

ArmD™ HUV, ArmD™ HWF

Silica fiber with hard polymer cladding

Armadillo presents its ArmD™ HUV/HWF fibers as a cost-effective substitute for silica/silica fibers. These fibers offer high numerical aperture values, minimal bend losses, and efficient connectorization, making them suitable for a broad range of applications.

Wavelength		Numerical aperture (NA)	
ArmD™ HUV / HWF	350 - 2200 nm	Standard	0,37 ± 0,02
		High	0,48 ± 0,02
			0,50 ± 0,02
			0,52 ± 0,02
			0,57 ± 0,02
			0,62 ± 0,02

High NA HCS Fibers

Advantages

- Cost-effective (compared to silica / silica fibers)
- High concentricity
- All dielectric, non-magnetic design
- Step-index profile
- Biocompatible material
- Sterilizable using ETO and other methods



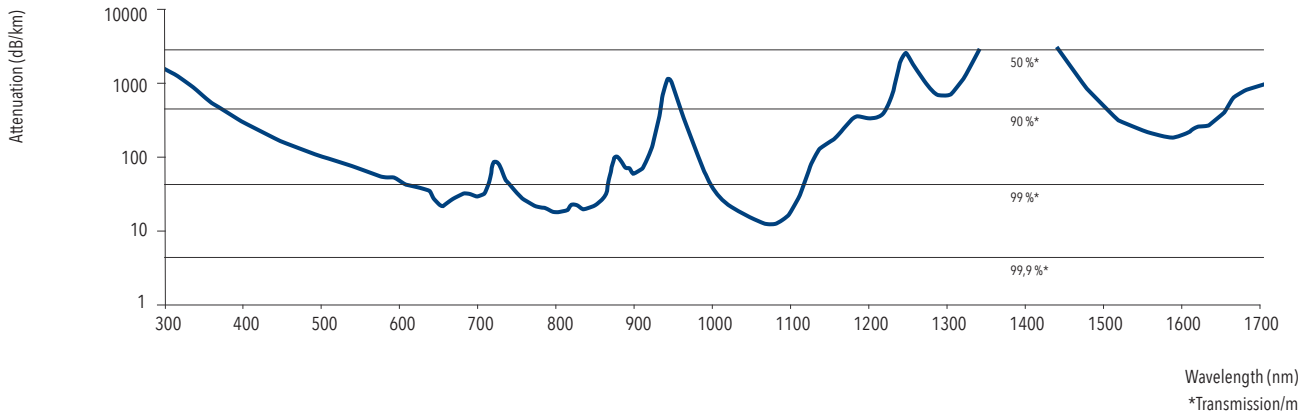
Technical data

Wavelength / spectral range	ArmD™ HUV and ArmD™ HWF: 350 - 2200 nm
Numerical aperture (NA)	0,37 ± 0,02 0,48 ± 0,02 0,50±0,02 0,52±0,02 0,57±0,02 0,62±0,02
Operating temperature	-40 to +150 °C
Core diameter	Available from 100 to 2000 µm
OH content	ArmD™ HUV: high (> 700 ppm) ArmD™ HWF: low (< 1 ppm)
Standard proof test	100 kpsi
Minimum bending radius	50 × cladding diameter (short-term mechanical stress) 150 × core diameter (during use with high laser power)

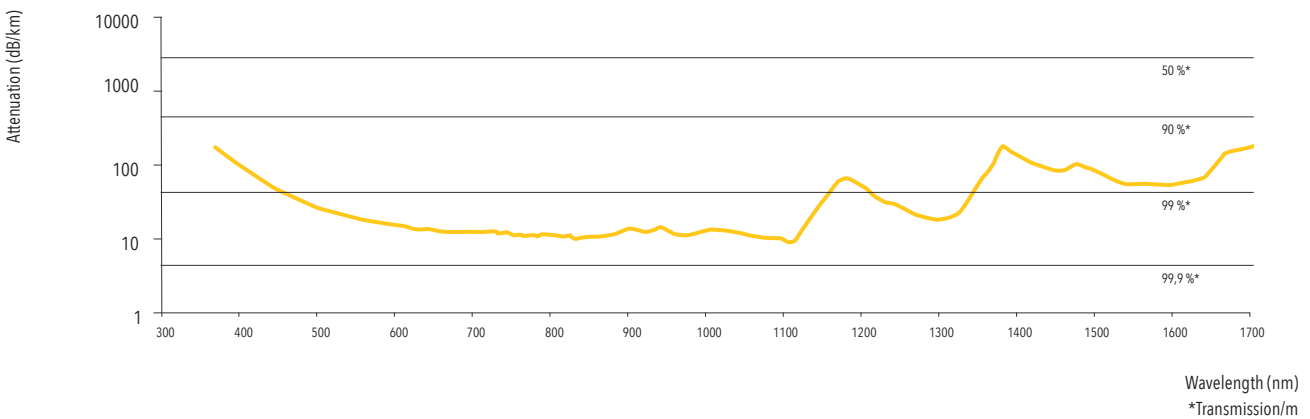
Attenuation values

The following diagrams provide an overview of attenuation values in relation to wavelengths:

ArmD™ Ultra HUV



ArmD™ Ultra HWF



Applications

The preferred option for a range of applications, including remote illumination and photodynamic therapy, among others.

1 2 3 4 5 6
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Product code key using the example of WF 300/330 (H)(B)N (28)

- | | |
|-----------------------------------|---|
| 1 Fiber type | UV = ArmD™ UV WF = ArmD™ WF WFGE = ArmD™ WFGE HUV = ArmD™ HUV HWF = ArmD™ HWF |
| 2 Standard core / cladding ratios | Core \varnothing (μm) / Cladding \varnothing (μm) |
| 3 Buffer | H = hard polymer buffer No information = silicone buffer |
| 4 Colour | B = black BL = blue W = white Y = yellow R = red G = green No information = transparent |
| 5 Jacket material | A = acrylate jacket (no buffer) F = PFA Fluon® N = nylon jacket (silicone or hard polymer jacket)
T = ETFE jacket (silicone or hard polymer buffer) P = polyimide jacket (no buffer) |
| 6 Numerical aperture (NA) | 12 = 0,12 28 = 0,28 No information = 0,22 (standard) |

SIA "Armadillo"

LV40203150242
Krisjana Valdemara iela 33-27,
Riga LV 1010 Latvia



<https://armadillosia.com>
Phone +1 408 900-8883
Fax 408 834-7430
info@armadillosia.com