VA LCP® MEDIAL COLUMN FUSION PLATES 3.5

Instruments and Implants approved by the AO Foundation.
This publication is not intended for distribution in the USA.

SURGICAL TECHNIQUE
This description alone does not provide sufficient background for direct use of the instrument set. Instruction by a surgeon experienced in handling these instruments is highly recommended.

**Processing, Reprocessing, Care and Maintenance**

For general guidelines, function control and dismantling of multi-part instruments, as well as processing guidelines for implants, please contact your local sales representative or refer to: http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance

For general information about reprocessing, care and maintenance of Synthes reusable devices, instrument trays and cases, as well as processing of Synthes non-sterile implants, please consult the Important Information leaflet (SE_023827) or refer to: http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance
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</tbody>
</table>
In 1958, the AO formulated four basic principles, which have become the guidelines for internal fixation\textsuperscript{1, 2}.

\begin{itemize}
  \item **Anatomic reduction**
  
  Fracture reduction and fixation to restore anatomical relationships.

  \item **Early, active mobilization**
  
  Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.

  \item **Stable fixation**
  
  Fracture fixation providing absolute or relative stability, as required by the patient, the injury, and the personality of the fracture.

  \item **Preservation of blood supply**
  
  Preservation of the blood supply to soft tissues and bone by gentle reduction techniques and careful handling.
\end{itemize}


VA LCP Medial Column Fusion Plates 3.5 mm

Indications
The DePuy Synthes VA LCP Medial Column Fusion Plates 3.5 are indicated for deformities, severe arthritis, and arthrosis of the medial column consisting of the first metatarsal, medial cuneiform, navicular and talus.

Contraindications
No specific contraindications.
VA LCP Medial Column Fusion Plates 3.5 are designed for fusion applications, specifically Charcot foot or severe arthritis. Plates are designed to stabilize the medial column and restore the arch.

Plates are for medial, medial with talus extension, and plantar applications.

Plates provide ability to independently compress each joint using compression forceps, 2.8 mm compression wires, and rod.
- Compression slots provide the ability to achieve 4–6 mm of compression through the plate

Variable Angle Locking Screws are designed to sit flush within the plate holes* to reduce the likelihood of soft-tissue irritation.

VA LCP Medial Column Fusion Plate 3.5, 78 mm
- Designed to span the navicular, medial cuneiform, and first metatarsal
- Designed for arthrodesis of the first naviculocuneiform and tarsometatarsal joints

* Variable Angle Locking Screws sit flush within the plate holes when inserted at nominal angle.
VA LCP Medial Column Fusion Plate 3.5, 95 mm, Talus Extension
- Designed to span the talus, navicular, medial cuneiform, and first metatarsal
- Designed for arthrodesis of the talonavicular, first naviculocuneiform and tarsometatarsal joints

VA LCP Medial Column Fusion Plantar Plate 3.5, 78 mm
- Designed to span the navicular, medial cuneiform, and first metatarsal
- Designed for arthrodesis of the first naviculocuneiform and tarsometatarsal
- Plantar application for increased biomechanical strength, allowing the plate to be applied on the tension side of the medial column*

* References:
Anatomic, precontoured plates, with ability to contour the plate shaft further depending on the deformity and patient anatomy.

1.6 mm Kirschner wires holes in all plates for preliminary plate placement.

**Variable Angle Locking Technology**
Offers a variety of options for fixation within the medial column, including:
- Ability to adapt screw trajectory to patient anatomy
- Ability to angulate screws toward specific fragments or areas of cortical bone

**3.5 mm Variable Angle Locking Screw holes** accept 3.5 mm Variable Angle Locking screws, 3.5 mm Low-Profile Cortex screws, and 3.5 mm Cortex screws. 3.5 mm Locking screws can be inserted at nominal angle

**Elongated screw holes** accept 3.5 mm Low-profile Cortex, or 3.5 mm Cortex screws
Compression Forceps
- Maintain tactile compression during screw insertion using the speed lock mechanism
- Can be used within the plate through the compression slots or elongated screw hole in the shaft of the plate

