## ottobock.

## W\% (kon Family. Walking unlimited.

Dynamic ankle foot orthoses



## The carbon AFOs.


#### Abstract

The WalkOns are a comprehensive range of dynamic ankle foot orthoses (AFOs) made of carbon or fiberglass with a dynamic energy return. Children and adolescents as well as adults with various degrees of drop foot can use them.


In addition to the classic design with a posterior support element at the calf, there is an even more flexible variant with a coil spring design and the WalkOn Reaction with an anterior support element that provides additional stability for the knee. With the classic WalkOn design and with the knee-stabilizing WalkOn Reaction, you can also select either a medial or a lateral upright. The orthosis can thus be used for customized treatment, depending on the indication, anatomical situation and personal preferences. The available junior versions can also be combined with other dynamic foot/ankle foot orthoses (DAFOs) if the biomechanical requirements can be met more effectively as a result.

All models feature a slim, lightweight design that has also been optimized for durability. Adult versions are tested for two million cycles or steps and junior versions for one million steps.

Compliance is also optimized for all the variants with removable and washable pad/strap combinations.


## Which WalkOn is the right one?

Selecting an orthosis made easy.
The selection tool on
page 5 gives you an initial recommendation on which WalkOn could be suitable for your patient based on their muscle status and other anatomical criteria. The table on pages 6 and 7 gives you an overview of the indications and the product design of the different WalkOns. The functions of the individual WalkOns are presented clearly on page 8.

[^0]Determine muscle status


Knee stabilization required?

No
Yes

## Patient with ankle instability?

| No | Yes |  |  | Yes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Patient with pronation or valgus malposition? |  |  |  |  |  |
| No | No |  | Yes | Yes |  |  |
|  |  |  |  |  |  |  |
| WalkOn Flex 28U22 | $\begin{gathered} \text { WalkOn } \\ 28 \mathrm{U} 11 \end{gathered}$ | WalkOn Trimable 28U23 | WalkOn <br> Lateral <br> 28U33 | WalkOn Reaction Lateral 28U34 | WalkOn Reaction 28U24 | WalkOn Reaction Plus 28U25 |



No/mild spasticity


WalkOn Trimable 28U23

| Plantar flexor musculature |
| :--- |
| Knee extension |
| Sole can be trimmed to size |
| Pylon design |
| Support element |
| Material |


| Adult size | Yes | Yes | Yes |
| :---: | :---: | :---: | :---: |
| Children's size | Yes | No | No |

## 28U22 WalkOn Flex <br> 28U11 WalkOn <br> 28U23 WalkOn Trimable <br> 28U33 WalkOn Lateral

Indication of drop foot, with or without mild spasticity,
e.g. caused by:

Peroneal paralysis

- Stroke
- Traumatic brain injury
- Multiple sclerosis
- Neuromuscular atrophy



## 28U34 WalkOn Reaction Lateral <br> 28U24 WalkOn Reaction <br> $28 U 25$ WalkOn Reaction Plus

Indication of mild impairment of the plantar flexor musculature, mild impairment of knee extension or drop foot with or without mild to moderate spasticity, e.g. caused by:

- Stroke
- Traumatic brain injury
- Multiple sclerosis
- Neuromuscular atrophy
- Peroneal paralysis
- Infantile cerebral palsy (ICP)

Additional indications for
$28 U 25$ WalkOn Reaction Plus:

