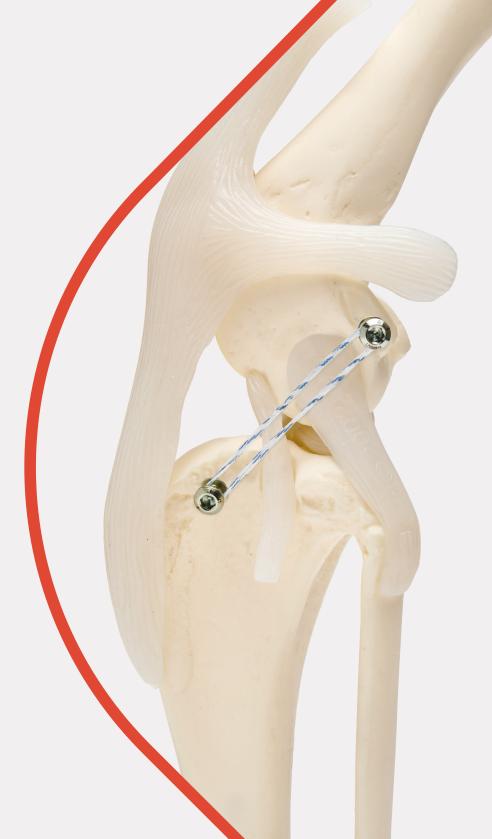
SURGICAL TECHNIQUE

OrthoZip LATERAL STABILIZATION SYSTEM





Product Information

OrthoZip, featuring SilverPlus antimicrobial

A novel option for repair of the CCL using a minimally invasive lateral approach to the stifle, combining an antimicrobial coated ultra-high molecular weight polyethylene self-locking suture and titanium alloy bone anchors. Two bone anchors are implanted on isometric locations on the lateral tibia and femur and connected by a self-retaining polyethylene suture.

This procedure offers added benefits over traditional lateral suture with an antimicrobial coating, stronger overall stabilization of the stifle, and a material that will not creep or stretch compared to monofilament nylon.

Product Benefits

- Isometric, Adjustable & Strong
- Self-locking knotless/crimpless system
- Simple with minimal instrumentation and inventory
- Offered in two sizes for small and large breeds
- Infection prevention featuring SilverPlus® antimicrobial
- Ultra-high strength with UHMWPE polyethylene



Product Components

OrthoZip Titanium Alloy Cancellous Bone Anchors

- Titanium alloy bone anchors provide a smooth stress-free surface for the suture
- Anchor heads keeps suture securely on post body and are self-tapping with a Hex drive
- Available in two sizes for small and large breeds, cancellous threads for extra retention

OrthoZip Self-Locking Suture

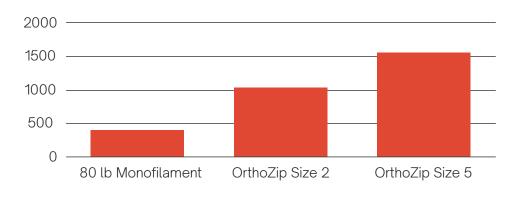
- Made from UHMWPE (Ultra High Molecular Weight Polyethylene)
 orthopedic suture
- Available in USP #2 and #5
- >2X the strength of standard fiber loops
- Blue tracer fiber for easy visibility
- Pre-sterile: ready to use in two sizes for small and large breeds
- High grade medical certified materials
- Very high strength with minimal elongation
- No knot, No crimp, No expensive instrumentation





Technical Benefits of the System

- Minimal instrumentation required
- Novel Self-Locking UHMWPE Loop
- SilverPlus Antimicrobial Coating
- Five Year Shelf Life
- One size drill bit and screwdriver for all bone anchor
- Unique Cancellous bone anchor thread design for maximum retention
- Double the strength of standard 80lb Nylon Leader Line



Ultimate Load Failure Static Mechanical Testing







Preparing for Use

Device Description

The OrthoZip system consists of two sizes of Ultra-High Molecular Weight Polyethylene (UHMWPE) self-locking suture loops coated in SilverPlus, a silver ion antimicrobial. The OrthoZip system is used in conjunction with titanium alloy bone anchors and surgical accessories including a screwdriver and drill bit.

Indications

The OrthoZip system is intended for veterinary use only in the management of ligament injuries. Applications include stabilization of cranial cruciate injuries and collateral ligament injuries or augmentation.

