BMS (Building Management System) RS485 Data Cable

RE-02Y(St)H 1P18A (CU/PE/OSCR/LSZH 1×2×18AWG)

- LSZH Outer Sheath
- Tinned Copper Drain Wire
- PE Insulation
- Fireproof tape
- Overall AL/Polyester Tape
- Stranded Tinned Copper
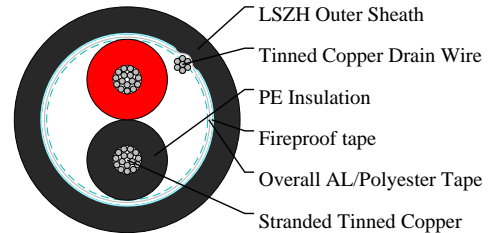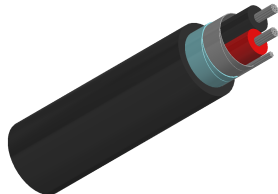
APPLICATIONS

The cables are designed for RS485 data connections. 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.

FIRE PERFORMANCE

Basic design	EIA/TIA 485
Halogen Free	IEC 60754-1
No corrosive gas emission	IEC 60754-2
Minimum Smoke Emission	IEC 61034/1/2
Reduced Fire Propagation	IEC 60332-3C / NF C 32-070-2.2 (C1)
Flame Retardance	IEC 60332-1 / NF C 32-070-2.1 (C2)
Fire Resistance	IEC 60331-23 / NF C 32-070-2.3(CR1)

CABLE CONSTRUCTION

Conductors: Tinned annealed copper wire, stranded according to IEC(EN) 60228 class 5.

Insulation: Solid or foam PE compound.

Cabling Elements: Insulated cores are twisted to form pairs with varying lay length to minimize crosstalk.

Overall screen: Aluminum/ polyester tape with tinned copper drain wire.

Fire Barrier: Fireproof tape.

Outer Sheath: Thermoplastic LSZH compound type LTS3 as per BS 7655-6.1.

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -30°C – +90°C

Temperature range during installation (mobile state): -20°C – +50°C

Minimum bending radius: 8 × 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:120Ω

Capacitance:45 nF/km conductor to conductor

　　　　　90 nF/km conductor to shield
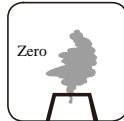
DIMENSION AND PARAMETERS

No. of Pairs	AWG Size	No./Nominal Diameter of Strands	Nominal Insulation Thickness	Nominal Sheath Thickness	Nom. Overall Diameter	Approx. Weight
		no./mm	mm	mm	mm	kg/km
1	18	16/0.254	1.15	1.2	10.5	100

Fire Resistant
IEC 60331-21

Flame Retardant
NF C32-070-2.1(C2)
IEC60332-1-2/EN50265-2-1

Zero
Halogen Free
IEC 60754-1

Low Corrosivity
IEC60754-2/EN50267-2-2/3
NF C32-074/NF C20-453

Low Smoke Emission
IEC 61034-2 / EN 50268-2
NF C32-073/NF C 20-902

Reduced Fire Propagation
NF C32-070-2.2(C1)
IEC60332-3-24/EN50266-2-4