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FIN SHORT

OPERATING TECHNIQUE

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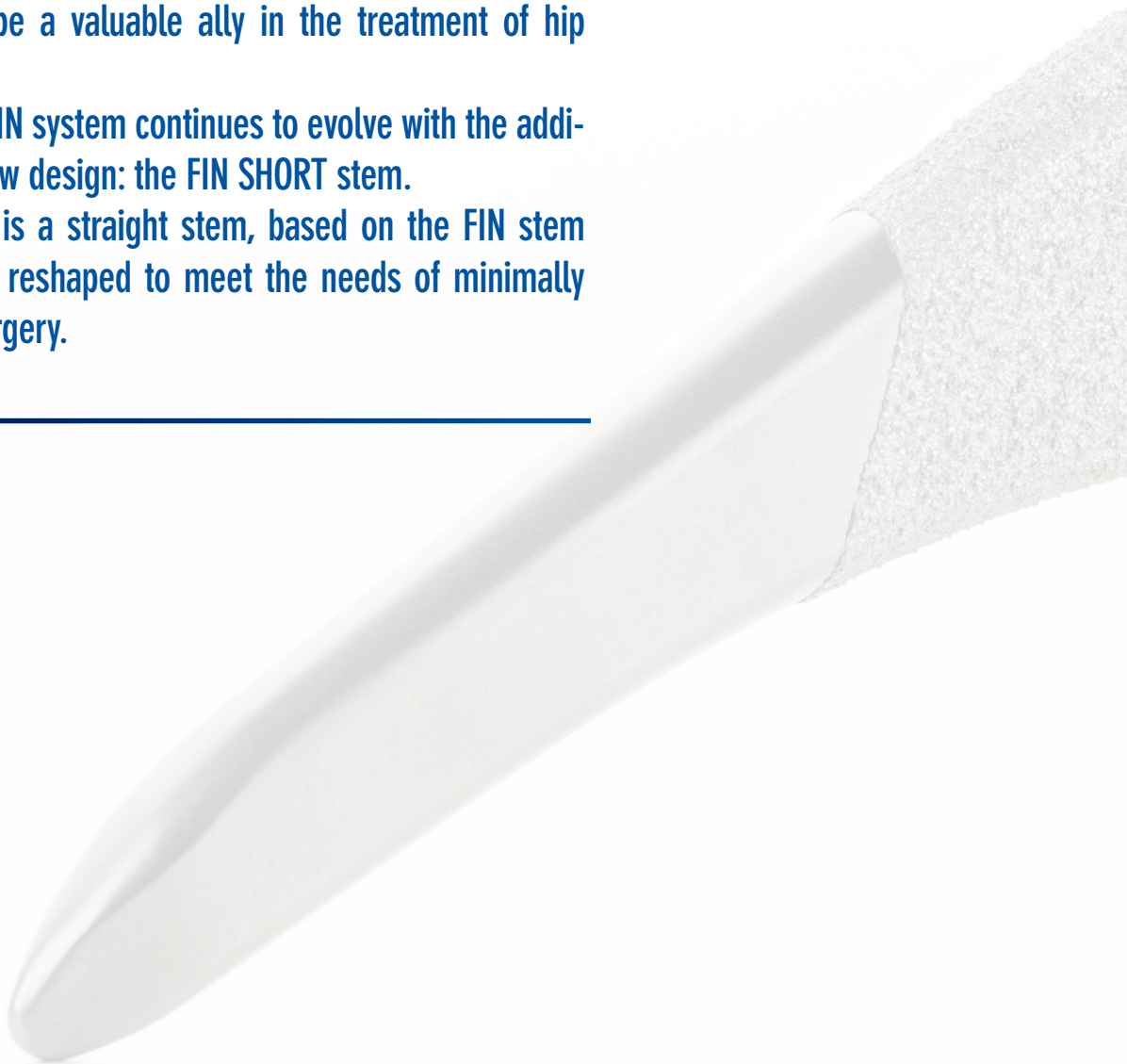
Introduced in 1992, the FIN stem was designed to provide surgeons with an implant that combines easy insertion with effective anchoring.
Based on the clinical results achieved, the FIN stem has proved to be a valuable ally in the treatment of hip disorders.
Today the FIN system continues to evolve with the addition of a new design: the FIN SHORT stem.
FIN SHORT is a straight stem, based on the FIN stem design and reshaped to meet the needs of minimally invasive surgery.



