



Caledonian

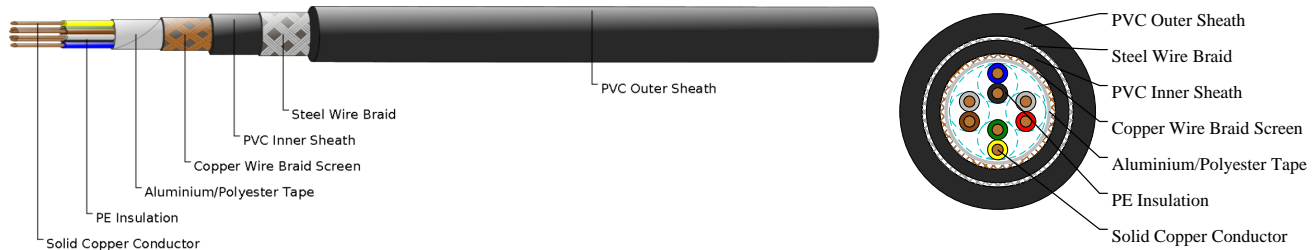
FIREGUARD Flame Retardant Instrumentation & Data Cables

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Flame Retardant CAT6 SWB Armoured Data Cables

FGD-CAT6 SF/UTP 4P23 SWB



APPLICATIONS

Cat6 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

ISO/IEC 11801

EN 50173

ANSI/TIA/EIA 568

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	BS EN 60332-1-2
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CABLE CONSTRUCTION

Conductors: 23AWG solid bare copper.

Insulation: PE.

Twining: Two coloured insulated conductors twisted together to form a pair. Four pairs of twisted wires are respectively placed in the 4 grooves of the cross skeleton.

Screen: Aluminium/polyester tape.

Overall Screen: Copper wire braid.

Inner Sheath: Flame retardant, low smoke and halogen-free polyolefin, coloured black.

Armouring: Steel Wire Braid (SWB)

Outer Sheath: Thermoplastic PVC compound.

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



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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

Nominal Conductor Diameter: 0.57/0.58mm

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

Maximum DCR Unbalance: 3%

Maximum Mutual Capacitance: 5.8pF/m

Maximum Capacitance Unbalance: 30pF/100m

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

Maximum Propagation Delay Skew: 18ns/100m

DIMENSION AND PARAMETERS

Caledonian Cable Code	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
FGD-CAT6 SF/UTP 4P23 SWB	0.57/0.58	0.2	0.6	1	8.96	148



EN 50173



Flame Retardancy
BS EN 60332-1-2