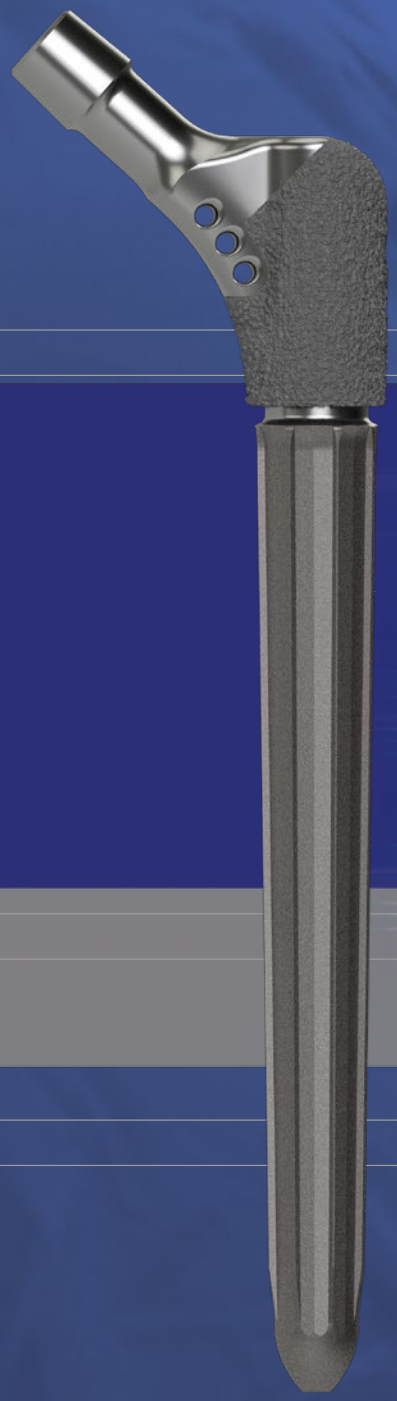
M-Vizion®

FEMORAL REVISION SYSTEM

SMART MODULAR THINKING



Surgical Technique

Joint | Spine | Sports Med

Medacta International

TABLE OF CONTENTS

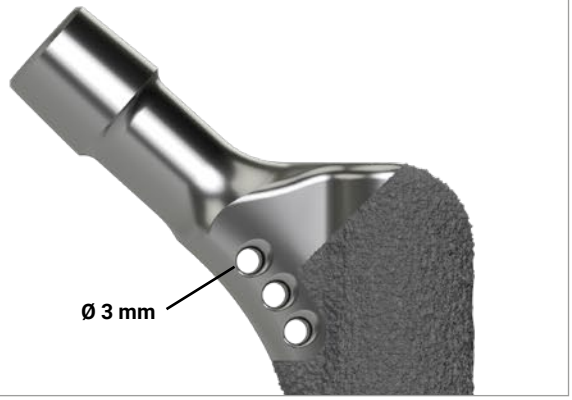
1. INTRODUCTION

This document describes the recommended surgical technique for the M-Vizion Femoral Revision System.

1. **M-Vizion Femoral Revision System**

The M-Vizion is a cementless modular stem made of Ti-Al-Nb alloy and composed of a proximal and a distal component. The proximal body is coated with Mectagrip, an innovative coating which provides high friction and scratch-fit feel.

The proximal body is available in two versions: without hole and three-hole. The three-hole version enables the usage of cables in order to fix the greater trochanter if the surgeon deems it necessary.



2.

Carefully read the instructions for use and contact your local Medacta representative should you have any questions concerning product compatibility.

1.1 INDICATIONS OF USE

The M-Vizion Femoral Revision System is designed for use in total or partial hip arthroplasty to provide increased patient mobility and reduced pain by replacing the damaged hip joint, in primary or revision surgery.

Total hip arthroplasty is indicated in the following cases:

- Severely painful and/or disabled joint as a result of arthrosis, traumatic arthritis, rheumatoid polyarthritis, or congenital hip dysplasia
- Avascular necrosis of the femoral head
- Acute traumatic fracture of the femoral head or neck
- Failure of previous hip surgery: joint reconstruction, internal fixation, arthrodesis, partial hip arthroplasty, hip resurfacing replacement or total hip arthroplasty.

Partial hip arthroplasty is indicated in the following cases:

- Acute traumatic fracture of the femoral head or neck
- Non-union of femoral neck fracture
- Avascular necrosis of the femoral head
- Primary pathology involving the femoral head but with a non deformed acetabulum

1.2 CONTRAINDICATIONS

Total or partial hip arthroplasty is contraindicated in the following cases:

- Acute, systemic or chronic infection
- Skeletal immaturity
- Severe muscular, neurological, vascular deficiency or other pathologies of the affected limb that may compromise the function of the implant
- Bone condition that may compromise the stability of the implant

Mental or neuromuscular disorders may create an unacceptable risk to the patient and can be a source of post-operative complications.

It is the surgeon's responsibility to ensure that the patient has no known allergy to the materials used.

1.3 PRE-OPERATIVE PLANNING

Careful preoperative planning is essential. It will help the surgeon to pre-select the implant sizes in order to recreate the patient's joint biomechanics as closely as possible.

In addition, using the set of X-ray templates (with the same magnification of the patient's X-ray), it will be possible to determine:

- The implant components size
- The prosthetic centre of rotation
- The level of the neck cut (in case of primary surgery)
- The head size

WARNING

The final implant will be selected intra-operatively, because of possible discrepancies between actual conditions and templating.

1.4 SURGICAL APPROACH

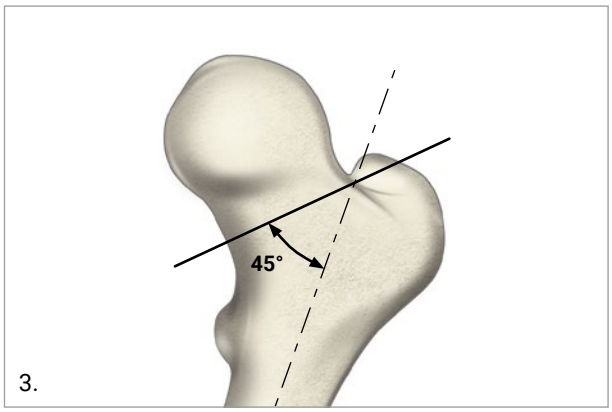
The choice of surgical approach is up to the surgeon.

2. FEMORAL NECK OSTEOTOMY/PRIMARY STEM REMOVAL

In primary surgery cases, the level of the neck cut is determined during pre-operative planning using the X-ray templates.

The recommended femoral neck osteotomy angle is 45° to the diaphyseal axis of the femur. The resection is performed with an oscillating saw, taking care to maintain the 45° angle. The femoral head is removed using an extractor.

In revision surgery cases, proceed with existing implant removal. For both cemented and cementless stems, specific extraction instruments are available to aid the removal of any pre-existing implant and debris.



3.

3. ACCESSING THE FEMORAL CANAL

To gain access to the medullary canal, the thigh is held in the position that provides the best exposure of the diaphyseal axis, depending on the selected approach.

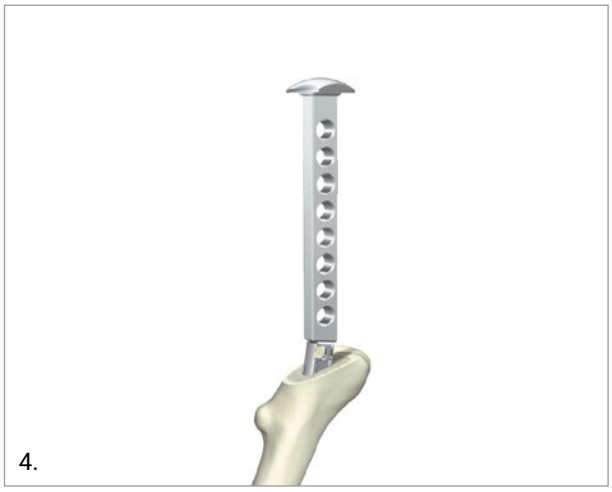
In primary surgery cases, to avoid undersizing and varus positions of the stem, a box chisel is applied opposite the digital fossa of the femoral neck.

Guide the chisel with a slight anteversion. This removes a block of cancellous bone.

TRICK

To ensure that the stem is at the correct depth within the femur, make sure that the reamer axis is aligned with the femoral axis. If necessary remove some bone from the proximal region before fully inserting the reamer to allow it to find the correct alignment.

The angled chisel (reference 01.15.10.0224) is available as option.


4.

4. DISTAL REAMING

To prepare the femoral canal, use the distal reamers up to the size determined during pre-operative planning of the distal component or until cortical contact is achieved. Distal reamers are available in 1 mm increments from 12 mm to 28 mm. Distal reamers are common for all the stem length 140 -180 -220 mm, except for stem length 140 mm with diameters from Ø 12 to Ø 15 that require the short distal reamer. See the table below.

Ream the femur by hand using the dedicated T-handle until the reamer advances to the desired mark.

Ensure that a proper depth of reaming is achieved:

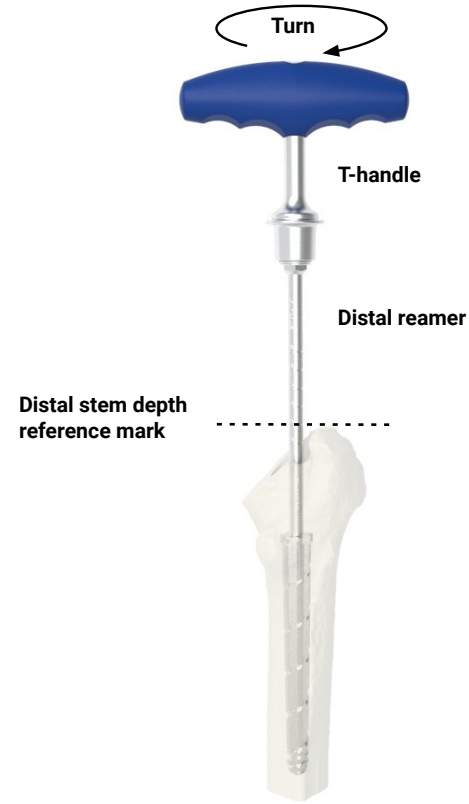
- Ream until "squeaking" or "chatter" is heard
- Use fluoroscopy or X-Ray if needed
- Check for cortical bone on the reamer

CAUTION

The use of distal reamers should be carefully weighed depending on bone quality. In revision surgery cases with compromised bone quality, be careful not to further weaken the bone tissue.

