Caledonian

FIREGUARD Flame Retardant Instrumentation & Data Cables

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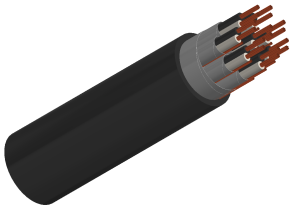
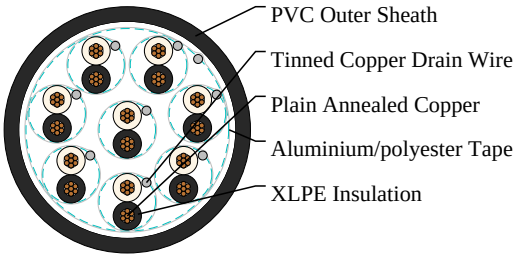
Flame Retardant Individual and Overall Screened Instrumentation Cables (8 Pairs)

RE-2X(St)Y PiMF





APPLICATIONS

The unarmoured XLPE versons are generally used for indoor installation and suitable for wet and damp areas. Generally used within industrial process manufacturing plants for communication, data and voice transmission signals and services.

STANDARDS

Basic design to BS EN 50288-7 (formerly BS 5308)

FIRE PERFORMANCE

Flame Retardance (Single vertical wire or cable test)	IEC 60332-1-2; EN 60332-1-2

VOLTAGE RATING

500V

CABLE CONSTRUCTION

Conductor: Plain or metal coated copper wire, solid, stranded or flexible according to IEC 60228 class 1, 2 and 5.
Insulation: Extruded XLPE compound according to EN 50290-2-29. PVC, PE, PP compound can be offered as options.
Pairs: Two insulated conductors uniformly twisted together with a lay not exceeding 100mm (<=1.5mm²) or 150mm (for 2.5mm²).
Individual Screen: Aluminium/polyester tape is applied over each pair with metallic side down in contact with tinned copper drain wire, 0.5mm².
Binder tape: PETP transparent tape.
Overall Screen: Aluminium/polyester tape is applied over the laid up pairs with metallic side down in contact with tinned copper drain wire, 0.5mm². Copper braid screen or aluminium/polyester tape combined with copper braid screen can be offered as option.
Outer Sheath: Thermoplastic PVC compound according to EN 50290-2-22.
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.

COLOUR CODE

Insulation Colour: Colours and/or additional ring markings and/or symbols achieved by the use of coloured insulation or by a coloured surface using extrusion, printing or painting.
Outer Sheath: Black. Other colours can be offered upon request.

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation: -30°C - +90°C
Temperature range fixed installation: -5°C - +50°C
Maximum short circuit temperature (5 Seconds): 250°C
Minimum bending radius: 7.5 x Overall Diameter

Electrical Properties

Conductor Area Size:1.0mm²
Insulation Thickness (Nominal):0.6mm
Insulation Thickness (Minimum):0.44mm
Conductor Resistance (20°C):18.5ohm/km
Minimum Insulation Resistance (20°C):1000Mohm/km
Maximum Mutual Capacitance:250nf/km
Capacitance Unbalance:500pf/500m
Maximum L/R (Ratio):25μH/ohm
Operating Voltage:500V
Dielectric Strength for 1 Minute:AC>=2000V DC>=3000V

DIMENSION AND PARAMETERS

No. of Pairs × Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Approx. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	mm	kg/km
8x2x1.0	2	0.6	1.3	17.9	427

Rated voltage

EN 50288-7

Flame Retardancy
BS EN 60332-1-2