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STRUCTURED CABLING SYSTEMS

DIGISOL Solid Cable, Cat6 UTP, 4 Pair, 23AWG, Armoured Outdoor Cable



Introduction:-

DIGISOL Cat6 4 Pair UTP armoured Cable has been designed for horizontal cabling networks for transmission of high speed data, digital and analog, voice and video signals over LANs. 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 upto 250 MHz.
- UV resistance outer jacket sheath
- Suitable for outdoor applications
- Rugged double sheath construction cable
- ECCS Tape armouring provides excellent mechanical protection
- 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 : U/UTP CM rated

Insulation Material : High density polyethylene (HDPE)

 $\begin{array}{ll} \mbox{Insulation Diameter Insulation} & : 1.02 \pm 0.01 \mbox{ mm} \\ \mbox{Nominal Thickness} & : 0.24 \mbox{ mm} \end{array}$

Central Member : PE cross seperator

Seperator Dimension/Thickness : 4.4 mm/ 0.6 mm Seperator Material : Polyolefin / Polyethylene

Wrapping : Polyester tape (0.025mm thickness)

Inner/Outer Jacket sheath :FRPVC / Polyethylene Inner/Outer Jacket Average : 0.75 / 1.20 mm (Min.)

Thickness (± 0.01mm)

Armouring : ECCS Tape (≥ 0.125mm thickness)

 $\begin{array}{ll} \mbox{Inner/Outer Jacket Diameter} & : 7.0 \, / \, 10.0 \, (\pm \, 0.5 \, \mbox{mm}) \\ \mbox{Rip Cord} & : 1 \, \mbox{no. (Polyester)} \end{array}$

Jacket Colour : Black

Mechanical Properties:-

Maximum Tensile Strength : 13.1

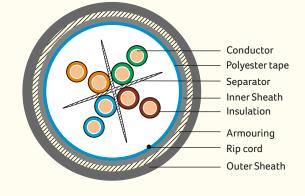
of Jacket (N/mm²)
Pulling Force

: 11.5 Kg (25.35 lbs)

Bending radius : $<12 \times Cable Diameter at -20^{\circ}C \pm 1^{\circ}C$

Environmental Properties:-

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



Electrical Properties:-

Conductor Resistance : ≤ 9.38 Ω /100m Max. Mutual Capacitance : < 5.6 nF/100m Max

Resistance Unbalance : 5% Max

Capacitance Unbalance : Max. 330 pF/100m Dielectric Strength : 2.5 KVDC for 2 seconds

Delay Skew : < 45ns/100m Propagation Delay @250 MHz : 536ns/100m

Impedance : $100 \pm 15 \Omega$ @ 100 MHz

Current Rating : 1.5 A Max.
Operating Voltage : 72 V
Nominal Velocity of Propagation : 69%

Color Code:-

Pair Number : Color

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

Standards:-

Comply to ANSI/TIA-568-C.2

ISO/IEC 11801 RoHS Compliant

Transmission Performance Parameters:- @ 250 MHz for 70m cable due to armouring

Frequency MHZ	Insertion Loss (dB/100m)	NEXT (dB/100m)	PSNEXT (dB/100m)	ACRF (dB/100m)	PSACRF (dB/100m)	Return Loss (dB/100m)
250	35.9	33.1	30.2	15.3	12.3	8.0

Ordering Information:-

Part Codes	Description	
DGC-SC6A4F-3GW	DIGISOL Solid Cable, Cat6 UTP ARMD (ECCS Tape), 4 Pair, 23AWG, CM, Black, 305m	