



Straight and angled handpieces for surgery



Surgical instruments - technical characteristics



PM RM 1122 / 1:1 ratio
REF 1600206-001
REF 1600340-001
REF 1600341-001



PM AM 10121 / Reducing ratio of 10
REF 1600202-001



PM AM 1122 / 1:1 ratio
REF 1600207-001
REF 1600336-001
REF 1600337-001



PM AM 1221 / Increasing ratio of 2
REF 1600295-001
REF 1600338-001
REF 1600339-001

For bur lengths:
70 mm
95 mm
125 mm

Straight and angled handpieces

Coupling	E Standard type
PM RM 1122	Straight handpiece / 1:1 ratio / Max. rotation speed 40 000 rpm / Ring locking system
PM AM 10121	Angled handpiece / 10x reducer / Max. rotation speed 4 000 rpm / Ring locking system
PM AM 1122	Angled handpiece / 1:1 ratio / Max. rotation speed 40 000 rpm / Ring locking system
PM AM 1221	Angled handpiece / 1:2 ratio / Max. rotation speed 80 000 rpm / Ring locking system
Spray	1 external spray
Irrigation tubes	70 mm REF 1500096-001 / 95 mm REF 1500097-001 / 125 mm REF 1500098-001
Irrigation lines	Set with 10 irrigation lines REF 1100037-010

Tools

Tools for PM	Shank Ø 2.35 mm - type 2, according to ISO 1797-1
Total length according to ISO 6360/1	70 mm, diamond burs, DIA 242 type 70 mm, tungsten carbide or stainless steel burs, 236 type 95 mm and 125 mm (on sale at Bien-Air)
Head size	006 to 070 according to ISO 2157. Refer to the Bien-Air Surgery catalogue.



PM Dr. Causse
1600210-001

For stapedotomy, straight handpiece

Coupling	E Standard type
PM Dr. Causse Type	Straight handpiece with Dr. Causse's drill tool / 1:1 ratio / Max. rotation speed 40 000 rpm / Ring locking system Recommended for executing a stapedotomy



PM RM 1122 Intra-nasal
1600329-001



PM AM 1122 Intra-nasal
1600328-001



Spherical bur chuck, supplied with handpiece
1100058-001

For en-DCR, straight and angled handpieces

Coupling	E Standard type
PM RM 1122 Intra-nasal	Straight handpiece / 1:1 ratio / Max. rotation speed 10 000 rpm / Ring locking system
PM AM 1122 Intra-nasal	Angled handpiece / 1:1 ratio / Max. rotation speed 10 000 rpm / Ring locking system
Spray	1 external spray and suction system
Bur	Spherical bur chuck, head dia. 3.1 mm according to ISO 2157 Shank dia. 2.35 mm - type 2 according to ISO 1797-1 Total length: 125 mm according to ISO 6360/1



Microsaws

The saws are provided with extra-thin blades which reduce the loss of bone to a minimum. The sagittal, osseoscalpel and oscillating saws are equipped with an irrigation tube integrated in the hand-grip. For the compass model, a detachable tube ensures correct irrigation, it can be used with blades or tungsten rasp.



BASCH micromotor:
controlled by our microsurgery control units
OSSEOPRO and OSSEODOC and by the
otorhinolaryngology control unit ORL-E-922.
High-performance motor, brushless, variable
speed, high torque, self-ventilated.



Straight and contra-angled handpieces

Reliable, strong and easy-to-use instruments, designed mainly for surgery and implantology applications. The 30:1 reduction model is fitted with a removable Kirschner/Meyer system for irrigation through the centre of the tool or an external spray. The 1:1 transmission handpieces have only an external spray. Push-button instruments.



Straight and angled handpieces

This new range, adapted to modern-day user requirements, ensures that you work in complete safety. Instruments with external spray of the E Standard type. Bur locking by ring rotation. Identification of the transmission type by a green ring (speed reducing ratio of 10), blue ring (1:1 ratio) or red ring (speed increasing ratio of 2). The position of the spray nozzle is adjustable, for improved adaptation of the physiological liquid outlet. The four instruments, PM AM and PM RM, are available, according to the model, in 3 sizes. These instruments are designed to receive tool lengths 70, 95 and 125 mm.



