

intercus

Technique Guide

TALARLOCK®/PANTALARLOCK®



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Utility model N°: 20 211 106 036.9



Large fragment
for screws \varnothing 5.5 mm / \varnothing 6.5 mm
polyaxial angle-stable plate

TALARLOCK®/PANTALARLOCK®

Material

Titanium

Plates
Screws

Titanium
Ti6Al4V

EN ISO 5832-2
EN ISO 5832-3

Indications

- TALARLOCK® - polyaxial angle-stable upper ankle joint fusion plate from posterolateral
- PANTALARLOCK® - polyaxial angle-stable arthrodesis plate for a combined fusion of the upper ankle and subtalar joint from posterolateral

Plate Features

- » from a surgical perspective, the plate allows for an easy posterolateral approach to the upper ankle joint and subtalar joint without affecting any major anatomical structures
- » both joints can be approached via one incision, no alteration of plantar soft tissue
- » the patient's prone position allows for an optimum control of the axial heel with a possible extension in terms of posterior preparation
- » less impairment of wound-healing in comparison with ventral or dual approach techniques
- » the implant is easy to place
- » excellent compression of arthrodesis space with traction screws, optimum fixation by means of polyaxial angle-stable screws in the tibia, talus and calcaneus
- » reduced x-ray times due to designated screw positioning in the plate



PANTALARLOCK®



TALARLOCK®



Doctor Responsible for the Plate Design

Dr. med. Vásárhelyi, Clinic Linde Biel, Switzerland

Medical Author of the Technique Guide

Dr. med. Vásárhelyi, Clinic Linde Biel, Switzerland

Reference Clinics

Clinic Linde Biel, Switzerland

University of Rostock

Ortopedkliniken Södra Älvsborg Hospital, Borås, Sweden

Martin Luther University of Halle-Wittenberg

Ev. Diakonissenkrankenhaus Leipzig



Patient Positioning

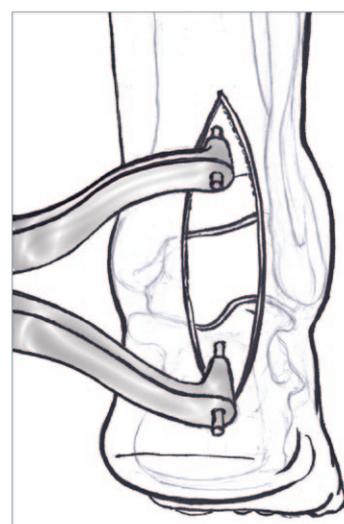
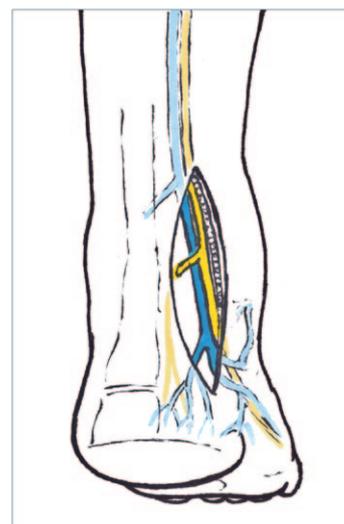
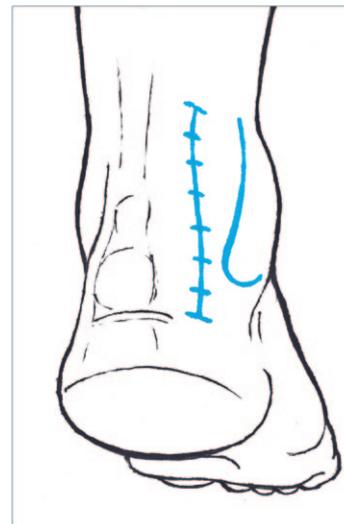
Prone position

Posterolateral Approach

Make a central incision between the posterior edge of the fibular malleolus and the lateral Achilles tendon edge.

Cave: sural nerve and small saphenous vein must be spared. Preparation of subcutis, longitudinal splits of the fascia. Cave: medial protection of the tendon of flexor hallucis longus. Insertion of a large blunt retractor with joint. Removal of cartilage in upper ankle joint together with removal of osteophytes.

