



NEWCLIP-TECHNICS

INNOVATION MEANS MOTION



## ALIANS DISTAL RADIUS

POLYAXIAL LOCKING SYSTEM  
*DUALTEC SYSTEM® II*

- ▶ Precontoured implant
- ▶ Pre-angled screws and polyaxiality of 20°
- ▶ Ø2.8 mm single diameter

# ALIANS DISTAL RADIUS

**Indications:** The implants of the Alians Radius range are intended for the fixation of extra- and intra-articular fractures as well as distal radius osteotomies in adults.

**Contraindications:**

- Serious vascular deterioration, bone devitalization.
- Pregnancy.
- Acute or chronic local or systemic infections.
- Lack of musculo-cutaneous cover, severe vascular deficiency affecting the concerned area.
- Insufficient bone quality preventing a good fixation of the implants into the bone;
- Muscular deficit, neurological deficiency or behavioral disorders, which could submit the implant to abnormal mechanical strains.
- Allergy to one of the materials used or sensitivity to foreign bodies.
- Serious problems of non-compliance, mental or neurological disorders, failure to follow post-operative care recommendations.
- Unstable physical and/or mental condition.

## ANATOMICAL PLATE WITH OPTIMIZED FIXATION HOLES

### EPIPHYSEAL FIXATION Ø2.8 mm locking screws

**Distal holes:**

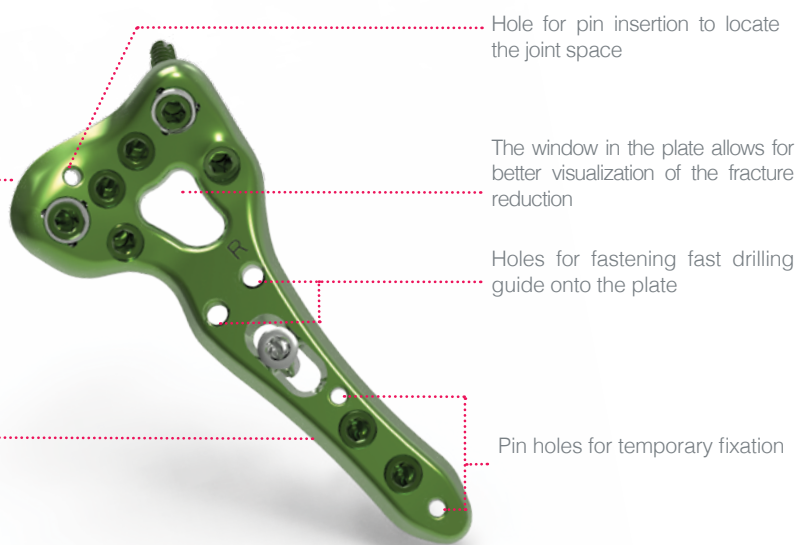
- 2 monoaxial locking holes in the middle of the plate.
- 2 polyaxial locking holes (+/- 10°) on each side of the plate (1 on the radial styloid side, 1 on the ulnar side).

**Proximal holes:**

- 2 monoaxial locking holes.

### DIAPHYSEAL FIXATION Ø2.8 mm screws

- 1 oblong hole to facilitate the positioning of the plate  
*Cortical screw.*
- 2 monoaxial locking holes  
*Locking screws.*

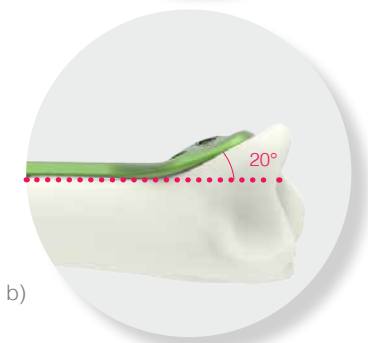
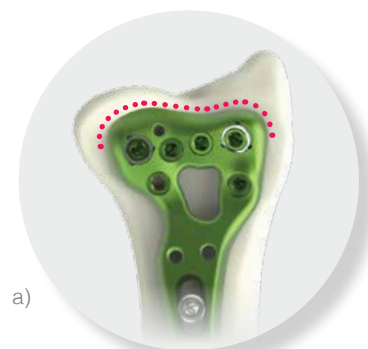


## A PRECONTOURED IMPLANT

- The distal edge of the plate runs alongside the *watershed line* (a.).
- The round edge of the low profile plate designed for minimal irritation of soft tissues and flexor tendons.
- The design of this implant is the result of a proprietary state-of-the-art mapping technology to establish the maximum congruence between the plate and the bone.