These handpieces for DCR have been tested and are recommended by Doctor Bruno Fayet of the Department of Ophthalmology of the Hospital and University of Paris (6th arrondissement), and by Doctor Emmanuel Racy of the Department of Otorhinology of Lariboisière Hospital and the University of Paris (7th arrondissement).



Straight and angled handpieces for endonasal dacryocystorhinostomy (en-DCR) in adult patients

The special design of the intra-nasal tip - fitted with a shield covering half of the handpiece - is particularly appropriate for endonasal operations. Transmission type identified by a blue ring (1:1 transmission). Special nose equipped with an external spray and a suction device.



Surgical instruments - technical characteristics



Osseoscalpel microsaw
1600213-001



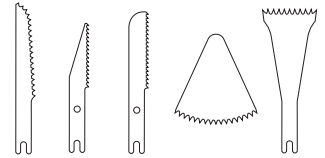
Compass microsaw
1600214-001



Oscillating microsaw
1600217-001



Sagittal microsaw
1600222-001



Microsaws

Coupling	E Standard type
Osseoscalpel microsaw	According to Sachse. With axial/sagittal cut, oscillating hub, especially suitable for three-dimensional cutting. Irrigation tube for physiological liquid integrated in the hand-grip / Recommended max. running speed 20 000 rpm Blades: thickness 0.35 mm. Length of serration 12/18/24 mm
Compass microsaw	Detachable irrigation tube to be slid over the instrument / Recommended max. running speed 15 000 rpm Blades: thickness 0.25 mm. Length of serration 11/14/18/22/26 mm. Can also be used with tungsten rasp
Oscillating microsaw	Irrigation tube for physiological liquid integrated in the hand-grip / Recommended max. running speed 15 000 rpm 27-mm saw blade with short shank. Length of serration 6/10/15 mm, thickness 0.30 mm. Usable length 11 mm 42-mm saw blade with long shank. Length of serration 6/10/15 mm, thickness 0.30 mm. Usable length 26 mm
Sagittal microsaw	According to Sachse. Tube for physiological liquid integrated in the hand-grip. Recommended max. running speed 20 000 rpm / Blades: thickness 0.35 mm. Length of serration 4/6/10/12 mm