Elongation of upper ankle joint and subsequently subtalar with Hintermann spacer. Complete cartilage removal with chisel/Luer/sharp curette/ball reamer. Multiple subchondral drilling with drill Ø 1.5 mm is recommended. Set the correct axis, fill bone defects with autologous/allogeneic cancellous bone.

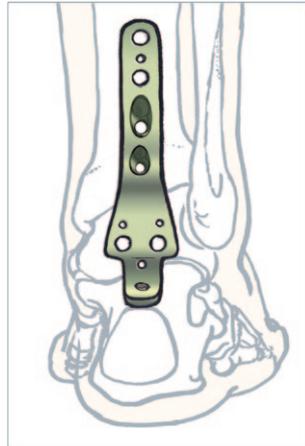




PANTALARLOCK® Plate Position

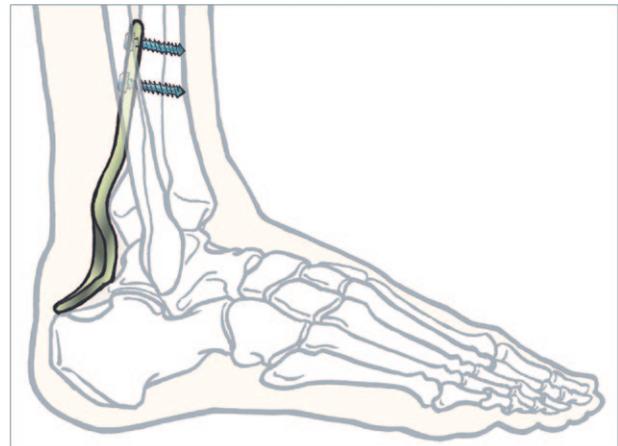
It is possible to fasten the plate to the tibia shaft deploying K-wires Ø 1.8 mm (750.614318).

To ensure an optimum placement, the use of an image intensifier is recommended.



The screw-to-plate locking is carried out tightening one screw after the other, starting from the tibia down to the calcaneus.

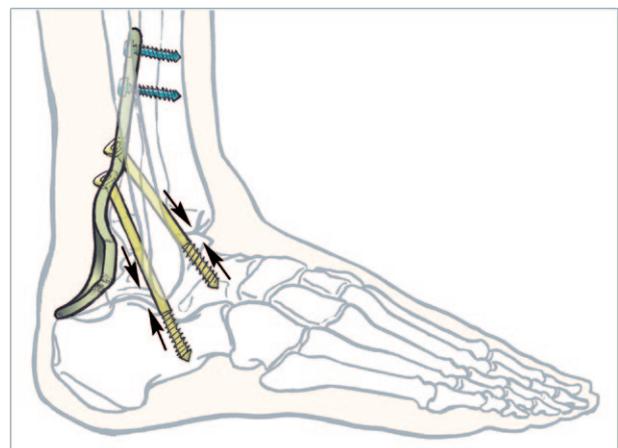
1. To fasten the plate, insert the two tibial angle-stable cortical screws Ø 5.5 mm. Drill the guide hole with an angle-stable drill sleeve (750.104510) using a drill Ø 4.0 mm (750.111126). Measure for screw length with measuring device (750.105013).
2. Whilst under image intensifier, place the traction screws (cancellous bone) Ø 6.5 mm from lateral angle. Drill the guide hole using a drill Ø 3,2 mm (750.111105). Measure for screw length with measuring device (750.105013). Drill out the through hole by approximately two thirds of the screw length using drill Ø 4.5 mm (750.111106).



Position of talar screw tip: in the center of talar neck

Position of calcaneal screw tip: centrally in the anterior process.

