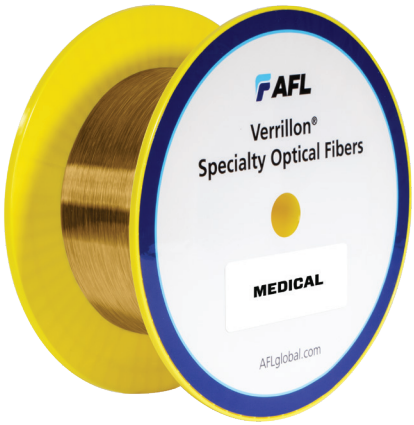

Verrillon®

Near-Infrared (NIR) Medical Laser Delivery Fibers

Verrillon® NIR Medical Laser Delivery Fibers consist of a family of multimode low-OH pure-silica core fibers designed for laser power delivery in minimally-invasive surgical procedures. This family of fibers is suitable for lasers operating in the near-infrared spectral region from 500 to 2200nm, such as Nd:YAG and Ho:YAG.

Features

- Step-Index multimode pure silica core designs
- Core diameters from 50 µm to 2000 µm
- Biocompatible fibers are suitable for laser surgery
- Polyimide coating allows for use up to 300°C
- High radiation resistance

Specifications

	LARGE DIAMETER MEDICAL LASER DELIVERY OPTICAL FIBERS - POLYIMIDE - NIR SPECTRUM (LowOH)		
PART NO.	**MMF50125P15520-1**	**MMF-100-P-110-140-22**	**MMF-200-1-P-220-245-1**
Description	50/125/155 Pure Silica Core, Polyimide coated, Step-Index Multimode Fiber, 0.20 NA, 100 kpsi Proof Test	100/110/140 Low OH, Pure Silica Core, Polyimide coated, Multimode Fiber, 0.22 NA, 100 kpsi Proof Test	200/220/245 Low OH, Pure Silica Core, Polyimide coated, Multimode Fiber, 0.22 NA, 100 kpsi Proof Test
PARAMETER			
Material			
Core	Pure Silica	Low-OH Pure Silica	Low-OH Pure Silica
Cladding	F-doped Silica	F-doped Silica	F-doped Silica
Coating	Polyimide	Polyimide	Polyimide
Geometry			
Core Diameter (mm)	50 ± 3	100 ± 5	200 ± 8
Clad Diameter (mm)	125 ± 2	110 ± 5	220 ± 6
Core Non-Circularity (%)	≤ 5	-	≤ 5
Clad Non-Circularity (%)	≤ 1	-	≤ 1
Core/Clad Offset (mm)	≤ 1.5	≤ 3.0	-
Coat Diameter (mm)	155 ± 5	140 ± 5	245 ± 10
Coating Concentricity (%)	≥ 80		≥ 80
Optical			
NA (nominal)	0.2	0.22	0.22
Attenuation	See Low-OH full preform spectrum on next page		
Mechanical			
Prooftest (kpsi)	≥ 100	≥ 100	≥ 100
Operating Temperature (°C)	-65 to +300	-65 to +300	-65 to +300

Continued >

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Near-Infrared (NIR) Medical Laser Delivery Fibers

Specifications

	LARGE DIAMETER MEDICAL LASER DELIVERY OPTICAL FIBERS - POLYIMIDE - NIR SPECTRUM (LowOH)		
PART NO.	**M400440P470L22-1**	**M600660P690L22-1**	**M900990P1020L22-1**
Description	400/440/470 Low OH, Pure Silica Core, Polyimide coated, Multimode Fiber, 0.22 NA, 100kpsi Proof Test	600/660/690 Low OH, Pure Silica Core, Polyimide coated, Multimode Fiber, 0.22 NA, 100kpsi Proof Test	900/990/1020 Low OH, Pure Silica Core, Polyimide coated, Multimode Fiber, 0.22 NA, 100kpsi Proof Test
PARAMETER			
Material			
Core	Low-OH Pure Silica	Low-OH Pure Silica	Low-OH Pure Silica
Cladding	F-doped Silica	F-doped Silica	F-doped Silica
Coating	Polyimide	Polyimide	Polyimide
Geometry			
Core Diameter (mm)	400 ± 10	600 ± 10	900 ± 10
Clad Diameter (mm)	440 ± 10	660 ± 10	990 ± 10
Core Non-Circularity (%)	-	-	-
Clad Non-Circularity (%)	-	-	-
Core/Clad Offset (mm)	≤ 3.0	≤ 3.0	≤ 3.0
Coat Diameter (mm)	470 ± 10	690 ± 10	1020 ± 10
Coating Concentricity (%)	-	-	-
Optical			
NA (nominal)	0.22	0.22	0.22
Attenuation	See Low-OH full preform spectrum below		
Mechanical			
Prooftest (kpsi)	≥ 100	≥ 100	≥ 100
Operating Temperature (°C)	-65 to +300	-65 to +300	-65 to +300