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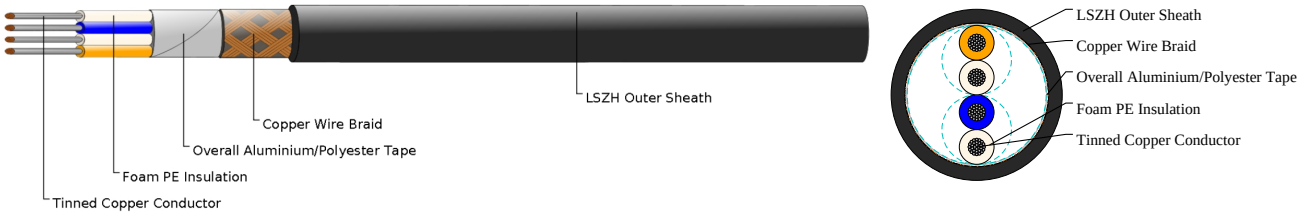
FIRETOX LSZH Flame Retardant Instrumentation & Data Cables

www.caledonian-cables.com marketing@caledonian-cables.com

LSZH Flame Retardant RS 485 Databus Cables

Multipair RS 485 Overall Double Screened Databus Cable
RE-02Y(St)CH / RE-02YS(St)CH 2P1



APPLICATIONS

The cables are designed for RS485 data connections where continued functionality is required during a fire situation. This cable combines low capacitance insulation with one of the highest levels of screening to provide high speed, interference free, data transmission where continued functionality is required during a fire situation.

STANDARDS

Basic design adapted to EIA/TIA 485

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire 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

CABLE CONSTRUCTION

Conductors: Tinned copper wire, stranded according to IEC 60228 class 2 or class 5.
Insulation: Foam PE or foam skin PE.
Cabling Elements: Insulated cores are twisted to form pairs with varying lay length to minimize crosstalk. Two pair cable had four cores laid in quad formation.
Cabling: Pairs are cabled together in concentric layers.
Overall Screen: Aluminium/polyester tape+copper wire braid.
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.

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -20°C - +90°C
Temperature range during installation (mobile state): -5°C - +60°C

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Minimum bending radius: 8 x Overall Diameter

Electrical Properties

Dielectric test:1000 V r.m.s. for 5’ (core-core)
1000 V r.m.s. for 5’ (core-screen)
Impedance:120 Ω
Capacitance:45 nF/km conductor to conductor
90 nF/km conductor to shield

DIMENSION AND PARAMETERS

No. of Pairs	Nominal Cross-sectional Area	No./Nominal Diameter of Strands	Nominal Insulation Thickness	Nominal Sheath Thickness	Approx. Overall Diameter	Approx. Weight
	mm²	no./mm	mm	mm	mm	kg/km
2	1	30/0.2	0.7	1.1	11.7	164

Rated voltage

EIA/TIA 485


Flame Retardancy
BS/EN/IEC 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