NOTE: The final implant is slightly oversized compared to the reamers in order to give some press-fit to achieve primary stability.

NOTE: The marks on the distal reamer identify the height of the proximal body. These marks also correspond to the center of the head when a 'M' size is used. This often matches to the height of the greater trochanter tip, when the patient anatomy is appropriate.



5.

	DISTAL STEM LENGTH		
DISTAL STEM DIAMETER Ø (mm)	L 140 mm	L 180 mm	L 220 mm
12	Short distal reamer	Long distal reamer	Long distal reamer
13			
14			
15			
16	Long distal reamer		
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			

5. DISTAL STEM TRIALING

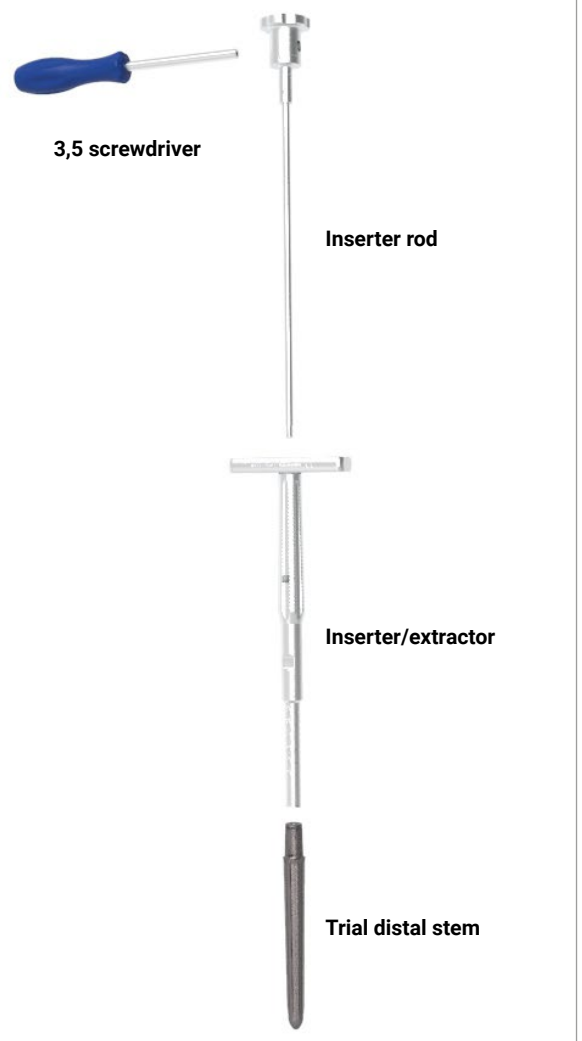
Once distal reaming is complete, select the trial distal stem of the same diameter as the final reamer.

Introduce the inserter rod into the inserter/extractor. Screw the assembly to the trial distal stem. Tighten the inserter rod using the short screwdriver. Using the short screwdriver, give the locking head an additional turn.

NOTE: When the marked line on the threaded rod is visible inside the window, all the components are correctly assembled. Please see fig. 6.

OPTION

Assemble the instruments on the back table, keeping a vertical position as shown in the images.



6.

NOTE: The trial stem has four fins and the distal stem has eight.

Insert the trial distal stem into the prepared femoral canal to the depth mark that matches the ream depth of the final reamer previously used. The depth marks on the inserter/extractor indicate the height of the chosen proximal component size.

Check that the distal stem is stable both axially and in rotation.

Once the trial distal stem has been positioned at the desired level the depth marks on the inserter/extractor indicate the vertical position of height of the `M` size head center for each proximal body height. This often corresponds to the tip of the greater trochanter, when the patient anatomy is appropriate.

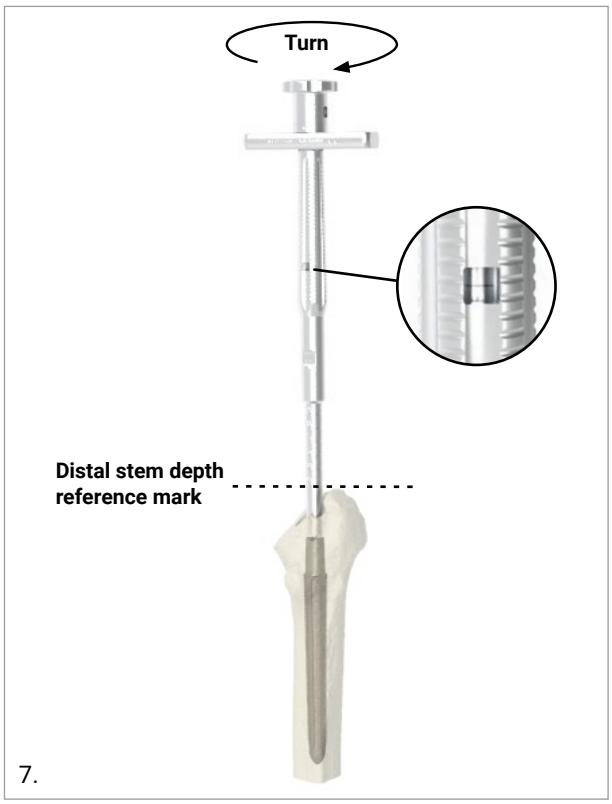
Unscrew the inserter rod and remove the distal stem inserter/extractor.

TRICK

Use the short screwdriver to ease the removal of the inserter rod.

OPTION

The trialing of the distal stem can be performed with the final implant as well. Implant the final distal stem as described in this chapter for the distal trial stem.



7.

OPTION

Whenever necessary, connect the Extractor Body to the inserter rod using the screw and use the gliding cylinder to extract the trial distal stem.

8.

The extractor body is available as a standard option in the Medacta Stem Removal System (ref. 01.34S.402).

6. PROXIMAL REAMING

Assemble the threaded rod to the distal stem.

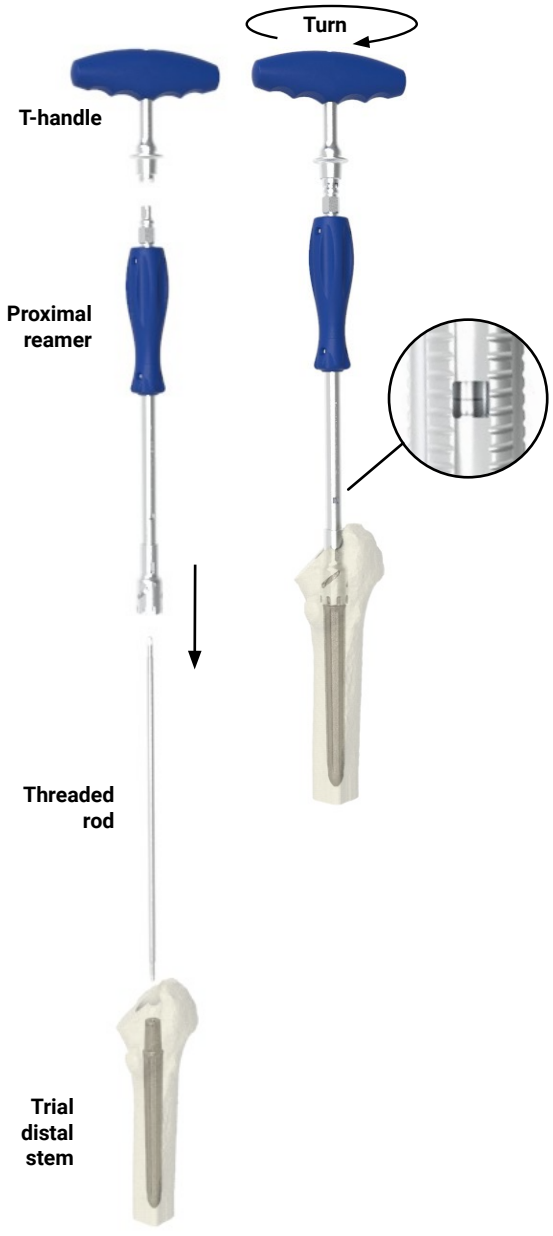
CAUTION
Be careful not to bend the threaded rod.

Slide the proximal reamer over the threaded rod and proceed along the femoral axis until the reamer is fully seated.

Ream the proximal femur with the proximal reamer of the selected diameter by hands using the dedicated T-handle.

Once the reaming is complete, remove the proximal reamer leaving the threaded rod in place, attached to the distal stem.

NOTE: When the marked line on the threaded rod is visible inside the window of the proximal reamer, all the components are correctly assembled.



9.

7. PROXIMAL BODY TRIALING

Once proximal reaming is complete, ensure that the taper junction of the trial distal stem is clean and dry. Select the trial proximal body of the chosen height and appropriate offset.

