



Elan

Experience smoother, safer
and more natural walking

Blatchford 

Biomimetic Hydraulic Technology

Blatchford hydraulic ankles fine-tune joint position to align the body with the ground to reduce socket interface stress, continuously adjusting to absorb and release energy for an efficient roll-over and remaining perfectly aligned for the next step to help reduce the risk of falls.

Microprocessor Active Resistance Control

Elan mimics natural muscle resistance and ankle motion by adapting hydraulic resistance levels to optimize stability when standing, on slopes and uneven terrain. This encourages more symmetrical limb loading, faster walking speed and reduced compensatory movements. The ankle pivot point is optimally positioned close to the natural weight line for a more natural response through the gait cycle.

The result is smoother, safer and more natural walking, helping to preserve the body for the long term.

Scientifically Proven*

Blatchford's Biomimetic Hydraulic Technology mimics the dynamic and adaptive qualities of muscle actuation to encourage more natural gait. Multiple independent scientific studies, comparing Blatchford hydraulic ankle-feet to non-hydraulic feet, have shown:

- Greater comfort, reduced socket pressures
- Improved safety, reduced risk of trips and falls
- Smoother, easier and more natural gait
- More evenly balanced inter-limb loading
- Greater satisfaction

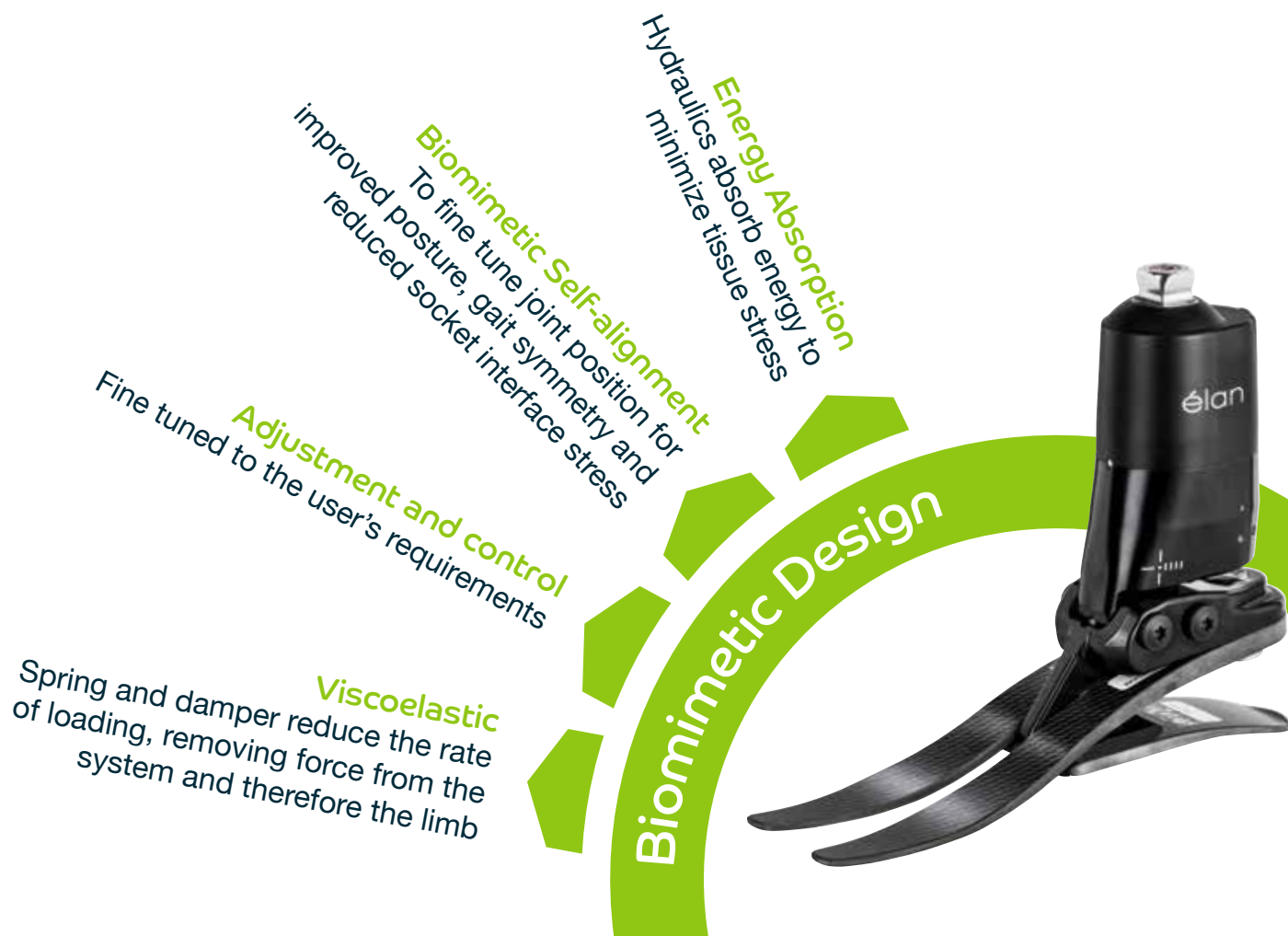
*Please see Clinical Compendium available to download on our website



Biomimetic Design Philosophy

Human walking is a marvel of evolution, offering beautifully efficient, rhythmic, sinuous ambulation. Biomimetic engineering is at the heart of Blatchford's design philosophy, where we believe the best prostheses replicate the dynamic and adaptive qualities of natural limb movement.

