

0.6/1KV Multicore Thin Wall Traction Cables

Applications

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



Standard

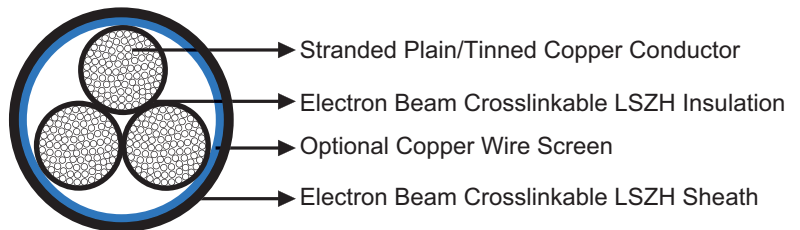
- BS 6853 -1a
- DIN 5510-1 1-4
- NFF 16-101 F0

Construction

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

- Insulation: Electron beam crosslinkable thin wall LSZH compound.

- Screen(optional): Copper Wire Screen (for screened cable).
- Outer Sheath: Electron beam crosslinkable LSZH compound.



Optional

FRA-TW-1M-FR (Fire resistant)

Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	0.5	0.75	1.0	1.5	2.5
Maximum Conductor Resistance	Ω/km	40.1	26.7	20	13.7	8.21
Voltage Rating	KV	0.6/1.0				

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

FRA-TW-1M (Multicore unscreened)

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-TW-1M-2C0.5S	2×0.5	19/0.18	0.3	4.4	31
FRA-TW-1M-3C0.5S	3×0.5	19/0.18	0.3	4.6	36
FRA-TW-1M-4C0.5S	4×0.5	19/0.18	0.3	5.0	43
FRA-TW-1M-5C0.5S	5×0.5	19/0.18	0.3	5.5	53
FRA-TW-1M-6C0.5S	6×0.5	19/0.18	0.3	6.0	62
FRA-TW-1M-2P0.5S	2×2×0.5	19/0.18	0.3	6.5	58
FRA-TW-1M-4P0.5S	4×2×0.5	19/0.18	0.3	8.7	99
FRA-TW-1M-2C0.75S	2×0.75	19/0.22	0.3	4.75	35
FRA-TW-1M-3C0.75S	3×0.75	19/0.22	0.3	5.15	47
FRA-TW-1M-4C0.75S	4×0.75	19/0.22	0.3	5.6	57
FRA-TW-1M-6C0.75S	6×0.75	19/0.22	0.3	6.75	83
FRA-TW-1M-2P0.75S	2×2×0.75	19/0.22	0.3	7.75	81
FRA-TW-1M-2C1S	2×1.0	19/0.25	0.3	5.1	45
FRA-TW-1M-3C1S	3×1.0	19/0.25	0.3	5.4	54
FRA-TW-1M-4C1S	4×1.0	19/0.25	0.3	5.8	64
FRA-TW-1M-6C1S	6×1.0	19/0.25	0.3	7.3	98
FRA-TW-1M-10C1S	10×1.0	19/0.25	0.3	8.7	143
FRA-TW-1M-25C1S	25×1.0	19/0.25	0.3	12.8	324
FRA-TW-1M-2C1.5S	2×1.5	19/0.3	0.3	6.0	63
FRA-TW-1M-3C1.5S	3×1.5*	19/0.3	0.3	6.3	76
FRA-TW-1M-4C1.5S	4×1.5	19/0.3	0.3	6.9	94
FRA-TW-1M-5C1.5S	5×1.5*	19/0.3	0.3	7.8	116
FRA-TW-1M-6C1.5S	6×1.5	19/0.3	0.3	8.45	141
FRA-TW-1M-7C1.5S(G/Y)	7G 1.5	19/0.3	0.3	9.1	165
FRA-TW-1M-8C1.5S	8×1.5	19/0.3	0.3	10.3	201
FRA-TW-1M-10C1.5S	10×1.5	19/0.3	0.3	10.6	216
FRA-TW-1M-18C1.5S	18×1.5	19/0.3	0.3	13.4	374
FRA-TW-1M-25C1.5S(G/Y)	25G 1.5	19/0.3	0.3	15.5	494
FRA-TW-1M-2C2.5S	2×2.5	19/0.4	0.4	7.3	98
FRA-TW-1M-3C2.5S	3×2.5*	19/0.4	0.4	7.8	122
FRA-TW-1M-4C2.5S	4×2.5	19/0.4	0.4	8.7	152
FRA-TW-1M-5C2.5S	5×2.5	19/0.4	0.4	9.4	181
FRA-TW-1M-6C2.5S	6×2.5	19/0.4	0.4	10.6	223

