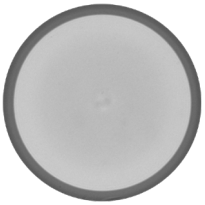
SPECIALTY OPTICAL FIBER

IXF-MMSI-L-200-220-022-AL

Multimode Fiber



The IXF-MMSI family includes step-index multimode fibers designed for use in harsh environments with extreme temperatures and/or low to moderate radiation levels. Exail offers a wide range of polymer and metalic coatings well-suited for high-temperature applications.
Aluminum coated fibers offer a wide operating temperature range, from cryogenic temperatures up to +400 °C. They are also hermetic to hydrogen, mitigating hydrogen darkening in hydrogen-rich environments.

Step-index multimode fibers are available with low-OH, mid-OH and high-OH content depending on the operating wavelength range. Other coatings and geometries are available upon request.

Benefits & Features

- Aluminum coating
- Ø200 µm pure silica core, F-doped cladding
- 0.22 numerical aperture, step-index profile
- 1.1 CCDR
- Operating temperature up to +400 °C
- Optimized for VIS-IR operation (low-OH content)
- Hermetic to hydrogen and water vapor
- Solderable directly to connectors

Applications

- Sensing
- Spectroscopy
- Plasma diagnostics and monitoring

Related Products

• IXF-MMGI-50-125-020-AL	Graded-index mulltimode
• IXF-SM-1550-125-014-AL	SM 1550 nm, NA 0.14
• IXF-SM-1550-125-019-AL	SM 1550 nm, NA 0.19
• IXF-SM-1060-125-014-AL	SM 1060 nm, NA 0.14

Parameters

Core diameter (µm)	200 ± 4
Cladding diameter (µm)	220 ± 4
Numerical aperture	0.22 ± 0.02
Attenuation over 800-1100 nm (dB/km)	≤ 20
Core/Clad concentricity (µm)	≤ 1
Coating diameter (µm)	270 ± 15
Proof test level (kpsi)	100

Design parameters

Core material	Pure silica core
OH content	Low-OH
Coating material	Aluminum
Operating temperature range (°C)	-269 to +400
Short term bend radius (mm)	≥ 25
Long term bend radius (mm)	≥ 50

contact.photonics@exail.com | www.exail.com
Europe +33 1 30 08 94 50 | Americas +1 508 745 3487 | APAC +60 11 1623 1698