

23 AWG Solid Copper, Individually Screened Pairs with Overall Braided Shield, LSZH/PVC Jacket — DHRUVA Connect

1. Product Overview

The DHRUVA Connect Category 6A S/FTP LAN cable is an enhanced-performance, fully screened copper cabling solution designed for the transmission of high-speed data, and analogue and digital voice/video (RGB) signals over local area networks (LANs). The cable supports 10GBASE-T Ethernet applications and is rated for operation at a bandwidth of up to 500 MHz.

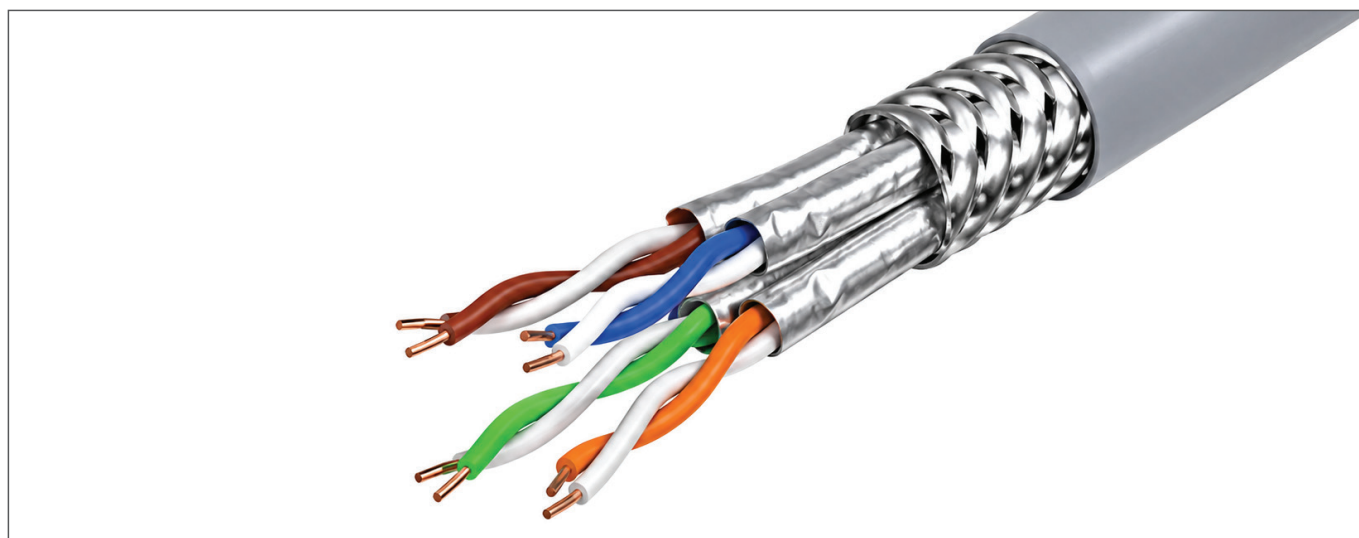
Each of the four twisted pairs is individually screened with an aluminium/polyester tape, and the pair group is further enclosed within an overall tinned-copper braided shield. This dual-layer (screened/foiled, overall-braided) construction gives S/FTP cable superior alien-crosstalk and EMI/RFI rejection compared with F/UTP designs, making it well suited to high-density installations and 10 Gigabit backbone or horizontal runs. Construction and transmission performance meet or exceed the requirements of ANSI/TIA-568.2-D and ISO/IEC 11801.

2. Key Features

- 23 AWG solid bare-copper conductors for low insertion loss and reliable long-run conductivity.
- Individual pair screening with aluminium/polyester tape to suppress inter-pair (alien) crosstalk.
- Overall tinned-copper braided shield for robust EMI/RFI protection and mechanical durability.
- Foamed polyethylene (PE) insulation for reduced attenuation and consistent pair geometry.
- Rated for 500 MHz bandwidth, supporting 10GBASE-T and all lower-speed Ethernet standards.
- Low Smoke Zero Halogen (LSZH) jacket option for improved fire safety in enclosed/indoor installations.
- Supplied on a wooden drum in 305 m or 500 m put ups for large-scale structured cabling projects.