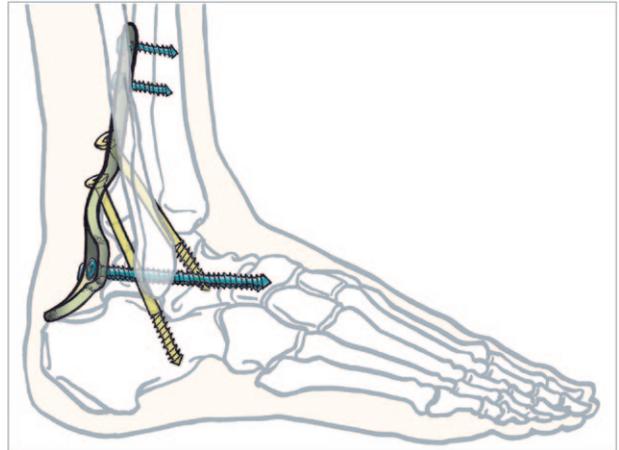
Compression of arthrodesis spaces.



PANTALARLOCK® Plate Position

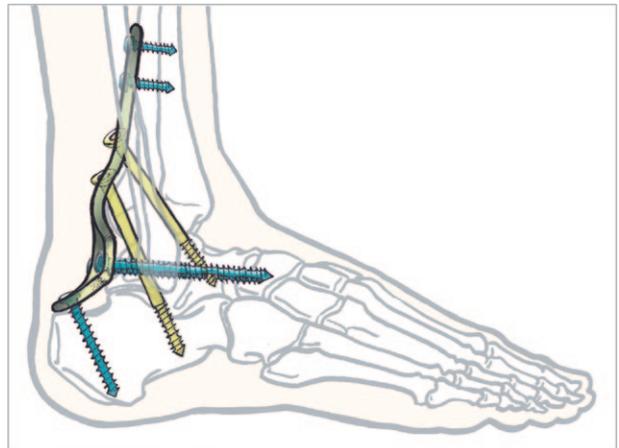
3. Insert the two talar angle-stable cortical screws \varnothing 5.5 mm. Continuous monitoring with image intensifier. Drill the guide hole with angle-stable drill sleeve (750.104510) using a drill \varnothing 4.0 mm (750.111126). Measure for screw length with measuring device (750.105013).

Position: anterior neck of the talus, centrally in os naviculare when talonavicular arthrodesis is desired (after cartilage removal).



4. Insert calcaneal angle-stable cancellous bone screws \varnothing 5.5 mm. Drill the core hole with angle-stable drill sleeve (750.104511) using a drill \varnothing 3.2 mm (750.111105). Measure for screw length with measuring device (750.105013).

Position: near plantar cortex.



Correct final outcome.





Example Cases



preoperative



postoperative

PANTALARLOCK®-Plate

Example Cases



Results 10 weeks after surgery

TALARLOCK®-Plate



S | Angle-stable plate systems

OSG-/USG-Arthrodesenplatten System
Arthrodesis-plate system of the upper and lower ankle joint

OSG-/USG-Arthrodesenplatten System „TALARLOCK®/PANTALARLOCK®“
polyaxial winkelstabil, einläufig, Titan, UNIBOX
Arthrodesis-plate system of the upper and lower ankle joint „TALARLOCK®/PANTALARLOCK®“
polyaxial angle-stable, mono-track, Titanium, UNIBOX



Bezeichnung

Name

Artikel-Nr. Titan
Code N° Titanium

TALARLOCK®/PANTALARLOCK® System

TALARLOCK®/PANTALARLOCK® system

System 11.975

Im Set enthaltene Implantate und Instrumente
The set contains the following implants and instruments

