



# Caledonian

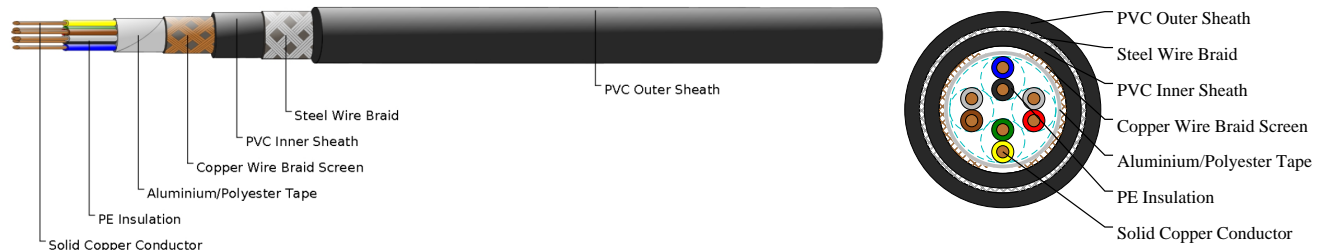
FIREGUARD Flame Retardant Instrumentation & Data Cables

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## Flame Retardant CAT5E SWB Armoured Data Cables

FGD-CAT5E SF/UTP 4P24 SWB



## 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 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 |
|--|-----------------|

## CABLE CONSTRUCTION

Conductors: 24AWG solid bare copper.

Insulation: PE.

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

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

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



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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     | 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-CAT5E SF/UTP 4P24 SWB | 0.53               | 0.2                          | 0.6                            | 1                              | 8.76                     | 123          |



EN 50173



Flame Retardancy  
BS EN 60332-1-2