INDICATIONS

The indications are tied to hip pathologies that require an arthroplasty to reduce or eliminate pain and / or improve joint function. The general guidelines are: Non-inflammatory degenerative joint disease such as primary or secondary osteoarthritis; Aseptic necrosis of the femoral head; Rheumatoid Arthritis; Post-traumatic Arthritis; Correction of functional deformity; Outcomes of fractures of the femoral neck; Outcomes of traumatic dislocations of the hip; Failures of osteotomy; Outcomes of arthrodesis.

CONTRAINDICATIONS

The hip joint surgery is absolutely contraindicated in cases of: systemic or local infection, sepsis, and osteomyelitis. It is relatively contraindicated in case of: Osteoporosis; Patient uncooperative or suffering from neurological disorders, unable to follow directions; Systemic disorders and / or metabolic problems that lead to a progressive deterioration of bone support; Neurological or neuromuscular disorders that could create an unacceptable risk to the prostheses instability or lead to a failure of prostheses fixation; Osteomalacia; Active infection or suspected latent infection in the hip joint; Distant focus of infection that could spread to the implant site; Vascular insufficiency, muscular atrophy, neuromuscular diseases; Incomplete or insufficient presence of soft tissue around the knee joint; Obesity; Inadequate bone stock for the prostheses support or fixation; Skeletal immaturity; Local or disseminated neoplastic diseases; Incorrigible severe deformities.

MATERIALS

FIN SHORT stem is made of Ti6Al4V titanium alloy.
Ti-Growth-C® titanium Plasma Spray proximal coating

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1 Preoperative evaluation

Preoperative planning allows the surgeon to approach the intervention correctly, anticipating any situations that could occur. The purpose of this planning is to evaluate:

1. the heterometry
2. the choice of the appropriate size and CCD angle of stem
3. the position of the femoral stem

To radiographically assess the limb length discrepancy, on orthostatic pelvic x-ray, draw a reference line through the lower edge of the two ischium the two U-figures, and evaluate the distance between them and the small trochanter on each side.

The preoperative choice of stem is indicative, the final size will be established during surgery.

The upper edge of the small trochanter is a simple reference point to identify, on x-rays and during surgery, to determine the position of the stem (distance: cutting plane-apex of morse cone) in relation to the anatomy (distance: cutting plane-center of rotation of the femoral head).

Femoral heads, available in different lengths, will be usefull to achieve the right capsular tension.

The Fin Short stem preoperative templates are available in 15% magnification.

Use of an X-ray reference may help to determine the enlargement of the patient's X-ray.

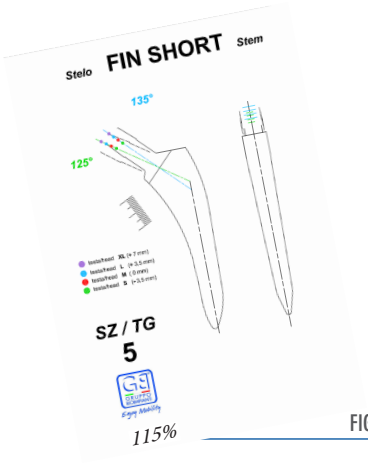

FIG.1

2 Femoral neck osteotomy

Perform the femoral osteotomy by performing a resection about 1 cm above the small trochanter and with an inclination of about 45°.

Perform the osteotomy, making sure to maintain the correct angle, so as not to affect the great trochanter.

