ottobock.

OneFit® Select Kenevo Packages

Redefining the fitting experience in the NHS







2016

In late 2016, NHS England approved the funding of microprocessor knees.



2017

Ottobock introduce OneFit® concept.



2018

Customer survey.



Introducing OneFit® Select, the new way to order your Kenevo.

In late **2016**, NHS England approved the funding of microprocessor knees (MPKs) for those living with knee disarticulation, transfemoral, hip disarticulation and hemipelvectomy amputations. The funding was a huge step forward in improving the lives of countless amputees and enabled clinicians to select the best possible prosthesis available for their patients.

As a result of the funding, we knew the workload of the multi-disciplinary team would certainly increase and in response to this, Ottobock developed the OneFit® Trial and OneFit® Clinic concept. OneFit® Trial aimed to reduce the number of clinical appointments required for fitting, by providing patients with new products for their trial. Following successful completion of the trial, the patient remained on the same componentry, thus eliminating the potential safety risk of returning to their original limb before the definitive fitting.

In **2018**, we surveyed all the clinicians involved in fitting MPKs to NHS patients. The results not only highlighted the overwhelming success of our OneFit® Trial and OneFit® Clinic Concept, but it also showed that clinicians want even more flexibility, along with the ability to tailor the Kenevo package to meet the needs of their patients.

Now, in **2019**, in response to the results of the survey, we want to take the OneFit® concept even further and are delighted to launch our new order process; OneFit® Select.

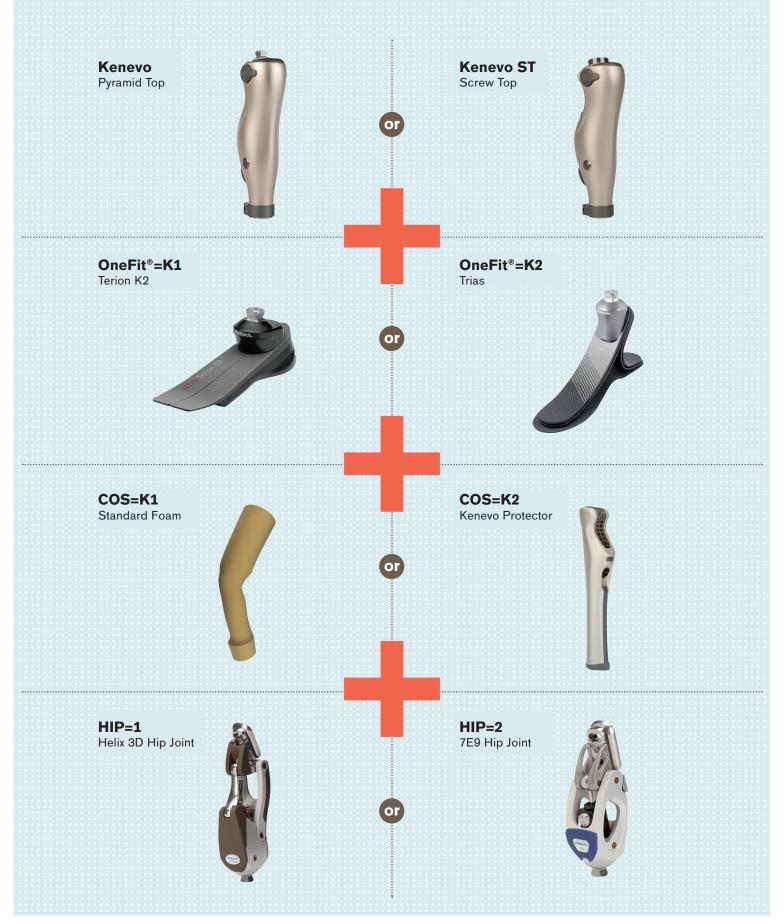
What is OneFit® Select?

OneFit® Select is the new way to order your Kenevo through the NHS MPK Policy. In addition to the benefits our OneFit® concept offers both you and your patients, we've streamlined the order process, extended the range of products to choose from, while still offering significant cost savings.

OneFit® Select aims to:

- · Ship all your ordered items for the trial
- · Add the full range of Kenevo cosmetic options to the package
- Increase the number of feet you can choose from
- · Offer a range of hip joints within your Kenevo package
- Provide simple part numbers and an easy ordering concept to build your Kenevo package

OneFit® Select Choose your package



Introducing the Kenevo

Ottobock's Kenevo is the world's first and only microprocessor knee specifically designed to meet the needs of low to moderate mobility patients. The Kenevo operates in one of 3 different modes which gives it the extraordinary ability to adapt to your patient's needs and developing skills; for example during rehabilitation.

Thinking ahead into the future when a patient's mobility deteriorates, either with age or comorbidity; they can continue to use the Kenevo knee joint and you can alter the mode to suit the patient's declining mobility.

