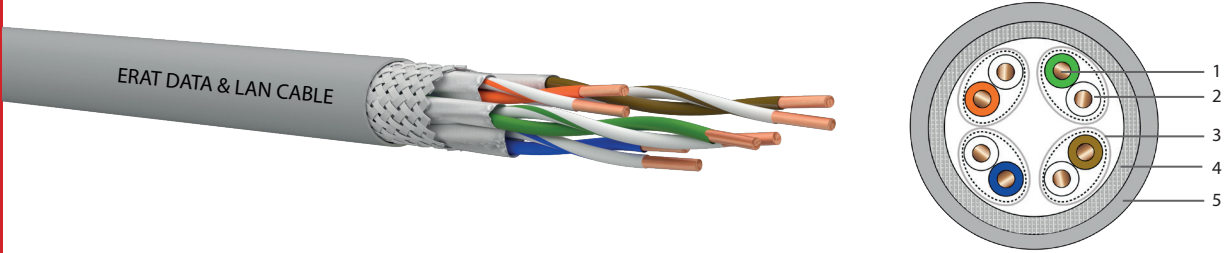


## CAT 6 S-FTP 23 AWG DATA CABLE



| AREAS OF USE / FEATURES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CABLE CONSTRUCTION                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>ERAT CAT 6 cables are used to transmit digital and analog audio, data, video, and PoE signals.</p> <p>ERAT CAT 6 S/FTP cables are a type of cable capable of data transmission at speeds of 1 Gbps and a frequency of 250 MHz. They are manufactured with either LSZH-HFFR or PVC jackets, depending on customer requirements.</p> <ul style="list-style-type: none"> <li>• 1000BASE-TX Gigabit Ethernet</li> <li>• 1000BASE-T Gigabit Ethernet</li> <li>• ATM 155 / ATM 25</li> <li>• 100BASE-T "Fast Ethernet"</li> <li>• 100BASE-T2/ 100BASE-T4</li> <li>• 100BASE-TX</li> <li>• 10BASE-T Ethernet</li> <li>• ISDN, TPDDI, TP-PMD</li> <li>• Power Over Ethernet (PoE)</li> </ul> | <ol style="list-style-type: none"> <li>1. Copper Conductor</li> <li>2. LSZH / PVC Isolated</li> <li>3. Aluminum Foil</li> <li>4. Tinned Copper Braid</li> <li>5. Outer Sheath</li> </ol> |

| PHYSICAL PROPERTIES               |                                                                                                   |
|-----------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Conductor</b>                  | Pure, annealed copper                                                                             |
| <b>Conductor Diameter</b>         | 23 AWG                                                                                            |
| <b>Isolated</b>                   | Polyolefin                                                                                        |
| <b>Number of Isolates</b>         | 8, in 4 twisted pairs                                                                             |
| <b>Copper Braid</b>               | Tinned Copper Braid                                                                               |
| <b>Individual Pair Shield</b>     | Laminated aluminum foil providing 100% coverage (foil side facing outwards)                       |
| <b>Outer Sheath</b>               | LSZH (Low Smoke Zero Halogen) flame-retardant or PVC compound                                     |
| <b>Jacket Color</b>               | Grey (RAL 7040). (Different colors can be produced upon customer request.)                        |
| <b>Performance Guarantee</b>      | A 25-year system performance guarantee is offered when end-to-end ERAT-branded products are used. |
| <b>Cable Labeling Information</b> | Brand, Cable type, Relevant standards, Date, Serial number, Meters                                |

| MECHANICAL AND ENVIRONMENTAL PROPERTIES |                            |
|-----------------------------------------|----------------------------|
| <b>Tensile Force</b>                    | 50 N / mm <sup>2</sup> max |
| <b>Bending Radius (Short-Term)</b>      | 4 x Cable Diameter         |
| <b>Bending Radius (Long-Term)</b>       | 8 x Cable Diameter         |
| <b>Operating Temperature</b>            | -40 to +70 °C              |
| <b>Installation Temperature</b>         | -10 to +50 °C              |
| <b>Storage Temperature</b>              | -40 to +70 °C              |

## CAT 6 S-FTP 23 AWG DATA CABLE

### PACKAGING, DIMENSIONS & WEIGHT

| Packaging Type      | Outer Diameter (mm) | Approximate Weight (kg) |
|---------------------|---------------------|-------------------------|
| 500 m Plywood Reel  | 7.2±0.3             | 26.5                    |
| 1000 m Plywood Reel | 7.2±0.3             | 53.0                    |

### ELECTRICAL PROPERTIES

|                                              |                                                     |
|----------------------------------------------|-----------------------------------------------------|
| Impedance Characteristic                     | 100±6 Ohm @ 1-250 MHz                               |
| DC Resistance                                | 80 Ohm/km max.                                      |
| Resistance Imbalance                         | 2% max.                                             |
| Effective Capacity                           | 45 pF/m nom. @ 1 KHz                                |
| Capacitance Imbalance (to Ground)            | 1600 pF/km max. @ 1 KHz.                            |
| Voltage                                      | 72 Vdc max.                                         |
| Dielectric Strength                          | 1.7 kV AC / 2 seconds                               |
| Signal Speed (NVP)                           | Min. %67 - 69                                       |
| Signal Transmission Time (Propagation Delay) | 534 + 36/f <sup>1/2</sup> nS/100m max @ 1-250 MHz   |
| Inter-lane Signal Skew                       | 45 nS/100m max @ 1-250 MHz                          |
| Insulation Resistance                        | 5000 MegaOhm•km min. @ 500 Vdc                      |
| Joint Attenuation                            | 55 dB min @ 30-100 MHz 55-20Log(f/100) @100-250 MHz |

| Frequency (MHz) | Return Loss (dB) | Insertion Loss (dB) | NEXT Loss (dB) | PS NEXT Loss (dB) | ACRF (dB) |
|-----------------|------------------|---------------------|----------------|-------------------|-----------|
|                 | Min.             | Max.                | Min.           | Min.              | Min.      |
| 1.00            | 19.1             | 1.9                 | 65.0           | 62.0              | 64.2      |
| 4.00            | 21.0             | 3.5                 | 64.1           | 61.8              | 52.1      |
| 8.00            | 21.0             | 5.0                 | 59.4           | 57.0              | 46.1      |
| 10.00           | 21.0             | 5.5                 | 57.8           | 55.5              | 44.2      |
| 16.00           | 20.0             | 7.0                 | 54.6           | 52.2              | 40.1      |
| 20.00           | 19.5             | 7.9                 | 53.1           | 50.7              | 38.2      |
| 25.00           | 19.0             | 8.9                 | 51.5           | 49.1              | 36.2      |
| 31.25           | 18.5             | 10.0                | 50.0           | 47.5              | 34.3      |
| 62.50           | 16.0             | 14.4                | 45.1           | 42.7              | 28.3      |
| 100.00          | 14.0             | 18.6                | 41.8           | 39.3              | 24.2      |
| 200.00          | 11.0             | 27.4                | 36.9           | 34.3              | 18.2      |
| 250.00          | 10.0             | 31.1                | 35.3           | 32.7              | 16.2      |

### ISOLATED COLORS

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |
| Blue                                                                                | White                                                                               | Orange                                                                              | Orange /White                                                                       | Yellow                                                                              | Yellow /White                                                                         | Brown                                                                                 | Brown/White                                                                           |