

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 metallic 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

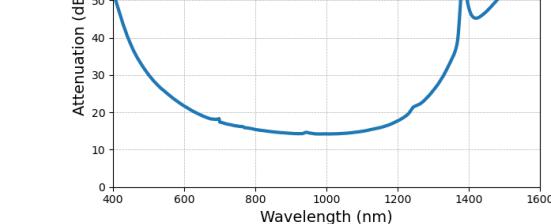
- Aluminum coating
- Ø200 µm pure silica core, F-doped cladding
- 0.22 numerical aperture, step-index profile
- 1.1 CCDR
- Operating temperature up to +400 °C
- Optimized for VIS-IR operation (low-OH content)
- Hermetic to hydrogen and water vapor
- Solderable directly to connectors

Applications

- Sensing
- Spectroscopy
- Plasma diagnostics and monitoring

Related Products

| | |
|--------------------------|------------------------|
| • IXF-MMGI-50-125-020-AL | Graded-index multimode |
| • 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 |



Typical attenuation spectrum of the IXF-MMSI-L-200-220-022-AL fiber.

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 |



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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