Precautions

Veterinarian medical professionals are advised to review this medical technique guide, review device Instructions for Use, and complete an educational course on the OrthoZip system prior to use.





Explore options for online education and in-person labs to learn more about Movora's extracapsular solutions.

Technical Guidance

Device Description

- Approach may vary The medial limited arthrotomy approach is favorable for CCL removal and meniscal inspection
- Placement of the OrthoZip bone anchors is recommended at isometric points (see reference on page 6) All size bone anchors can be predrilled with a 2.0mm drill bit, drill guides are recommended for precise drilling, penetration of both near and far cortices of the femur and tibia is preferred to confirm bone anchor angle and maximize the bone anchor length
- Note the sizing guidance:
 - Size 2 Suture and 3mm bone anchors are recommended for patients under 40 lbs (18 kg)
 - Size 5 Suture and 4mm bone anchors are recommended for patients 40-70 lbs (18-32 kg)
 - Be advised that 4mm bone anchors can be used on patients over 70 lbs with caution as there is a greater risk of failure on any extracapsular fixation on larger mass patients
- Measure the depth of each drill hole so the appropriate length bone
 anchor is used

- Insert the OrthoZip bone anchor so the lower flange is secured flush to the bone surface. A stab incision is often required on the femoral side so that the flange can seat below the joint capsule. You may also secure the suture around the two bone anchors, and they can be tightened to final seating after the placement of the OrthoZip loop
- Begin securing the OrthoZip loop by placing the sheath of the suture around the femoral bone anchor and have the free ends toward the tibial side
- Pull the OrthoZip free ends from the tibial side once it is wrapped over both bone anchors, the free ends can be pulled by hand or by using instruments
- During tensioning be sure to check cranial drawer in multiple stifle angles and tighten until cranial drawer is gone
- If the OrthoZip loop is overtightened, it can be loosened by grasping an individual strand of the loop and pulling it away from the sheath, and then repeating this process on the other side of the loop for the second strand
- Check for absence of cranial drawer and maintenance of normal range of motion, Cut the free ends of the OrthoZip loop 3-4mm from the sheath with a scalpel blade or sharp scissors, The surgical approach is lavaged and can be closed routinely

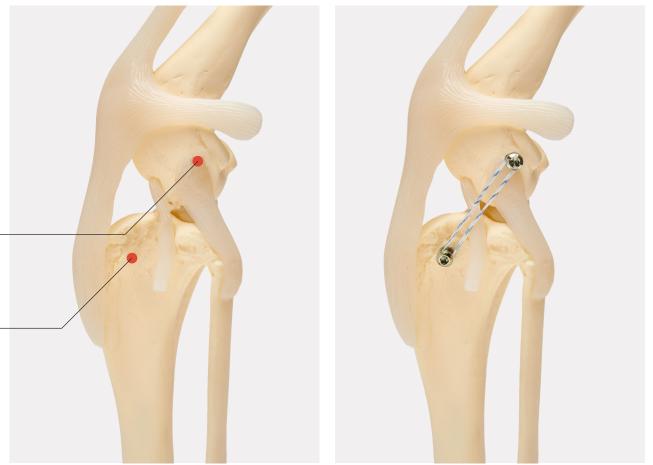
Isometric Location Reference

There are numerous publications that address different anchoring points when placing lateral sutures for stifle stabilization. There are some similar findings between them but also some differences.

Movora recommends assessing each individual patient to find the best location for that specific case. For Reference, the illustration (right) depicts the findings of common isometric location points used for stabilization.

F (Femur) – is located at the caudal edge of the lateral femoral condyle, immediately adjacent to the distal pole of the fabella. This is located directly over the origin of the CCL.

T (Tibia) – is located just distal to the tibial plateau as proximal as possible midway between the LDE sulcus and the cranial edge of the tibia.