- Impairment of the plantar
flexor muscles
- Impairment of knee extension



## WalkOn Family.

 At a glance.|  | WalkOn Flex $28 U 22$ | WalkOn $28 U 11$ | WalkOn <br> Trimable $28 \mathrm{U} 23$ | WalkOn Lateral 28U33 | WalkOn <br> Reaction <br> Lateral 28U34 | WalkOn Reaction $28 \mathrm{U} 24$ | WalkOn <br> Reaction Plus 28U25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effectively supports a physiological gait, even at different speeds and with different loads | - | - | - | - | - | - | - |
| Supports dorsiflexion (ground clearance) | - | - | - | - | - | - | - |
| Reduces the risk of stumbling and falling ${ }^{1}$ | $\bullet$ | $\bullet$ | - | - | $\bullet$ | - | - |
| Helps prevent uncontrolled foot contact and foot drop | - | - | - | - | - | - | - |
| Energy return supports toe-off and heel strike | $\bullet$ | - | - | - | - | - | - |
| Fewer compensating movements | - | - | - | - | - | - | - |
| Greater flexibility while walking | $\bullet$ |  |  |  |  |  |  |
| Improves walking on uneven surfaces (in comparison with WalkOn) ${ }^{1}$ | - |  |  |  |  |  |  |
| Stabilizes the ankle joint |  | - | - | - |  |  |  |
| Limits plantar flexion and supination when worn with a sturdy shoe |  | - | - | - |  |  |  |
| High energy return of the orthosis |  | - | - | - | - | - | - |
| Stabilizes the knee and ankle joints using ground reaction forces |  |  |  |  | - | - | - |
| Noticeably longer support element makes it possible to exert greater influence on deviations of the frontal axis in the knee and ankle joints |  |  |  |  | - | - | - |
| Highly dynamic characteristics |  |  |  |  | - | - |  |
| Dynamic forefoot characteristics are stiffer (compared with the WalkOn Reaction) ${ }^{1}$ |  |  |  |  |  |  | - |



## WalkOn. Adults.

WalkOn Flex, WalkOn, WalkOn Trimable

| Article number |  | Side | Shoe size (US) | Calf Height |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 28 \mathrm{U} 22 \\ & 28 \mathrm{U} 11 \\ & 28 \mathrm{U} 23 \end{aligned}$ | = L36-39 | Left |  |  |
|  | =R36-39 | Right | Women: 6-8.5 |  |
| $\begin{aligned} & 28 \mathrm{U} 22 \\ & 28 \mathrm{U} 11 \\ & 28 \mathrm{U} 23 \end{aligned}$ | = L39-42 | Left | Men: 6-9 |  |
|  | =R39-42 | Right | 0 |  |
| $\begin{aligned} & 28 \mathrm{U} 22 \\ & 28 \mathrm{U} 11 \\ & 28 \mathrm{U} 23 \end{aligned}$ | $=\mathrm{L} 42-45$ | Left | Men: 9-12 <br> Women: 10-13 | 14.8 " (37.5 cm) |
|  | =R42-45 | Right |  |  |
| $\begin{aligned} & 28 \mathrm{U} 22 \\ & 28 \mathrm{U} 11 \\ & 28 \mathrm{U} 23 \end{aligned}$ | $=\mathrm{L} 45-48$ | Left | Men: 12-15 | 15.4 " (39 cm) |
|  | =R45-48 | Right |  |  |

Example for ordering $28 \cup 22=L 42-45$

WalkOn Reaction, WalkOn Reaction Plus

| Article number |  | Side | Shoe size (US) | Calf Height |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 28 U 24 \\ & 28 U 25 \end{aligned}$ | = L36-39 | Left | Men: 5-6 <br> Women: 6-8.5 | 13.8 " (35 cm) |
|  | =R36-39 | Right |  |  |
| $\begin{aligned} & 28 U 24 \\ & 28 \mathrm{U} 25 \end{aligned}$ | = L39-42 | Left | Men: 6-9 <br> Women: 8.5-10 | 14.2 " (36 cm) |
|  | =R39-42 | Right |  |  |
| $\begin{aligned} & 28 U 24 \\ & 28 U 25 \end{aligned}$ | $=\llcorner 42-45$ | Left | Men: 9-12 <br> Women: 10-13 | 14.8 " (37.5 cm) |
|  | $=\mathrm{R} 42-45$ | Right |  |  |
| $\begin{aligned} & 28 U 24 \\ & 28 U 25 \end{aligned}$ | $=\llcorner 45-48$ | Left | Men: 12-15 | 15.4 " 39 cm ) |
|  | =R45-48 | Right |  |  |