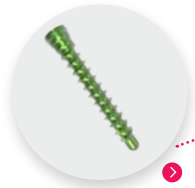
The plate offers:

- metaphyseal / diaphyseal curvature,
- different medial and lateral radii of curvature for optimal *volar tilt* (20°) (b.).



# TECHNICAL FEATURES

## Ø2.8 MM SINGLE DIAMETER FIXATION SCREWS



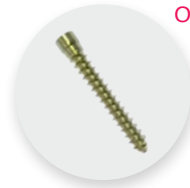
Locking screw  
Lengths: 10-28 mm  
Ref. SDT2.8Lxx



The blunt-tipped screw is designed for minimal irritation of soft tissues and extensor tendons.



Standard cortical screw  
Lengths: 10-18 mm  
Ref. CT2.8Lxx



Non locking screw  
**for monoaxial holes only**  
Lengths: 10-28 mm  
Ref. QDT2.8Lxx

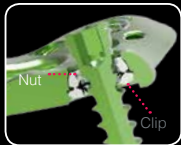
### OPTIONAL SCREWS



Lag screw  
**for polyaxial holes\* only**  
Lengths: 16-28 mm  
Ref. QT2.8Lxx

\* Only used in intraoperative situation for reduction before the insertion of a locking screw (SDT2.8Lxx)

## ANGULAR RANGE: $\pm 10^\circ$ POLYAXIAL LOCKING RANGE



a. Before locking.



b. Locked screw into the plate : clip and nut lag effect.

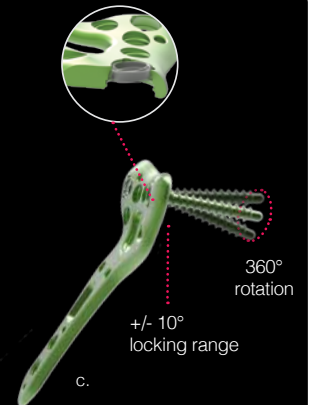
### → DTS2® TECHNOLOGY PRINCIPLE

The lag effect generated between the clip and the nut enables the locking. (See a. and b.) Thanks to the DTS2® technology, the locking offers the following properties: polyaxiality and reversibility.

### → ANGULAR RANGE: $\pm 10^\circ$ POLYAXIAL LOCKING FIXATION

The DTS2® technology allows the screw to lock into the plate while permitting an angulation of the screw.

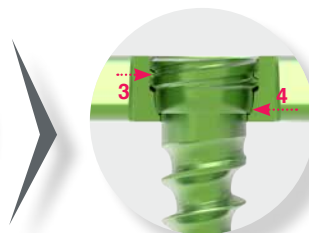
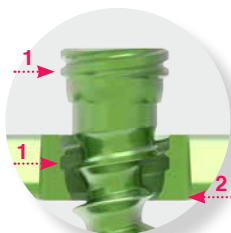
Newclip Technics plates combine both polyaxial and locking technologies to create a fixed-angle construct particularly useful in case of poor bone quality and/or multi-fragmentary fractures (c).



## MONOAXIAL LOCKING SYSTEM

### Features

- The threaded sections of the screw head and inside the hole have strictly the **same characteristics** (1):
  - Cylindrical internal thread profile,
  - Cylindrical external thread profile,
- Buttress (2),
- Plate and screw made from the same material: titanium alloy.

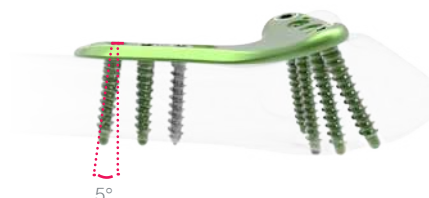


### Results

- **Low profile construct:** The buried screw head is stopped thanks to the buttress (4) ensuring the locking,
- Construct limiting the risk of cold welding,
- Construct allowing a perfect coaptation of both profiles when locking (3).