Item # Information

Patient Weight Recommendation

< 40 lbs (18 Kg) — 3.0 mm Bone Anchor AND #2 Self-Locking Suture

Item# Product Description

Froduct Description

OrthoZip Plus Size 2 Fiber, Self-Locking Suture SAH.EV005636 3.0mm x 16mm (10mm Thread) Cancellous OrthoZip Anchor SAH.EV005753 3.0mm x 18mm (12mm Thread) Cancellous OrthoZip Anchor SAH.EV005754 3.0mm x 20mm (14mm Thread) Cancellous OrthoZip Anchor SAH FV005755 3.0mm x 22mm (16mm Thread) Cancellous OrthoZip Anchor SAH.EV005756 3.0mm x 24mm (18mm Thread) Cancellous OrthoZip Anchor SAH.EV005757 SAH.EV005758 3.0mm x 26mm (20mm Thread) Cancellous OrthoZip Anchor SAH.EV005759 3.0mm x 28mm (22mm Thread) Cancellous OrthoZip Anchor 3.0mm x 30mm (24mm Thread) Cancellous OrthoZip Anchor SAH.EV005760 3.0mm x 32mm (26mm Thread) Cancellous OrthoZip Anchor SAH.EV005761 3.0mm x 34mm (28mm Thread) Cancellous OrthoZip Anchor SAH.EV005762 3.0mm x 36mm (30mm Thread) Cancellous OrthoZip Anchor SAH.EV005763 3.0mm x 38mm (32mm Thread) Cancellous OrthoZip Anchor SAH.EV005764 3.0mm x 40mm (34mm Thread) Cancellous OrthoZip Anchor SAH.EV005765

Patient Weight Recommendation

40 -70 Lbs (18 - 32 Kg) - 4.0 mm Bone Anchor #5 Self-Locking Suture

Item# **Product Description** SAH.EV005638 OrthoZip Plus Size 5 Fiber, Self-Locking Suture SAH.EV005731 4.0mm x 18mm (13mm Thread) Cancellous OrthoZip Anchor SAH.EV005732 4.0mm x 20mm (15mm Thread) Cancellous OrthoZip Anchor SAH EV005735 4.0mm x 22mm (17mm Thread) Cancellous OrthoZip Anchor SAH.EV005736 4.0mm x 24mm (19mm Thread) Cancellous OrthoZip Anchor 4.0mm x 26mm (21mm Thread) Cancellous OrthoZip Anchor SAH.EV005737 4.0mm x 28mm (23mm Thread) Cancellous OrthoZip Anchor SAH.EV005738 SAH.EV005739 4.0mm x 30mm (25mm Thread) Cancellous OrthoZip Anchor SAH.EV005740 4.0mm x 32mm (27mm Thread) Cancellous OrthoZip Anchor 4.0mm x 34mm (29mm Thread) Cancellous OrthoZip Anchor SAH.EV005741 SAH.EV005742 4.0mm x 36mm (31mm Thread) Cancellous OrthoZip Anchor SAH.EV005743 4.0mm x 38mm (33mm Thread) Cancellous OrthoZip Anchor SAH.EV005744 4.0mm x 40mm (35mm Thread) Cancellous OrthoZip Anchor SAH.EV005745 4.0mm x 42mm (37mm Thread) Cancellous OrthoZip Anchor SAH.EV005746 4.0mm x 44mm (39mm Thread) Cancellous OrthoZip Anchor

Accessories

Item#	Product Description
SAH.EV003149 2.0 QCK 100	Screwdriver, Teflon handle, 2.5mm Hex 2.0mm Quick Coupling Drill Bit - 100mm
319.01	Depth Gauge for 2.4 - 4.0mm Screws, 5-60mm - 1.8mm Tip

OrthoZip may be used on patients greater than 70 lb. (32 kg); users are advised to exercise caution, as any extracapsular repair on high mass patients comes with certain risks of failure.

Support Instrumentation

SAG,EV003149Screwdriver 2.5mm Hex, Teflon HandleSAG,EVDBJC20Jc Drill Bit, 2.0mm 85mm Long, Anti-skid Tin CoatedDDS 2.0/2.7Drill Sleeve Dbl Ended 2.0/2.72.0 QCK 1002.0mm Quick Coupling Drill Bit - 100mm2.0 QCK 100 DLC2.0mm Quick Coupling Drill Bit, DLC Coated -100mm	Item#	Product Description
50020Universal Aiming Device Drill Guide 2.0mm50025Universal Aiming Device Drill Guide 2.5mm	SAG,EVDBJC20 DDS 2.0/2.7 2.0 QCK 100 2.0 QCK 100 DLC 50000 50020 50025	Jc Drill Bit, 2.0mm 85mm Long, Anti-skid Tin Coated Drill Sleeve Dbl Ended 2.0/2.7 2.0mm Quick Coupling Drill Bit - 100mm 2.0mm Quick Coupling Drill Bit, DLC Coated -100mm Imex Universal Aiming Device Universal Aiming Device Drill Guide 2.0mm



K Movora Education

Explore options for online education and in-person labs to learn more about Movora's extracapsular solutions.

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