### ottobock.

# Walking unlimited.

Dynamic ankle foot orthoses





### The carbon AFOs.

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.



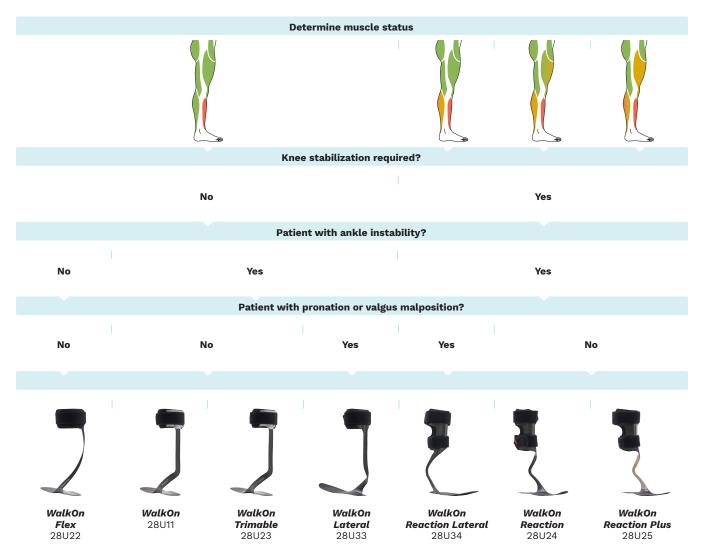
Which *WalkOn* is the right one? Selecting an orthosis made easy.

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.

## WalkOn Family. Selection Tool.

#### 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



### *WalkOn* Family. Appropriate solutions for your patients.

	WalkOn Flex 28U22	WalkOn 28U11	WalkOn Trimable 28U23
Drop foot	No/mild spasticity	No/mild spasticity	No/mild spasticity
Plantar flexor musculature	_	-	_
Knee extension	-	-	-
Sole can be trimmed to size	Yes	_	Yes
Pylon design	Medial	Medial	Medial
Support element	Posterior	Posterior	Posterior
Material	Fiberglass prepreg	Carbon fiber prepreg	Carbon fiber prepreg
Adult size	Yes	Yes	Yes
Children's size	Yes	No	No

- 28U22 WalkOn Flex 28U11 WalkOn
- 28U23 WalkOn Trimable

#### 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

WalkOn Lateral 28U33	WalkOn Reaction Lateral 28U34	WalkOn Reaction 28U24	WalkOn Reaction Plus 28U25
No/mild spasticity	No/mild/moderate spasticity	No/mild/moderate spasticity	No/mild/moderate spasticity
_	Mild impairment	Mild impairment	Impairment
_	Mild impairment	Mild impairment	Impairment
Yes	Yes	Yes	Yes
Lateral	Lateral	Medial	Medial
Posterior	Anterior	Anterior	Anterior
Carbon fiber prepreg	Carbon fiber prepreg	Carbon fiber prepreg	Carbon fiber prepreg with Dyneema reinforcement
Yes	Yes	Yes	Yes
Yes	Yes	No	Yes

#### 28U34 WalkOn Reaction Lateral 28U24 WalkOn Reaction 28U25 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

- 28U25 WalkOn Reaction Plus:
- Impairment of the plantar flexor muscles
- Impairment of knee extension



# *WalkOn* Family. At a glance.

	WalkOn Flex	<b>WalkOn</b> 28U11	WalkOn Trimable 28U23	WalkOn Lateral 28U33	WalkOn Reaction Lateral 28U34	WalkOn Reaction 28U24	WalkOn Reaction Plus 28U25
Effectively supports a physiological gait, even at different speeds and with different loads	•	•	•	•	•	•	•
Supports dorsiflexion (ground clearance)	٠	٠	•	٠	٠	٠	٠
Reduces the risk of stumbling and falling <sup>1</sup>	•	•	•	•	•	•	•
Helps prevent uncontrolled foot contact and foot drop	٠	٠	٠	٠	٠	٠	٠
Energy return supports toe-off and heel strike	•	•	•	•	•	•	•
Fewer compensating movements	٠	٠	٠	٠	٠	٠	٠
Greater flexibility while walking	•						
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		٠	•	٠			
High energy return of the orthosis		•	•	•	•	•	٠
Stabilizes the knee and ankle joints using ground reaction forces					•	•	٠
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					٠	٠	
Dynamic forefoot characteristics are stiffer (compared with the WalkOn Reaction) <sup>1</sup>							٠





#### WalkOn Flex, WalkOn, WalkOn Trimable

Article r	number	Side	Shoe size (US)	Calf Height
28U22 28U11	=L36-39	Left	Men: 5-6	13.8" (35 cm)
28011 28U23	=R36-39	Right	Women: 6-8.5	
28U22 28U11	=L39-42	Left	Men: 6-9 Women: 8.5-10	14.2" (36 cm)
28011 28U23	=R39-42	Right		
28U22	=L42-45	Left	Men: 9-12 Women: 10-13	14.0" (27.5)
28U11 28U23	=R42-45	Right		14.8" (37.5 cm)
28U22 28U11	=L45-48	Left	Men: 12-15	15 47 (20)
28011 28U23	=R45-48	Right		15.4" (39 cm)

