

COIA High Temperature Optical Fibre Temperature Range from **-40 °C up to +250 °C**

HTF250 - SM 09/125/245 – Low / Medium Tg (Dual Layer)

High end applications require reliable Special Optical Fibres.

The typical applications for the latest development of COIA HTF250, High Temperature Optical Fibres up to +250°C, includes medical and industrial lasers, in high temperature environment, for high efficiency fibre optic bundles, harsh environmental sensors, energy research, mining, Fibre Optic DTS, Oil hole drilling & refinery, Food & aircraft industries, car & train tunnel cabling, etc...

COIA offers GIMM 50µm, 62.5µm as well as SM 9/125 High End Fibres with an extended operating temperature range up to +250°C.

The Fibre Primary and Secondary Coating is a special developed and Patent pending Dual Layer UV-Acrylate Coating (**COIA Galaxy® HPHTC 250 – Patent pending No. 10 2005 032 619.6**), a unique & world-wide sole developed & manufactured High Performance Product by COIA.

Furthermore COIA's Galaxy® HPHTC 250 High Performance High Temperature Coatings and HTF250 High Temperature Optical Fibres do comply with ROHS 2002/95/EG regulation.

Optical Characteristics		Specific Value Range	Unit
Attenuation Coefficient <i>@ Max. Operating Temperature</i>	@ 1310 nm	≤ 0.34 - ≤ 0.36	dB/km
	@ 1550 nm	≤ 0.20 - ≤ 0.23	dB/km
Mode Field Diameter	@ 1310 nm	9.2 ± 0.4	µm
	@ 1550 nm	10.3 ± 0.5	µm
Fiber Cut-Off Wavelength		1190 – 1330	nm
Zero Dispersion Wavelength		1300 – 1324	nm
Zero Dispersion Slope		≤ 0.09	ps/nm ² .km
Effective Group Index of Refraction	@ 1310 nm	1.467	
	@ 1550 nm	1.468	
Geometrical Characteristics		Specific Value	Unit
Core/Clad Concentricity Error		≤ 0.5	µm
Cladding Diameter		125 ± 1.0	µm
Cladding Non-Circularity		≤ 0.7	%
Coating Diameter		245 ± 10	µm
Coating/Clad Concentricity Error		≤ 10.0	µm
Standard Lengths		1.1 – 50.4	km
Mechanical Characteristics			
Proof Test		≥ 100	kpsi
		≥ 8.8	N
Coating Strip Force		3.0 - 4.0	N
Life Time		@ Max. Operating Temperature	
Short Term (3 hours)		+250 °C	
Medium Term (10 days)		+200 °C	
Long Term (> 100 days)		+150 °C	

COIA reserves the right to modify above specifications without notice as all Fibres, Preforms and Coatings are subject to COIA's continuing process development and quality improvement policy to ensure high reliability and superior performance of our Products.

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