Compression Wires
- 2.8 mm diameter, 200 mm overall length
- Thread lengths from 10 mm to 60 mm in 5 mm increments
- Allow the plate to be drawn to the bone facilitating preliminary plate fixation
- Cobalt chromium alloy material that is stiffer than conventional stainless steel

3.5 mm Compression/Distraction rod for VA Locking Screw Hole
- Threads into Variable Angle plate holes
- Use with compression forceps
- Stardrive® recess in head for insertion into plate and final tightening using torque limiter (2.5 Nm)
### Instruments

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03.127.002</td>
<td>VA Double Drill Guide 3.5, for Drill Bits Ø 2.8 mm</td>
</tr>
<tr>
<td>310.288</td>
<td>Drill Bit Ø 2.8 mm, length 165 mm, for AO/ASIF Quick Coupling</td>
</tr>
<tr>
<td>or 03.127.004</td>
<td>VA Drill Guide 3.5, for Drill Bits Ø 2.8 mm, long, with spherical head</td>
</tr>
<tr>
<td>03.113.024</td>
<td>Drill Bit Ø 2.8 mm with Stop, calibrated, length 250/225 mm, for Quick Coupling</td>
</tr>
</tbody>
</table>

To insert the Variable Angle Locking screw off the nominal axis, insert the cone-shaped side of drill guide in the desired variable angle locking screw hole in the plate.

The funnel of the drill guide allows a drilling angle within a 30° cone.

When drilling off-axis, the drill guide should remain in place and the drill bit may be aimed in any direction within the cone.

- Verify the drill bit angle and depth under radiographic imaging to ensure the desired angle has been achieved.
- If necessary, drill at a different angle and verify again under imaging.

**Precautions:**

- Avoid excessive re-drilling, especially in poor bone quality.
- Instruments and screws may have sharp edges or moving joints that may pinch or tear user's glove or skin.
- Handle devices with care and dispose worn bone cutting instruments in an approved sharps container.
**Optional Technique**

The 2.8 mm Variable Angle Spherical Drill Guide can be used to drill for a 3.5 mm Variable Angle Locking Screw.

Gently press the spherical tip of the VA drill guide into the variable angle locking hole to ensure the lip of the drill guide stops on the edge of the variable angle locking hole to prevent drilling beyond 15 degrees.

Toggle the drill guide to the desired angulation and drill.

**Note:** The screw hole depth can be measured off the 2.8 mm Calibrated Drill Bit, 250 mm (03.113.024) when using 2.8 mm Spherical Drill Guide (03.127.004). To do so, drill to the desired depth and verify that the plastic stop sits on the drill guide. Remove the drill bit and read the indicated drill depth below the plastic stop.
Drill for Variable Angle Locking screws:
Coaxial (Fixed Angle)

<table>
<thead>
<tr>
<th>Instruments</th>
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</thead>
<tbody>
<tr>
<td>03.127.002</td>
</tr>
<tr>
<td>310.284</td>
</tr>
</tbody>
</table>

Optional

| 03.127.001  | VA Fixed Angle Drill Guide 3.5, for Drill Bits Ø 2.8 mm |

To insert VA locking screws into the plate in line with the predefined screw trajectory insert the coaxial funnel of the VA double drill guide into the desired screw hole in the plate.

Drill to the desired depth.

Verify the drill bit depth under radiographic imaging.
1
Select Correct Screw Length

<table>
<thead>
<tr>
<th>Instruments</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03.118.007 Depth Gauge, percutaneous</td>
<td></td>
</tr>
<tr>
<td>03.118.009 Adapter for Screws ø 3.5 mm, for Depth Gauge 03.118.007</td>
<td></td>
</tr>
</tbody>
</table>

Use the depth gauge to measure for correct screw length.

