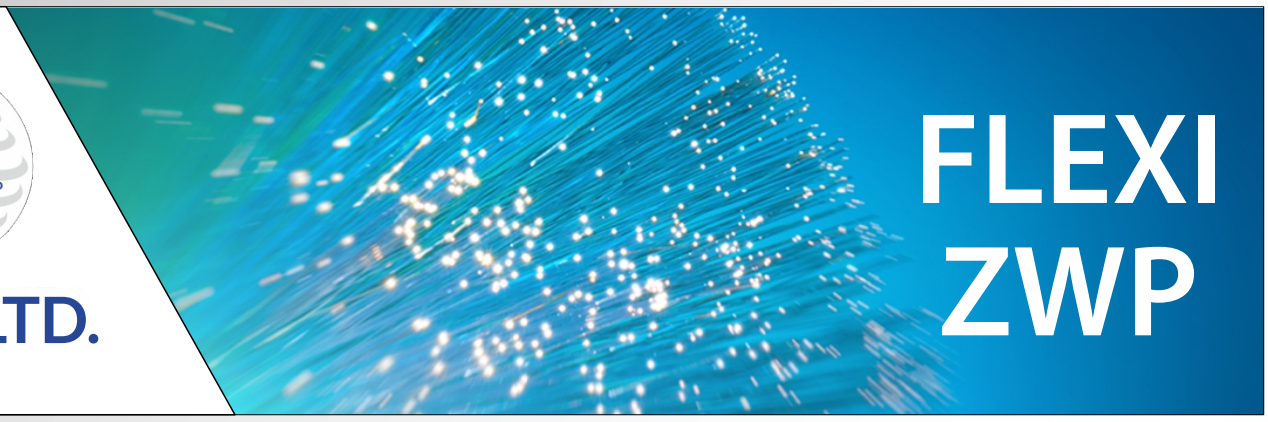
HFCL LTD.



FLEXI ZWP

PRODUCT DESCRIPTION

- HFCL'S "FLEXI ZWP" IS A LOW WATER PEAK SINGLE MODE OPTICAL FIBER SUITED FOR OPTICAL TRANSMISSION SYSTEMS OPERATING OVER THE ENTIRE WAVELENGTH RANGE FROM 1260nm TO 1625nm.
- "FLEXI ZWP" IS SUITABLE FOR APPLICATIONS IN METRO, ACCESS NETWORKS AND ALSO SUITABLE FOR HIGH SPEED TRANSMISSION TECHNOLOGIES SUCH AS DWDM AND CWDM.
- "FLEXI ZWP" FIBER COMPLIES WITH OR EXCEEDS THE ITU –T G652D AND IEC 60793-2-50 TYPE B-652D STANDARDS SPECIFICATIONS. A DUAL LAYER ACRYLATE COATING PROVIDES HIGH PRODUCT RELIABILITY AND EXCELLENT STRIP FORCE STABILITY.

TRANSMISSION CHARACTERISTICS

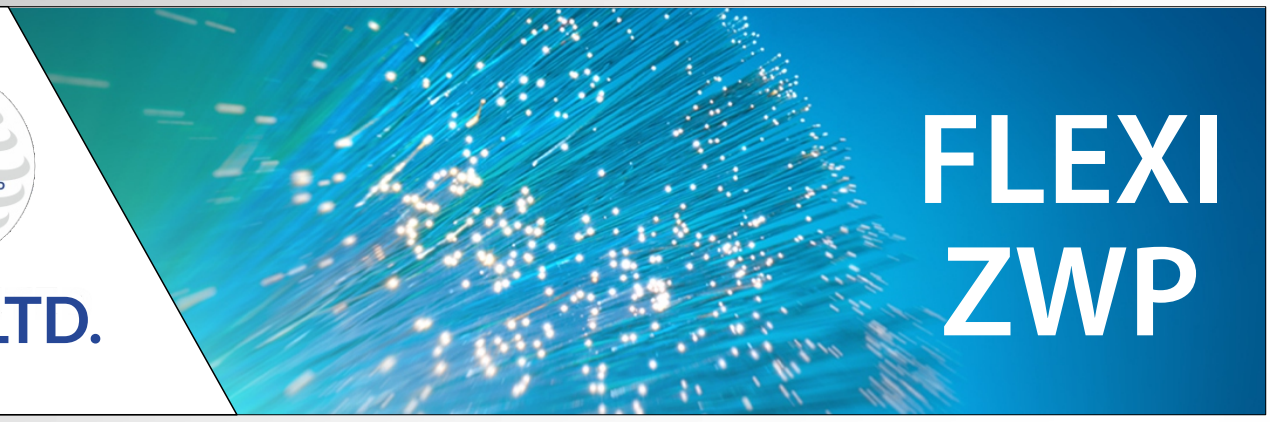
ATTRIBUTE	UNIT	VALUE
Attenuation @ 1310 nm	dB/km	≤ 0.34
Attenuation @ 1383 nm*	dB/km	≤ Value at 1310 nm
Attenuation @ 1550 nm	dB/km	≤ 0.20
Attenuation @ 1625 nm	dB/km	≤ 0.23
Point Discontinuities at 1310 nm and 1550 nm	dB	≤ 0.05
Zero Dispersion Wavelength	nm	1300 nm-1324 nm
Zero Dispersion Slope	$ps/nm^2.km$	≤ 0.092
Max Dispersion 1285 nm-1330 nm	ps/nm.km	≤ 3.5
Dispersion @ 1550 nm	ps/nm.km	≤ 18
Dispersion @ 1625 nm	ps/nm.km	≤ 22
PMD coefficient Individual Fiber	ps/√km	≤ 0.2
PMD LDV	ps/√km	≤ 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: 9.2±0.4 1550 nm:10.4±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)	%	≤ 4

HFCL LTD.



FLEXI ZWP

MECHANICAL CHARACTERISTICS

ATTRIBUTE	UNIT	VALUE
Proof stress level	kpsi	≥100 (0.69 GPa) or 1% strain
Dynamic tensile strength (Un-aged)	GPa	≥ 3.8
Coating Strip force (peak)	N	1.3≤F≤ 8.9
Fiber Curl	m	≥ 4
Stress corrosion susceptibility parameter (Dynamic Fatigue), Nd		≥ 20
Macro Bend Loss		
Change in attenuation with 100 turns on 60 mm diameter mandrel		≤ 0.05 dB at 1550 nm ≤ 0.10 dB at 1625 nm
Change in attenuation with 100 turns on 50 mm diameter mandrel		≤ 0.05 dB at 1310 nm ≤ 0.05 dB at 1550 nm
Change in attenuation when fiber is coiled with 1 turn around 32 mm diameter mandrel		≤ 0.50 dB at 1550 nm ≤ 1.00 dB at 1625 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 ± 2° C	≤ 0.05 dB/Km
Accelerated Aging (Temperature) Induced attenuation at 1310nm,1550 nm,1625 nm due to Temperature aging at 85 ± 2° 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	

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

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
1470 @ 1625 nm

ISO 9001 | TL9000 CERTIFIED