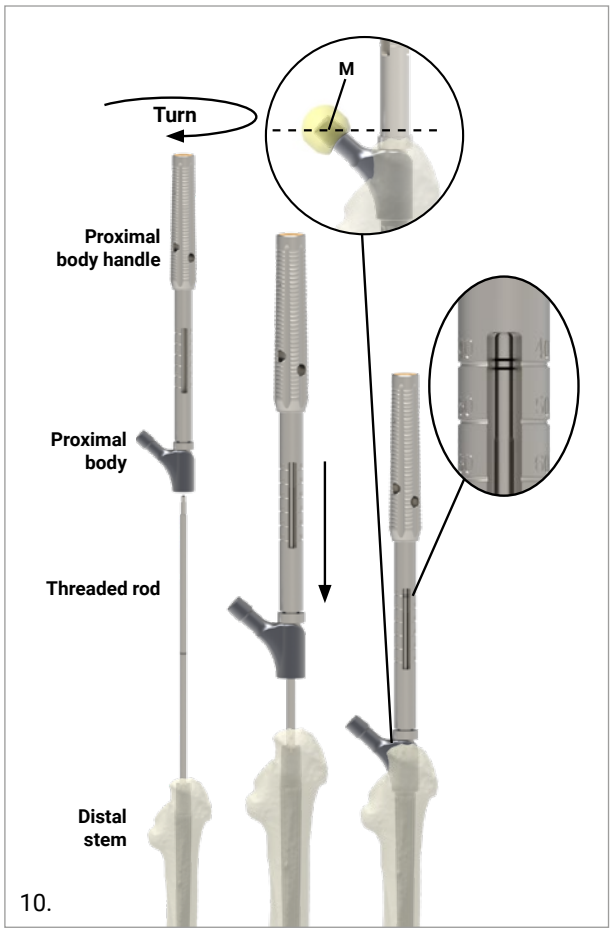
Connect the trial proximal body handle to the selected proximal body and slide the assembly on the threaded rod. Adjust the anteversion of the proximal body to the desired position.

TRICK

The proximal trial body with the plastic sleeve allows the coupling also with the final distal stem implant without damaging the taper.

TRICK

The laser-marked lines on the threaded rod, once visualized from the window of the proximal body handle, can be used as a reference to check the trial proximal body length to be used. Perform a visual check to identify the correct length.



10.

Unscrew and remove the proximal body handle and the threaded rod.

In order to fix the proximal body to the distal stem, use the screwdriver to insert the trial locking screw, which is shorter than the actual implant and its surface has no coating.

11.

8. TRIAL REDUCTION

Trial heads of different diameters and heights are available to perform the trial reductions. A trial head is fitted to the trial neck by pushing it onto the taper.

After placement of the trial or final acetabular component, the trial reduction is performed with the help of the head impactor.

Simply pull the trial head to remove it.

12.

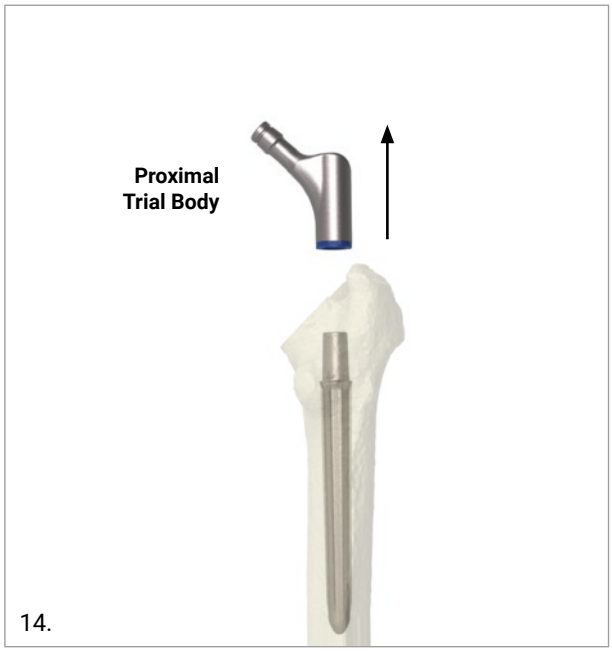
9. PROXIMAL TRIAL COMPONENT REPOSITIONING

After checking and testing mobility, joint stability and lower limb length, trial components can be repositioned and exchanged, if needed.

Use the screwdriver to remove the trial locking screw and consequently disassemble the trial proximal body.

13.

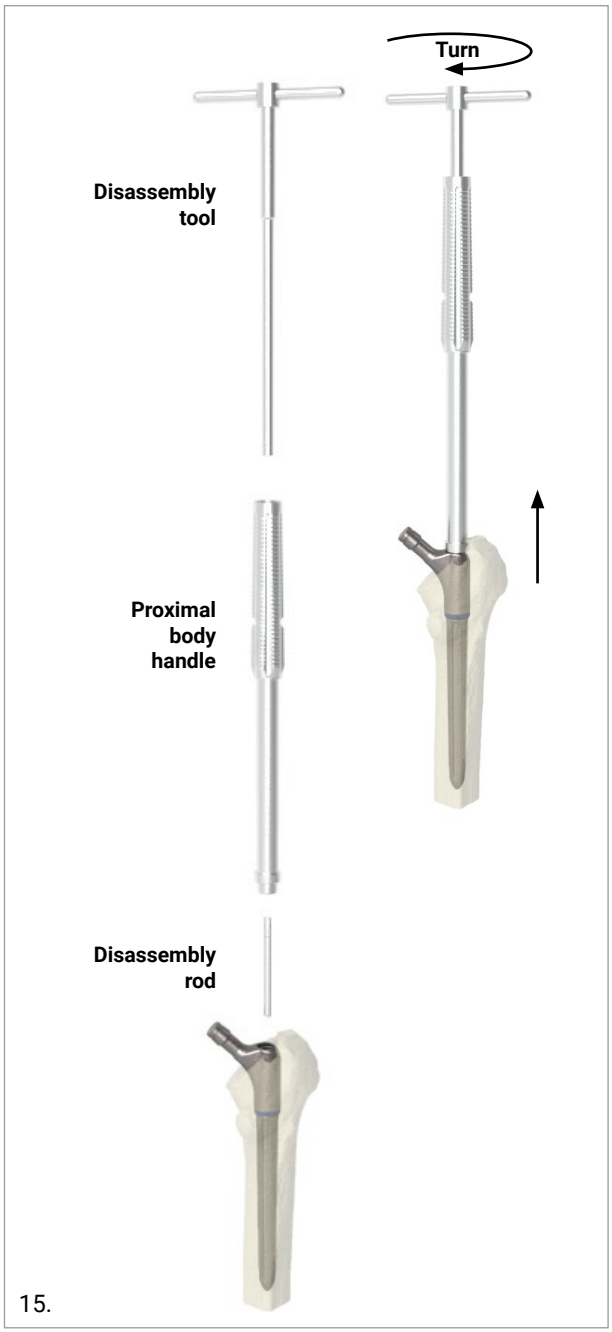
Remove the trial proximal body by hand.



14.

OPTION

If the proximal body is stuck to the distal stem, please screw the proximal body handle in the proximal body. Insert the disassembly tool into the proximal body handle and turn it clockwise. While turning, the disassembly tool pushes against the disassembly rod and disengages the trial proximal body from the trial distal stem.



15.

It is now possible to repeat the trial using another proximal trial body.

CAUTION

Please check the femoral preparation particularly in the calcar region. If needed a curette/rongeur/chisel may be of assistance to finish the calcar preparation.

10. REMOVAL OF TRIAL COMPONENTS

When the trial reduction is satisfactory, remove the trial components.

Use the screwdriver to unscrew the trial locking screw and consequently disassemble the trial proximal body. Remove the trial proximal body by hands.

In order to remove the trial distal body, please slide the inserter rod through the inserter/extractor. Couple both components to the trial distal stem. Use the 3.5 screwdriver to complete the assembly by tightening the inserter rod.

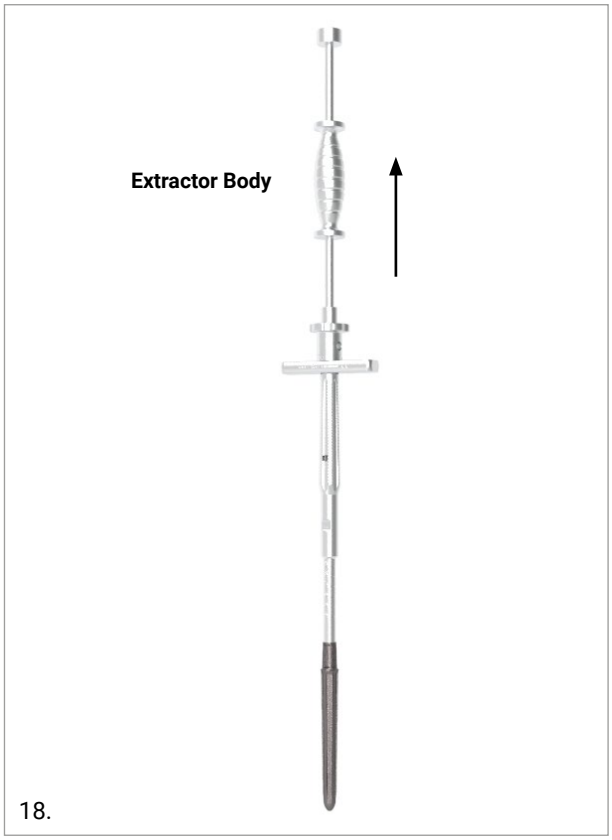
16.

Remove the trial distal stem hitting the anvil of the inserter/extractor.

17.

OPTION

Whenever necessary, connect the Extractor Body to the inserter rod using the screw and use the gliding cylinder to extract the trial distal stem.



18.

11. FINAL IMPLANTS

The final implantation procedure can be carried out in vivo or with the back table device. The choice of the procedure is up to the surgeon.

11.1 FINAL IMPLANTS (IN VIVO)

Insert the final distal implant component following the same steps described for the trial stem.

WARNING
Visually inspect the stem to make sure that no small scratches, indentations or surface damage have occurred, as this may be detrimental to the mechanical performance of the stem and may result in long term fracture of the device.

CAUTION
Before assembling the distal/proximal component take any possible precaution to allow a good mechanical connection at the taper junction: clean and dry as carefully as the conditions permit. A damaged surface or the presence of particulate debris between the two surfaces may compromise the longevity of the implant. Dry the taper carefully and inspect the smooth taper junction for any visible damage, and if deemed necessary please replace the implants.

Connect the proximal body handle to the selected proximal body and slide the assembly over the threaded rod.

WARNING
Take care not to damage the taper's micro-thread while placing the final implant.

