

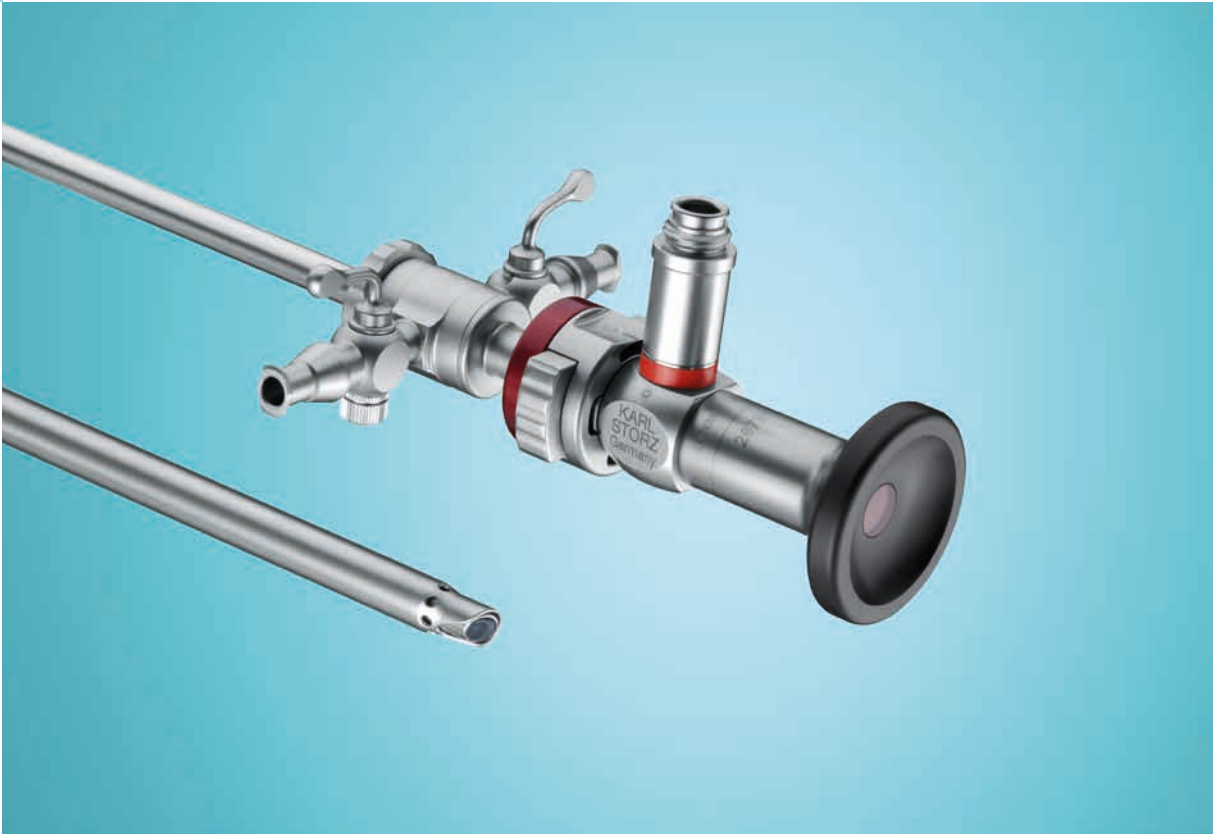
Highlights 2019

Arthroscopy and Sports Medicine



Knee

STORZ
KARL STORZ – ENDOSKOPE



Diamond Standard: HOPKINS® Telescopes and Sheaths for Optimal Vision

KARL STORZ HOPKINS® telescopes are considered to be the best arthroscopes in the industry. The diverse product range covers all arthroscopic interventions while the unique rod lens system ensures excellent image quality with optimal brightness, contrast and detail properties.

The product range includes all well-established angles of view in arthroscopy:

- 0° • 30° • 70°

Arthroscopes with diameters ranging from 1 mm to 4 mm leave nothing to be desired. A selection of sheaths with various locking mechanisms, which are co-ordinated with HOPKINS® telescopes, ensures the safe locking of the telescope in the sheath.