3. Cable Construction

Cross-sectional view of the Category 6A S/FTP cable construction, illustrating the four individually foil-screened twisted pairs, overall braided shield, and outer jacket:



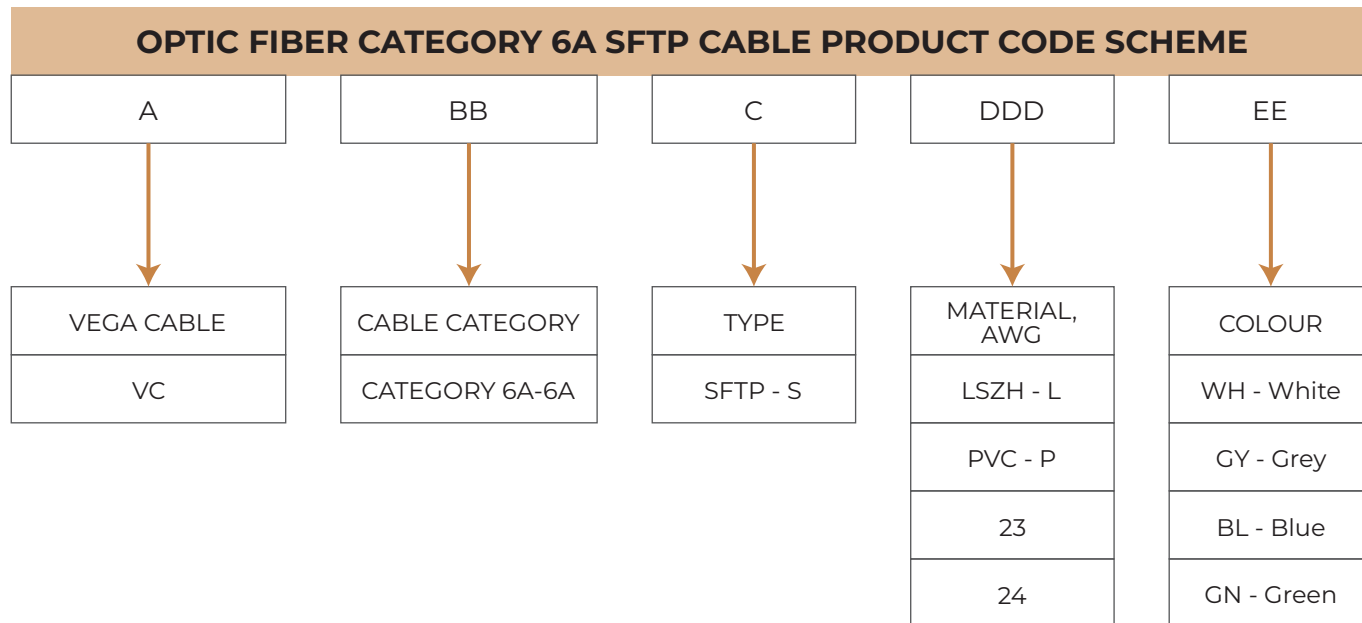


Category 6A S/FTP LAN Cable

4. Technical Specifications

Parameter	Specification
Category	Category 6A, S/FTP solid cable
Number of Pairs	4
Number of Conductors	8
Conductor Material	Bare solid copper
Conductor Gauge	23 AWG
Conductor Outer Diameter	0.565 ± 0.005 mm
Insulation Material	Foamed polyethylene (PE)
Pair Shielding	Individual pair screen — aluminium/polyester tape
Overall Shield (Braid)	Tinned copper braid, overall screen
Pair Construction	2 insulated conductors twisted together
Outer Jacket Material	PVC / LSZH / PE (per part number)
Overall Cable Diameter	7.6 ± 0.3 mm (nominal)
Rated Bandwidth	500 MHz
Transmission Standard	10GBASE-T and lower Ethernet rates
Conductor Resistance	< 9.38 Ω / 100 m
Resistance Unbalance	5% max.
Delay Skew	< 45 ns
Mutual Capacitance	< 5.6 nF / 100 m (solid conductor)
Capacitance Unbalance	330 pF / 100 m
Put-Up / Packaging	305 m or 500 m per wooden drum
Applicable Standards	ANSI/TIA-568.2-D, ISO/IEC 11801
Certifications	CE, UL, RoHS, ETL

5. Ordering Information



Part Number	Description
VC-6A-S-L23-GY	DHRUVA Connect Category 6A S/FTP solid cable, 23 AWG, LSZH jacket, 305 m, Grey

6. Compliance & Certification

Product design and transmission performance conform to ANSI/TIA-568.2-D and ISO/IEC 11801 category requirements, and the cable is certified to CE, UL, RoHS, and ETL standards, as referenced in the ordering codes above.

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