**Precaution:** When measuring for 3.5 mm and 4.0 mm screws, the adapter must be attached to the depth gauge.
2

Insert Variable Angle Locking Screws

**Instruments**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03.118.111</td>
<td>Silicone Handle with AO/ASIF Quick Coupling</td>
</tr>
<tr>
<td>314.116</td>
<td>Screwdriver Shaft Stardrive 3.5, T15, self-holding, for AO/ASIF Quick Coupling</td>
</tr>
</tbody>
</table>

Insert the correct length variable angle locking screw.

The Variable Angle Locking screws can be inserted manually or with power. For manual insertion, use the Stardrive Screwdriver Shaft and handle with quick coupling. Initial insertion of Variable Angle Locking screws may be done using power equipment. Do not lock the screws with power tools.

Confirm screw position and length prior to final tightening. Final tightening must be done manually with the torque limiter.

**Precaution:**

- Do not engage the screw head with the plate hole while inserting under power. Screw engagement and final locking must be done manually with the torque limiter.
- Do not use the torque limiting handle for screw removal.
3
Lock Variable Angle screws

Instruments

<table>
<thead>
<tr>
<th>Instrument Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>03.127.016</td>
<td>Handle with Torque Limiting Function, 2.5 Nm</td>
</tr>
<tr>
<td>314.116</td>
<td>Screwdriver Shaft Stardrive 3.5, T15, self-holding, for AO/ASIF Quick Coupling</td>
</tr>
</tbody>
</table>

Use the torque limiter for final tightening of Variable Angle Locking screws.

The use of the torque limiter is mandatory when engaging the screws into variable angle locking holes to ensure the appropriate amount of torque is applied. Confirm screw position and length prior to final tightening.

**Precaution:** Do not lock the screws to the plate under power. Screw engagement and final tightening must be done manually with the torque limiter or handle:

- 2.5 Nm torque limiting handle for 3.5 mm
- Do not use the torque limiters for screw removal
Required set(s):

**Plates, Stainless steel**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.211.251</td>
<td>VA LCP Medial Column Plate 3.5 (Stainless Steel), in Modular Tray, Vario Case System</td>
</tr>
</tbody>
</table>

**Screws, Stainless steel**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>01.211.259</td>
<td>Screw Rack Module (metal) for VA Locking Screws 3.5 and Cortex Screws 3.5 (Stainless Steel)</td>
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<tr>
<td>or</td>
<td>01.211.255</td>
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**Instruments**

<table>
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<th>Code</th>
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<tr>
<td>01.118.227</td>
<td>Instruments for VA Locking and Cortex Screw Insertion 3.5, in Modular Tray, Vario Case System</td>
</tr>
<tr>
<td>01.211.253</td>
<td>Compression and Distraction Forceps, large, in Modular Tray, Vario Case System</td>
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</table>

Optional set(s)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>01.111.475</td>
<td>Chisel Set for Orthopaedic Foot Instruments, with Lid, with Contents</td>
</tr>
<tr>
<td>01.111.476</td>
<td>Compression/Distraction Device Set for Orthopaedic Foot Instruments, with Lid, with Contents</td>
</tr>
<tr>
<td>182.669</td>
<td>Special Instrument Set for Hindfoot</td>
</tr>
<tr>
<td>329.300</td>
<td>Bending Press, length 400 mm</td>
</tr>
<tr>
<td>01.122.019</td>
<td>Small Fragment Bending Instruments, in Modular Tray, Vario Case System</td>
</tr>
</tbody>
</table>
1

Position patient

Place the patient in the supine position. Place a bump under the contralateral hip to facilitate visualization of the medial side.

2

Approach

Make a medial utility incision 1 cm below the medial malleolus, from the navicular down to the first metatarsal.

When inserting the VA LCP Medial Column Fusion Plan- tar Plate 3.5, make an incision at the junction of the plantar and medial skin, right above the abductor and inferior border of the first metatarsal.

Warning: Avoid the tibialis anterior tendon.
3

Prepare joint surfaces

Expose and prepare all the joints for fusion. Anatomically align the tarsometatarsal axis. If necessary, correct deformities with bone resection or bone graft. The corrections should be performed to the estimated final shape of the foot.

