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bebionic

The world's most lifelike bionic hand

Quality for life

“We are Nicky and Kevin. We both lead active lives and sports activities are very important to us. The multi-articulating bebionic hand lets us continue our active lifestyle and face new challenges at the same time”



Kevin

As a keen cyclist, Kevin had tried a variety of adapted hand prostheses over the last 30 years, but had never found one that didn't give him a backache. All that changed the moment he was fitted with the bebionic – the multi-articulating hand that offers unrivalled versatility, functionality and performance.



Nicky

Passionate about fitness and leading an active lifestyle, Nicky wanted to achieve more but was held back by the challenges involved in activities requiring both hands. Since Nicky has been introduced to bebionic, her life and the lives of those around her have changed. She knows there are no more limits on her life now.

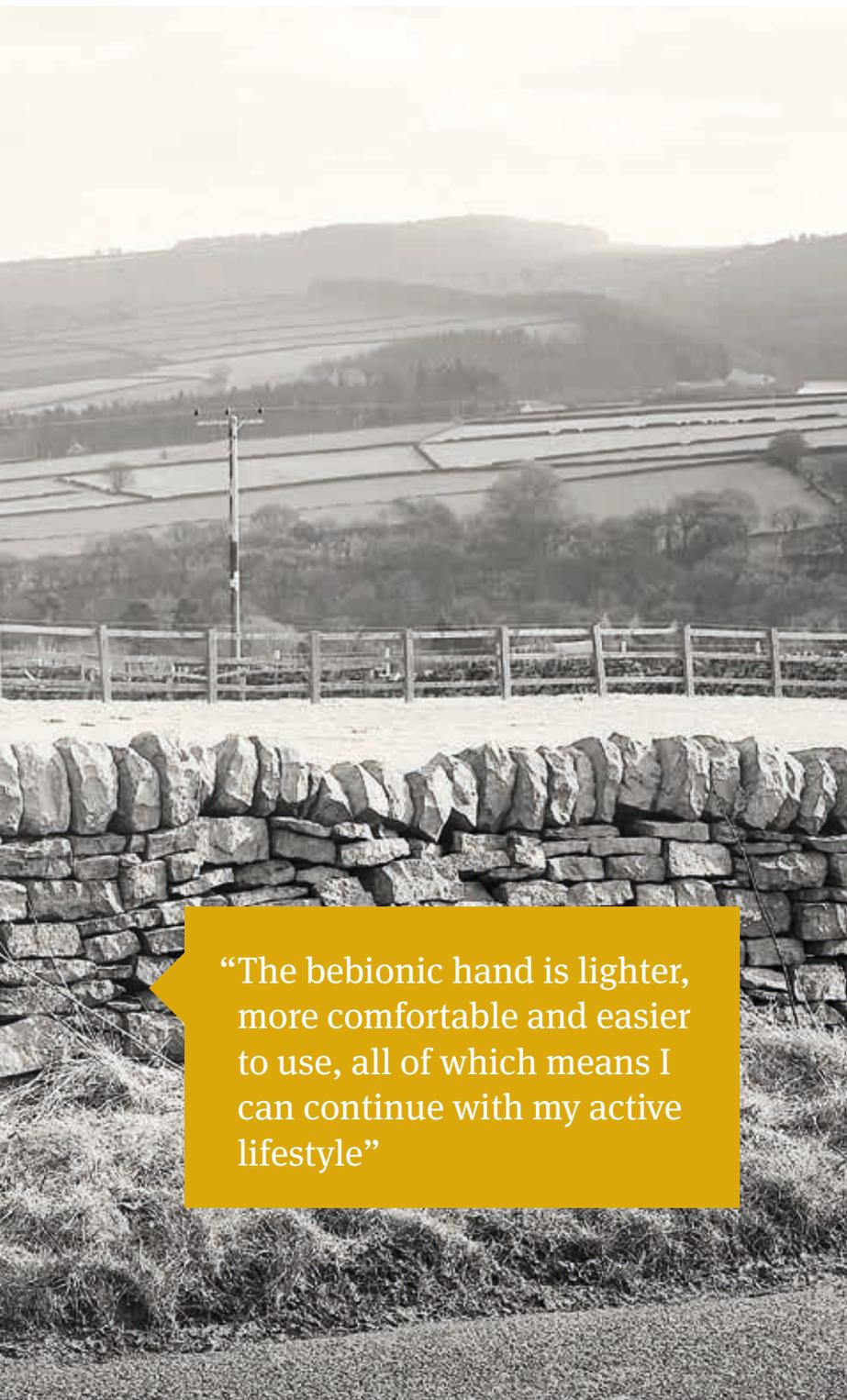
An active life with the bebionic

Kevin has always been passionate about cycling and football. But after a tragic accident in 1982 led to the loss of his forearm, Kevin reached a turning point in his life. Keen to lead as normal and active a life as possible, he constantly set himself new challenges. From getting back into badminton