

KONZEPT HUMERAL

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NAILING SYSTEM



about us

Auxein Medical is an integrated, research based, orthopaedic Implants & Instruments manufacturing company, producing a wide range of quality, affordable generic implants, trusted by healthcare professionals and patients across geographies. It is the Company's constant endeavor to provide a wide basket of generic and innovator products that exceed the highest expectations of our customers in term of quality and safety. The company has world-class manufacturing unit established in India and serves customers in over 60 countries worldwide.

Our Achievements

US FDA 510K APPROVED •

(Locking Plates and Screws)

EC Certificate - Class IIa & IIb •

ISO 13485:2016 •

ISO 9001:2015 •

India FDA Approved •

GMP Certificate •

Orthopaedic Implants

INTRODUCTION

- INTRAMEDULLARY OSTEOSYNTHESIS OF HUMERUS, consist of:
- Implants (intramedullary nail, locking screws, end cap or compression screw),
- Instrument set for implantation and extraction after finished treatment,
- Instruction on how to manage instrument set (surgical technique).

Intramedullary osteosynthesis of humerus provides stable fixation of fractured shaft of the bone, it is recommended to use in following cases:

- Pathological comminuted fractures,
- Difficult fractures with closed and opened (I grade) damages,
- Malunion of fractures of humeral shaft after treatment with other methods.

This system provides the following methods of intramedullary fixation depending on the type of humeral fracture:

Static Method

Static fixation is used in multi-fragment fractures when the fragments of fractured bone don't cling in the axial line. In this fixation, to lock the nail with screws are used all holes in distal part, and in proximal part of the nail - one round hole or two holes (round and oblong).



Dynamic Method

Dynamic fixation may be used in case of good cortex contact of fragments of fractured bone in transverse and oblique fractures, also in false joints. All distal holes and one proximal hole of the intramedullary humeral nail are used in that fixation. Dynamic fixation enables axial displacement of bone fragments while loading the limb, in this way physiological stimulus is forming to create bone scar and its reconstruction into the lamellar bone.

Dynamic with compression method

In dynamic with compression method (compressive fixation) the compressive screw is axial screwed into internal threaded hole of the nail shaft in order to put pressure on locking screw which locked the nail. The compressive fixation eliminates all micro-movements in the initial stage of fracture treatment

Oblique locking of the nail

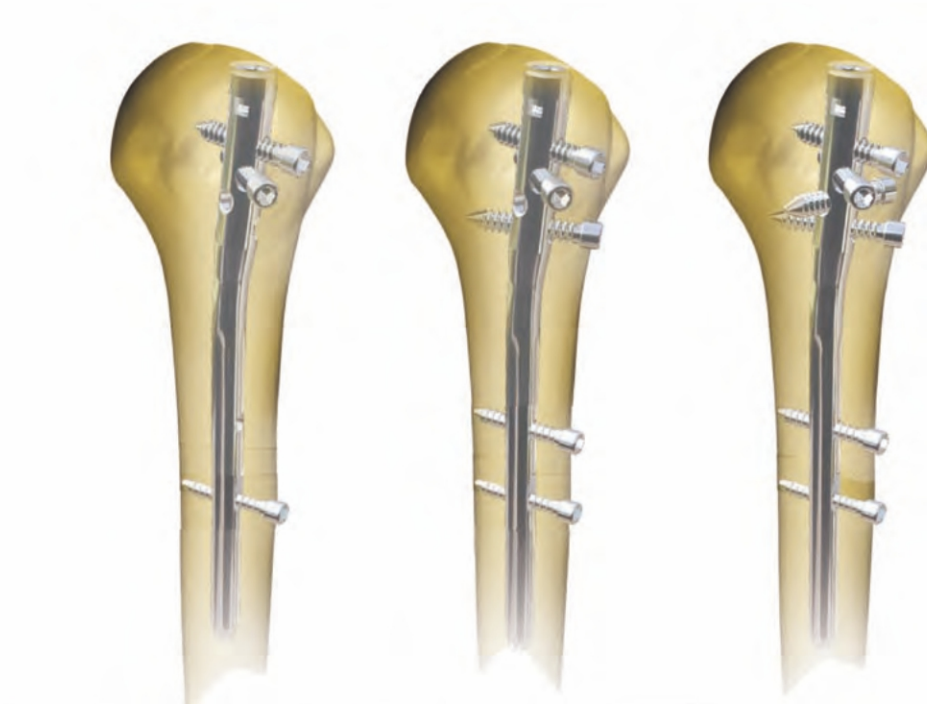


Distal inserting of the nail

Humeral bone fractures located in area of shaft, metaphysis and epiphysis of humeral bone may be also connect using intramedullary Auxein nail inserted from distal epiphysis area.