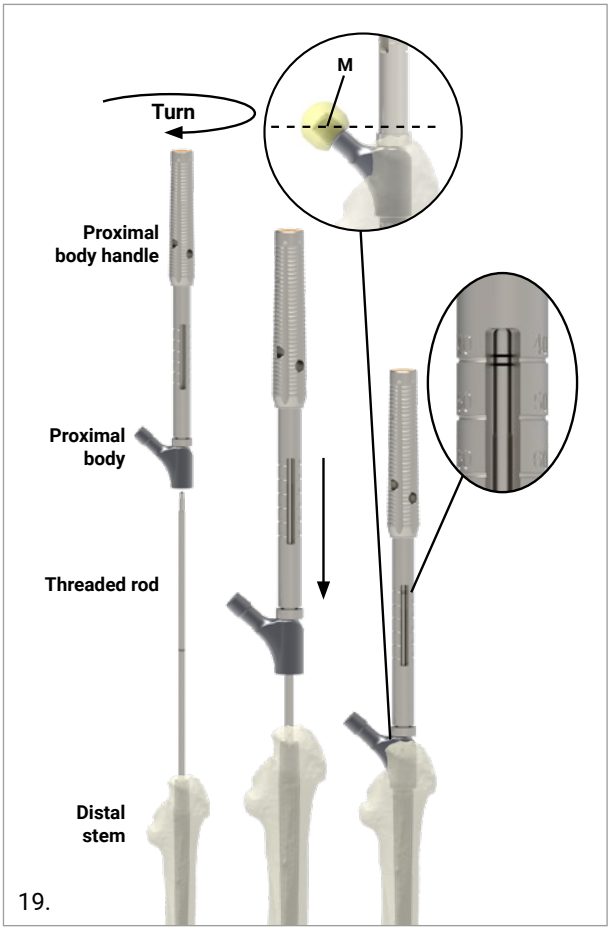
Adjust the anteversion of the proximal body to the desired position and tap lightly on the proximal body handle in the axial direction to couple the proximal body to the spigot of the distal stem.

TRICK
The laser marked line on the proximal body handle can be used as reference during the final implant insertion. It corresponds to the 'M' size head center and if the patient anatomy is appropriate it can be aligned with the tip of the greater trochanter when seated in its final position.

CAUTION
If the marked line is positioned higher than the tip of the greater trochanter, please check the femoral preparation particularly in the calcar region. If needed a curette/rongeur/chisel may be of assistance to finish the calcar preparation.

TRICK
The laser-marked lines on the threaded rod, once visualized from the window of the proximal body handle, can be used as a reference to check the proximal body length intended to be used. Perform a visual check to identify the correct length.

Unscrew and remove the proximal body handle.

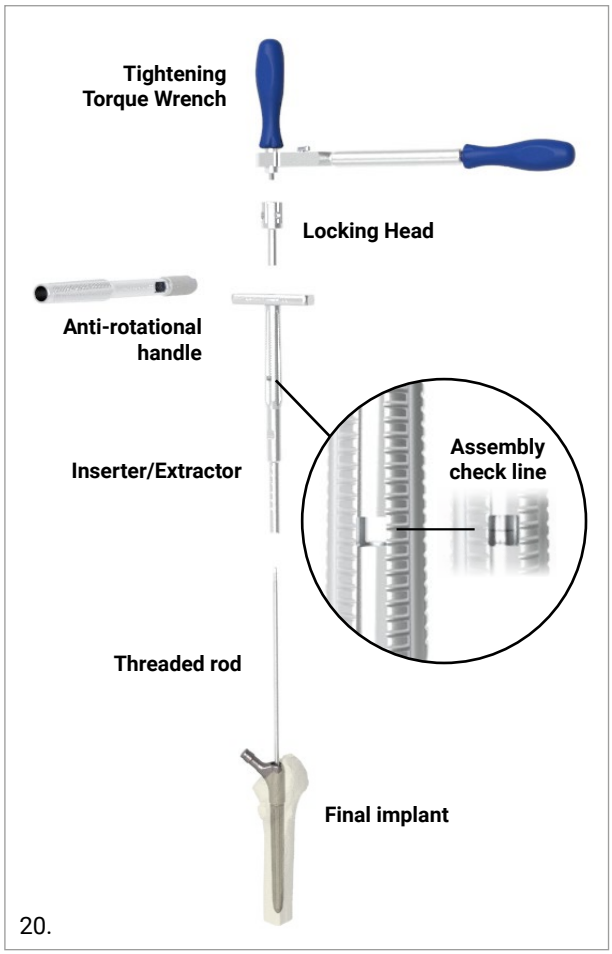


19.

Once the distal and the proximal components are assembled, proceed engaging the taper junction.

NOTE: check that the distal stem is stable (both axially and in rotation) and verify the desired anteversion of the proximal body.

The final implant assembly can be carried out with the Tightening torque wrench option or with the Compression handle option. The choice of the option is up to the surgeon.



20.

TRICK

Avoid overtighten the threaded rod in order to ease the disassembling after engaging the taper junction.

Insert the inserter/extractor on the threaded rod. Complete the assembly with the locking head.

NOTE: When the marked line on the threaded rod is visible inside the window of the inserter/extractor, all the components are correctly assembled.

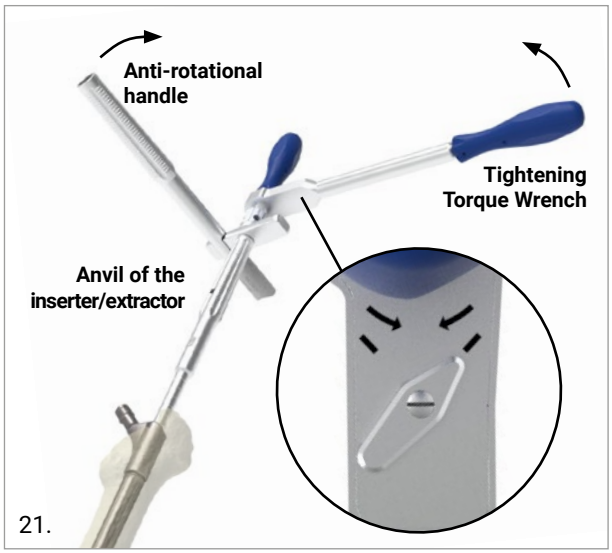
NOTE: The depth marked lines on the inserter/extractor should not be considered at this time.

Crank the locking head using the short screwdriver. The locking head should be in contact with the "T" part of the stem inserter/extractor.

Insert the Tightening Torque Wrench on the top of the locking head.

To engage the tapers of the distal and proximal body implants, tighten using the Tightening Torque Wrench. Position the knob according to fig. 20.

The anti-rotation handle must be coupled medially to the anvil and used as a fulcrum, to avoid force transmission to the bone. The Tightening Torque Wrench is moved until a 'click' is heard in order to reach the torque limit. At this stage, the correct coupling of the distal stem and proximal body is achieved.

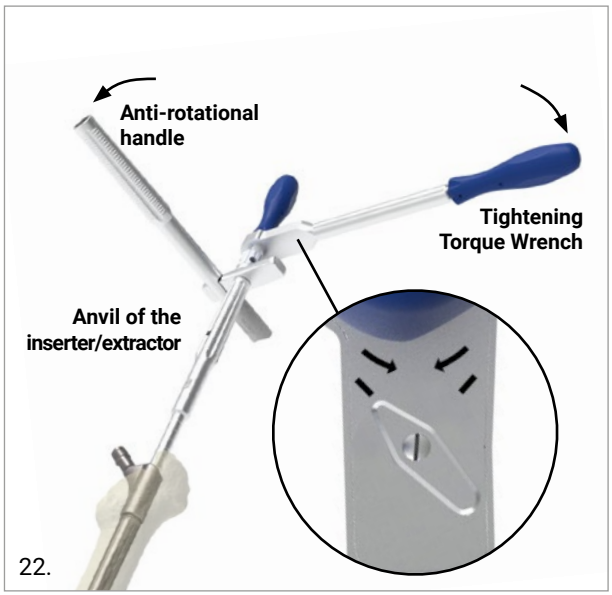


21.

After engaging the final implant taper remove the instrument assembly.

WARNING

During disassembly of the locking head, always use the Tightening Torque Wrench. In order to avoid force transmission to the bone, position the knob according to fig. 21.

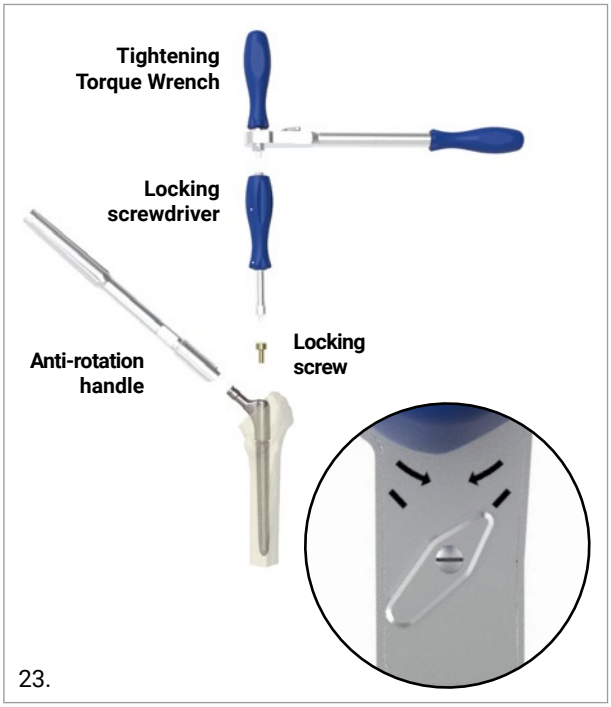


22.

11.2 FINAL SCREW INSERTION AND FINAL REDUCTION (IN VIVO)

To finalize the taper fixation, insert the locking screw to the top of the proximal body.

