

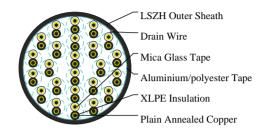
# Caledonian

FIREFLIX Fire Resistant Instrumentation & Data Cables www.caledonian-cables.com marketing@caledonian-cables.com

### Fire Resistant Overall Screened Instrumentation Cables (Multipair)

RE-2X(St)H...Cl





## **APPLICATIONS**

The unarmoured LSZH sheathed cables are generally used for indoor installation and suitable for wet and damp areas. Generally, the cables are used within industrial process manufacturing plants for communication, data and voice transmission signals and services. Also used for the interconnection of electrical equipment and instruments, the LSZH sheath can reduce toxic smoke and fume emission.

### STANDARDS

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

### FIRE PERFORMANCE

Circuit Integrity	IEC 60331-21; BS 6387 CWZ (Optional); BS EN 50200 (PH30/PH60/PH120)
Flame Retardance (Single vertical wire or cable 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

### **VOLTAGE RATING**

500V

# CABLE CONSTRUCTION

Conductor: Plain or metal coated copper wire, solid, stranded or flexible according to IEC 60228 class 1, 2 and class 5.

Fire Barrier: Mica glass tape.

Insulation: Extruded XLPE compound according to EN 50290-2-29. LSZH, PE, PP compound can be offered as options.

Pairs: Two insulated conductors uniformly twisted together with a lay not exceeding 100mm (<=1.5mm<sup>2</sup>) or 150mm (for 2.5mm<sup>2</sup>).



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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, 0.5mm<sup>2</sup>. Copper braid screen or aluminium/polyester tape combined with copper braid screen can be offered as option.

Outer Sheath: 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).

Outer Sheath Option: UV resistance, hydrocarbon resistance, oil resistance, anti-rodent and anti-termite properties can be offered as option.

## 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:  $0.75 \text{ mm}^2$ Insulation Thickness (Nominal): 0.6 mmInsulation Thickness (Minimum):0.44 mmConductor Resistance ( $20^\circ$ C): 25.0 ohm/kmMinimum Insulation Resistance ( $20^\circ$ C): 1000 Mohm/kmMaximum Mutual Capacitance: 250 nf/kmCapacitance Unbalance: 500 pf/500mMaximum L/R (Ratio):  $25 \mu$ H/Ohm Operating Voltage: 500 VDielectric Strength for 1 Minute AC :>=2000 VDielectric Strength for 1 Minute DC :>=3000 V

### DIMENSION AND PARAMETERS

No. of Pairs × Cross- sectional Area	Conductor Class	Nominal Insulation Thickness	Nominal Outer Sheath Thickness	Approx. Overall Diameter	Approx. Weight
No.×mm <sup>2</sup>		mm	mm	mm	kg/km
24x2x0.75	2	0.6	1.6	35.6	1183



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Rated voltage





EN 50288-7









Halogen Free IEC 60754-1

Low Corrosivi IEC 60754-2