Examples of reconstructive humeral nail:

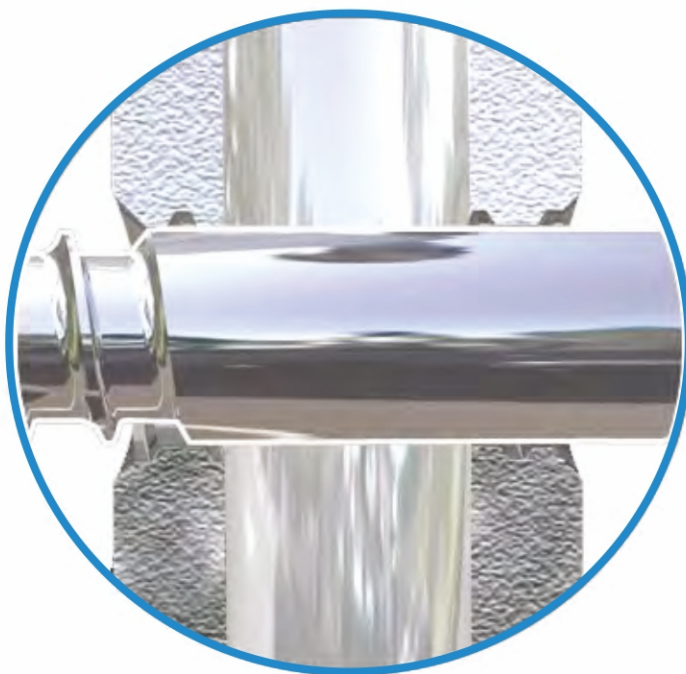


Reconstructive intramedullary humeral nail is offered in:

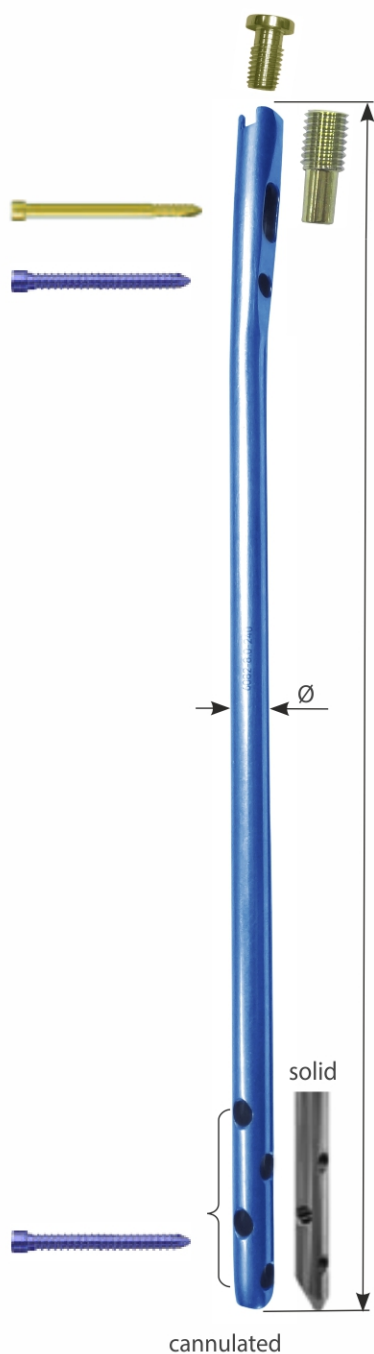
- Diameter range from 6 to 9mm (with pitch 1mm);
- In solid and cannulated version;
- Length range from 150 to 215mm in short version and from 220 to 400mm in long version;
- Made of stainless steel and titanium.

Nail design make implantation possible to right and left limb. To the nails in short and long version is used the same target. Locking nail in short version in distal part is performed using holes marked on the target as "RECONSTRUCTION", whereas nails in long version are locked using slider located on target slider (before implantation it is necessary to place slider this way that set blocks led onto holes of the slider freely hit on holes on the nail), or using "free hand" technique. In the proximal part the nail has 4 holes letting for uniting damaged fragments of the head of the humerus. Thanks to applying in the proximal part threaded locking holes, reconstruction humeral nail allows for optional locking at using:

- Proximal screw 04,5



Intramedullary Humeral Nail



Intramedullary Humeral Nail
Cannulated


	Stainless Steel	Titanium	Dia x Length
Ø6mm	6082-6.0-180	TI-6082-6.0-180	Ø6mm x 180
	6082-6.0-200	TI-6082-6.0-200	Ø6mm x 200
	6082-6.0-220	TI-6082-6.0-220	Ø6mm x 220
	6082-6.0-240	TI-6082-6.0-240	Ø6mm x 240
	6082-6.0-260	TI-6082-6.0-260	Ø6mm x 260
	6082-6.0-280	TI-6082-6.0-280	Ø6mm x 280
	6082-6.0-300	TI-6082-6.0-300	Ø6mm x 300
	6082-6.0-320	TI-6082-6.0-320	Ø6mm x 320
Ø7mm	6082-7.0-180	TI-6082-7.0-180	Ø7mm x 180
	6082-7.0-200	TI-6082-7.0-200	Ø7mm x 200
	6082-7.0-220	TI-6082-7.0-220	Ø7mm x 220
	6082-7.0-240	TI-6082-7.0-240	Ø7mm x 240
	6082-7.0-260	TI-6082-7.0-260	Ø7mm x 260
	6082-7.0-280	TI-6082-7.0-280	Ø7mm x 280
	6082-7.0-300	TI-6082-7.0-300	Ø7mm x 300
	6082-7.0-320	TI-6082-7.0-320	Ø7mm x 320
Ø8mm	6082-8.0-180	TI-6082-8.0-180	Ø8mm x 180
	6082-8.0-200	TI-6082-8.0-200	Ø8mm x 200
	6082-8.0-220	TI-6082-8.0-220	Ø8mm x 220
	6082-8.0-240	TI-6082-8.0-240	Ø8mm x 240
	6082-8.0-260	TI-6082-8.0-260	Ø8mm x 260
	6082-8.0-280	TI-6082-8.0-280	Ø8mm x 280
	6082-8.0-300	TI-6082-8.0-300	Ø8mm x 300
	6082-8.0-320	TI-6082-8.0-320	Ø8mm x 320
Ø9mm	6082-9.0-180	TI-6082-9.0-180	Ø9mm x 180
	6082-9.0-200	TI-6082-9.0-200	Ø9mm x 200
	6082-9.0-220	TI-6082-9.0-220	Ø9mm x 220
	6082-9.0-240	TI-6082-9.0-240	Ø9mm x 240
	6082-9.0-260	TI-6082-9.0-260	Ø9mm x 260
	6082-9.0-280	TI-6082-9.0-280	Ø9mm x 280
	6082-9.0-300	TI-6082-9.0-300	Ø9mm x 300
	6082-9.0-320	TI-6082-9.0-320	Ø9mm x 320

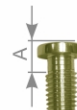
Solid


	Stainless Steel	Titanium	Dia x Length
Ø6mm	6082-6.0-180N	TI-6082-6.0-180N	Ø6mm x 180
	6082-6.0-200N	TI-6082-6.0-200N	Ø6mm x 200
	6082-6.0-220N	TI-6082-6.0-220N	Ø6mm x 220
	6082-6.0-240N	TI-6082-6.0-240N	Ø6mm x 240
	6082-6.0-260N	TI-6082-6.0-260N	Ø6mm x 260
	6082-6.0-280N	TI-6082-6.0-280N	Ø6mm x 280
	6082-6.0-300N	TI-6082-6.0-300N	Ø6mm x 300
	6082-6.0-320N	TI-6082-6.0-320N	Ø6mm x 320
Ø7mm	6082-7.0-180N	TI-6082-7.0-180N	Ø7mm x 180
	6082-7.0-200N	TI-6082-7.0-200N	Ø7mm x 200
	6082-7.0-220N	TI-6082-7.0-220N	Ø7mm x 220
	6082-7.0-240N	TI-6082-7.0-240N	Ø7mm x 240
	6082-7.0-260N	TI-6082-7.0-260N	Ø7mm x 260
	6082-7.0-280N	TI-6082-7.0-280N	Ø7mm x 280
	6082-7.0-300N	TI-6082-7.0-300N	Ø7mm x 300
	6082-7.0-320N	TI-6082-7.0-320N	Ø7mm x 320
Ø8mm	6082-8.0-180N	TI-6082-8.0-180N	Ø8mm x 180
	6082-8.0-200N	TI-6082-8.0-200N	Ø8mm x 200
	6082-8.0-220N	TI-6082-8.0-220N	Ø8mm x 220
	6082-8.0-240N	TI-6082-8.0-240N	Ø8mm x 240
	6082-8.0-260N	TI-6082-8.0-260N	Ø8mm x 260
	6082-8.0-280N	TI-6082-8.0-280N	Ø8mm x 280
	6082-8.0-300N	TI-6082-8.0-300N	Ø8mm x 300
	6082-8.0-320N	TI-6082-8.0-320N	Ø8mm x 320
Ø9mm	6082-9.0-180N	TI-6082-9.0-180N	Ø9mm x 180
	6082-9.0-200N	TI-6082-9.0-200N	Ø9mm x 200
	6082-9.0-220N	TI-6082-9.0-220N	Ø9mm x 220
	6082-9.0-240N	TI-6082-9.0-240N	Ø9mm x 240
	6082-9.0-260N	TI-6082-9.0-260N	Ø9mm x 260
	6082-9.0-280N	TI-6082-9.0-280N	Ø9mm x 280
	6082-9.0-300N	TI-6082-9.0-300N	Ø9mm x 300
	6082-9.0-320N	TI-6082-9.0-320N	Ø9mm x 320