Implantate Bezeichnung	Implants Name	Artikel-Nr. Titan Code N° Titanium	Anzahl Quantity
TALARLOCK®-Platte, polyaxial winkelstabil	TALARLOCK®-plate, polyaxial angle-stable	750.597634	1
PANTALARLOCK®-Platte, polyaxial winkelstabil	PANTALARLOCK®-plate, polyaxial angle-stable	750.597734	1
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 30 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 30 mm	750.356030	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 32 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 32 mm	750.356032	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 34 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 34 mm	750.356034	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 36 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 36 mm	750.356036	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 38 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 38 mm	750.356038	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 40 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 40 mm	750.356040	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 42 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 42 mm	750.356042	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 44 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 44 mm	750.356044	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 46 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 46 mm	750.356046	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 48 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 48 mm	750.356048	2
Spongiosaschraube Ø 5,5 mm, konisches Kopfgewinde, L 50 mm	Cancellous screw Ø 5.5 mm, conical bead thread, L 50 mm	750.356050	2
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 26 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 26 mm	750.355026	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 28 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 28 mm	750.355028	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 30 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 30 mm	750.355030	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 32 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 32 mm	750.355032	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 34 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 34 mm	750.355034	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 36 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 36 mm	750.355036	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 38 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 38 mm	750.355038	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 40 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 40 mm	750.355040	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 42 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 42 mm	750.355042	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 44 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 44 mm	750.355044	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 46 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 46 mm	750.355046	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 48 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 48 mm	750.355048	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 50 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 50 mm	750.355050	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 55 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 55 mm	750.355055	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 60 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 60 mm	750.355060	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 65 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 65 mm	750.355065	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 70 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 70 mm	750.355070	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 75 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 75 mm	750.355075	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 80 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 80 mm	750.355080	4
Kortikalisschraube Ø 5,5 mm, konisches Kopfgewinde, L 85 mm	Cortical screw Ø 5.5 mm, conical bead thread, L 85 mm	750.355085	4

**OSG-/USG-Arthrodesepplatten System „TALARLOCK®/PANTALARLOCK®“
polyaxial winkelstabil, einläufig, Titan, UNIBOX**

*Arthrodesis-plate system of the upper and lower ankle joint „TALARLOCK®/PANTALARLOCK®“
polyaxial angle-stable, mono-track, Titanium, UNIBOX*



Bezeichnung

Name

Artikel-Nr. Titan
Code N° Titanium

TALARLOCK®/PANTALARLOCK® System

TALARLOCK®/PANTALARLOCK® system

System 11.975

Im Set enthaltene Implantate und Instrumente

The set contains the following implants and instruments

Implantate Bezeichnung	Implants Name	Artikel-Nr. Titan Code N° Titanium	Anzahl Quantity
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 45 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 45 mm	750.387045	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 50 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 50 mm	750.387050	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 55 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 55 mm	750.387055	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 60 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 60 mm	750.387060	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 65 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 65 mm	750.387065	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 70 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 70 mm	750.387070	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 75 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 75 mm	750.387075	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 80 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 80 mm	750.387080	2
Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, L 85 mm	Cancellous screw Ø 6.5 mm, 32 mm thread, L 85 mm	750.387085	2

Implantate Bezeichnung	Implants Name	Artikel-Nr. Code N°	Anzahl Quantity
Kirschnerdraht mit Trokarspitze, Ende rund, Ø 1,8 mm, L 150 mm	Kirschner wire with trocar point, round end, Ø 1.8 mm, L 150 mm	750.614318	5
Spiralbohrer, zweilippig, Ø 3,2 mm, L 195 mm, Schnellkupplung	Drill-bit, double spiral, Ø 3.2 mm, L 195 mm, quick coupling	750.111105	1
Spiralbohrer, zweilippig, Ø 4,5 mm, L 145 mm, Schnellkupplung	Drill-bit, double spiral, Ø 4.5 mm, L 145 mm, quick coupling	750.111106	1
Spiralbohrer, zweilippig, Ø 4,0 mm, L 195 mm, Schnellkupplung	Drill-bit, double spiral, Ø 4.0 mm, L 195 mm, quick coupling	750.111126	1
Bohrbüchse, ID 3,3 mm, L 70 mm, für winkelstabile Systeme	Drill guide, ID 3.3 mm, L 70 mm, for angle-stable systems	750.104511	1
Bohrbüchse, ID 4,1 mm, L 70 mm, für winkelstabile Systeme	Drill guide, ID 4.1 mm, L 70 mm, for angle-stable systems	750.104510	1
Selbsthaltende Schraubenzange	Self-holding screw-forceps	750.106001	1
Sechskantschraubendreher, für Schrauben Ø 4,5 mm - Ø 6,5 mm	Hexagonal screw driver, for screws Ø 4.5 mm - Ø 6.5 mm	750.102002	1
Schraubennmessgerät, für Schrauben Ø 4,5 mm - Ø 6,5 mm, lang	Gauge for screws with conical bead thread Ø 4.5 mm - Ø 6.5 mm, long	750.105013	1
Lagerungssieb, für TALARLOCK®/PANTALARLOCK® System, UNIBOX	Storage container, for TALARLOCK®/PANTALARLOCK®, UNIBOX	750.108036	1