to participating in the first ever “Cyborg Olympics” – the Cybathlon. To succeed in these challenges, Kevin realised that his active lifestyle meant he needed a prosthesis that offered him greater control, strength, speed and flexibility than anything he had used before. The moment he was introduced to the bebionic, Kevin knew that this hand was right for him. Unique and ergonomic features made it unlike anything he had tried before. The bebionic’s multi-

articulation features allow him to grip the bike’s brake hoods, which in turn aligns the rest of his body posture to the correct position, making for a pleasant and enjoyable ride.

The new hand was lighter, more comfortable and easier to use, all of which meant that, Kevin could continue with his active lifestyle and set himself one particular challenge – a London to Paris bike ride. Cycling from London to Paris, contending with the steep ascents and fast descents of Kent and the unrelenting climbs in northern France, was certainly an incredible challenge. Completing the tour and finally ending up in front of the Eiffel Tower was an experience that would scarcely have been possible had it not been for the bebionic.





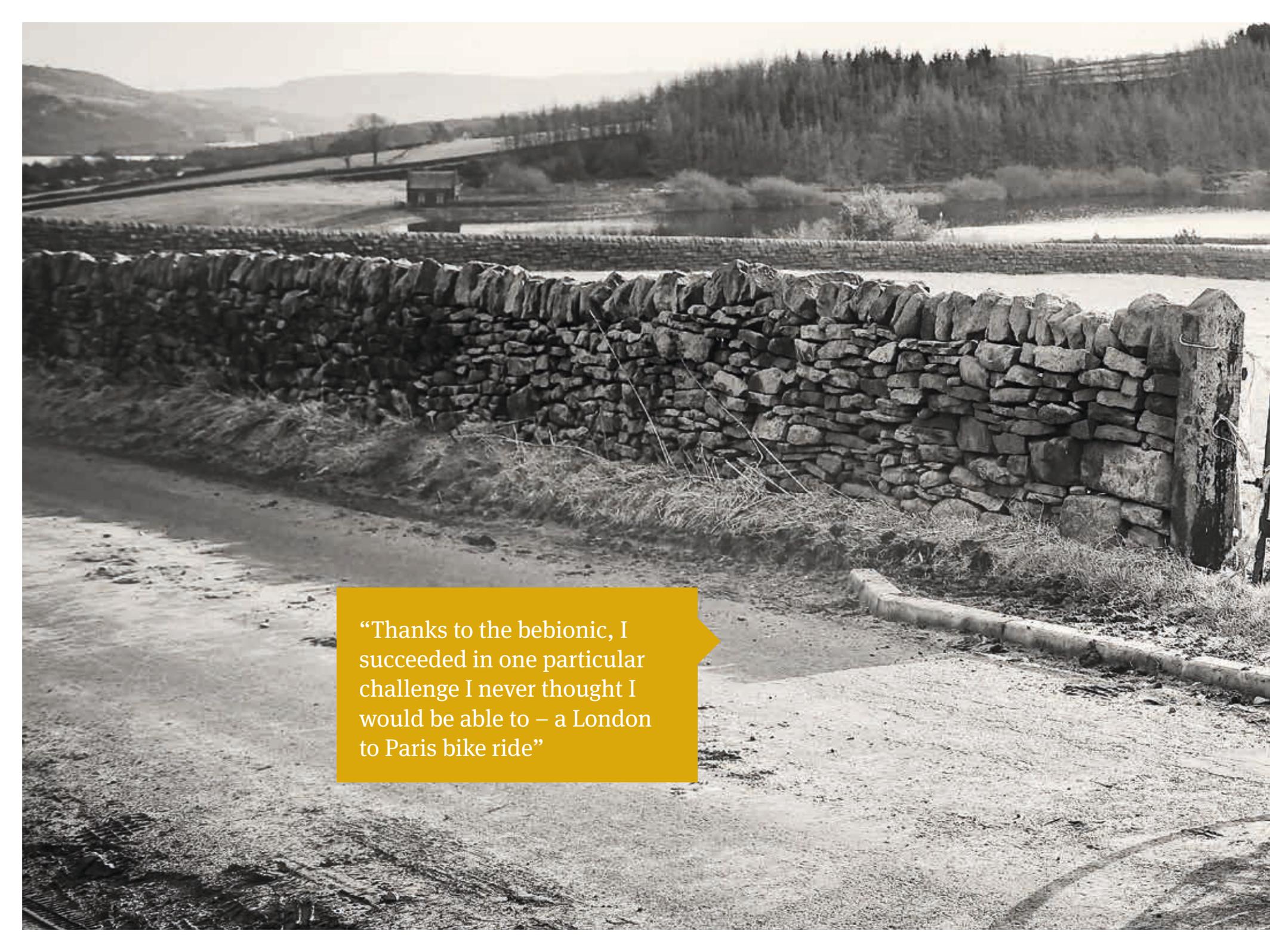
“The bebionic hand is lighter, more comfortable and easier to use, all of which means I can continue with my active lifestyle”



