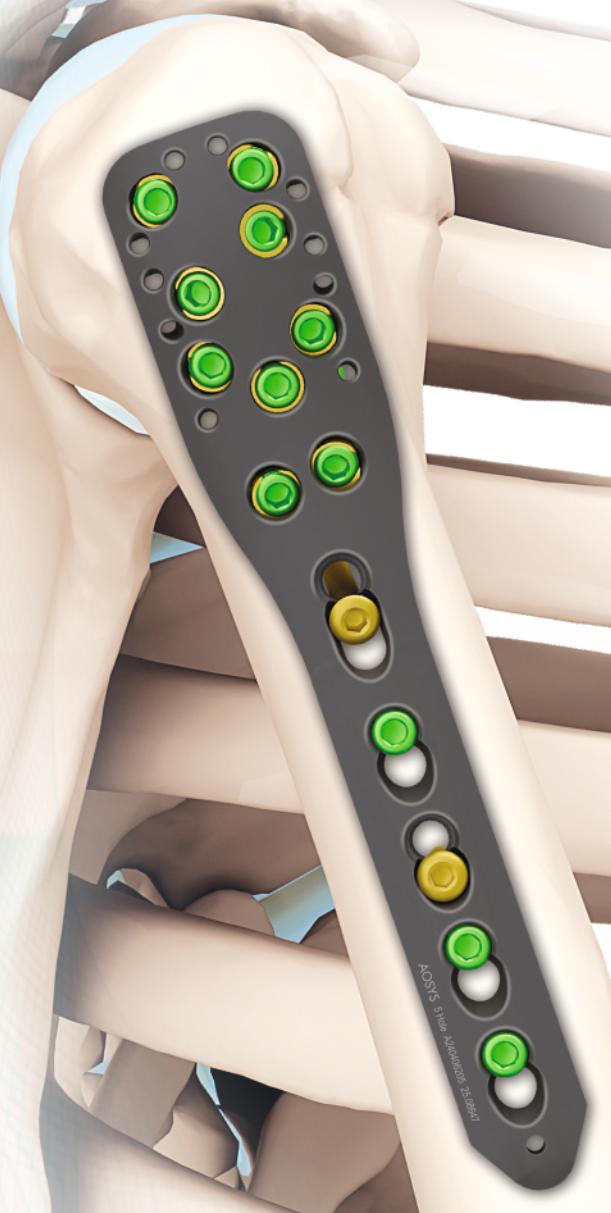


**AOSYS®**  
*Revolutionising healthcare with innovation*



## **VARIABLE ANGLE SERIES**

Precision in Engineering | Stability in Fixation | Freedom in Healing

[www.aosys.in](http://www.aosys.in)



# Revolutionary Variable Angle Ring System

AOSYS introduces the **next generation of variable angle locking technology**, designed for **absolute fixation freedom and anatomical precision**. Each VA plate utilizes a **spherical locking washer mechanism** that allows up to  $\pm 18^\circ$  of angulation, enabling surgeons to **direct each screw optimally** according to the fracture pattern and bone quality.

## Core Advantages:

- **360° Targeting Flexibility:** Screws can be directed at any desired angle within a 36° cone for tailored fixation.
- **Thread Protection:** The locking interface prevents thread deformation, ensuring consistent grip throughout the screw's life.
- **Smooth Screw Movement:** Precisely machined ring geometry allows smooth insertion and locking without cross-threading.
- **Tapered Inner Thread Expansion:** Natural micro-expansion of the inner ring achieves a firm, vibration-resistant lock between plate and screw.
- **True Variable Locking:** No inserts required - direct ring engagement ensures lasting angular stability.
- **Enhanced Bone – Plate Contact:** Optimized interface design distributes forces evenly, improving load sharing and minimizing stress concentration.

## VA Locking Proximal Humerus Plate

### Anatomically Contoured Plate Profile

- Each plate is anatomically shaped to match the natural curvature of the bone.
- The low-profile design minimizes soft tissue irritation and allows **minimally invasive application** through smaller incisions.



