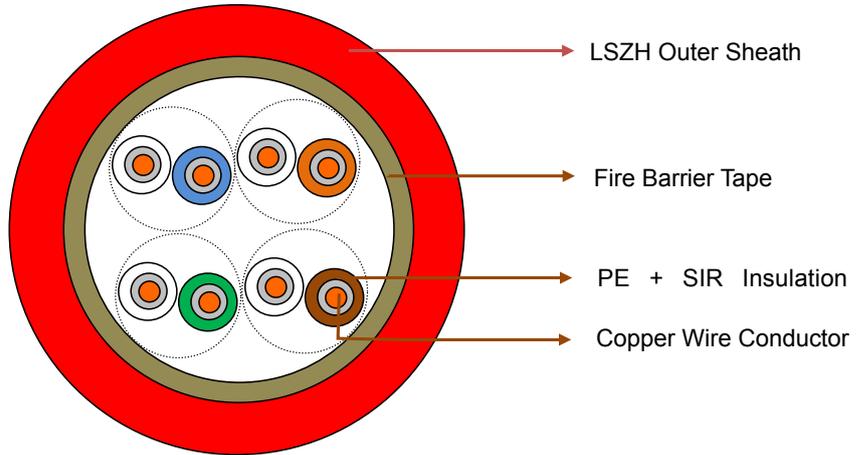




Fire Resistant UTP CAT6 Data Cables

FFX-CAT6UTP4P23FR



APPLICATION

Category 6 Cable is a cable standard for Gigabit Ethernet and other network protocol that is backward compatible with the Category 5/5E and Category3 Cable Standard. Cat. 6 feature more stringent specification for crosstalk and system noise. The cable standard is suitable for 10BaseT, 100BaseTx & 1000BaseT (Gigabit Ethernet) application.

With fire barrier tape, it will continue to transmit data even when being directly attacked by fire.

STANDARDS

Basic design to EN50173

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23
-------------------	--------------

VOLTAGE RATING

60V

CABLE CONSTRUCTION

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

Insulation: PE and SIR compound.

Separator: Plastic separator.

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 during operation (fixed state): -20°C - +60°C

Temperature range during installation (mobile state): -5°C - +50°C

Minimum bending radius: 10 x Overall Diameter

ELECTRICAL PERFORMANCE

Characteristic Impedance	100±15Ω
Nominal Velocity of Propagation (NVP)	69%
Max. DC Resistance	7.5 Ω/100m
Max. Resistance Unbalance	3%
Max. Mutual Capacitance:	5.6 nF/100m
Max. Capacitance Unbalance	330 pF/100m
Max. Propagation Delay Skew	45 ns/100m
Max. Propagation Delay	536 ns/100m@100mhz
Max. Pulling Load	80 N

TRANSMISSION PROPERTIES

Frequency	Min.RL	Max.Attenuation	NEXT	PSNEXT
MHz	dB	dB/100m	dB	dB
1	18	1.0	74.3	72.3
4	21	2.8	65.3	63.3
8	22.5	4.3	60.8	58.8
10	23	5.0	59.3	57.3
16	23	6.6	56.2	54.2
20	23	7.5	54.8	52.8
25	22.3	8.5	53.3	51.3
31.25	21.6	9.7	51.9	49.9
62.5	19.5	14.4	47.4	45.4
100	18.1	18.8	44.3	42.3



Frequency	Min.RL	Max.Attenuation	NEXT	PSNEXT
MHz	dB	dB/100m	dB	dB
200	16	28	39.8	37.8
250	15.3	31.8	38.3	36.3

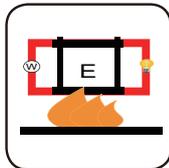
Frequency	ELFEXT	PSELFEXT	ACR
MHz	dB	dB	dB
1	67.8	64.8	72.3
4	55.8	52.8	61.5
8	49.7	46.7	55.5
10	47.8	44.8	53.3
16	43.7	40.7	48.6
20	41.8	38.8	46.3
25	39.8	36.8	43.8
31.25	37.9	34.9	41.2
62.5	31.9	28.9	32
100	27.8	24.8	24.5
200	21.8	18.8	10.8
250	19.8	16.8	5.5

CONSTRUCTION PARAMETERS

Cable Code	Conductor Diameter	Nominal ISheath Thickness	Nominal Overall Diameter	Approx. Weight
	mm	mm	mm	kg/km
FFX-CAT6UTP4P23FR	0.57±0.01	1.20±0.1	11.5±1.0	140



Rated Voltage



IEC 60331-23
Circuit Integrity