ArmD® Metal-Coated Silica Fibers

Silica/silica fibers with Metal Coating

ArmD® Metal-coated silica fibers, available in Tin, Copper, Aluminum, and Carbon-primed Aluminum are capable of withstanding the highest temperatures among all types of fibers, making them well-suited for challenging environments.

Wavelength	
ArmD® UV	200 – 1100 nm
ArmD® NIR	300 – 2600 nm

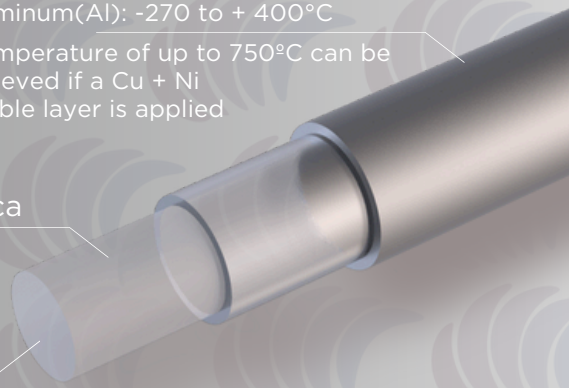
Numerical Aperture (NA)	
Low	0,12 ± 0,02 | 0,15 ± 0,02
Standard	0,22 ± 0,02
High	0,26 ± 0,02
	0,28 ± 0,02
	or customized

Advantages

- Available for all fibers
- Exceptional resistance to high temperatures
- Robust resistance to harsh chemicals
- Solderable for convenient integration
- Hermetically sealed for enhanced durability

Metal Coating Options:
Tin: 230°C
Copper (Cu): -270 to + 600°C*
Aluminum(Al): -270 to + 400°C

*Temperature of up to 750ºC can be achieved if a Cu + Ni double layer is applied



Technical data

Operating temperature	- 270 to + 600 °C
Core diameter	Available from 25 to 2000 µm
Core thickness	Tin: 15 to 50 | Copper: 15 to 50 | Aluminum: 15 to 150
Tensile strength (short gauge), GPa	Tin: 6 to 9 | Copper: 2 to 3 | Aluminum: 3.5 to 6
Two point bending strength, GPa	Tin: > 10 | Copper: > 10 | Aluminum: > 10
Static fatigue parameter, n	Tin: > 100 | Copper: > 100 | Aluminum: > 100
Minimum bending radius	100 × diameter (short-term mechanical stress) 200 × diameter (during use with high laser power)

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