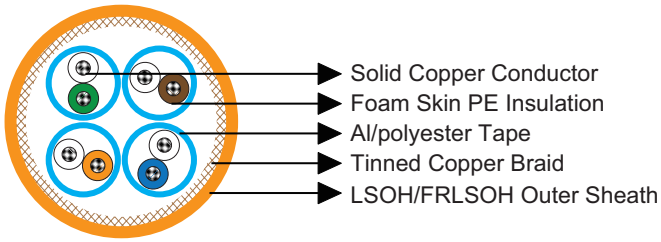
# Cat 7 S/FTP 23AWG 4P/8P

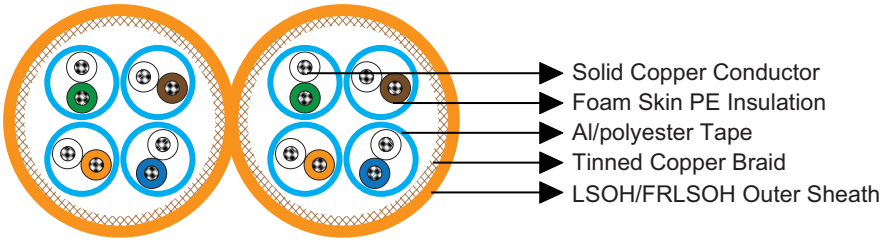
## Application

These Cat7 S/FTP cables are manufactured in accordance with IEC 61156-5 requirements, can support all Class F applications like Ethernet, Fast Ethernet, Gigabit Ethernet, suitable for voice, data, CATV and sharing application installations up to 600MHz.

## Standards




- EN 50173-1
- EN 50288-4-1
- ISO/IEC 11801
- IEC 61156-5
- IEC 60332-1 (for LSOH & FRLSOH Sheath)
- IEC 60754-2 (for LSOH & FRLSOH Sheath)
- IEC 61034 (for LSOH & FRLSOH Sheath)
- IEC 60332-3-24 (for FRLSOH Sheath)




## Construction

- Conductors: Solid bare copper conductor.
- Insulation: Foam skin PE.
- Twinning: Two coloured insulated conductors twisted together to form a pair.
- Individual Screen: Al/polyester tape.
- Overall Screen: Tinned copper wire braid.
- Outer Sheath: LSOH/FRLSOH.

## Core Identification

Pair 1: White, Blue
Pair 2: White, Orange
Pair 3: White, Green
Pair 4: White, Brown

## Electrical Properties

| | | |
|---|---|---|
| Characteristic Impedance(1-250MHz) | Ω | 100±15 |
| Characteristic Impedance(100-500MHz) | Ω | 100±22 |
| Nominal Velocity of Propagation(NVP) | | 79% |
| Maximum Mutual Capacitance | nF/100m | 5.6 |
| Maximum Resistance Unbalance | | 5% |
| Maximum Propagation Delay Skew(1-125MHz) | ns/100m | 30 |
| Maximum Propagation Delay@100MHz | ns/100m | 536 |
| Voltage Rating | V rms | 60 |

## Nominal Transmission Characteristics @20℃

| FREQ | NEXT | Attenuation | RL | ACR | ELFEXT | PSNEXT | PSACR | PSELFEXT |
|---|---|---|---|---|---|---|---|---|
| MHz | dB/100m | dB/100m | dB/100m | dB/100m | dB/100m | dB/100m | dB/100m | dB/100m |
| 1.0 | 80.0 | 2.0 | 20.0 | 78.0 | 80.0 | 77.0 | 75.0 | 77.0 |
| 4.0 | 80.0 | 3.6 | 23.0 | 76.4 | 80.0 | 77.0 | 73.4 | 77.0 |
| 10.0 | 80.0 | 5.7 | 25.0 | 74.3 | 74.0 | 77.0 | 71.3 | 71.0 |
| 16.0 | 80.0 | 7.2 | 25.0 | 72.8 | 69.9 | 77.0 | 69.8 | 66.9 |
| 20.0 | 80.0 | 8.1 | 25.0 | 71.9 | 68.0 | 77.0 | 68.9 | 65.0 |
| 31.3 | 80.0 | 10.1 | 23.6 | 69.9 | 64.1 | 77.0 | 66.9 | 61.1 |
| 62.5 | 75.5 | 14.5 | 21.5 | 61.0 | 58.1 | 72.5 | 58.0 | 55.1 |
| 100.0 | 72.4 | 18.5 | 20.1 | 53.9 | 54.0 | 69.4 | 50.9 | 51.0 |
| 200.0 | 67.9 | 26.8 | 18.0 | 41.1 | 78.0 | 64.9 | 38.1 | 45.0 |
| 250.0 | 66.5 | 30.2 | 17.3 | 36.3 | 46.0 | 63.5 | 33.3 | 43.0 |
| 300.0 | 65.3 | 33.3 | 17.3 | 32.0 | 44.5 | 63.3 | 29.0 | 41.5 |
| 600.0 | 60.8 | 48.9 | 17.3 | 11.9 | 38.4 | 57.8 | 8.9 | 35.4 |

## Mechanical and Thermal Properties

Bending Radius: 8×OD (during installation); 4×OD (fixed installed)
Temperature Range: -20℃ ~ +60℃

## Dimensions and Weight

| Part No. | Construction No. of elements×No. of cores in element×Cross section(mm²) | Nominal Insulation Thickness mm | Nominal Sheath Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|---|---|---|---|---|---|
| MLN-S/FTPCAT74P23 | 4×2×23AWG | 0.41 | 0.75 | 7.5 | 75 |
| MLN-S/FTPCAT78P23 | 2×(4×2×23AWG) | 0.41 | 0.75 | 7.5×15.0 | 150 |