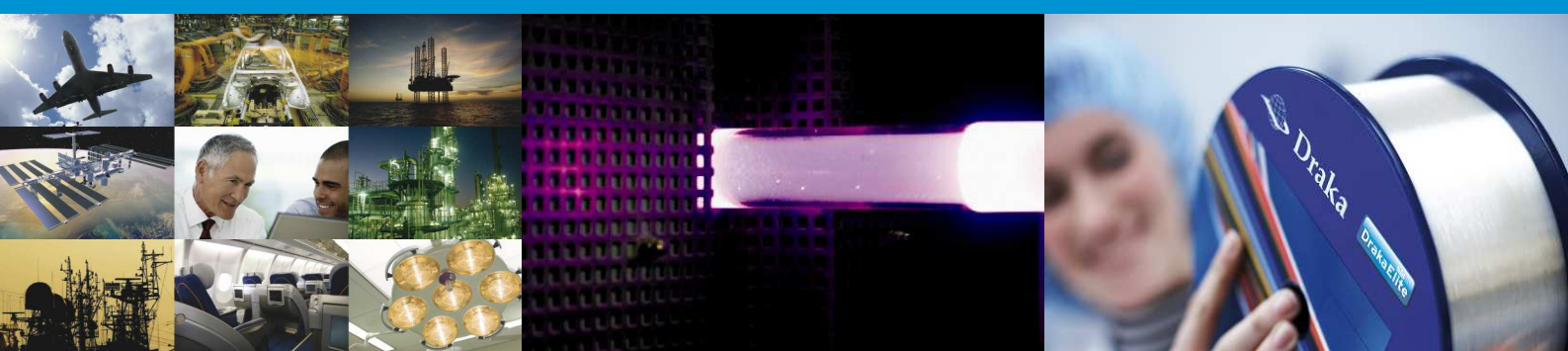


Improved bending loss performances



Specialty Fiber



Issue date: 02/10
Supersedes: 12/09

Product Type: 50 / 125 μm High-NA, Bend-Improved

Coating Type: Dual Layer Primary Coating Acrylate (DLPC9)

For data transmission and communication in harsh environments

- Industry
- Military/Defense
- Transport

This Draka's Graded-Index 50/125 μm Multimode Specialty Fiber has a 50 μm core diameter and a 125 μm cladding diameter. This fiber is designed for use at 850 nm and/or 1300 nm.

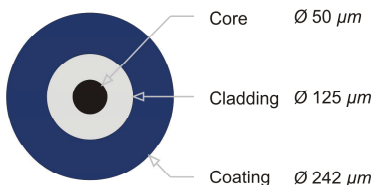
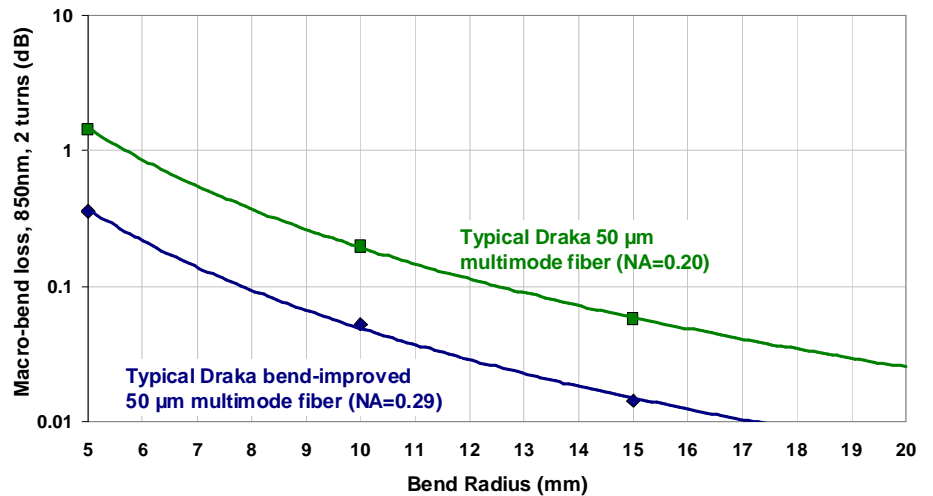
The fiber complies with a high Numerical Aperture, providing improved bending loss performances. Typical bend-loss is shown in the figure below.