PM 1123
1600052-001



CA 1122
1600200-001



CA 30121
1600284-001

Straight and contra-angle handpieces

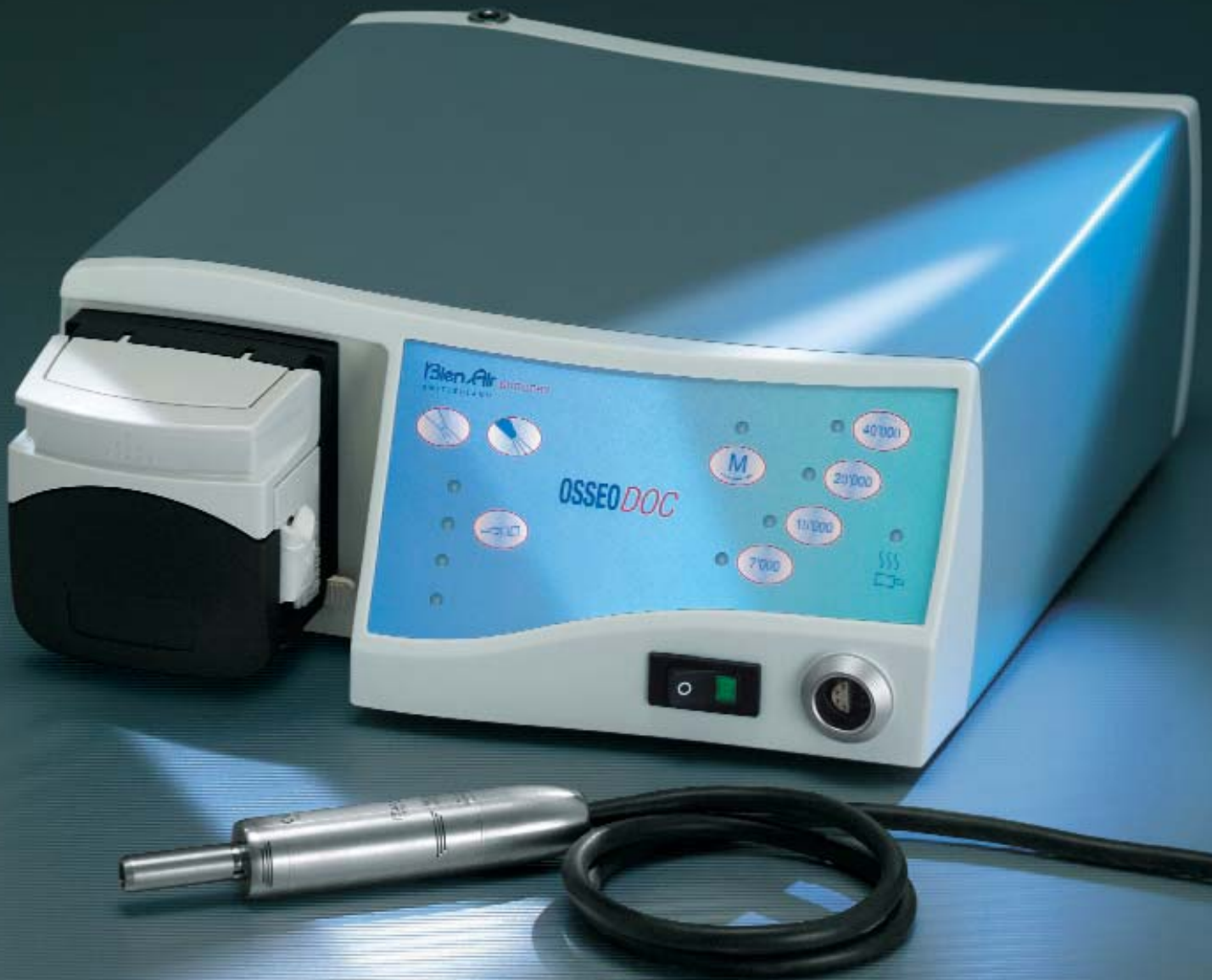
Coupling	E Standard type
PM 1123	Straight handpiece, 1:1 ratio / Ring locking system / 1 external spray / Tools ø 2.35 mm - type 2 - Length 44.5 mm
CA 1122	Contra-angle, 1:1 ratio / Push button grip / 1 external spray / Tools ø 2.35 mm - type 1 - Length 22 or 26 mm
CA 30121	Contra-angle, 30x reducer / Push button grip / 1 external spray and Kirschner/Meyer type detachable irrigation system Tools ø 2.35 mm - type 1 - Length 22 or 26 mm or Kirschner/Meyer type



Motor BASCH

REF	Motor 1600076-001 / Cable 1600342-001
Coupling	ISO nose, E Standard type
Power input	0-24 Vdc 5 A max.
Electromagnetic compatibility	In accordance with IEC 601-1-2
Rotation speed	500 - 40 000 rpm, self-ventilated
Dimensions / Weight	diameter 21 mm, length 100 mm, ISO nose included / 110 g, without cable
Motor cable	Push-pull type at OSSEOPRO or ORL-E-922 end, stainless steel ferrule at BASCH motor end. Black colour / length 3 m
Sterilization	Instruments, BASCH motor and cable are sterilizable in autoclave according to ISO Standard 7785

Bien-Air Surgery SA reserves the right to modify its products without prior notice.



**OSSEODOC - Simple and practical controls
with sterilisable micromotor**

OSSEODOC - the new control module from Bien-Air

Compact, robust and stable, the new OSSEODOC control for orthopaedic microsurgery is practical and efficient. Its motor has a standard ISO type "E" coupling which enables the operator to use a wide range of hand tools, micro-saws and other surgical instruments. Push-button selection of 4 motor speed ranges, two directions of rotation, two irrigation options and 4 flow rates for the peristaltic pump. Most of these functions are available using the foot control. Pilot lamps and audible signals indicate the functions activated.

Details that count:

- Convenient footpedal for functions with representative and standardised symbols.
- Footpedal and 2 pushbuttons for variable speed operation: on the right, select from a range of 4 speeds and also select the direction of motor rotation; on the left, control the flow rate of the peristaltic pump and ON/OFF.
- The brushless BASCH motor can be autoclaved with its cable. It operates smoothly without vibration in both directions of rotation through a speed range extending from 500 to 40 000 rpm. Cooled by self-ventilation.
- An acoustic signal warns when the motor is rotating anticlockwise.
- No risk of burns due to monitoring of motor temperature. Automatic stop if temperature rises above limit, with LED display on OSSEODOC panel.
- Irrigation flow rate with 4 levels can be adjusted using the control panel while the ranges of 15 to 65 ml/min or 30 to 130 ml/min can be controlled using the mechanical selector.
- Irrigation function on demand using the pedal "Kick down" function.
- OSSEODOC product range with or without peristaltic pump.
- Peristaltic pump kit available separately. Easy for the user to assemble.
- Control, motor and cable provide the assured electromagnetic protection required in medical standards 93/42/EEC and CEI 601-1-2.

