

LGCE- 24-OC1008-00

Cable Description	24 FIBRE DOUBLE SHEATH (HDPE) ARMORED OPTICAL FIBER CABLE
Type of Fibre	Single Mode, G.657A1

Introduction

Double Sheath Armored optic cable containing LWP-SMF in full compliance with ITU-T G 657A1. The offered cables are fully compliant to the relevant IEC specifications.

Cable Design

- * Enhance low water peak single mode fibers in full compliance with ITU-T-G657A1.
- * Non-metallic and anti-buckling element FRP rod used as Central Strength Member.
- * Loose buffer tubes fully filled Thixotropic Jelly
- * Loose buffer tubes S-Z Stranded
- * Cable core is Dry (WS yarn over CSM)
- * Cable core is wrapped with Water Swellable Tape
- * UV Stabilized HDPE Inner sheath, Black
- * Corrugated ECCS Tape
- * UV Stabilized HDPE Outer sheath, Black
- * Rip Cord to open the inner and outer sheath.

Application

- * Direct burial / Inside Duct
- * In areas with particularly high mechanical loads

Special Features

- * Single layer stranded construction
- * Corrugated ECCS tape as protect Mechanical Damage and against Rodent
- * Particularly Robust Cable
- * Flexible buffer tubes provide easy fibre routing inside closure

Cable Physical Characteristics

Fibre Count	24
Number of Fibres in each Loose Tube	12
Number of Loose Tube in each cable	2
Number of Filler (if Required)	4
Cable Diameter (mm)	13.5
Tolerance $\pm$ (mm)	0.5
Nominal Cable Weight (kg/km)	160
Standard Length (meters)	2000 / 4000 $\pm$ 10%

Cable Mechanical & Environmental Characteristics

Test	Standard	Product Performance
Temperature Range (°C)	[IEC 60794-1-22-F1]	-30 °C to +70 °C
Cable Bending Radius (mm)	[IEC 60794-1-21-E11 A & B]	20 X D , D= Cable diameter
Tensile Force (N)	[IEC 60794-1-21-E1]	2500 N (max)
Impact Resistance (Nm)	[IEC 60794-1-21-E4]	25 Nm
Crush Resistance (N)	[IEC 60794-1-21-E3 A]	4000 N (100 X 100 mm)
Torsion Resistance	[IEC 60794-1-21-E7]	$\pm$ 180°, 10 Cycle , 2 Meter Sample
Water Penetration	[IEC 60794-1-22-F5 B]	1 Meter Water Head, 3 Meters Cable Sample, 24 Hours

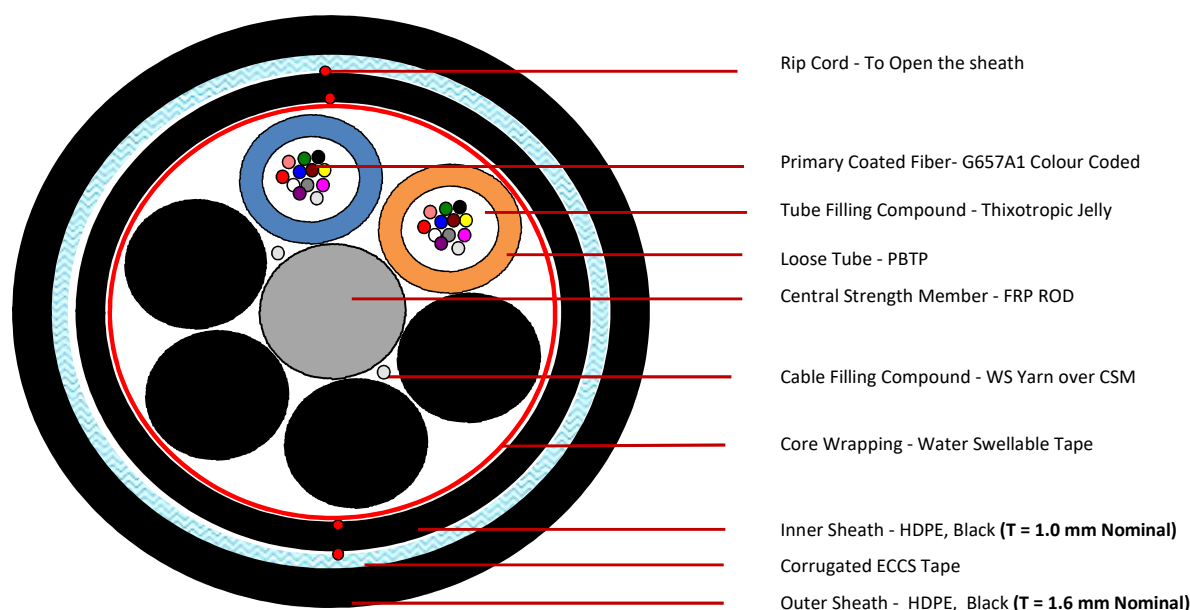
Note: After the Test, Change in Attenuation shall be $\leq$ 0.05 dB/Km. No Fibre Break & Damage or Crack on the Cable

Cable Transmission Characteristics

Fibre Type	Attenuation Coefficient (dB/Km)					PMD	Cable Cut-Off	MFD
	850	1300	1310	1550		ps/sqrt.km	nm	μ m
Single Mode	G.657A1	-	-	$\leq$ 0.36	$\leq$ 0.23	$\leq$ 0.2	$\leq$ 1260	9.2 $\pm$ 0.4

Cable Constructional Details

Cable Cross Sectional Diagram of 24F Cable [Drawing not to scale]



Identification Fibre & Loose Tube Colour

Fibre Colour	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua
Loose Tube Colour	Blue	Orange										
Filler Colour	Black											

Proposed Printing Details & Method at every meters

Printing Method & Colour	Hot foil Indentation Method & Contrast Color	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking
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Proposed Stenciling on Drum

Every length will be delivered on non-returnable wooden drums. Generally the cable drum flange will be marked with following: (These details can also be customised.)

- * Arrow showing the direction, the drum can be rolled.
- * Country of origin.
- * The manufacturer's name
- * Number of fibers.
- * Nominal cable length in meters
- * Net and gross weight.
- * Drum number
- * Customer's/Project name and destination