Locking Elements

End Cap For Intramedullary Cannulated Humeral Nail

A	Stainless Steel	Titanium
0	6083.100	TI-6083.100



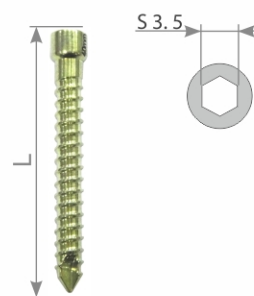
Compression Screw For Intramedullary Cannulated Humeral Nail

Stainless Steel	Titanium
1219.000	TI-1219.000



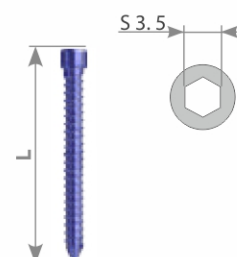
4.5mm Locking Bolt For Intramedullary Cannulated Humeral Nail

Length	Stainless Steel	Titanium
20	6001.020	TI-6001.020
22	6001.022	TI-6001.022
24	6001.024	TI-6001.024
26	6001.026	TI-6001.026
28	6001.028	TI-6001.028
30	6001.030	TI-6001.030
35	6001.035	TI-6001.035
40	6001.040	TI-6001.040
45	6001.045	TI-6001.045
50	6001.050	TI-6001.050
55	6001.055	TI-6001.055
60	6001.060	TI-6001.060
65	6001.065	TI-6001.065
70	6001.070	TI-6001.070



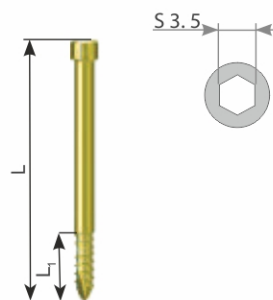
3.5mm Locking Bolt

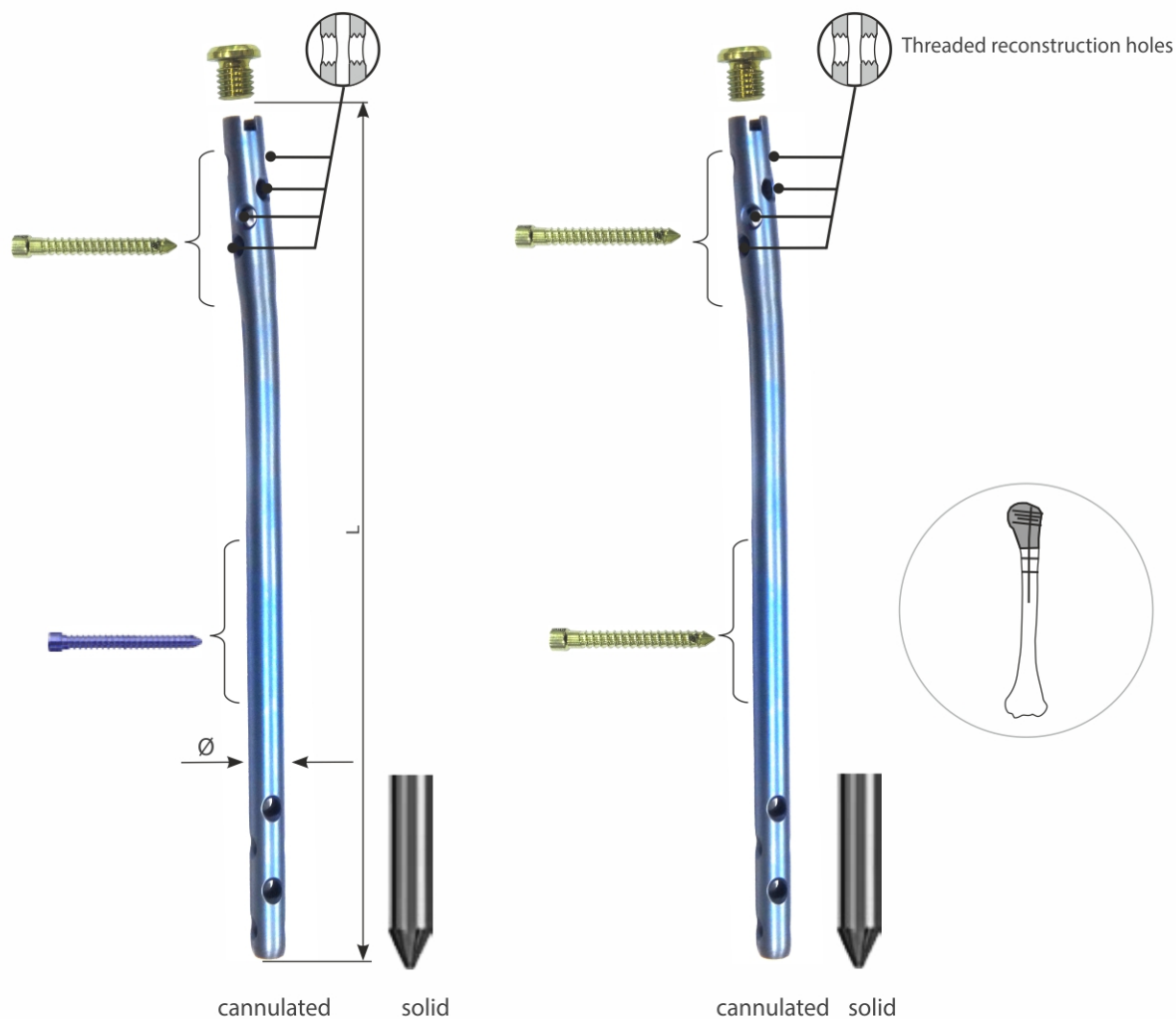
Length	Stainless Steel	Titanium
20	1222.020	TI-1222.020
22	1222.022	TI-1222.022
24	1222.024	TI-1222.024
26	1222.026	TI-1222.026
28	1222.028	TI-1222.028
30	1222.030	TI-1222.030
35	1222.035	TI-1222.035
40	1222.040	TI-1222.040
45	1222.045	TI-1222.045
50	1222.050	TI-1222.050
55	1222.055	TI-1222.055
60	1222.060	TI-1222.060
65	1222.065	TI-1222.065
70	1222.070	TI-1222.070