The activity modes:

Overview

Mode A: Locked Mode

In mode A, the knee behaves like a semi-automatic knee lock. However, the unlocking of the knee joint is automatically detected by the IMU and releases the lock at exactly the right time to allow the patient to sit down safely. There are no uncosmetic lock cables or lock release levers on the socket. The resistance against flexion during sitting is hydraulically controlled and allows the patient to load both limbs whilst the sitting motion is being performed. Conversely, if the patient prefers to sit down with the prosthesis still fully extended and unloaded, then once they're sat down, the user can tap the toe or slightly extend the knee joint to release the lock and allow for a more cosmetic sitting position.



Mode B: Semi-locked mode without stance phase flexion

The flexion valve is closed throughout the entire stance phase mode. The knee joint unlocks for the swing phase. The swing phase release occurs late in the stance phase. This increases safety while walking and meets the special needs of less active users. The Kenevo re-determines the triggering threshold for each step so it always occurs at the right time and independent of the load.



Mode B+: Semi Locked mode with stance phase flexion

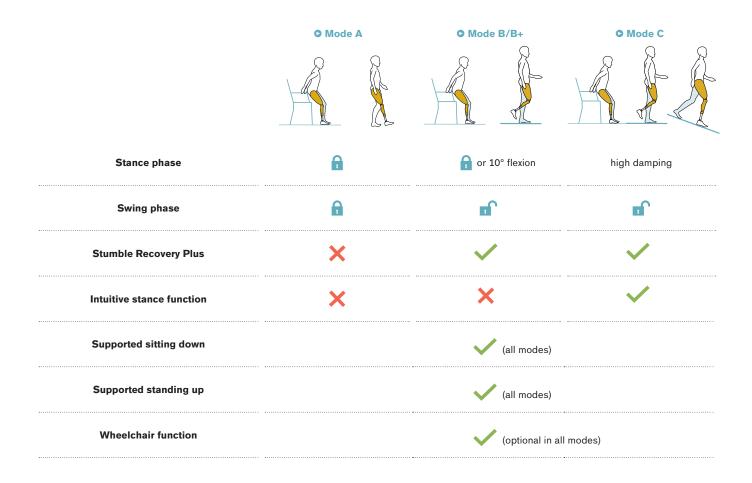
This activity mode is like mode B with its special swing phase release but is supplemented with stance phase flexion up to 10 degrees during heel strike. Stance phase extension damping is also adjusted in real time. The prosthetist can switch the stance phase flexion of mode B+ on or off in the K-Soft adjustment software. The addition of stance phase flexion at heel strike adds greater ground clearance during swing phase, even when walking slowly. In addition, walking up ramps becomes easier and safer.



Mode C: Yielding Mode

The user achieves even more natural walking in yielding mode. In contrast to the other activity modes, in this case the stance phase is not locked but exhibits a high level of damping. This supports the user on uneven surfaces, slopes and stairs. The swing phase can be released earlier, which promotes flexion damping in advance. As in the other activity modes, the swing phase flexion is not controlled, and the swing phase extension damping is adjusted automatically.

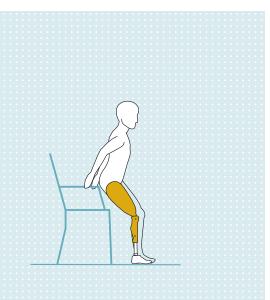




Unique safety

The basic functions

The Kenevo has basic functions that are always active – independent of the prosthesis adjustment and the activity mode selected. The user uses them intuitively.



Supported sitting down
Wheelchair function Supported standing up
Standing function Enhanced safety

If the user starts to sit down, the Kenevo detects this automatically with a patented control process. It adjusts the hydraulic resistance so the knee joint will bend in a controlled manner despite the load. The stance phase bending function provides progressive support, i.e. the damping increases as the load increases. The user can also sit down with the leg extended; the knee flexes automatically during sitting. As soon as the user is sitting, the Kenevo switches to energy saving mode.

Advantages

- · Provides a high level of safety and very good balance
- · No manual unlocking necessary; both hands are free for support on the armrests or walking aid
- · Relieves the contralateral side by shifting load to both legs
- · The joint is slightly damped in the flexion direction during sitting



Supported standing up Supported sitting down Wheelchair function

Standing function Enhanced safety

The Kenevo detects automatically when the user stands up. If the user cannot stand up in a single motion, the Kenevo provides support by locking the joint in the flexion direction (from 45° up to extended prosthesis).

Advantages

- · It is possible to place a load on the prosthesis while standing up even before the prosthesis is extended
- The user can rest on the prosthesis if standing up in a single motion
- · If the user falls backward, the knee joint switches automatically into supported sitting down





Enhanced safety Supported sitting down Standing function Supported standing up Wheelchair function

The Kenevo has various safety functions. These include Stumble Recovery Plus: during the swing phase, the Kenevo detects if the user trips. It then switches immediately to higher flexion resistance than the setting; this stumble recovery represents the highest level of safety that is technically possible. A further advantage is real-time gait and motion detection. The Kenevo detects immediately if the user interrupts a motion and switches to higher stance phase flexion resistance in this case as well. In addition, there is a safety mode with high damping: the joint switches to this mode to protect against overheating, or when the battery is empty, for example.