Recommended Sets, consisting of HOPKINS® Telescopes, Arthroscope Sheaths and Obturators

Set for the Knee Joint:

- 28731 BWA **HOPKINS® Wide Angle Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28135 CR **High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 5.5 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28126 BC/BT/BS, 28134 O, color code: blue
- 28126 BT **Obturator**, semisharp, for use with Arthroscope Sheaths 28229 DR, 28129 CR, 28126 CR/R/B, 28136 CR, 28135 CR and 28136 EC, color code: green-red-yellow

Set for the Shoulder Joint:

- 28731 BWA **HOPKINS® Wide Angle Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28136 CR **High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 6 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28126 BC/BT/BS, 28134 O, color code: red
- 28126 BT **Obturator**, semisharp, for use with Arthroscope Sheaths 28229 DR, 28129 CR, 28126 CR/R/B, 28136 CR, 28135 CR and 28136 EC, color code: green-red-yellow

Set for the Hip Joint:

- 28731 CWA **HOPKINS® Wide Angle Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: yellow
- 28130 CR **High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 6 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28130 BC/BT, 28140 O, color code: red
- 28130 BT **Obturator**, semisharp, for use with Arthroscope Sheaths 28131 CR/R, 28130 CR/R, color code: green-red-yellow

Set for the Ankle and Elbow Joints:

- 28208 BA **HOPKINS® Forward-Oblique Telescope 30°**, diameter 2.7 mm, length 11 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28133 DS **High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 4 mm, working length 7.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescope 30° and Obturator 28133 BC
- 28133 BC **Obturator**, blunt, for use with Arthroscope Sheaths 28133 CR/DS

Set for the Wrist Joint:

- 28300 BA **HOPKINS® Wide Angle Forward-Oblique Telescope 30°**, diameter 2.4 mm, length 10 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28303 DS **High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 3.5 mm, working length 6.5 cm, two stopcocks, rotatable, for use with HOPKINS® Telescope 30° 28300 BA and Obturators 28302 BU/BV
- 28302 BV **Obturator**, blunt, for use with Arthroscope Sheaths 28303 DS/BS

Further HOPKINS® telescopes and sheaths can be found in the Arthroscopy and Sports Medicine catalog.



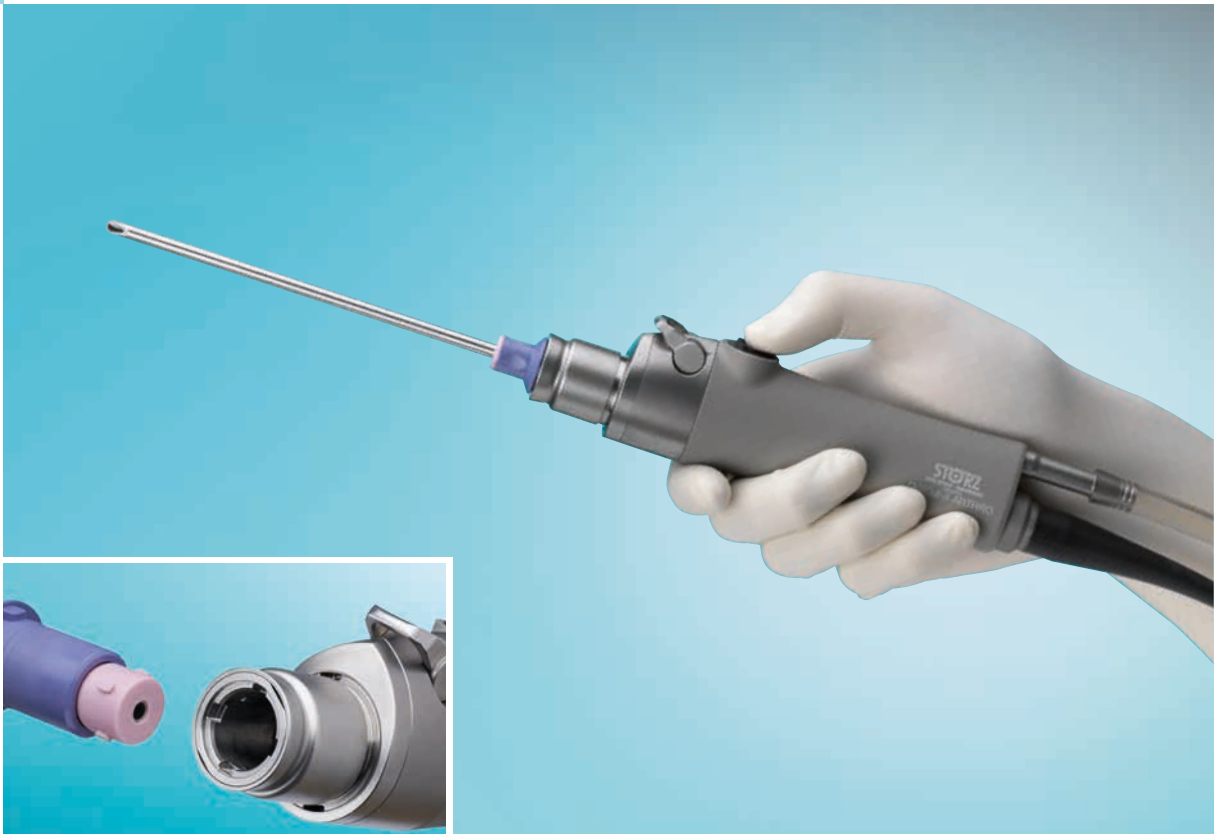
A Revolution in Imaging: EndoCAMEleon® with Variable Direction of View