Proximal screw Ø4.5

Length	Length ₁	Stainless Steel	Titanium
25	12	1221.025	TI-1221.025
30	12	1221.030	TI-1221.030
35	16	1221.035	TI-1221.035
40	16	1221.040	TI-1221.040
45	16	1221.045	TI-1221.045
50	18	1221.050	TI-1221.050
55	18	1221.055	TI-1221.055
60	18	1221.060	TI-1221.060
65	20	1221.065	TI-1221.065
70	20	1221.070	TI-1221.070



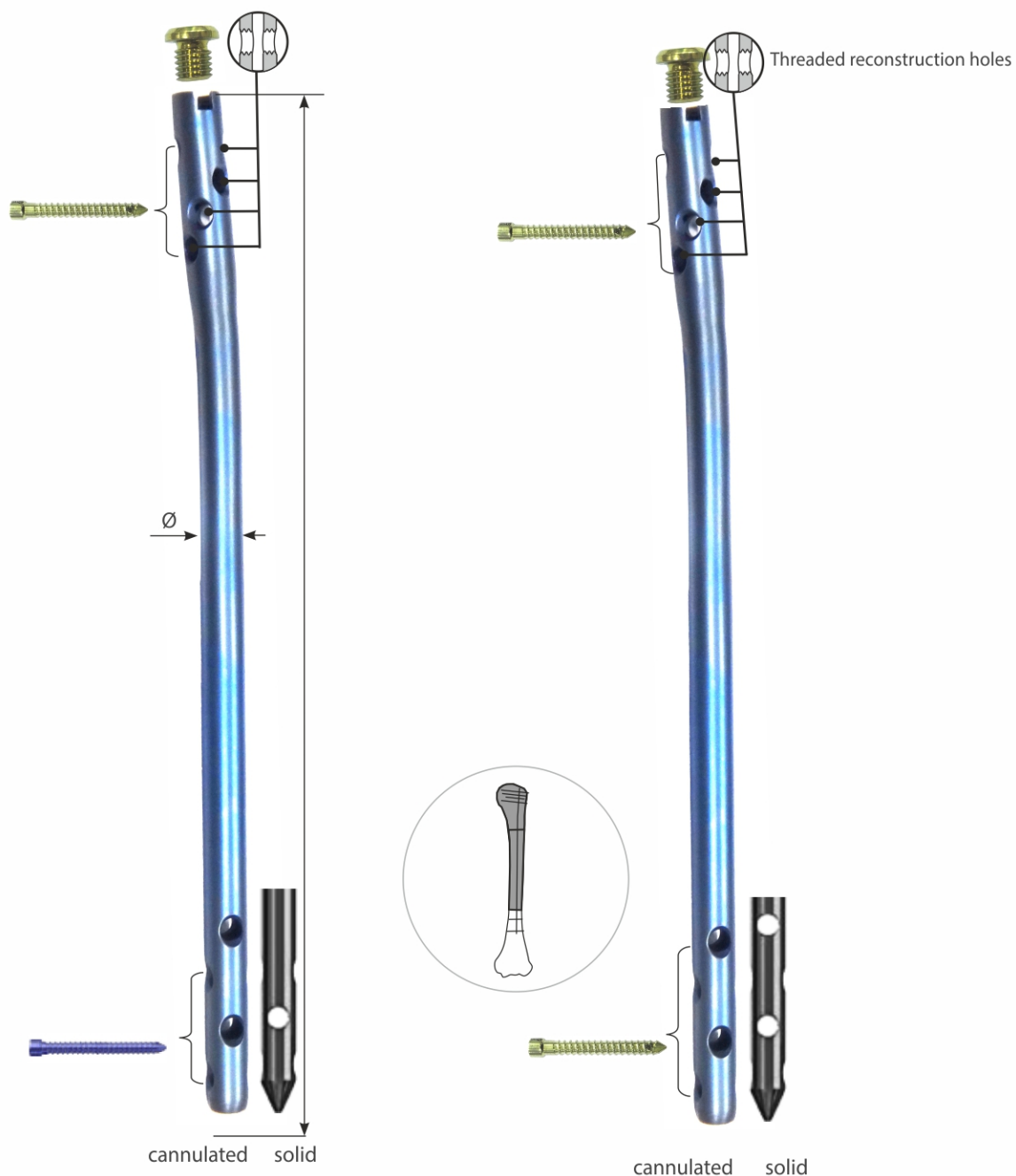
Reconstruction Nail

Cannulated

Stainless Steel	Titanium	Dia x Length
1355-6.0-150	TI-1355-6.0-150	Ø6mm x 150
1355-7.0-150	TI-1355-7.0-150	Ø7mm x 150
1355-8.0-150	TI-1355-8.0-150	Ø8mm x 150
1355-9.0-150	TI-1355-9.0-150	Ø9mm x 150

Solid

Stainless Steel	Titanium	Dia x Length
1355-6.0-150N	TI-1355-6.0-150N	Ø6mm x 150
1355-7.0-150N	TI-1355-7.0-150N	Ø7mm x 150
1355-8.0-150N	TI-1355-8.0-150N	Ø8mm x 150
1355-9.0-150N	TI-1355-9.0-150N	Ø9mm x 150

Reconstruction Intramedullary Humeral Nail



Cannulated


	Stainless Steel	Titanium	Dia x Length
Ø6mm	6092-6.0-200	TI-6092-6.0-200	Ø6mm x 200
	6092-6.0-220	TI-6092-6.0-220	Ø6mm x 220
	6092-6.0-240	TI-6092-6.0-240	Ø6mm x 240
