Polarization Maintaining Passive Double-cladding Fiber

Everfoton panda type polarizationmaintaining passive double-cladding fiber, using advanced PCVD process to deposit core and stress rod, has accurate refractive index distribution and excellent geometric and birefringent properties. Combined with special coating with a low refractive index, high NA (numerical aperture > 0.46) double-cladding transmission is realized. Meanwhile, large mode field diameter ensures good connection performance with other passive double-cladding fibers, and perfectly matches PM ytterbium doped fiber, which is very beneficial to ultrafast laser processing and reducing high pulse nonlinear effect.

Characteristics

- Precise control of geometric parameters
- Excellent birefringence
- Matching active ytterbium-doped polarization-maintaining fiber with good fusion compatibility

Applications

- Chirped pulse amplification
- Second harmonic generator
- Single-frequency narrow linewidth amplifier
- Frequency doubling

Specifications

Fiber Type	GDF_DC 20/400-0.065 (PM)	GDF_DC 25/250-0.065 (PM)
Part No.	DG1118-G	DG1118-F
Optical Properties		
Core NA	0.065 ± 0.005	0.065 ± 0.005
Inner Cladding NA	≥ 0.46	≥ 0.46
Birefringence Index	4×10^{-4} (Typical)	2.5×10^{-4} (Typical)
Cladding Attenuation@1095nm (dB/km)	≤ 15.0	≤ 15.0
Geometrical Properties		
Core Diameter (μm)	20.0 ± 1.5	25.0 ± 1.5
Cladding Diameter (μm)	400.0 ± 5.0	247.0 ± 3.0
Coating Diameter (μm)	550.0 ± 15.0	395 ± 15
Proof Test (kpsi)	≥ 100	≥ 100