ENDOCAMELEON® ARTHRO is a multidirectional arthroscope that combines the existing HOPKINS® technology with a variable direction of view. This guarantees optimal image quality with ideal visualization. The desired direction of view can be adjusted between 15° and 90° during surgery. The ENDOCAMELEON® is particularly beneficial for working in tight joint spaces as the all-round view has been greatly enhanced.

Special Features:

- HOPKINS® telescope with unique rod lens system for optimal brightness and contrast
- Easy-to-use adjusting knob selects the desired direction of view (15° to 90°)
- Better visualization of difficult-to-reach anatomical structures
- Time-saving as portal changeover is reduced

- 28731 AE **ENDOCAMELEON® ARTHRO HOPKINS® Telescope**, diameter 4 mm, length 18 cm, **autoclavable**, variable direction of view from 15° – 90°, adjustment knob for selecting the desired direction of view, fiber optic light transmission incorporated, color code: gold
- 28136 EC **Arthroscope Sheath ENDOCAMELEON®**, with snap-in coupling mechanism, diameter 6 mm, working length 13.5 cm, distal tapered, with irrigation holes, two stopcocks, rotatable, for use with ENDOCAMELEON® ARTHRO HOPKINS® Telescope 28731 AE and Obturator 28134 O with cannulated handle or Obturators 28126 BC/BT
- 28126 BT **Obturator**, semisharp, for use with Arthroscope Sheaths 28229 DR, 28129 CR, 28126 CR/R/B, 28136 CR, 28135 CR and 28136 EC, color code: green-red-yellow
- 28140 EWK **Changing Rod ENDOCAMELEON®**, cannulated, diameter 3.8 mm, length 31 cm, for use with Arthroscope Sheath ENDOCAMELEON® 28136 EC and Nitinol Guide Wire 28140 GW



Performance Meets Ergonomics: The New DrillCut-X® ARTHRO Shaver Handpiece

The new DRILLCUT-X® ARTHRO shaver handpiece stands out due to its excellent cleanability and exceptional versatility. It features an ergonomic design while its dimensions make the tool suitable for use in both large and small joints. The shaver handpiece is controlled via the UNIDRIVE® S III ARTHRO console.

- Ergonomic design allows various hand positions
- Possible to lock blades in 4 positions (0°, 90°, 180°, 270°)
- Low-noise operation
- Handpiece weight of only 310 g allows fatigue-free work



Unique feature:

The distal end of the shaver handpiece is detachable so that optimal cleaning of previously hard-to-access areas is possible.






The DRILLCUT-X® ARTHRO shaver handpiece and versatile shaver blades is a combination that is optimal for successful arthroscopy. Various reusable blades as well as blades for single use offer a wide range of high-quality working materials.

Shaver Handpiece:

28200 DX **DRILLCUT-X® ARTHRO Shaver Handpiece**, up to 8000 rpm, for use with UNIDRIVE® S III ARTHRO SCB **28723020-1**, as of software status 1.10.

Shaver Blades:

Working length 120 mm

Type		Use	Order No.	Diameter	Color Code	Application
	Aggressive Cutter	reusable	28205 AB	3.5 mm	green	soft tissue
			28205 AC	4.2 mm		
			28205 AD	5.5 mm		
		for single use	28205 ABS	3.5 mm light gray		
			28205 ACS	4.2 mm medium gray		
			28205 ADS	5.5 mm purple		
	Aggressive Cutter	reusable	28205 AK	4.5 mm	green	soft tissue
		for single use	28205 AKS	4.5 mm purple		
	End Cutter	reusable	28205 BC	4.2 mm	red	soft tissue
		for single use	28205 BCS	4.2 mm medium gray		
	Full Radius Resector	reusable	28205 CC	4.2 mm	yellow	soft tissue
		for single use	28205 CBS	3.5 mm light gray		
			28205 CCS	4.2 mm medium gray		
			28205 CDS	5.5 mm dark gray		
	Round Burr	reusable	28205 FC	4.2 mm	orange	bone
		for single use	28205 FCS	4.2 mm medium gray		
			28205 FDS	5.5 mm dark gray		

Further reusable blades as well as blades for single use can be found in the Arthroscopy and Sports Medicine catalog.



