



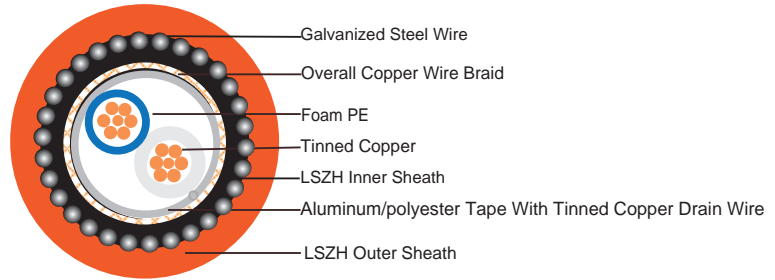
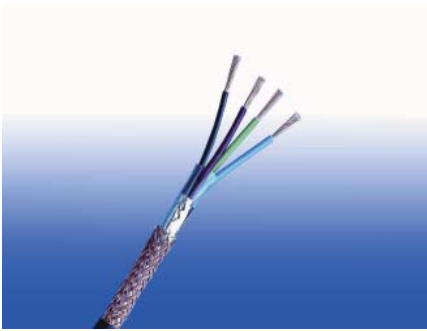
# Caledonian

## LSZH Fire Retardant RS485 Screened & GSWA Databus Cables

www.caledonian-cables.co.uk www.caledonian-tech.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Note: Asterisk \* denotes superseded standard.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

<b>Dielectric test</b>	2000 V r.m.s. for 5' (core-core) 1000 V r.m.s. for 5' (core-screen)
<b>Impedance</b>	120Ω
<b>Capacitance</b>	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 <sup>2</sup>	No/mm	mm	mm	mm	mm	kg/km
<b>RE-02Y(St)CHGSWAH1P24AWG</b>	1	0.22	7/0.2	1.0	0.9	1.3	13.0	300



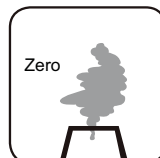
Rated Voltage



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