(Fig.2)

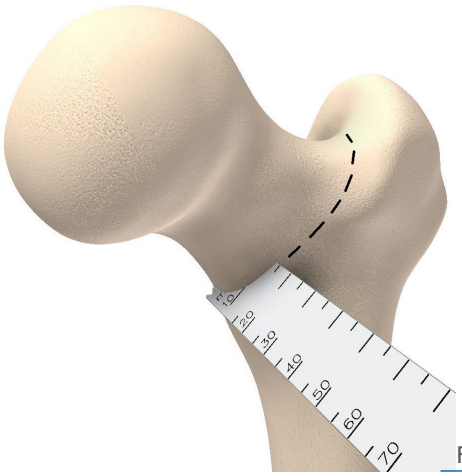

FIG.2

3 Preparation of the femoral canal

To create a cavity for the rasps, thus facilitating their insertion, use the Osteotome (Ref. 110381013) on the lateral portion of the implant base of the femoral neck. (Fig. 3A)
Once the access point for the rasps has been made with the osteotome, use the Reamer (Ref. 110381400) to identify the intramedullary canal. (Fig. 3B)
The use of the canal finder rasp (Ref. 120411115) is recommended only in presence of particularly dense or sclerotic bone in the area of the greater trochanter. (Fig.3C)

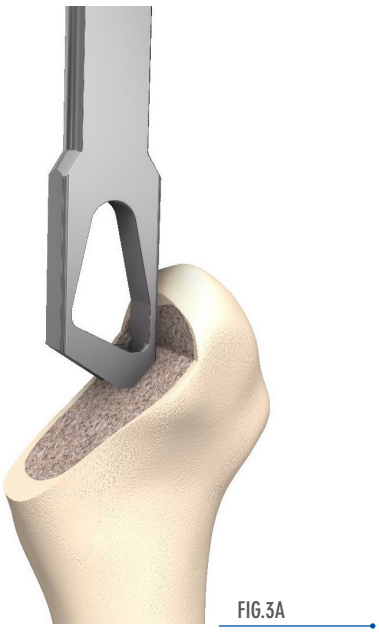

FIG.3A

FIG.3B

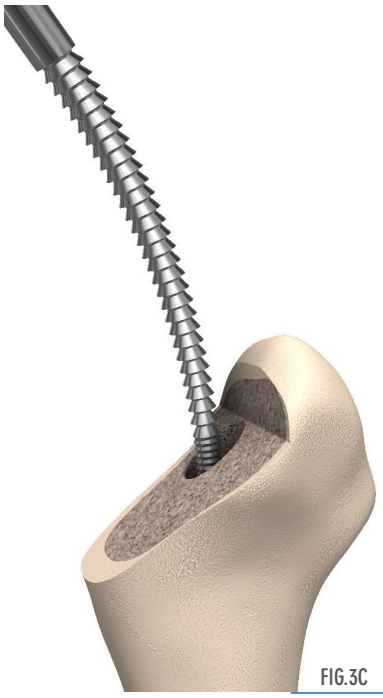

FIG.3C

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4 Broaching of the femoral canal

Assemble the rasp handle (Ref. 120411111) to the rasp (Ref. 110380651÷110380659).
Start by using the smallest rasp, making sure to immediately give the desired anteversion.
Progressively use larger sizes without changing the anteversion until reaching:

1. planned stem position (distance cutting plane-apex of the morse taper)
2. an appreciable condition of torsional stability (Fig.4)

Once the rasp can proceed no further along the femoral canal, check its size, which will coincide with the corresponding size of the definitive component.