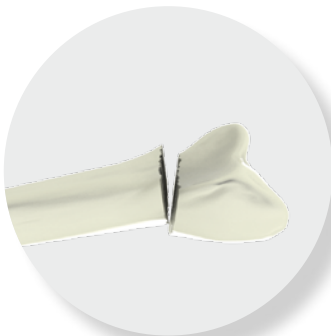
## PRE DETERMINED ANGULATION ON DIAPHYSEAL AREA

The most proximal hole has a pre-angulation of  $5^\circ$  in order to cover a maximum of bone surface, allowing a good plate anchorage.

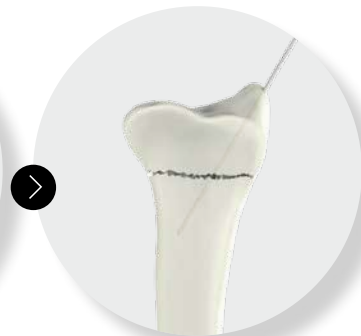


# SURGICAL TECHNIQUE

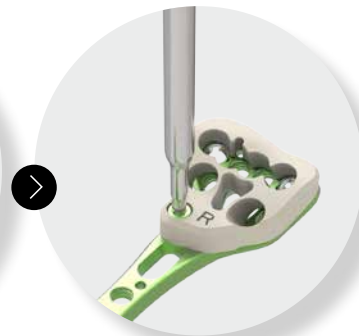
## SIMPLE REDUCTION



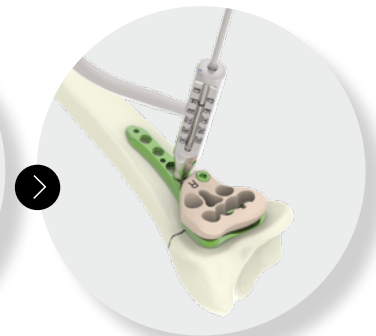
1. Simple fracture.



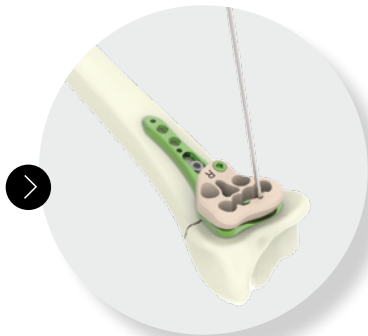
2. Reduction of the fracture. Temporary fixation with pin (33.0214.120).



3. The fast drilling guide is locked onto the plate with the screwdriver (ANC082).



4. Drill (ANC088) using Ø2.0 mm non threaded bent guide gauge (ANC450) and insert a cortical screw (CT2.8Lxx) into the oblong hole. The drilling depth can be directly read on the guide gauge.



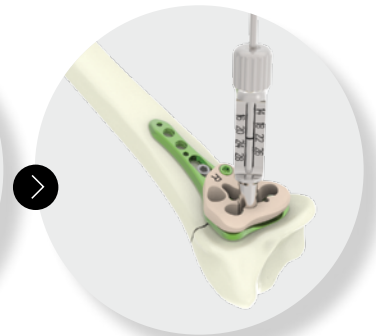
5. The joint space is assessed using a Ø1.4 mm pin (33.0214.120).



a)



b)



7. Drill (ANC088) and read the drilling depth directly on the non threaded guide gauge (ANC046) for epiphyseal holes.



8. Epiphyseal locking screws (SDT2.8Lxx) are inserted through the fast drilling guide using the screwdriver (ANC082).



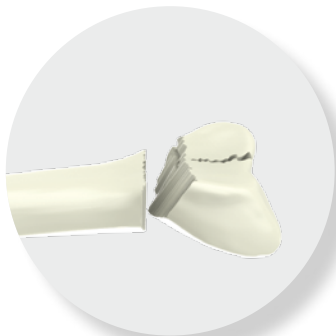
9. To ease the insertion of the Ø2.8 mm locking screws (SDT2.8XX) on the diaphyseal area, widen the drilling made in the first cortex using the countersink (ANC084). Then insert the remaining locking screws (SDT2.8Lxx) using the screwdriver (ANC082).

