

300/500V Multicore Thin Wall Fire Resistant Traction Cables

Application

Single Core power and control cable designed for protected, fixed installation inside and outside railway vehicles for connecting fixed and moving parts.



Standards

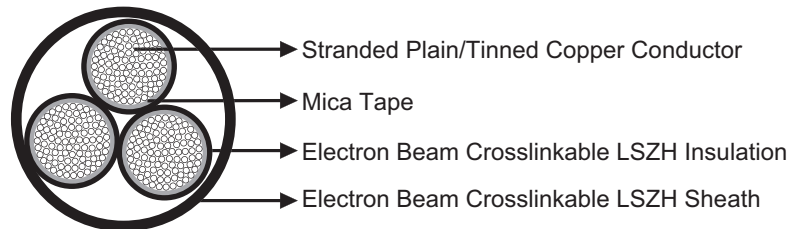
- BS 6853 -1a
- DIN 5510-1 1-4
- NFF 16-101 F0
- BS 6387

Construction

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

- Flame Barrier: Mica tape.
- Insulation: Electron beam crosslinkable thin wall LSZH compound.

- Sheath: Electron beam crosslinkable LSZH compound.



Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	0.5	0.75	1.0	1.5	2.5
Maximum DC Conductor Resistance	Ω/km	40.1	26.7	20.0	13.7	8.21
Voltage Rating	KV	0.45/0.75				

Mechanical and Thermal Properties

- Minimum Bending Radius: 3×OD (OD<12mm); 4×OD (OD>12mm)
- Operating Temperatures: -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-TW-0.5M-FR-3C0.5S	3×0.5	16/0.20	0.56	5.8	41
FRA-TW-0.5M-FR-26C0.5S	26×0.5	16/0.20	0.56	14.7	297
FRA-TW-0.5M-FR-5P0.5S	5×2×0.5	16/0.20	0.56	12.9	178
FRA-TW-0.5M-FR-2C0.75S	2×0.75	24/0.20	0.58	5.9	40
FRA-TW-0.5M-FR-4C0.75S	4×0.75	24/0.20	0.58	7.05	75
FRA-TW-0.5M-FR-8C0.75S	8×0.75	24/0.20	0.58	9.3	125
FRA-TW-0.5M-FR-2C1S	2×1.0	32/0.20	0.63	6.5	61
FRA-TW-0.5M-FR-2C1.5S	2×1.5	30/0.25	0.66	7.1	81
FRA-TW-0.5M-FR-3C1.5S	3×1.5	30/0.25	0.66	7.7	99
FRA-TW-0.5M-FR-5C1.5S	5×1.5*	30/0.25	0.66	9.5	150
FRA-TW-0.5M-FR-6C1.5S	6×1.5	30/0.25	0.66	10.7	188
FRA-TW-0.5M-FR-7C1.5S(G/Y)	7 G 1.5	30/0.25	0.66	10.3	190
FRA-TW-0.5M-FR-12C1.5S(G/Y)	12 G 1.5	30/0.25	0.66	13.8	319
FRA-TW-0.5M-FR-20C1.5S	20×1.5	30/0.25	0.66	17.8	533
FRA-TW-0.5M-FR-25C1.5S	*25×1.5	30/0.25	0.66	19.6	630
FRA-TW-0.5M-FR-37C1.5S	37×1.5	30/0.25	0.66	22.6	889
FRA-TW-0.5M-FR-3C2.5S(G/Y)	3 G 2.5	50/0.25	0.63	8.5	135
FRA-TW-0.5M-FR-12C2.5S(G/Y)	12 G 2.5	50/0.25	0.63	15.9	460
FRA-TW-0.5M-FR-25C2.5S(G/Y)	25 G 2.5	50/0.25	0.63	22.2	900

*green/yellow cables can be offered as an option

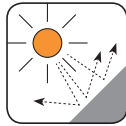
G: green/yellow cables



Impact Resistant



Highly Flexible



UV Resistant



Weather Resistant



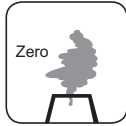
Oil Resistant



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