Value Innovation is a way of looking at the world. How we can help our customers do more, make more, save more, achieve more.



Macro bend-loss 50 μm multimode fiber, 850 nm, 2 turns



Features	Benefits
Produced by the PCVD process, the ultimate process for graded-index multimode fiber	PCVD produced multimode fibers show excellent modal bandwidth performance
Coated with the Dual Layer UV Acrylate DLPC9	<ul style="list-style-type: none"> • Optimized performance in tight buffer cable applications • High resistance to micro-bending • Stable performance over a wide range of environmental conditions • Improved easy stripping of tight buffer coatings
High Numerical Aperture	Improved bending loss performances

Improved bending loss performances
Product Type: 50 / 125 µm High-NA, Bend-Improved
Issue date: 02/10
Coating Type: Dual Layer Primary Coating Acrylate (DLPC9)
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Optical Specifications
Attenuation

Attenuation Coefficient at 850 nm	≤ 3 dB/km
Attenuation Coefficient at 1300 nm	≤ 0.7 dB/km

Minimum Modal Bandwidth¹

Minimum Modal Bandwidth at 850 nm	≥ 160 to ≥ 500 MHz.km
Minimum Modal Bandwidth at 1300 nm	≥ 160 to ≥ 500 MHz.km

Numerical Aperture

NA	0.29 ± 0.02
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Chromatic Dispersion

Zero-Dispersion wavelength, Zero-Dispersion Slope	FDDI spec
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Bending Loss

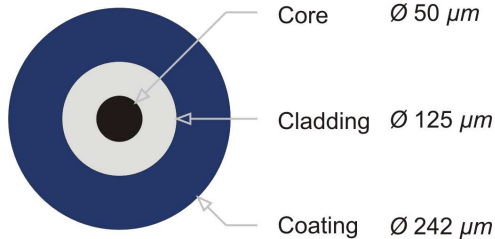
	Launch according to IEC 61280-4-1	Typical Value
Two turns of R=15 mm at 850 nm		0.03 dB
Two turns of R=10 mm at 850 nm		0.07 dB

Group Index of Refraction

	Typical Value
Group Index of Refraction at 850 nm	1.498
Group Index of Refraction at 1300 nm	1.492

Geometrical Specifications
Parameters

Core Diameter	50 ± 2 µm
Core Non-Circularity	≤ 5 %
Core/Cladding Concentricity Error	≤ 2 µm
Cladding Diameter	125.0 ± 1.0 µm
Cladding Non-Circularity	≤ 1.0 %
Coating Diameter	242 ± 10 µm
Coating Non-Circularity	≤ 5 %
Cladding/Coating Concentricity Error	≤ 12 µm
Length	Standard lengths
	1.1, 2.2, 4.4, 8.8 km


Mechanical Specifications
Parameters

Proof Test ²	Off line	≥ 8.8 N
		≥ 1.0 %
		≥ 100 kpsi
		≥ 0.7 GPa

Environmental Specifications
Parameters

Operating Temperature ³	≥ - 60°C to ≤ + 85°C
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¹ The modal bandwidth is linearly normalized to 1km, according to IEC 60793-2-10

² Higher proof test available upon request

³ Available with higher temperature coatings: 150°C, 200°C

How can we be of service to you?

Value Innovation is a way of looking at the world. How can we help our customers do more, make more, save more, achieve more?

Take DrakaElite™. Based on our proprietary manufacturing process and our control of all technological building blocks, we offer an extensive portfolio of specialized optical fibers that have been designed, developed, manufactured

and tested for every environment. Whether you want to guide, amplify, transmit, process, control or sense light, Draka has the fiber you need, whatever your environment. And if for some reason we don't have exactly what you need, well, we'll just make it.

That's Value Innovation in action.

Draka Communications

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The Draka Communications policy of continuous improvement may cause in changed specifications without prior notice