## FINAL RESULT

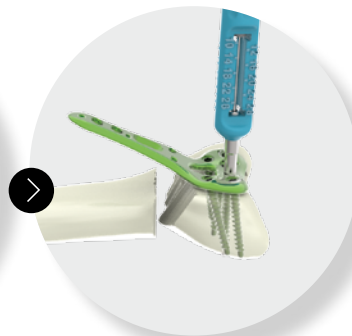


# SURGICAL TECHNIQUE

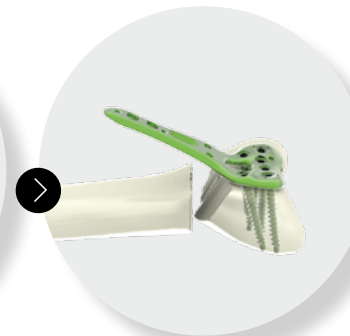
## REDUCTION OF THE FRACTURE USING THE PLATE



1. Complex fracture



2. Lock the threaded guide gauge (ANC558) onto the plate, drill (ANC088), then insert the distal locking screw (SDT2.8Lxx). Repeat for all epiphyseal holes. (See Polyaxial surgical technique).



3. The fracture is reduced using the plate until both anterior cortical lines are in place.



4. Insert and tighten the cortical screw (CT2.8Lxx) into the oblong hole. Complete the fixation by inserting all the locking screws in the remaining diaphyseal holes (SDT2.8Lxx). To ease the insertion of the Ø2.8 mm screws, use the countersink (ANC084).

## POLYAXIAL SURGICAL TECHNIQUE

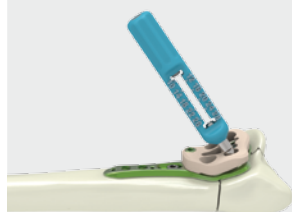
### INSTRUMENTS for monoaxial and/or polyaxial techniques in epiphyseal area

#### FAST DRILLING GUIDE

Pre-angulation of the screws offered by the fast drilling guide for quick, simplified surgical procedure (as defined herein).



Fast drilling guides are also suitable and optional if the polyaxial technique is chosen.

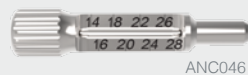


#### GUIDE GAUGES

##### Non threaded guide gauge ANC046

Used in combination with the fast drilling guide for screw insertion:

- into monoaxial locking holes
- into polyaxial locking holes using the fast drilling guide pre-angulation.



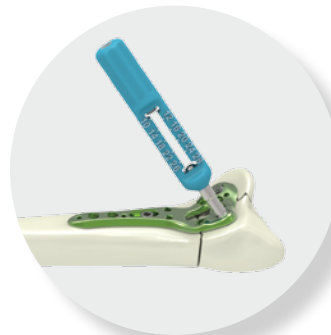
ANC046

##### Threaded guide gauge ANC558

- Suitable for both the polyaxial and the monoaxial techniques
- Allows  $\pm 10^\circ$  locking range with DTS2® holes.

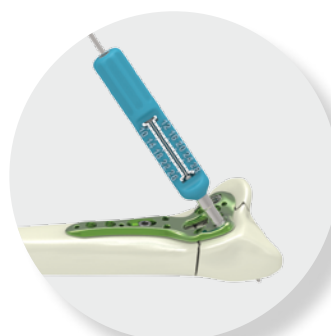


ANC558



#### ➤ Step 1

Screw the threaded guide gauge (ANC558) into DTS2® polyaxial hole. Angulate the locking guide gauge as desired before tightening.



#### ➤ Step 2

Drill (ANC088) and read the depth directly on the threaded guide gauge (ANC558) or insert the length gauge (ANC557) for checking.