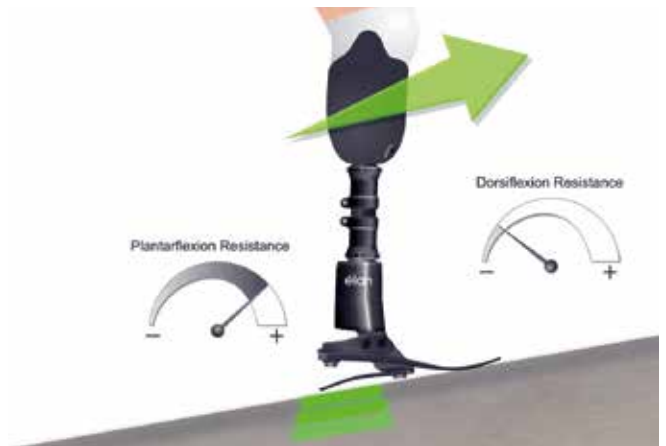
This approach led to the design of the world's first hydraulic ankle-foot and the development of Blatchford's award-winning, clinically proven range that is tried, tested and trusted.





Ramp Brake

On walking downhill, lower plantar flexion resistance allows the foot to fully contact the slope sooner for improved safety and security. At the same time, increased dorsiflexion resistance provides a braking effect stabilizing the user for a safer, more controlled descent.



Ramp Assist/Fast Walk

When walking quickly or up slopes, the plantar flexion resistance increases allowing for more optimal energy storage and return. Combined with a softer dorsiflexion resistance, this aids forward momentum, body position and minimizes the effort required to walk fast or uphill.



Standing Support

Standing for longer periods has also just got easier. A network of sensors detect the user is stationary, increasing resistance to help improve balance, stability, reduce effort and encourage a more natural posture.