*earth cable can be offered as an option

G: earth cable (yellow/green)

FRA-TW-1M-OS (Multicore screened)

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-TW-1M-OS-2C0.5S	2×0.5	19/0.18	0.3	4.8	42
FRA-TW-1M-OS-3C0.5S	3×0.5	19/0.18	0.3	5.3	51
FRA-TW-1M-OS-4C0.5S	4×0.5	19/0.18	0.3	5.4	56
FRA-TW-1M-OS-6C0.5S	6×0.5	19/0.18	0.3	6.5	82
FRA-TW-1M-OS-15C0.5S	15×0.5	19/0.18	0.3	9.0	167
FRA-TW-1M-OS-2P0.5S	2×2×0.5	19/0.18	0.3	7.2	80
FRA-TW-1M-OS-3P0.5S	3×2×0.5	19/0.18	0.3	8.1	98
FRA-TW-1M-OS-4P0.5S	4×2×0.5	19/0.18	0.3	9.3	131
FRA-TW-1M-OS-12P0.5S	12×2×0.5	19/0.18	0.3	13.0	276

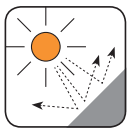
Cable Code	No. of cores & Nominal Conductor Cross Sectional Area No. x mm ²	Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
FRA-TW-1M-OS-2C0.75S	2x0.75	19/0.22	0.3	5.0	48
FRA-TW-1M-OS-4C0.75S	4x0.75	19/0.22	0.3	6.0	72
FRA-TW-1M-OS-6C0.75S	6x0.75	19/0.22	0.3	7.2	103
FRA-TW-1M-OS-10C0.75S	10x0.75	19/0.22	0.3	8.7	152
FRA-TW-1M-OS-18C0.75S	18x0.75	19/0.22	0.3	11.0	244
FRA-TW-1M-OS-3P0.75S	3x2x0.75	19/0.22	0.3	9.0	127
FRA-TW-1M-OS-2C1S	2x1.0	19/0.25	0.3	5.6	60
FRA-TW-1M-OS-3C1S	3x1.0	19/0.25	0.3	6.0	76
FRA-TW-1M-OS-4C1S	4x1.0	19/0.25	0.3	6.5	88
FRA-TW-1M-OS-6C1S	6x1.0	19/0.25	0.3	7.8	114
FRA-TW-1M-OS-8C1S	8x1.0	19/0.25	0.3	8.9	171
FRA-TW-1M-OS-25C1S	25x1.0	19/0.25	0.3	13.8	392
FRA-TW-1M-OS-2P1S	2x2x1.0	19/0.25	0.3	8.3	117
FRA-TW-1M-OS-2C1.5S	2x1.5	19/0.3	0.3	6.5	86
FRA-TW-1M-OS-3C1.5S	3x1.5	19/0.3	0.3	6.8	95
FRA-TW-1M-OS-4C1.5S	4x1.5	19/0.3	0.3	7.4	118
FRA-TW-1M-OS-6C1.5S	6x1.5	19/0.3	0.3	9.0	168
FRA-TW-1M-OS-18C1.5S	18x1.5	19/0.3	0.3	14.4	452
FRA-TW-1M-OS-2C2.5S	2x2.5	19/0.4	0.4	7.8	122
FRA-TW-1M-OS-4C2.5S	4x2.5	19/0.4	0.4	8.4	152
FRA-TW-1M-OS-6C2.5S	6x2.5	19/0.4	0.4	11.4	268



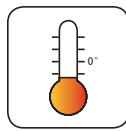
Impact Resistant



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