*NB: It is possible to check the depth with the length gauge (ANC102).*



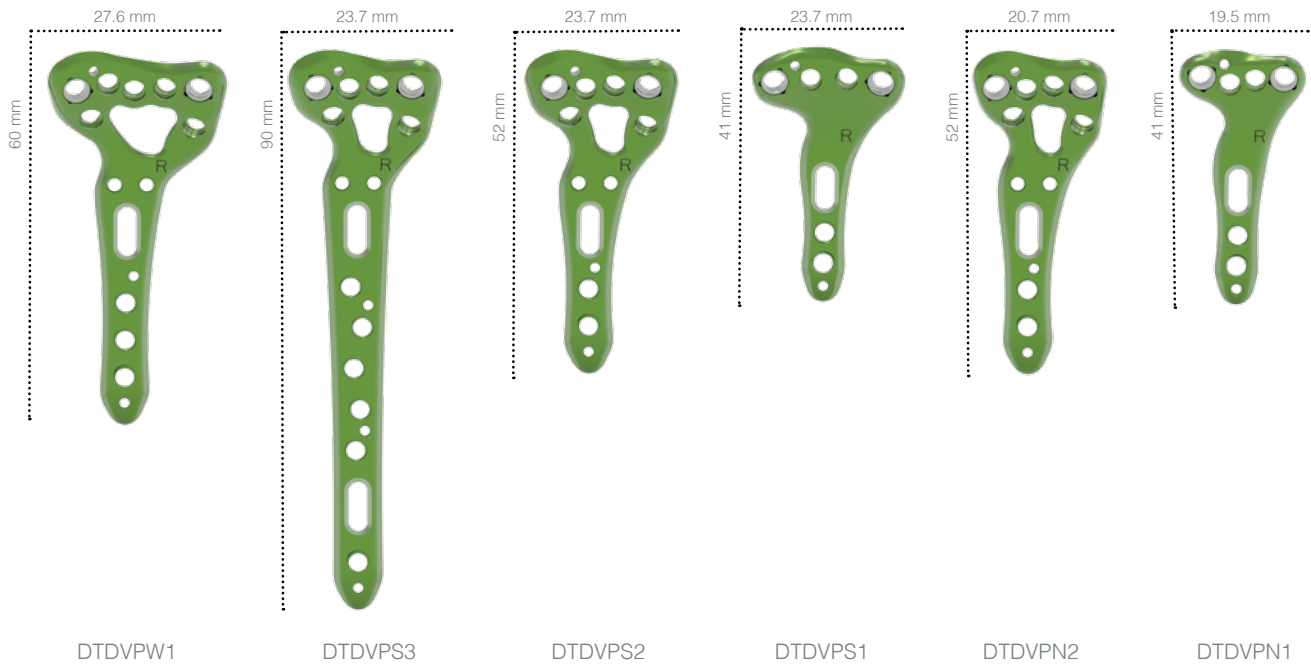
#### ➤ Step 3

Insert the locking screw (SDT2.8Lxx) and lock it using the screwdriver (ANC082).