S | Angle-stable plate systems

OSG-/USG-Arthrodesepplatten System - Implantate
Arthrodesis-plate system of the upper and lower ankle joint - implants

TALARLOCK®-Platte, polyaxial winkelstabil, Großfragment, Titan
 zur posterolateralen Versorgung von Arthrodesen des OSG
TALARLOCK®-plate, polyaxial angle-stable, large fragment, Titanium
 for posterolateral treatment of arthrodesis of the upper ankle joint

Lochzahl <i>N° of holes</i> Kopf / Schaft <i>Head / shank</i>	Plattenlänge <i>Plate length</i> mm	Artikel-Nr. Titan <i>Code N° Titanium</i>
2/4	95	750.597634

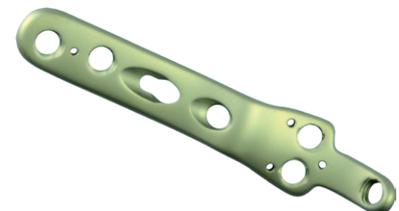
4,0 mm Plattenstärke - *Plate thickness*
 25,0 mm Plattenbreite / Kopf - *Plate width / head*
 19,0 mm Plattenbreite / Schaft - *Plate width / shank*



PANTALARLOCK®-Platte, polyaxial winkelstabil, Großfragment, Titan
 Arthrodesenplatte zur kombinierten Fusion des OSG und Subtalargelenks
 von posterolateral
PANTALARLOCK®-plate, polyaxial angle-stable, large fragment, Titanium
 arthrodesis plate for a combined fusion of the upper ankle and subtalar joint
 from posterolateral

Lochzahl <i>N° of holes</i> Kopf / Schaft <i>Head / shank</i>	Plattenlänge <i>Plate length</i> mm	Artikel-Nr. Titan <i>Code N° Titanium</i>
3/4	114	750.597734

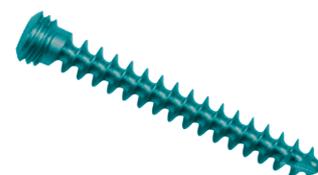
4,0 mm Plattenstärke - *Plate thickness*
 25,0 mm Plattenbreite / Kopf - *Plate width / head*
 19,0 mm Plattenbreite / Schaft - *Plate width / shank*



Spongiosaschraube Ø 5,5 mm, mit einläufigem Gewinde,
 konisches Kopfgewinde, selbstschneidend
Cancellous screw Ø 5,5 mm, with mono-track thread,
conical head thread, self-tapping

Schraubenlänge <i>Screw length</i> mm	Artikel-Nr. Titan <i>Code N° Titanium</i>
30	750.356030
32	750.356032
34	750.356034
36	750.356036
38	750.356038
40	750.356040
42	750.356042
44	750.356044
45	750.356045
46	750.356046
48	750.356048
50	750.356050

5,5 mm Schraubendurchmesser - *Screw diameter*
 2,5 mm Kerndurchmesser - *Core diameter*
 8,0 mm Kopfdurchmesser - *Head diameter*
 3,5 mm Innensechskant - *Hexagon socket*
 3,2 mm Bohrer für Gewindeloch - *Drill-bit for thread hole*



Kortikalisschraube Ø 5,5 mm, mit einläufigem Gewinde, konisches Kopfgewinde, selbstschneidend
Cortical screw Ø 5.5 mm, with mono-track thread, conical head thread, self-tapping

