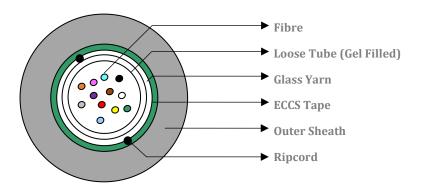


#### **HFCL Limited**

Document no.: HFCL/LAP(E)090625/UTA/001 Rev 00 DATE: 09/06/25

\_\_\_\_\_

# Technical Specifications 12/24F Unitube Armoured OFC



Product Details

Optical Fibres inside central loose tube
Glass yarn as peripheral strength member
Corrugated steel tape armour for rodent protection
Polyethylene sheath as outer protection

### **Cable Construction**

Parameter	Structure/Layout/Material		
Fibre Count	12F	24F	
Number of fibres per tube	12	24	
Number of loose tubes	1		
Loose Tube OD	3.2 ± 0.2 mm		
Peripheral Strength Member	Glass Yarn Water Blocking		
Armouring	ECCS Tape		
Outer Sheath	PE - Black		
Number of Ripcords	2 – Polyester		
Cable Diameter	8.5 ± 0.5 mm		
Cable Weight	75 ± 10 kg/km		

## **Colour Coding**

Fibre Count	1	2	3	4	5	6	7	8	9	10	11	12
Fibre Colour	Rd	Gr	Bl	Yl	Sl	Vi	Br	0r	Wh	Pk	Bk	Aq
Fibre Count	13	14	15	16	17	18	19	20	21	22	23	24

<sup>\*</sup>black ring marking on 13<sup>th</sup> to 24<sup>th</sup> fibre, 22<sup>nd</sup> fibre shall be natural with black ring mark instead of black

Loose Tube Colour Nt

## Cable & Fibre Characteristics

Max. Tensile Strength		tallation: 1800 N eration: 1000 N	IEC-60794-1-21-E1		
Max. Crush Resistance	2	2000 N/10 cm	IEC-60794-1-21-E3		
Impact Resistance		10 N.m	IEC-60794-1-21-E4		
Torsion	± 180 °		± 180 °		IEC-60794-1-21-E7
Minimum Bend Radius	20 x D		IEC-60794-1-21-E11		
Water Penetration Test	1 m water head, 3 m sample, 24 hours		IEC-60794-1-22-F5		
	Installation	-5 °C to + 50 °C			
Environmental Performance	Operation	-40 °C to + 70 °C	IEC-60794-1-22-F1		
	Storage	-20 °C to + 70 °C			

CPR Class	Fca
-----------	-----

Fibre Type	G.652D		
Attenuation	1310 nm	≤ 0.36 dB/km	
Attenuation	1550 nm	≤ 0.23 dB/km	
Charactic Discounies	1285-1330 nm	≤ 3.5 ps/nm.km	
Chromatic Dispersion	1550 nm	≤ 18 ps/nm.km	
PMD (Max. Individual)	≤ 0.2 ps/√km		
PMD (Link design value)	≤ 0.06 ps/√km		
Cable cut off wavelength λcc	≤ 1260 nm		
MFD =	1310 nm	9.2 ± 0.4 μm	
MFD	1550 nm	10.4 ± 0.5 μm	
Core-Cladding Concentricity Error	≤ 0.5 μm		
Cladding Diameter	125 ± 0.7 μm		
Cladding Non Circularity	≤ 0.8 %		
Coating Diameter	242 ± 5 μm		

Cable Marking

As per customer requirement.

Cable Length

4.0 km ± 5 %

Packaging

Wooden drums or reels

Cable end sealed

Drum marking: Drum number, User name, HFCL Limited, Fibre count, Cable Length, Date of manufacture, Net weight, Gross weight

Cable Performance Standards

IEC 60793, ANSI/ICEA S-87-640, Telcordia GR-20, ITU-T, RoHS, REACH