



3.6/6KV Single Core Medium 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

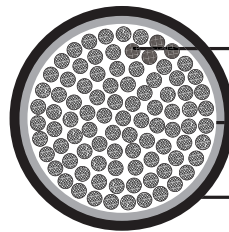
- BS 6853 -1a
- DIN 5510-1 1-4
- NFF 16-101 F0

Construction

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

- Insulation: Electron beam crosslinkable medium 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-MW-6S-OS (Screened)

FRA-MW-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**

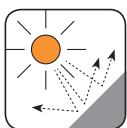
Cable Code	No. of cores& Nominal Conductor Cross Sectional Area No. x mm ²	Nominal Diameter of Strands No./mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
FRA-MW-6S-1G2.5	1x2.5	50/0.25	2.6	9.4	120
FRA-MW-6S-1G4	1x4.0	56/0.30	2.6	9.9	140
FRA-MW-6S-1G6	1x6.0	84/0.30	2.6	10.4	165
FRA-MW-6S-1G10	1x10.0	80/0.40	2.6	11.3	220
FRA-MW-6S-1G16	1x16.0	126/0.40	2.6	12.5	290
FRA-MW-6S-1G25	1x25.0	196/0.40	2.9	14.9	430
FRA-MW-6S-1G35	1x35.0	276/0.40	2.9	16.2	540
FRA-MW-6S-1G50	1x50.0	396/0.40	2.9	17.8	670
FRA-MW-6S-1G70	1x70.0	360/0.50	2.9	19.6	880
FRA-MW-6S-1G95	1x95.0	475/0.50	2.9	21.2	1100
FRA-MW-6S-1G120	1x120.0	608/0.50	2.9	23.3	1380
FRA-MW-6S-1G150	1x150.0	756/0.50	2.9	24.9	1660
FRA-MW-6S-1G185	1x185.0	925/0.50	3.2	27.3	2010
FRA-MW-6S-1G240	1x240.0	1221/0.50	3.4	30.7	2670
FRA-MW-6S-1G300	1x300.0	1525/0.50	3.4	32.2	3170
FRA-MW-6S-1G400	1x400.0	2013/0.50	3.4	36.6	4150



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

