

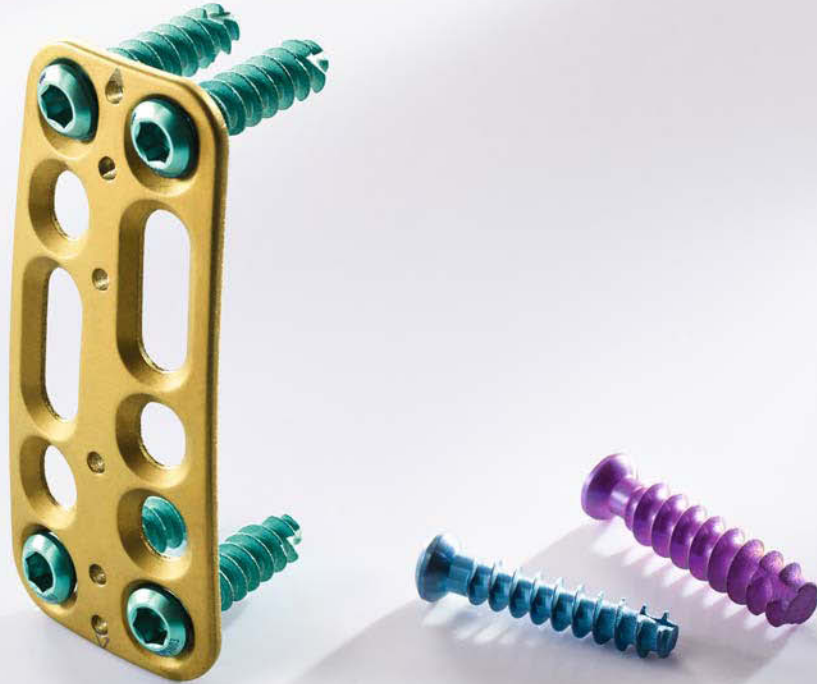
Aesculap® CASPARevolution

Anterior Cervical Plating System



Aesculap Spine

CASPARevolution



The CASPARevolution System is characterized by its semi-rigid plate and screw interface.

- It provides stability and adapts to changes in height due to graft resorption and micromotions.
- The implant construct allows the graft to share the load. This provides enhanced preconditions for bone healing and fusion by keeping the graft loaded and preventing motion.
- Therefore, it reduces the risk of screw breakage and possibility of inferior plate and screw pullout.

CASPARevolution

The clinically proven CASPARevolution design combines the advantages of the semi-rigid plate and screw interface with the very low profile and versatility.

Independent biomechanical studies and clinical results confirm that the special screw design without locking mechanism enables a stable anterior plating.

Solid bony anchoring due to roughened surface, selftapping thread and conical core.^{1,2}

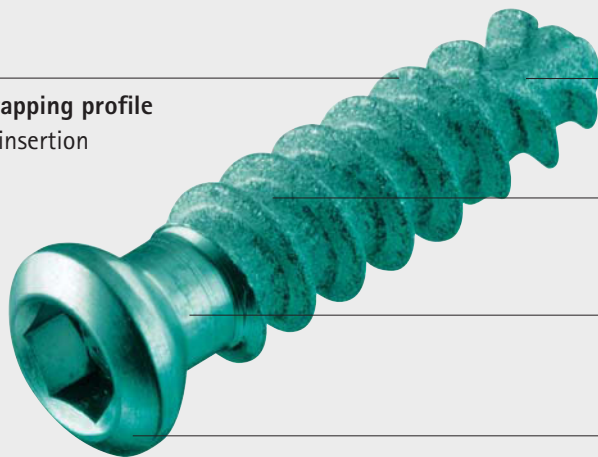
With both unicortical
and bicortical screws,
the CASPARevolution system offers...

- Anchorage of choice.
- Intra-operative freedom regarding the type of screw fixation unicortical or bicortical – or both, dedicated by patients' needs and surgeons' judgement.

¹ Caspar W, Geisler FH, Pitzen T, Johnson TA. Anterior Cervical Plate Stabilization in One- and Two-Level Degenerative Disease: Overtreatment or Benefit?. J of Spinal Disorders. 1998;Vol.11,No.1,1-11.

