



ST2513/CT2243 Outdoor Single Mode Unarmoured Trackside Optical Fiber Cables

Applications

The cables are designed for long distance telecom links on optical fibres along railway tracks. The cables are suitable for pulled through ducts or laid in channels.



Standards

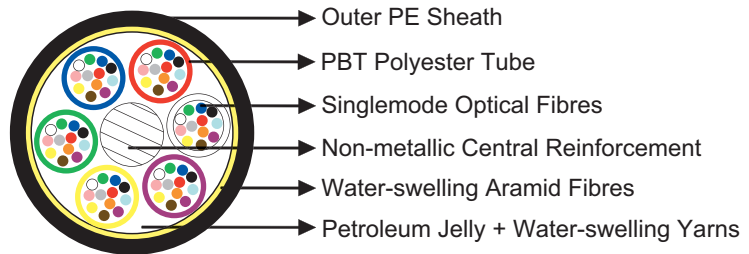
- SNCF ST 2513-99

Construction

- Fibres: Singlemode optical fibres G652 coloured (6 or 12 per tube).

- Tube: PBT polyester tubes From 12 to 72 OFs: 1 to 6 tubes; 144 OFs: 12 tubes.

- Central Strength Member: Non-metallic central reinforcement (FRP).
- Filling: Petroleum jelly + water-swelling yarns.
- Reinforcement: Water-swelling aramid fibres.
- Sheath: PE sheath.



Electrical Characteristics at 20°C

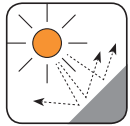
Maximum Attenuation		G652
@1310nm	dB/km	0.35
@1550nm	dB/km	0.22
Maximum Chromatic Dispersion		
Between 1260 and 1360nm	ps/(nm/km)	3.5
Between 1530 and 1565nm	ps/(nm/km)	19
Zero Dispersion Wavelength	nm	1310±11
Zero Dispersion Slope	ps/(nm ² .km)	0.09
Numerical Aperture		0.14
Point discontinuity	dB	0.1
PMD (individual fiber)	ps/km	0.2
Maximum Cutoff Wavelength	nm	1260
Cladding Diameter	um	125±1
Core/Cladding Concentricity Error	um	≤0.5
Cladding Non Circularity	%	≤1
Coating Non Circularity	%	≤6
Proof Test Level	Kpsi (GN/m ²)	100 (0.7)
Crush Resistance	N/cm	300
Maximum Laying Tension	N	From 12 to 72 FO: 2500;144 FO: 3000

➤ Mechanical and Thermal Properties

- Minimum Bending Radius: from 12 to 72 FO: 230mm; 144 FO: 340mm.
- Temperature Range: -30°C to +60°C (during operation); -10°C +60°C (during installation)

➤ Dimensions and Weight

Cable Code	No. of fibres	No of Tubes x No of Fibers/Tube	Nominal Sheath Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
RO2513-ML-B-9-1×12-F-2Y	12	1 tubes of 12 OF	1.5	11.6	112
RO2513-ML-B-9-3×12-F-2Y	36	3 tubes of 12 OF	1.5	11.6	112
RO2513-ML-B-9-6×6-F-2Y	36	6 tubes of 6 OF	1.5	11.6	112
RO2513-ML-B-9-6×12-F-2Y	72	6 tubes of 12 OF	1.5	11.6	112
RO2513-ML-B-9-12×12-F-2Y	144	12 tubes of 12 OF	1.5	17.0	225



UV Resistant



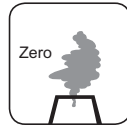
Water Resistant



Laid In Ducts



Laid in Channel



Zero Halogen
IEC 60754-1/NF C20-454
EN 50267-2-1