Example for ordering 28U24=L42-45

WalkOn Lateral, WalkOn Reaction Lateral

| Article number |  | Side | Shoe size (US) | Calf Height |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 28 \mathrm{U} 33 \\ & 28 \mathrm{U} 4 \end{aligned}$ | = L36-39 | Left | Men: 5-6 <br> Women: 6-8.5 | 12.8 " (32.5 cm) |
|  | =R36-39 | Right |  |  |
| $\begin{aligned} & 28 \mathrm{U} 33 \\ & 28 \mathrm{U} 4 \end{aligned}$ | =L39-42 | Left | Men: 6-9 <br> Women: 8.5-10 | $\begin{aligned} & 13.6 "(34.5 \mathrm{~cm}) \\ & 13.8 "(35 \mathrm{~cm}) \end{aligned}$ |
|  | =R39-42 | Right |  |  |
| $\begin{aligned} & 28 \mathrm{U} 33 \\ & 28 \mathrm{U} 4 \end{aligned}$ | $=\mathrm{L} 42-45$ | Left | Men: 9-12 <br> Women: 10-13 | 14.6 " (37 cm) |
|  | =R42-45 | Right |  |  |
| $\begin{aligned} & 28 U 33 \\ & 28 U 34 \end{aligned}$ | $=\mathrm{L} 45-48$ | Left | Men: 12-15 | $\begin{aligned} & 15.4 "(39 \mathrm{~cm})- \\ & 15.6 "(39.5 \mathrm{~cm}) \end{aligned}$ |
|  | =R45-48 | Right |  |  |

[^1]

## WalkOn. Children.

WalkOn Flex Junior

| Article number |  | Side | Shoe size (US) | Calf Height |
| :---: | :---: | :---: | :---: | :---: |
| 28U22 | = $\mathrm{L} 24-27$ | Left | Junior: 7.5/8-10 | 8" (20.5 cm) |
|  | =R24-27 | Right |  |  |
| 28U22 | $=\mathrm{L} 27-30$ | Left | Junior: 10-12.5 | 9.3 " (24 cm) |
|  | =R27-30 | Right |  |  |
| 28U22 | $=\mathrm{L} 30-33$ | Left | Junior: 12.5-2 | 10.4 " (27 cm) |
|  | =R30-33 | Right |  |  |
| 28U22 | = L33-36 | Left | Men: 2-4.5 <br> Women: 3.5-6 | 11.6 " (29.5 cm) |
|  | =R33-36 | Right |  |  |

Example for ordering $28 \cup 22=L 27-30$

WalkOn Reaction Junior

| Article number |  | Side | Shoe size (US) | Calf Height |
| :---: | :---: | :---: | :---: | :---: |
| 28U25 | = L24-27 | Left | Junior: 7-9.5 | 8.1 " (20.5 cm) |
|  | =R24-27 | Right |  |  |
| 28U25 | $=\mathrm{L} 27-30$ | Left | Junior: 9.5-12 | 9.6 " 24.5 cm ) |
|  | =R27-30 | Right |  |  |
| 28U25 | $=\mathrm{L} 30-33$ | Left | Junior: 12-14.5 | 10.6 " (27 cm) |
|  | =R30-33 | Right |  |  |
| 28U25 | = L33-36 | Left | Men: 2-4.5 <br> Women: 3.5-6 | 11.6 " (29.5 cm) |
|  | =R33-36 | Right |  |  |

Example for ordering $28 \cup 25=L 27-30$

WalkOn Lateral Junior, WalkOn Reaction Lateral Junior

| Article number |  | Side | Shoe size (US) | Calf Height |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 28 U 33 \\ & 28 \mathrm{U} 4 \end{aligned}$ | = L24-27 | Left |  |  |
|  | =R24-27 | Right |  |  |
| $\begin{aligned} & 28 \mathrm{U} 33 \\ & 28 \mathrm{U} 4 \end{aligned}$ | = L27-30 | Left | Junior: 10-12.5 | 9.6 " (24.5 cm) |
|  | =R27-30 | Right |  |  |
| $\begin{aligned} & 28 \mathrm{U} 33 \\ & 28 \mathrm{U} 34 \end{aligned}$ | = L30-33 | Left | Junior: 12.5-2 | 10.6 " (27 cm) |
|  | =R30-33 | Right |  |  |
| $\begin{aligned} & 28 U 33 \\ & 28 U 34 \end{aligned}$ | = L33-36 | Left | Men: 2-4.5 <br> Women: 3.5-6 | 11.5 " (29.4 cm) |
|  | =R33-36 | Right |  |  |

[^2]

## Easy-fit orthoses. Sole and pronation strap.

The orthoses in the WalkOn product range are particularly lightweight and comfortable to wear thanks to their anatomical design. For an optimal fit, the soles can generally be trimmed to size using ordinary scissors. A lateral pronation strap can also be used.