Kirschner wires used to temporarily hold joints in place must be placed to avoid interference with final plate placement.
<table>
<thead>
<tr>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.111.475 Chisel Set for Orthopaedic Foot Instruments, with Lid, with Contents</td>
</tr>
<tr>
<td>01.111.476 Compression/Distraction Device Set for Orthopaedic Foot Instruments, with Lid, with Contents</td>
</tr>
</tbody>
</table>

The chisel set can be used to help prepare the bone for fusion. The Compression/distraction device can be used to open the joints for joint preparation.

**Note:** Reference the Orthopaedic Foot Instrument Technique Guide for the Joint Preparation technique steps and product assembly.
4

Contour plate (optional)

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<th>Instruments</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>329.040</td>
<td>Bending Iron for Plates 2.4 to 3.5, length 145 mm</td>
</tr>
<tr>
<td>329.050</td>
<td>Bending Iron for Plates 2.4 to 3.5, length 145 mm</td>
</tr>
<tr>
<td>329.300</td>
<td>Bending Press, length 400 mm</td>
</tr>
</tbody>
</table>

The VA LCP Medial Column Fusion Plates 3.5 may require additional contouring in the shaft depending on patient anatomy and the desired correction of the medial arch. The plate should only be bent in between the Variable Angle Locking screw holes.

Precaution: Reverse bending or use of the incorrect instrumentation for bending may weaken the plate and lead to premature plate failure (e.g. breakage). Do not bend the plate beyond what is required to match the anatomy.
5

Position plate

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>292.160</td>
<td>Kirschner Wire Ø 1.6 mm with trocar tip, length 150 mm, Stainless Steel</td>
</tr>
</tbody>
</table>

Remove any bony prominences if needed. Provisionally fix the plate to the bone with 1.6 mm Kirschner wires. Confirm proper plate positioning prior to screw insertion.

Warning: Protect the anterior tibial tendon during plate application to maintain its integrity, as it inserts on the plantar medial aspect of the foot.

The VA LCP Medial Column Fusion Plate 3.5, 78 mm is designed to span the navicular, cuneiform, and first metatarsal.
The VA LCP Medial Column Fusion Plate 3.5, 95 mm is designed to span the talus, navicular, medial cuneiform, and first metatarsal.

The VA LCP Medial Column Fusion Plantar Plate 3.5, 78 mm is designed to span the navicular, medial cuneiform, and first metatarsal.

**Note:** Osteophytes may need to be removed to facilitate placement of the plantar plate.
6

Insert screws and independently compress each joint

To insert 3.5 mm Variable Angle Locking screws, follow the technique as described on page 8–13.

If using the compression technique to independently compress each joint, follow the technique specified on the following pages for each plate:

A) Medial Column Fusion Plate, 78 mm page 22–26
B) Medial Column Fusion Plate, Talus Extension, 95 mm page 27–30
C) Medial Column Fusion Plantar Plate, 78 mm page 31–34

Instruments for Compression Technique

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>03.118.015–03.118.040</td>
<td>Compression Wire Ø 2.8 mm, length 200 mm, thread lengths 15–40 mm</td>
</tr>
<tr>
<td>03.118.002</td>
<td>Compression Forceps, large, with Speed Lock</td>
</tr>
<tr>
<td>03.118.005</td>
<td>Compression/Distraction Rod for VA Locking Hole Ø 3.5 mm</td>
</tr>
<tr>
<td>03.127.016</td>
<td>Handle with Torque Limiting Function, 2.5 Nm</td>
</tr>
<tr>
<td>314.116</td>
<td>Screwdriver Shaft Stardrive 3.5, T15, self-holding, for AO/ASIF Quick Coupling</td>
</tr>
<tr>
<td>03.118.111</td>
<td>Silicone Handle with AO/ASIF Quick Coupling</td>
</tr>
</tbody>
</table>
To compress the naviculocuneiform joint:

a 1) Insert a 3.5 mm VA Locking screw into the navicular portion of the plate in the lateral hole following the Variable Angle Locking screw insertion technique on page 8–13.
a 2)
Insert a compression rod into the navicular portion of
the plate in the medial or center hole.