Kevin is a sportsman

Cycling from London to Paris, contending with the steep ascents and fast descents of Kent, and the unrelenting climbs in northern France: it was certainly an incredible challenge and one that would scarcely have been possible had it not been for the bebionic.





“Thanks to the bebionic, I succeeded in one particular challenge I never thought I would be able to – a London to Paris bike ride”



A fresh new outlook on life

It was 7:14 pm on Thursday, 5 March when Nicky realised how sweet it was to be able to walk down the road holding onto her boyfriend's hand whilst holding her handbag in the other. This incredible moment started with the latest addition to the bebionic – the bebionic small. It is the most natural and true to life bionic hand.

Born without her right hand, Nicky Ashwell spent years adapting to life's tasks, finding alternative ways to do things with one hand. Nicky's previous experience of wearing a standard prosthetic hand as a child didn't benefit her. She improvised either through adjusting to use her residual limb, or by wearing a purely cosmetic limb to help her posture.

By a chance encounter, Nicky was introduced to the bebionic, the most advanced prosthetic hand. Since then, it's changed her life and the lives of those around her. From opening her handbag, riding a bike to stirring her tea – it's the little things like this that have made the biggest difference in Nicky's life.

The technology behind the bebionic small comprises a unique system which tracks and senses each finger during every single move – mimicking the functions of a real hand. Now Nicky has a fresh new outlook on life and the confidence to accomplish the dreams she had when she was a little girl; she knows there are no more limits to her life now.



“From the first moment that I triggered the sensors of the bebionic hand with my muscle movement, I was amazed at just how easy it was to control and how natural it felt”

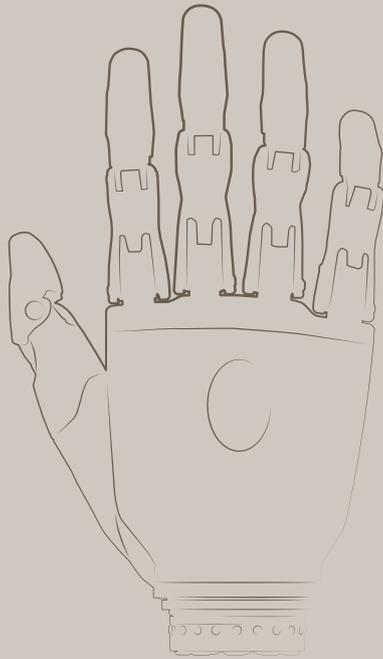


When dreams come true

Now Nicky can grab the world with both hands and live out her dreams as she creates more amazing turning points. The bebionic hand is the most advanced hand available and gives her the confidence to accomplish the dreams she's had since she was a little girl.







bebionic – sophisticated technology and design

The bebionic pushes the boundaries of multi-articulating myoelectric hands. Advanced technology and innovative design have been combined to create a comfortable, precise and intuitive myoelectric hand. The most lifelike and easy-to-use, you and users around the world can perform better with the bebionic. This sophisticated hand offers you a wide range of wrist options, sizes and technical features such as individual motors in each finger, proportional speed control, selectable thumb positions or 14 different grip patterns.



