



CT-104+



CT-105+



CT-106+

## CT-104+, CT-105+ and CT-106+ Fibre Cleavers

When exceptional cleave quality is required for fibres up to 1,250  $\mu\text{m}$ , the new large diameter CT-104+/CT-105+/CT-106+ cleaver family provides a variety of options depending on your needs. The colour LCD shows cleaving progress and recommended insert size depending on fibre coating and cladding diameter. Saving and storing cleaving programs to a PC or tablet is accomplished using a USB port. The LDF cleaver's extensive programming features allow for optimal results.

Excess clamping force may deform the coating or worsen the cleave angle due to rotational stress by the clamps. Therefore, to get good cleaving quality, the clamping force should be the minimum force that does not slip while the cleaver applies fibre tension. The optimum clamping force depends on the optical fibres structure and coating material. The CT-105+/CT-106+ cleavers feature a new technology that finds the optimum clamping force automatically and accurately.

### Specifications

PARAMETER	CT-104+	CT-105+	CT-106+
Applicable Optical Fibre	Glass optical fibres, capillary		
Number of Fibres	Single		
Cladding Diameter	80 - 600 $\mu\text{m}$	80 - 1,250 $\mu\text{m}$	
Coating Diameter	160 - 3,000 $\mu\text{m}$		
Fibre Clamping	Manual clamping	Automatic clamping	
Cleaving Length	5 - 40 mm		
Cleaving Angle <sup>1</sup>	Average 0.2 degrees or less (Cladding diameter 125 $\mu\text{m}$ ) <sup>2</sup>		
	Average 0.3 degrees or less (Cladding diameter 400 $\mu\text{m}$ ) <sup>2</sup>		
	Average 0.4 degrees or less (Cladding diameter 600 $\mu\text{m}$ ) <sup>3</sup>	Average 1.0 degrees or less (Cladding diameter 1,000 $\mu\text{m}$ ) <sup>3</sup>	
Angled Cleaving	–	–	0 - 15° (up to 800 $\mu\text{m}$ cladding fibre)
Blade Life <sup>4</sup>	20,000 fibres (Cladding diameter 250 $\mu\text{m}$ )		
Dimensions	240 (W) $\times$ 134 (D) $\times$ 155 (H) mm		240 (W) $\times$ 134 (D) $\times$ 163 (H) mm
Weight	3.4 kg	3.5 kg	3.8 kg
Humidity	0 to 95% RH, non condensing		
Temperature	0°C to +50°C (operation) -40°C to +80°C (storage)		
Number of Cleaving Modes	Maximum 100		
Cleave Result	1,000 cleave data		
Power Supply	AC adapter: ADC-19A Input: AC100 to 240 V (50 to 60 Hz) (max. 20 W)		
Monitor	TFT 4.7 inches colour LCD		
PC Interface	USB 2.0 (Mini-B type) for PC communication		

#### Notes:

1. A new blade was used to cleave the special fibres. The average cleave angle changes depending on the environmental conditions, blade condition, operating method, and cleanliness.
2. Measured with an interferometer at room temperature.
3. Measured with the splicer, FSM-100P+.
4. The blade life changes depending on the environmental conditions, operating method, and the fibre type cleaved.

## CT-104+, CT-105+ and CT-106+ Fibre Cleavers

### CT-104+ Features

- 80 - 600 µm cladding diameter
- Manual clamping system
- Up to 100 stored program modes
- 200,000 cleaves per blade for 250 µm fibre
- Optional adapter for use with FH-100 series fibre holders
- Communication to a PC via USB

### CT-105+ Features

- 80 - 1,250 µm cladding diameter
- Automatic clamping system
- Up to 100 stored program modes
- 200,000 cleaves per blade for 250 µm fibre
- Optional adapter for use with FH-100 series fibre holders
- Fibre backstop standard
- Communication to a PC via USB

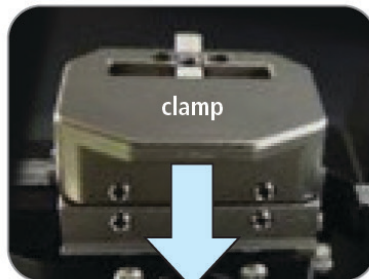
### CT-106+ Features

- 80 - 1,250 µm cladding diameter
- Automatic clamping system
- Up to 100 stored program modes
- Angled cleaving function (up to 15° on fibres up to 800 µm cladding diameter)
- 200,000 cleaves per blade for 250 µm fibre
- Optional adapter for use with FH-100 series fibre holders
- Communication to a PC via USB



### Angled Cleaving

Angled cleaving from up to 15° is possible for fibres up to 800 µm (only for CT-106+)



### Automatic Clamp Function

Clamp optical fibre with programmable force automatically (CT-105+ and CT-106+ only). No compressed air or torque wrenches required.



