FEATURES AND SPECIFICATIONS

molex

Outdoor Loose Tube Composite Fibre Cable

Insect Resistant Nylon Jacket

Optical Fibre

Dry Blocked Core

Polyethylene Sheath

Moisture-Resistant Jelly-Filled Loose Tube

Central Strength Element

Features and Benefits

The Outdoor Loose Tube Composite Optical Fibre Cable is a robust and non-metallic outdoor cable. The cable can be used in in-ground applications. The nylon sheath provide insect resistance.

- Provides OS2 and OM3 fibres in a single cable.
- Cable can contain up to 72 Fibres in jelly-filled loose tubes (6 or 12 Fibres per tube)
- Tubes and Fillers are laid up around non-metallic strength member
- Water barrier tape and Polyethylene protects against water ingression

Commerical Standards

IEC 60793, IEC 60794 & ITU-T G.652D

Technical Information

Mechanical Characteristics

Number of Elements: 5

Fibre/Tube identification: Colour coded Central Strength: Member: Glass rein

forced plastic (GRP)

Fibre Protection (Tube): Polybutylene

Terephthalate (PBT)

Fillers: As required

Water Blocking: Thixotropic Gel

(Tubes)

Petroleum Jelly (Interstices)

Core Wrapping: Polybutylene

Terephthalate Tape Polyethylene (UV

Sheath: Polyethylene Stabilised)

Jacket: Nylon (UV Stabilised)

Fibre Count (up to): 72
Tube Diameter (mm): 2
Nominal Diameter (mm): 9.6
Nominal Weight (Kg/km): 70
Maximum Tension (kN)
Installation: 2.3
In Service: 1.3
Maximum Crush Resistance (kN/100mm): 1.6
Minimum Bend Radius (mm)
Under Load: 20 x OD

Storage Temperature: -40°C to +70°C Operating Temperature: -40°C to

+70°C

10 x OD

Electrical/Optical Characteristics

Singlemode Fibres

No Load:

	G652	G652.D
Attenuation (dB/km) (max) @1310/1383/1550nm (typical)	0.4/NA/0.3 0.35/NA/0.22	0.4/0.38/0.3 0.34/0.31/0.21
Zero dispersion Wavelength	1300-1324mm	1302-1322mm
Slope@ Zero Dispersion Wavelength (ps/nm².km)	0.092	0.090
PMD (ps/√km)	0.1	0.1
MFD @ 1310nm @ 1550nm	9.2 ± 0.4mm 10.4 ± 0.5mm	9.2 ± 0.4mm 10.4 ± 0.5mm
Cladding diameter (mm)	125 ± 2	125 ± 0.7
Mode Filed Concentricity err.	≤ 0.8mm	≤ 0.5mm
Cladding non-circularity (%)	1	1
Fibre Coating Diameter (mm)	250 ± 10	250 ± 10

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molex Outdoor Loose Tube **Composite Fibre Cable**

Technical Information

Electrical/Optical Characteristics

Multimode Fibres

	62.5μm (OM1)	50/125μm (OM2)	50/125μm (OM3)
Attenuation (dB/km) @850/1300nm	3.0/1.0	3.0/1.0	3.0/1.0
Minimum OFL Bandwidth @850/1300nm (MHz.km)	200/500	500/500	1500/500
Numerical aperture	0.275 ± 0.015	0.200 ± 0.015	0.200 ± 0.015
Typical Core Diameter (μm)	62.5 ± 2.5	50 ± 2.5	50 ± 2.5
Core-Clad Conc Error (µm)	≤ 1.5	≤ 1.5	≤ 1.5
Cladding diameter (µm)	125 ± 1	125 ± 1	125 ± 1
Fibre Coating Diameter	250 ± 10	250 ± 10	250 ± 10
Minimum G-Ethernet transmission Distance @850/1300nm (m)	275/550	550/550	970/600

ORDERING INFORMATION

Order No.	SAP No.	Description
AFO-ZC00601	Consult Molex	6 Core OS2/ 6 Core OM3 Outdoor Loose Tube Composite PE/Nylon Sheath Cable
AFO-ZC00602	Consult Molex	6 Core OS2/ 6 Core OM1 Outdoor Loose Tube Composite PE/Nylon Sheath Cable
AFO-ZC01201	Consult Molex	12 Core OS2/ 12 Core OM3 Outdoor Loose Tube Composite PE/Nylon Sheath Cable

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