A Portfolio for all Demands: Techniques for Cruciate Ligament Reconstruction

Products and techniques that set a new standard in established arthroscopic knee surgery were successfully developed in collaboration with well-known orthopedic specialists and trauma surgeons.

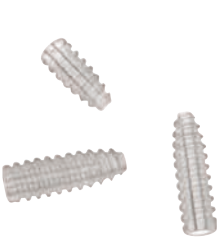
The versatile product range for anatomically correct reconstruction of the cruciate ligaments includes instruments for both the anterior and posterior cruciate ligaments.

- Graft harvesting and preparation: Offers optimal harvesting and preparation of all common grafts
- Tunnel placement: A large selection of aimers, drills and dilators ensures efficient tunnel placement
- Tibial and femoral fixation systems: Interference screws manufactured from ultramodern materials as well as fixation buttons made of titanium for femoral and tibial anchorage ensure excellent long-term results and patient satisfaction

Bioresorbable Interference Screws:

MEGA FIX® B – The Bioresorbable Interference Screw

Material: Amorphous stereocopolymer Poly(L-Lactide-co-D, L-Lactide)



Diameter	Length	Art. No.
6 mm	19 mm	2870619 B
	23 mm	2870623 B
7 mm	19 mm	2870719 B
	23 mm	2870723 B
	28 mm	2870728 B
8 mm	19 mm	2870819 B
	23 mm	2870823 B
	28 mm	2870828 B
9 mm	23 mm	2870923 B
	28 mm	2870928 B

Note: Also available as a composite consisting of amorphous stereocopolymer Poly(L-Lactide-co-D, L-Lactide) and the ceramic material β -TCP (β – tricalcium phosphate) (80:20).

MEGA FIX® P – The Perforated Bioresorbable Interference Screw

Material: Amorphous stereocopolymer Poly(L-Lactide-co-D, L-Lactide)



Diameter	Length	Art. No.
8 mm	23 mm	2870823 P
	28 mm	2870828 P
9 mm	23 mm	2870923 P
	28 mm	2870928 P
	35 mm	2870935 P
10 mm	28 mm	2871028 P
	35 mm	2871035 P
11 mm	35 mm	2871135 P

Note: Also available as a composite consisting of amorphous stereocopolymer Poly(L-Lactide-co-D, L-Lactide) and the ceramic material β -TCP (β – tricalcium phosphate) (80:20).

Extracortical Implant Systems for Femoral and Tibial Fixation



28729 FT

FLIPTACK, extracortical fixation button, 4 x 12 mm, sterile, for single use



28729 TT

ENDOTACK®, tibial fixation button, 10 x 16 mm, sterile, for single use

Further information on instruments and implants for cruciate ligament reconstruction is available in the Arthroscopy and Sports Medicine catalog.



Unique: Minimally Invasive Harvesting of the Quadriceps Tendon for Reconstruction of the Cruciate Ligaments and MPFL

The quadriceps tendon is used in cruciate ligament revision surgery and, more and more frequently, for the primary reconstruction of the anterior (ACL) and posterior (PCL) cruciate ligaments. The quadriceps tendon has also emerged as an ideal graft source for the reconstruction of the medial patellofemoral ligament (MPFL).

A special tendon harvesting system was designed to provide fast, safe and atraumatic tendon harvesting, featuring the following properties:

- Reproducible technique
- Easy and safe subcutaneous tendon harvesting
- Defined harvesting depth
- Attractive cosmetic results

The instrument set also enables quadriceps tendon harvesting for the anatomical reconstruction of the medial patellofemoral ligament (MPFL). One of the benefits of this technique is that the patella remains free of implant fixations and drill tunnels.