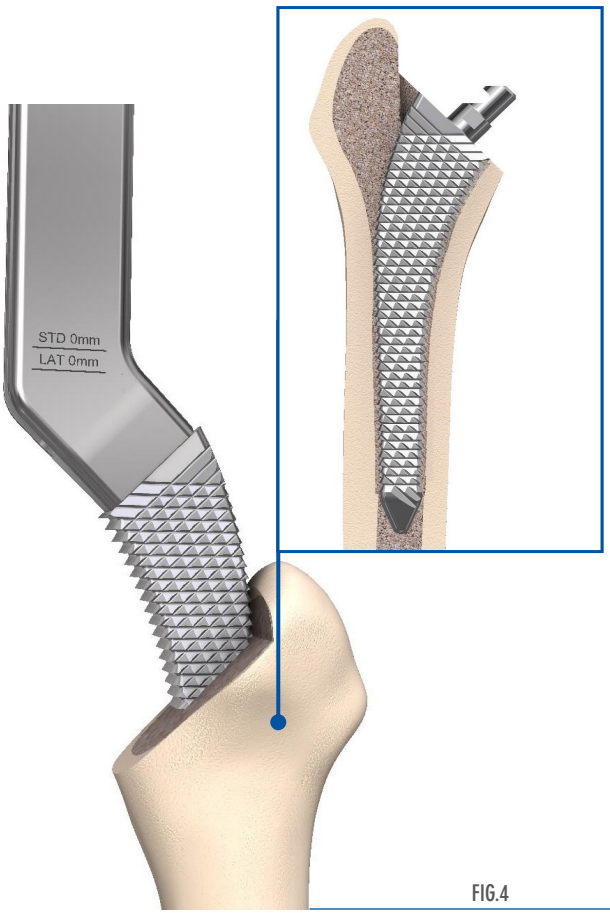


FIG.4

5 Trial reduction

Once broaching is complete, leave the last rasp used in place and proceed with the trial reduction.
Insert the trial neck (Ref. 135°: 110380662; Ref. 125°: 110380663) and then the Trial Heads (Ref. 22.2mm: 110381020* ÷ 110381040*, Ref. 28mm: 110380860 ÷ 110380890, Ref. 32mm: 110380960 ÷ 110380990, Ref. 36mm: 110381060 ÷ 110381090) available in four diameters (22.2mm, 28mm, 32mm, 36mm) each of which available in four different lengths (short, medium, long, extra long). (Fig.5)
Proceed with reduction by linking the rasp, attached to the trial head via the trial neck (Ref. 135°: 110380662; Ref. 125°: 110380663), with the previously implanted cup and check:

- absence of conflict
- stability during the entire range of motion
- soft tissue tension
- limb length.

FIG.5

6 Inserting the stem

Once the trial reduction has been performed, remove the trial head, trial neck and, for last, the rasp.

Insert the stem using the Fin Short impactor (Ref. 110380640) which allows correct positioning and control of anteversion. (Fig.6)

NB: If it is difficult to insert the final component, it is possible to proceed as follow: extract the stem with the stem extractor (Ref. 110380820), use the canal finder rasp (Ref. 120411115) to shape the area of the greater trochanter and proceed with the insertion again.

7 Positioning of the femoral head

Once the stem has been inserted, it is recommended to perform a further trial reduction to choose the definitive head.
To assemble the definitive head, use the Head impactor (Ref. 110380800) with the Head Impactor Adapter (Ref. 110380805 ÷ 110380815) chosen according to the diameter of the head. (Fig.7)