### Combi & Elongated Combi Holes

- Accept both **3.5 mm cortical and 3.5 mm locking screws**.
- Dynamic compression slots allow controlled fracture compression during reduction, improving contact and healing.

### Tapered Tip for MIS

- Tapered anterior edge ensures smooth insertion under soft tissue envelopes for minimally invasive procedures.

### Product Code :

SIZE	CODE	HOLE
SHORT	A240406202	2 Hole
SHORT	A240406203	3 Hole
SHORT	A240406204	4 Hole
SHORT	A240406205	5 Hole
LONG	A240406305	5 Hole
LONG	A240406306	6 Hole
LONG	A240406308	8 Hole
LONG	A240406310	10 Hole

### Locking Head Bone Screw, Dia. 3.5mm, Self Tapping

- Length.....10–50mm (2mm Variation)  
Length.....55–90mm (5mm Variation)  
Reference .....SS316L : A1062  
.....Titanium : A2062



### Cortical Bone Screw, Dia.3.5mm x 20 TPI, Self Tapping

- Length.....10–50mm (2mm Variation)  
Length.....55–70mm (5mm Variation)  
Reference .....SS316L : A1024  
.....Titanium : A2024



### Peripheral Suture Holes

- Peripheral suture holes support soft-tissue reattachment and rotator cuff repair.
- Promote joint stability and assist biological healing, especially in osteoporotic or comminuted fractures.



### K-wire System for stable fixation & Distal K-wire Hole

- Assures accurate screw alignment and controlled angulation during insertion.
- Reduces surgical time and prevents intraoperative misalignment.
- Allows precise plate positioning during surgery.
- Aids temporary stabilization and prevents plate migration during initial fixation.

### Variable Angle Locking Mechanism

- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability (360°)** while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.



## VA Locking Extended Medial Distal Humerus Plate (2.7/3.5mm)

- Designed for intra-articular and extra-articular distal humerus fractures, osteotomies, and revisions.
- Provides strong fixation in small distal fragments.
- Diverging screw pattern offers firm grip in osteoporotic bone.

### Variable Angle Locking Mechanism

- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability** (360°) while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.

### Product Code :

LEFT CODE	RIGHT CODE	HOLE
A240414801	A240414901	1 Hole
A240414802	A240414902	2 Hole
A240414804	A240414904	4 Hole
A240414806	A240414906	6 Hole
A240414808	A240414908	8 Hole
A240414810	A240414910	10 Hole

### Locking Head Bone Screw, Dia. 2.7mm, Self Tapping

Length.....	10–40mm (2mm Variation)
Length.....	45–60mm (5mm Variation)
Reference .....	SS316L : A1061
.....	Titanium : A2061



