

0.6/1KV Single Core Thin 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.

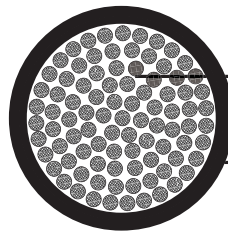


Standard

- 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.



Stranded Plain/Tinned Copper Conductor

Electron Beam Crosslinkable LSZH Insulation

Optional

FRA-TW-1SU-FR (Fire resistant & Unsheathed)

Electrical Characteristics at 20°C

| | | | | | | | | | | |
|---------------------------------|-----------------|---------|------|------|-----|------|------|------|------|------|
| Nominal Conductor Cross Section | mm ² | 0.5 | 0.6 | 0.75 | 1.0 | 1.2 | 1.5 | 2.0 | 2.5 | 4.0 |
| Maximum Conductor Resistance | Ω/km | 40.1 | 33.4 | 26.7 | 20 | 16.3 | 13.7 | 11.2 | 8.21 | 5.09 |
| 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

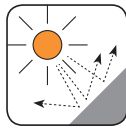
| Cable Code | No. of cores & Nominal Conductor Cross Sectional Area No. x mm ² | Nominal Diameter of Strands No/mm | Nominal Insulation Thickness mm | Nominal Overall Diameter mm | Nominal Weight kg/km |
|--------------------|--|--------------------------------------|------------------------------------|--------------------------------|-------------------------|
| FRA-TW-1SU-1C0.5S | 1x0.5 | 19/0.18 | 0.3 | 1.4 | 5.8 |
| FRA-TW-1SU-1C0.6S | 1x0.6 | 19/0.20 | 0.3 | 1.5 | 7 |
| FRA-TW-1SU-1C0.75S | 1x0.75 | 19/0.22 | 0.3 | 1.6 | 8.4 |
| FRA-TW-1SU-1C1S | 1x1.0 | 19/0.26 | 0.3 | 1.75 | 10 |
| FRA-TW-1SU-1C1.2S | 1x1.2 | 19/0.28 | 0.3 | 2.0 | 13 |
| FRA-TW-1SU-1C1.5S | 1x1.5 | 19/0.30 | 0.3 | 2.15 | 16 |
| FRA-TW-1SU-1C2S | 1x2.0 | 37/0.25 | 0.4 | 2.4 | 19 |
| FRA-TW-1SU-1C2.5S | 1x2.5 | 19/0.40 | 0.4 | 2.75 | 26 |
| FRA-TW-1SU-1C4S | 1x4.0 | 56/0.30 | 0.4 | 3.35 | 40 |



Impact Resistant



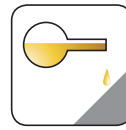
Highly Flexible



UV Resistant



Weather Resistant



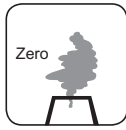
Oil Resistant



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

