



3.6/6KV Single Core Standard Wall Traction Cables

Applications

Single core power and control cable designed for protected, fixed installation inside and outside railway vehicles for connecting fixed and moving parts in direct current and alternating voltage technology, especially converter technology.



Standard

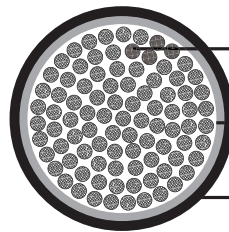
- BS 6853 -1a
- DIN 5510-1 1-4
- NFF 16-101 F0

Construction

- Conductors: Circular Class 5 stranded plain or tinned copper to BS EN 60228: 2005 / BS 6360.

- Insulation: Electron beam crosslinkable standard wall LSZH compound.

- Outer Sheath: Electron beam crosslinkable LSZH compound.



Stranded Plain/Tinned Copper Conductor

Electron Beam Crosslinkable LSZH Insulation

Electron Beam Crosslinkable LSZH Sheath

Optional

FRA-SW-6S-OS (Screened)

FRA-SW-6S-FR (Fire resistant)

Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	1.5	2.5	4.0	6.0	10	16	25	35	50
Maximum Conductor Resistance	Ω/km	13.7	8.21	5.09	3.39	1.95	1.24	0.795	0.565	0.393
Voltage Rating	KV	3.6/6								

Nominal Conductor Cross Section	mm ²	70	95	120	150	185	240	300	400
Maximum Conductor Resistance	Ω/km	0.277	0.21	0.164	0.132	0.108	0.0817	0.0654	0.0495
Voltage Rating	KV	3.6/6							

Mechanical and Thermal Properties

- Minimum Bending Radius: 3×OD (OD<12mm); 4×OD (OD>12mm)
- Temperature Range: -40°C to +120°C

➤ **Dimensions and Weight**

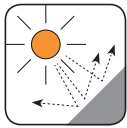
Cable Code	No. of cores & Nominal Conductor Cross Sectional Area No. × mm ²	Nominal Diameter of Strands No./mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
FRA-SW-6S-1G2.5	1×2.5	50/0.25	3.0	11.4	170
FRA-SW-6S-1G4	1×4.0	56/0.30	3.0	12.0	190
FRA-SW-6S-1G6	1×6.0	84/0.30	3.0	12.5	230
FRA-SW-6S-1G10	1×10.0	80/0.40	3.0	13.4	300
FRA-SW-6S-1G16	1×16.0	126/0.40	3.0	14.5	360
FRA-SW-6S-1G25	1×25.0	196/0.40	3.0	16.0	450
FRA-SW-6S-1G35	1×35.0	276/0.40	3.0	17.3	560
FRA-SW-6S-1G50	1×50.0	396/0.40	3.0	19.0	720
FRA-SW-6S-1G70	1×70.0	360/0.50	3.0	20.8	930
FRA-SW-6S-1G95	1×95.0	475/0.50	3.0	22.6	1160
FRA-SW-6S-1G120	1×120.0	608/0.50	3.1	24.7	1430
FRA-SW-6S-1G150	1×150.0	756/0.50	3.1	26.3	1740
FRA-SW-6S-1G185	1×185.0	925/0.50	3.2	28.5	2080
FRA-SW-6S-1G240	1×240.0	1221/0.50	3.4	31.7	2730
FRA-SW-6S-1G300	1×300.0	1525/0.50	3.4	34.2	3230
FRA-SW-6S-1G400	1×400.0	2013/0.50	3.4	37.8	4210



Impact Resistant



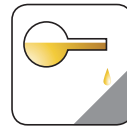
Highly Flexible



UV Resistant



Weather Resistant



Oil Resistant



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

