Technical Data Sheet

Category 5e PVC Shielded Cable

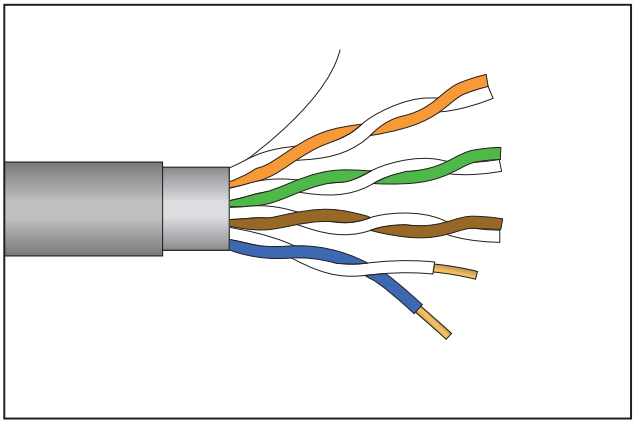
Bulk Copper Cable

Application/Product Description

HellermannTyton Category 5e 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 5e patch panels, outlets and patch leads the combined performance exceeds Category 5e/Class D link and channel requirements.

The cable is supplied in 305m lengths with 1 metre markings on the cable in a Reelex Box for easy installation.



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Technical Data

Electrical Characteristics @ 20°C	Specification
DC Loop Resistance	≤169Ω/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

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	10	100
Insertion Loss (dB/100m)	Spec	2.0	6.5	22.0
	Typical	2.2	5.9	18.8
NEXT (dB)	Spec	65.3	50.3	35.3
	Typical	85.8	64.6	48.7
PS-NEXT (dB)	Spec	62.3	47.3	32.3
	Typical	79.6	58.6	42.3
ACR-F (dB/100m)	Spec	63.8	43.8	23.8
	Typical	85.4	67.2	47.4
PS ACR -F(dB/100m)	Spec	60.8	40.8	20.8
	Typical	79.9	61.3	41.4
Return Loss (dB)	Spec	20.0	25.0	20.1
	Typical	26.4	39.0	33.0

**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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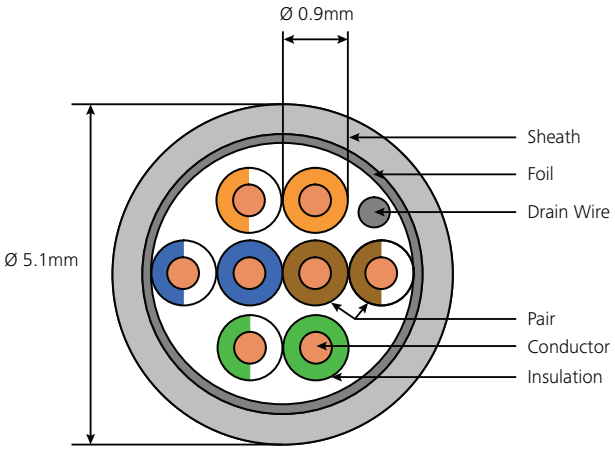
Cable Construction



Product Performance	
Core	
Core Conductor	24 AWG Solid Copper Wire
Insulation	Polyethylene
Diameter	0.90mm
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
Sheath	PVC, Grey RAL 7032
Outer Diameter	5.1mm ± 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:	12 x outer diameter
Packaged Weight	12kg (305m/Box)

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