

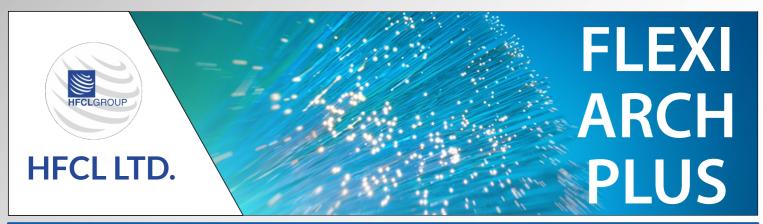
PRODUCT DESCRIPTION

- ▶ HFCL'S "FLEXI ARCH PLUS" IS A SINGLE MODE OPTICAL FIBER WITH CHARACTERISTICS OF BEND INSENSITIVE WITH ENTIRE BANDWIDTH RANGING FROM 1260nm TO 1625nm.
- ▶ HFCL'S "FLEXI ARCH PLUS" PROVIDES SUPERIOR MACRO BEND, REDUCED PMD LOSSES. THIS BEND-OPTIMIZED FIBER RESULTS IN LOW ATTENUATION LOSSES AFTER CABLING.
- ▶ "FLEXI ARCH PLUS" IS FULLY COMPLIANT OR EXCEEDS WITH ITU-T G.657A2 AND G.652D RECOMMENDATIONS.

TRANSMISSION CHARACTERISTICS					
ATTRIBUTE	UNIT	VALUE			
Attenuation @ 1310 nm Attenuation @ 1383 nm* Attenuation @ 1550 nm Attenuation @ 1625 nm Point Discontinuities at 1310 nm and 1550 nm Zero Dispersion Wavelength Zero Dispersion Slope Max Dispersion 1285 nm-1330 nm Dispersion @ 1550 nm Dispersion @ 1625 nm PMD coefficient Individual Fiber PMD LDV	dB/km dB/km dB/km dB/km dB nm ps/nm²km ps/nm.km ps/nm.km ps/nm.km ps/nkm	≤ 0.35 ≤ 0.35 ≤ 0.21 ≤ 0.23 ≤ 0.05 1300 to 1324 ≤ 0.092 ≤ 3.5 ≤ 18 ≤ 22 ≤ 0.1 ≤ 0.06			

^{*} After Hydrogen aging according to IEC 60793-2-50.for B 1.3 fiber category.

GEOMETRICAL CHARACTERISTICS				
ATTRIBUTE	UNIT	VALUE		
Cable Cutoff Wavelength	nm	≤ 1260		
Cladding Diameter	μm	125 ± 0.7		
Mode Field Diameter	μm	1310 nm: 8.6±0.4		
		1550 nm:9.6±0.5		
Core-clad concentricity error	μm	≤ 0.5		
Cladding Non Circularity (Ovality)	%	≤ 0.8		
Secondary Coating Diameter	μm	242 ± 5		
Coating-cladding concentricity error	μm	≤ 12		
Coating Non Circularity (Ovality)	%	≤ 6		



MECHANICAL CHARACTERISTICS					
ATTRIBUTE	UNIT	VALUE			
Proof stress level Dynamic tensile strength (un-aged) Coating strip force (peak) Fiber Curl Stress corrosion susceptibility parameter (Dynamic Fatigue), Nd Macro Bend Loss Change in attenuation when fiber is coiled with 1 turn around 15 mm diameter mandrel Change in attenuation when fiber is coiled with 1 turn around 20 mm diameter mandrel Change in attenuation when fiber is coiled with 10 turn around 30 mm diameter mandrel	kpsi GPa N m	≥ 100 (0.69 GPa) or 1% strain ≥ 3.8 1.3≤F≤ 8.9 ≥ 4 ≥ 20 ≤ 0.20 dB at 1550 nm ≤ 0.50 dB at 1625 nm ≤ 0.10 dB at 1625 nm ≤ 0.20 dB at 1625 nm ≤ 0.03 dB at 1550 nm ≤ 0.10 dB at 1550 nm			

ENVIRONMENTAL CHARACTERISTICS				
ATTRIBUTE	VALUE			
Temperature Cycling Induced Attenuation at 1310nm ,1550 nm ,1625 nm at -60°C to +85°C	≤ 0.05 dB/Km			
Temperature-Humidity Cycling Induced attenuation at 1310nm ,1550 nm ,1625 nm at -10° C to +85° C and upto 98% relative humidity	≤ 0.05 dB/Km			
Water Immersion Induced attenuation at 1310nm ,1550 nm ,1625 nm due to water immersion at 23 \pm 2° C	≤ 0.05 dB/Km			
Accelerated Aging (Temperature) Induced attenuation at 1310nm ,1550 nm ,1625 nm due to Temperature aging at $85\pm2^\circ$ C	≤ 0.05 dB/Km			
Damp Heat Induced attenuation at 1310nm ,1550 nm ,1625 nm due to Temperature& Humidity aging at +85° C and 85% relative humidity	≤ 0.05 dB/Km			

NOTE: FIBERS CAN BE SUPPLIED BASED ON CUSTOMER REQUIREMENTS EITHER IN NATURAL / COLOR.

INSPECTION CERTIFICATE

HFCL SHALL PROVIDE IN-HOUSE TEST CERTIFICATE WHICH INCLUDE OPTICAL, MECHANICAL PARAMETERS AS PER CUSTOMER REQUIREMENTS.

MATERIAL PROPERTIES

GROUP REFRACTIVE INDEX OF FIBER:

1.466 @ 1310 nm

1.467 @ 1550 nm 1.470 @ 1625 nm

ISO 9001 | TL9000 CERTIFIED