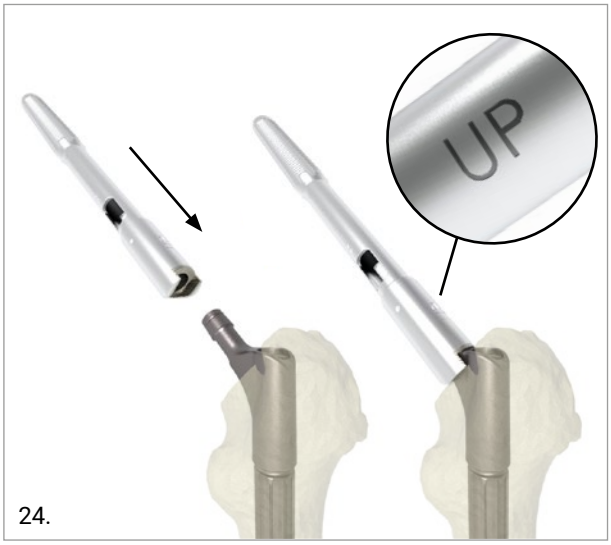
Insert the Tightening Torque Wrench on the top of the locking screwdriver. Position the knob according to fig. 22.



23.

CAUTION

The anti-rotation handle has to be positioned as shown in the picture below. The "UP" marking must be on the same side of the Locking Screw. The plastic sleeve of the anti-rotation handle protects the taper from any damage.



24.

Tighten the locking screw using the 5 mm locking screwdriver until a "click" is heard from the torque wrench.

This sound indicates that the torque limit has been reached and that the screw has been correctly tightened.

CAUTION

While tightening, position the anti-rotation handle on the proximal body taper as shown in the picture and use it as a counter-torque device, in order to avoid force transmission to the bone.

25.

OPTION

If needed, the long Locking screwdriver can be used as an alternative to the short locking screwdriver shown in the picture.

26.

If needed, the locking screw can be removed.

WARNING

To remove the locking screw, assemble the Tightening Torque Wrench. Position the knob according to fig. 26. In order to avoid force transmission to the bone, position the anti-rotation handle as shown in the picture and use it as a counter-torque device.

27.

WARNING
The locking screw already tightened must not be used again.

A further trial reduction can be performed with the trial heads to determine the final head size.

CAUTION
Metal head sizes XL (for Ø 28 mm and Ø 32 mm) and XXL (for Ø 28 mm, Ø 32 mm and Ø 36 mm) have a collar which may decrease the Range of motion compared to shorter sizes. Always perform trial reduction with the chosen head.

The proximal body taper must be thoroughly cleaned before placing the prosthetic head. Place the final head of the chosen size in position and fix it using the head impactor.

WARNING
Always impact the final head with the plastic head impactor provided for this purpose.

NOTE: For further details about ceramic femoral heads, please refer to the instructions for use for ceramic femoral heads.

Reduce the hip.

11.3 FINAL IMPLANTS (WITH THE BACK TABLE DEVICE)

According to the surgeon preference, the final implantation can be also assembled with the back table device.

WARNING
Take care not to damage the taper's micro-thread while placing the final implant.

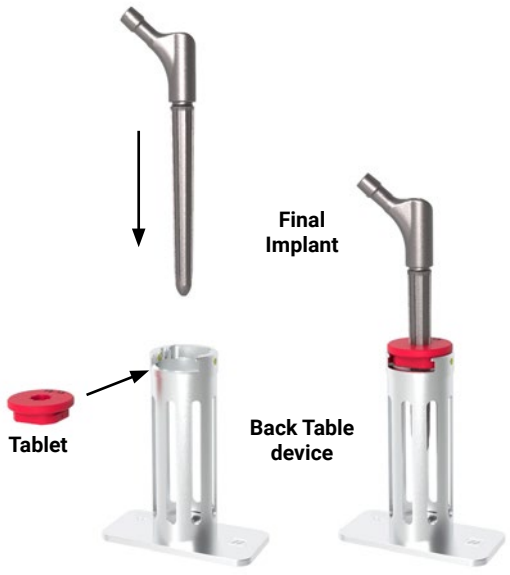
WARNING
Visually inspect the stem to make sure that no small scratches, indentations or surface damage have occurred, as this may be detrimental to the mechanical performance of the stem and may result in long term fracture of the device.

CAUTION
Before assembling the distal/proximal component and (smooth) taper engagement, thoroughly clean the taper junction with physiological saline. Dry the taper carefully and inspect the smooth taper junction for any visible damage, replace the implant if so.

Position the back table device into the dedicated space inside the tray.

According to the selected distal component sizes, choose the proper tablet size.

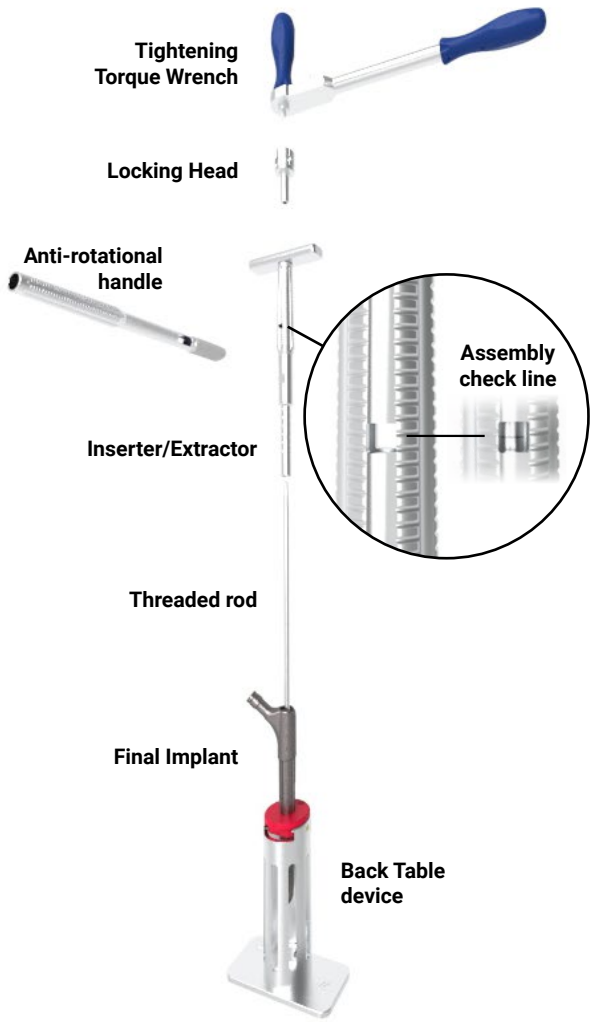
Insert the proper tablet into the support and then insert the distal body. Carry out the assembly manually of the distal stem and the proximal body.



28.

Once the distal and the proximal components are assembled, proceed engaging the taper junction.

Fully screw the threaded rod on the assembly.



29.

TRICK

Avoid overtighten the threaded rod in order to ease the disassembling after engaging the taper junction.

Insert the inserter/extractor on the threaded rod. Complete the assembly with the locking head.

NOTE: When the marked line on the threaded rod is visible inside the window of the inserter/extractor, all the components are correctly assembled.

Crank the locking head using the short screwdriver. The locking head should be in contact with the "T" part of the stem inserter/extractor.

Insert the Tightening Torque Wrench on the top of the locking head.

To engage the tapers of the distal and proximal body implants, tighten using the Tightening Torque Wrench. Position the knob and the anti-rotation handle according to fig. 29. The anti-rotation handle must be coupled medially to the anvil and used as a fulcrum. The Tightening Torque Wrench is moved until a 'click' is heard in order to reach the torque limit.

At this stage, the correct coupling of the distal stem and proximal body is achieved.

30.

After engaging the final implant taper remove the instrument assembly.

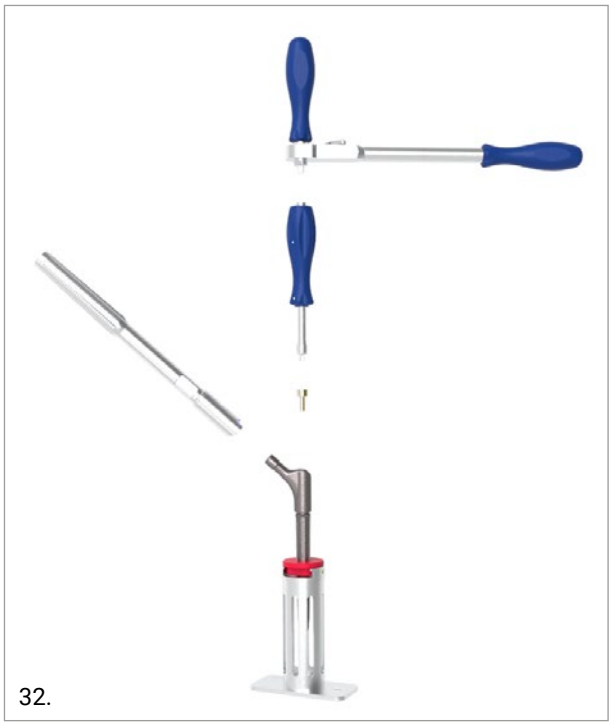
During disassembly of the locking head, always use the Tightening Torque Wrench. Position the knob according to fig. 30 and move the assembly in the opposite direction as done for the engagement of the implants.

31.

11.4 FINAL SCREW INSERTION AND FINAL REDUCTION (WITH THE BACK TABLE DEVICE)

To lock the distal stem and proximal body implants, insert the locking screw to the top of the proximal body.

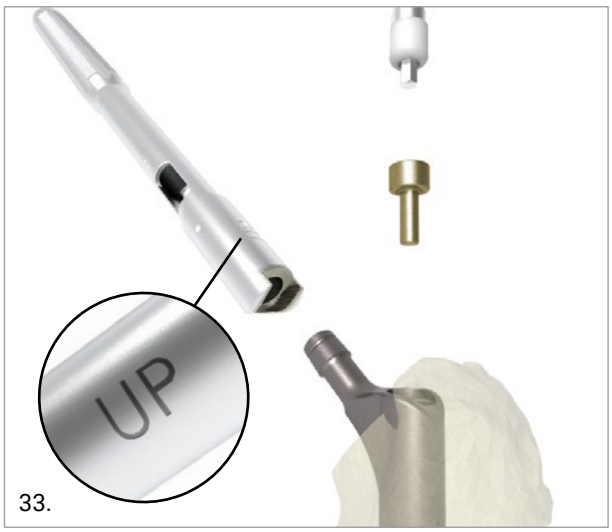
Insert the Tightening Torque Wrench on the top of the locking screwdriver.



