

Caledonian

Railway Cables www.caledonian-cables.com

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K13 PVC Subway Signalling Cables for Metro/Local Trains/Tramlines

RS/K13-2Y(L)2YBY-14P1





APPLICATIONS

The cables are designed for remote control and teletransmission in underground railway networks. The cables can be laid in channel, cable tray, or on hook supports, along suburban railway lines electrified at maximum 1500V DC

STANDARDS

AFNOR NF F 55-633

CABLE CONSTRUCTION

Conductors:Solid copper conductor

Insulation:Polyethylene insulation.

Cabling Element:Pair/Quad.

Stranding:4-pair cables are composed of pairs, while other cables are composed of star quads.

Spare Pairs: Spare pairs may be provided according to capacity of cables.

Core Wrapping:One or more non-hygroscopic polyester tapes are helically or longitudinally laid with an overlap. Screen:Aluminium/Nylon tape bonded with a special PVC sealing sheath or Aluminium/PE tape bonded with a halogen-free fire-retardant sheath.

Drain Wire: A tinned copper drain wire, 0.5mm nominal diameter.

Inner sheath: Several glass silk tapes are helically laid with an overlap to form bedding.

Armour: Two helically applied steel tapes.

Outer Sheath:LSPVC.

COLOUR CODE

4-pair cable:
Pair1: black/colourless Pair2: blue/ colourless
Pair3: yellow/colourless Pair4: red/ colourless
Other cable:
Side circuit 1 of a quad a-wire: sequence of black/blue/yellow/red/green/blue/yellow, etc.
b-wire: colourless
Side circuit 2 of a quad a-wire: grey
b-wire: white



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Unit binder: sequence of white/blue/yellow/brown/black/red/green/violet

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 8xOD (static); 16xOD (dynamic) Temperature Range: -40°C to +60°C (during operation); -20°C to +50°C (during installation)

Electrical Properties

Electrical Characteristics at 20°C: Nominal Conductor Diameter:1 mm Nominal Mutual Capacity:57.5 nF/km Minimum Insulation Resistance:5000 MΩ.km Maximum Operating Voltage:500 V Maximum Permissible Current:1 A

DIMENSION AND PARAMETERS

No. of Pairs	Conductor Diameter	Nominal Diameter over Insulation	Nominal Inner Sheath Thickness	Nominal Outer Sheath Thickness	Nom. Overall Diameter	Approx. Weight
	mm	mm	mm	mm	mm	kg/km
14(7Q)	1	1.8	1	1.4	20.5	630













Mineral Oil Resistant

Impact Resistant

Laid In Ducts