

SXCAV & SXCAG Signalling Cables

Applications

The cables are designed for connection between switching centers and equipment shelters along the trackside. The cables are used as main signalling cables specially designed to give good induction protection (R.F=0.24 at inductive voltage 170 V/km) and are suitable for installation in intercity railways electrified at 25KV ac.

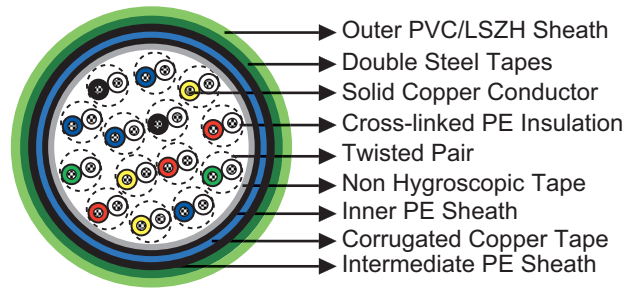


Standards

- SXCAV SXCAG Specification
- Fire performance: EN 50266-2-4 C

Construction

- Conductors: Class 1 solid bare copper conductor.
- Insulation: Coloured cross-linked PE insulation.
- Cabling Element: Each two conductors are twisted together to form a pair.
- Stranding: Pairs are helically stranded in layers to form the cable core.
- Core Wrapping: Plastic tape(s) with overlapping.
- Inner Sheath: PE sheath.
- Electrostatic Shield: One corrugated copper tape.
- Intermediate Sheath: PE sheath.
- Electromagnetic Shield: Two helically applied steel tapes.
- Outer Sheath: Black unleaded PVC (SXCAV) or green halogen free (SXCAG) sheath.



Electrical Characteristics at 20°C

Nominal Conductor Diameter	mm	1.38
Nominal Cross Section Area	mm ²	1.5
Maximum Conductor Resistance (DC)	Ω/km	12.3
Minimum Insulation Resistance @500 V DC (3mins)	MΩ.km	10000
Maximum Mutual Capacitance @1000Hz (AC)	nF/km	60
Maximum Reduction Factor @170V/km 50Hz		0.24
Operating Voltage	V	1000

Mechanical and Thermal Properties

- Minimum Bending Radius: 10×OD
- Temperature Range: -25°C to +90°C (during operation); -10°C to +90°C (during installation)



↳ Dimensions and Weight

SXCAV Cables

Cable Code	Number of Pairs	Nominal Sheath Thickness mm			Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Inter.	Outer		
1.38mm Conductor, 2.38mm Insulated Wire						
RS/SXCAV-2Y2Y(K)2YBY-1P1.5S	1	1.0	0.8	1.6	16.9	513
RS/SXCAV-2Y2Y(K)2YBY-4P1.5S	4	1.0	0.8	1.6	23.1	826
RS/SXCAV-2Y2Y(K)2YBY-7P1.5S	7	1.0	0.8	1.7	26.1	1060
RS/SXCAV-2Y2Y(K)2YBY-14P1.5S	14	1.2	0.8	1.8	32.3	1571
RS/SXCAV-2Y2Y(K)2YBY-24P1.5S	24	1.2	1.1	2.0	38.3	2199
RS/SXCAV-2Y2Y(K)2YBY-30P1.5S	30	1.2	1.1	2.2	42.8	2555

SXCAG Cables

Cable Code	Number of Pairs	Nominal Sheath Thickness mm			Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Inter.	Outer		
1.38mm Conductor, 2.38mm Insulated Wire						
RS/SXCAG-2Y2Y(K)2YBH-1P1.5S	1	1.0	0.8	1.6	16.9	515
RS/SXCAG-2Y2Y(K)2YBH-4P1.5S	4	1.0	0.8	1.6	23.1	855
RS/SXCAG-2Y2Y(K)2YBH-7P1.5S	7	1.0	0.8	1.7	26.1	1095
RS/SXCAG-2Y2Y(K)2YBH-14P1.5S	14	1.2	0.8	1.8	32.3	1616
RS/SXCAG-2Y2Y(K)2YBH-24P1.5S	24	1.2	1.1	2.0	38.3	2260
RS/SXCAG-2Y2Y(K)2YBH-30P1.5S	30	1.2	1.1	2.2	42.8	2625



Anti Induction



Buried in Ciround



Laid In Ducts

PVC Sheath



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

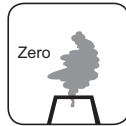
LSZH Sheath



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

