

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

### 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

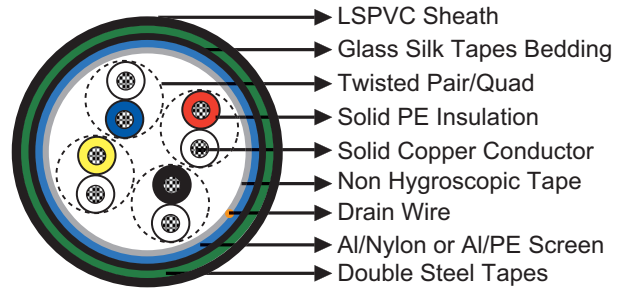


### Standards

- AFNOR NF F 55-633

### Construction

- Conductors: Solid copper conductor, 0.6/0.8/1.0/1.2 mm nominal diameter.
- 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.
- Bedding: Several glass silk tapes are helically laid with an overlap to form bedding.
- Armour: Two helically applied steel tapes.
- Outer Sheath: LSPVC.



### Electrical Characteristics at 20°C

	mm	0.6	0.8	1.0	1.2
Nominal Conductor Diameter	mm	0.6	0.8	1.0	1.2
Nominal Mutual Capacity	nF/km	57.5	57.5	57.5	57.5
Minimum Insulation Resistance	MΩ.km	5000	5000	5000	5000
Maximum Operating Voltage	V	200	400	500	750
Maximum Permissible Current	A	0.35	0.63	1.0	1.4

### Mechanical and Thermal Properties

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



## Core Identification

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

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

## Dimensions and Weight

Cable Code	Number of Pairs	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
0.6mm Conductor, 0.96mm Insulated Wire					
RS/K13-2Y(L)2YBY-4P0.6	4	1.0	1.0	12.5	220
RS/K13-2Y(L)2YBY-8P0.6	8(4Q)	1.0	1.0	13.5	260
RS/K13-2Y(L)2YBY-14P0.6	14(7Q)	1.0	1.2	15.5	350
RS/K13-2Y(L)2YBY-28P0.6	28(14Q)	1.0	1.4	17.5	480
RS/K13-2Y(L)2YBY-56P0.6	56(4 x 7Q)	1.0	1.4	22.0	750
0.8mm Conductor, 1.27mm Insulated Wire					
RS/K13-2Y(L)2YBY-4P0.8	4	1.0	1.0	14.0	280
RS/K13-2Y(L)2YBY-8P0.8	8(4Q)	1.0	1.2	15.0	340
RS/K13-2Y(L)2YBY-14P0.8	14(7Q)	1.0	1.4	18.0	470
RS/K13-2Y(L)2YBY-28P0.8	28(14Q)	1.0	1.4	21.0	700
RS/K13-2Y(L)2YBY-56P0.8	56(4 x 7Q)	1.0	1.6	28.5	1200
1.0mm Conductor, 1.8mm Insulated Wire					
RS/K13-2Y(L)2YBY-4P1	4	1.0	1.2	15.5	340
RS/K13-2Y(L)2YBY-8P1	8(4Q)	1.0	1.4	17.5	460
RS/K13-2Y(L)2YBY-14P1	14(7Q)	1.0	1.4	20.5	630
RS/K13-2Y(L)2YBY-28P1	28(14Q)	1.0	1.6	25.0	990
RS/K13-2Y(L)2YBY-56P1	56(4 x 7Q)	1.0	1.8	34.0	1700
1.2mm Conductor, 2.0mm Insulated Wire					
RS/K13-2Y(L)2YBY-2P1.2	2(1Q)	1.0	1.2	12.5	240
RS/K13-2Y(L)2YBY-4P1.2	4	1.0	1.4	17.0	420
RS/K13-2Y(L)2YBY-8P1.2	8(4Q)	1.0	1.4	18.5	530
RS/K13-2Y(L)2YBY-14P1.2	14(7Q)	1.0	1.4	21.5	740
RS/K13-2Y(L)2YBY-28P1.2	28(14Q)	1.0	1.6	27.5	1250



Impact Resistant



Mineral Oil Resistant



Acid & Alkaline Resistant



Laid In conduit



Flame Retardant  
NF C32-070-2.1(C2)  
IEC 60332-1/EN 50265-2-1



Low Smoke Emission  
IEC 61034/NFC20-902  
EN 50268/NF C32-073