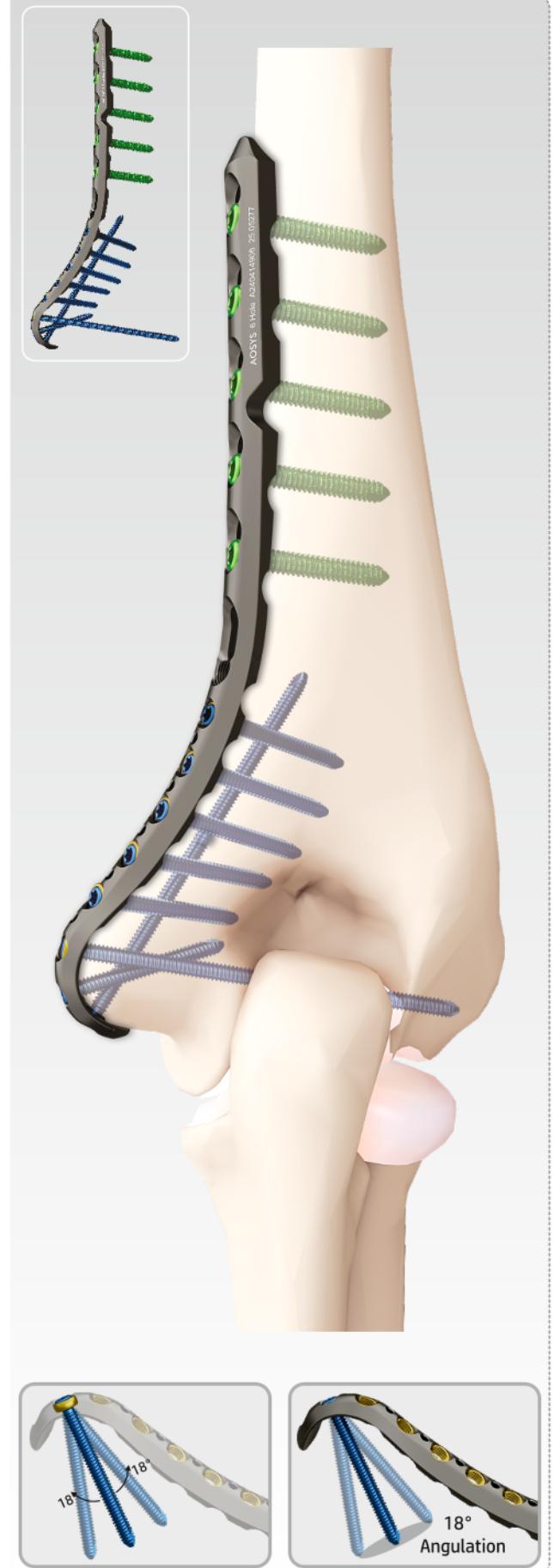
### Locking Head Bone Screw, Dia. 3.5mm, Self Tapping

Length.....	10–50mm (2mm Variation)
Length.....	55–90mm (5mm Variation)
Reference .....	SS316L : A1062
.....	Titanium : A2062

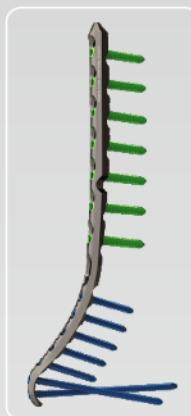
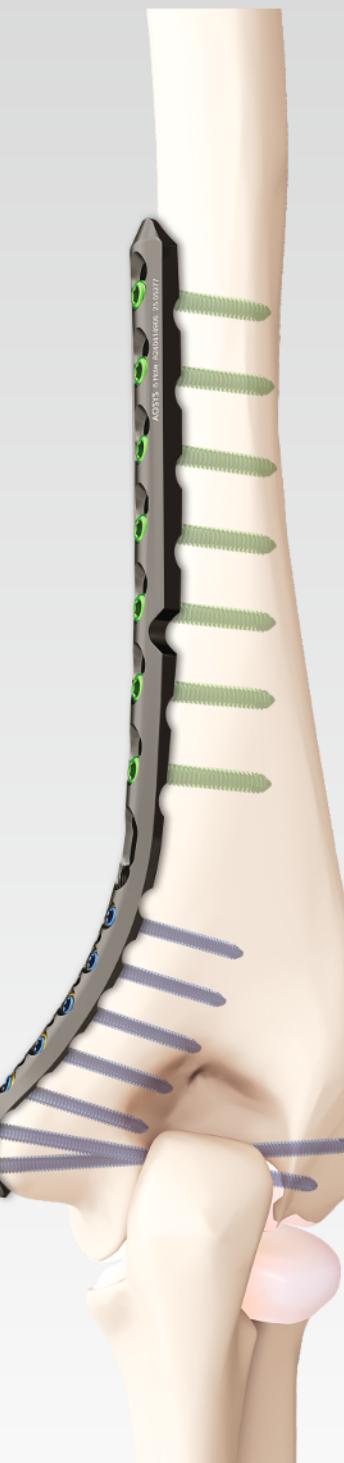


### Cortical Bone Screw, Dia.3.5mm x 20 TPI, Self Tapping

Length.....	10–50mm (2mm Variation)
Length.....	55–70mm (5mm Variation)
Reference .....	SS316L : A1024
.....	Titanium : A2024



## VA Locking Medial Distal Humerus Plate



- Designed for intra-articular and extra-articular distal humerus fractures, osteotomies, and revisions.
- Provides strong fixation in small distal fragments.
- Diverging screw pattern offers firm grip in osteoporotic bone.

