RICHTER POWERFIX® Set
Instruments and bioinert PEEK implants for cruciate ligament reconstruction
RICHTER POWERFIX® set for the reconstructive treatment of cruciate ligament ruptures

The new set from KARL STORZ for ligament fixation in minimally invasive knee surgery: Inert implant material in combination with sophisticated instruments. This combination offers the possibility of safe use and reliable reproducibility of your surgical procedures.

Jörg Richter, M.D., Markgröningen
Germany
Features and Benefits

- Inert material
- Easy revision
- MRI-neutral
- Less risk of breakage
- Threads more stable than bioresorbable screws
- Accelerated insertion due to the use of two threads
- Left and right-handed threads, femoral
- Structured screw portfolio
- Neutrality towards the bone
POWERFIX® PEEK interference screws, made from PEEK-OPTIMA®, provide strong mechanical fixation of both hamstring and BTB grafts for the reconstructive treatment of anterior as well as posterior cruciate ligament ruptures. The POWERFIX® PEEK interference screws feature a double-threaded design, which considerably simplifies and also accelerates insertion. Thanks to a standardized and easily reproducible technology, a consistent treatment outcome is achieved.

The RICHTER POWERFIX® set combines the latest technical possibilities with proven technology. This results in the most optimal and stable graft fixation near the joint in the reconstruction of cruciate ligament ruptures. The perfectly matched implants in combination with the instruments used provide an optimal connection between the screw and the screwdriver. High torsional stability ensures the secure application of the implant and significantly reduces the dreaded risk of breakage.

- High mechanical stability
- Excellent biocompatibility
- Inert, non-resorbable PEEK
- Manageable and sensible product range

With its bone-like modulus, the PEEK-OPTIMA® implant can help minimize stress shielding and stimulate bone healing.

The POWERFIX® interference screws made of PEEK-OPTIMA® are radiolucent and thus allow optimal monitoring of the healing process by means of X-rays, CT or MRI without creating artefacts.

PEEK-OPTIMA® material is extremely robust, durable and highly resistant to fatigue. Polymers are able to withstand frequent sterilization processes without showing any signs of degradation.

PEEK-OPTIMA® has a long history of success with regard to safety, biocompatibility and biostability.
The screw design offers further advantages through its two-thread pattern and the screw drive that extends down to the screw tip. This makes it possible to insert the screw with just a few turns of the screwdriver.

Another highlight of the screw design is the availability of both clockwise and reverse femoral interference screws. These prevent an inadvertent dislocation of the graft.

Particularly for anterior cruciate ligament reconstruction of the right knee, the reverse-thread interference screw achieves better results as the graft is systematically blocked dorsally and cannot be luxated in a ventral direction.

The high stability of the PEEK-OPTIMA® material thus prevents the dreaded risk of implant fractures significantly. Furthermore, it allows for a high torsional force which makes it considerably easier to start the implant.

Despite all this mechanical stability and even if bone density is high, the thread design prevents damage to the graft through optimal tunnel preparation using instruments from the RICHTER POWERFIX® set.
Instruments

Features and benefits

- Gentle harvesting of hamstring tendons using blunt and open tendon strippers
- Tendon thickness tester for use directly on the patient
- Placement of femoral tunnels with special laser-marked bone drills
- Placement of tibial tunnels using collar burrs
- Dilators with fins for femoral tunnel creation whereby the screw position can be freely preselected and screw insertion behavior is enhanced
- Femoral target guide with axial handle and 7 mm offset
- Angle adjustable (50°-85°) tibial target guide with quick-release insertion guide
- Screwdriver for all screw sizes with short, robust and laser-marked guide wire
POWERFIX® PEEK Interference Screws

**Clockwise Threads**

2870725 PR  **POWERFIX®,** PEEK interference screw, clockwise, diameter 7 mm, length 25 mm, sterile, for single use
2870825 PR  **POWERFIX®,** PEEK interference screw, clockwise, diameter 8 mm, length 25 mm, sterile, for single use
2870830 PR  **POWERFIX®,** PEEK interference screw, clockwise, diameter 8 mm, length 30 mm, sterile, for single use
2870835 PR  **POWERFIX®,** PEEK interference screw, clockwise, diameter 8 mm, length 35 mm, sterile, for single use
2870930 PR  **POWERFIX®,** PEEK interference screw, clockwise, diameter 9 mm, length 30 mm, sterile, for single use
2870935 PR  **POWERFIX®,** PEEK interference screw, clockwise, diameter 9 mm, length 35 mm, sterile, for single use

