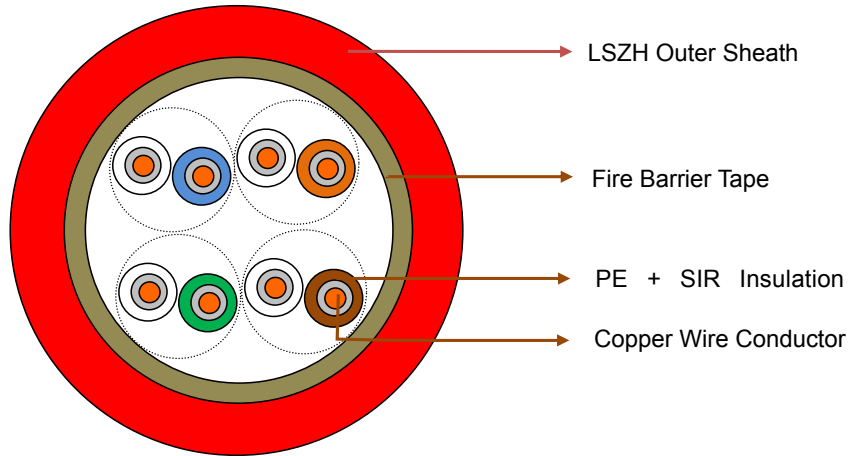
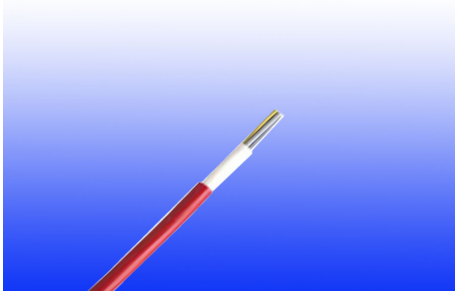




### Fire Resistant UTP CAT6 Data Cables

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
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#### 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

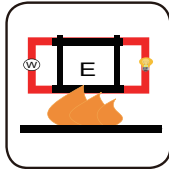
Frequency	ELFEXT	PSELFEXT	ACR
MHz	dB	dB	dB
1	67.8	64.8	72.3
4	55.8	52.8	61.5
8	49.7	46.7	55.5
10	47.8	44.8	53.3
16	43.7	40.7	48.6
20	41.8	38.8	46.3
25	39.8	36.8	43.8
31.25	37.9	34.9	41.2
62.5	31.9	28.9	32
100	27.8	24.8	24.5
200	21.8	18.8	10.8
250	19.8	16.8	5.5

### 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