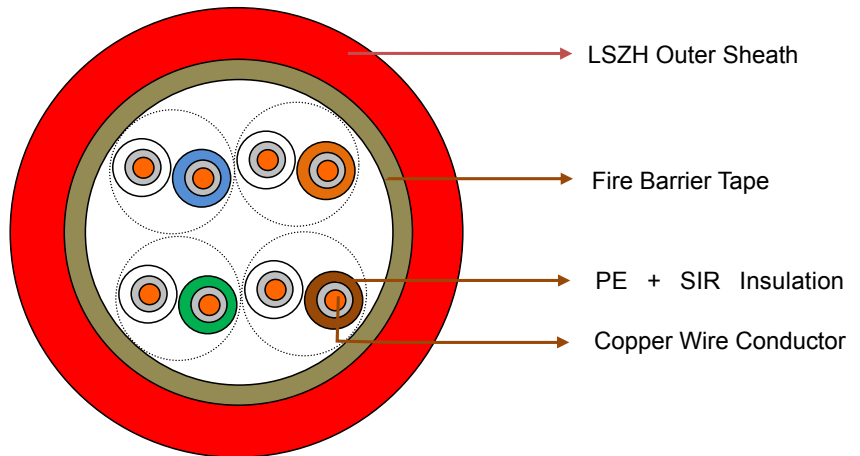
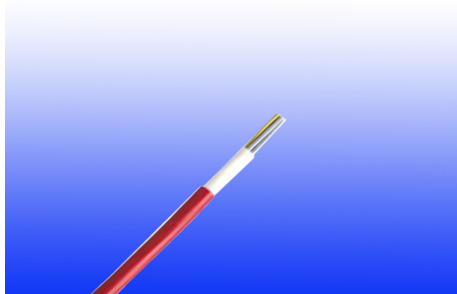




Fire Resistant UTP CAT5e Data Cables

FFX-CAT5EU/UTP4P24FR



APPLICATION

The cables are designed for structure wiring, compatible with all known connection systems according to EN 50173.

Based on the design for structured wiring (found in IEC 61156 and BS EN 50288), this cable brings together high frequency data transmission and circuit integrity in four pair cable that will continue to transmit data even when being directly attacked by fire.

STANDARDS

Basic design to EN50173

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23; BS 6387 CWZ; DIN VDE 0472-814(FE180); CEI 20-36/2-1; SS299-1; NBN C 30-004 (cat. F3); NF C32-070-2.3(CR1)
System Circuit Integrity	DIN 4102-12, E30 depending on lay system
Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires & cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*

VOLTAGE RATING

60V

CABLE CONSTRUCTION

Conductors: Plain annealed copper wire, solid according to IEC 60228 class 1.

Insulation: PE and SIR compound.

Cabling Elements: Insulated cores are twisted to form pairs with varying lay length to minimize crosstalk. Two-pair cable had four cores laid in quad formation.

Fire Barrier: Fire resistance tape wrapped overall core assembly.

Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1.

PHYSICAL AND THERMAL PROPERTIES

Temperature range: -30°C ~ +75°C

Minimum bending radius during installation (mobile state): 8 x Overall Diameter

Minimum bending radius during operation (fixed state): 4 x Overall Diameter

ELECTRICAL PERFORMANCE

Characteristic Impedance	100 Ohm±15%
Nominal Velocity of Propagation (NVP)	69%
Max. DC Resistance	9.38 Ohm/100m
Max. Resistance Unbalance	5%
Max. Mutual Capacitance:	5.6 nF/100m
Maximum Capacitance Unbalance	330 pF/100m
Max. Propagation Delay Skew	45 ns/100m
Max. Propagation Delay	536 ns/100m@100 mhz
Max. Pulling Load	80N

TRANSMISSION PROPERTIES

FREQ (MHz)	NEXT(dB/100m) Minimum Value/Typical Value/ Standard Value	IL (dB/100m)	SRL (dB/100m) Minimum Value/Typical Value/ Standard Value
1	64.0/71.0/62.0	2.0	24.5/26.0/23.0
4	55.0/62.0/53.0	4.0	24.5/26.0/23.0
8	49.5/57.0/48.0	5.7	24.5/26.0/23.0
10	49.0/56.0/47.0	6.4	24.5/26.0/23.0
16	44.9/52.0/44.0	8.2	24.5/26.0/23.0
20	42.5/48.0/42.0	9.2	24.5/26.0/23.0
25	42.0/48.0/41.0	10.3	24.5/26.0/23.0
31.25	40.6/48.0/39.0	11.6	22.5/24.0/21.0
62.5	36.1/43.0/35.0	16.9	19.5/22.0/18.0
100	34.0/40.0/32.0	21.8	17.5/20.0/16.0



CONSTRUCTION PARAMETERS

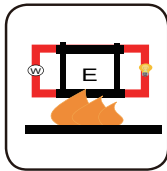
Cable Code	Conductor Diameter	Nominal Sheath Thickness	Nominal Overall Diameter	Approx. Weight
	mm	mm	mm	kg/km
FFX-CAT5EU/UTP4P24FR	0.50±0.01	1.20±0.1	11.0±1.0	130



Rated Voltage



Standard



IEC 60331/BS 6387
NF C32-070-2.3(CR1)
Circuit Integrity



Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4



IEC 61034-1&2
EN 50268-1&2/NF C32-07
Low Smoke Emission



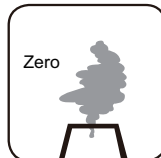
NES 02-713/NF C 20-454
Low Toxicity



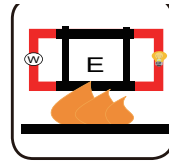
IEC60754-2
EN50267-2-2/3
NF C 32-074
Low Corrosivity



IEC 61034-1&2
EN 50268-1&2/NF C32-07
Low Smoke Emission



Halogen Free
IEC60754-1
EN50267-2-1



DIN 4102-12
Functional Integrity