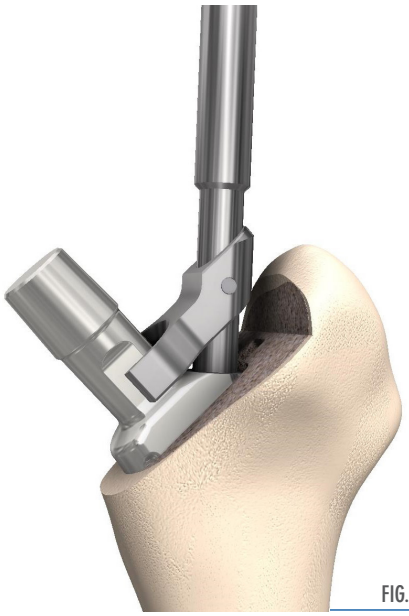


FIG.6

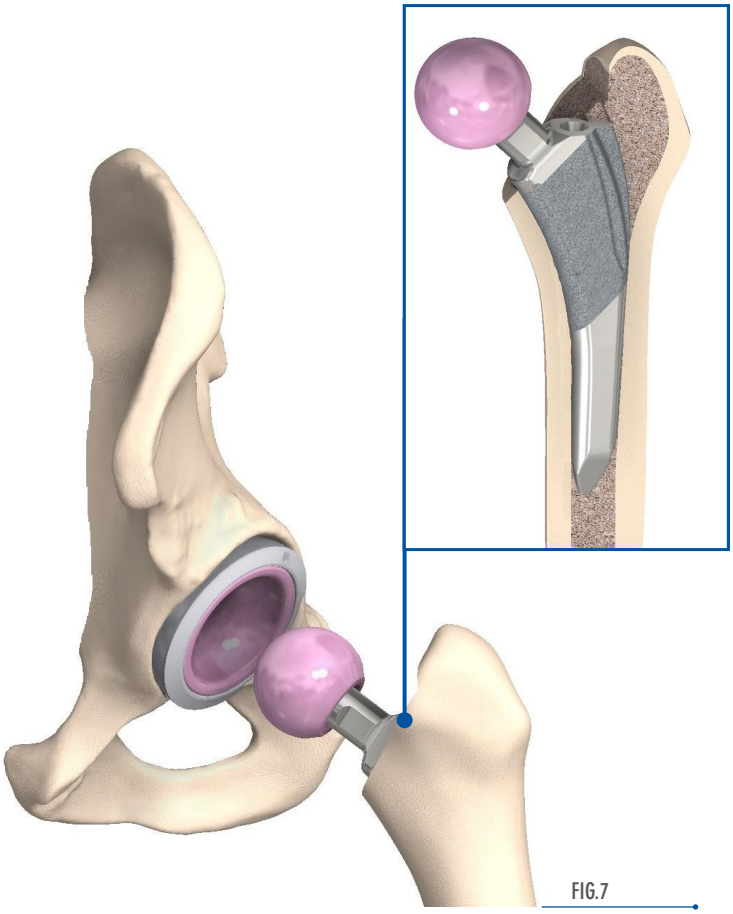


FIG.7

8 Stem extraction

If it is necessary to extract the Fin Short stem, use the Stem Extractor (Ref. 110380820).
(Fig.8)

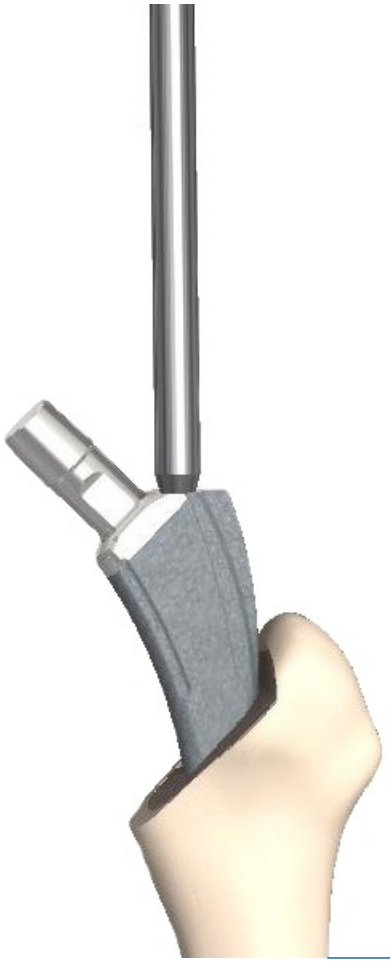
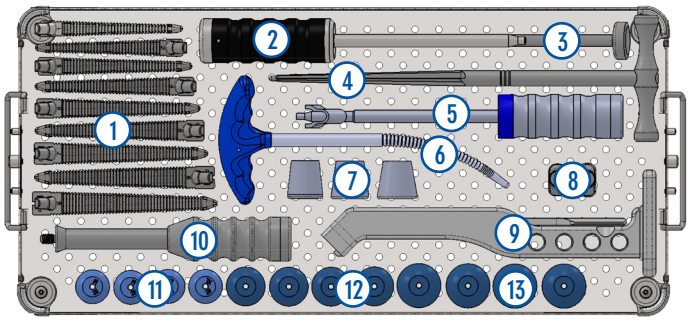


