

**Kokyo**

株式会社光響

住所：京都市下京区烏丸通四条下ル水銀屋町637番地 第5長谷ビル2階

Email : [info@symphotony.com](mailto:info@symphotony.com)

TEL : 070 - 6925 - 5558

Web : <http://www.symphotony.com/>

FAX : 075 - 320 - 1604

## **FK11 & FK12 Precision Fiber Optic Cleavers**



### **FK11**

The FK11 Precision Fiber Cleaver uses patented, ultrasonic cleaving technology to produce flat, clean, low end-angle cleaves every time. That means low-loss, high-strength fusion splices, optimum performance of pigtailed active devices, and consistent results in measurement applications. The FK11 will also minimize the time required to make splices and maximize the output of test systems that rely on high-quality cleaves.

### **FK11-LDF**

The FK11-LDF Large Diameter Fiber Cleaver employs the FK11 cleaving technology to produce flat, clean, low end-angle cleaves on large diameter fibers and fibers having non-circular geometry. While cleave performance is dependent on stresses within the fiber, it has been demonstrated that the FK11-LDF is capable of producing cleaves with end angles less than  $1.5^\circ$ .

### **FK12**

The FK12 Angled Fiber Cleaver sets the standard for low reflectance fiber termination of better than  $-60$  dB. Fast and repeatable cleaving of fiber ends at user-selectable cleave angles ( $0^\circ$  to  $15^\circ$ ) make it possible for device manufacturers to reduce the reflectance of fiber connections and other terminations without the use of index-matching gels. The FK12 is the tool of choice when quick fiber termination and low return loss are required for minimum cost.

### **Features and Benefits**

- "Tension first" cleaving, minimizes end face contamination and damage.
- Ultrasonic cleave initiation ensures flat, defect free cleaves.
- Long-life diamond blade provides dependable, extended use.
- Cleave a wide range of fiber types and sizes.
- Fast end terminations reduce installation and pigtailling costs.

## Precision Fiber Cleaving is Easy

All FK-series cleavers employ the same patented operating principle. The fiber to be cleaved is restrained, placed under controlled tension and then the cleaver's ultrasonically vibrating diamond blade is brought into momentary contact with the fiber surface. The flaw created by the blade subsequently propagates through the fiber diameter due to the axial tension and the fiber ultimately cleaves. The result is a clean, flat fiber end face that is virtually free of defects and is optimal for mechanical termination, splicing or testing. For the FK12 cleaver, the user applies a specific amount of torsional stress to the fiber just before the cleaving step to achieve the desired end angle.

Specifications			
Model	FK11 Series	FK11-LDF	FK12
Fiber Types Cleaved	Silica	Hard and plastic-clad silica, all silica	Silica
Fiber Diameters 1, 2	80 to 200 $\mu\text{m}$	180 to 400 $\mu\text{m}$	125 $\mu\text{m}$
Maximum Coating Diameter	900 $\mu\text{m}$	n/a	900 $\mu\text{m}$
Minimum Cleave Length	~ 6 mm	n/a	~ 6 mm
Cleave Angle Settings 3	n/a	n/a	0 to 15°
Cleave Angle Repeatability 4	< 0.6°	< 1.5°	< 1° 5
Typical Blade Lifetime	> 20,000 cleaves	> 5,000 cleaves	> 20,000 cleaves
Case	ABS, non-slip feet, 6.25 mm (0.24") BSW thread tripod mount		
Battery	9V alkaline (MN1604); estimated battery life > 10,000 cleaves		
Weight	1.1 kg (2.4 lbs)		
Dimensions (H x W x D)	75 x 153 x 150 mm (3.0" x 6.0" x 5.9")		
Operating Temperature	0 to 45° C (32 to 113° F)		
Storage Temperature	-20 to 60° C (-4 to 140° F)		

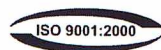
**Notes:**

1. Nominal cladding diameter
2. Contact factory for other fiber diameters or non-circular fiber geometries
3. Standard 125  $\mu\text{m}$  cladding diameter fiber
4. 2-sigma for FK11 Series and FK12, typical for FK11-LDF (depends on fiber type)
5. 8° setting

## FK Cleaver Family

- FK11 For fibers with nominal coating diameters to 250  $\mu\text{m}$ , clamps fiber 16 mm from cleave point  
 FK11-2 Same as FK11 but with soft-faced, left-hand clamp for clamping on fiber buffer  
 FK11-4 For fibers with nominal coating diameters to 900  $\mu\text{m}$ , clamps fiber 18 mm from cleave point  
 FK11-LDF Large diameter fiber cleaver  
 FK12 Cleaver used to create angled fiber end faces

**Note:** Both the FK11 and FK12 Cleavers are available in RoHS compliant versions. Specify when ordering.



Photon Kinetics includes products formerly branded as York Technology, PK Technology, GN Nettest and NetTest.

Photon Kinetics, Inc.  
9305 SW Gemini Drive, Beaverton, OR 97008 USA  
Tel +1 503 644 1960  
Fax +1 503 526 4700

ISO 9001:2000 certified. Printed in the USA. Specifications subject to change without notice.  
"Photon Kinetics" and the "PK" logo are registered trademarks of Photon Kinetics.

