Caledonian

FIRETOX LSZH Flame Retardant Instrumentation & Data Cables

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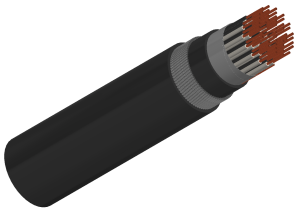
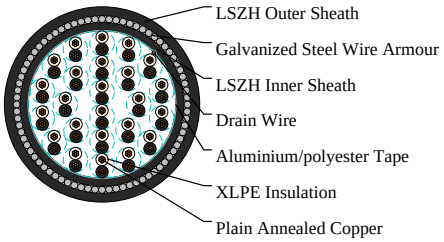
LSZH Flame Retardant Overall Screened, Armoured Instrumentation Cables (Multipair)

RE-2X(St)HSWAH





APPLICATIONS

The LSZH sheathed cables are generally used for indoor installation and suitable for wet and damp areas. The galvanized steel wire armour provides excellent protection. 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.This product type is TUV approved.

STANDARDS

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

APPROVALS

TUV Certification (Z1 17 12 98200 014)

FIRE PERFORMANCE

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 5.
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 (<=1.5mm²) or 150mm (for 2.5mm²).
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.
Inner Sheath: Thermoplastic LSZH compound.
Amouring: Galvanized steel wire armour.
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 during installation: -5°C - +50°C
Maximum short circuit temperature (5 Seconds): 250°C
Minimum bending radius: 10 x Overall Diameter

Electrical Properties

Conductor Area Size:1.5mm²
Insulation Thickness (Nominal):0.6mm
Insulation Thickness (Minimum):0.44mm
Conductor Resistance (20°C):12.3ohm/km
Minimum Insulation Resistance (20°C):1000Mohm/km
Maximum Mutual Capacitance:250nf/km
Capacitance Unbalance:500pf/500m
Maximum L/R (ratio):40μH/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 Inner Sheath Thickness	Nominal Armour Wire Diameter	Nominal Outer Sheath Thickness	Approx. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	mm	mm	mm	kg/km
24x2x1.5	2	0.6	1.8	1.6	2.0	38.5	2859

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Rated voltage

EN 50288-7

Flame Retardancy
BS EN 60332-1-2

Halogen Free
IEC 60754-1

Low Corrosivity
IEC 60754-2

Low Smoke Emission
IEC 61034-2

Reduced Fire Propagation
EN 60332-3-24