	6092-6.0-260	TI-6092-6.0-260	Ø6mm x 260
	6092-6.0-280	TI-6092-6.0-280	Ø6mm x 280
	6092-6.0-300	TI-6092-6.0-300	Ø6mm x 300
	6092-6.0-320	TI-6092-6.0-320	Ø6mm x 320
Ø7mm	6092-7.0-200	TI-6092-7.0-200	Ø7mm x 200
	6092-7.0-220	TI-6092-7.0-220	Ø7mm x 220
	6092-7.0-240	TI-6092-7.0-240	Ø7mm x 240
	6092-7.0-260	TI-6092-7.0-260	Ø7mm x 260
	6092-7.0-280	TI-6092-7.0-280	Ø7mm x 280
	6092-7.0-300	TI-6092-7.0-300	Ø7mm x 300
	6092-7.0-320	TI-6092-7.0-320	Ø7mm x 320
Ø8mm	6092-8.0-200	TI-6092-8.0-200	Ø8mm x 200
	6092-8.0-220	TI-6092-8.0-220	Ø8mm x 220
	6092-8.0-240	TI-6092-8.0-240	Ø8mm x 240
	6092-8.0-260	TI-6092-8.0-260	Ø8mm x 260
	6092-8.0-280	TI-6092-8.0-280	Ø8mm x 280
	6092-8.0-300	TI-6092-8.0-300	Ø8mm x 300
	6092-8.0-320	TI-6092-8.0-320	Ø8mm x 320
Ø9mm	6092-9.0-200	TI-6092-9.0-200	Ø9mm x 200
	6092-9.0-220	TI-6092-9.0-220	Ø9mm x 220
	6092-9.0-240	TI-6092-9.0-240	Ø9mm x 240
	6092-9.0-260	TI-6092-9.0-260	Ø9mm x 260
	6092-9.0-280	TI-6092-9.0-280	Ø9mm x 280
	6092-9.0-300	TI-6092-9.0-300	Ø9mm x 300
	6092-9.0-320	TI-6092-9.0-320	Ø9mm x 320

