

# NEURO HiTRONIC—

Microhydraulic & Microprocessor  
Swing and Stance Phase Control



## NEURO HiTRONIC – The Orthosis Control



### Intelligent Motion Sensors

The controller of the orthosis has motion sensors that detect the lower leg's movements and can tell if the user is standing or walking. The control immediately reacts to changes in walking speed and step length.

### Lightweight, Flat and Compact

The new controller is divided into two parts via a jointed connection and can thus be mounted anatomically and discreetly in the lower leg shell.

### Various Operating Options

Using the User app on the smartphone (iOS/Android), Apple Watch or Bluetooth remote control



## NEURO HiTRONIC – Microhydraulic & Microprocessor Swing and Stance Phase Control

### Advantages for the Patient

- Infinitely locking. The system knee joint locks at any knee flexion angle and thus enables fluent motion sequences.
- Silent locking and unlocking.
- Compact and lightweight. The system knee joint can be comfortably worn under the trousers and offers a high level of wearing comfort.
- Natural gait. Slow or fast, but most importantly safe and fluent walking even when alternating between short and long steps. This gives a new walking feeling and confidence in the orthosis.
- Easy controlling. The NEURO HiTRONIC can be operated with the remote control, smartphone (iOS or Android) or Apple Watch.
- Permanently locked. The system joint can be permanently locked in case of increased safety requirements. The NEURO HiTRONIC can also be permanently unlocked for activities (e.g. cycling).
- High performance rechargeable battery. An orthosis with the NEURO HiTRONIC system knee joint can be used all day without any problems. In Free mode: 24 hours. In Auto mode: 26,000 strides. The use in Lock mode does not require power.

### Safety thanks to Microhydraulics & Microprocessor

The NEURO HiTRONIC is the first microprocessor-controlled microhydraulic system knee joint with permanent stance phase control and swing phase support from FIOR & GENTZ. This technology, which was specially developed for orthoses, enables patients to move freely without having to think about the function of the orthosis all the time. Thanks to the intelligent motion sensors and innovative proprietary microhydraulics controlled by a microprocessor, the NEURO HiTRONIC supports a natural gait, thus avoiding incorrect posture and preventing damage to the musculoskeletal system.



### Watch Function Video

Scan the QR code for more information

Can be worn comfortably under trousers

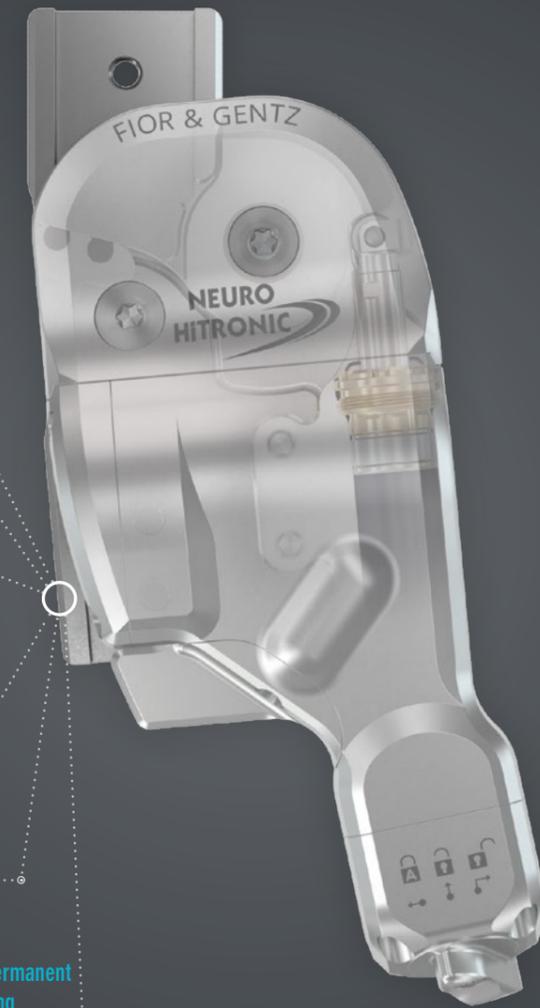
Silent locking and unlocking

Infinite, permanent stance phase control and integrated swing phase support

Intelligent FIOR & GENTZ microhydraulics

3 switch modes: Free, Lock and Auto

Rotary switch for permanent locking and unlocking



3,45cm



## NEURO HiTRONIC

Technology  
for People

Getting from A to B  
in everyday life  
is no longer a problem.  
The NEURO HiTRONIC  
offers security and  
flexibility in every  
situation.



Permanent locking and  
unlocking of the system joint  
via the rotary switch

Thanks to the  
intelligent control of  
the NEURO HiTRONIC,  
even walking on uneven  
terrain is easy.



Fits comfortably  
under the trousers



The NEURO HiTRONIC is ideal for running around together in the garden. Thanks to the infinite locking, you easily forget it's there.



## NEURO HiTRONIC

### Easy Mounting. Easy Handling.

The microprocessor-controlled microhydraulic NEURO HiTRONIC system knee joint offers orthotists unique advantages when producing and adjusting the orthosis. Regardless of the complex technology, such as the intelligent microhydraulics and the innovative motion sensors, mounting the system knee joint is easy. Demounting is just as easy, for example, in preparation for maintenance.



#### Advantages for the Orthotist

- All system components, the size and materials are selected by the Orthosis Configurator® based on the individual data of each patient.
- Expert app. Extensive adjustments on an unlimited number of NEURO HiTRONIC orthoses can be made conveniently in the workshop, for example, using a tablet.
- Unilateral construction (without supporting joint) possible. This enables the production of an orthosis with the best possible function and the least material usage.
- Integrated swing phase support. The joint has an integrated, non-adjustable propulsion support that supports the end-grade knee extension.
- Easy mounting in the orthosis. As always, the orthosis is produced according to the proven FIOR & GENTZ production technique.



Orthosis  
Configurator

[www.orthosis-configurator.com](http://www.orthosis-configurator.com)



Would you like to produce an orthosis with a **NEURO HiTRONIC** system knee joint for your patient?

Use the Orthosis Configurator® to independently select the necessary system components for an orthosis with the **NEURO HiTRONIC**.

The Orthosis Configurator® determines the appropriate system components for your patient by taking the patient data and the load capacity into account.



**Orthosis  
Configurator**

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ORTHOPÄDIETECHNIK MIT SYSTEM