



# Caledonian

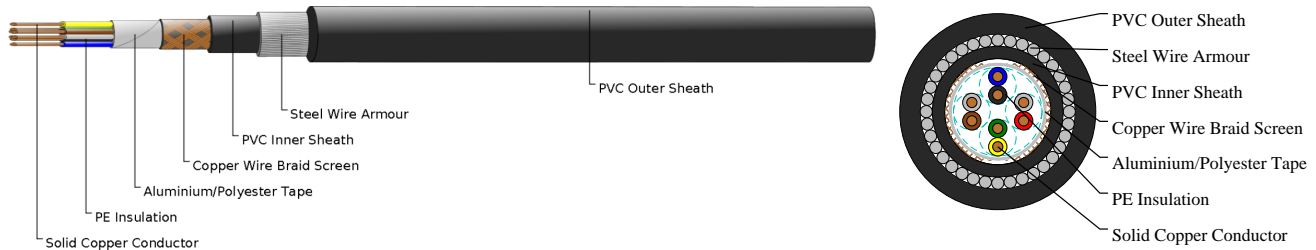
FIREGUARD Flame Retardant Instrumentation & Data Cables

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## Flame Retardant CAT6 SWA Armoured Data Cables

FGD-CAT6 SF/UTP 4P23 SWA



## 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 Armour (SWA)

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 SWA	0.57/0.58	0.2	0.6	1	9.96	242



EN 50173



Flame Retardancy  
BS EN 60332-1-2