Solid


	Stainless Steel	Titanium	Dia x Length
Ø6mm	6092-6.0-200N	TI-6092-6.0-200N	Ø6mm x 200
	6092-6.0-220N	TI-6092-6.0-220N	Ø6mm x 220
	6092-6.0-240N	TI-6092-6.0-240N	Ø6mm x 240
	6092-6.0-260N	TI-6092-6.0-260N	Ø6mm x 260
	6092-6.0-280N	TI-6092-6.0-280N	Ø6mm x 280
	6092-6.0-300N	TI-6092-6.0-300N	Ø6mm x 300
	6092-6.0-320N	TI-6092-6.0-320N	Ø6mm x 320
Ø7mm	6092-7.0-200N	TI-6092-7.0-200N	Ø7mm x 200
	6092-7.0-220N	TI-6092-7.0-220N	Ø7mm x 220
	6092-7.0-240N	TI-6092-7.0-240N	Ø7mm x 240
	6092-7.0-260N	TI-6092-7.0-260N	Ø7mm x 260
	6092-7.0-280N	TI-6092-7.0-280N	Ø7mm x 280
	6092-7.0-300N	TI-6092-7.0-300N	Ø7mm x 300
	6092-7.0-320N	TI-6092-7.0-320N	Ø7mm x 320
Ø8mm	6092-8.0-200N	TI-6092-8.0-200N	Ø8mm x 200
	6092-8.0-220N	TI-6092-8.0-220N	Ø8mm x 220
	6092-8.0-240N	TI-6092-8.0-240N	Ø8mm x 240
	6092-8.0-260N	TI-6092-8.0-260N	Ø8mm x 260
	6092-8.0-280N	TI-6092-8.0-280N	Ø8mm x 280
	6092-8.0-300N	TI-6092-8.0-300N	Ø8mm x 300
	6092-8.0-320N	TI-6092-8.0-320N	Ø8mm x 320
Ø9mm	6092-9.0-200N	TI-6092-9.0-200N	Ø9mm x 200
	6092-9.0-220N	TI-6092-9.0-220N	Ø9mm x 220
	6092-9.0-240N	TI-6092-9.0-240N	Ø9mm x 240
	6092-9.0-260N	TI-6092-9.0-260N	Ø9mm x 260
	6092-9.0-280N	TI-6092-9.0-280N	Ø9mm x 280
	6092-9.0-300N	TI-6092-9.0-300N	Ø9mm x 300
	6092-9.0-320N	TI-6092-9.0-320N	Ø9mm x 320

Locking Elements

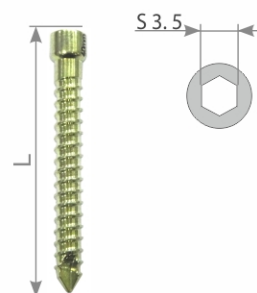
End Cap Reconstruction Cannulated Intramedullary Humeral Nail,

A	Stainless Steel	Titanium
0	6084.00	TI-6084.00



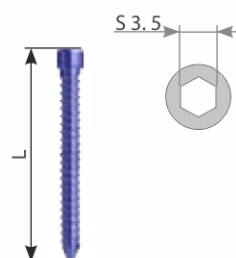
4.5mm Locking Bolt For Intramedullary Cannulated Humeral Nail

Length	Stainless Steel	Titanium
20	6001.020	TI-6001.020
22	6001.022	TI-6001.022
24	6001.024	TI-6001.024
26	6001.026	TI-6001.026
28	6001.028	TI-6001.028
30	6001.030	TI-6001.030
35	6001.035	TI-6001.035
40	6001.040	TI-6001.040
45	6001.045	TI-6001.045
50	6001.050	TI-6001.050
55	6001.055	TI-6001.055
60	6001.060	TI-6001.060
65	6001.065	TI-6001.065
70	6001.070	TI-6001.070



3.5mm Locking Bolt

Length	Stainless Steel	Titanium
20	1222.020	TI-1222.020
22	1222.022	TI-1222.022
24	1222.024	TI-1222.024
26	1222.026	TI-1222.026
28	1222.028	TI-1222.028
30	1222.030	TI-1222.030
35	1222.035	TI-1222.035
40	1222.040	TI-1222.040
45	1222.045	TI-1222.045
50	1222.050	TI-1222.050
55	1222.055	TI-1222.055
60	1222.060	TI-1222.060
65	1222.065	TI-1222.065
70	1222.070	TI-1222.070