**Reverse Threads**

2870725 PL  **POWERFIX®,** PEEK interference screw, reverse thread, diameter 7 mm, length 25 mm, sterile, for single use
2870825 PL  **POWERFIX®,** PEEK interference screw, reverse thread, diameter 8 mm, length 25 mm, sterile, for single use
RICHTER POWERFIX® Set

28729 PZT  POWERFIX® Tibial Target Guide, for ACL reconstruction, tunnel angle adjustable between 50° and 85°

28729 PZF  POWERFIX® Femoral Target Guide, for ACL reconstruction, with 7 mm offset, for drilling diameters 6-10 mm

28789 PS  POWERFIX® Screwdriver, cannulated, size 7-9, handle with cleaning connector, for use with POWERFIX® PEEK interference screw diameter 7-9 mm and POWERFIX® Guide Wire 28789 PGW-6
28789 PGW-6  **POWERFIX® Guide Wire**, diameter 1.4 mm, length 26.5 cm, unsterile, for single use, package of 6, for use with **POWERFIX® Screwdriver 28789 PS**

28729 BLR  **POWERFIX® Undercut Drill**, diameter 7.5 mm, cannulated, with additional laser marking, for use with Drilling Wire 28729 D-6 and Larding Wire 28729 E

28729 BER  **POWERFIX® Undercut Drill**, diameter 8 mm, cannulated, with additional laser marking, for use with Drilling Wire 28729 D-6 and Larding Wire 28729 E

28729 BMR  **POWERFIX® Undercut Drill**, diameter 8.5 mm, cannulated, with additional laser marking, for use with Drilling Wire 28729 D-6 and Larding Wire 28729 E

28729 BFR  **POWERFIX® Undercut Drill**, diameter 9 mm, cannulated, with additional laser marking, for use with Drilling Wire 28729 D-6 and Larding Wire 28729 E

28729 BNR  **POWERFIX® Undercut Drill**, diameter 9.5 mm, cannulated, with additional laser marking, for use with Drilling Wire 28729 D-6 and Larding Wire 28729 E
28729 BLD  **Collar Burr**, tibial, diameter 7 mm, cannulated, collar diameter 8.5 mm at 43 mm, for use with Drilling Wire 28729 D and Larding Wire 28729 E

28729 BLL  **Collar Burr**, tibial, diameter 7.5 mm, cannulated, collar diameter 9 mm at 43 mm, for use with Drilling Wire 28729 D and Larding Wire 28729 E

28729 BLE  **Collar Burr**, tibial, diameter 8 mm, cannulated, collar diameter 9.5 mm at 43 mm, for use with Drilling Wire 28729 D and Larding Wire 28729 E

28729 BLM  **Collar Burr**, tibial, diameter 8.5 mm, cannulated, collar diameter 10 mm at 43 mm, for use with Drilling Wire 28729 D and Larding Wire 28729 E

28729 BLF  **Collar Burr**, tibial, diameter 9 mm, cannulated, collar diameter 10.5 mm at 43 mm, for use with Drilling Wire 28729 D and Larding Wire 28729 E

28729 AC  **Open Tendon Stripper**, graduated, diameter 7.5 mm, length 30 cm

28729 DFQ  **Dilator with Fin**, cannulated, for dilating the femoral drill channel to diameter 7 mm and simultaneous placement of a notch 25 mm in length

28729 DFR  **Dilator with Fin**, cannulated, for dilating the femoral drill channel to diameter 7.5 mm and simultaneous placement of a notch 25 mm in length

28729 DFS  **Dilator with Fin**, cannulated, for dilating the femoral drill channel to diameter 8 mm and simultaneous placement of a notch 25 mm in length

28729 DFT  **Dilator with Fin**, cannulated, for dilating the femoral drill channel to diameter 8.5 mm and simultaneous placement of a notch 25 mm in length

28729 DFU  **Dilator with Fin**, cannulated, for dilating the femoral drill channel to diameter 9 mm and simultaneous placement of a notch 25 mm in length
**28729 SE**  
**Tendon Thickness Tester**, for determination of tendon thickness size 7-12 at intervals of 0.5 mm

**28728 KB**  
**Curette**, oval, large, curved, 30° upwards, working length 13 cm

**28728 KC**  
**Curette oval**, medium, curved, 10° upwards, working length 13 cm

**754719**  
**SCHNIDT Forceps**, slightly curved, serrated, length 19 cm

**28729 D-6**  
**Drilling Wire**, spiral shape, with eyelet, diameter 2.4 mm, length 38 cm, unsterile, for single use, package of 6, for use with Undercut Drills 28729 BA-BH, POWERFIX® Undercut Drills 28729 BER-BNR, Collar Burrs 28729 BLC-BLF and Drills 28729 GA-GE

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