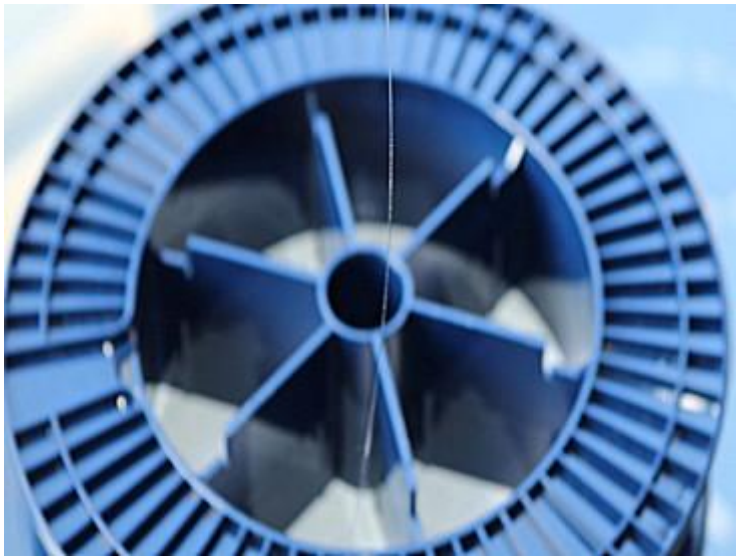
100um large core energy transmission optical fiber



Product Description

We are currently able to provide international commercial-level quartz energy optical fibers in batches. Our energy optical fibers include two categories: quartz cladding type high-performance energy optical fibers and plastic cladding type high-performance energy optical fibers. Quartz cladding type energy optical fibers can transmit higher laser power, have good resistance to optical damage, as well as lower attenuation and higher light transmittance (from near ultraviolet band to near infrared band 400nm ~ 1600nm).

Part Number

PDF-100/140

Product features

High laser power transmission capability、 Large core diameter、 Good flexibility and high strength、Made of synthetic high-purity quartz material, with low transmission loss, high transmittance and other excellent properties、 Can

be processed into various end face shapes

● Application area

Laser transmission, laser coupling, laser welding、 laser cutting, laser medical treatment, spectrum detection 、 lighting, sensors and other high power transmission fields

Parameter

Large core power transmission fiber						
Fiber PN#	PDF-100/140	PDF-105/125	PDF-200/230	PDF-400/440	PDF-600/660	PDF-900/990
Core diameter(μ m) ±2%	100	105	200	400	600	900
Clad diameter(μ m) ±2%	140	125	230	440	660	990
Coating diameter(μ m)±3%	245	245	380	535	850	1370
Core-clad concentricity um	≤3	≤3	≤3	≤3	≤3	≤3
Core non-circularity	≤3	≤3	≤3	≤3	≤3	≤3
Cladding non-circularity	≤2	≤2	≤2	≤2	≤2	≤2
Numerical aperture	0.29	0.24	0.22	0.22	0.22	0.22
Attenuation@850nm db/km	≤4.5	≤4.5	≤4.5	≤6	≤6	≤6
@1310nm	≤2	≤2	≤2	≤8	≤8	≤8
Core/cladding material	GEO2/SIO2					

Ordering Information

PDF-100/140 100um large core power transmission optical fiber Product parameters:
Core: 100um, cladding diameter: 140um, coating diameter: 245um, core-cladding concentricity ≤3 um, numerical aperture diameter 0. 29
PDF-105/125 105um large core power transmission optical fiber Product parameters:
Core: 105um, cladding diameter: 125um, coating diameter: 245um, core-cladding concentricity ≤3 um, numerical

aperture diameter 0. 24
PDF-200/230 200um large core power transmission optical fiber Product parameters:
Core: 200um, cladding diameter: 230um, coating diameter: 380um, core-cladding concentricity ≤3 um, numerical aperture diameter 0. 24
PDF-400/440 400um Large Core Energy Transmission Fiber Product Parameters:
Core: 400um, Cladding Diameter: 440um, Coating Diameter: 535um, Core-Clad Concentricity ≤3 um, Numerical Aperture 0. 22
PDF-600/660 600um Large Core Energy Transmission Fiber Product Parameters:
Core: 600um, Cladding Diameter: 660um, Coating Diameter: 850um, Core-Clad Concentricity ≤3 um, Numerical Aperture 0. 22
PDF-900/990 900um Large Core Energy Transmission Fiber Product Parameters:
Core: 900um, Cladding Diameter: 990um, Coating Diameter: 1370um, Core-Clad Concentricity ≤3 um, Numerical Aperture 0. 22