



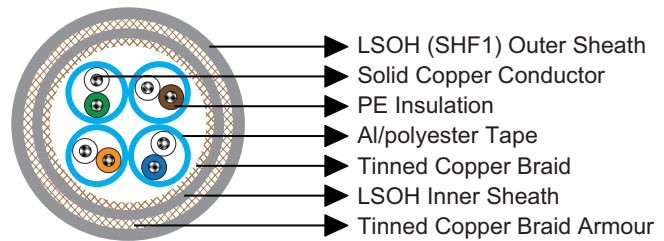
## Armoured Cat 6 S/FTP 23AWG

### Application

These Cat6 S/FTP cables are manufactured in accordance with IEC 61156-5 requirements, can support all Class E applications like Ethernet, Fast Ethernet, Gigabit Ethernet, suitable for basic voice and data installations up to 250MHz.

### Standards

- EN 50288
- ISO 11801
- IEC 61156-5
- IEC 60332-1
- IEC 60754-1/2
- IEC 61034



### Construction

- Conductors: Solid bare copper conductor.
- Insulation: PE.
- Twining: Two coloured insulated conductors twisted together to form a pair.
- Individual Screen: Al/polyester tape.
- Overall Screen: Tinned copper braid.
- Inner Sheath: LSOH.
- Armour: Tinned copper braid.
- Outer Sheath: LSOH (SHF1).

### Core Identification

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

### Electrical Properties

|                                    |          |        |
|------------------------------------|----------|--------|
| Characteristic Impedance(1-250MHz) | $\Omega$ | 100±15 |
|------------------------------------|----------|--------|



|  |         |     |
|--|---------|-----|
| Nominal Velocity of Propagation(NVP)     |         | 69% |
| Maximum Mutual Capacitance               | nF/100m | 5.6 |
| Maximum Capacitance Unbalance            | pF/100m | 330 |
| Maximum Resistance Unbalance             |         | 3%  |
| Maximum Propagation Delay Skew(1-125MHz) | ns/100m | 30  |
| Maximum Propagation Delay@100MHz         | ns/100m | 536 |

## Nominal Transmission Characteristics @20°C

| 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   | 74.3    | 2.0         | 20.0    | 72.2    | 67.8    | 72.3    | 70.2    | 64.8     |
| 4.0   | 65.3    | 3.8         | 23.0    | 61.4    | 55.8    | 63.3    | 59.5    | 52.8     |
| 8.0   | 60.8    | 5.3         | 24.5    | 55.4    | 49.7    | 58.8    | 53.5    | 46.7     |
| 10.0  | 59.3    | 6.0         | 25.0    | 53.3    | 47.8    | 57.3    | 51.3    | 44.8     |
| 16.0  | 56.2    | 7.6         | 25.0    | 48.6    | 43.7    | 54.2    | 46.6    | 40.7     |
| 20.0  | 54.8    | 8.5         | 25.0    | 46.3    | 41.8    | 52.8    | 44.3    | 38.8     |
| 25.0  | 53.3    | 9.5         | 24.3    | 43.8    | 39.8    | 51.3    | 41.8    | 36.8     |
| 31.3  | 51.9    | 10.7        | 23.6    | 41.1    | 37.9    | 49.9    | 39.1    | 34.9     |
| 62.5  | 47.4    | 15.4        | 21.5    | 31.9    | 31.9    | 45.4    | 29.9    | 28.9     |
| 100.0 | 44.3    | 19.8        | 20.1    | 24.4    | 27.8    | 42.3    | 22.4    | 24.8     |
| 200.0 | 39.8    | 29.0        | 18.0    | 10.6    | 21.8    | 37.8    | 8.6     | 18.8     |
| 250.0 | 38.3    | 32.8        | 17.3    | 5.3     | 19.8    | 36.3    | 3.3     | 16.8     |
| 300.0 | 37.1    | 36.4        | 16.8    | 0.5     | 18.3    | 35.1    | -1.5    | 15.3     |
| 350.0 | 36.1    | 39.8        | 16.3    | -3.8    | 16.9    | 34.1    | -5.8    | 13.9     |
| 400.0 | 35.3    | 43.0        | 15.9    | -7.9    | 15.8    | 33.3    | -9.9    | 12.8     |
| 450.0 | 34.5    | 46.3        | 15.5    | -10.5   | 14.7    | 32.5    | -12.5   | 11.7     |
| 500.0 | 33.8    | 48.9        | 15.2    | -15.3   | 13.8    | 31.8    | -17.3   | 10.8     |
| 550.0 | 33.2    | 51.8        | 14.9    | -18.6   | 12.9    | 31.2    | -20.6   | 9.9      |
| 600.0 | 32.4    | 54.5        | 14.7    | -21.9   | 12.2    | 30.6    | -23.9   | 9.2      |

\* Data for 250MHz above are for reference only

## Mechanical and Thermal Properties

Bending Radius: 8 × OD (during installation); 4 × OD (fixed installed)

Temperature Range: -20°C ~ +60°C

## Dimensions and Weight

| Part No.           | Construction<br>No. of elements×No. of<br>cores in element×Cross<br>section(mm <sup>2</sup> ) | Nominal<br>Insulation<br>Thickness<br>mm | Nominal Sheath Thickness<br>mm |       | Nominal<br>Overall<br>Diameter<br>mm | Nominal<br>Weight<br>kg/km |
|--------------------|---|--|--------------------------------|-------|--------------------------------------|----------------------------|
|                    |   |  | Inner                          | Outer |                                      |                            |
| MLN-S/FTPCAT6A4P23 | 4×2×23AWG   | 0.578                                    | 0.60                           | 1.09  | 10.78                                | 188                        |