K24 LSZH Subway Signalling Cables

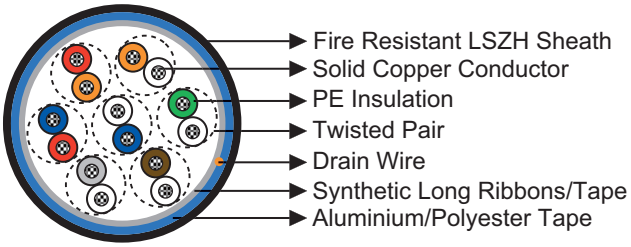
Applications

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 55-624

Construction



- Conductors: Solid copper conductor, 0.5/0.6/0.9 mm nominal diameter.
- Insulation: Polyethylene insulation.
- Cabling Element: Each two conductors are twisted together to form a pair.
- Stranding: For cables less than 15 pairs, pairs are helically stranded in concentric layers to form the cable core. For cables from 21 to 112 pairs, pairs are stranded in concentric layers or bundles to form the cables core.
- Core Wrapping: One or more synthetic long ribbons or tapes are arranged on the cable core.
- Screen: Aluminium/Polyester tape.
- Drain Wire: A tinned copper drain wire, 0.5mm nominal diameter.
- Sheath: Fire retardant LSZH.

Optional

Armoured Cables: For armoured cable, one or more tape(s) is (are) helically applied with overlap on the screen to form a bedding, and double steel tapes armour with a halogen-free fire retardant outer sheath are applied on the bedding.

Electrical Characteristics at 20℃

Nominal Conductor Diameter	mm	0.5	0.6	0.9
Minimum Insulation Resistance	MΩ.km	5000	5000	5000
Maximum Operating Voltage	V	200	200	400
Maximum Permissible Current	A	0.25	0.35	0.80

Mechanical and Thermal Properties

- Minimum Bending Radius: 7.5×OD (unarmoured); 10×OD (armoured)
- Temperature Range: -40℃ to +60℃ (during operation); -20℃ to +50℃ (during installation)

Dimensions and Weight

Unarmoured K24 Cables A–2Y(L)H n × 2 × 0.5/0.6/0.9

Cable Code	Number of Pairs (n)	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
0.5mm Conductor, 0.9mm Insulated Wire				
RS/K24-2Y(L)H-2P0.5	2	1.0	6.0	55
RS/K24-2Y(L)H-3P0.5	3	1.0	6.5	65
RS/K24-2Y(L)H-5P0.5	5	1.0	7.0	80
RS/K24-2Y(L)H-7P0.5	7	1.0	8.0	95
RS/K24-2Y(L)H-10P0.5	10	1.0	9.0	120
RS/K24-2Y(L)H-15P0.5	15	1.2	10.5	150
RS/K24-2Y(L)H-21P0.5	21	1.2	12.5	185
0.6mm Conductor, 0.96mm Insulated Wire				
RS/K24-2Y(L)H-2P0.6	2	1.0	6.5	65
RS/K24-2Y(L)H-3P0.6	3	1.0	7.0	70
RS/K24-2Y(L)H-5P0.6	5	1.0	8.0	90
RS/K24-2Y(L)H-7P0.6	7	1.0	8.5	110
RS/K24-2Y(L)H-10P0.6	10	1.2	10.0	140
RS/K24-2Y(L)H-15P0.6	15	1.2	11.5	175
RS/K24-2Y(L)H-21P0.6	21	1.2	13.5	225
0.9mm Conductor, 1.5mm Insulated Wire				
RS/K24-2Y(L)H-2P0.9	2	1.0	8.5	95
RS/K24-2Y(L)H-3P0.9	3	1.0	9.0	110
RS/K24-2Y(L)H-5P0.9	5	1.0	10.5	150
RS/K24-2Y(L)H-7P0.9	7	1.2	12.0	185
RS/K24-2Y(L)H-10P0.9	10	1.2	13.5	245
RS/K24-2Y(L)H-15P0.9	15	1.4	15.0	340
RS/K24-2Y(L)H-21P0.9	21	1.4	19.0	435

Armoured K24 Cables A–2Y(L)HBH n × 2 × 0.5/0.6/0.9

Cable Code	Number of Pairs (n)	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
0.5mm Conductor, 0.9mm Insulated Wire					
RS/K24-2Y(L)HBH-2P0.5	2	1.0	1.0	10.0	195
RS/K24-2Y(L)HBH-3P0.5	3	1.0	1.0	10.5	205
RS/K24-2Y(L)HBH-5P0.5	5	1.0	1.0	11.0	230
RS/K24-2Y(L)HBH-7P0.5	7	1.0	1.0	12.0	255
RS/K24-2Y(L)HBH-10P0.5	10	1.0	1.0	13.0	295
RS/K24-2Y(L)HBH-15P0.5	15	1.0	1.2	14.5	345
RS/K24-2Y(L)HBH-21P0.5	21	1.0	1.2	16.5	400
0.6mm Conductor, 0.96mm Insulated Wire					
RS/K24-2Y(L)HBH-2P0.6	2	1.0	1.0	10.5	200
RS/K24-2Y(L)HBH-3P0.6	3	1.0	1.0	11.0	210
RS/K24-2Y(L)HBH-5P0.6	5	1.0	1.0	12.0	245
RS/K24-2Y(L)HBH-7P0.6	7	1.0	1.0	12.5	285
RS/K24-2Y(L)HBH-10P0.6	10	1.0	1.2	14.0	330
RS/K24-2Y(L)HBH-15P0.6	15	1.0	1.2	15.5	385
RS/K24-2Y(L)HBH-21P0.6	21	1.0	1.2	18.0	450
0.9mm Conductor, 1.5mm Insulated Wire					
RS/K24-2Y(L)HBH-2P0.9	2	1.0	1.0	12.5	260
RS/K24-2Y(L)HBH-3P0.9	3	1.0	1.0	13.5	285
RS/K24-2Y(L)HBH-5P0.9	5	1.0	1.0	14.5	345
RS/K24-2Y(L)HBH-7P0.9	7	1.0	1.2	16.0	395
RS/K24-2Y(L)HBH-10P0.9	10	1.0	1.2	18.0	485
RS/K24-2Y(L)HBH-15P0.9	15	1.0	1.4	19.5	610
RS/K24-2Y(L)HBH-21P0.9	21	1.0	1.4	24.0	735


Impact Resistant

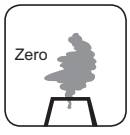

Mineral Oil Resistant


Acid&Alkaline Resistant


Laid In conduit


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


Fire Retardant
NF C32-070-2.2(C1)
IEC 60332-3/EN50266



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


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


Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453


Low Toxicity