### Variable Angle Locking Mechanism

- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability (360°)** while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.

### Product Code :

LEFT CODE	RIGHT CODE	HOLE
A240414601	A240414701	1 Hole
A240414602	A240414702	2 Hole
A240414604	A240414704	4 Hole
A240414606	A240414706	6 Hole
A240414608	A240414708	8 Hole
A240414610	A240414710	10 Hole



### Locking Head Bone Screw, Dia. 2.7mm, Self Tapping

Length.....10–40mm (2mm Variation)  
Length.....45–60mm (5mm Variation)  
Reference .....SS316L : A1061  
.....Titanium : A2061



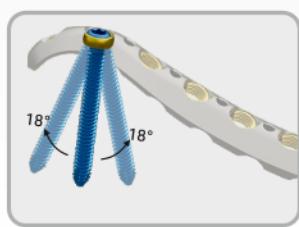
### Locking Head Bone Screw, Dia. 3.5mm, Self Tapping

Length.....10–50mm (2mm Variation)  
Length.....55–90mm (5mm Variation)  
Reference .....SS316L : A1062  
.....Titanium : A2062



### Cortical Bone Screw, Dia.3.5mm x 20 TPI, Self Tapping

Length.....10–50mm (2mm Variation)  
Length.....55–70mm (5mm Variation)  
Reference .....SS316L : A1024  
.....Titanium : A2024



## VA Locking Distal Humerus Plate, Lateral

- Indicated for metaphyseal fractures, comminuted distal humeral shaft fractures, and non-unions.
- Anatomical curvature maintains ulnar nerve safety and ensures subcutaneous implant comfort.
- Allows stable fixation with minimal soft-tissue disruption.

### Variable Angle Locking Mechanism

- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability** (360°) while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.

### Product Code :

LEFT CODE	RIGHT CODE	HOLE
A240415001	A240415101	1 Hole
A240415002	A240415102	2 Hole
A240415005	A240415105	5 Hole
A240415007	A240415107	7 Hole
A240415009	A240415109	9 Hole
A240415011	A240415111	11 Hole

### Locking Head Bone Screw, Dia. 2.7mm, Self Tapping

Length.....10–40mm (2mm Variation)  
 Length.....45–60mm (5mm Variation)  
 Reference .....SS316L : A1061  
 .....Titanium : A2061



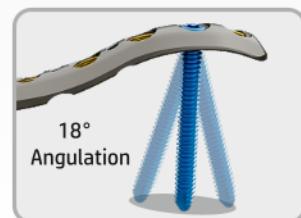
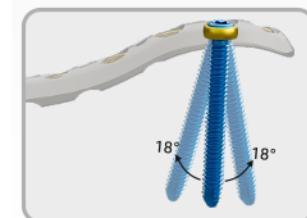
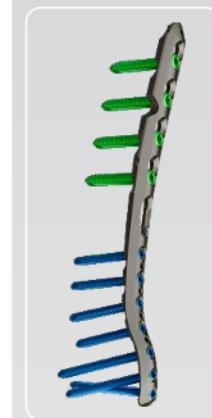
### Locking Head Bone Screw, Dia. 3.5mm, Self Tapping

Length.....10–50mm (2mm Variation)  
 Length.....55–90mm (5mm Variation)  
 Reference .....SS316L : A1062  
 .....Titanium : A2062

