



Polarization Maintaining Low Loss Coupler Fibers

Nufern's broad line of PM fibers now includes PM980C-HP & PM14XXC-HP coupler fibers. Components designed with these new coupler fibers exhibit insertion losses up to one order of magnitude better than was previously possible. These fibers also demonstrate superior polarization control in coupler applications, resulting in increased system and network efficiencies.

Typical Applications

- Couplers and combiners
- Pump combiners
- Raman gain modules

Features & Benefits

- Dramatically reduced insertion loss — Lower system cost
- High proof test (200kpsi) — Low risk of mechanical handling failure
- High fatigue failure resistance — Longest service life

Optical Specifications

Operating Wavelength
Core NA
Mode Field Diameter

Cutoff
Core Attenuation

Normalized Cross Talk

PM980C-HP

970 – 1550 nm
0.120
6.6 ± 1.0 μm @ 980 nm
900 ± 70 nm
≤ 2.5 dB/km @ 980 nm
≤ - 37.0 dB at 2 m @ 980 nm
≤ - 20.0 dB at 100 m @ 980 nm

PM14XXC-HP

1390 – 1625 nm
0.125
9.8 ± 0.8 μm @ 1450 nm
10.4 ± 0.8 μm @ 1550 nm
1320 ± 60 nm
≤ 1.0 dB/km @ 1450 nm
≤ 1.0 dB/km @ 1550 nm
≤ - 37.0 dB at 2 m @ 1550 nm
≤ - 20.0 dB at 100 m @ 1550 nm

Geometrical & Mechanical Specifications

Cladding Diameter
Core Diameter
Coating Diameter
Coating Concentricity
Core/Clad Offset
Coating Material
Operating Temperature Range
Proof Test Level

125.0 ± 1.0 μm
5.5 μm
245.0 ± 15.0 μm
< 5.0 μm
≤ 0.50 μm
UV Cured, Dual Acrylate
-40 to 85 °C
≥ 200 kpsi (1.4 GN/m²)

125.0 ± 1.0 μm
8.0 μm
245.0 ± 15.0 μm
< 5.0 μm
≤ 0.50 μm
UV Cured, Dual Acrylate
-40 to 85 °C
≥ 200 kpsi (1.4 GN/m²)



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Nufern products are manufactured under an ISO 9001:2008 certified quality management system.



Standard specifications and design parameters are listed above. Specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.

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