

## Category 7 S/FTP Cable

### Features and Benefits

- **Applications:**
  - High-Speed Data Centers: 10G backbone cabling (future-proof for 25G/40G short-reach).
  - Broadcast & Professional AV .
  - Industrial Automation, Smart Factories & High-EMI Environments.
  - High-Speed PoE++ (802.3bt) Applications
  - Future-Proof Installations
- **Key Features:**
  - Cat 7 supports frequencies up to 600 MHz .
  - Future-proof for emerging technologies like 10 Gbps over 100M and 25 Gbps over shorter distances.
  - Each pair is individually shielded, and an overall shield reduces crosstalk and EMI (electromagnetic interference).
  - Suitable for Power over Ethernet applications (PoE/PoE+/4PPoE) according to IEEE 802.3af, IEEE ,802.3at and 802.3bt Type 4 (PoE++) up to 100W.
  - The optional outer LSZH/LSFRZH jacket is flame-retardant and produces minimal smoke and zero halogen gases during combustion.

### Physical Specifications

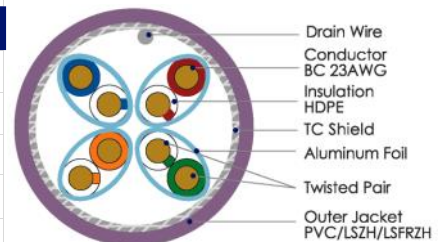
|                               |                                                                      |
|-------------------------------|----------------------------------------------------------------------|
| Category                      | 7                                                                    |
| No. of Pair & Conductor       | 4 PR /Solid bare copper / 23 AWG                                     |
| Conductor Insulation & Size   | HDPE/ Outer Dia. 1.45 ± 0.1 mm                                       |
| Cable Type                    | S-FTP / AL—MYLA Foil around each pair/Tinned copper Overall braiding |
| Outer Jacket Material & Size  | LSFRZH / Outer Dia. : 7.80 ± 0.35mm                                  |
| Min. Bend Radius Installation | 8x Cable-Ø                                                           |
| Operating Temperature         | -10°C to +65°C                                                       |
| Storage Temperature           | - 20°C to +75°C                                                      |

### Electrical Characteristics

|                                         |              |
|-----------------------------------------|--------------|
| Conductor resistance unbalance          | ≤ 2%         |
| Delay skew 4.0-100MHz                   | ≤ 25 ns/100m |
| Max. DC resistance                      | ≤ 9.0 Ω/100m |
| Insulation Resistance                   | ≥5000 MΩ*km  |
| Propagation Velocity at >10 MHz (NVP*c) | 76 %         |
| Bandwidth                               | 600 MHz      |

### Transfer Characteristics

| Freq.<br>MHz | RL   | ATT  | NEXT | ACRF | PS NEXT | PS ACRF |
|--------------|------|------|------|------|---------|---------|
|              | ≥dB  | ≥dB  | ≥dB  | ≥dB  | ≥dB     | ≥dB     |
| 4.00         | 23.0 | 3.7  | 78.0 | 78.0 | 75.0    | 75.0    |
| 100.00       | 20.1 | 19.0 | 72.4 | 54.0 | 69.4    | 52.3    |
| 250.00       | 17.3 | 31.0 | 66.4 | 46.0 | 63.4    | 44.3    |
| 600.00       | 17.3 | 50.1 | 60.7 | 38.4 | 57.7    | 36.7    |



- **Standard:**
  - ISO/IEC 11801 Class F.
  - EN 50173-1 & EN 50288-9-1.
  - ANSI/TIA-568.2-D
  - IEC 60332-1,2 (for LSZH),
  - IEC 60332-3-24/25, (for LSFRZH),
  - RoHS & CE

| Part No.   | Type of Class | Type of Cable | Conductor Size | Outer Jacket | Outer Jacket Color Options | Packaging         |
|------------|---------------|---------------|----------------|--------------|----------------------------|-------------------|
| CS-C7XSF23 | CAT-7         | S-FTP         | 23AWG          | LSFRZH       | Purple                     | 500M - 1000M/Reel |