- 28185 QS **Quadriceps Tendon Cutter**, for subcutaneous terminal cutting of the quadriceps tendon
- 28185 MH **Handle**, for use with Quadriceps Tendon Knives 28185 FA – FF and Quadriceps Tendon Separators 28185 EA – EC
- 28185 MB **Tendon Thickness Tester**, for determining the thickness of the quadriceps tendon

Knives for Harvesting the Quadriceps Tendon

MPFL Reconstruction	Cutting	Dimensions (w × h)	Art. No.
Tendon Knife	vertical parallel	10 × 4 mm	28185 FA
Tendon Knife	vertical parallel	12 × 4 mm	28185 FB
Tendon Separator	horizontal parallel	2 mm in height	28185 EA
Tendon Separator	horizontal parallel	3 mm in height	28185 EB

Cruciate Ligament Reconstruction	Cutting	Dimensions (w × h)	Art. No.
Tendon Knife	vertical parallel	8 × 6 mm	28185 FC
Tendon Knife	vertical parallel	9 × 6 mm	28185 FD
Tendon Knife	vertical parallel	10 × 6 mm	28185 FE
Tendon Knife	vertical parallel	12 × 6 mm	28185 FF
Tendon Separator	horizontal parallel	5 mm in height	28185 EC



SilCut® PRO Punches for Precise Interventions

The instrument line with diverse jaw geometries and sharp homogenous cutting



The hand instruments in the SILCUT® PRO product line set new standards in arthroscopic resection. Furthermore, KARL STORZ CLEANFIT® offers a unique cleaning concept that guarantees straightforward and efficient instrument cleaning.

The SILGRASP® PRO Line product range includes punches for large and small joints. In addition, a series of grasping forceps supplement this portfolio. The design and construction of the SILCUT® PRO range integrates all the demands that should be met by an arthroscopic precision instrument.

- Utmost precision thanks to an extremely flat profile
- Optimal cleaning thanks to integrated LUER-connector
- Diverse jaw models for different anatomic conditions
- Functional and ergonomic design for fatigue-free work





Punches with square jaw shape

cross-toothed, cutting width 3.4 mm, sheath diameter 3.5 mm, working length 12 cm



- | | | |
|---|-----------|--|
|  | 28571 BBL | SILCUT® PRO Upbiter , jaws curved, 15° upwards, sheath curved 15° to left and 10° curved upwards |
|  | 28571 BBR | SILCUT® PRO Upbiter , jaws curved, 15° upwards, sheath curved 15° to right and 10° curved upwards |

Punches with special jaw shape



with circumferential teeth, cutting width 4.3 mm, sheath diameter 3.5 mm, straight sheath, working length 12 cm

- | | | |
|--|-----------|---|
|  | 28571 CL | SILCUT® PRO Side Punch , angled jaws, curved to left 45° |
|  | 28571 CLU | SILCUT® PRO Side Punch , angled jaws, 15° upwards, left 45° |
|  | 28571 CR | SILCUT® PRO Side Punch , angled jaws, curved to right 45° |
|  | 28571 CRU | SILCUT® PRO Side Punch , angled jaws, 15° upwards, right 45° |

with circumferential teeth, cutting width 5.8 mm, sheath diameter 3.5 mm, straight sheath, working length 12 cm

- | | | |
|---|----------|--|
|  | 28571 E | SILCUT® PRO Giga Punch , straight jaws |
|  | 28571 EU | SILCUT® PRO Giga Punch , curved jaws, 15° upwards |

with circumferential teeth, cutting width 5 mm, sheath diameter 3.5 mm, straight sheath, working length 12 cm