**Precaution:** The compression rod needs to be
inserted and locked using the 2.5 Nm torque limiter.

Using a wire driver, insert a 2.8 mm compression wire
into the compression slot in the cuneiform portion of the
plate. Insert the wire as far distal as anatomy permits to
maximize compression.

**Precaution:**
- Bicortical fixation is recommended.
- To minimize stripping of the wire threads, wire
insertion should proceed slowly when the
spherical stop nears the plate. Control the
insertion for tactile confirmation of compression
between the wire, the plate, and the bone.

Remove Kirschner wires before compressing.

a 3)
Compress the joint using the compression forceps.
Thread the speed nut counterclockwise so the forceps
are in their open position. Place the compression forceps
into position, with the tips around the spheres of the
compression wire and rod.

Compress by squeezing the handles.

**Precaution:** Do not exert excessive force as this may
cause the compression wire to strip out of the bone.

To lock the device, thread the speed nut clockwise while
maintaining pressure on the forceps.

**Note:** The total amount of compression that can be
achieved through the compression slot is 6 mm.
a 4) Insert a 3.5 mm VA Locking screw in the proximal hole of the cuneiform portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the compression forceps and 2.8 mm compression wire. Leave the compression rod in the current position.
To compress the first tarsometatarsal joint:

a 5) Insert a 2.8 mm compression wire into the elongated screw hole in the metatarsal portion of the plate. Insert the wire as far distal as anatomy permits to maximize compression. Reference a2 for specific technique.

Remove Kirschner wires before compressing.

a 6) Compress the joint using the compression forceps. Reference a3 for specific technique.

Note: The elongated screw hole can achieve up to 4 mm of compression.
7) Insert a 3.5 mm VA Locking screw in either open hole in the metatarsal portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the 2.8 mm compression wire and the compression rod.

**Precaution:** The compression rod should be removed using the Stardrive Screwdriver Shaft and Handle with quick coupling. Do not remove the rod with the torque limiter.

Insert additional screws into the open holes of the plate as needed.

**Precaution:** It is recommended to fill three 3.5 mm Variable Angle Locking screw holes in the navicular portion of the plate, and two screw holes per additional segment.*

* Testing on file at DePuy Synthes.
To compress the naviculocuneiform joint:

b 1) Insert a 3.5 mm VA Locking screw into the navicular portion of the plate in the lateral hole following the Variable Angle Locking screw insertion technique on page 8–13.

b 2) Insert a compression rod in the open hole in the navicular portion of the plate.

**Precaution:** The compression rod needs to be inserted and locked using the 2.5 Nm torque limiter.

Using a wire driver, insert a 2.8 mm compression wire into the compression slot in the cuneiform portion of the plate. Reference a2 for specific technique.

**Precaution:** Bicortical fixation is recommended.

Remove Kirschner wires before compressing.
b 3) Compress the joint using the compression forceps. Reference a3 for specific technique.

Note: The total amount of compression that can be achieved through the compression slot is 6 mm.

b 4) Insert a 3.5 mm VA Locking screw in the most proximal hole within cuneiform portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the compression forceps and compression wire. Leave the compression rod in the current position.
To compress the first tarsometatarsal joint:

b 5) Insert a 2.8 mm compression wire into the elongated screw hole within the metatarsal portion of the plate. Reference a2 for specific technique.

Remove Kirschner wires before compressing.

b 6) Compress the joint using compression forceps.

Reference a3 for specific technique.

Note: The elongated screw hole can achieve up to 4 mm of compression.

b 7) Insert a 3.5 mm VA Locking screw into an open hole within the metatarsal portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the compression forceps and the 2.8 mm compression wire. Leave the compression rod in the current position.
To compress the talonavicular joint:

b 8) Insert a 2.8 mm compression wire into the compression slot within the talus portion of the plate. Reference a2 for specific technique.

Remove Kirschner wires before compressing.

b 9) Compress the joint using compression forceps.

Reference a3 for specific technique.

