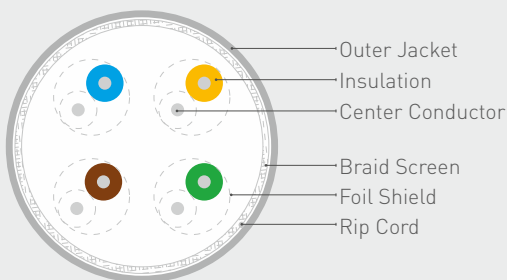
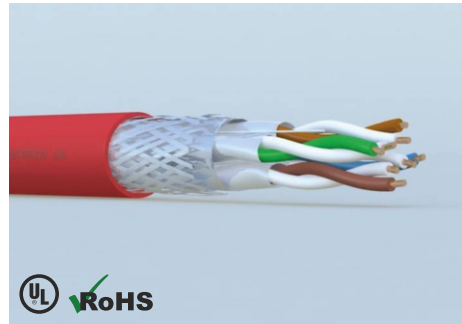


# CATEGORY 6 S/FTP 4 PAIR CABLE

Norden Category 6 S/FTP cables exceed Category 6 / Class E specification. It is tested to 250 MHz frequency range and designed to support Gigabit 1000Base-T and 1000Base-Tx applications upto 100m. Extremely high pair-balance providing excellent EMC (Electro Magnetic Compatibility), minimizing radiation, maximizing noise immunity and providing high alien cross talk performance to F/FTP (Foiled Twisted Pair) cabling systems. S/FTP (Twisted Pair – Overall shield and Individual Foil shield) cabling systems are installed for improved Alien Cross talk performance.



## COMPLIANCE

IEEE 802.af, IEEE 802.3at for PoE applications  
 ANSI/TIA-568.2-D Category 6  
 ISO/IEC-11801, Class E  
 IEC 61156-5: Category 6  
 LSZH: IEC 60332-1, IEC 60754, IEC 61034

## PRODUCT CLASSIFICATION

|                  |                    |
|------------------|--------------------|
| Product Sequence | Premium            |
| Product Type     | Twisted Pair Cable |

## MATERIAL CONSTRUCTION & DESIGN

|                                       |                                    |
|---------------------------------------|------------------------------------|
| Conductor Material                    | Bare Copper                        |
| Conductor Size                        | 0.57 mm, 23 AWG                    |
| Conductor Construction                | Solid                              |
| Insulation Material                   | High Density PE                    |
| Insulation Diameter                   | 1.36 mm                            |
| Conductor Unit Identification         | Solid/Stripe                       |
| Rip Cord                              | Yes                                |
| Drain Wire                            | N/A                                |
| Colour Code                           | Per TIA/EIA 568-B                  |
| Ind. Shield Material                  | Aluminium Foil                     |
| Ind. Shield Design                    | 100 % Coverage                     |
| Conductor Unit lay-Up                 | Pairs                              |
| Overall Shield Design                 | Braid                              |
| Overall Shield Material               | Tinned Copper, 0.10 mm             |
| Braid Coverage                        | 45 % nom.                          |
| Total Number of Wires                 | 8                                  |
| Outer Jacket                          | LSZH Low Smoke Zero Halogen or PVC |
| Outer Jacket Thickness & Ex. Diameter | 0.55±0.05 mm, 7.9±0.5 mm           |
| Outer Jacket Colour                   | Per Requirement                    |
| Marking                               | Per Requirement                    |

# CATEGORY 6 S/FTP 4 PAIR CABLE

## ELECTRICAL & MECHANICAL CHARACTERISTICS

|                                  |   |
|----------------------------------|---|
| Frequency Range                  | 1 - 250 MHz   |
| Impedance                        | 100 Ω ±15   |
| Coupling Attenuation             | 85 dB min @ 30-100 MHz 85-20 Log (f/100) @100-250 MHz |
| DC Resistance                    | 73 Ω/km nom.  |
| Max. Resistance Unbalance        | 4 %   |
| Capacitance                      | 5.6 nF/100m max.                                      |
| Capacitance Unbalance            | 3.3 pF/m max.   |
| Propagation Delay Skew           | 35 ns/100m max.                                       |
| Velocity of Propagation          | 69 %  |
| Dielectric Strength              | 1 KV/minute   |
| Min. Insulation Resistance       | 5 GΩ•km   |
| Max. Tensile Strength Short Term | 110 N   |
| Transfer Impedance               | 1000 mΩ/m max @ 100 MHz                               |
| Min. Bend Radius                 | 58 mm   |
| Operating Temperature Range      | -10 °C +70 °C   |

## TRANSMISSION PERFORMANCE

Cat. 6 screened Pair Horizontal Cables\*

| Freq. MHz | Attenuation dB/100m @ 20°C | NEXT dB | PSNEXT dB | RL dB | ELFEXT dB | PSELFEXT dB |
|-----------|----------------------------|---------|-----------|-------|-----------|-------------|
| 1         | 2.0                        | 80.0    | 78.0      | 27.0  | 81.8      | 77.8        |
| 4         | 3.8                        | 75.0    | 72.8      | 30.0  | 76.8      | 73.8        |
| 10        | 6.0                        | 71.0    | 69.0      | 30.0  | 70.0      | 67.8        |
| 20        | 8.5                        | 62.0    | 60.2      | 30.0  | 58.8      | 55.8        |
| 31.25     | 10.4                       | 60.9    | 58.9      | 28.6  | 56.8      | 53.3        |
| 100       | 19.8                       | 54.0    | 52.0      | 26.0  | 47.8      | 44.8        |
| 150       | 24.7                       | 50.7    | 48.7      | 25.1  | 43.3      | 40.3        |
| 200       | 29.0                       | 48.1    | 46.1      | 23.8  | 38.8      | 35.8        |
| 250       | 32.8                       | 46.3    | 44.3      | 22.0  | 36.8      | 33.8        |

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

## ORDERING INFORMATION

| Part Number   | Description                        | Standard Length |
|---------------|------------------------------------|-----------------|
| 113-11001504X | Category 6 S/FTP 4 Pair Cable PVC  | 305 mtr         |
| 113-11002504X | Category 6 S/FTP 4 Pair Cable LSZH | 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)  |
|---------------|------------------|----------|----------|-----------------|
| 113-11001504X | Plywood Reel/Ctn | 17.1     | 18.7     | 420 x 420 x 260 |
| 113-11002504X | Plywood Reel/Ctn | 17.5     | 19.0     | 420 x 420 x 260 |