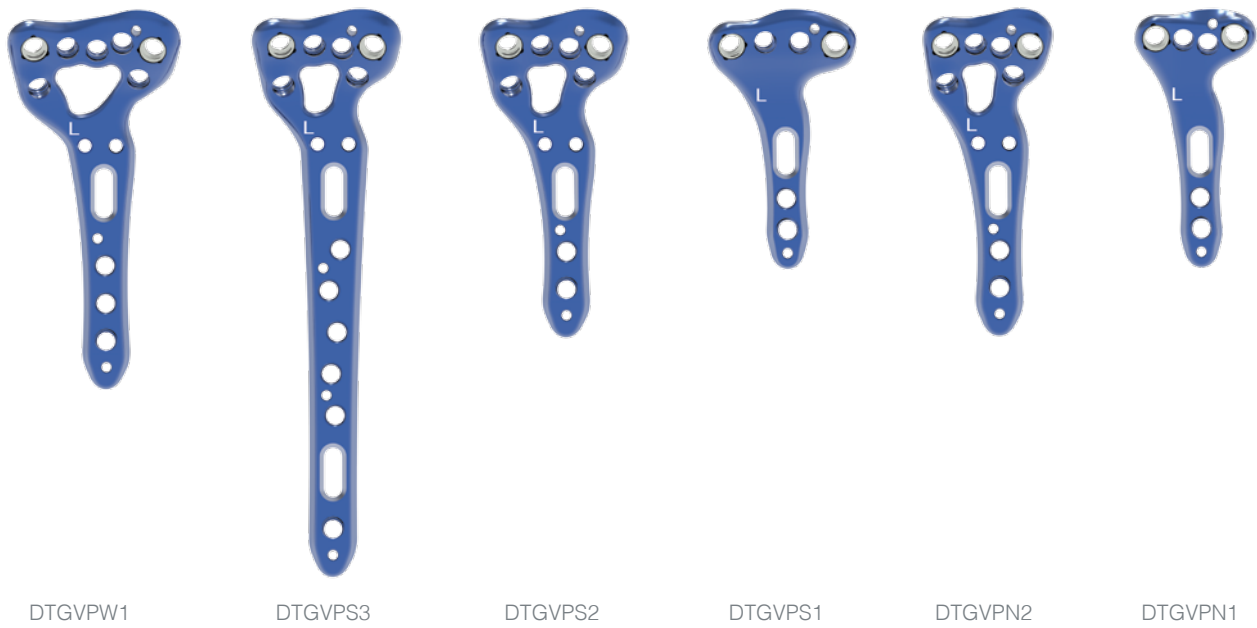


ALIANS DISTAL RADIUS RANGE

→ RIGHT PLATES - GREEN ANODIZED



→ LEFT PLATES - BLUE ANODIZED



# IMPLANTS REFERENCES

## ALIANS DISTAL RADIUS PLATES

Ref.	Description
DTDVPN1	Polyaxial plate for distal radius - Narrow head - Size 1 - Right
DTGVPN1	Polyaxial plate for distal radius - Narrow head - Size 1 - Left
DTDVPN2	Polyaxial plate for distal radius - Narrow head - Size 2 - Right
DTGVPN2	Polyaxial plate for distal radius - Narrow head - Size 2 - Left
DTDVPS1	Polyaxial plate for distal radius - Standard head - Size 1 - Right
DTGVPS1	Polyaxial plate for distal radius - Standard head - Size 1 - Left
DTDVPS2	Polyaxial plate for distal radius - Standard head - Size 2 - Right
DTGVPS2	Polyaxial plate for distal radius - Standard head - Size 2 - Left
DTDVPS3	Polyaxial plate for distal radius - Standard head - Size 3 - Right
DTGVPS3	Polyaxial plate for distal radius - Standard head - Size 3 - Left
DTDVPW1	Polyaxial plate for distal radius - Wide head - Size 1 - Right
DTGVPW1	Polyaxial plate for distal radius - Wide head - Size 1 - Left



### Ø2.8 mm STANDARD CORTICAL SCREWS\*

Ref.	Description
CT2.8L10	Standard cortical screw - Ø2.8 mm - L10 mm
CT2.8L12	Standard cortical screw - Ø2.8 mm - L12 mm
CT2.8L14	Standard cortical screw - Ø2.8 mm - L14 mm
CT2.8L16	Standard cortical screw - Ø2.8 mm - L16 mm
CT2.8L18	Standard cortical screw - Ø2.8 mm - L18 mm

\* Not anodized.  
Sterile screws are pink anodized.



### Ø2.8 mm LOCKING SCREWS\*

Ref.	Description
SDT2.8L10	Locking screw - Ø2.8 mm - L10 mm
SDT2.8L12	Locking screw - Ø2.8 mm - L12 mm
SDT2.8L14	Locking screw - Ø2.8 mm - L14 mm
SDT2.8L16	Locking screw - Ø2.8 mm - L16 mm
SDT2.8L18	Locking screw - Ø2.8 mm - L18 mm
SDT2.8L20	Locking screw - Ø2.8 mm - L20 mm
SDT2.8L22	Locking screw - Ø2.8 mm - L22 mm
SDT2.8L24	Locking screw - Ø2.8 mm - L24 mm
SDT2.8L26	Locking screw - Ø2.8 mm - L26 mm
SDT2.8L28	Locking screw - Ø2.8 mm - L28 mm

\* Green anodized.