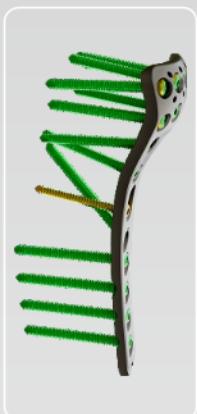


### Cortical Bone Screw, Dia.3.5mm x 20 TPI, Self Tapping

Length.....10–50mm (2mm Variation)  
 Length.....55–70mm (5mm Variation)  
 Reference .....SS316L : A1024  
 .....Titanium : A2024



## VA Locking Proximal Tibial Plate



- Designed for lateral and medial tibial plateau fractures, biconcave fractures, and osteotomies.
- Variable screw angulation enables subchondral raft construction for articular surface support.
- High torsional strength ensures stable fixation under axial load.

### Variable Angle Locking Mechanism

- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability** (360°) while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.

### Product Code :

LEFT CODE	RIGHT CODE	HOLE
A240406404	A240406504	4 Hole
A240406406	A240406506	6 Hole
A240406408	A240406508	8 Hole
A240406410	A240406510	10 Hole
A240406412	A240406512	12 Hole
A240406414	A240406514	14 Hole



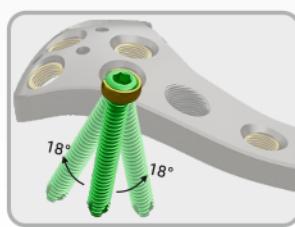
### Locking Head Bone Screw, Dia. 3.5mm, Self Tapping

Length.....10–50mm (2mm Variation)  
Length.....55–90mm (5mm Variation)  
Reference .....SS316L : A1062  
.....Titanium : A2062



### Cortical Bone Screw, Dia.3.5mm x 20 TPI, Self Tapping

Length.....10–50mm (2mm Variation)  
Length.....55–70mm (5mm Variation)  
Reference .....SS316L : A1024  
.....Titanium : A2024



## VA Locking Cable Plate (Broad)

- Designed for complex reconstructions requiring both screw and cable fixation (e.g., periprosthetic or long bone fractures).
- Integrates locking screw fixation with cable tension, allowing secure hold even in poor bone quality.
- Enhances load sharing and distributes stress evenly across fixation points.

### Variable Angle Locking Mechanism

- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability** (360°) while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.

### Product Code :

LEFT CODE	RIGHT CODE	HOLE
A240415001	A240415101	1 Hole
A240415002	A240415102	2 Hole
A240415005	A240415105	5 Hole
A240415007	A240415107	7 Hole
A240415009	A240415109	9 Hole
A240415011	A240415111	11 Hole

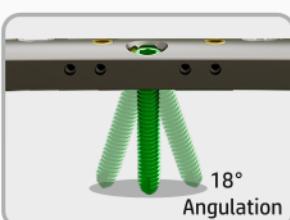
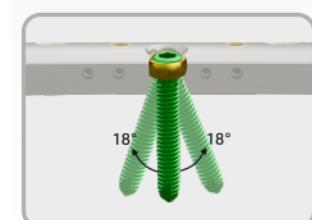
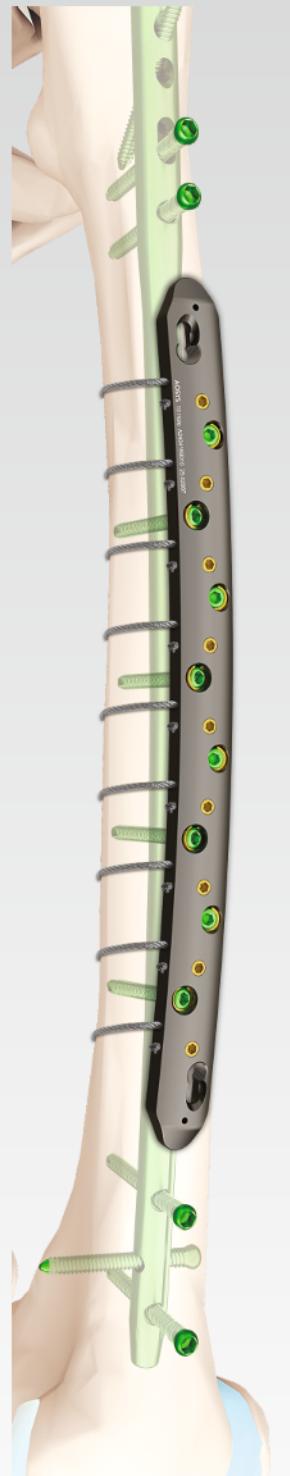
### Locking Head Bone Screw, Dia. 5.0mm Self Tapping