FIG.8

FIN SHORT INSTRUMENT CODES



Tray and cover for instruments FIN SHORT
REF: 110380680

	DESCRIPTION	REF.	SIZE	QNT
1	Fin Short Broach	110380651	1	1
		110380652	2	1
		110380653	3	1
		110380654	4	1
		110380655	5	1
		110380656	6	1
		110380657	7	1
		110380658	8	1
		110380659	9	1
2	Stem Impactor-Extractor	110380820	-	1
3	Osteotome	110381013	-	1
4	Solid taper reamer	110381400	-	1
5	Fin short Impactor	110380640	-	1
6	Canal finder rasp	120411115	-	1

	DESCRIPTION	REF.	DIAM.	QNT
7	Head impactor adapter	110380805	28mm	1
		110380810	32mm	1
		110380815	36mm	1

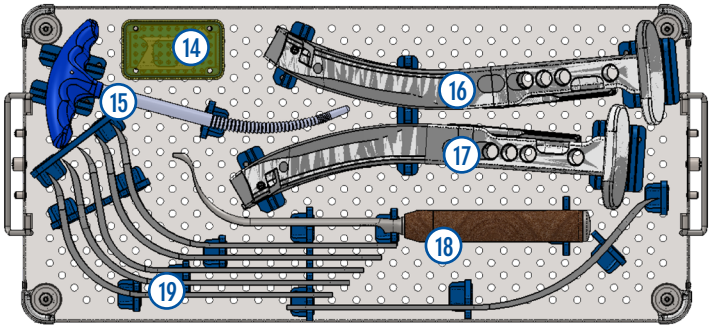
	DESCRIPTION	REF.	CCD	QNT
8	Trial neck	110380662	135°	1
		110380663	125°	1

	DESCRIPTION	REF.	NECK	QNT
9	Handle for rasp	120411111	-	1
10	Head Impactor	110380800	-	1
11	Trial head (Diam. 28mm)	110380860	S	1
		110380870	M	1
		110380880	L	1
		110380890	XL	1
12	Trial head (Diam. 32mm)	110380960	S	1
		110380970	M	1
		110380980	L	1
		110380990	XL	1
13	Trial head (Diam. 36mm)	110381060	S	1
		110381070	M	1
		110381080	L	1
		110381090	XL	1

DESCRIPTION	REF.	NECK	QNT
Trial head (Diam. 22.2mm)*	110381020	S	1
	110381030	M	1
	110381040	L	1

* Upon request

DAA INSTRUMENT CODES

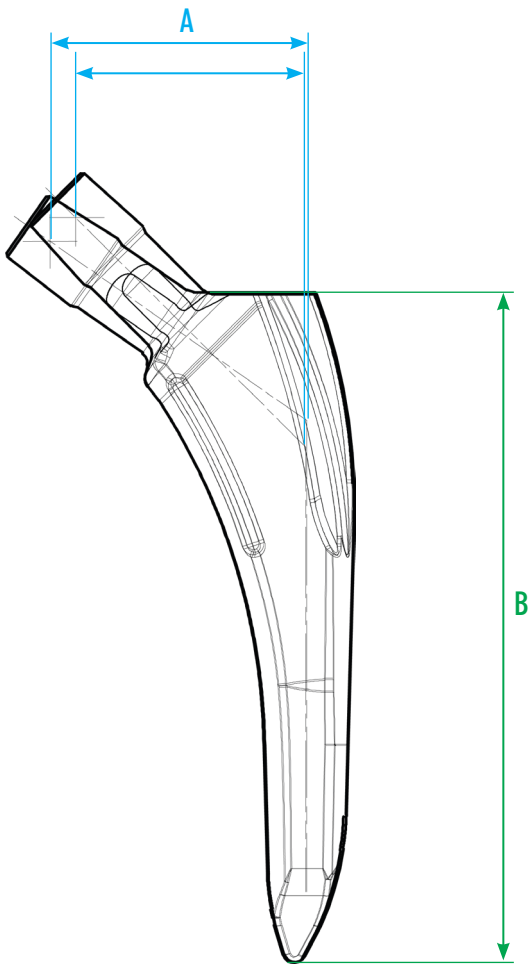


OPTIONAL UPON REQUEST

Tray for instruments DAA
Ref: 110384001
Cover for tray DAA
Ref: 110384002

	DESCRIPTION	REF.	QNT
14	Box chisel	110381012	1
15	Canal finder rasp	120411115	1
16	Offset rasp and box chisel handle R	120411109	1
17	Offset rasp and box chisel handle L	120411110	1
	Offset rasp and box chisel handle woodpecker*	120411099*	1
	Offset rasp and box chisel handle*	120411098*	1
18	Muller elevator	400114650	1
19	Retractors	400114664	1
		400114666	1
		400114665	1
		400114662	1
		400114660	1
		400114661	1
		400114650	1

