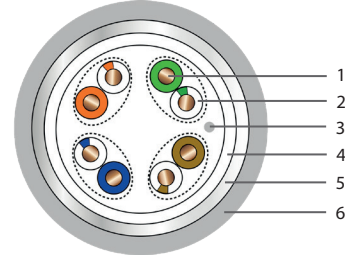
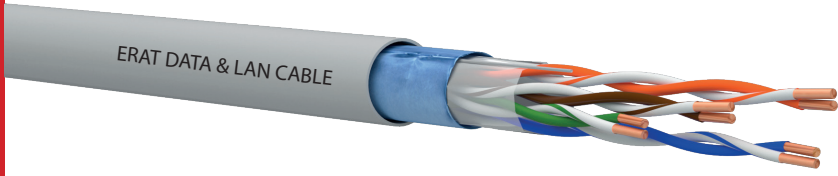


CAT 5E F-UTP 24 AWG DATA CABLE



AREAS OF USE / FEATURES	CABLE CONSTRUCTION
Category 5E cables are widely used in network cabling systems. ERAT CAT 5E F/UTP cables support data transmission rates of up to 100 Mbps with an operating bandwidth of 100 MHz. They provide high transmission performance and are less susceptible to external interference. The cables are available with LSZH, HFFR, or PVC outer jackets to meet specific customer requirements. • 10BASE-T Ethernet • ISDN, TPDDI, TP-PMD • Power Over Ethernet (PoE) • 100BASE-T "Fast Ethernet" • 100BASE-T2/ 100BASE-T4 • 100BASE-TX	1. Copper Conductor 2. LSZH / PVC Isolated 3. Grounding Wire 4. Polyester Tape 5. Aluminum Foil 6. Outer Sheath

PHYSICAL PROPERTIES	
Conductor	Pure, annealed copper
Conductor Diameter	24 AWG
Isolated	Polyolefin
Number of Isolates	8, in 4 twisted pairs
Polyester Tape Wrap	Polyester tape provides 100% coverage.
Grounding Wire	Solid, tinned annealed copper
Internal Shielding	Laminated aluminum foil providing 100% opacity (foil side facing inwards)
Outer Sheath	LSZH (Low Smoke Zero Halogen) flame-retardant or PVC compound
Jacket Color	Grey (RAL 7040). (Different colors can be produced upon customer request.)
Performance Guarantee	A 25-year system performance guarantee is offered when end-to-end ERAT-branded products are used.
Cable Labeling Information	Brand, Cable type, Relevant standards, Date, Serial number, Meters

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

CAT 5E F-UTP 24 AWG DATA CABLE

PACKAGING, DIMENSIONS & WEIGHT

Packaging Type	Outer Diameter (mm)	Approximate Weight (kg)
500 m Plywood Reel	6.0±0.3	20.5
1000 m Plywood Reel	6.0±0.3	41

ELECTRICAL PROPERTIES

Impedance Characteristic	100±6 Ohm @ 1-100 MHz
DC Resistance	93 Ohm/km max.
Resistance Imbalance	2% max.
Effective Capacity	56 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
Insulation Resistance	5000 MegaOhm•km min. @ 500 Vdc
Joint Attenuation	55 dB min @ 30-100 MHz 55-20Log(f/100)
Transfer Impedance	50 mOhm/m max. @ 1-30 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	19.0	2.1	60.0	57.0	58.6
4.00	19.0	3.9	54.8	51.8	46.6
8.00	19.0	5.5	50.0	47.0	40.6
10.00	19.0	6.2	48.5	45.5	38.6
16.00	19.0	7.9	45.2	42.2	34.5
20.00	19.0	8.9	43.7	40.7	32.6
25.00	18.0	10.0	42.1	39.1	30.7
31.25	17.1	11.2	40.5	37.5	28.7
62.50	14.1	16.2	35.7	32.7	22.7
100.00	12.0	21.0	32.3	29.3	18.6

ISOLATED COLORS

							
Blue	Blue/White	Orange	Orange /White	Yellow	Yellow /White	Brown	Brown/White