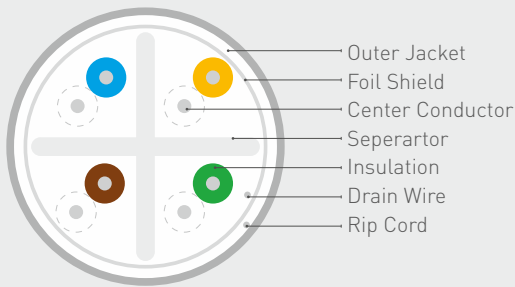
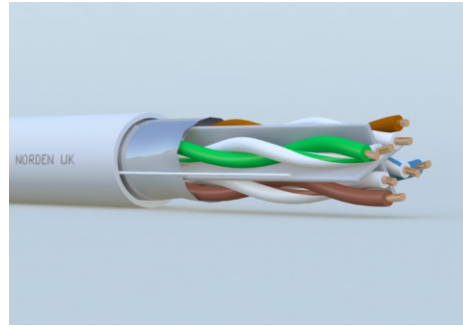


# CATEGORY 6A F/UTP 4 PAIR CABLE

Norden Category 6A F/UTP cables exceed Category 6A / Class EA specification. It is tested to 500 MHz frequency range and designed to support 10 Gigabyte applications to full 100 m.

Extremely high pair-balance providing excellent EMC (Electro Magnetic compatibility), minimizing radiation, maximizing noise immunity and providing high alien cross talk performance to F/UTP cabling systems. F/UTP (Twisted Pair – overall Foil shield) cabling systems are installed for improved Alien Cross talk performance.



## COMPLIANCE

IEEE 802.3an :2006 (10GBASE-T)  
 ANSI/TIA-568-C.2:2009 Category 6A  
 ISO/IEC-11801, 2nd Edition Class EA  
 IEC 61156-5:2002 Category 6A  
 LSOH: IEC 60332-1, IEC 60754, IEC 61034

## PRODUCT CLASSIFICATION

Product Sequense	E Series
Product Type	Twisted Pair Cable

## MATERIAL CONSTRUCTION & DESIGN

Conductor Material	Solid Bare Copper
Conductor Size	23 AWG
Conductor Construction	Solid
Insulation Material	HDPE
Colour Code	Per TIA/EIA 568-B
Screening Material	Aluminium/Polyester Foil
Screening Design	100 % Coverage
Conductor Unit Lay-Up	Pairs
Overall Drain-Wire Material	Tinned Copper 0.10 mm
Total Number of Wires	8
Outer Jacket Material	PVC/LSOH
Outer Jacket Thickness & Ex. Diameter	0.50±0.05 mm, 7.3±0.4 mm
Rip Cord	Yes
Outer Jacket Colour	Per Requirement



# CATEGORY 6A F/UTP 4 PAIR CABLE

## ELECTRICAL & MECHANICAL CHARACTERISTICS

Frequency Range	1 - 500 MHz
Characteristic Impedance	100 $\Omega \pm 6$
Coupling Attenuation	55 dB min @ 30-100 MHz 55-20 Log (f/100) @100-500 MHz
Max. DC Resistance	72 $\Omega$ /km @ 20 °C
Max. Resistance Unbalance	2 %
Capacitance Unbalance	1.2 pF/m max.
Velocity of Propagation	78 % nom.
Propagation Delay Skew	25 ns/100m max.
Dielectric Strength	1.5 KV/minute
Dielectric Strength to Shield	1.5 KV/minute
Min. Insulation Resistance	5 G $\Omega$ •km
Transfer Impedance	1000 m $\Omega$ /m max @ 100 MHz
Max. Tensile Strength - Short Term	130 N
Min. Bend Radius	55 mm
Operating Temperature Range	-20 °C +65 °C

## TRANSMISSION PERFORMANCE

Cat. 6A Screened-pair Horizontal Cables\*

Freq. MHz	Attenuation dB/100m @ 20°C	NEXT dB	PS dB	NEXT	RL dB	ACR dB	ELFEXT dB	PSELFEXT dB
1	1.7	86.3	83.3	23.0	84.6	84.0	80.0	
4	3.4	85.0	83.0	23.0	75.6	81.0	78.0	
10	5.4	77.3	74.3	25.0	71.9	76.0	73.0	
20	7.6	70.0	67.0	25.0	62.4	70.0	67.0	
31.25	9.7	68.0	65.0	23.8	58.3	65.0	63.0	
100	18.0	65.3	62.3	21.1	47.3	55.0	52.8	
150	23.6	62.0	59.8	18.8	38.4	53.5	51.5	
200	27.4	59.0	57.2	18.0	31.6	49.0	46.0	
250	31.0	57.6	54.6	17.3	26.6	44.0	41.0	
300	34.2	55.0	52.0	16.8	20.8	39.6	36.6	
400	40.0	53.0	51.8	16.8	13.0	37.0	34.0	
500	42.2	52.0	50.0	16.8	9.8	35.0	33.0	

\*Supplied cables meets Cat. 6a min. transmission requirements as per IEC 61156-5 Ed. 2

## ORDERING INFORMATION

Part Number	Description	Standard Length
114-40001204X	Category 6A F/UTP 23 AWG 4 Pair Cable PVC E Series	305 mtr
114-40002204X	Category 6A F/UTP 23 AWG 4 Pair Cable LSZH E Series	305 mtr

X: BK(Black), BL(Blue), GN(Green), GY(Gray), RD(Red), WH(White), YL(Yellow)

## PACKING INFORMATION

Part Number	Packing Mode	N.W (kg)	G.W (kg)	Dimension (mm)
114-40001204X	Plywood Reel/Ctn	16.9	18.8	340 x 340 x 340
114-40002204X	Plywood Reel/Ctn	17.2	19.0	340 x 340 x 340