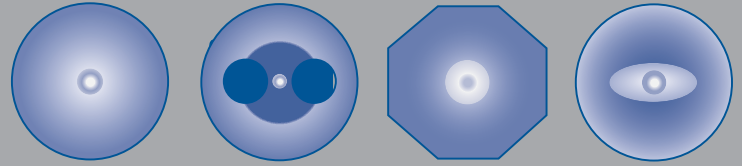


# Gyroscope PM Fibers



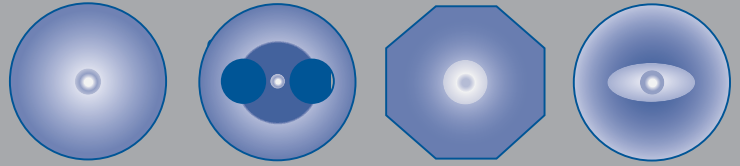
Application	Reference	Operating wavelength (+/-25nm )	Optical losses @ operating W.L (dB/km)	Cutoff wavelength (nm)	Core NA (+/- 0.02)v	Mode field diameter (μm)
Terrestrial	IXF-PMG-820-40	820	< 15	< 770	0.18	4 +/- 0.5
Terrestrial	IXF-PMG-820-80	820	< 5	< 770	0.16	4.5 +/- 0.5
Terrestrial	IXF-PMG-820-80-P	820	< 5	< 770	0.16	4.5 +/- 0.5
Terrestrial	IXF-PMG-1310-80	1310	< 2	< 1270	0.16	6 +/- 0.5
Terrestrial	IXF-PMG-1310-80-LS	1310	< 2	< 1270	0.16	6 +/- 0.5
Terrestrial	IXF-PMG-1310-80-P	1310	< 2	< 1270	0.16	6 +/- 0.5
Terrestrial	IXF-PMG-1550-40	1550	< 5	< 1450	0.18	7 +/- 1
Terrestrial	IXF-PMG-1550-80	1550	< 2	< 1450	0.16	8 +/- 1
Space Grade	IXF-PMG-1550-80-E	1550	< 2	< 1450	0.16	8 +/- 1
Terrestrial	IXF-PMG-1550-80-LS	1550	< 2	< 1450	0.16	8 +/- 1
Terrestrial	IXF-PMG-1550-80-P	1550	< 2	< 1450	0.16	8 +/- 1

\* @ 633 nm

The **IXF-PMG** fibers are advanced performances Polarization Maintaining Fiber specially designed for Fiber Optic Gyroscopes for Terrestrial and Space environment.

The Host composition and the raw materials guarantee an extremely low sensitivity to high temperature variation and to high energy radiation.

# Gyroscope PM Fibers



Beat length* (mm)	Cross talk (dB)	H parameter (m-1)	Quartz clad diameter (μm)	Coating diameter (μm)	PM structure
< 2.3	< -20 (100 m)	< 1.10 <sup>-4</sup>	40 +/- 1	105 +/- 5	Tiger
< 1.8	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Tiger
< 1.8	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Panda
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Tiger
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	125 +/- 2	Tiger
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Panda
< 2.3	< -20 (100 m)	< 1.10 <sup>-4</sup>	40 +/- 1	105 +/- 5	Tiger
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Tiger
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Tiger
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	125 +/- 2	Tiger
< 1.6	< -25 (100 m)	< 3.10 <sup>-5</sup>	80 +/- 1	170 +/- 2	Panda

## KEY FEATURES

- Panda & Tiger design available
- Design for space environment
- Qualified by international inertial sensing manufacturers
- Proof test level (kpsi): 100
- Core/clad concentricity (μm): < 1
- Axial twisting of fiber: < 3 (turns/m)
- Core ellipticity (%) : < 15

## RELATED PRODUCTS

- Fiber Optic Gyroscopes (FOG's)
- PM couplers
- PM Fiber Bragg Gratings
- Erbium Doped Fibers
- Gain Flattening Filters