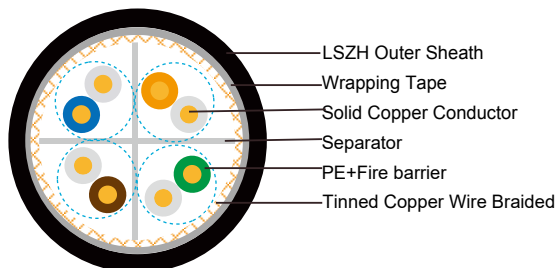




Fire Resistant CAT6 S/UTP Unarmoured and LSZH Sheathed Data Cables

FFX-CAT6S/UTP4P23FR



APPLICATION

Cat6 cable is a cable standard for Gigabit ethernet and other network protocol, suitable for 10baseT, 100baseTx&1000baseT (Gigabit ethernet) application.

STANDARDS

Basic design adapted to EN 50173

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23
Flame Retardance (Single vertical wire or cable test)	IEC 60332-1-2; EN 60332-1-2
Reduced Fire Propagation (Vertically-mounted bundled wires & cables test)	IEC 60332-3-24;EN 60332-3-24
Halogen Free	IEC 60754-1; EN 50267-2-1
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2
Minimum Smoke Emission	IEC 61034-2; EN 61034-2

CABLE CONSTRUCTION

Conductors: 4 Pairs (8 cores) 23AWG solid pure bare copper.

Insulation: PE.

Fire Barrier: Fire resistant tape or compound wrapped around the insulation cores.

Twinning: Two coloured insulated conductors twisted together to form a pair.

Separator: Isolator.

Overall Screen: Tinned copper wire braided.

Outer Sheath: Halogen-free flame retardant thermoplastic LSZH compound.

PHYSICAL AND THERMAL PROPERTIES

Installation Temperature: 10°C ~ +50°C; **Operating Temperature:** -20°C ~ +60°C

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

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

COLOUR CODE

Insulation Color: White/Blue & Blue, White/Orange & Orange, White/Green & Green, White/Brown & Brown.

Sheath Color: Black. Other color is also available upon request.



FIREFLIX Fire Resistant Instrumentation & Data Cables

www.caledonian-cables.co.uk www.addison-cables.com

ELECTRICAL PROPERTIES

AWG		23
Nominal Conductor Diameter	mm	0.56~0.58
Maximum DC Resistance@20°C	Ω/100m	8.0
Maximum DCR Unbalance	%	3
Maximum Mutual Capacitance	pF/m	7.0
Maximum Capacitance Unbalance	pF/100m	300
Characteristic Impedance@1-100MHz	Ω	100±15
Dielectric Strength(min.)	KV/1min	1.5 a.c/2.5 d.c

TRANSMISSION PROPERTIES

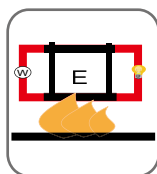
FREQ MHz	Attenuation dB/100m	NEXT dB	PSNEXT dB	ELFEXT dB/100m	PSELFEXT dB/100m	RL dB
0.772	1.8	76.0	74.0	70.0	67.0	—
1	2.0	74.3	72.3	67.8	64.8	20.0
4	3.8	65.3	63.3	55.7	52.7	23.0
8	5.3	60.8	58.8	49.7	46.7	24.5
10	6.0	59.3	57.3	47.8	44.8	25.0
16	7.6	56.3	54.3	43.7	40.7	25.0
20	8.5	54.8	52.8	41.7	38.7	25.0
25	9.5	53.3	51.3	39.8	36.8	24.3
31.25	10.7	51.9	49.9	37.9	34.9	23.6
62.5	15.4	47.4	45.4	31.8	28.8	21.5
100	19.8	44.3	42.3	27.8	24.8	20.1
155	25.2	41.5	39.5	23.9	20.9	18.8
200	29.0	39.8	37.8	21.7	18.7	18.0
250	32.8	38.3	36.3	19.8	16.8	17.3

CONSTRUCTION PARAMETERS

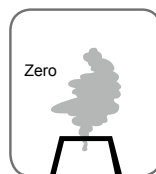
Cable Code	Conductor Diameter	Nominal PE Insulation Thickness	Nominal Outer Sheath Thickness	Approx. Overall Diameter	Nominal Weight
	AWG	mm	mm	mm	kg/km
FFX-CAT6S/UTP4P23FR	23	0.2	1.0	11.5	126



Standard


Circuit Integrity
IEC 60331-23/BS 6387(Optional)

Flame Retardancy
BS EN 60332-1-2

Reduced Fire Propagation
EN 60332-3-24

Halogen Free
IEC 60754-1

Low Corrosivity
IEC 60754-2

Low Smoke Emission
IEC 61034-2