

# ProCleave™ TF

ELECTRONIC FIBER CLEAVER FOR THIN FIBERS



The ProCleave™ TF is an advanced electronic fiber cleaver developed for thin and reduced-cladding optical fibers with cladding diameters  $< 80 \mu\text{m}$ . These fibers are increasingly used to enable smaller, lighter, and higher-density photonic systems, such as miniaturized fiber-optic gyroscopes, FOGs, for navigation, and ultra-thin embedded fiber Bragg grating sensors, FBGs, for structural monitoring and advanced medical and industrial sensing.

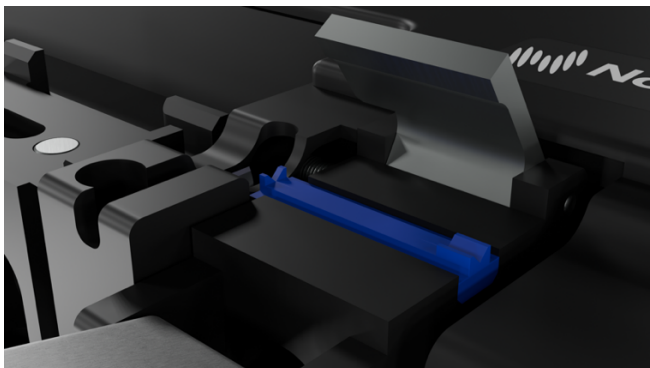
The ProCleave™ TF utilizes advanced ultrasonic diamond scribe technology to achieve optimal cleave performance and consistency. The precise fiber tension control enables accurate cleaving at very low fiber tension resulting in very flat end faces, low cleave angles (typical  $< 1^\circ$ ) with minimum blade intrusion. The generic clamping mechanism is designed for ease of use and with process speed in mind. It is powered by an external power supply or the built-in rechargeable battery. This makes it ideal for both high-yield production lines and R&D environments.

The ProCleave™ TF is used together with a fiber holder\* from a fusion splicer (adapted for all main splicer brands).

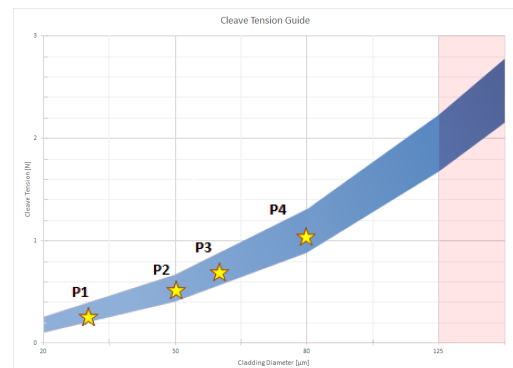
\* Fiber holder not included in the delivery kit.

## Key Features

- Designed for fiber cladding diameters from 30 to 80  $\mu\text{m}$
- Electronic cleave process for optimal cleave quality and repeatability
- Low cleave angles with very flat end faces, typical  $< 1^\circ$
- Can be powered with battery or external power supply
- Delivered with platform that support Fujikura, Fitel and 3SAE fiber holders



Generic clamping mechanism of ProCleave™ TF



Typical cleave tension as a function of cladding diameter

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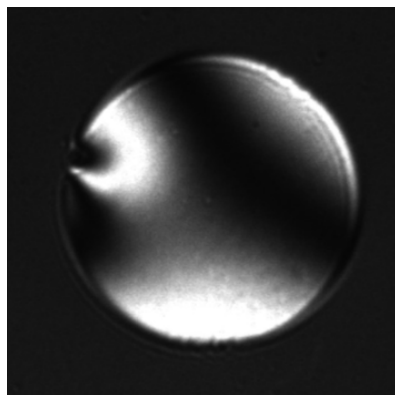


## Technical Specifications

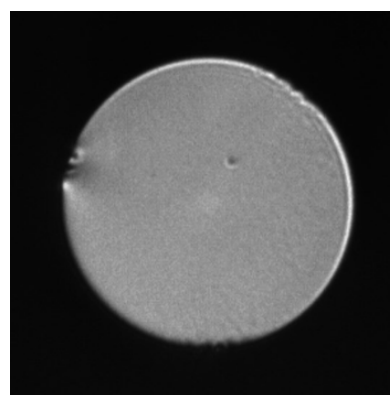
<b>Dimensions:</b>	150(W) x 94(D) x 47(H) mm 150(W) x 107(D) x 51(H) mm (incl. lever and rubber feet)
<b>Supported fiber cladding:</b>	30 – 80 $\mu\text{m}$ , with capability up to 125 $\mu\text{m}$ *
<b>Cleave angles:</b>	Typical $< 1^\circ$
<b>Weight:</b>	0.91 Kg
<b>Power Source:</b>	Built-in rechargeable Li-Ion battery or external power supply (100 - 240 V AC, 50/60 Hz)
<b>Supported fiber coating:</b>	Depending on fiber holder

\*Cleaving fibers with cladding diameters near the upper limit may affect cleave results.

Product	Part #	Qty
<b>NorthLab ProCleave™ TF</b>	<b>CL-03-03000</b>	
<b>Standard Package</b>		
Power Supply + Cord EU/US	CL-90-90005	1
Tool Kit	CL-03-01001	1
USB 2.0 Cable	N/A	1
User's Manual & PC Software (USB-stick)	N/A	1
<b>Optional Components</b>		
Spare Diamond Blade	CL-90-90001	
LD Clamp for fiber cladding $\sim 180 - 250 \mu\text{m}$	CL-03-01002	



Interferometer image approx.  $0.15^\circ$



Magnified end face

*Information is subject to change without notice. Last update: 2026-02-03.*