

HYDROGEN SATURATED FIBER

MEDICAL LASER / INDUSTRIAL LASER / HIGH POWER LASER DELIVERY /
UV DELIVERY SYSTEMS/ 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			



HYDROGEN SATURATED FIBER

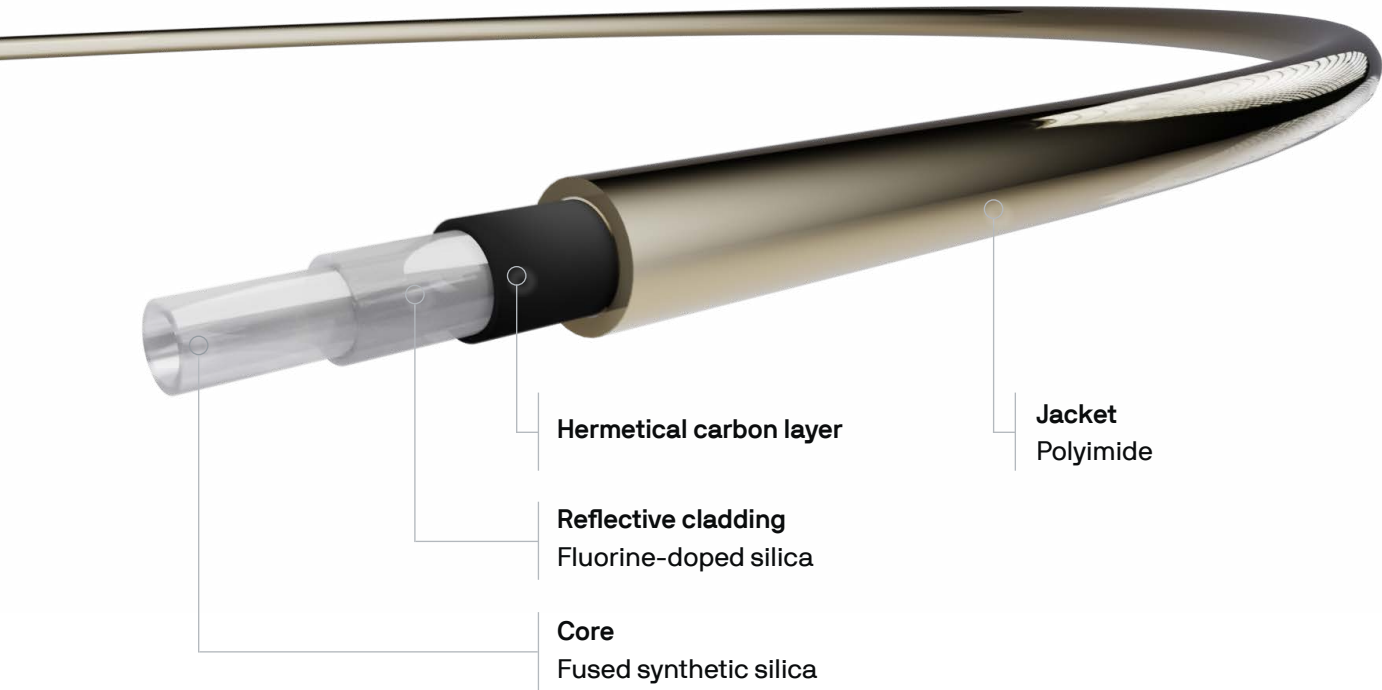
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THE WORLD'S LEADING OPTICAL
FIBER PRODUCTION LAB.

FIBER TYPE:
SILICA/SILICA, STEP INDEX, MULTIMODE, SOLARIZATION RESISTANT

Outstanding purity of High OH content fused silica material guaranties excellent transparency at UV-VIS wavelengths making Lightguide ZLDUV...CPH fibers first choice for unlimited applications. Silica/silica structure of this fiber type provide the highest optical performance all through number of parameters - from transmission to damage threshold level. **THIS FIBER IS HYDROGEN SATURATED and COATED WITH HERMETICAL CARBON LAYER.** Hydrogen reacts with defects couesd by UV exposure ensuring superior transmission.

FIBER STRUCTURE



SPECIFICATIONS

PHYSICAL

Available core Ø:
70 - 600 µm, larger upon a request

Core shapes:
circular (standard)

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

Operating t°:
-190 to +150°C

CCDR (clad to core ratio):
1.10, customized

Proof test:
100 or 70 kpsi

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

OPTICAL

Spectral attenuation data (graph no. 1)

UV induced transmission changes at 214 nm and recovery (graph no. 2)