Note: The total amount of compression that can be achieved through the compression slot is 4 mm.

b 10) Insert a 3.5 mm VA Locking screw into the lateral screw hole within the talus portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the compression forceps, 2.8 mm compression wire, and compression rod.

Insert additional screws into the open holes of the plate as needed following the VA Locking screw insertion technique on page 8–13.

Precaution: It is recommended to fill two 3.5 mm VA Locking screw holes per segment.*

* Testing on file at DePuy Synthes.
C
VA LCP Medial Column Fusion Plantar Plate 3.5, 78 mm

To compress the naviculocuneiform joint:

c 1) Insert a 3.5 mm VA Locking screw into the lateral hole in the navicular portion of plate following the Variable Angle Locking screw insertion technique on page 8–13.

c 2) Insert a compression rod into the open hole in the navicular portion of the plate.

Precaution: The compression rod needs to be inserted and locked using the 2.5 Nm torque limiter.

Using a wire driver, insert a 2.8 mm compression wire into the compression slot within the cuneiform portion of the plate. Reference a2 for specific technique.

Precaution: Bicortical fixation is recommended.

Remove Kirschner wires before compressing.
c 3) Compress the joint using the compression forceps. Reference a3 for specific technique.

**Note:** The total amount of compression that can be achieved through the compression slot is 6 mm.

c 4) Insert a 3.5 mm VA Locking screw in the proximal hole within the cuneiform portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the compression forceps and the compression wire. Leave the compression rod in the current position.
To compress the first tarsometatarsal joint:

c 5) Insert a 2.8 mm compression wire into the elongated screw hole within the metatarsal portion of the plate. Reference a2 for specific technique.

Remove Kirschner wires before compressing.

c 6) Compress the joint using the compression forceps.

Reference a3 for specific technique.

Note: The elongated screw hole can achieve up to 4 mm of compression.
c 7) Insert a 3.5 mm VA Locking screw in the metatarsal portion of the plate following the Variable Angle Locking screw insertion technique on page 8–13.

Remove the compression wire and compression rod.

**Precaution:** The compression rod should be removed using the Stardrive Screwdriver Shaft and Handle with quick coupling. Do not remove the rod with the torque limiter.

Insert additional screws into the open holes of the plate as needed.

**Precaution:** It is recommended to fill two Variable Angle Locking screw holes per segment.*

* Testing on file at DePuy Synthes.
Lock Variable Angle Locking Screws

Lock the 3.5 mm Variable Angle Locking screws manually with the 2.5 Nm torque limiting handle, as described in the Variable Angle Locking Technique on page 8–13.

Confirm fixation and positioning of the plate and screws under flurosscopic imaging.
Implant removal

Instruments

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>314.116</td>
<td>Screwdriver Shaft Stardrive 3.5, T15, self-holding, for AO/ASIF Quick Coupling</td>
</tr>
<tr>
<td>03.118.111</td>
<td>Silicone Handle with AO/ASIF Quick Coupling</td>
</tr>
</tbody>
</table>

If implant removal is desired, unlock all screws manually from the plate using the proper screwdriver shaft and handle. Then remove the screws completely from the bone.

**Precaution:** Do not use the torque limiters for screw removal.
### VA LCP Medial Column Fusion Plate* 3.5

<table>
<thead>
<tr>
<th>Stainless Steel</th>
<th>Right/Left</th>
<th>Length (mm)</th>
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</thead>
<tbody>
<tr>
<td>02.211.416</td>
<td>Right</td>
<td>78</td>
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<tr>
<td>02.211.417</td>
<td>Left</td>
<td>78</td>
</tr>
</tbody>
</table>

* Available non sterile or sterile packed.
Add "S" to catalog number to order sterile product.

