

Caledonian

Railway Cables

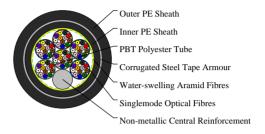
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CT2242 Outdoor Single Mode Armoured Trackside Optical Fiber Cables

RO2242-ML-C-9-6X12-SR-2Y(STA)2Y





APPLICATIONS

The cables are designed for long distance telecom links on optical fibres along railway tracks. The cables are suitable for installation directly in channels or buried.

STANDARDS

SNCF CT 2242.6.1

CABLE CONSTRUCTION

Fibres: Singlemode optical fibres G652 coloured (6 or 12 per tube) Central Strength Member: Non-metallic central reinforcement (FRP).

Tube: PBT polyester tubes containing fibres

Filling: Petroleum jelly with water-swelling yarns to provide longitudinal watertightness

Inner Sheath: Low density polyethylene

Armour: 0.25mm thick corrugated steel tape armour.

Outer Sheath:Low density polyethylene.

PHYSICAL AND THERMAL PROPERTIES

Minimum Bending Radius: 310mm.

Temperature Range: -40°C to +70°C (during operation); -10°C +70°C (during installation).

Electrical Properties

Electrical Characteristics at 20°C:

Maximum Attenuation: G652

@1310nm:0.35 dB/km

@1550nm: 0.22 dB/km

Maximum Chromatic Dispersion:

Between 1260 and 1360nm:3.5 ps/(nm/km) Between 1530 and 1565nm:19 ps/(nm/km)

Zero Dispersion Wavelength:1310±11 nm Zero Dispersion Slope:0.09 ps/(nm2.km)

Numerical Aperture:0.14



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Point discontinuity:0.1 dB

PMD (individual fiber):0.2 ps/km

Maximum Cutoff Wavelength: 1260 nm

Cladding Diameter:125±1 um

Core/Cladding Concentricity Error:≤0.5 um

Cladding Non Circularity:≤1% Coating Non Circularity:≤6%

Proof Test Level:100 (0.7) Kpsi (GN/m2)

Crush Resistance:450 N/cm

Maximum Laying Tension:3000 N

DIMENSION AND PARAMETERS

| No. of fibres | Nominal Sheath Thickness | Nom. Overall Diameter | Approx. Weight |
|---------------|--------------------------|-----------------------|----------------|
| | mm | mm | kg/km |
| 72 | 1.5 | 16.5 | 300 |



Laid In Channel



Laid In Ducts



UV Resistant



Water Resistant

