

K27 Fire Resisting Control Cables (CR1-C1 Class)

Applications

The cables are designed to provide circuit integrity for safety lighting, smoke extraction, ventilation, emergency telephone and exits during fire for underground railways.

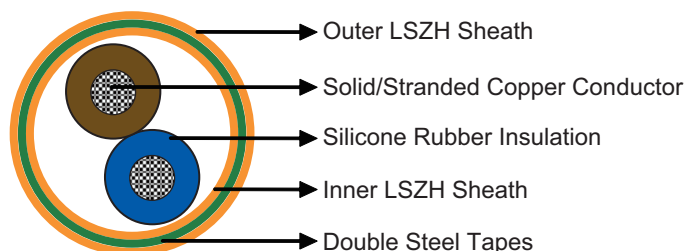


Standards

- RATP K27 specification
- Fire resistant: class CR1
- No fire propagation: class C1 RATP (<30cm)

Construction

- Conductors: Class 1 solid conductor from 1.5mm² to 4mm²; class 2 stranded conductor for 6mm².
- Insulation: Silicone rubber insulation.
- Stranding: Cores are helically stranded in concentric layers.
 - Inner Sheath: LSZH.
 - Armour: Two layers of steel tape.
 - Outer Sheath: LSZH.



Electrical Characteristics at 20°C

Number of strands/Nominal Conductor Diameter	mm	7/1.04	1/1.39	1/1.79	1/2.25
Nominal Cross Section Area	mm ²	6	1.5	2.5	4
Nominal Insulation Thickness	mm	1.0	0.8	1.0	1.0
Operating Voltage	V	300/500			

Mechanical and Thermal Properties

- Minimum Bending Radius: 5×OD (static); 10×OD (dynamic)
- Temperature Range: -10°C to +90°C (during operation); -10°C to +60°C (during installation)



Dimensions and Weight

Cable Code	Number of Cores	Nominal Sheath Thickness mm		Maximum Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
7/1.04mm Conductor, 4.76mm Insulated Wire					
RS/K27-SZ1F3Z1-U(AS+)-2G6	2	1.0	1.5	17.0	406
1/1.39mm Conductor, 2.99mm Insulated Wire					
RS/K27-SZ1F3Z1-U(AS+)-2G1.5	2	1.0	1.5	11.3	200
RS/K27-SZ1F3Z1-U(AS+)-3G1.5	3	1.0	1.5	12.5	237
RS/K27-SZ1F3Z1-U(AS+)-12G1.5	12	1.0	1.5	18.9	596
1/1.79mm Conductor, 3.79mm Insulated Wire					
RS/K27-SZ1F3Z1-U(AS+)-2G2.5	2	1.0	1.5	13.2	265
RS/K27-SZ1F3Z1-U(AS+)-3G2.5	3	1.0	1.5	13.5	309
1/2.25mm Conductor, 4.26mm Insulated wire					
RS/K27-SZ1F3Z1-U(AS+)-2G4	2	1.0	1.5	14.7	325
RS/K27-SZ1F3Z1-U(AS+)-3G4	3	1.0	1.5	15.6	411



Impact Resistant



Mineral Oil Resistant



Acid & Alkaline Resistant



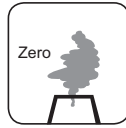
Laid In conduit



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/EN 50266



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



Insulation Integrity FE180
EN 50200/IEC 60331
/NF C32-070-2.3(CR1)

