

ALLUX2

Manufacturer

Nabtesco Mobility Assist

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CAT.APE32-082-2505-(3RA)

Nabtesco Mobility Assist



NEW

ALLUX2

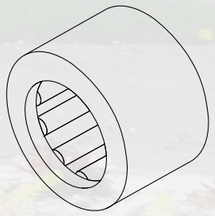
Improved usability

A PC and/or remote control is no longer required! A certified prosthetist can quickly and easily program and adjust ALLUX 2 from a Bluetooth-enabled smartphone. The patient is also able to easily switch modes and check battery level with a smartphone.



Improved Durability

The introduction of new needle bearings provides smooth movement and increased durability while also improving the water resistance rating of ALLUX 2.



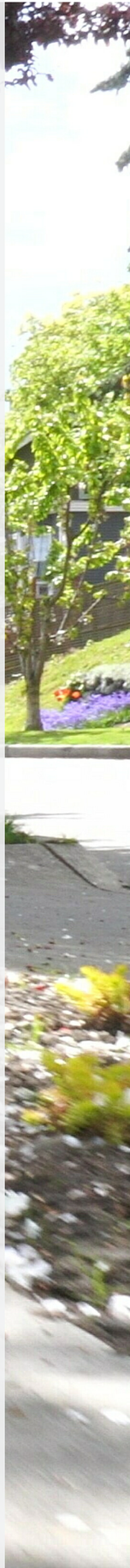
Improved Flexibility

With a new maximum flexion angle of 180 degrees (up from 155°), ALLUX 2 offers more range of motion than any other microprocessor knee on the market today. This very wide range of makes the ALLUX 2 also highly suitable for Hip disarticulation prosthesis.





Hip disarticulation prosthesis



4-Bar linkage design

ALLUX 2 is often referred to as a “natural knee” due to it movement which closely mimicks that of a human knee joint. The 4-Bar linkage design allows smooth transition to swing phase and with increased toe clearance, helps to reduce the risk of a fall.



Total phase microprocessor control

ALLUX 2 adapts automatically in both stance and swing phases providing stumble recovery even in a flexed position. Traditional mechanical hydraulic controls limit knee movement due to constant resistance. Microprocessor control of the hydraulic unit provides the ideal resistance based on walking speed. This allows for the patient to focus on their environment and activity and not their prosthesis, thus expanding flexibility in their daily life.

The world’s first total phase MPK 4-Bar linkage design

Enhanced function of swing phase And a more natural gait



The microprocessor controlled hydraulic cylinder provides a smooth swing phase at various walking speeds. Finely tuned response, coupled with the 4-Bar linkage, allows the user to walk with a natural gait. The needle bearings introduced with ALLUX 2 have increased the smoothness and fluidity of the knee’ s movement to a new level.

Increased toe clearance Reduced risk of stumbling



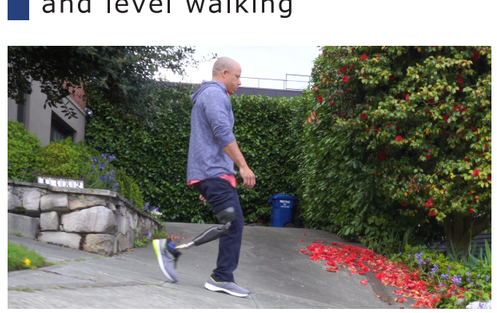
Compared to a single axis knee joint, the 4-Bar linkage shortens the length from knee center to toe during swing phase. This results in increased toe clearance and greatly reduces the risk of stumbling.

Enhanced safety for stumble recovery



ALLUX 2 constantly monitors the knee position and movement and responds to abnormal situations. For instance: if the prosthesis gets stuck on an obstacle during swing phase, the knee will detect this adverse event and immediately increase resistance to prevent knee buckling.

Stance yielding function for going down stairs, slopes, and level walking





The stance yielding function allows patients to smoothly walk down stairs and slopes step-over-step. If your patient already has experience with this functionality, they will easily adjust to yielding with a 4-Bar linkage design. In addition, ALLUX 2 allows for individuals to walk with a natural knee flexion movement to help reduce the shock during initial contact with the ground.

Long Battery Life
+Emergency battery included for security



ALLUX 2 battery life is approximately 4 days (5000 steps/day on prosthetic side). The charge time for an empty battery is only 3 hours and a Backup battery is included in case of emergency.

Low Profile for Long Residual Limbs



While the patient is seated, the 4-Bar linkage folds under itself and allows for a more natural sitting position.

Greatest flexion angle in a microprocessor knee



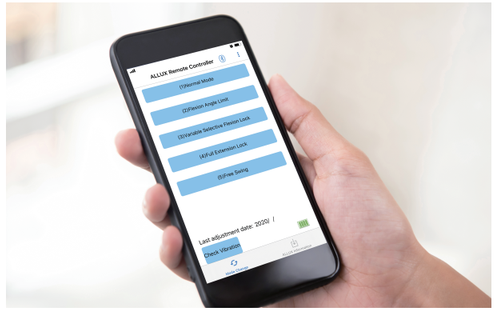
ALLUX 2 offers a knee flexion angle of 180 degrees, more than any other microprocessor knee available. This increased range of motion is great for activities like biking, kneeling, or changing shoes.
This very wide range makes the ALLUX 2 also highly suitable for Hip disarticulation prosthesis

Safety lock function



When the knee is flexed, loaded, and is stationary for a preset period of time (3/4 to 3 seconds), flexion will be automatically locked until it is extended. With ALLUX 2, Safety lock function has been improved to include a vibration from the knee-joint, letting the user know Safety lock has been engaged.

Selecting 5 different modes with a smartphone



With a Bluetooth connected smartphone, the user can easily and conveniently select between up to five different pre-programmed modes to fit their current activity or environment for the highest level of versatility. From free swing, varying locking positions, or additional walking modes, users can easily change the function of ALLUX 2 with the push of a button in the remote control App.

New Communication Bluetooth

Bluetooth

The stability and reliability of the wireless programming has been improved through Bluetooth connectivity via iOS or Android smartphones.

Specification		
Type	NE-Z41	NE-Z41SH
Name	ALLUX 2	
Proximal connection	Pyramid	Threaded head
Height	295mm (11 1/2 in)	287mm (11 1/3 in)
Knee weight	1510g (3.4 lbs)	1520g (3.4 lbs)
Max. flexion	180°	
Weight limit	K3(MOB3):125kg(275lb) K4(MOB4):100kg(220lb)	
Battery	Lithium ion battery	
Battery life	approx. 4 days (5000 steps per day on prosthetic side)	
Supplemental backup battery	Lithium ion battery	
Water resistance	IP44	
Activity level	K2 ～ K4	
Communication	Bluetooth	
Application software	• Adjustment App for Prosthetists (iOS and Android) • Remote Control App for Users (iOS and Android)	

*Specifications are subject to change without notice.



Components Included

ALLUX 2 Knee
Charging port cap NE-CC01
Power OFF cap NE-CC02
Charger NE-BC01
AC adapter NE-AD01
Backup battery NE-SB01
Backup battery case NE-SC01
Extension cable NE-CL02
Backup battery charging cable NE-CL01

L-CODES (for USA) :

PDAC – L5615 , L5856, L5845, L5848

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