



AutoCleaver LDF

The AutoCleaver LDF is a high precision fiber cleaver, designed for cleaving of Large Diameter Fibers. It provides outstanding cleaving performance for large diameter fibers from 250 μm up to 1200 μm in diameter. It also supports cleaving of fibers as small as 125 μm . The unique and patent-pending cleaving process generates typical cleave angles of less than 0.5 degrees with LDF fibers.

The AutoCleaver LDF can be configured for use with the Fujikura FSM-45 series of fusion splicers and therefore supports splicing operations with large diameter fibers. The cleaved fiber is transferred from the cleaver to the Fujikura splicer using a standard Fujikura fiber holder. The built in Microprocessor controls all vital parameters and settings, such as fiber alignment, clamping, tension and the exact position and speed of the diamond blade. This control of sensitive parameters guarantees a high cleaving repeatability and accuracy. During cleaving, the fiber coating is clamped by a touch-operated tension clamp. The clamp is quickly interchangeable based on the fiber coating diameter. A v-groove clamping block and a fiber height adjuster are selected based upon the diameter of the fiber cladding. The fiber coating tension clamp as well as the V-groove clamp block and height adjuster work together as a fiber handling kit to ensure optimum cleaving performance for a particular fiber. These parts may be selected at the time of cleaver purchase from the selection guide matrix. Other sets are easily exchanged by the operator to set the cleaver up for another fiber size.

The AutoCleaver LDF also accepts the use of NYFORS fiber holders in place of the tension clamps normally used for coating clamping. This provides versatile use of the cleaver for operations when splicing is not required. The cleaver is designed to generate minimum amounts of fiber waste, typically less than 20 mm. An automatic waste disposal system removes any hazardous fiber scraps. The cleaver can be connected to an external PC that gives access to all programmable parameters and settings.

The AutoCleaver LDF comes in a small bench top design. It has been designed to easily permit recessed mounting for ergonomic workbench operations in a production environment and is therefore ready to be integrated into different subsystems.

Features

- Fully automatic
- Low cleave angles: $< 0.50^\circ$
- Very flat end faces
- Operator independent
- Designed for production and laboratory environments
- Automatic scrap fiber collection
- Long diamond life
- PC controllable
- Adaptable for fiber holders of the Fujikura FSM-45F-LDF and FSM-45PM-LDF fusion splicer

Specifications

PARAMETER	VALUE
Fiber Cladding	250 - 1000 μm *
Fiber Coating	300 - 1500 μm *
Cycle Time	Typical < 14 seconds
Cleave Angle	Typical $< 0.5^\circ$
Cladding Diameter	230 - 1000 μm
Coating Diameter	250 - 1500 μm
Fiber Waste	Typical < 20 mm
Power Supply	External 12V DC
Compressed Air	External Compressor**, 6 bar 4 mm instant push-in fitting
PC Connection	RS-232
Dimensions	175 mm (W) x 138 mm (D) x 104 mm (H)
Weight	2.5 kg

* Fiber specific handling kits required

** Not included in delivery



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Ordering Information

DESCRIPTION	AFL NO.
AutoCleaver LDF with Power Supply and Cord Includes: Adaptor Plate FJK, PC software, RS-232 cable, manual and tools	50100023
Nyfors AutoCleaver LDF w/Universal Stage Includes: Long Rail, Power Supply & Cord Adaptor Plate FJK, PC software, RS-232 cable, manual and tools	S015274

* See Fiber Handling matrix below for additional required items.

Selection Guide Matrix for Determining Fiber Handling Kit

DESCRIPTION	LABEL	AFL NO.
V-Groove (Used with all splicer brands) Select size based on fiber cladding diameter		
V-groove, LD, Cladding 200-349 µm	Orange	50100086
V-groove, LD, Cladding 350-699 µm	Green	50100087
V-groove, LD, Cladding 700-1000 µm	Red	50100088
Height Adjuster (Used with all splicer brands) Select size based on fiber cladding diameter		
Height Adj. LD, Cladding 200-349 µm	Orange	50100048
Height Adj. LD, Cladding 350-529 µm	White	50100049
Height Adj. LD, Cladding 530-699 µm	Black	50100050
Height Adj. LD, Cladding 700-1000 µm	Red	50100051
Linear Insert (Used only with Fujikura splicers) Select size based on fiber coating diameter		
Linear Insert, Coating 210-699 µm	210-699	50100070
Linear Insert, Coating 700-1000 µm	700-1000	50100071

Misc. Accessories

DESCRIPTION	AFL NO.
Diamond blade	50100091
Cleaver Blade Replacement Tool	50100032
Power Supply, 100-240V, 1.25A	50100075
Adapter for Power Supply, US	50100009
Universal Stage NFF FH Base	S014770

