

ELECTRO BISMED

Bipolar Electrosurgical Forceps

Instructions for Use (IFU) & Care Guide

Product:	Reusable Bipolar Forceps	Document No.:	IFU-BF-001
Classification:	Class IIa Medical Device	Revision:	Rev. 01
Standard:	IEC 60601-2-2 / ISO 13485	Issue Date:	2026-07-29

1. Intended Use / Indications

ELECTRO BISMED Bipolar Forceps are reusable electrosurgical instruments intended to deliver high-frequency (HF) electrical current between the two tips to coagulate tissue and achieve haemostasis during surgical procedures. Current flows only between the forceps tips, confining the thermal effect to the grasped tissue and minimising collateral damage. The device is intended for use only by trained, qualified medical personnel in conjunction with a compatible bipolar-mode electrosurgical generator.

Contraindications

- Do not use for cutting or as a bipolar sealing device unless specifically rated for that mode.
- Not intended for procedures requiring monopolar output.
- Do not use on patients where HF surgery is contraindicated (e.g., certain active implants) without specialist assessment.

2. Warnings & Precautions

WARNING: Risk of burns, fire and electric shock. Read all instructions before use.

- Inspect the instrument and cable insulation before every use; never use a device with cracked, worn or damaged insulation.
- Use the lowest generator power setting that achieves the desired clinical effect.
- Keep tips clean and free of eschar (charred tissue) during use; accumulated eschar reduces performance and causes sticking.
- Do not activate the generator when the tips are touching each other or a metallic object (short circuit).
- Ensure the patient does not contact grounded metal objects during activation.
- Do not use in the presence of flammable anaesthetics, gases or oxygen-enriched atmospheres.
- Use only cables and connectors specified as compatible with this device and generator.
- Activate only when the tips are in the surgical field and in view of the operator.
- Interference may occur with cardiac pacemakers/implants — consult device cardiologist before use.

3. Technical Specification

Parameter	Specification
Mode	Bipolar coagulation
Max. rated voltage (Vp)	500 Vp (peak)
Max. recommended power	As per generator bipolar setting; typ. 30–50 W
Connector	Standard bipolar (2-pin / 28.5 mm) — verify with generator
Material	Stainless steel tips, insulated shanks
Reusable / Sterilisable	Yes — steam autoclavable
Life cycle	Reprocess until inspection criteria fail (see §7)

4. Operating Instructions

- 1 Confirm the device is clean, sterile and undamaged (see §2).
- 2 Connect the bipolar cable to the forceps and to the bipolar output of the generator.
- 3 Select bipolar mode and set power to the lowest effective setting.
- 4 Grasp only the target tissue between the two tips.
- 5 Activate the generator; apply current until the desired coagulation is achieved.
- 6 Release activation before opening the tips. Wipe tips clean between activations.
- 7 On completion, deactivate, disconnect and transfer for reprocessing without delay.

5. Cleaning & Reprocessing

Point of Use

- Remove gross soil immediately after use with a soft, damp lint-free cloth; do not allow blood/tissue to dry.
- Keep instrument moist during transport to reprocessing (covered tray or enzymatic gel).

Manual Cleaning

- Immerse in a neutral or enzymatic detergent solution prepared per manufacturer's dilution.
- Brush all surfaces, tips and hinge with a soft non-metallic brush; never use abrasive pads or wire brushes on the tips.
- Rinse thoroughly with purified water to remove all detergent residue.
- Inspect tips for residual eschar; polish gently only with a fine abrasive pad if required.

Automated Cleaning (Washer-Disinfector)

- Load so that tips are open and not shielded; use an instrument-appropriate cycle.
- Use a validated thermal-disinfection cycle with a neutral-pH detergent.
- Ensure final rinse uses purified/deionised water; dry fully.

Sterilisation (Steam / Autoclave)

Method	Temperature	Exposure	Dry Time
Pre-vacuum steam	132–134 °C	4 min	20–30 min
Gravity steam	121 °C	30 min	20–30 min

Parameters are guidance only. Always validate cycles against your facility's equipment and local standards (e.g., ISO 17665). Do not exceed 138 °C. Allow the instrument to cool to room temperature before reuse.

6. Care, Handling & Storage

- Handle tips with care — they are precision-machined and easily bent or misaligned.
- Store in a clean, dry, protected tray with tips shielded to prevent damage.
- Do not stack heavy instruments on top of the forceps.
- Apply instrument-grade lubricant to the hinge periodically if applicable.
- Keep away from corrosive chemicals, saline soaks and prolonged moisture to prevent pitting/corrosion.

7. Inspection Criteria & Disposal

Remove from service if any of the following are found:

- Cracked, melted, blistered or worn insulation on shanks or cable.
- Bent, misaligned or non-mating tips that do not close evenly.
- Pitting, corrosion or persistent surface deposits that cannot be cleaned.
- Loose hinge, damaged connector pins, or intermittent electrical continuity.

Dispose of end-of-life or contaminated devices as clinical/biohazardous waste in accordance with local regulations. Decontaminate before disposal or return.

This document is provided by ELECTRO BISMED for reusable bipolar forceps. Retain for the working life of the device. Report any serious incident related to this device to the manufacturer and the competent authority of the country of use.