32.

CAUTION

The anti-rotation handle has to be positioned as shown in the picture below. The "UP" marking has to be on the same side of the Locking Screw. The plastic sleeve of the anti-rotation handle protects the taper from any damage.



33.

Tighten the locking screw using the 5 mm locking screwdriver until a “click” is heard from the torque wrench.

This sound indicates that the torque limit has been reached and that the screw has been correctly tightened.

While tightening, position the anti-rotation handle on the proximal body taper as shown in the picture and use it as a counter-torque device.

34.

OPTION

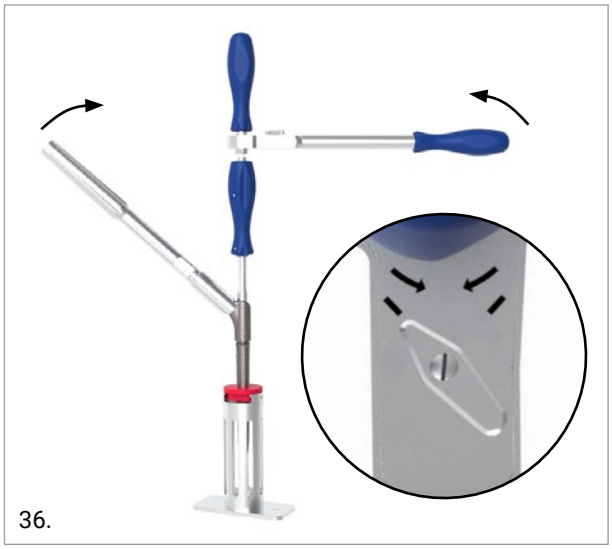
If needed, the long locking screwdriver (shown in the picture below) can be used as alternative to the short locking screwdriver.

35.

If needed, the locking screw can be removed.

WARNING

To remove the locking screw, assemble the Tightening Torque Wrench; position the knob and the anti-rotation handle according to fig. 35. Use the anti-rotation handle as a counter-torque device.



36.

WARNING

The locking screw already tightened must not be used again.

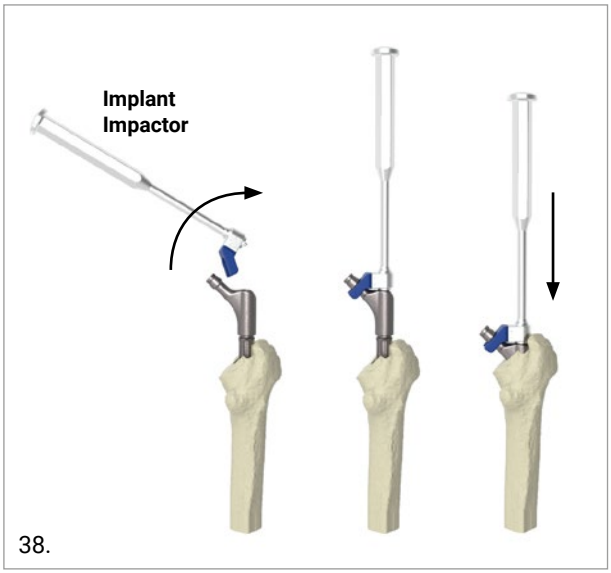
OPTION

If the assembled implant is stuck in the back table device, please use the extractor screw device as shown in picture. Use the 3.5 screwdriver if extra counter torque is needed.

37.

Once all components are assembled, implant the M-Vizion stem into the femur manually.

The implant impactor is designed to place the stem in the desired anteversion.



38.

A further trial reduction can be performed with the trial heads to determine the final head size.

CAUTION
Metal head sizes XL (for Ø 28 mm and Ø 32 mm) and XXL (for Ø 28 mm, Ø 32 mm and Ø 36 mm) have a collar which may decrease the Range of motion compared to shorter sizes. Always perform trial reduction with the chosen head.

The proximal body taper must be thoroughly cleaned before placing the prosthetic head.

Place the final head of the chosen size in position and fix it using the head impactor.

WARNING
Always impact the final head with the plastic head impactor provided for this purpose.

NOTE: For further details about ceramic femoral heads, please refer to the instructions for use for ceramic femoral heads.

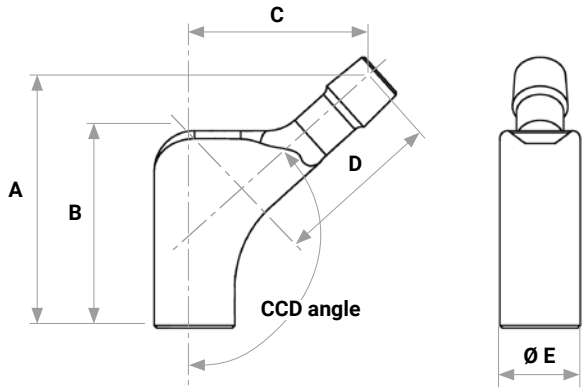
Reduce the hip.

OPTION
Alternatively to the implant impactor, it can be used the proximal body handle with the anvil tightened on the top. This option is not suitable for proximal bodies with length L40.


39.

12. IMPLANTS NOMENCLATURE

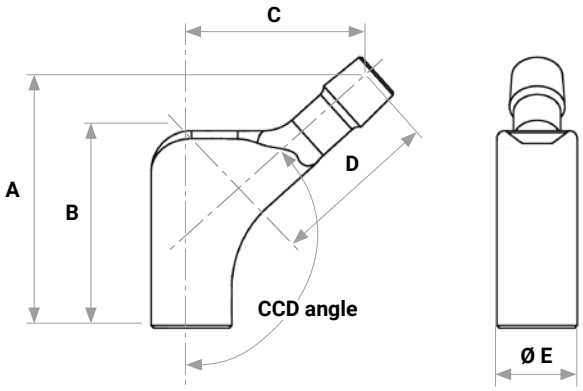
PROXIMAL BODY[II]



REFERENCE	DESCRIPTION	CCD ANGLE	A (mm)	B SHOULDER LENGTH (mm)	C NECK OFFSET (mm)	D NECK LENGTH (mm)	ø E (mm)
01.22.001	Proximal Body Ø 20 mm L 40 mm STD	132°	50	39	37	35,4	20
01.22.002	Proximal Body Ø 20 mm L 50 mm STD	132°	60	49	37	35,4	20
01.22.003	Proximal Body Ø 20 mm L 60 mm STD	132°	70	59	37	35,4	20
01.22.004	Proximal Body Ø 20 mm L 70 mm STD	132°	80	69	37	35,4	20
01.22.005	Proximal Body Ø 20 mm L 80 mm STD	132°	90	79	37	35,4	20
01.22.006	Proximal Body Ø 20 mm L 90 mm STD	132°	100	89	37	35,4	20
01.22.007	Proximal Body Ø 20 mm L 40 mm LAT	132°	50	39	43	39,65	20
01.22.008	Proximal Body Ø 20 mm L 50 mm LAT	132°	60	49	43	39,65	20
01.22.009	Proximal Body Ø 20 mm L 60 mm LAT	132°	70	59	43	39,65	20
01.22.010	Proximal Body Ø 20 mm L 70 mm LAT	132°	80	69	43	39,65	20
01.22.011	Proximal Body Ø 20 mm L 80 mm LAT	132°	90	79	43	39,65	20
01.22.012	Proximal Body Ø 20 mm L 90 mm LAT	132°	100	89	43	39,65	20
01.22.021	Proximal Body Ø 24 mm L 40 mm STD	132°	50	39	37	35,4	24
01.22.022	Proximal Body Ø 24 mm L 50 mm STD	132°	60	49	37	35,4	24
01.22.023	Proximal Body Ø 24 mm L 60 mm STD	132°	70	59	37	35,4	24
01.22.024	Proximal Body Ø 24 mm L 70 mm STD	132°	80	69	37	35,4	24
01.22.025	Proximal Body Ø 24 mm L 80 mm STD	132°	90	79	37	35,4	24
01.22.026	Proximal Body Ø 24 mm L 90 mm STD	132°	100	89	37	35,4	24
01.22.027	Proximal Body Ø 24 mm L 40 mm LAT	132°	50	39	43	39,65	24
01.22.028	Proximal Body Ø 24 mm L 50 mm LAT	132°	60	49	43	39,65	24
01.22.029	Proximal Body Ø 24 mm L 60 mm LAT	132°	70	59	43	39,65	24
01.22.030	Proximal Body Ø 24 mm L 70 mm LAT	132°	80	69	43	39,65	24
01.22.031	Proximal Body Ø 24 mm L 80 mm LAT	132°	90	79	43	39,65	24
01.22.032	Proximal Body Ø 24 mm L 90 mm LAT	132°	100	89	43	39,65	24

[II] A locking screw is always packed together with the proximal body

PROXIMAL BODY [II]