### Backstop

Improves cleave quality especially for large-diameter fibres as well as lower tension fibre cleaving and is standard on CT-105+ cleavers

## Ordering Information

DESCRIPTION	AFL NO.
<b>CT-104+ Large Diameter Optical Fibre Cleaver</b> includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT104+ instruction manual	S016417
<b>CT-105+ Large Diameter Optical Fibre Cleaver</b> includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT105+ instruction manual	S016076
<b>CT-106+ Angled Large Diameter Optical Fibre Cleaver</b> includes: ADC-19A AC adapter, ACC-09 AC power cord, HEX-01 hex wrench, USB-01 USB Cable and M-CT106+ instruction manual	S016077

## Accessories

PART NUMBER	DESCRIPTION
FUJCT-105BLADE	Replacement Blade (Suits CT-104+/105+/106+)
FUJCT-105LI-xxx/xxx	Lower Fibre Insert (Suits CT-104+/105+/106+)
FUJCT-105UI-xxx/xxx	Upper Fibre Insert (Suits CT-104+/105+/106+)
FUJCT-105SPA30	30 µm Height Adjusting Spacer (Suits CT-104+/105+/106+)
FUJCT-105SPA50	50 µm Height Adjusting Spacer (Suits CT-104+/105+/106+)
FUJCT-105SPA100	100 µm Height Adjusting Spacer (Suits CT-104+/105+/106+)
FUJCT105HW	Hex Wrench (Suits CT-104+/105+/106+)
xxx/xxx = fibre/coating diameter. Refer to table on page 3 to select appropriate inserts e.g. Inserts required for cleaving 250 µm fibre.	
FUJCT105LI250	CT-104+/105+/106+ Lower Insert - 250 µm fibre
FUJCT105UI80/400	CT-104+/105+/106+ Upper Insert - 80-400 µm fibre

## CT-104+, CT-105+ and CT-106+ Fibre Cleavers

### Insert Selection Guide

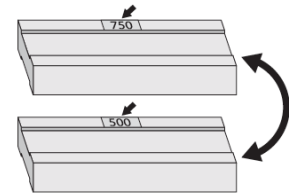
LOWER INSERT	UPPER INSERT											
	INSERT-U-80-400	INSERT-U-500-750 <sup>1</sup>		INSERT-U-1000-1250 <sup>1</sup>		INSERT-U-1500-1750 <sup>1</sup>		INSERT-U-2000-2250 <sup>1</sup>		INSERT-U-2500-3000 <sup>1</sup>		
		500	750	1000	1250	1500	1750	2000	2250	2500	3000	
INSERT-L-80	54-107											
INSERT-L-125	84-167											
INSERT-L-160	105-213											
INSERT-L-250	167-333											
INSERT-L-400	267-533	400-533										
INSERT-L-500-750 <sup>1</sup>	500	334-667	467-667	550-667								
	750		634-868	717-1000	787-1000							
INSERT-L-1000-1250 <sup>1</sup>	1000			884-1118	954-1188	1037-1272						
	1250					1120-1355	1204-1438	1287-1522				
INSERT-L-1500-1750 <sup>1</sup>	1500					1370-1605	1454-1688	1537-1772				
	1750							1620-1855	1704-1938	1780-2015		
INSERT-L-2000-2250 <sup>1</sup>	2000							1870-2105	1947-2288	2030-2265		
	2250								2114-2348	2197-2432	2280-2515	
INSERT-L-2500-3000 <sup>1</sup>	2500									2364-2598	2447-2682	2614-2848
	3000										2780-3015	2947-3182

**Note:**

1. Each side of this insert is equipped with a groove that is marked with the size of the fibre diameter on the table.

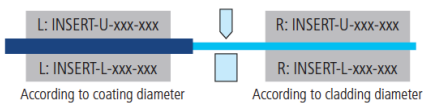
**Upper and lower inserts can be changed up or down depending on required fibre fit into the V-groove**

Insert 500 µm and above are double-sided. Therefore, the visible label when inserted indicates the size of the insert you are using.



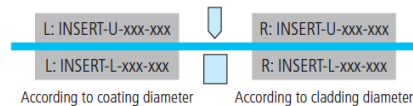
**Upper and lower inserts are necessary for both left and right side clamps.**

Case 1: Cleaving coating-stripped fibre



**Inserts according to both coating diameter and cladding diameter are necessary.**

Case 2: Cleaving glass rod



**Two insert pairs of the same size according to rod diameter are necessary**