### VA LCP Medial Column Fusion Plate 3.5*

<table>
<thead>
<tr>
<th>Stainless Steel</th>
<th>Right/Left</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>02.211.420</td>
<td>Right</td>
<td>95</td>
</tr>
<tr>
<td>02.211.421</td>
<td>Left</td>
<td>95</td>
</tr>
</tbody>
</table>

### VA LCP Medial Column Fusion Plate 3.5, Plantar*

<table>
<thead>
<tr>
<th>Stainless Steel</th>
<th>Right/Left</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>02.211.418</td>
<td>Right</td>
<td>78</td>
</tr>
<tr>
<td>02.211.419</td>
<td>Left</td>
<td>78</td>
</tr>
</tbody>
</table>

* Available non sterile or sterile packed.
Add "S" to catalog number to order sterile product.
The Variable Angle LCP Medial Column Fusion plates 3.5 accept the following screws:

**3.5 mm Variable Angle Locking Screws**
Threaded, rounded head locks securely into the variable angle locking holes
- Locked screws allow unicortical screw fixation and load transfer to the near cortex
- Used with 2.8 mm drill bit
- T15 Stardrive recess
- Self-tapping
- Color coded for easier identification
- Screws in set: 12 mm–50 mm (02.127.112–02.127.150)
- Additionally available: 10 mm–95 mm (02.127.110–02.127.195)

**3.5 mm Low-profile Cortex Screws**
For use in locking, non-locking, or combi-holes
- Used to provide compression or neutral fixation
- Low-profile head
- Used with 2.5 mm drill bit
- T15 Stardrive recess
- Self-tapping tip
- Screws in set: 12 mm–50 mm (02.206.212–02.206.250)
- Additionally available: 10 mm–110 mm (02.206.210–02.206.310)
**3.5 mm Locking Screws***
Only for axial insertion in the variable angle locking holes
- Threaded, conical head locks securely into the variable angle locking holes
- Used with 2.8 mm drill bit
- T15 Stardrive recess
- Self-tapping tip
- Additionally available: 10 mm–95 mm (212.101–212.131)

**3.5 mm Cortex Screws***
For use in locking, non-locking, or combi holes
- Used to provide compression or neutral fixation
- Used with 2.5 mm drill bit
- Self-tapping tip
- Available with T15 Stardrive or Small Hexagonal Recess
- Additionally available: Stardrive Recess 10 mm–150 mm (02.200.010–02.200.150)
- Hexagonal Recess 10 mm–110 mm (204.810–204.910)

* The screws are available sterile and non-sterile.
### INSTRUMENTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>310.284</td>
<td>LCP Drill Bit Ø 2.8 mm with Stop, length 165 mm, 2-flute, for Quick Coupling</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>310.284</td>
<td>LCP Drill Bit Ø 2.8 mm with Stop, 2-flute, for Quick Coupling</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>310.350</td>
<td>Drill Bit Ø 3.5 mm, length 110/85 mm, 2-flute, for Quick Coupling</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>03.127.002</td>
<td>VA Double Drill Guide 3.5, for Drill Bits Ø 2.8 mm</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>03.127.001</td>
<td>VA Fixed Angle Drill Guide 3.5, for Drill Bits Ø 2.8 mm</td>
<td><img src="image5.png" alt="Image" /></td>
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<tr>
<td>323.360</td>
<td>Universal Drill Guide 3.5</td>
<td><img src="image6.png" alt="Image" /></td>
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<tr>
<td>03.118.007</td>
<td>Depth Gauge, percutaneous</td>
<td><img src="image7.png" alt="Image" /></td>
</tr>
<tr>
<td>Part Number</td>
<td>Description</td>
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<tr>
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<td>------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>03.118.009</td>
<td>Adapter for Screws Ø 3.5 mm, for Depth Gauge 03.118.007</td>
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</tr>
<tr>
<td>314.116</td>
<td>Screwdriver Shaft Stardrive 3.5, T15, self-holding, for AO/ASIF Quick Coupling</td>
<td></td>
</tr>
<tr>
<td>03.127.016</td>
<td>Handle with Torque Limiting Function, 2.5 Nm</td>
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<tr>
<td>03.118.111</td>
<td>Silicone Handle with AO/ASIF Quick Coupling</td>
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</tr>
<tr>
<td>03.118.002</td>
<td>Compression Forceps, large, with Speed Lock</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compression Wires Ø 2.8 mm, length 200 mm, thread length (mm)</td>
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<tr>
<td>03.118.015</td>
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<td>03.118.020</td>
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<td>03.118.025</td>
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<td>03.118.030</td>
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<td>03.118.035</td>
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<td>03.118.040</td>
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<tr>
<td>03.118.005</td>
<td>Compression/Distraction Rod for VA Locking Hole Ø 3.5 mm</td>
<td></td>
</tr>
</tbody>
</table>
Optional

