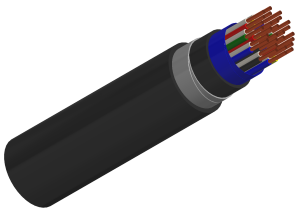
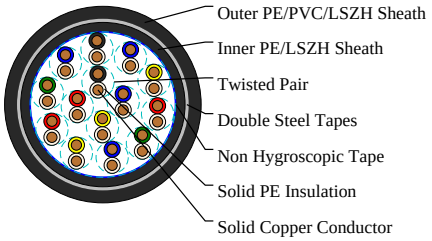
Caledonian
Railway Cables
www.caledonian-cables.com marketing@caledonian-cables.com

ZPFU & ZPFU-SH Main & Local Signalling Cables (Ordinary Non-Electrified or DC Electrified Lines)

1.13mm Conductor, 2.3 Insulated Wire
RS/ZPFU-2Y2YB2Y-14P1S





APPLICATIONS

The cables are designed for the main signalling circuits of 1500V DC electrified lines.

STANDARDS

SNCF CT 445
NF F 55-698

VOLTAGE RATING

750V DC/450V AC

CABLE CONSTRUCTION

Conductors:Solid annealed copper
Insulation:Solid polyethylene.
Cabling Element:Two conductors are twisted to form a pair.
Stranding:Pairs are helically stranded to form the cable core.
Core Wrapping:Plastic tape(s) with overlapping.
Inner Sheath:PE/LSZH FR option can be offered upon request to NF C 32 070.2.2 (C1).
Mechanical Protection:Two helically applied steel tapes (0.5mm, depending on pair count).
Outer Sheath:PE/PVC/LSZH FR option can be offered upon request to NF C 32 070.2.2 (C1).
Remark: ZPFU: PE/PVC Sheath; ZPFU-SH: LSZH Sheath.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 8xOD (static); 16xOD (dynamic)
Temperature Range: -40℃ to +70℃ (during operation); -20℃ to +50℃ (during installation)

Electrical Properties

Electrical Characteristics at 20°C:
Nominal Conductor Diameter:1.13 mm
Nominal Cross Section Area:1 mm sq
Maximum Conductor Resistance (DC):18.1 Ω/km
Minimum Insulation Resistance @500 V DC (3min) :5000 MΩ.km

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Maximum Mutual Capacitance (AC) @1000Hz:55 nF/km
Maximum Capacitance Unbalance @1000Hz:400 pF/500m
Attenuation @45KHz:2.5 dB/km
Characteristic Impedance @45KHz:120Ω
Dielectric Strength, conductor to conductor (DC voltage 3mins):4500V
Operating Voltage (AC/DC):450/750V

DIMENSION AND PARAMETERS

No. of Pairs	Nominal Cross-sectional Area	Conductor Diameter	Nominal Diameter over Insulation	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Nom. Armour Thickness	Nom. Overall Diameter	Approx. Weight
	mm²	mm	mm	mm	mm	mm	mm	kg/km
14	1	1.13	2.3	1.2	1.8	0.5	24.1	1011


Buried in Ground


Laid In Ducts


Mineral Oil Resistant


Rated voltage


UV Resistant