Example for ordering 28U22=L42-45

#### WalkOn Reaction, WalkOn Reaction Plus

Article number		Side	Shoe size (US)	Calf Height
28U24	=L36-39	Left	Men: 5-6	10.07 (05.00)
28U25	=R36-39	Right	Women: 6-8.5	13.8" (35 cm)
28U24	=L39-42	Left	Men: 6-9 Women: 8.5-10	14.2" (36 cm)
28U25	=R39-42	Right		
28U24	=L42-45	Left	Men: 9-12 Women: 10-13	14.8" (37.5 cm)
28U25	=R42-45	Right		
28U24	=L45-48	Left	Men: 12-15	15.4" (39 cm)
28U25	=R45-48	Right		

Example for ordering 28U24=L42-45

#### WalkOn Lateral, WalkOn Reaction Lateral

Article r	number	Side	Shoe size (US)	Calf Height
28U33	=L36-39	Left	Men: 5-6	12.8" (32.5 cm)
28U34	=R36-39	Right	Women: 6-8.5	
28U33	=L39-42	Left	Men: 6-9	13.6" (34.5 cm) -
28U34	4 =R39-42 Right Women: 8.5-10	13.8" (35 cm)		
28U33	=L42-45	Left	Men: 9-12 Women: 10-13	14.6" (37 cm)
28U34	=R42-45	Right		
28U33	=L45-48	Left	Men: 12-15	15.4" (39 cm) -
28U34	=R45-48	Right	Wieff. 12-15	15.6" (39.5 cm)

Example for ordering 28U33=L42-45





#### WalkOn Flex Junior

Article number		Side	Shoe size (US)	Calf Height
001100	=L24-27	Left	huminen 75/0.10	8" (20.5 cm)
28U22	=R24-27	Right	Junior: 7.5/8-10	
001100	=L27-30	Left	Junior: 10-12.5	9.3" (24 cm)
28U22	=R27-30	Right		
28U22	=L30-33	Left	Junior: 12.5-2	10.4" (27 cm)
28022	=R30-33	Right		
001100	=L33-36	Left	Men: 2-4.5 Women: 3.5-6	11.6" (29.5 cm)
28U22	=R33-36	Right		

Example for ordering 28U22=L27-30

#### WalkOn Reaction Junior

Article number		Side	Shoe size (US)	Calf Height
001105	=L24-27	Left		8.1" (20.5 cm)
28U25	=R24-27	Right	Junior: 7-9.5	
001105	=L27-30	Left		9.6" (24.5 cm)
28U25	=R27-30	Right	Junior: 9.5-12	
001105	=L30-33	Left		10.6" (27 cm)
28U25	=R30-33	Right	Junior: 12-14.5	
	=L33-36	Left	Men: 2-4.5 Women: 3.5-6	11.6" (29.5 cm)
28U25	=R33-36	Right		

Example for ordering 28U25=L27-30

#### WalkOn Lateral Junior, WalkOn Reaction Lateral Junior

Article r	number	Side	Shoe size (US)	Calf Height
28U33	=L24-27	Left	1	8" (20.5 cm)
28U34	=R24-27	Right	Junior: 7.5/8-10	
28U33	=L27-30	Left		9.6" (24.5 cm)
28U34	=R27-30	Right	Junior: 10-12.5	
28U33	=L30-33	Left	Junior: 12.5-2	10.6" (27 cm)
28U34	=R30-33	Right		
28U33	=L33-36	Left	Men: 2-4.5	
28U34	=R33-36	Right	Women: 3.5-6	11.5" (29.4 cm)

Example for ordering 28U33=L27-30



### **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.

**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 28Z10 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 28Z10 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	<b>Sizes included</b> (adapted to the smallest size in each case)
28T9	28U22 WalkOn Flex Junior	R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36
28T2	28U22 WalkOn Flex	R36-39, R42-45, L36-39, L42-45
28T1N	28U11 WalkOn	R36-39, R42-45, L36-39, L42-45
28T1N	28U23 WalkOn Trimable	R36-39, R42-45, L36-39, L42-45
28T16	28U33 WalkOn Lateral Junior	R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36
28T6	28U33 WalkOn Lateral	R36-39, R42-45, L36-39, L42-45
28T7	28U34 WalkOn Reaction Lateral Junior	R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36
28T8	28U34 WalkOn Reaction Lateral	R36-39, R39-42, R42-45, R45-48, L36-39, L39-42, L42-45, L45-48
28T3=US	28U24 WalkOn Reaction	R39-42, R42-45, L39-42, L42-45
28T5	28U25 WalkOn Reaction Junior	R24-27, R27-30, R30-33, R33-36, L24-27, L27-30, L30-33, L33-36
28T4=US	28U25 WalkOn Reaction Plus	R39-42, R42-45, L39-42, L42-45



#### With compliments from

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<sup>1</sup> Pradon, D., Hutin, E., Khadir, S., Taiar, R., Genet, F., Roche, F. (2011) A pilot study to investigate the combined use of Botulinum toxin type-a and ankle foot orthosis for the treatment of spastic foot in chronic hemiplegic patients. CHU Raymond Poincaré, Laboratoire d'Analyse du Mouvement, Garches, France.