▶ small (black and white)



▶ medium



▶ large

▶ opposed



▶ non-opposed



14 grip patterns for optimised handling

The many functions of the bebionic hand give you the opportunity to move in a manner that's true to life. The bebionic hand provides 14 different grip patterns, allowing you to be more flexible in your day-to-day life. You can choose grip patterns between two selectable thumb positions – opposed and non-opposed.

Grip patterns with opposed thumb

Eight grip patterns with the thumb in opposition to the fingers allow you first and foremost to hold and manipulate objects in a more stable and precise manner.





Power

This pattern enables you to hold round or cylindrical objects more easily and securely. You can hold a ball or a piece of fruit as well as bottles or the handles of home and garden utensils. Power grip also lets you shake hands.

Active index

The active index grip offers the ideal finger position for typing or operating a spray bottle. It allows you to grasp the handle of an object with the middle, ring and little fingers and secure the grip with the thumb at the same time; the index finger will then close. You can control the index finger independently and position it accordingly.



Pinch

Pinch pattern is can be specifically applied to the fine manipulation of objects. To achieve pinch grip, please ask your O&P professional to manually reposition the thumb so that it only touches the index finger.



Hook

Hook grip is ideal for carrying a shopping bag or a briefcase. You can achieve a hook grip either with the thumb in opposition and a partially closed power grip or by closing the fingers from the relaxed hand position.



Precision closed

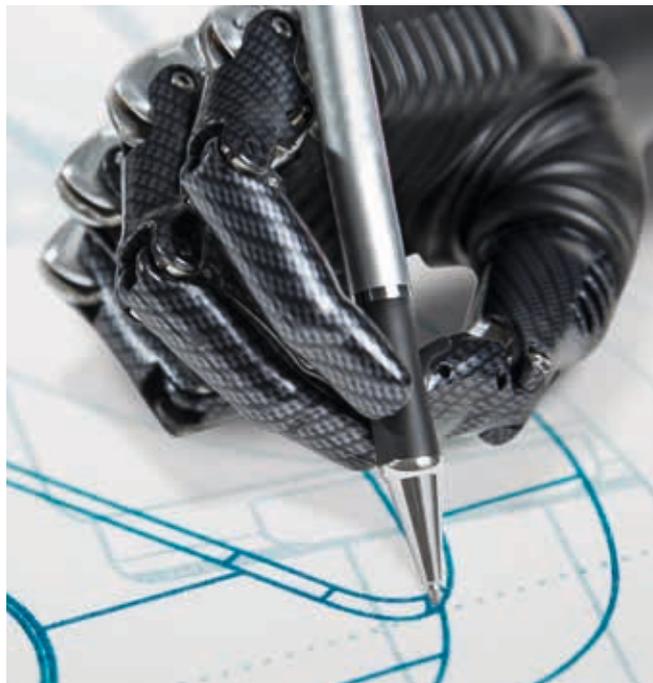
You can use this type of grip in situations similar to precision open grip, but where extended fingers are obstructive, such as working at a desk. The middle, ring and little fingers first close into the palm; then the thumb moves to the midpoint of its range and pauses; after that the index is active and under your control. To achieve precision closed grip, please ask your O&P professional to manually reposition the thumb so that it only touches the index finger.





Finger Adduction

The fingers of the bebionic hand move together naturally as they close. This allows you to more securely grip thin objects, such as cutlery or a toothbrush, between the fingers to achieve a new level of functionality. Finger adduction offers its greatest functionality with the hand in power grip. It also operates with the hand in key grip and pinch grip.



Tripod

This type of grip allows you to pick up, hold and manipulate a variety of everyday objects such as car keys, coins, jar lids and pens. As soon as you have opposed the thumb, you can close the hand into tripod grip and the thumb will meet with the index and middle fingers. Your ring and little fingers continue to close until they meet resistance or the close signal stops.

Precision open

With precision open grip you can pick up and manipulate small objects when the thumb is in opposition. The index finger meets the static thumb. When you apply a close signal, the thumb closes to the midpoint of its range and pauses. The index is then active and under your control while the middle, ring and little fingers remain extended. To achieve precision open, please ask your O&P professional to manually reposition the thumb so that it only touches the index finger.



