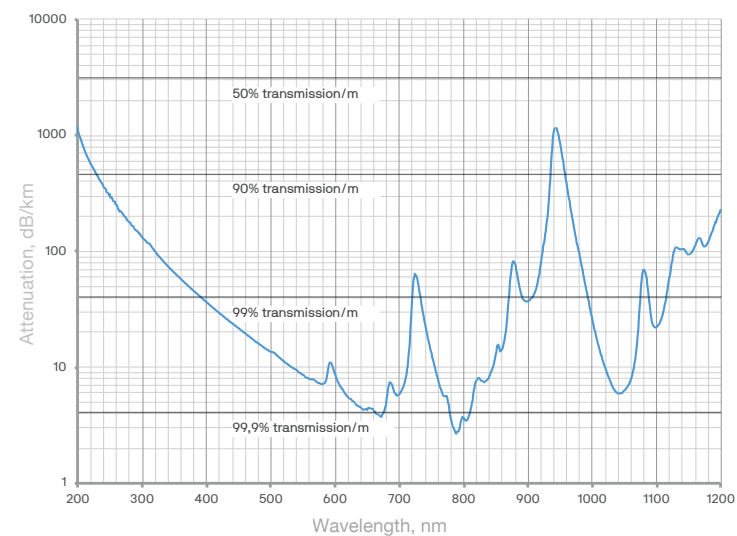


OPTICAL DATA

Graph no. 1  
Spectral attenuation of typical ZLDUV...CPH fiber (200 μm)



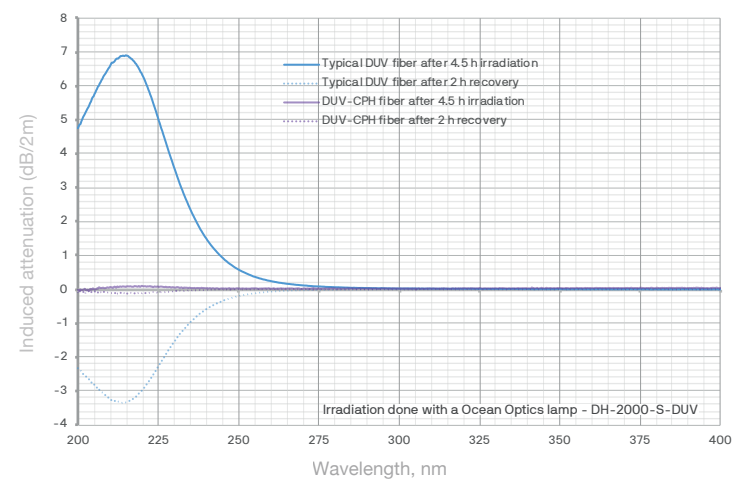
Solarization resistant fiber

Hydrogen loading does not affect (lower) initial UV attenuation spectra

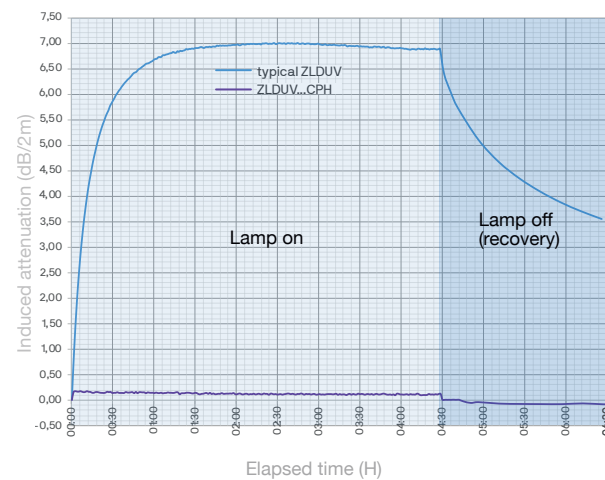
Hydrogen loading reduce solarization by one order of magnitude

ZLDUV...CPH fibers reach solarization saturation within minutes (based on measurement using specific lamp)

Graph no. 2  
Induced Attenuation spectra for typical ZLDUV and ZLDUV..CPH fibers (200 μm)



Graph no. 3  
Induced Attenuation at 214 nm for typical ZLDUV and ZLDUV..CPH fibers (200 μm)