² Pitzen T, Wilke HJ, Caspar W, Claes L, Steudel WI. Evaluation of a new monocortical screw for anterior cervical fusion and plating by a combined biomechanical and clinical study. European Spine Journal. 1999;8.

selftapping profile
fast insertion



roughened surface
safe fixation

conical core
secure Press-Fit

no thread at 'screw neck'
no 'Back-Out'

small head without locking mechanism
flat profile

Clinical example

pre-operative



post-operative (6 months)



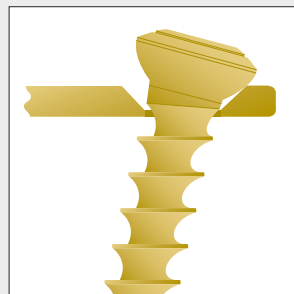
Anterior cervical autologous bone graft fusion and plating with monocortical screws C 5/6 in a 35 years old female: ap and lateral.

CASPARevolution

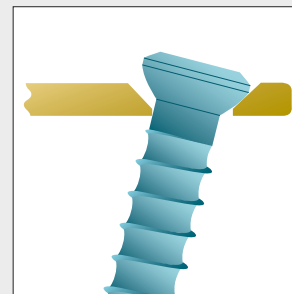
- Anchorage of choice: unicortical or bicortical screw fixation – or both in combination.
- Reliable unicortical screw fixation by selftapping profile, roughened surface and conical core shape.
- Easy bicortical screw insertion into posterior cortex due to roughened and blunt screw tip incorporating self-cutting distal feature.
- Oversized 4.5 mm screws ensures firm anchoring in osteoporotic bone or serves as a revision screw.
- Provides flexibility of screw placement with variable angle options ($\pm 35^\circ$ screw angulation).
- Lordotic plate radius facilitates restoration of cervical lordosis; furthermore, individual plate contouring possible.
- Bicompatibility and improved postoperative imaging options with Titanium material.
- Tried and trusted instrumentation for easy implant insertion such as temporary fixation pins to keep a plate in position for screw insertion.
- Excellent long-term results of the total CASPAR cervical system.^{1,2}

Resists screw backout

Proximal screw design without locking mechanism: smooth screw shank at plate interface.



previous generation



CASPARevolution

Very low profile

Small screw head volume and flat plate height avoids soft tissue irritations.



¹ Caspar W, Geisler FH, Pitzen T, Johnson TA. Anterior Cervical Plate Stabilization in One- and Two-Level Degenerative Disease: Overtreatment or Benefit?. J of Spinal Disorders. 1998;Vol.11,No.1,1-11.

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Screws

Screw material: ISOTAN[®]_F

Forged Titanium alloy (Ti6Al4V) in accordance to ISO 5832-3



3.5 mm / bicortical

Ref. No.	lengths*
LB450T	10 mm
LB452T	12 mm
LB454T	14 mm
LB456T	16 mm
LB457T	17 mm
LB458T	18 mm
LB459T	19 mm
LB460T	20 mm
LB461T	21 mm
LB462T	22 mm
LB463T	23 mm
LB464T	24 mm
LB465T	25 mm
LB466T	26 mm
LB467T	27 mm
LB468T	28 mm

Special instruments:

2.0 mm drill	FG412R
Twin drill guide (10 – 30 mm)	FF886R
Tap	FG413R



4.0 mm / unicortical

Ref. No.	lengths*
LB554T	14 mm
LB555T	15 mm
LB556T	16 mm
LB557T	17 mm
LB558T	18 mm
LB559T	19 mm

Special instruments:

2.2 mm drill	FG414R
Twin drill guide (13 – 19 mm)	FG415R



4.5 mm / oversized

Ref. No.	lengths*
LA017T	17 mm
LA018T	18 mm
LA019T	19 mm
LA020T	20 mm
LA021T	21 mm
LA022T	22 mm
LA023T	23 mm
LA024T	24 mm
LA025T	25 mm
LA026T	26 mm
LA027T	27 mm
LA028T	28 mm

* Please note:

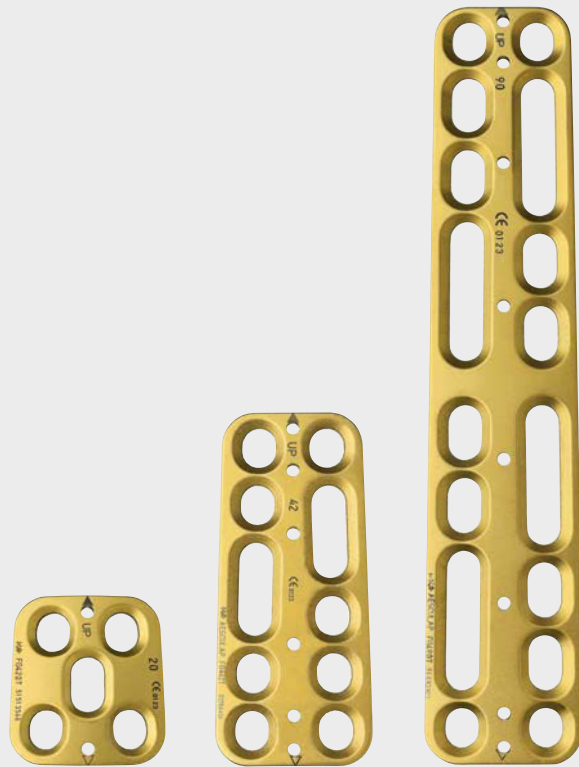
the screw lengths given are the overall length including the screw head (2.2 mm)!
Example: a 16 mm screw has a penetration depth of 13.8 mm.

Plates

Plate material: ISOTAN[®]_p

Pure Titanium in accordance to ISO 5832-2

Ref. No.	lengths*	Ref. No.	lengths*
FG420T	20 mm	FG450T	50 mm
FG422T	22 mm	FG452T	52 mm
FG424T	24 mm	FG454T	54 mm
FG426T	26 mm	FG457T	57 mm
FG428T	28 mm	FG460T	60 mm
FG430T	30 mm	FG463T	63 mm
FG432T	32 mm	FG466T	66 mm
FG434T	34 mm	FG469T	69 mm
FG436T	36 mm	FG472T	72 mm
FG442T	42 mm	FG475T	75 mm
FG444T	44 mm	FG478T	78 mm
FG446T	46 mm	FG481T	81 mm
FG448T	48 mm	FG484T	84 mm
		FG487T	87 mm
		FG490T	90 mm



Special instruments:

Spikes for temporary plate fixation	FG310R
Spike-Impactor	FG315R
Plate holding forceps	FF969R
Plate contouring	FF956R
Forceps	FF966R
Single drill guide (10 – 30 mm)	FF885R
Screw driver	FF954R
Screw holding sheath	FF964R
Screw driver with ball tip	FF957R

For further details regarding detailed instrumentation and operative technique, please ask for the Aesculap brochure O43102.

CASPARevolution

Recommendation for basic CASPAR uni- and bicortical Implants and Plating Instruments

Implants:

Amount	Ref. No.	Description
each 10 x	LB 450 T – LB 468 T	Bicortical HWS screws 10 – 28 mm, range of lengths according the user
each 10 x	LB 554 T – LB 559 T	Unicortical HWS screws 14 – 19 mm
each 5 x	LA 017 T – LA 028 T	Uni- or bicortical revision screws, 17 – 28 mm, range of lengths according the user
each 1 x	FG 424 T – FG 490 T	HWS Plates, length of 24 – 90 mm, range of lengths according the user
1	FG 064 P	Rack for unicortical screws with lid (illustration see below)
1	FG 061 P	Implant tray with lid (illustration see below)

Plating instruments:

Amount	Ref. No.	Description
1	FF 956 R	Plate bending pliers, cross and transverse contouring
1	FF 966 R	Plate bending pliers, bending of edges
1	FF 969 R	Plate holding forceps
1	FG 315 R	Spike impactor
1	FG 310 R	Spikes (package with 10 pieces)
1	FF 885 R	Drill guide, depth adjustment 10 – 30 mm (unicortical and bicortical)
1	FF 886 R	Twin drill guide, depth adjustment 10 – 30 mm (bicortical)
1	FG 415 R	Twin drill guide, depth adjustment 13 – 19 mm (unicortical)
2	FG 412 R	Drill, 2.0 mm (bicortical)
2	FG 414 R	Drill, 2.2 mm (unicortical)
1	FG 413 R	Tap for bicortical screws
1	FF 965 R	Depth gauge
1	FF 954 R	Screw driver
1	FF 964 R	Screw holding sheath
1	FF 957 R	Screw driver with ball tip
1	LS 040 S	Screw grasping forceps
1	JF 213 R	Perforated basket 485 x 253 x 76 mm
2	JF 936	Silicone pad

FG 064 P



FG 061 P



