LIGHTGUIDE

POLYMER CLADDING FIBER

MEDICAL LASER / INDUSTRIAL LASER / HIGH POWER LASER DELIVERY /
ANALYTICAL SENSING / SPECTROSCOPY

ZLUV 190-1200nm	ZLDUV 190-1200nm	ACS UV 190-1200nm FW 300-2400nm	ZLDUV...CPH 190-800nm	ZLXUV 308nm	CO_2 9.6-10.6µm
ZLWF 400-2400nm	ZLHWF 350-2200nm	ZLUVWF 350-2200nm			

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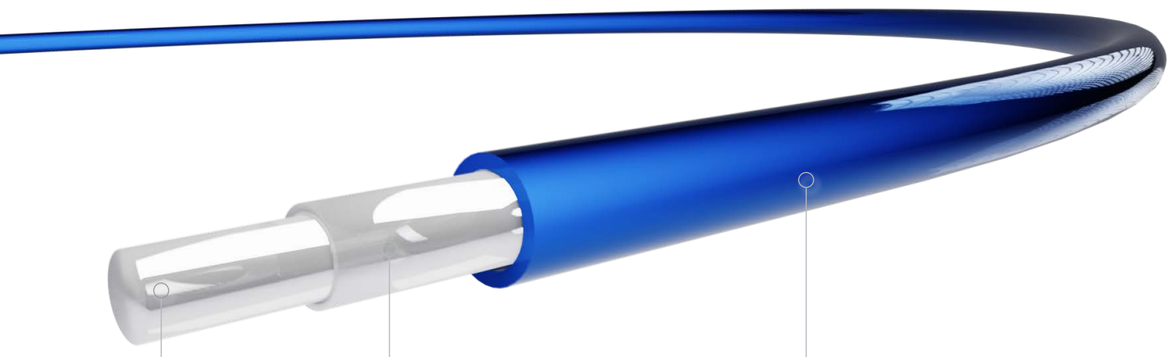
FIBER TYPE:
SILICA/POLYMER, STEP INDEX, MULTIMODE

Silica/polymer structure of this fiber type provide benefits of high NA, while outstanding purity of Low OH content fused silica core material guaranties excellent transparency at VIS-NIR wavelengths making Lightguide ZLHWF fibers first choice for numerous applications.

FIBER STRUCTURE



Reflective cladding
Hard polymer
NA=0.37
NA=0.50

Core
Fused synthetic silica

Jacket
Nylon (-40°C to +100°C)
Acrylate (-40°C to +85°C)
ETFE (-40°C to +150°C)
Others upon request

SPECIFICATIONS

PHYSICAL

Available core Ø:
200-1500 µm, larger upon a request

Core shapes:
circular (standard)

Standard Ø tolerances of fiber layers:
Core ± 2%
Cladding ± 2%
Jacket ± 5%

Operating t°:
-40 to +150°C (depend on selected buffer and jacket materials)

Proof test:
100 kpsi

Bending radius, mm
Momentary: 50 x glass diameter, mm
Long term: 120 x glass diameter, mm

OPTICAL

Spectral attenuation data (graph no. 1)

Operating wavelength range:
350-2200 nm

NA (numerical aperture):
0.37 ± 0.02
0.50 ± 0.02

CHEMICAL

Core material:
Synthetic silica, Low OH

OH content in core material:
<0.7 ppm, typical 0.1 ppm

Reflective cladding material:
Hard polymer

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OPTICAL DATA

Graph no. 1

Spectral attenuation of typical ZLHWF fiber.