

MAUNT®

M10000628 **Cleaver CT-114, Fujikura**



Description

The Fujikura CT-114 is widely used in fibre preparation for the fusion splicing of standard data communication fibres, large-diameter octagonal or round fibres (LDF), polarisation-preserving fibres, photonic crystal fibres and even for the production of components with capillary tubes, bulb lenses, end caps and more. The CT-114 is designed for cleaving glass fibres with cladding diameters between 80 and 660 µm. The CT-114 features an advanced new blade mechanism that automatically adjusts the cleave position. The CT-114 also has an RFID tag attached to the fibre holder. This RFID tag allows the user to link a fibre holder to a cleave mode. In this menu, each fibre holder has a unique RFID and user-defined name for easy setting of combinations of fibre holder and cleave mode. The CT-114 uses the links in this menu to automatically change the cleave mode based on the fibre holder recognised by the cleave machine's RFID sensor. This can be used as process control or to help with optimising cleaving.

Brand

Fujikura

Technical specifications



Fibre type	Silica optical fibres and capillary tubes
Fibre number	Single mode
Cladding diameter	80-660 µm
Coating diameter	81-3.182 µm
Fibre clips	Manual ¹
Backstop adjustment	Manual
Voltage range ²	0 to 3,000 gf (29.4 N)
Cleaver length ³	30 - 75 mm
Cleaving angle	Average 0.2° (Cladding diameter 125 µm) Average 0.3° (Cladding diameter 400 µm) Average 0.4° (Cladding diameter 660 µm) ⁵
Blade life ⁷	200,000 fibres (10,000 fibres x 20 positions for 250 µm cladding fibres)
Dimensions (WxDxH)	240 x 133 x 142 mm without projections
Weight	3.6 kg without inserts and with fibre holder adapter
Humidity	0 to 95% RH, non-condensing (operation and storage)
Temperature	0°C to 40°C (operation) -40°C to 80°C (storage)
Number of cleave modes	Maximum 100
Cleaver results	10,000 cleave data
AC adaptor	Input: AC 100 V to 240 V (50 or 60 Hz) (max. 1.5 A) Output: DC 19 V, Max. 2.1 A
Display	TFT 4.95" touch screen LCD monitor
Interface	PC: USB 2.0 (Mini-B type) for PC communication Grounding point: Applicable with M3 size truss screw



Wireless communication

RFID complies with ISO 15693

Automatic functions

Automatic selection of cleave mode via RFID tag
Motorised knife position change Automatic voltage adjustment

PC Software

Firmware update via internet Cleave mode and parameter upload and download

***1** For cladding diameters smaller than 400 μm , use magnets. For cladding diameters of 400-660 μm , use both magnets and clamping screw. The clamping screw may be required depending on the fibre type when it is also falls below 400 μm .

***2** There are cases where the set voltage differs from the actual voltage.

***3** The detachment length is defined as the distance between the clip on the left side of the fibre and the end of the split-off fibre.

***4** Measured with an interferometer at room temperature. For each fibre, a new blade was used for splitting off. The average splitting angle changes depending on operational conditions such as blade condition, working method and Purity.

***5** Measured with an FSM-100P+ splitting device at room temperature. For each fibre, a new blade was used for splitting off. The average splitting angle changes depending on operational conditions such as the state of the blade, the working method and cleanliness.

***6** The maximum bevel splitting changes depending on the fibre type being split off and the clamping position.

***7** The life of the blade changes depending on operational conditions such as the condition of the blade, the working method, cleanliness and fibre type being separated.