The OSSEODOC product range comprises:

An electronic table control unit with or without peristaltic pump, a network cable, a BASCH motor with cable, a footpedal, 1 sterilisable holder for hand tools. Additional equipment for the version with pump: a power source and 10 single irrigation lines together with 10 retaining clips (for the sterile tubing).



Multifunction pedal



With or without integral peristaltic pump



Sterilisable BASCH motor





Technical characteristics of the OSSEODOC product range



OSSEODOC

Voltage	230 or 115 Vac
Power supply to motor	1 quick-release push-pull connector on control unit / 24 Vdc for BASCH motor
Insulation class	I, type B
Protection class	IP 40 (protection against introduction of objects wider than > 1mm)
Dimensions (LxPxH)	261 x 300 x 110 mm (height with power source 520 mm)
Weight	5 kg with pump / 4,100 kg without pump

Additional equipment for version with integral pump

Pump flow rate	Adjustable from 30 to 130 ml/min. or from 15 to 65 ml/min. (4x4 values for irrigation flow rate)
Power source	Stainless steel, height 450 mm
Irrigation tubes	Silicon tube, internal diameter 2.4 mm / external diameter 5.6 mm. with tap.
Retaining clips	Set of 10 clips for irrigation lines



Multifunction pedal

Seal integrity	Sealed : IPx8 acc. to CEI 529 and APG and in accordance with EN 60601-1
Functions	Controls for: start / stop functions, motor forward/reverse selection, speed control selection and operation of peristaltic pump.
Dimensions/weight	(lpxh) 160 x 170 x 55 mm / 0.830 kg



BASCH motor

Input power rating	0-24 Vdc 5 A max.
Mechanical power rating	62 W with OSSEODOC at 20 000 rpm and 24 Vdc
Rotational speed	500 to 40 000 rpm with OSSEODOC, 4 speed ranges. Self-ventilated
Attachment	ISO front-end "nose" coupling, type E Standard
Dimensions	Diameter 21 mm, length 100 mm, ISO "nose" included
Weight	110 g, without cable
Motor cable	Push-pull type on side of OSSEODOC, stainless-steel nut, colour black, length 3 m
Sterilisation	Motor and cable are sterilisable in autoclave

This company reserves the right to make model modifications and technical changes.



OSSEODOC with integral peristaltic pump

Set comprises:

- 1 OSSEODOC control for 230 Vac/115 Vac REF 1600331-001
 - 1 mains power cable, Switzerland REF 1300065-001
 - 1 mains power cable, Europe REF 1300066-001
- With integral peristaltic pump

With:

- 1 sterilisable BASCH micromotor REF 1600076-001
- 1 black cable for micromotor REF 1600342-001
- 1 sealed footpedal with 2 pushbuttons, multifunctional REF 1600407-001
- 1 Irrigation stand REF 1500017-001
- Set of 10 Irrigation lines REF 1100037-010
- Set of 10 retaining clips REF 1300064-010
- 1 sterilisable handpiece holder REF 1000007-001

Set 230 Vac / 115 Vac

REF 1700168-001

OSSEODOC without integral peristaltic pump



Set comprises:

- 1 OSSEODOC control for 230 Vac/115 Vac REF 1600332-001
 - 1 mains power cable, Switzerland REF 1300065-001
 - 1 mains power cable, Europe REF 1300066-001
- Without integral pump

With:

- 1 sterilisable BASCH micromotor REF 1600076-001
- 1 black cable for micromotor REF 1600342-001
- 1 sealed footpedal with 2 pushbuttons, multifunctional REF 1600407-001
- 1 sterilisable handpiece holder REF 1000007-001

Set 230 Vac / 115 Vac

REF 1700169-001

Peristaltic pump kit



To be integrated in OSSEODOC with:

- 1 Irrigation stand REF 1500017-001
- Set of 10 Irrigation lines REF 1100037-010
- Set of 10 retaining clips REF 1300064-010

REF 1700170-001