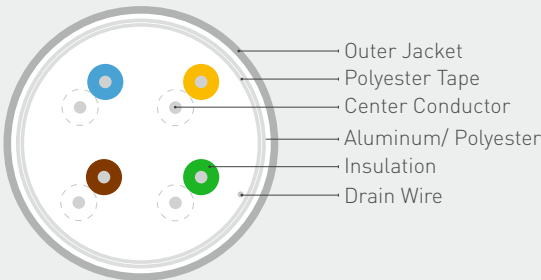
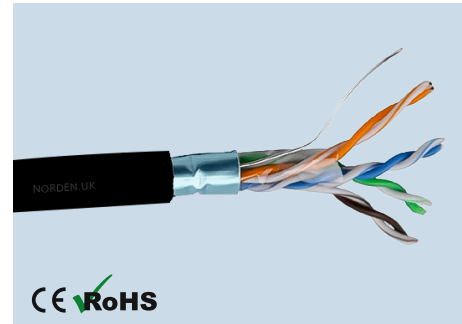


# CATEGORY 5E F/UTP 4 PAIR EXTERNAL CABLE PE

Norden Category 5e F/UTP cables exceed Category 5e / Class D specification. It is tested to 100 MHz frequency range and designed to support Gigabit 1000Base-T applications upto 100m. Norden Category 5e F/UTP cables standard packing are in 305m easy pull-out boxes. F/UTP (Twisted Pair – overall Foil shield) cabling systems are installed for improved Alien Crosstalk performance. By design, Norden cables are manufactured to the highest quality standards, design requirements and materials to ensure that every box provides significant margin over specifications ANSI/TIA-568.2-D.2 for NEXT, Power Sum NEXT and Insertion Loss across the entire channel.



## COMPLIANCE

IEEE 802.af, IEEE 802.3at for PoE applications  
 ANSI/TIA-568.2-D.2 Category 5E  
 ISO/IEC-11801, Class D  
 IEC 61156-5: Category 5E  
 EN 50288-2-1  
 EN 50173

## PRODUCT CLASSIFICATION

Product Sequence	Premium
Product Type	Twisted Pair Cable

## MATERIAL CONSTRUCTION & DESIGN

Conductor Material	Solid-Bare Copper
Conductor Size	24 AWG
Conductor Construction	Solid
Insulation Material	PE
Insulation O.D	1.05 ± 0.05 mm
Conductor Unit Identification	Solid/Stripe
Conductor Unit Lay-Up	Pairs
Total Number of Wires	8
Wrapping Tape	Polyester Tape
Screening Material	Aluminium/Polyester foil
Screening Design	≥25%
Overall Drain-Wire Material	Tinned Copper
Overall Drain-Wire	Construction Solid
Outer Jacket	LDPE
Outer Jacket Thickness & Ex. Diameter	0.50, 6.30±0.3 mm
Outer Jacket Colour	Per Requirement
Marking	Per Requirement

# CATEGORY 5E F/UTP 4 PAIR EXTERNAL CABLE PE

## ELECTRICAL & MECHANICAL CHARACTERISTICS

Frequency Range	1 - 100 MHz
Impedance	100 ±15
Coupling Attenuation	40 dB min @ 30-100 Mhz
Max. DC Resistance	93 Ω/km
Max. Resistance Unbalance between pairs	≤4.0%
Mutual Capacitance	5.6nF/100m
Capacitance Unbalance to-ground	330 pf/100m
Velocity of Propagation	69 %
Propagation Delay Skew	≤ 45 ns/100m
Dielectric Strength	1 KV/minute
Min. Insulation Resistance	5 GΩ•km
Max DC Loop Resistance	19.2Ω/100m
Operating Temperature	-20 °C +65 °C

## TRANSMISSION PERFORMANCE

Cat. 5e Screened Pair Horizontal Cables\*

Freq. MHz	Attenuation dB/100m @ 20°C	NEXT dB	PSNEXT dB/100m	RL dB	ELFEXT dB/100m	PSELFEXT dB/100m
1.0	2.0	65.3	62.3	20.0	63.8	60.8
4.0	4.1	56.3	53.3	23.3	51.7	48.7
10.0	6.5	50.1	47.8	25.0	43.8	40.8
16.0	8.2	47.3	44.2	25.0	39.7	36.7
20.0	9.3	45.8	42.8	25.0	37.7	34.7
31.25	11.7	42.9	39.9	23.6	33.9	30.9
62.5	17.0	38.4	35.4	21.5	27.8	24.8
100	22.0	35.3	32.3	20.0	23.8	20.8

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

## ORDERING INFORMATION

Part Number	Description	Standard Length
112-20003204X	Category 5E F/UTP 4 Pair External Cable PE	305 mtr

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