

CORNING



PANDA PM Bend Insensitive

Polarization Maintaining Fibers for Bend Sensitive Applications

Specialty Optical Fibers

PANDA PM Specialty Fibers are designed with the best polarization maintaining properties, and are the industry standard in the world today. PANDA PM Bend Insensitive Specialty Optical Fiber is designed with significantly improved bending capacity, suited to meet the needs of package size reductions and 100 Gbps systems.

PANDA PM fibers are optimized for high reliability, and our Boron-doped stress rod profile is field proven to support high growth applications over a wide temperature range.

PANDA PM Specialty Optical Fiber design uses two stress applying parts to create an extremely high birefringence, resulting in fiber with excellent polarization maintaining properties. This design was invented and patented by Corning Incorporated. Corning continues to have a manufacturing partnership with Fujikura Ltd.

Applications

Small package size transponders, transceivers, modulators, and laser fiber assemblies

Sensors

Bend sensitive applications

Miniaturized components

Polarization sensitive components

Fiber Type	Part Number	Bending Radius
PM Bend Insensitive	PMBI 15	7.5 mm
PM Small Radius	PMSR 15	15 mm

Key Optical Specifications

Part Number	PMBI 1550	PMSR 1550
Operating Wavelength (nm)	1550	
Cutoff Wavelength (nm)	≤ 1440	
Maximum Attenuation (dB/km)	≤ 3.0	≤ 0.50
Mode-field Diameter (μm)	9.0 ± 0.4	9.5 ± 0.4
Maximum Beat Length (mm)	3.0	2.0 - 5.0
Maximum Cross Talk at 100 m (dB)	≤ - 30	
Maximum Bending Cross Talk (dB) (λ = 1550 nm, bending diameter = 15 mm, 10 turns)	≤ - 30	

Features

Significantly improved bending capacity

Extremely high birefringence

Single-mode design

Fibers available with dual-layer UV acrylate and flame retardant polyester coatings

Key Geometric, Mechanical, and Environmental Specifications

245 μm + 400 μm UV/ UV Acrylate Coating

Part Number	PMB115-U25D-H	PMSR15-U25D-H	PMSR15-U40D-H
Bending Radius (mm)	R7.5	R15.0	R15.0
Cladding Outside Diameter (μm)	125 ± 1		
Coating Outside Diameter (μm)	245 ± 15	245 ± 15	400 ± 15
Core-to-Cladding Concentricity (μm)	≤ 0.5		
Operating Temperature (°C)	- 40 to +85*		
Standard Lengths	100 m, 200 m, 300 m, 400 m, 500 m		
Proof Test (kpsi)	200		

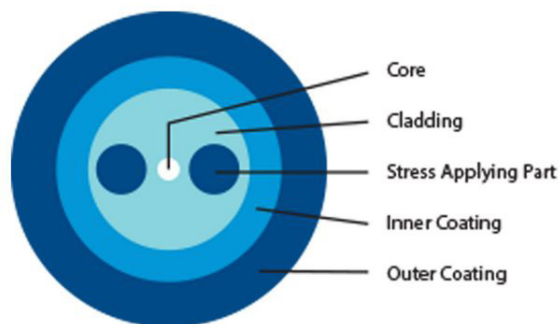
Flame Retardant Coating

500 μm + 900 μm Polyester-Elastomer Coating

Polyester-Elastomer Coating is a UL® recognized component plastic with a flammability classification of V-O in accordance with UL94. Fibers with this coating have a VW-1 end product flammability classification in accordance with UL1581.

Part Number	PMB115-H50D-H	PMSR15-H50D-H	PMSR15-H90D-H
Bending Radius (mm)	R7.5	R15.0	R15.0
Cladding Outside Diameter (μm)	125 ± 1		
Coating Outside Diameter (μm)	500 ± 50	500 ± 50	900 ± 100
Core-to-Cladding Concentricity (μm)	≤ 0.5		
Operating Temperature (°C)	- 40 to +85*		
Standard Lengths	100 m, 200 m, 300 m, 400 m, 500 m		
Proof Test (kpsi)	200		

*Without coiling on a shipping reel



For more information about Corning's leadership in Specialty Fiber technology, visit our website at www.corning.com/specialtyfiber

To obtain additional technical information, an engineering sample or to place an order for this product, please contact us at:

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