10-1180-00

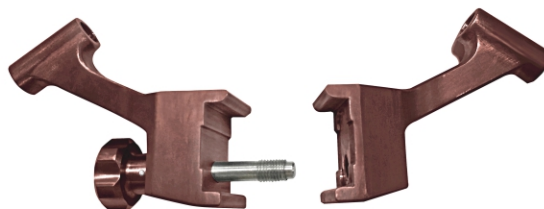
Humeral Target B


10-1181-00

Distal target D


10-1182-00

Angular reconstruction target


10-1183-00

Connecting screw M7x1spec. L=95


10-1184-00

Connecting screw M7x1spec. L=101


10-1185-00

Set block Ø3.5/4.5mm



10-1186-00

Protective guide Ø6.5/9mm


10-1187-00

Drill Guide Ø6.5/3.5mm


10-1188-00

Drill Guide Ø6.5/2.8mm


10-1189-00

Drill Guide Ø6.5/4.5mm


10-1190-00

Trocar Ø6.5mm


10-1191-00

Target D



10-1192-00

Trocac short Ø7mm


10-1193-00

Drill guide short Ø7/3.5mm


10-1194-00

Drill guide Ø7/2.8mm


10-1195-00

Impactor-Extractor Rod


10-1196-00

Connector M7/M16


10-1197-00

Screwdriver, Hex 3.5mm



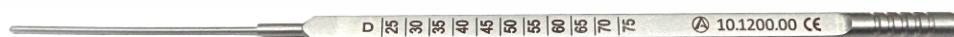
10-1198-00 Mallet



10-1199-00 Socket wrench S11



10-1200-00 Screw length measuring Device



10-1201-00 Guide rod Ø1.8 x 500mm



10-1202-00 Handle guide rod



10-1203-00 Teflon Pipe guide Ø7/290mm



10-1204-00

Drill with scale Ø2.8 x 240mm


10-1205-00

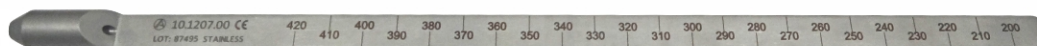
Drill with scale Ø3.5 x 240mm


10-1206-00

Drill with scale Ø4.5 x 240mm


10-1207-00

Nail length measuring Device


10-1208-00

Insertion target Ø9.0mm


10-1209-00

Curved awl Ø8.0mm



10-1210-00

Instrument Trays for Konzept Humerus Nailing Instrument Set



10-1211-00

Sterilization Container for Konzept Humerus Nailing Instrument Set



40.5020.000 Konzept Humerus Nailing Instrument Set



40.5020.000 Konzept Humerus Nailing Instrument Set

Code	Set Consisting of	Units
10-1180-00	Humeral Target B	1
10-1181-00	Distal target D	1
10-1182-00	Angular reconstruction target	1
10-1183-00	Connecting screw M7x1spec. L=95	1
10-1184-00	Connecting screw M7x1spec. L=101	1
10-1185-00	Set block Ø3.5/4.5mm	2
10-1186-00	Protective guide Ø6.5/9mm	2
10-1187-00	Drill Guide Ø6.5/3.5mm	2
10-1188-00	Drill Guide Ø6.5/2.8mm	2
10-1189-00	Drill Guide Ø6.5/4.5mm	1
10-1190-00	Trocar Ø6.5mm	1
10-1191-00	Target D	1
10-1192-00	Trocar short Ø7mm	1
10-1193-00	Drill guide short Ø7/3.5mm	1
10-1194-00	Drill guide Ø7/2.8mm	1
10-1195-00	Impactor-Extractor Rod	1
10-1196-00	Mallet	1
10-1197-00	Connector M7/M16	1
10-1198-00	Screwdriver, Hex 3.5mm	1
10-1199-00	Socket wrench S11	1
10-1200-00	Screw length measuring Device	1
10-1201-00	Guide rod Ø1.8 x 500mm	1
10-1202-00	Handle guide rod	1
10-1203-00	Teflon Pipe guide Ø7/290mm	1
10-1204-00	Drill with scale Ø2.8 x 240mm	2
10-1205-00	Drill with scale Ø3.5 x 240mm	2
10-1206-00	Drill with scale Ø4.5 x 240mm	1
10-1207-00	Nail length measuring Device	1
10-1208-00	Insertion target Ø9.0mm	4
10-1209-00	Curved awl Ø8.0mm	1
10-1210-00	Instrument Trays for Konzept Humerus Nailing Instrument Set	2
10-1211-00	Sterilization Container for Konzept Humerus Nailing Instrument Set	1



USA

Auxein Inc.

1500 Nw 89th Court, Suite 205, Doral, Florida 33172

Tel: +1 305 395 6062

E Fax: +1 305 395 6262

Email: USoffice@auxein.com

INDIA

Auxein Medical Pvt. Ltd.

Plot No. 168-169-170, Phase-4, Kundli Industrial Area,
HSIIDC, Sector-57, Sonapat - 131028, Haryana

Tel: +91 99106 43638

Fax: +91 86077 70197

Email: info@auxein.com

www.auxein.com