Length.....12–50mm (2mm Variation)  
Length.....55–70mm (5mm Variation)  
Reference .....SS316L : A1064  
.....Titanium : A2064



### Cortical Bone Screw, Dia. 4.5mm, Self Tapping

Length.....12–60mm (2mm Variation)  
Length.....55–90mm (5mm Variation)  
Reference .....SS316L : A1026  
.....Titanium : A2026



## VA Locking Curved Condylar Cable Plate



- Ideal for distal femoral condylar fractures, metaphyseal reconstructions, and non-unions.
- Curved profile follows bone contour for anatomical fit.
- The cable-locking mechanism reinforces fixation against varus/valgus stress.

### Variable Angle Locking Mechanism

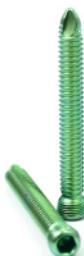
- The spherical washer allows surgeons to insert locking screws at variable angles, optimizing fixation even in complex fracture geometries.
- Provides **additional circumferential stability** (360°) while maintaining a secure lock within the plate.
- Enhances fixation strength by accommodating anatomical variations and bone density differences.

### Secure Screw Fixation

- When tapered locking screws are inserted, the washer expands, locking the screw securely within the plate.
- This prevents micromotion and reduces the risk of screw back-out, ensuring long-term construct stability.

### Product Code :

LEFT CODE	RIGHT CODE	HOLE
A240412104	A240412204	4 Hole
A240412106	A240412206	6 Hole
A240412108	A240412208	8 Hole
A240412110	A240412210	10 Hole
A240412112	A240412212	12 Hole
A240412114	A240412214	14 Hole