Schraubenlänge <i>Screw length</i>	Artikel-Nr. Titan <i>Code N° Titanium</i>
mm	
26	750.355026
28	750.355028
30	750.355030
32	750.355032
34	750.355034
36	750.355036
38	750.355038
40	750.355040
42	750.355042
44	750.355044
46	750.355046
48	750.355048
50	750.355050
52	750.355052
54	750.355054
56	750.355056
58	750.355058
60	750.355060
65	750.355065
70	750.355070
75	750.355075
80	750.355080
85	750.355085

- 5,5 mm Schraubendurchmesser - *Screw diameter*
- 4,0 mm Kerndurchmesser - *Core diameter*
- 8,0 mm Kopfdurchmesser - *Head diameter*
- 3,5 mm Innensechskant - *Hexagon socket*
- 4,0 mm Bohrer für Gewindeloch - *Drill-bit for thread hole*



Spongiaschraube Ø 6,5 mm, 32 mm Gewinde, selbstschneidend
Cancellous screw Ø 6.5 mm, 32 mm thread, self-tapping

Schraubenlänge <i>Screw length</i>	Artikel-Nr. Titan <i>Code N° Titanium</i>
mm	
45	750.387045
50	750.387050
55	750.387055
60	750.387060
65	750.387065
70	750.387070
75	750.387075
80	750.387080
85	750.387085

- 6,5 mm Schraubendurchmesser - *Screw diameter*
- 3,0 mm Kerndurchmesser - *Core diameter*
- 4,5 mm Schaftdurchmesser - *Shank diameter*
- 8,0 mm Kopfdurchmesser - *Head diameter*
- 3,5 mm Innensechskant - *Hexagon socket*
- 3,2 mm Bohrer für Gewindeloch - *Drill-bit for thread hole*
- 4,5 mm Bohrer für Durchgangsloch - *Drill-bit for cannulation*





S Angle-stable plate systems

OSG-/USG-Arthrodesenplatten System - Instrumente

Arthrodesis-plate system of the upper and lower ankle joint - instruments

Kirschnerdraht mit Trokarspitze, Ende rund Kirschner wire with trocar point, round end

Durchmesser Diameter	Länge Length	Artikel-Nr. Stahl Code N° Stainless steel	Artikel-Nr. Titan Code N° Titanium
mm	mm		
1,8	150	750.614318	750.714318



Spiralbohrer, zweilippig, Schnellkupplung Drill-bit, double spiral, quick coupling

Durchmesser Diameter	Gesamtlänge Total length	Nutzbare Länge Usable length	Artikel-Nr. Code N°
mm	mm	mm	
3,2	195	170	750.111105
4,0	195	170	750.111126
4,5	145	120	750.111106



Bohrbüchse, für winkelstabile Plattensysteme, mit einläufigem Gewinde Drill guide, for angle-stable plate-systems, with mono-track thread

AD ED	ID ID	Länge Length	Artikel-Nr. Code N°
mm	mm	mm	
8,5	3,3	70	750.104511
8,5	4,1	70	750.104510



Selbsthaltende Schraubenpinzette Self-holding screw-forceps

Artikel-Nr.
Code N°

750.106001



Sechskantschraubendreher, für Schrauben Ø 4,5 mm, Ø 5,5 mm, Ø 6,5 mm, mit Griff Hexagonal screw driver, for screws Ø 4.5 mm, Ø 5.5 mm, Ø 6.5 mm, with handle

Artikel-Nr.
Code N°

750.102002



Schraubenmessgerät,
für Schrauben mit konischem Kopfgewinde Ø 4,5 mm, Ø 5,5 mm, lang
*Gauge for screws,
with conical bead thread Ø 4.5 mm, Ø 5.5 mm, long*

Artikel-Nr.
Code N°

750.105013



Lagerungssieb, für OSG-/USG-Arthrodesen System
„TALARLOCK®/PANTALARLOCK®“, polyaxial winkelstabil, einläufig,
komplett, Titan, UNIBOX, System 11.975
*Storage container, for arthrodesis of the upper and lower ankle joint system
„TALARLOCK®/PANTALARLOCK®“ polyaxial locking,
complete, Titanium, UNIBOX, System 11.975*

Artikel-Nr.
Code N°

750.108036

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