03.113.024 Drill Bit Ø 2.8 mm with Stop, calibrated, length 250/225 mm, for Quick Coupling

03.127.004 VA Drill Guide 3.5, for Drill Bits Ø 2.8 mm, long, with spherical head

03.118.003 Distraction Forceps, large, with Speed Lock

329.040 Bending Irons, length 145 mm for 2.4 to 3.5 plates
329.050 for 2.4 to 3.5 plates
01.211.251 VA LCP Medial Column Plate 3.5 (Stainless Steel), in Modular Tray, Vario Case System

Contents:
- Modular Tray for VA LCP Medial Column Plates 3.5 (68.211.251)
- One plate per size 78 mm, 95 mm and plantar 78 mm, left and right
- Miscellaneous tray

The lid for this tray can be ordered separately (68.001.105)

01.211.253 Compression and Distraction Forceps, large, in Modular Tray, Vario Case System

Contents:
- Modular Tray for Compression and Distraction Forceps, large (68.211.253)
- Compression and Distraction Forceps, large, with Speed Lock
- Two Compression/Distraction Rods for VA Locking Hole Ø 3.5 mm
- Two Compression Wires Ø 2.8 mm, per thread length from 10–60 mm

The lid for this tray can be ordered separately (68.001.104)
01.118.227  Instruments for VA Locking and Cortex Screw Insertion 3.5, in Modular Tray, Vario Case System

Contents:
- Modular tray for VA Locking and cortex screw insertion 3.5 (68.118.007)
- Instruments needed for the insertion of φ 3.5 mm VA locking and cortex screws.

The lid for this tray can be ordered separately (68.001.104).

01.211.259  Screw Rack Module (metal) for VA Locking Screws 3.5 and Cortex Screws 3.5 (Stainless Steel)

Contents:
- VA Locking Screw Stardrive φ 3.5, 10–60 mm
- Cortex Screw Stardrive φ 3.5, 10–50 mm

Optional:
- Cortex Screw φ 4.0, 20–60 mm
**MRI INFORMATION**

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**Torque, Displacement and Image Artifacts according to ASTM F 2213-06, ASTM F 2052-06e1 and ASTM F2119-07**

Non-clinical testing of worst case scenario in a 3 T MRI system did not reveal any relevant torque or displacement of the construct for an experimentally measured local spatial gradient of the magnetic field of 3.69 T/m. The largest image artifact extended approximately 169 mm from the construct when scanned using the Gradient Echo (GE). Testing was conducted on a 3 T MRI system.

**Radio-Frequency-(RF-)induced heating according to ASTM F2182-11a**

Non-clinical electromagnetic and thermal testing of worst case scenario lead to peak temperature rise of 9.5 °C with an average temperature rise of 6.6 °C (1.5 T) and a peak temperature rise of 5.9 °C (3 T) under MRI Conditions using RF Coils (whole body averaged specific absorption rate [SAR] of 2 W/kg for 6 minutes [1.5 T] and for 15 minutes [3 T]).

**Precautions:** The above mentioned test relies on non-clinical testing. The actual temperature rise in the patient will depend on a variety of factors beyond the SAR and time of RF application. Thus, it is recommended to pay particular attention to the following points:

- It is recommended to thoroughly monitor patients undergoing MR scanning for perceived temperature and/or pain sensations.
- Patients with impaired thermoregulation or temperature sensation should be excluded from MR scanning procedures.
- Generally, it is recommended to use a MR system with low field strength in the presence of conductive implants. The employed specific absorption rate (SAR) should be reduced as far as possible.
- Using the ventilation system may further contribute to reduce temperature increase in the body.