

ArmD® NIR-Ge

Ge-doped silica/silica fiber

Armadillo ArmD® NIR-Ge fibers distinguish themselves with maximum numerical aperture values, unparalleled performance, and an extensive spectral range. Offering a wide range of core diameter options and customizable solutions, these fibers can be tailored to meet your specific needs.

Wavelength

ArmD® NIR-Ge 400 – 2600 nm

Numerical Aperture (NA)

Standard 0.37 ± 0.02

Jacketing Options:

Polyimide: -190 to +350°C

ETFE (Tefzel®): -40 to +150°C

Nylon: -40 to +100°C

Acrylate: -40 to +85°C

DuPont Hytrel® 7246: -40 to +140°C

Acrylate DeSolite® DF-0009: -40 to 150°C

PFA Fluon®: -200° to +260°C

Advantages

- Germanium-doped silica glass core
- High resistance against laser damage
- Step-index profile
- Special jackets available for high temperatures, high vacuum and harsh chemicals
- Very low NA expansion
- Biocompatible material
- Sterilizable using ETO and other methods

Fluorine-doped silica cladding

Germanium-doped silica glass core

Buffer (if provided)
Silicone,
hard polymer

Technical data

Operating temperature	-200 to +350 °C
Core diameter	Available from 20 to 1000 µm
Standard core / cladding ratios	1 : 1.04 1 : 1.06 1 : 1.1 1 : 1.15 1 : 1.2 1 : 1.25 1 : 1.4 or customized
Standard proof test	100 kpsi (nylon, ETFE, acrylate jacket) 70 kpsi (polyimide jacket)
Minimum bending radius	50 × cladding diameter (short-term mechanical stress) 150 × core diameter (during use with high laser power)



armadillosia.com
+1-408-900-8883
info@armadillosia.com

