Made in Germany
The KINEGEN Knee Joint Series
Prosthetic knee joint systems are used to replace the missing healthy knee joint. Their design must therefore meet very high technical demands in order to enable the amputee to live a carefree life again. Which knee joint is used for which patient is first and foremost depending on the activity level of the patient. Therefore, it is crucial to diligently and correctly determine the activity level in order to achieve the best possible provisioning for the patient.

With our KINEGEN Series which was developed here at Streifeneder and is made in Germany we are able to offer an excellent range of technically sophisticated prosthetic knee joints for every requirement. Their high functionality combined with the aesthetic design gives the amputee a higher quality of life, in everyday life as well as in leisure time.
Features

Prosthetic knee joints must not only replace the biological knee joint but also partly take over the function of the missing muscular system as well. As a result, the prosthetic knee joint must meet numerous requirements – it has to provide the patient with a high degree of safety, meet the dynamic of the amputees and must be adjustable to his gait pattern.

Especially geriatric patients need a very good stability from heel strike to toe push-off. This can be achieved by different technical solutions such as a lock, a load-dependent brake, or by means of a polycentric knee joint as well. In order to achieve this stability, locked joints are primarily used for geriatric patients. They will allow for a bending of the lower limb (e. g. to sit down) only after the patient has manually unlocked them.

These needs are perfectly met by our new knee joint KINEGEN.guard, which not only offers a load-dependant brake, but also a lock which can be deactivated and is backlash free. As the patient becomes more active, it is essential to make his swing phase, which is now longer due to the increased walking speed, as comfortable as possible.
Joints with adjustable load-dependent braking functions and knee-extending elastic elements such as the newly developed KINEGEN.basic provide the patient with an optimum mobility at low walking speeds.

Swing-phase controlled joints for medium walking speeds such as the KINEGEN.air are equipped with a load-dependent brake, a knee-extending spring element and a pneumatic system. The pneumatic system of the KINEGEN.air allows both, independent and continuous adjustments of the kinetic resistance for flexion (bending) and extension (stretching) and the continuous adjustment of the final extension impact damping. Thus, the extension impact is comfortably damped prior to the full extension of the joint.

KINEGEN.air-active 3A1800 is a polycentric knee joint with pneumatic swing phase control. Due to the shortened leg provided by the polycentric technology, an especially large flexion angle and therefore better stumbling protection during the swing phase is achieved.

For highly active patients we have developed our polycentric knee joint KINEGEN.stream. Due to its high performance hydraulic system, it offers a variety of adjustment possibilities and can therefore be optimally adjusted to the individual needs of the amputee.
3A850 KINEGEN.guard

- locking mechanism connects the upper and the lower part backlash-free, in order to offer a rigid joint with high safety level
- after deactivating the lock, the joint can be used as a knee joint with constant friction
- both the braking force as well as the spring-loaded mechanism that supports the joint during extension can be individually adjusted to the patient
- high stance phase stability, even without lock, through its load-dependant brake and its joint axis that is shifted to the back
- interior, steplessly adjustable extension assist spring
- all settings may be made wearing the prosthesis and in a sitting position

max. 125 kg
3A810 KINEGEN.basic

- like 3A850, but without locking mechanism
- high stance phase stability through load-depandanct brake and a joint axis shifted to the back
- knee stability even when walking on an inclined plane
- very smooth-running, therefore low expenditure of energy for the patient
- interior, steplessly adjustable extension assist spring
- all settings may be made wearing the prosthesis and in a sitting position

max. 125 kg
3A1000 KINEGEN.air

- adjustable pneumatic final extension impact damping for optimum wearing comfort
- pneumatic swing-phase control through adjustable dual chamber pneumatics
- easy adjustment of the pneumatics through flexion and extension damping which both can be independently configured
- high stance phase stability through load-dependant brake and a joint axis shifted to the back
- knee stability even when walking on an inclined plane

An essential advantage is the precise end position damping adjustability of the KINEGEN.air, which comfortably lowers the impact of the extension stop just before full extension of the knee. This prevents unnecessary or additional loads on the patient’s stump and the gait pattern looks considerably more harmonious. Depending on the requested adjustment, it is possible to achieve a completely impact-free feeling in the patient’s stump.
3A1800 KINEGEN.air-active

- due to the polycentric technology, an especially large flexion angle is achieved
- furthermore, the alignment of the multiple axes provides a shortening of the prosthetic leg during swing phase adding to an increased safety against stumbling
- the pneumatic swing phase control in combination with the dynamic performance of the joint linkage ensures a harmonic and natural gait pattern of the prosthesis wearer
- pneumatic swing phase control by means of the adjustable pneumatic twin-chamber
- steplessly variable adjustment of the pneumatic extension- and flexion resistance
- extension support using an integrated extension assist
- mechanical stance phase safety provided by polycentric technology
- low in maintenance
- intuitive operation
- simple cosmetic covering

max. 125 kg
3A2000 KINEGEN.stream

- adjustable hydraulic final extension impact damping for optimum wearing comfort
- stepless adjustment possibilities for hydraulic extension and flexion resistance
- extension support via integrated pneumatic chamber
- good adaption to changing different speeds
- mechanical stance phase control through polycentricity
- shortening of the leg during swing phase through polycentric knee construction
- proximal connection movable in A-P direction for up to 10 mm
- Easy and safe switching to free-spin mode (e.g. for riding a bike)
- various proximal connection possibilities (pyramid adapter as well as M36 threaded connection)
- high performance hydraulics due to bigger cylinder volume
- great smoothness due to high quality bearings
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Max. patient weight</th>
<th>Activity level (walky)</th>
<th>Proximal connection</th>
<th>Distal connection</th>
<th>Knee flexion angle</th>
<th>Total height</th>
<th>Proximal assembly height</th>
<th>Distal assembly height</th>
<th>Total height joint head</th>
<th>Effective assembly height</th>
<th>Effective proximal assembly height</th>
<th>Effective distal assembly height</th>
<th>Weight</th>
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<tbody>
<tr>
<td>3A850</td>
<td>KINEGEN.guard Brake Knee Joint with Lock</td>
<td>125 kg</td>
<td>1 bis 2</td>
<td>Pyramid adapter</td>
<td>Ø 30 mm</td>
<td>145°</td>
<td>175 mm</td>
<td>53 mm</td>
<td>120 mm</td>
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<td>830 g (3A810)</td>
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<td>Ø 34 mm</td>
<td>145°</td>
<td>249 mm</td>
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<td>1120 g</td>
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<td>Pyramid adapter</td>
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