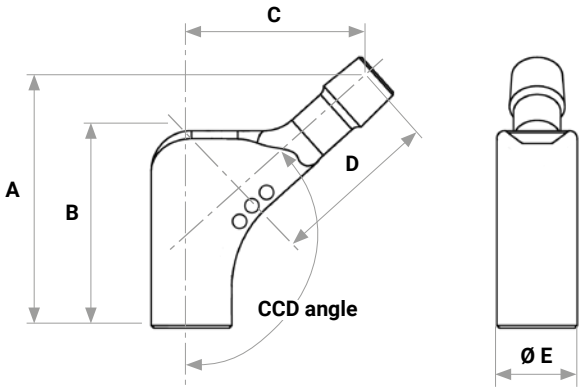


REFERENCE	DESCRIPTION	CCD ANGLE	A (mm)	B SHOULDER LENGTH (mm)	C NECK OFFSET (mm)	D NECK LENGTH (mm)	Ø E (mm)
01.22.041[I]	Proximal Body Ø 28 mm L 40 mm STD	132°	50	39	37	35,4	28
01.22.042[I]	Proximal Body Ø 28 mm L 50 mm STD	132°	60	49	37	35,4	28
01.22.043[I]	Proximal Body Ø 28 mm L 60 mm STD	132°	70	59	37	35,4	28
01.22.044[I]	Proximal Body Ø 28 mm L 70 mm STD	132°	80	69	37	35,4	28
01.22.045[I]	Proximal Body Ø 28 mm L 80 mm STD	132°	90	79	37	35,4	28
01.22.046[I]	Proximal Body Ø 28 mm L 90 mm STD	132°	100	89	37	35,4	28
01.22.047[I]	Proximal Body Ø 28 mm L 40 mm LAT	132°	50	39	43	39,65	28
01.22.048[I]	Proximal Body Ø 28 mm L 50 mm LAT	132°	60	49	43	39,65	28
01.22.049[I]	Proximal Body Ø 28 mm L 60 mm LAT	132°	70	59	43	39,65	28
01.22.050[I]	Proximal Body Ø 28 mm L 70 mm LAT	132°	80	69	43	39,65	28
01.22.051[I]	Proximal Body Ø 28 mm L 80 mm LAT	132°	90	79	43	39,65	28
01.22.052[I]	Proximal Body Ø 28 mm L 90 mm LAT	132°	100	89	43	39,65	28
01.22.061[I]	Proximal Body Ø 32 mm L 40 mm STD	132°	50	39	37	35,4	32
01.22.062[I]	Proximal Body Ø 32 mm L 50 mm STD	132°	60	49	37	35,4	32
01.22.063[I]	Proximal Body Ø 32 mm L 60 mm STD	132°	70	59	37	35,4	32
01.22.064[I]	Proximal Body Ø 32 mm L 70 mm STD	132°	80	69	37	35,4	32
01.22.065[I]	Proximal Body Ø 32 mm L 80 mm STD	132°	90	79	37	35,4	32
01.22.066[I]	Proximal Body Ø 32 mm L 90 mm STD	132°	100	89	37	35,4	32
01.22.067[I]	Proximal Body Ø 32 mm L 40 mm LAT	132°	50	39	43	39,65	32
01.22.068[I]	Proximal Body Ø 32 mm L 50 mm LAT	132°	60	49	43	39,65	32
01.22.069[I]	Proximal Body Ø 32 mm L 60 mm LAT	132°	70	59	43	39,65	32
01.22.070[I]	Proximal Body Ø 32 mm L 70 mm LAT	132°	80	69	43	39,65	32
01.22.071[I]	Proximal Body Ø 32 mm L 80 mm LAT	132°	90	79	43	39,65	32
01.22.072[I]	Proximal Body Ø 32 mm L 90 mm LAT	132°	100	89	43	39,65	32

[I] On demand

[II] A locking screw is always packed together with the proximal body

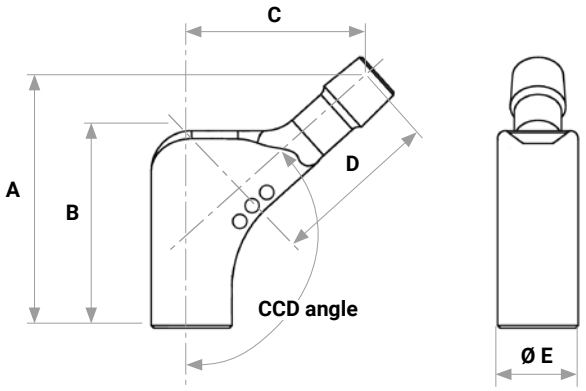
PROXIMAL BODY WITH HOLES[II]



REFERENCE	DESCRIPTION	CCD ANGLE	A (mm)	B SHOULDER LENGTH (mm)	C NECK OFFSET (mm)	D NECK LENGTH (mm)	Ø E (mm)
01.22.401	Proximal Body Ø 20 mm L 40 mm STD with holes	132°	50	39	37	35,4	20
01.22.402	Proximal Body Ø 20 mm L 50 mm STD with holes	132°	60	49	37	35,4	20
01.22.403	Proximal Body Ø 20 mm L 60 mm STD with holes	132°	70	59	37	35,4	20
01.22.404	Proximal Body Ø 20 mm L 70 mm STD with holes	132°	80	69	37	35,4	20
01.22.405	Proximal Body Ø 20 mm L 80 mm STD with holes	132°	90	79	37	35,4	20
01.22.406	Proximal Body Ø 20 mm L 90 mm STD with holes	132°	100	89	37	35,4	20
01.22.407	Proximal Body Ø 20 mm L 40 mm LAT with holes	132°	50	39	43	39,65	20
01.22.408	Proximal Body Ø 20 mm L 50 mm LAT with holes	132°	60	49	43	39,65	20
01.22.409	Proximal Body Ø 20 mm L 60 mm LAT with holes	132°	70	59	43	39,65	20
01.22.410	Proximal Body Ø 20 mm L 70 mm LAT with holes	132°	80	69	43	39,65	20
01.22.411	Proximal Body Ø 20 mm L 80 mm LAT with holes	132°	90	79	43	39,65	20
01.22.412	Proximal Body Ø 20 mm L 90 mm LAT with holes	132°	100	89	43	39,65	20
01.22.421	Proximal Body Ø 24 mm L 40 mm STD with holes	132°	50	39	37	35,4	24
01.22.422	Proximal Body Ø 24 mm L 50 mm STD with holes	132°	60	49	37	35,4	24
01.22.423	Proximal Body Ø 24 mm L 60 mm STD with holes	132°	70	59	37	35,4	24
01.22.424	Proximal Body Ø 24 mm L 70 mm STD with holes	132°	80	69	37	35,4	24
01.22.425	Proximal Body Ø 24 mm L 80 mm STD with holes	132°	90	79	37	35,4	24
01.22.426	Proximal Body Ø 24 mm L 90 mm STD with holes	132°	100	89	37	35,4	24
01.22.427	Proximal Body Ø 24 mm L 40 mm LAT with holes	132°	50	39	43	39,65	24
01.22.428	Proximal Body Ø 24 mm L 50 mm LAT with holes	132°	60	49	43	39,65	24
01.22.429	Proximal Body Ø 24 mm L 60 mm LAT with holes	132°	70	59	43	39,65	24
01.22.430	Proximal Body Ø 24 mm L 70 mm LAT with holes	132°	80	69	43	39,65	24
01.22.431	Proximal Body Ø 24 mm L 80 mm LAT with holes	132°	90	79	43	39,65	24
01.22.432	Proximal Body Ø 24 mm L 90 mm LAT with holes	132°	100	89	43	39,65	24

[II] A locking screw is always packed together with the proximal body

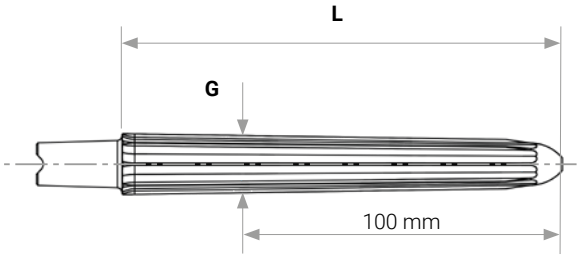
PROXIMAL BODY WITH HOLES[II]



REFERENCE	DESCRIPTION	CCD ANGLE	A (mm)	B SHOULDER LENGTH (mm)	C NECK OFFSET (mm)	D NECK LENGTH (mm)	Ø E (mm)
01.22.441	Proximal Body Ø 28 mm L 40 mm STD with holes	132°	50	39	37	35,4	28
01.22.442	Proximal Body Ø 28 mm L 50 mm STD with holes	132°	60	49	37	35,4	28
01.22.443	Proximal Body Ø 28 mm L 60 mm STD with holes	132°	70	59	37	35,4	28
01.22.444	Proximal Body Ø 28 mm L 70 mm STD with holes	132°	80	69	37	35,4	28
01.22.445	Proximal Body Ø 28 mm L 80 mm STD with holes	132°	90	79	37	35,4	28
01.22.446	Proximal Body Ø 28 mm L 90 mm STD with holes	132°	100	89	37	35,4	28
01.22.447	Proximal Body Ø 28 mm L 40 mm LAT with holes	132°	50	39	43	39,65	28
01.22.448	Proximal Body Ø 28 mm L 50 mm LAT with holes	132°	60	49	43	39,65	28
01.22.449	Proximal Body Ø 28 mm L 60 mm LAT with holes	132°	70	59	43	39,65	28
01.22.450	Proximal Body Ø 28 mm L 70 mm LAT with holes	132°	80	69	43	39,65	28
01.22.451	Proximal Body Ø 28 mm L 80 mm LAT with holes	132°	90	79	43	39,65	28
01.22.452	Proximal Body Ø 28 mm L 90 mm LAT with holes	132°	100	89	43	39,65	28
01.22.461	Proximal Body Ø 32 mm L 40 mm STD with holes	132°	50	39	37	35,4	32
01.22.462	Proximal Body Ø 32 mm L 50 mm STD with holes	132°	60	49	37	35,4	32
01.22.463	Proximal Body Ø 32 mm L 60 mm STD with holes	132°	70	59	37	35,4	32
01.22.464	Proximal Body Ø 32 mm L 70 mm STD with holes	132°	80	69	37	35,4	32
01.22.465	Proximal Body Ø 32 mm L 80 mm STD with holes	132°	90	79	37	35,4	32
01.22.466	Proximal Body Ø 32 mm L 90 mm STD with holes	132°	100	89	37	35,4	32
01.22.467	Proximal Body Ø 32 mm L 40 mm LAT with holes	132°	50	39	43	39,65	32
01.22.468	Proximal Body Ø 32 mm L 50 mm LAT with holes	132°	60	49	43	39,65	32
01.22.469	Proximal Body Ø 32 mm L 60 mm LAT with holes	132°	70	59	43	39,65	32
01.22.470	Proximal Body Ø 32 mm L 70 mm LAT with holes	132°	80	69	43	39,65	32
01.22.471	Proximal Body Ø 32 mm L 80 mm LAT with holes	132°	90	79	43	39,65	32
01.22.472	Proximal Body Ø 32 mm L 90 mm LAT with holes	132°	100	89	43	39,65	32

