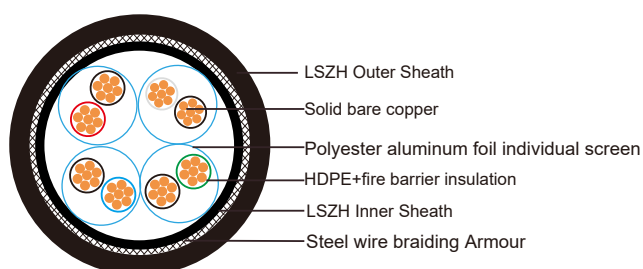


Fire Resistant CAT6A SWB Armoured Data Cables

Fire Resisting S/FTP Cat 6A Cable to IEC 60331-23

Part NO. FFX-CAT6AS/FTP4P23FR SWB



APPLICATION

Cat6A Cable is a cable standard for Gigabit Ethernet and other network protocol, suitable for 10BaseT, 100BaseTx & 1000BaseT (Gigabit Ethernet) application. In addition, these cables can be offered with copper wire braid armoured & flame retardant outer sheath, providing additional mechanical protection still maintaining the flexibility of the cable.

STANDARDS

Basic design adapted to EN 50173

FIRE PERFORMANCE

Circuit Integrity	IEC 60331-23; BS 6387 CWZ (Optional)
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: 23AWG solid bare copper.

Insulation: HDPE+fire barrier insulation.

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

Individual Shield: Every pair is separately shielded with polyester aluminum foil.

Overall Shield: Tinned copper braiding

Inner Sheath: Thermoplastic LSZH compound, coloured black.

Armouring: Steel wire braid.

Outer Sheath: Thermoplastic LSZH compound, coloured black. UV resistance, oil resistance, mud resistance can be offered as option.



Caledonian

FIREFLIX Fire Resistant Instrumentation & Data Cables

www.caledonian-cables.net

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 PROPERTIES

AWG		23
Maximum DC Resistance@20°C	Ω/100m	9.38
Maximum DCR Unbalance	%	3
Maximum Mutual Capacitance	pF/m	5.8
Maximum Capacitance Unbalance	pF/100m	30
Characteristic Impedance@1-100MHz	Ω	100±15
Maximum Propagation Delay Skew	ns/100m	18

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
300	34.5	37.1	35.1	18.3	15.3	16.8
350	45.2	36.1	34.1	16.9	13.9	16.3
400	40.7	35.3	33.3	15.8	12.8	15.9
450	43.2	34.5	32.5	14.7	11.7	15.5
500	46.0	33.8	31.8	13.8	10.8	15.2

CONSTRUCTION PARAMETERS

Cable Code	Construction No. of Elements×No. of Cores in Element×Conductor Diameter	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Approx. Overall Diameter	Approx. Weight
	AWG	mm	mm	mm	mm	kg/km
FFX-CAT6AS/FTP4P23FR SWB	4x2x23	0.335	1.0	1.0	13.0	224