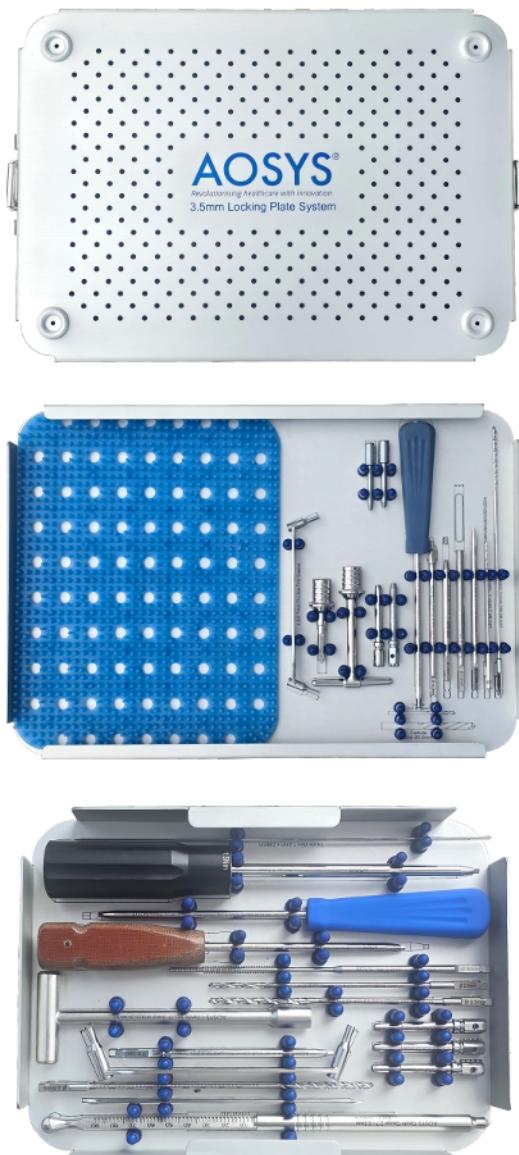


### Locking Head Bone Screw, Dia. 5.0mm Self Tapping

Length.....12–50mm (2mm Variation)  
Length.....55–70mm (5mm Variation)  
Reference .....SS316L : A1064  
.....Titanium : A2064



**(X101) Instrument Set for 3.5mm Locking Plate System**



Product Code	Name of Products	Qty.
X101.01	Depth Gauge, 2.7/3.5mm	1
X101.03	Double Drill Guide Sleeve 2.5mm   3.5mm	1
X901.03	Drill Bit with Quick Coupling, 2.5mm x 150mm	1
X901.04	Drill Bit with Quick Coupling, 2.5mm x 200mm	1
X901.05	Drill Bit with Quick Coupling, 2.8mm x 180mm	2
X901.11	Drill Bit with Quick Coupling, 3.5mm x 110mm	1
X101.08	Locking Drill Sleeve 2.8mm	3
X101.10	T Handle for LCP Sleeve	1
A780602150	K Wire, Simple, 2.0mm x 150mm	3
X101.14	Screw Driver Shaft, 2.5mm, Hexagonal for 3.5mm screw	1
X101.15	Screw Driver, 2.5mm, Hexagonal for 3.5mm screws	1
X101.19	T Handle with Quick Coupling for Drill / Tap	1
X101.20	Tap, 3.5mm	1
X101.22	Torque Limiting Screw Driver 3.5mm	1
X102.25	AO Quick Coupling Adaptor	1
X101.28	Hollow Mill for 3.5mm screw	1
X101.30	Slip Extractor for 3.5mm screw	1
X101.34	Locking Drill Sleeve, 2.5mm	3
X101.29	Countersink 4.0mm	1
X901.10	Drill Bit with Q.C. Dia. 2.0mm x 100mm SS	2
X103.10	Screw Driver Shaft, Star driver for 2.7mm Locking screw	1
X103.12	Screw Driver 2.7 mm, Star Drive	1
X103.11	Screw Driver Cannulated, 2.5mm, Hexagonal (for 4.0mm C.C. screw)	1
X103.02	Double Drill Sleeve 2.0mm/2.7mm	1
X103.07	Locking Drill Sleeve 2mm for 2.7mm screw	2
X904.04	Guide Wire Simple Dia. 1.2mm x 230mm SS	2
X103.16	Torque Limiting Handle QC for 2.4/2.7mm screw	1
X101.24	Implant tray for Proximal Tibia 3.5mm Plate Left & Right	2
X101.25	Implant tray for Distal Tibia 3.5mm plate Left & Right	2
X101.26	Implant tray for LCP Small / RCP	1
X101.27	Implant Tray for Fibula 2.7 & 3.5mm	1
X101.21	Implant Tray for Periarticular Humerus & PHILOS	1
X101.42	Instrument / Implant Box for 3.5mm Locking Plate	1

**Additional Instruments**

X101.16	Screw Driver, Cannulated, for 3.7mm screw	1
X101.17	Screw Driver Shaft, Cannulated, for 3.7mm screw	1
X101.02	Direct Measuring Device for 3.7mm Locking Plate	1
X101.09	Guide Wire Sleeve, 1.5mm	2
X101.07	Drill Bit, 2.8mm x 180mm, Cannulated	1
X904.05	Guide Wire Simple Dia. 1.5mm x 230mm SS	2
X101.31	Self Centering Bone Holding Forcep Medium	1
X101.32	Reduction Forceps Serrated Medium	1
X101.33	Reduction Forceps Pointed Medium	1
X104.14M	Hohmann Retractor (Medium)	1
X101.38	Carbide Drill Bit 2.5mm	1
X101.39	Carbide Drill Bit 5.0mm	1

