



Digitalis MCP

**METACARPOPHALANGEAL
JOINT ARTHROPLASTY**



SURGICAL TECHNIQUE



CLINICAL INDICATIONS

- Osteoarthritis
- Rheumatoid arthritis
- Joint surfaces destroyed following traumatic events
- Ankylosed joints or with limited range of motion
- Non-functional joint due to inadequate bony alignment

SURGICAL TECHNIQUE GUIDE

This document details the recommended surgical technique for the MCP DIGITALIS, specifically designed for the correction of bone deformities of the hand joints.

It serves as an educational resource to support qualified surgeons in ensuring the safe and effective application of the system. The following guidelines are provided for reference purposes only.

It remains the sole responsibility of the operating surgeon to determine the appropriateness of each procedure based on their professional clinical judgment and experience.

For comprehensive information regarding indications, contraindications, warnings, and precautions, please consult the official Instructions for Use (IFU) provided with the device.

INSTRUMENTATION

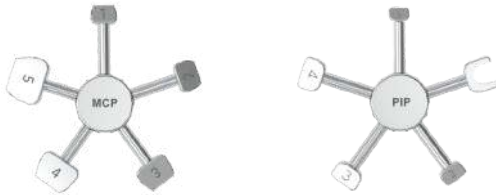
DDGI000001B

Digitalis instruments sterilization box (empty)



DDGI203000

Digitalis Handle



DDGI201003

Multisize Trial MCP

DDGI201004

Multisize Trial PIP



DDGI201001

Digitalis MCP Reamer

DDGI201002

Digitalis PIP Reamer



DDGI202001

Digitalis MCP Rasp

DDGI202002

Digitalis PIP Rasp



DDGI201013

Silicon MCP Trial size 1

DDGI201023

Silicon MCP Trial size 2

DDGI201033

Silicon MCP Trial size 3

DDGI201043

Silicon MCP Trial size 4

DDGI201053

Silicon MCP Trial size 5



DDGI201014

Silicon PIP Trial size 1

DDGI201024

Silicon PIP Trial size 2

DDGI201034

Silicon PIP Trial size 3

DDGI201044

Silicon PIP Trial size 4



ARTICULATION EXPOSURE



Make a 5 cm longitudinal incision along the back of the metacarpophalangeal (MCP) joint. Divide the capsule longitudinally and dissect it to expose the joint, preserving as much of the capsule as possible for subsequent repair. Continue the dissection so as to visualise the dorsal base of the proximal phalanx, the metacarpal head and the collateral ligament.

ARTICULAR SURFACES OSTEOTOMY

Resect the metacarpal head at the distal end and the base of the proximal phalanx using a micro-saw oscillating perpendicular to the metacarpal axis. Remove any osteophytes or sharp spurs from the joint.



SIZE CHOICE



Starting with the smallest size, insert the multi-size trial located inside the instrument set supplied with the device, test it and choose the one that best fits anatomically inside the joint.

PREPARATION OF THE MEDULLARY CANALS

Manually locate the metacarpal and proximal phalangeal medullary canals using a tip. Once the canal has been located, insert the reamer mounted on the appropriate handle. Proceed into the medullary canal until reaching the depth corresponding to the size chosen and/or identified in the previous step, clearly indicated on the reamer. Then use the rasp to complete the preparation of the medullary canals (it does not matter whether you start with the metacarpal or phalangeal canal first), taking care to keep the upper edge and the lateral and medial edges of the rasp parallel to the corresponding edges of the relevant bone portions. To prevent the rasp from rotating during broaching, use a forward-backward scraping method. Advance until you reach the depth corresponding to the size chosen, clearly indicated on the rasp.

NOTE: The key on the PIP multi-size trial can be used to tighten and/or loosen the reamer and rasp on the handle.



FINAL IMPLANT



Insert the trial spacer corresponding to the selected size and verify that the spacer fits perfectly to the surface of the resected bone planes, checking the mobility, alignment and stability of the implant.

Insert the final implant and proceed with careful suturing of the subcutaneous and cutaneous planes.

WOUND CLOSURE

Use one or two tension sutures to position the extensor tendon directly above the midline of the dorsal portion of the metacarpophalangeal joint. Wrap the radial cap and sagittal fascia. Move the joint again to ensure that there is no subluxation of the extensor tendon from 0 to 90 degrees of flexion. Irrigate the wound.

Apply a bulky dressing with a splint, keeping the finger in full extension. Leave the splint in place for 5-8 days before starting rehabilitation treatment.



Post-operative care: Bandage the finger and keep it in the rest position for 3-4 weeks, before starting the rehabilitation treatment.

Removal: If the implant needs to be removed, make a gradual curved dorsal incision above the affected joint (proceeding medially to the extensor tendon) and perform a full-thickness capsulotomy. Remove the silicone component using a needle holder and perform an implant revision or an arthrodesis procedure depending on the most appropriate clinical indication for the case. Re-suture capsule and patient's skin.



D I S T R I B U T E D B Y :



**Digitalis
Brochure**

BRM EXTREMITIES Srl

Via Lorenzo Mascheroni 29
20145 Milano (MI) Italy
T +39 02 89415508
brm-extremities.com

Headquarter

Via Privata ai Campi 7
23862 Civate (LC) Italy
T +39 0341 1693087
info@brm-extremities.com

TC-04A-001-A-EN-Rev00