# 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 <sub>2</sub> 9.6-10.6μm
ZLWF 400-2400nm	ZLHWF 350-2200nm	ZLUVWF 350-2200nm			





## HYDROGEN SATURATED FIBER

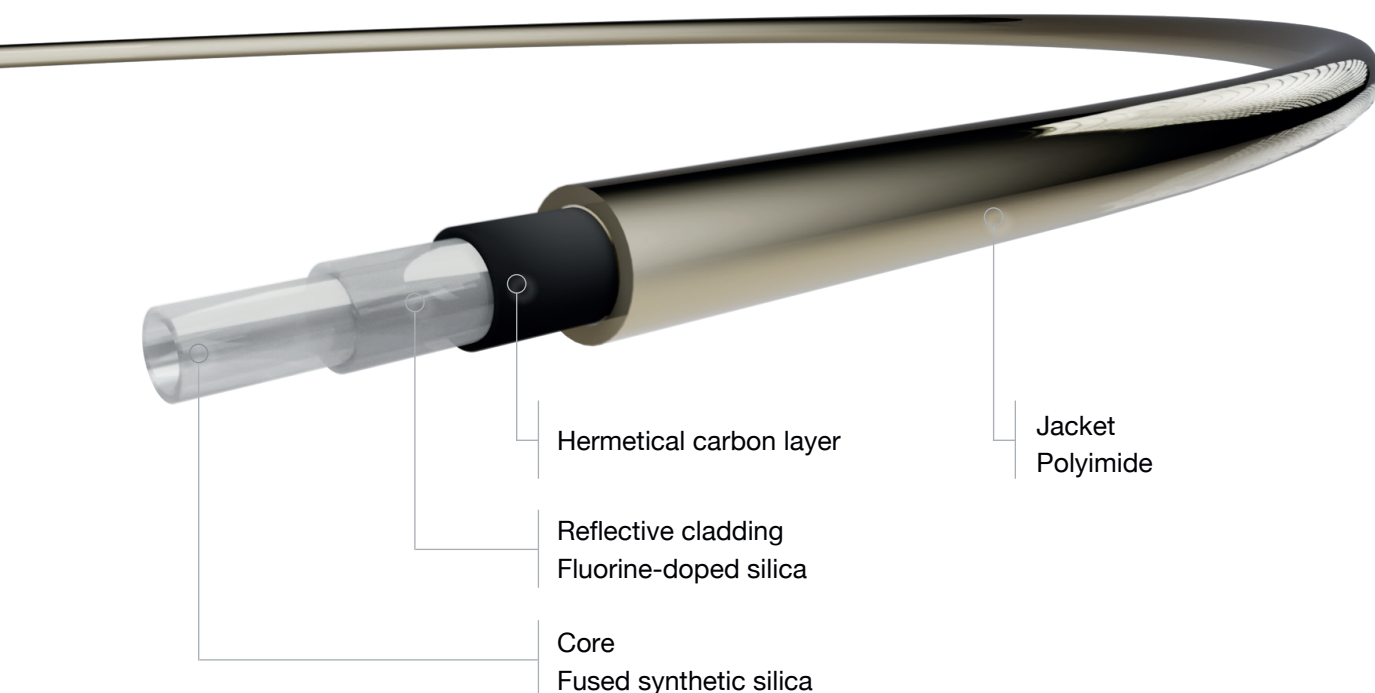
THE WORLD'S LEADING OPTICAL  
FIBER PRODUCTION LAB.

ZLUV 190-1200nm	ZLDUV 190-1200nm	ACS UV 190-1200nm FW 300-2400nm	ZLDUV...CPH 190-800nm	ZLXUV 308nm	CO <sub>2</sub> 9.6 - 10.6μm
ZLWF 400-2400nm	ZLHWF 350-2200nm	ZLUVWF 350-2200nm			

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

Outstanding purity of High OH content fused silica material guarantees 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 caused 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 attenuation (graph no. 3)

Operating wavelength range:  
190 - 800 nm

NA (numerical aperture):  
0.22 ± 0.02 as standard others upon request

##### CHEMICAL

Core material:  
Fused synthetic silica

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

Reflective cladding material:  
Fluorine-doped silica