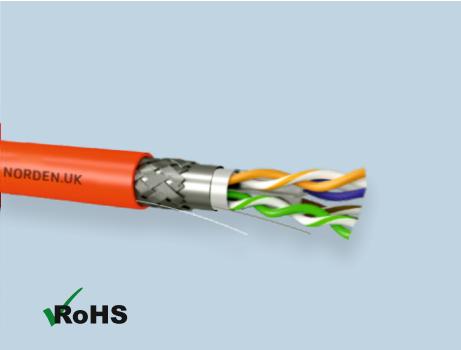


# CATEGORY 6A SF/UTP 4 PAIR PLENUM (CMP) CABLE

Norden Category 6A SF/UTP cables exceed the Category 6A / Class EA specification. Tested to a 500 MHz frequency range, they are designed to support 10 Gigabit applications over the full 100-meter distance. The SF/UTP construction combines unshielded twisted pairs with an overall foil shield, offering excellent electromagnetic compatibility (EMC). This shield minimizes radiation, maximizes noise immunity, and significantly improves alien crosstalk (AXT) performance compared to standard unshielded twisted pair (UTP) cables. SF/UTP cabling systems are ideal for environments that require enhanced performance and protection against external interference, delivering reliable high-speed data transmission



### COMPLIANCE

ANSI/TIA/EIA-568B.2  
 ISO/IEC 11801  
 EU (RoHS) Compliant  
 IEEE 802.3bt  
 ISO/IEC Compliance: 11801 ed 2.2(2011) Class EA;  
 ANSI/NEMA WC-66 Category 6A  
 ANSI/TIA-568-C.2 Category 6A

## PRODUCT CLASSIFICATION

Product Sequence	Premium
Product Type	Twisted Pair Cable

## MATERIAL CONSTRUCTION & DESIGN

Conductor Material	Solid Bare Copper
Conductor Size	23AWG, 0.585±0.006mm
Conductor Construction	Solid
Insulation Material	FEP (Fluorinated Ethylene Propylene)
Rip Cord	Yes
Colour Code Per	TIA/EIA 568-B
Tape	Mylar
Foil Shield Material	Al-Mylar, 100% coverage
Drain Wire	26AWG Stranded Tinned Copper
Conductor Unit Lay-Up	Pairs
Overall Shield Design	Braid
Overall Shield Material	Tinned Copper Braiding
Braid Coverage	60%
Total Number of Wires	8
Cross Filler	FEP (Fluorinated Ethylene Propylene)
Outer Jacket	Plenum PVC
Outer Diameter & Thickness	7.7±0.3mm, 0.50mm
Outer Jacket Colour	Per Requirement
Marking	Per Requirement

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## ELECTRICAL & MECHANICAL CHARACTERISTICS

Frequency Range	1 - 500 Mhz
Impedance	100±15Ω(1-100MHz);100±32Ω(100-550MHz)
DC Resistance	93.8Ω
Max. Resistance Unbalance	2%(within pairs),3%(between pairs)
Max. DCR Unbalanced between pairs	3
Capacitance Unbalance Pair/Ground	50 pF/100m
Mutual Capacitance	5.6nf/100m
Propagation Delay Skew	45 ns/100m
Max. Delay	537.6ns/100m MAX
Min Return Loss	14.9(550MHz)
Max./Min. Input Impedance (unfitted)	100±15Ω(1-100MHz);100±32Ω(100-550MHz)
Max./Min. Fitted Impedance	100±15Ω(1MHz);100±10Ω(2-550MHz)
UL Voltage Rating	300V
Velocity of Propagation	69%
Dielectric Strength	1000VDC
Min. Insulation Resistance	5000 MΩ/Km
Max. Tensile Strength Short Term	111N
Transfer Impedance	100±15 Ω
Min. Bend Radius	8xOD
Operating Temperature Range	-20 to +75°C

## TRANSMISSION PERFORMANCE

Cat. 6 screened Pair Horizontal Cables\*

Frequency (Mhz)	Attenuation (dB/100m)	NEXT (dB)	ACRF (dB)	PS.NEXT (dB)	PS.ACRF (dB)	Delay (ns/100m)	RL (dB)
1	2.1	74.3	67.8	72.3	64.8	570	20
4	3.8	65.3	55.8	63.3	52.8	552	23
8	5.3	60.8	49.7	58.8	46.7	547	24.5
10	5.9	59.3	47.8	57.3	44.8	545	25
16	7.5	56.2	43.7	54.2	40.7	543	25
20	8.4	54.8	41.8	52.8	38.8	542	25
25	9.4	53.3	39.8	51.3	36.8	541	24.3
31.25	10.5	51.9	37.9	49.9	34.9	540	23.6
62.5	15	47.4	31.9	45.4	28.9	539	21.5
100	19.1	44.3	27.8	42.3	24.8	538	20.1
200	27.6	39.8	21.8	37.8	18.8	537	18
250	31.1	38.3	19.8	36.3	16.8	536	17.3
300	34.3	37.1	18.3	35.1	15.3	536	16.8
400	40.1	35.3	15.8	33.3	12.8	536	15.9
500	45.3	33.8	13.8	31.8	10.8	536	15.2

## ORDERING INFORMATION

Part Number	Description	Standard Length
114-15001604X	Category 6A SF/UTP 4 Pair Plenum (CMP) Cable	305m