Caledonian

Coaxial Cables For Railway Application

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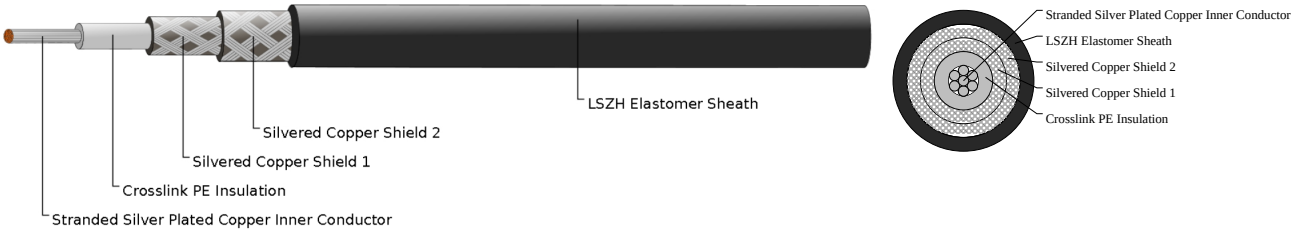
FRA 213D SW4



APPLICATIONS

These cables are designed for flexible installations, inside and outside railway rolling stock.

STANDARDS

DIN 5510-2

CABLE CONSTRUCTION

Inner conductor: Stranded silver plated copper.
Insulation: Crosslink PE (PEX).
Outer conductor (shield 1): Silver plated copper.
Outer conductor (shield 2): Silver plated copper.
Sheath: LSZH Elastomer.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 50mm (static)
Temperature Range: -40℃ ~ +105℃

Electrical Properties

Electrical Characteristics at 20℃:
Impedance:50+/-2 Ω
Nominal Capacitance:101 pF/m
Minimum Insulation Resistance:100000 MΩ.km
Inner Conductor Resistance:5.8MΩ/km
Outer Conductor Resistance:4.43MΩ/km
Attenuation:
@10MHz:2 dB/100m
@50MHz:5 dB/100m
@100MHz:8 dB/100m
@150MHz:10 dB/100m
@200MHz:12 dB/100m
@300MHz:15 dB/100m
@400MHz:17 dB/100m
@450MHz:19 dB/100m
@500MHz:20 dB/100m

@600MHz:22 dB/100m
@800MHz:27 dB/100m
@850MHz:28 dB/100m
@900MHz:29 dB/100m
@950MHz:30 dB/100m
@1000MHz:31 dB/100m
@1800MHz:45 dB/100m
@1900MHz:47 dB/100m
@2000MHz:49 dB/100m
@2400MHz:55 dB/100m
@3000MHz:64 dB/100m
@4000MHz:79 dB/100m
@5000MHz:93 dB/100m
@6000MHz:106 dB/100m
Velocity of propagation:66%

DIMENSION AND PARAMETERS

No./Nominal Diameter of Strands	Conductor Diameter	Nominal Outer Conductor Diameter	Nom. Overall Diameter	Approx. Weight
no./mm	mm	mm	mm	kg/km
7/0.25	2.25	8.7	10.8	202


Acid & Alkaline Resistant


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

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