Operating wavelength range:
190 – 800 nm

NA (numerical aperture):
0.22 ± 0.02

CHEMICAL

Core material:
Fused synthetic silica

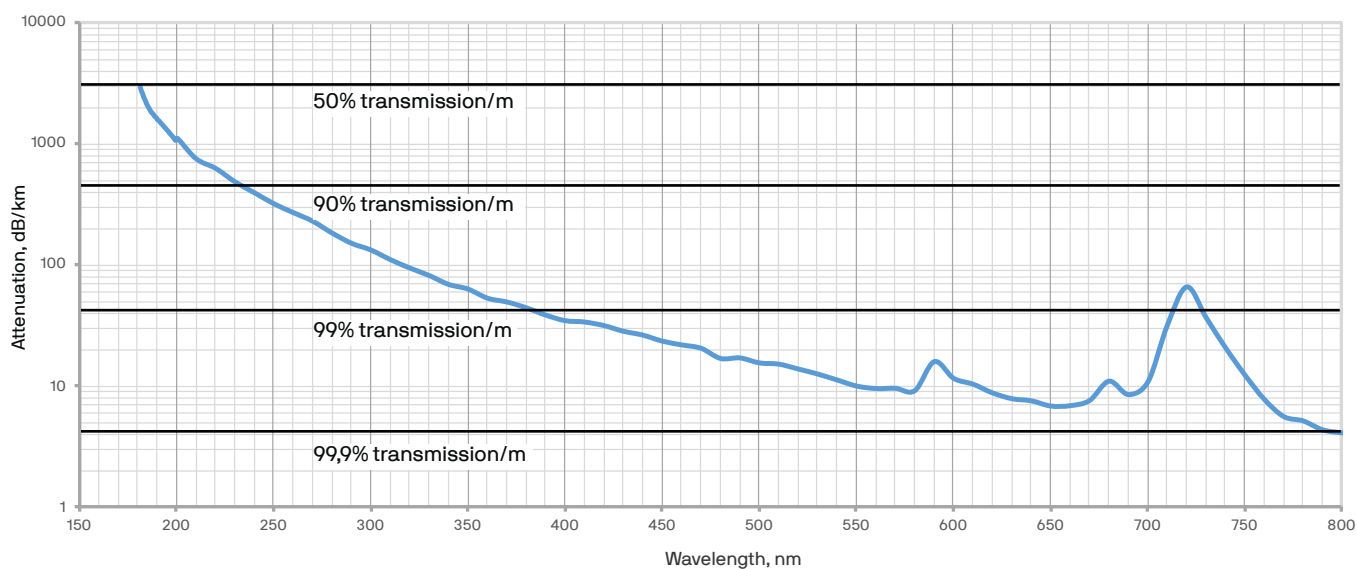
OH content in core material:
600...800 ppm

Reflective cladding material:
Fluorine-doped silica

OPTICAL DATA

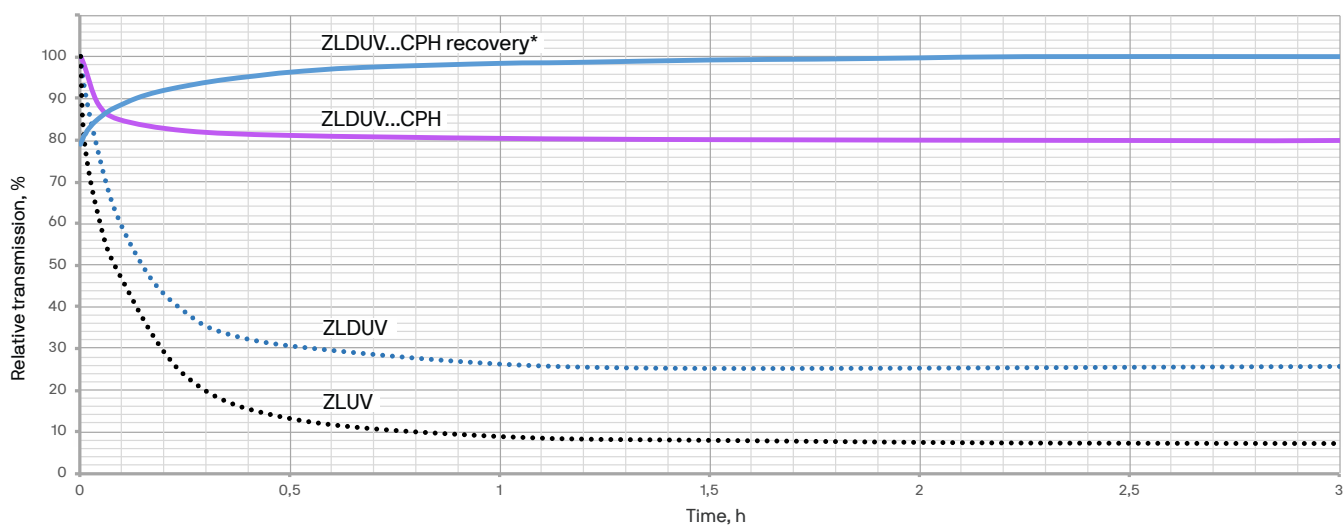
Graph no. 1

Spectral attenuation of typical ZLDUV...CPH fiber.



Graph no. 2

Solarization of ZLDUV...CPH fiber at 214 nm, deuterium lamp irradiation, fiber length 2 m.



*ZLDUV...CPH recovery in time after removed irradiation of deuterium lamp.