



STRUCTURED CABLING SYSTEMS

DIGISOL Solid Cable, Cat6 SFTP, 4 Pair, 23AWG, Grey, 305m



Introduction:-

DIGISOL Cat6 4 Pair SFTP Cable has been designed for horizontal cabling networks for transmission of high speed data, digital and analog, voice and video signals over LANs. Tinned copper screening gives protection against EMI, avoid signal loss and better mechanical properties of cable. Supports gigabit ethernet (1000 Base-T) standard suitable for noisy environments, high EMI interference surroundings and complies to the requirement of ANSI/TIA-568-C.2 and ISO/IEC 11801. Performance verified upto 250MHz.

Key Features:-

- Better cable material properties and design
- Performance verified for 250MHz.
- Superior shielding performance
- Available in FRPVC jacket sheath
- Packaged in a wooden reel for easier installation (305m length)

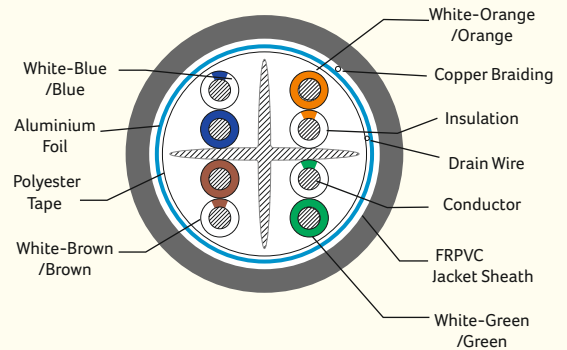
Technical Specifications:-

Construction Properties:-

Conductor	: 23 AWG, Solid bare copper
Pairs	: 4 Pair twisted wires
Type	: SF/UTP CM rated
Conductor Diameter	: 0.55 ± 0.02 mm
Insulation Material	: High density polyethylene (HDPE)
Insulation Diameter	: 1.03 ± 0.05 mm
Insulation Nominal Thickness	: 0.24 mm
Central Member	: PE cross separator
Separator Dimension/Thickness	: 5.0 mm/ 0.9 mm
Separator Material	: Polyolefin / Polyethylene
Wrapping	: Overall Polyester tape
HF-Screening	: Overall AL-PET (Mylar) tape
Braiding	: Tinned copper conductor
Jacket Sheath	: FRPVC
Jacket Average Thickness	: 0.44 ± 0.01 mm
Jacket Diameter	: 7.5 ± 0.5 mm
Rip Cord	: 1 no
Drain Wire	: 1 no (0.39 ± 0.01 mm)
Jacket Colour	: Grey

Mechanical Properties:-

Maximum Tensile Strength	: 400 N max.
Pulling Force	: 11.5 Kg (25.35 lbs)
Bending radius	: $< 8 \times$ Cable Diameter at $-20^{\circ}\text{C} \pm 1^{\circ}\text{C}$



Electrical Properties:-

Conductor Resistance	: $\leq 9.38 \Omega/100\text{m}$ Max.
Mutual Capacitance	: $< 5.6 \text{ nF}/100\text{m}$ Max
Resistance Unbalance	: 5% Max
Capacitance Unbalance	: Max. 330 pF/100m
Dielectric Strength	: 2.5 KVDC for 2 seconds
Delay Skew	: $< 45\text{ns}/100\text{m}$
Propagation Delay @250 MHz	: 536ns/100m
Impedance	: $100 \pm 15 \Omega$ (@ 1-250 MHz)
Current Rating	: 1.5 A Max.
Operating Voltage	: 72 V

Color Code:-

Pair Number	: Color
1 - 2	: White-Orange Stripe and Orange
3 - 6	: White-Green Stripe and Green
4 - 5	: White-Blue Stripe and Blue
7 - 8	: White-Brown Stripe and Brown

Environmental Properties:-

Operating Temperature	: -20°C to $+70^{\circ}\text{C}$
Installation Temperature	: -20°C to $+70^{\circ}\text{C}$

Standards:-

Comply to ANSI/TIA-568-D.2
ISO/IEC 11801/IEC 60332-1
RoHS Compliant

Transmission Performance Parameters:- @ 100 MHz and @ 250 MHz

Frequency MHz	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ACRF (ELFEXT) (dB)	PSACRF (PSSELFEXT) (dB)	ACR (dB)	PSACR (dB)
100	21.3	12.0	39.9	37.1	23.3	20.3	24.5	22.5
250	35.9	8.0	33.1	30.2	15.3	12.3	5.5	3.5

Ordering Information:-

Part Codes	Description
DGC-SC6SF4F-3GW	DIGISOL Solid Cable, Cat6 SFTP, 4 Pair, 23AWG, FRPVC CM, Grey, 305m