

TECHNICAL DETAILS OF 48 FIBRE (200um G657A1), MULTI LOOSE TUBE UNARMoured, MICRO DUCT OPTICAL FIBER CABLE

INTRODUCTION

Multi Loose tube, unarmoured, micro fibre optic cable containing LWP-SMF, in full compliance with ITU-T G657A1 200um. The offered cables are fully compliant to the relevant IEC specifications.

(1) CABLE DESIGN:

- * Fibers in full compliance with 200um ITU-T-G 657A1.
- * Non metallic and anti-buckling element used as Central Strength Member for Tensile Strength
- * Loose buffer tubes fully filled
- * Loose buffer tubes S-Z Stranded
- * PA12 Outer Sheath

(2) APPLICATION:

- * Suitable for Installation inside Micro Ducts

(3) SPECIAL FEATURES:

- * Completely dielectric cable/ non metallic cable immune to electromagnetic interferences
- * Suitable for Micro Duct Installation

(4) MECHANICAL CHARACTERISTICS:

Temperature Range (IEC 60794-1-22-F1)	Transportation and Storage -30° to +70°C
	Laying -30° to +70°C
	Operational -30° to +70°C
Cable Bending Radius (IEC 60794-1-21-E11)	40xD, D= Bend Diameter of Cable, 4 turns, 3 cycles
Repeated Bending (IEC 60794-1-21-E6)	25 Cycle, D= 20 X D, 100 N Load, Speed = 30 Cycles/min
Tensile Force (IEC 60794-1-2-E1)	350 N @ 0.25% fiber strain
Torsion Resistance (IEC 60794-1-2-E7)	10 Cycle (± 180°) 1 Kg Weight, L= 2 Mtr
Crush Resistance (IEC 60794-1-2-E3A)	300 N/10cms, 10min
Impact Resistance (IEC 60794-1-21-E4)	Impact Force = 1Nm, 3 Impact, Height - 500 mm
Water Penetration (IEC 60794-1-22-F5B)	1 meter water head, 3 meter cable sample, 24 hours

(5) OPTICAL CHARACTERISTICS:

200um ITU-T-Rec G 657A1 as per attached data sheet	
at 1310 nm	< 0.35 dB/Km
at 1550 nm	≤ 0.25 dB/Km

(6) COLOUR CODING:

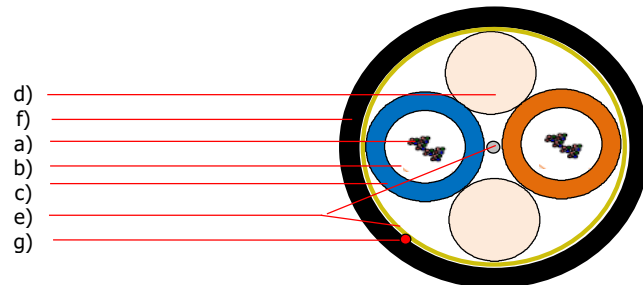
Colour of Fibres in a Tube:	12F/Tube Blue, Orange, Green, Brown, Slate, White, Red, Black Yellow, Violet, Pink & Aqua
Ring Marked Fibers	Blue, Orange, Green, Brown, Slate, White, Red, Yellow Violet, Pink, Aqua & Natural (No Ring Marking)
Colour of Loose Tubes:	Blue & Orange

* for 48 fibre cable : 48 Fiber construction with 2 tubes of 24 fibers each

(7) CABLE CONSTRUCTIONAL DETAILS:

a) Primary Coated Fibre	Single Mode (200um G.657A1)
b) Tube Filling Compound	Thixotropic Jelly
c) Loose Tube(s)	PBTP
d) Strength Member	FRP Rod
e) Binder	Aramid Yarn along with Water Swellable Yarn
f) Outer Sheath	Nylon Black
g) Ripcord	One Numbers under Outer Sheath

Typical Cross-section for 48F OFC



(8) DELIVERY INFORMATION:

Nominal Cable Weight (Kg/Km), Approx.	48F 14 +/- 2
Nominal Cable Diameter (mm)	3.8 +/- 0.2
Standard Length per Drum (Mtr)	4000 +/- 200

(9) CABLE SHEATH MARKING:

Cable sheath shall be marked with Ink Jet Printing method in contrast colour. Marking details can be customized as per customer requirements.

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