**(X102) Instrument Set for 5.0mm / 4.5mm Locking System**



Product Code	Name of Products	Qty.
X102.01	Depth Gauge, 4.5mm	1
X102.03	Double Drill Guide Sleeve 3.2mm / 4.5mm	1
X901.07	Drill Bit with Q.C. Dia. 3.2mm x 200mm SS	1
X901.06	Drill Bit with Quick Coupling, 3.2mm * 150mm	1
X901.08	Drill Bit with Quick Coupling, 4.3mm * 225mm	2
X901.12	Drill Bit with Q.C. Dia. 4.5mm x 150mm SS	1
X102.09	Locking Drill Sleeve 4.3mm for 5mm screw	2
X102.22	Locking Drill Sleeve 3.2mm for 5mm cancellous screw	2
X101.10	T Handle for LCP Sleeve	1
A780602150	K Wire, Simple, 2.0mm * 150mm	2
X102.14	Torque Limiting Screw Driver 5.0mm	1
X102.15	Screw Driver Shaft, 3.5mm, Hexagonal for 4.5/5.0mm screw	1
X102.16	Screw Device, 3.5mm, Hexagonal for 4.5/5.0mm screw	1
X101.19	T Handle with Quick Coupling for Drill / Tap	1
X102.17	Tap, 4.5mm	1
X102.25	A0 Quick Coupling Adaptor	1
X102.26	Counter Sink	1
X102.27	Slip Extractor 5.0mm	1
X102.28	Hollow Mill for 5.0mm Screw	1
X102.19	Distal Femur Plate Tray	2
X102.20	Locking Lateral Tibia Plate Tray	1
X102.29	Broad & Narrow Plates Tray	1
X102.30	Screw Box	1
X102.31	Complete Instrument Set for 5.0 mm/4.5 mm Locking System	1

Additional Instruments		
X102.02	Direct Measuring Device	1
X102.06	Drill Bit, 4.3mm * 200mm, Cannulated	1
X102.08	Guide Wire Sleeve, 2.0mm	1
X102.10	Guide Wire, 2.0mm * 230mm (Simple)	1
X102.11	Guide Wire, 2.0mm * 230mm (Threaded)	1
X102.12	Screw Driver Shaft, Cannulated, 5.0mm, Hexagonal	1
X102.13	Screw Driver, Cannulated, 3.5mm, Hexagonal	1
X104.14L	Hohmann Retractor (Large)	1
X102.21	Self Centering Bone Holding Forcep Large	1
X102.23	Reduction Forceps Serrated Large	1
X102.24	Reduction Forceps Pointed Large	1

## Advantages for Surgeons

- Adjustable variable angles simplify complex fracture fixation.
- Reliable angular stability reduces implant failure.
- Modular construct flexibility reduces the need for multiple plate types.
- Compatible with both standard and MIS techniques.

## Advantages for Patients

- Stable fixation minimizes micromotion and accelerates healing.
- Lower implant profile ensures comfort and reduces soft-tissue irritation.
- Allows early mobilization and functional recovery.

# AOSYS®

Revolutionising healthcare with innovation

**Aosys Private Limited**

**Manufacturing Plant**

Survey No.1381, Nr. Swadhin Industrial Park, Ahmedabad - Indore High Way,  
Village : Kuhia, Tal. Daskroi, District : Ahmedabad-382433.

**Mobile** : +91 92272 53532, +91 98255 28258

**Email** : [info.aosys@gmail.com](mailto:info.aosys@gmail.com)

**Visit Us** : [www.aosyspvtltd.com](http://www.aosyspvtltd.com), [www.aosys.in](http://www.aosys.in)

Company Details



All rights reserved by AOSYS Private Limited  
ASPL/CAT/VAR Issue No. 1 Rev 0 | Ver. 01/2026