



Caledonian

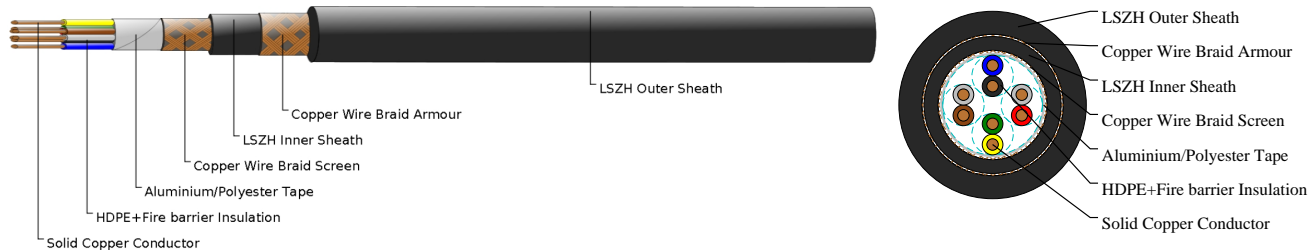
FIREFLIX Fire Resistant Instrumentation & Data Cables

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Fire Resistant CAT5E CWB/SWB/SWA Armoured Data Cables

FFX-CAT5E SF/UTP 4P24FR CWB



APPLICATIONS

Cat5E is a cable standard for Gigabit Ethernet and other network protocol, suitable for basic voice and data installations up to 100 MHz. In addition, these cables can be offered with copper wire braid armoured & flame retardant outer sheath, providing additional mechanically protection still maintaining the flexibility of the cable.

STANDARDS

ISO/IEC 11801

EN 50173

ANSI/TIA/EIA 568

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire 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
Circuit Integrity	IEC 60331-23; BS 6387 CWZ (Optional)

CABLE CONSTRUCTION

Conductors: 24AWG solid bare copper.

Insulation: HDPE+Fire barrier.

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

Overall Fire Barrier (optional).

Overall Screen1: Aluminium/polyester tape screen.

Overall Screen2: Copper wire braid screen.

Inner Sheath: Thermoplastic LSZH compound.

Armouring: Copper Wire Braid(CWB).

Outer Sheath: Halogen-free flame retardant thermoplastic LSZH compound type LTS3 as per BS 7655-6.1(Thermosetting LSZH compound type SW2-SW4 as per BS 7655-2.6 can be offered).



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Outer Sheath Option: UV resistance, hydrocarbon resistance, oil resistance, anti-rodent and anti-termite properties can be offered as option. Compliance to fire performance standard (IEC 60332-1, IEC 60332-3, UL 1581, UL 1666 etc) depends on the oxygen index of the PVC compound and the overall cable design. LSPVC can also be provided upon request.

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: 24

Nominal Conductor Diameter: 0.53mm

Maximum DC Resistance@20°C: 9.38Ω/100m

Maximum DCR Unbalance: 5%

Maximum Mutual Capacitance: 55.8pF/m

Maximum Capacitance Unbalance: 330pF/100m

Characteristic Impedance@1-100MHz: 100±15Ω

Maximum Propagation Delay Skew: 45ns/100m

DIMENSION AND PARAMETERS

Caledonian Cable Code	No. of Pairs	Conductor Diameter	Nominal Insulation Thickness	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Approx. Overall Diameter	Cable Weight
		mm	mm	mm	mm	mm	kg/km
FFX-CAT5E SF/UTP 4P24FR CWB	4	0.53	0.65	0.6	1	11.76	147



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



EN 50173



Flame Retardancy
BS EN 60332-1-2



Zero
Halogen Free
IEC 60754-1



Low Corrosivity
IEC 60754-2



Low Smoke Emission
EN 61034-2



Reduced Fire Propagation
EN 60332-3-24