

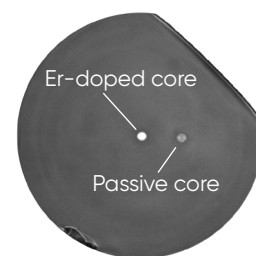
SPECIALTY OPTICAL FIBER

IXF-MC-2-EDF-PAS-125-024

Multicore fiber

The IXF-MC family of multicore fibers includes both passive and active fibers with 2, 4, 7 and 12 cores. Multicore fibers are used in a large variety of applications such as Space Division Multiplexing (SDM) and sensing (temperature, strain, or shape sensing). Passive multicore fibers have photosensitive cores, allowing Fiber Bragg Gratings (FBG) to be inscribed to the cores.

Custom developments of passive, active, or spun multicore fibers are possible.



Benefits & Features

- 2-core fiber (1 erbium-doped core, 1 passive core)
- Singlemode operation at 1550 nm
- Custom designs possible

Applications

- Space division multiplexing (SDM)

Related Products

- IXF-MC-4-EDF-FGC-980
- IXF-MC-4-SM-1060

Parameters

Core number	2
Core spacing (μm)	20 ± 1
Cutoff wavelength (nm)*	< 1500
Core diameter (μm)*	4.5 ± 0.5
Mode field diameter @1550 nm (μm)*	5.2 ± 0.5
Numerical aperture*	0.24 ± 0.02
Cladding diameter (μm)	125 ± 2
Coating diameter (μm)	245 ± 15
Proof test level (kpsi)	50

* Active and passive cores

Active core

Position	Center
Absorption @1480 nm (dB/m)	4 ± 1
Absorption @1530 nm (dB/m)	15 ± 3
Core/Clad concentricity (μm)	< 1.5

Passive core

Attenuation @1550 nm (dB/km)	< 2
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Design parameters

Coating material	Dual acrylate
Operating temperature range (°C)	-40 to +85

Exail reserves the right to change, at any time and without notice, the specifications, design, function or form of its products described herein.

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