## Soles easily trimmed to size

1 Before adjusting the sole, place the orthosis on the patient's foot. This allows you to determine the correct distance of the longitudinal arch from the posterior edge of the heel. If the user is wearing shoes with a removable insole, you can use this as a pattern for trimming the orthosis. Ensure that the sole is correctly positioned as described above so movement of the patient's Achilles tendon is not restricted by the orthosis.
$\mathbf{2}$ Trim the sole of the orthosis as marked. Do not reduce the lateral edge more than necessary. This prevents the spring from pressing against the foot or ankle. Make reductions from both sides only if you determine that the sole should be narrower.

Using an insole on the orthosis sole is generally recommended.


## Lateral pronation strap for added support

The $28 Z 10$ lateral pronation strap is an another option for additional support in the orthoses. It is included with the WalkOn Reaction and the WalkOn Reaction Plus and can be ordered as an option for the other orthoses. The principle of the lateral pronation strap is well understood and is still widely used today in the classic Valens calliper. However, unlike this conventional method, the $28 Z 10$ lateral pronation strap is not attached to the shoe, but is instead worn inside it. This allows the user to change their shoes at any time.

All information on how to fit the WalkOn Reaction and the WalkOn Reaction Plus can be found in the instructions for use included with the product.

## The WalkOn Fit Kits. Find the appropriate orthosis for every patient.

Fit Kits are available for all WalkOn orthoses to ensure your patients receive the best possible treatment. These interim orthoses are designed to assess which WalkOn orthosis is suitable for the patient with respect to the size and applicable indication.


Article no. Description

## Sizes included

(adapted to the smallest size in each case)

| $28 \mathrm{T9}$ | 28 U 22 WalkOn Flex Junior | R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36 |
| :---: | :---: | :---: |
| 28 T 2 | 28 U 22 WalkOn Flex | $\begin{aligned} & \text { R36-39, R42-45, } \\ & \text { L36-39, L42-45 } \end{aligned}$ |
| 28T1N | $28 \mathrm{U11}$ WalkOn | $\begin{aligned} & \text { R36-39, R42-45, } \\ & \text { L36-39, L42-45 } \end{aligned}$ |
| 28T1N | 28 U 23 WalkOn Trimable | $\begin{aligned} & \text { R36-39, R42-45, } \\ & \text { L36-39, L42-45 } \end{aligned}$ |
| 28 T 16 | 28U33 WalkOn Lateral Junior | R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36 |
| 28 T 6 | 28U33 WalkOn Lateral | $\begin{aligned} & \text { R36-39, R42-45, } \\ & \text { L36-39, L42-45 } \end{aligned}$ |
| $28 \mathrm{T7}$ | $28 U 34$ WalkOn Reaction Lateral Junior | R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36 |
| 28T8 | 28 U 34 WalkOn Reaction Lateral | $\begin{aligned} & \text { R36-39, R39-42, R42-45, R45-48, } \\ & \text { L36-39, L39-42, L42-45, L45-48 } \end{aligned}$ |
| 28T3=US | 28 U 24 WalkOn Reaction | $\begin{aligned} & \text { R39-42, R42-45, } \\ & \text { L39-42, L42-45 } \end{aligned}$ |
| 28 T 5 | $28 U 25$ WalkOn Reaction Junior | R24-27, R27-30, R30-33, R33-36, <br> L24-27, L27-30, L30-33, L33-36 |
| 28T4=US | 28 U 25 WalkOn Reaction Plus | $\begin{aligned} & \text { R39-42, R42-45, } \\ & \text { L39-42, L42-45 } \end{aligned}$ |



## With compliments from


[^0]:    Muscle status according to Janda
    0 No visible and/or palpable muscle contraction
    1 Visible and/or palpable muscle contraction with no motor effect
    2 Pronounced muscle tension, movement is possible when gravity is suspended
    3 Movement against gravity is possible
    4 Movement against low to medium resistance is possible
    5 Movement with normal strength

[^1]:    Example for ordering 28U33=L42-45

[^2]:    Example for ordering 28U33=L27-30