Advantages

- · Reduced risk of falling: if the user trips, it is easier to regain his or her balance
- The increased safety can increase the user's confidence in the prosthesis
- · Walking backwards is possible with consistently high level of safety
- · Safe even in the event of overheating or if the battery is empty



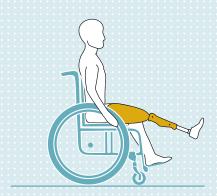
Supported sitting down Supported standing up Standing function Enhanced safety

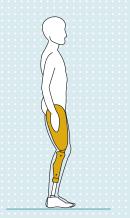
When sitting, the user can lock the Kenevo between 45° flexion and a nearly extended leg. This is especially helpful when sitting in a wheelchair if more room is needed between the prosthesis and the ground. The user activates the function by raising the lower leg to the desired position. It is deactivated with the same motion pattern or with slight pressure on the toes.

If the function is active, the Kenevo is in energy saving mode. You can switch the wheelchair function on or off as needed with the K-Soft adjustment software.

Advantages

- · Wheelchair is easier to manoeuvre thanks to the ground clearance
- · Easy to switch on or deactivate temporarily





Supported sitting down Wheelchair function Stance function Supported standing up

The level of safety while standing is consistently high: in activity modes A and B, the knee is locked in the stance phase. The intuitive stance function provides support in activity mode C. With its help the user can flex the joint slightly while standing. This leads to a more natural posture, and the load is taken off the contralateral side while the joint is locked in the flexion direction. The Kenevo switches to the set stance phase flexion resistance when the user starts to move.

Advantages

- In activity modes A and B, standing is completely safe thanks to the locked
- It is possible to place a load on the flexed prosthesis, allowing a natural, intuitive stance (activity mode C)
- · The user can stand on uneven surfaces and slopes with knee bent (activity mode C)



Walking backwards
Supported sitting down Standing function
Supported standing up Wheelchair function

Safe, reciprocal backwards walking is possible due to the positional data that the IMU reads. It detects that the knee joint is moving backwards and does not allow the knee joint to initiate swing phase at any point.





The Kenevo is rated IP22. This means that the electronics are protected against dripping and sprayed water.

6 year warranty package

The NHS OneFit® Select package is the only package to include a six-year manufacturer warranty. To ensure peace of mind at all times, we also include a free of charge service inspection at the 24th and 48th month following delivery. A free of charge loaner unit is provided for use during repairs or mandatory servicing.

Product overview

Terion K2

Confidence with every step.

Properties of Terion K2:

- Designed specifically to meet the needs of lower mobility patients
- Super lightweight
- Wide keel gives the patient stability during stance
- Split keel conforms well to changes in terrain
- Foam base provides cushioned heel strike and soft rollover





Trias

Secure as expected.

Properties of Trias:

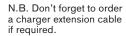
- Designed for moderately active patients who navigate familiar indoor and outdoor environments
- Soft rollover for easy movement at slow to moderate walking speeds
- Supports controlled movements across stable terrain





Cosmetic Foam

Pre-shaped cosmetic foam with a stepped centre hole specifically for the Kenevo.





Kenevo Protector

The Kenevo Protector covers the entire knee joint and tube, creating a fuller appearance under clothing.



Helix 3D Hip Joint

The Helix 3D Hip Joint's multi-axial joint structure produces three dimensional hip movements to compensate for natural pelvic rotation during gait. Hip flexion and extension during stance phase is hydraulically controlled, allowing for a smooth rollover under full load. Integrated polymer springs store energy during stance phase and release it to help with swing phase initiation; this helps to reduce the amount of energy needed for walking.



7E9 Hip Joint

The 7E9 is a monocentric hip joint with hydraulic control of the entire gait cycle. Cushioning of hip extension during stance phase dramatically improves socket comfort and with that, prosthesis usage time is often extended.



OneFit® Select order process

How does it work?

- Complete the OneFit® Select order form and return to **bockuk@ottobock.com** You do not need to send a purchase order at this stage. We will acknowledge receipt of your order by e-mail.
- We ship all components 1 week before your fitting date. This should give you plenty of time to get the limb set up prior to your patient's appointment.
- 1 week prior to your fitting date, we will confirm the shipment along with allocating you a OneFit® reference number unique to your order.
- Once you have received all your items, it is important you keep the original packaging in case the trial is unsuccessful.

If the trial is successful...

Send your purchase order noting your unique OneFit® reference number to:

Ottobock Customer Support **bockuk@ottobock.com**

If the trial is unsuccessful...

Note the reason for the unsuccessful trial and return all items in the original packaging using the normal returns process.

OneFit® Clinic

In order to relieve some of your workload, Ottobock's OneFit® Clinics aim to provide all NHS centres with the practical support they need. This can be particularly useful for prosthetists that are new to fitting Kenevo.

During a OneFit® Clinic, our Academy team can:

- Assist you in fitting multiple patients in a one-day session, or across multiple days depending on the number of patients.
- Tie their work in with your physiotherapy team and assist them with immediate patient training.

Our Academy experts are available to support you with any issues or assistance you may need in regards to the MPK policy.