[II] A locking screw is always packed together with the proximal body

DISTAL STEM

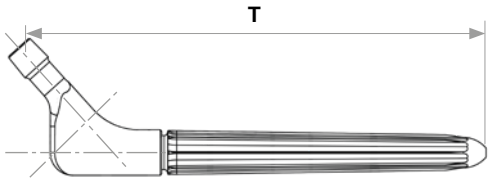


REF.	DESCRIPTION	L (mm)	G (mm)
01.22.101	Distal Stem Ø 12 mm L 140 mm	140	12
01.22.102	Distal Stem Ø 13 mm L 140 mm	140	13
01.22.103	Distal Stem Ø 14 mm L 140 mm	140	14
01.22.104	Distal Stem Ø 15 mm L 140 mm	140	15
01.22.105	Distal Stem Ø 16 mm L 140 mm	140	16
01.22.106	Distal Stem Ø 17 mm L 140 mm	140	17
01.22.107	Distal Stem Ø 18 mm L 140 mm	140	18
01.22.108	Distal Stem Ø 19 mm L 140 mm	140	19
01.22.109	Distal Stem Ø 20 mm L 140 mm	140	20
01.22.110	Distal Stem Ø 21 mm L 140 mm	140	21
01.22.111	Distal Stem Ø 22 mm L 140 mm	140	22
01.22.112[I]	Distal Stem Ø 23 mm L 140 mm	140	23
01.22.113[I]	Distal Stem Ø 24 mm L 140 mm	140	24
01.22.114[I]	Distal Stem Ø 25 mm L 140 mm	140	25
01.22.115[I]	Distal Stem Ø 26 mm L 140 mm	140	26
01.22.116[I]	Distal Stem Ø 27 mm L 140 mm	140	27
01.22.117[I]	Distal Stem Ø 28 mm L 140 mm	140	28
01.22.131	Distal Stem Ø 12 mm L 180 mm	180	12
01.22.132	Distal Stem Ø 13 mm L 180 mm	180	13
01.22.133	Distal Stem Ø 14 mm L 180 mm	180	14
01.22.134	Distal Stem Ø 15 mm L 180 mm	180	15
01.22.135	Distal Stem Ø 16 mm L 180 mm	180	16
01.22.136	Distal Stem Ø 17 mm L 180 mm	180	17
01.22.137	Distal Stem Ø 18 mm L 180 mm	180	18
01.22.138	Distal Stem Ø 19 mm L 180 mm	180	19
01.22.139	Distal Stem Ø 20 mm L 180 mm	180	20
01.22.140	Distal Stem Ø 21 mm L 180 mm	180	21
01.22.141	Distal Stem Ø 22 mm L 180 mm	180	22
01.22.142[I]	Distal Stem Ø 23 mm L 180 mm	180	23
01.22.143[I]	Distal Stem Ø 24 mm L 180 mm	180	24
01.22.144[I]	Distal Stem Ø 25 mm L 180 mm	180	25
01.22.145[I]	Distal Stem Ø 26 mm L 180 mm	180	26
01.22.146[I]	Distal Stem Ø 27 mm L 180 mm	180	27
01.22.147[I]	Distal Stem Ø 28 mm L 180 mm	180	28

[I] On demand

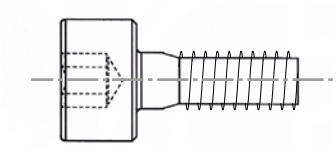
REF.	DESCRIPTION	L (mm)	G (mm)
01.22.161	Distal Stem Ø 12 mm L 220 mm	220	12
01.22.162	Distal Stem Ø 13 mm L 220 mm	220	13
01.22.163	Distal Stem Ø 14 mm L 220 mm	220	14
01.22.164	Distal Stem Ø 15 mm L 220 mm	220	15
01.22.165	Distal Stem Ø 16 mm L 220 mm	220	16
01.22.166	Distal Stem Ø 17 mm L 220 mm	220	17
01.22.167	Distal Stem Ø 18 mm L 220 mm	220	18
01.22.168	Distal Stem Ø 19 mm L 220 mm	220	19
01.22.169	Distal Stem Ø 20 mm L 220 mm	220	20
01.22.170	Distal Stem Ø 21 mm L 220 mm	220	21
01.22.171	Distal Stem Ø 22 mm L 220 mm	220	22
01.22.172[I]	Distal Stem Ø 23 mm L 220 mm	220	23
01.22.173[I]	Distal Stem Ø 24 mm L 220 mm	220	24
01.22.174[I]	Distal Stem Ø 25 mm L 220 mm	220	25
01.22.175[I]	Distal Stem Ø 26 mm L 220 mm	220	26
01.22.176[I]	Distal Stem Ø 27 mm L 220 mm	220	27
01.22.177[I]	Distal Stem Ø 28 mm L 220 mm	220	28

FINAL IMPLANT



	T (mm)		
PROXIMAL BODY SIZE	L 140 mm	L 180 mm	L 220 mm
40 STD	192,6	232,6	272,6
50 STD	202,6	242,6	282,6
60 STD	212,6	252,6	292,6
70 STD	222,6	262,6	302,6
80 STD	232,6	272,6	312,6
90 STD	242,6	282,6	322,6
40 LAT	192,6	232,6	272,6
50 LAT	202,6	242,6	282,6
60 LAT	212,6	252,6	292,6
70 LAT	222,6	262,6	302,6
80 LAT	232,6	272,6	312,6
90 LAT	242,6	282,6	322,6

LOCKING SCREW



REFERENCE	DESCRIPTION
01.22.201	Locking screw

NOTE: The locking screw is always packed together with the proximal body

FEMORAL HEADS





DIAMETER	SIZE	STAINLESS STEEL	CoCr	CeramTec BIOLOX delta	CeramTec BIOLOX Option [II]	Mectacer BIOLOX delta
Ø 22 mm	S	01.25.130 [I]	01.25.124 [I]	-	-	-
Ø 22 mm	M	25055.2203 [I]	01.25.123 [I]	-	-	-
Ø 28 mm	S	25055.2801	01.25.011	38.49.7175.445.00	38.49.7176.935.81	01.29.201
Ø 28 mm	M	25055.2803	01.25.012	38.49.7175.455.00	38.49.7176.935.82	01.29.202
Ø 28 mm	L	25055.2805	01.25.013	38.49.7175.465.00	38.49.7176.935.85	01.29.203
Ø 28 mm	XL	25055.2807	01.25.014	-	38.49.7176.935.84	-
Ø 28 mm	XXL	25055.2810 [I]	01.25.015 [I]	-	-	-
Ø 32 mm	S	25055.3201	01.25.021	38.49.7175.665.00	38.49.7176.945.81	01.29.204
Ø 32 mm	M	25055.3203	01.25.022	38.49.7175.675.00	38.49.7176.945.82	01.29.205
Ø 32 mm	L	25055.3205	01.25.023	38.49.7175.685.00	38.49.7176.945.85	01.29.206
Ø 32 mm	XL	25055.3207	01.25.024	38.49.7181.345.00	38.49.7176.945.84	01.29.207
Ø 32 mm	XXL	25055.3210 [I]	01.25.025 [I]	-	-	-
Ø 36 mm	S	-	01.25.030	38.49.7179.275.00	38.49.7176.965.81	01.29.208
Ø 36 mm	M	-	01.25.031	38.49.7179.285.00	38.49.7176.965.82	01.29.209
Ø 36 mm	L	-	01.25.032	38.49.7179.295.00	38.49.7176.965.85	01.29.210
Ø 36 mm	XL	-	01.25.033	38.49.7175.925.00	38.49.7176.965.84	01.29.211
Ø 36 mm	XXL	-	01.25.034 [I]	-	-	-
Ø 40 mm	S	-	-	38.49.7179.885.00 [I]	38.49.7179.815.81 [I]	01.29.212
Ø 40 mm	M	-	-	38.49.7179.895.00 [I]	38.49.7179.815.82 [I]	01.29.213
Ø 40 mm	L	-	-	38.49.7179.905.00 [I]	38.49.7179.815.85 [I]	01.29.214
Ø 40 mm	XL	-	-	38.49.7179.915.00 [I]	38.49.7179.815.84 [I]	01.29.215

[I] On demand

[II] Specific for revision cases

MECTACER BIOLOX OPTION SYSTEM [II]

HEAD DIAMETER (mm)	REFERENCE
Ø 28	01.29.230H
Ø 32	01.29.231H
Ø 36	01.29.232H
Ø 40	01.29.233H

SLEEVE SIZE	REFERENCE
S	01.29.240A
M	01.29.241A
L	01.29.242A
XL	01.29.243A

[II] Specific for revision cases

NOTES

Part numbers subject to change.

NOTE FOR STERILISATION

The instrumentation is not sterile upon delivery. It must be cleaned before use and sterilised in an autoclave in accordance with the regulations of the country, EU directives where applicable and following the instructions for use of the autoclave manufacturer. For detailed instructions please refer to the document "Recommendations for cleaning decontamination and sterilisation of Medacta International orthopaedic devices" available at www.medacta.com.

REDEFINING BETTER
IN ORTHOPAEDICS
AND SPINE SURGERY

MEDACTA.COM

Medacta
International

Medacta International SA
Strada Regina, 34 - 6874 Castel San Pietro - Switzerland
Phone +41 91 696 60 60 - Fax +41 91 696 60 66
info@medacta.ch

Find your local dealer at: medacta.com/locations

All trademarks are property of their respective owners and are registered at least in Switzerland.
This document is not intended for the US market.
Please verify approval of the devices described in this document with your local Medacta representative.

M-Vizion®
Surgical Technique

ref: 99.66.12
rev. 07

Last update: December 2023
CE 0476