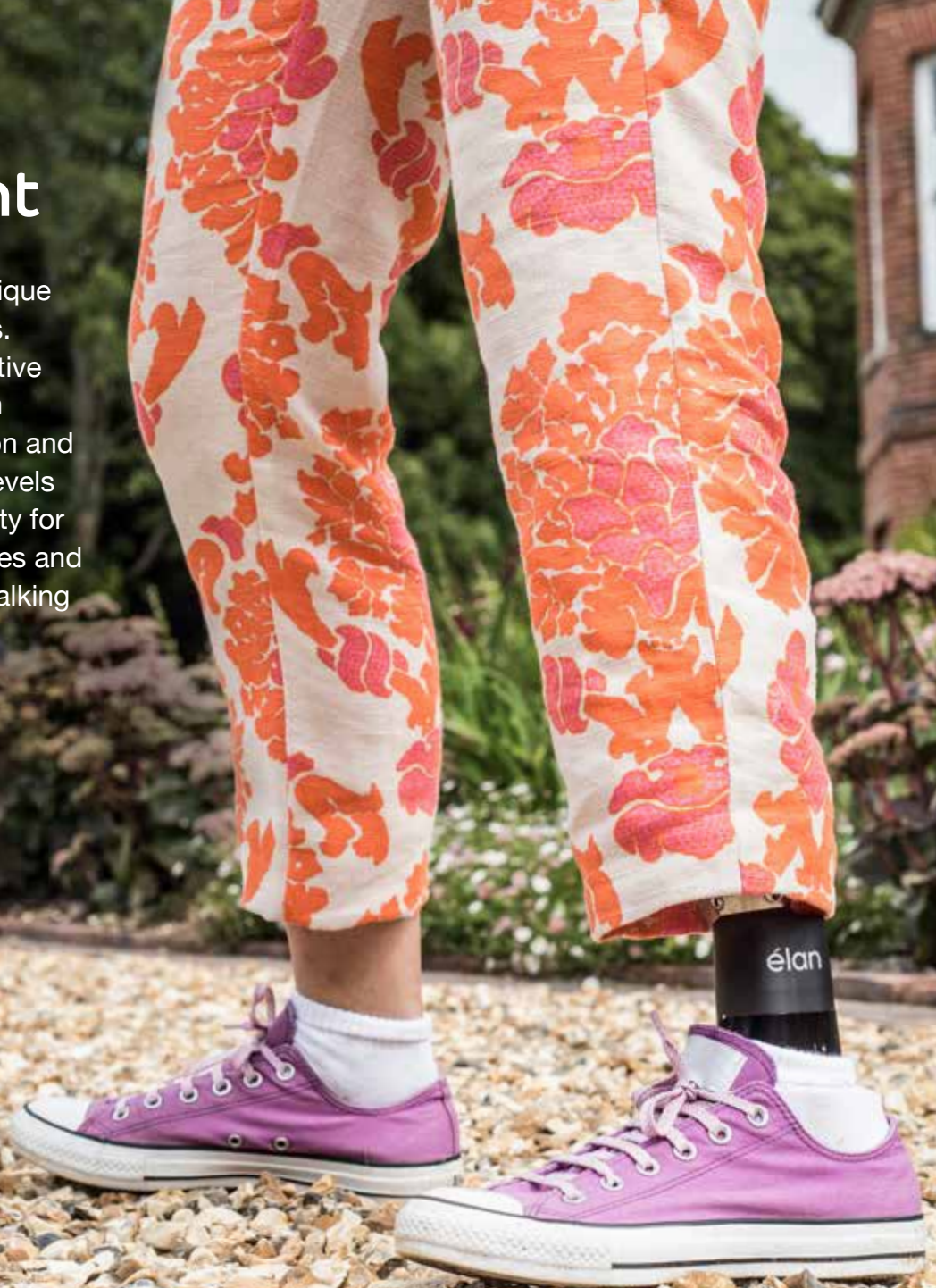


Swing Clearance

During swing phase, the ankle remains in a dorsiflexed position increasing toe clearance on every step and reducing the risk of stumbles or falls.

Why Elan is Different

Hills and slopes offer unique challenges for amputees. With Microprocessor Active Resistance Control, Elan adjusts the plantar flexion and dorsiflexion resistance levels to provide greater stability for standing and down slopes and greater assistance for walking fast or uphill.



A woman with long brown hair, wearing a grey tank top, black leggings, and colorful Asics sneakers, is performing a step-up exercise. She is standing on a grey step platform with her right foot, holding a blue dumbbell in her right hand. Her left foot is on the ground. The background is a red brick wall with a black lantern-style light fixture and a wooden bench. To the left, there is a white-framed glass door. The scene is outdoors on a paved patio area.

“Elan is a much better match for my real leg. It provides very controlled and fluid movement and I feel much more stable and evenly balanced.”

Georgy

Features

- Microprocessor controlled self-aligning plantar flexion and dorsiflexion
- Standing support mode increases resistance when stationary to help improve balance, stability, reduce effort and encourage a more natural posture
- Variable response to speed changes
- Increased plantar flexion resistance allows for more energy storage and return when walking quickly or up slopes
- Ankle remains dorsiflexed during swing phase to increase toe clearance and reduce risk of trips and falls
- Increased dorsiflexion resistance provides a brake when walking down slopes for improved safety and stability
- Batteries contained within ankle
- Sandal toe footshell

Specifications

Max. User Weight:	125kg* (275 lbs)
Activity Level:	3
Size Range:	22cm-30cm
Component Weight:	920g [†] (2 lb .45 oz)
Build Height:	170mm sizes 22-26 (6 ¹¹ / ₁₆) 175mm sizes 27-30 (6 ⁵⁷ / ₆₄)
Heel Height:	10mm



Suitable for outdoor use

Order Example

Product Code	Size	Side	Width*	Spring Set	Sandal Toe
ELAN	25	L	N	3	S

*Narrow (N) and Wide (W) available for sizes 25-27 only. For dark tone add suffix D. Example: foot size 25, left, narrow, spring rating 3, sandal toe.

Activity Level 3 has the ability or potential for ambulation with variable cadence. Typical of the community ambulator who has the ability to traverse most environmental barriers and may have vocational, therapeutic, or exercise activity that demands prosthetic utilization beyond simple locomotion. Activity level 2 and 4** users will require softer or stiffer springs as appropriate for the individual user rather than as shown in the spring selection guide.

Activity

3

User Weight

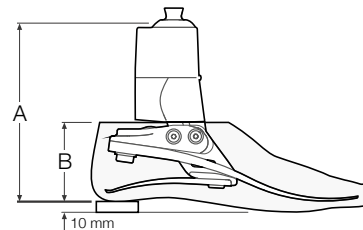
44-52 53-59 60-68 69-77 78-88 89-100 101-116 117-125 kg
100-115 116-130 131-150 151-170 171-195 196-220 221-255 256-275 lbs

1	2	3	4	5	6	7	8	Spring set
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Elan



Integrated Micro Connector and Battery Life Indicator



Sizes	A	B
22-26	170 mm	65 mm
27-28	175 mm	70 mm
29-30	175 mm	75 mm

Accessories

Communication kit 406431E
(required for programming ordered separately)

Spare battery charger kit 409087E

3

*For weights above 125kg up to 150kg contact a Blatchford representative. **Maximum user weight 100kg and always use one higher spring rate category than shown in Spring selection table. †Component weight shown is for a size 26cm without foot shell.

Patents: US: 7985265, 6719807, 8574312, 8740991, 9132023. EU/RoW: 5336386, 1149568



An annual visual inspection is recommended. Check for visual defects that may affect proper function. Maintenance must be carried out by competent personnel. Before carrying out any new activities of daily living, please check with your clinician whether specific training is required.

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Blatchford 

The Blatchford logo graphic consists of a vertical line of five colored dots: red, yellow, green, blue, and purple.