



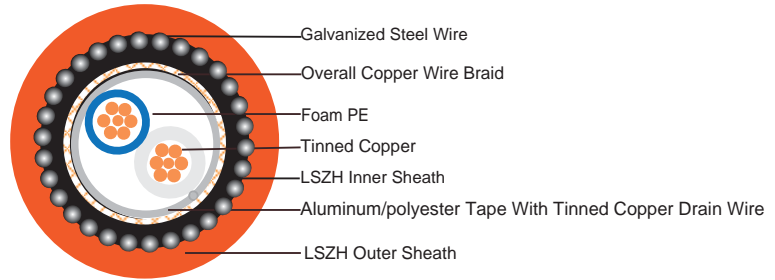
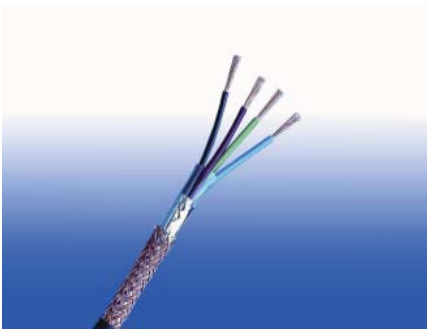
Caledonian

LSZH Fire Retardant RS485 Screened & GSWA Databus Cables

www.caledonian-cables.net

Foam PE Insulated, LSZH Sheathed, Overall Aluminium/polyester Tape & Overall Copper Wire Braid Double Screened, Galvanized Steel Wire Armoured Multipair RS 485 Databus Cables

RE-02Y(St)CHGSWAH1P24AWG



APPLICATION

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)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic gases	NES 02-713; NF C 20-454

Note: Asterisk * denotes superseded standard.

CABLE CONSTRUCTION

Conductors: Tinned copper wire, stranded according to IEC(EN) 60228 class 2.

Insulation: Foam 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: Aluminum/polyester tape + tinned copper wire braid.

Inner Sheath: LSZH compound.

Armored: Galvanized steel wire.

Outer Sheath: LSZH compound with flame retardant, termite, oil and abrasion resistant properties.

Color: Black.

PHYSICAL AND THERMAL PROPERTIES

Temperature range during operation (fixed state): -20°C - +90°C

Temperature range during installation (mobile state): -5°C - +60°C

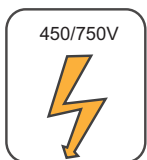
Minimum bending radius: 8 x Overall Diameter

ELECTRICAL PROPERTIES

Dielectric test	2000 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

CONSTRUCTION PARAMETERS

Cable Code	No. of pair	Nominal Cross Sectional Area	No./ Nominal Diameter of Strands	Nominal Insulation Thickness	Steel Wire Armour Diameter	Nominal Sheath Thickness	Nominal Overall Diameter	Approx. Weight
	No	mm ²	No/mm	mm	mm	mm	mm	kg/km
RE-02Y(St)CHGSWAH1P24AWG	1	0.22	7/0.2	1.0	0.9	1.3	13.0	300



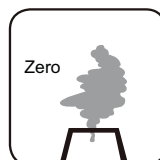
Rated Voltage



Standard



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



Halogen Free
IEC60754-1
EN50267-2-1



Low Toxicity
NES 02-713/NF C 20-454



Low Corrosivity
IEC60754-2
EN50267-2-2/3
NF C 32-074



Low Smoke Emission
IEC 61034-1&2
EN 50268-1&2/NF C32-073