Grip patterns with non-opposed thumb

The non-opposed thumb is parallel to the fingers of the hand. Six grip patterns allow you to type on a keyboard, use a mouse or carry and push objects.



Open palm

Open palm is suitable for carrying a tray or a plate. You can fully open the hand to provide a flat palm when the thumb is in the non-opposed position.



Finger point

Finger point allows you to type on a keypad and to press a bell or a button. With the thumb in the non-opposed setting, you can move to finger point position. The middle, ring, and little fingers close against the palm and the thumb moves against the middle finger.





Mouse

Mouse grip enables you to operate a mouse. The thumb and little finger close to hold the side of the mouse, with the middle and ring fingers providing more stability. The index finger closes onto the mouse button and then backs off to provide the button press. You can achieve a mouse click with a close signal release and the mouse with an open signal.



Column

You can use this grip as a way to push heavier objects or larger buttons and switches. It is also the recommended grip for dressing, as the thumb is kept out of the way. The column pattern moves the thumb into the palm from a non-opposed position. The fingers then close over the thumb to provide a fixed column.



Key

This pattern is ideal for you if you want to carry a piece of paper or letter, use a spoon or hold a thin flat object such as a plate, a credit card or a key. In the non-opposed thumb position, the four fingers partially close. The thumb then closes onto the side of the index finger. You can then raise and lower the thumb position without moving the other four fingers, which allows you to release, capture or reposition the object being gripped.



Relaxed hand

Relaxed hand pattern sets the thumb to the non-opposed position and partially drives it in towards the palm. All the fingers are driven to a slightly flexed position. By applying a further signal, you will drive the fingers into hook grip for a carrying position.

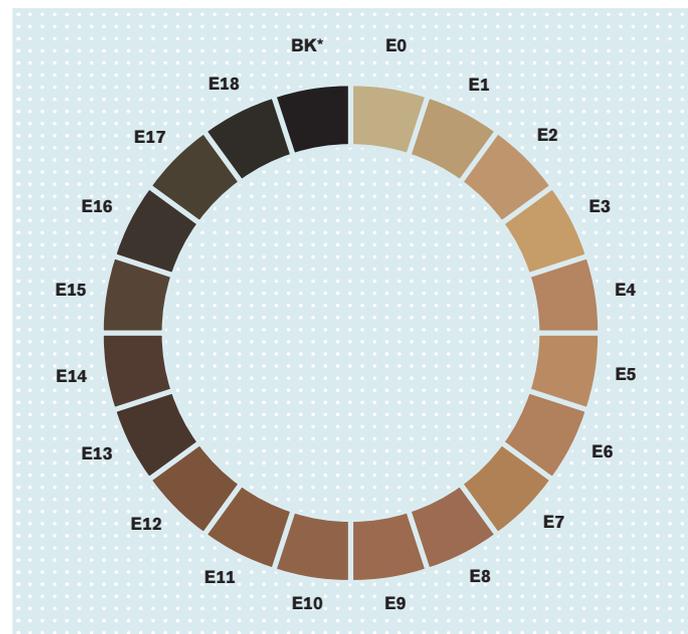


bebionic at a glance

Specifications	Small	Medium	Large
Tripod grip force	36.6 N	36.6 N	36.6 N
Key grip force	26.5 N	26.5 N	26.5 N
Time to open or close tripod grip	0.5 secs	0.5 secs	0.5 secs
Time to open or close – power grip	1.0 secs	1.0 secs	1.0 secs
Time to open or close – key grip	1.0 secs	1.0 secs	1.0 secs
Hand carry load (static)	45 kg (99 lb 3oz)	45 kg (99 lb 3oz)	45 kg (99 lb 3oz)
Finger carry load (static)	25 kg (55 lb 3oz)	25 kg (55 lb 3oz)	25 kg (55 lb 3oz)
Fingertip extension load	6 kg (13 lb 3oz)	6 kg (13 lb 3oz)	6 kg (13 lb 3oz)
Vertical push down load (through knuckles)	90 kg (198 lb 6oz)	90 kg (198 lb 6oz)	90 kg (198 lb 6oz)

Standard glove

Crafted using multiple layers of advanced silicone material and constructed with an integrated reinforcing mesh, the bebionic standard gloves are soft and durable, while remaining easy to remove and clean.



* Black colour only available for bebionic standard gloves.

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