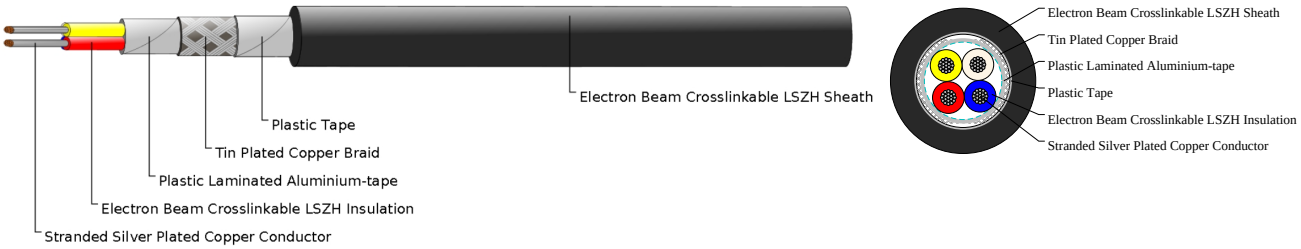
Caledonian
Railway Cables
www.caledonian-cables.com marketing@caledonian-cables.com

Firerail Databus Cables For Railway Applications

Category 5E Databus Cables
FRA-Cat5E-4C22A



APPLICATIONS

The cables are designed for permanently protected installation, inside and outside railway rolling stock, buses and other vehicles to connect fixed parts.Ethernet based networks as: infotainment, multimedia, passenger information system etc.

STANDARDS

DIN 5510-2
EN 50228-2-2
BS 6853
EN 50306-3 par 4.8/4.9/4.10

VOLTAGE RATING

300V

CABLE CONSTRUCTION

Conductors: Stranded silver plated copper conductor according to IEC 60228 class 5.
Insulation: Electron beam crosslinkable compound.
Cable Element: Individual conductor stranded together.
EMC Screen1: Plastic laminated aluminium-tape.
EMC Screen2: Tin plated copper braid.
Separator(s): Plastic tape.
Outer Sheath: Electron beam crosslinkable compound.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 6xOD
Temperature Range: -40℃ to +90℃

Electrical Properties

Electrical Characteristics at 20°C:
Nominal Cross Section:22 AWG
Nominal Conductor Resistance:54.4 Ω/km

Caledonian
Railway Cables
www.caledonian-cables.com marketing@caledonian-cables.com

Maximum Resistance Unbalance:1.1 Ω/km
Maximum Capacitance:
core to core:65 pF/m
Core to screen:100 pF/m
Characteristic Impedance @100MHz:100+/-5 Ω
Transfer Impedance f≤30MHz:200 mΩ/m
Nominal Voltage Rating V 300

DIMENSION AND PARAMETERS

No. of Cores × Cross-sectional Area	No./Nominal Diameter of Strands	Nominal Sheath Thickness	Nom. Overall Diameter	Approx. Weight
No.×mm²	no./mm	mm	mm	kg/km
4 x 22AWG	19/0.16	1.2	7.25	81


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


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


Highly Flexible


Impact Resistant


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


Low Toxcity


Oil Resistant


UV Resistant


Water Resistant

Zero Halogen
IEC 60754-1/EN 50267-2-1
NF C20-454