FIN SHORT IMPLANT CODES



FIN SHORT STANDARD NECK

REF.	SIZE	CCD	OFFSET (A)	STEM LENGTH (B)
110382741	1	135°	35mm	102mm
110382742	2	135°	36.2mm	105.5mm
110382743	3	135°	37.4mm	109mm
110382744	4	135°	38.6mm	112.5mm
110382745	5	135°	39.8mm	116mm
110382746	6	135°	41mm	119.5mm
110382747	7	135°	42.2mm	123mm
110382748	8	135°	43.4mm	126.5mm
110382749	9	135°	44.6mm	130mm

FIN SHORT VARUS NECK

REF.	SIZE	CCD	OFFSET (A)	STEM LENGTH (B)
110382761	1	125°	40mm	103.1mm
110382762	2	125°	41.2mm	106.6mm
110382763	3	125°	42.4mm	110.1mm
110382764	4	125°	43.6mm	113.6mm
110382765	5	125°	44.8mm	117.1mm
110382766	6	125°	46mm	120.6mm
110382767	7	125°	47.2mm	124.1mm
110382768	8	125°	48.4mm	127.6mm
110382769	9	125°	49.6mm	131.1mm

CRCO FEMORAL HEAD Cone 12/14

REF.	DIAM.	NECK	R.I.C.
110207105E*	22.2mm	S	-2mm
110207110E*	22.2mm	M	0
110207115E*	22.2mm	L	+2mm
110210105E	28mm	S	-3.5mm
110210110E	28mm	M	0mm
110210115E	28mm	L	+3.5mm
110210120E	28mm	XL	+7mm
110220105E	32mm	S	-4mm
110220110E	32mm	M	0mm
110220115E	32mm	L	+4mm
110220120E	32mm	XL	+7mm
110367705	36mm	S	-4mm
110367710	36mm	M	0mm
110367715	36mm	L	+4mm
110367720	36mm	XL	+8mm

STAINLESS STEEL FEMORAL HEAD Cone 12/14

REF.	DIAM.	NECK	R.I.C.
110205105E	28mm	S	-3.5mm
110205110E	28mm	M	0mm
110205115E	28mm	L	+3.5mm
110205120E	28mm	XL	+7mm
110205205E*	32mm	S	-4mm
110205210E*	32mm	M	0mm
110205215E*	32mm	L	+4mm
110205220E*	32mm	XL	+7mm

CERAMIC BIOLOX DELTA FEMORAL HEAD Cone 12/14

REF.	DIAM.	NECK	R.I.C.
110240205	28mm	S	-3.5mm
110240210	28mm	M	0mm
110240215	28mm	L	+3.5mm
110240305	32mm	S	-4mm
110240310	32mm	M	0mm
110240315	32mm	L	+4mm
110240320	32mm	XL	+7mm
110240405	36mm	S	-4mm
110240410	36mm	M	0mm
110240415	36mm	L	+4mm
110240420	36mm	XL	+8mm

ZTA CERAMIC FEMORAL HEAD Cone 12/14

REF.	DIAM.	NECK	R.I.C.
110240605	28mm	S	-3.5mm
110240610	28mm	M	0mm
110240615	28mm	L	+3.5mm
110240625	32mm	S	-4mm
110240630	32mm	M	0mm
110240635	32mm	L	+4mm
110240640	32mm	XL	+7mm
110240655	36mm	S	-4mm
110240660	36mm	M	0mm
110240665	36mm	L	+4mm
110240670	36mm	XL	+8mm

* Upon request

Web Site

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IFU

Use the QR-Code to view complete product informations, including instructions for use, indications and contraindications, precautions and warnings

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