## OPTIONAL SCREWS



### Ø2.8 mm NON LOCKING SCREWS\*

Ref.	Description
QDT2.8L10	Non locking screw - Ø2.8 mm - L10 mm
QDT2.8L12	Non locking screw - Ø2.8 mm - L12 mm
QDT2.8L14	Non locking screw - Ø2.8 mm - L14 mm
QDT2.8L16	Non locking screw - Ø2.8 mm - L16 mm
QDT2.8L18	Non locking screw - Ø2.8 mm - L18 mm
QDT2.8L20	Non locking screw - Ø2.8 mm - L20 mm
QDT2.8L22	Non locking screw - Ø2.8 mm - L22 mm
QDT2.8L24	Non locking screw - Ø2.8 mm - L24 mm
QDT2.8L26	Non locking screw - Ø2.8 mm - L26 mm
QDT2.8L28	Non locking screw - Ø2.8 mm - L28 mm

\* Golden anodized.



### Ø2.8 mm LAG SCREWS\* (1)

Ref.	Description
QT2.8L16	Lag screw - Ø2.8 mm - L16 mm
QT2.8L18	Lag screw - Ø2.8 mm - L18 mm
QT2.8L20	Lag screw - Ø2.8 mm - L20 mm
QT2.8L22	Lag screw - Ø2.8 mm - L22 mm
QT2.8L24	Lag screw - Ø2.8 mm - L24 mm
QT2.8L26	Lag screw - Ø2.8 mm - L26 mm
QT2.8L28	Lag screw - Ø2.8 mm - L28 mm

\* Golden anodized.

(1) Only used in intraoperative situation for reduction before the insertion of a locking screw (SDT2.8Lxx).

# INSTRUMENTS REFERENCES

INSTRUMENTS		
Ref.	Description	Qty
ANC046	Ø2.0 mm non threaded guide gauge for Ø2.8 mm screws	1
ANC082	2.0 mm quick coupling hexagonal prehensor screwdriver	2
ANC084	Ø2.8 mm quick coupling countersink	1
ANC088	Ø2.0 mm quick coupling drill bit – L125 mm	2
ANC102	Length gauge for Ø2.8 mm screws	1
ANC103	2.0 mm hexagonal non prehensor screwdriver	1
ANC350	Ø4.5 mm AO quick coupling handle - Size 1	2
ANC450	Ø2.0 mm non threaded bent guide gauge for Ø2.8 mm screws	1
ANC465	Fast drilling guide for DTGVPS2 and DTGVPS3 plates	1
ANC466	Fast drilling guide for DTDVPS2 and DTDVPS3 plates	1
ANC487	Fast drilling guide for DTGVPW1 plate	1
ANC488	Fast drilling guide for DTDVPW1 plate	1
ANC501	Fast drilling guide for DTGVPN2 plate	1
ANC502	Fast drilling guide for DTDVPN2 plate	1
ANC503	150 mm reduction forceps	1
ANC504	150 mm pointed reduction forceps	1
ANC557	Length gauge	1
ANC558	Threaded guide gauge for Ø2.8 mm screws	1
33.0214.120	Pin Ø1.4 L120 mm	3

## REMOVAL KIT

If you have to remove ALIANS DISTAL RADIUS implants, make sure to order the **Newclip Technics removal set** which includes the following instruments:

- ANC082 or ANC103: Screwdriver for Ø2.8 mm screws,
- ANC350: Ø4.5 mm AO quick coupling handle - Size 1.

## → SET DESCRIPTION



TOP  
(ANC492/C)



IMPLANTS TRAY  
(ANC492/I1)



INSTRUMENTS TRAY  
(ANC492/I2)



BASE  
(ANC492/B)



RACK  
(ANC492/R)



## Single use kit

Newclip Technics offers also a single use sterile solution to treat extra and intra-articular fractures as well as distal radius osteotomies : **Initial R™**. **Initial R™** is a single use kit with instrumentation and implants ready to use.

Please contact your NEWCLIP TECHNICS representative if you have questions about the availability of NEWCLIP TECHNICS products in your area.



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