR-F (dB/100m)	Spec	67.8	27.8	19.8
	Typical	105.4	60.6	47.0
PS ACR-F (dB/100m)	Spec	64.8	24.8	16.8
	Typical	98.7	55.2	40.9
Return Loss (dB)	Spec	20.0	20.1	17.3
	Typical	26.8	35.0	31.1

**Typical values are for permanent link tests when using the complete HellermannTyton Data System.*

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The current version available from www.htdata.co.uk/site/products/cable

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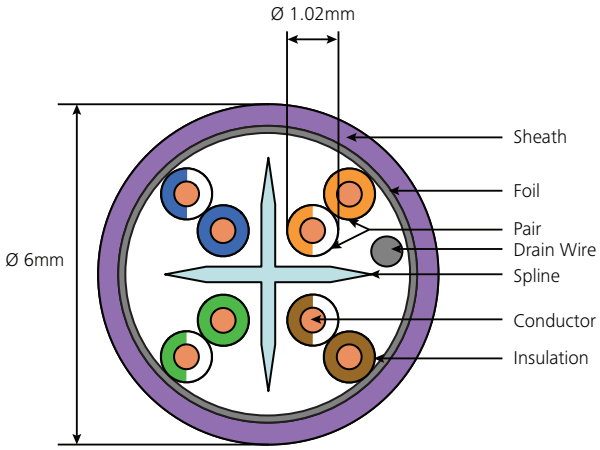
Cable Construction



Product Performance	
Core	
Core Conductor	23 AWG Solid Copper Wire
Insulation	Polyethylene
Diameter	1.02mm
Twisting	2 cores to the pair
Pair Colour	Blue-White/Blue, Orange-White/Orange, Green-White/Green, Brown-White/Brown
Final Assembly	
Cable	4 pairs to the core
Overall Screen	PET/Al-laminated plastic foil
Sheath	LSOH, Violet RAL 4001
Outer Diameter	6.0mm ± 0.2mm
Mechanical and Environmental	
Temp. Installation	0°C to +50°C
Temp. Operation	-20°C to +60°C
Min. Bend Radius	
During Installation:	8 x outer diameter
During Operation:	4 x outer diameter
Max. Tensile Force	
During Installation	100N
Packaged Weight	26.5kg (500m/Drum)

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