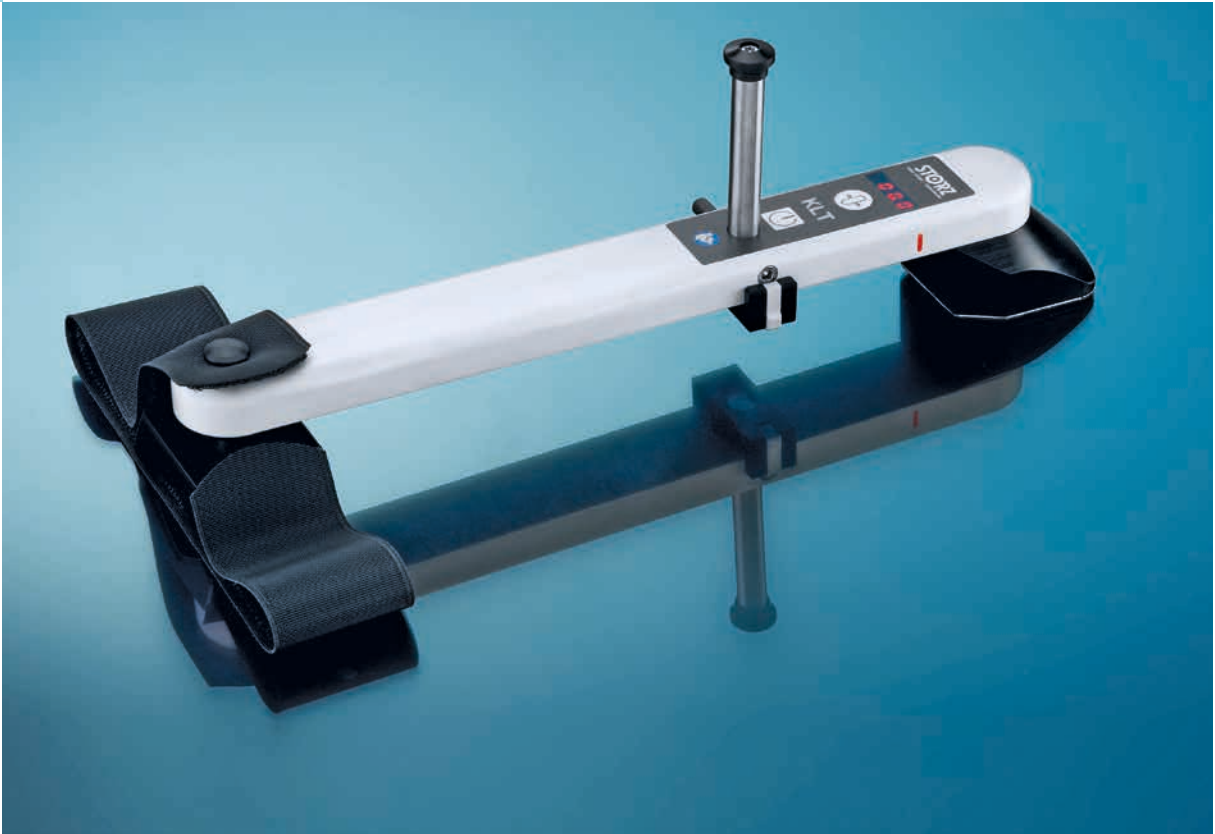
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|  | 28571 S | SILCUT® PRO Square Punch , rhombic jaws |
|  | 28571 SU | SILCUT® PRO Square Punch , rhombic jaws, 15° upwards |

Scissors, sheath diameter 3.5 mm, straight, working length 14 cm

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|---|----------|---|
|  | 28571 SP | SILCUT® PRO Scissors , straight jaws |
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All instruments are equipped with a handle with connector for cleaning.

Further information on grasping forceps and instruments is available in the Arthroscopy and Sports Medicine catalog.



Precise Measurement of the Stability of the Knee Joint: KLT – Knee Laxity Tester

The Knee Laxity Tester (KLT) was developed to allow fast and straightforward instrumented stability testing. This tester provides exact and reproducible measurements of tibial translation (drawer) in a side-by-side comparison. The patella pad on the upper end of the KLT is placed on the anterior surface of the patella. The mobile measuring plunger is then pressed against the tibial tubercle.

A testing device must meet a number of requirements in order to be suitable for routine clinical use. The KLT offers the following advantages:

- Easy handling for precise stability testing in examination rooms
- Easy and fast fixation of the KLT to the patient (zero point calibration)
- Easy and fast calibration
- Exact and fast measurement process
- High accuracy (± 0.1 mm)
- Digital display of results – easy to read
- Wide range of tests

Injuries to the cruciate ligaments and the ligament/cartilage structures may cause instability or laxity of the knee. This can be instrumentally measured with the KLT.

The KLT makes it possible to perform four important clinical tests for the diagnosis of anterior and/or posterior cruciate ligament lesions:

1. Lachman test
2. Spontaneous posterior drawer test in 90° flexion
3. Fixed posterior drawer test
4. Anterior drawer test in 90° flexion

28729 KLT **Knee Laxity Tester**, for instrumented stability tests

Imaging and OR Integration



Storage and
administration of image
and video data



SCENARA® .store

Flexible support for
image sources



Centralized communication
interface



SCENARA® .connect

KARL STORZ OR1™

Future-oriented integration meets innovative
data management



KARL STORZ SE & Co. KG, Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany
www.karlstorz.com

Further information and an overview
of Arthroscopy and Sports Medicine
products from KARL STORZ
can be viewed on



www.karlstorz.com
in the Human Medicine section,
Arthroscopy and Sports Medicine

It is recommended to check the suitability of the product for the intended procedure prior to use.

