

Orthotics



IMPRINT

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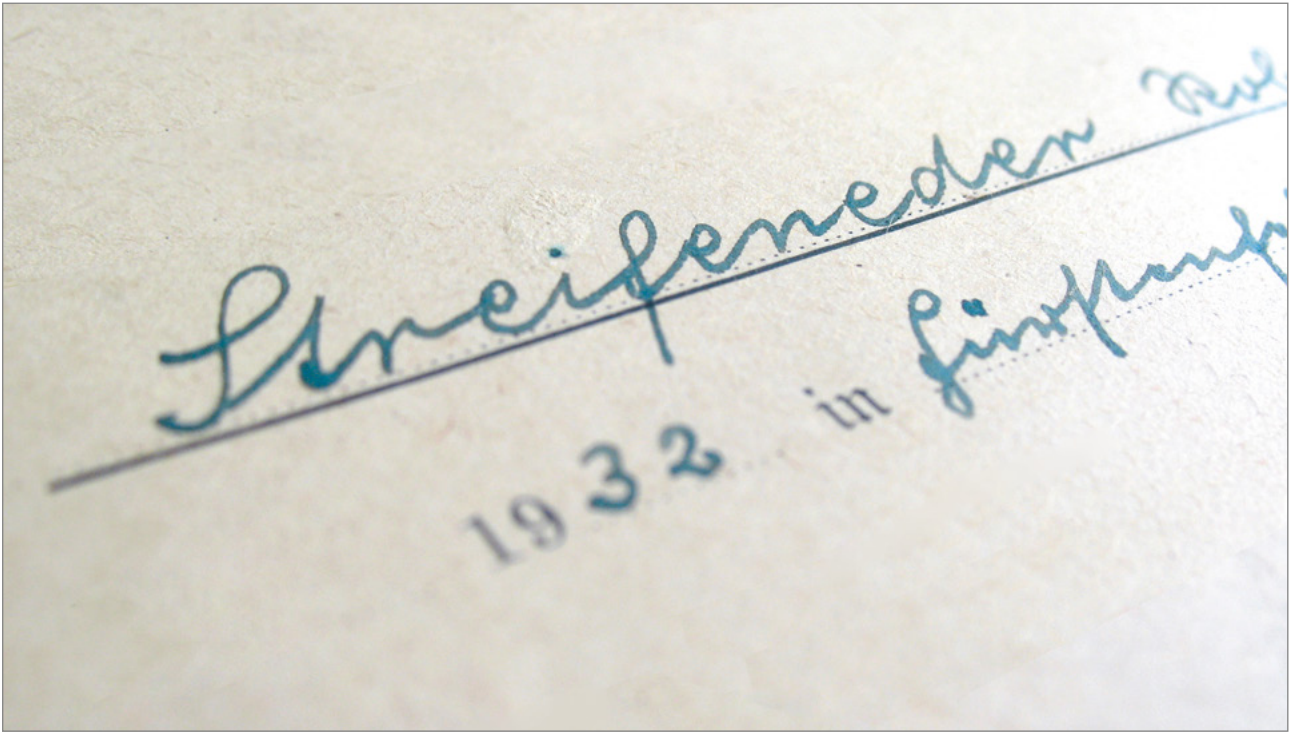
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History

1928	The Streifeneder firm is set up by Lilli and Friedrich Georg Streifeneder in Mannheim.	2010	A new building is purchased for Streifeneder ortho.production GmbH in Emmering.
1929	The first patent is applied for.	2011	Opening of the branch Streifeneder India, located in Gurgaon/Haryana. Establishment of distribution structures in Latin America. Relocation of Streifeneder ortho.production to the new building with modern training and education-, logistics- and administration centre. Foundation of Streifeneder Training Centre in Emmering.
1931	The property in Schöngeisinger Straße in Fürstenfeldbruck is purchased.	2012	Grand opening of Streifeneder Training Centre, with focus on national and international markets. Streifeneder ortho.production GmbH wins the “red dot design award” for the therapeutic shoe Pluto.
1932	The first orthopaedic workshop is fitted out in Fürstenfeldbruck near Munich.	2013	The US-American distribution partner Euro International, located in Tampa/Florida, is integrated in the company as Streifeneder USA.
1945	Further orthopaedic workshops are set up to cater for war invalids.	2014	Streifeneder group receives a new corporate design with new company logo.
1949	The orthopaedic workshop starts up at the Bad Tölz Hospital.	2017	New partner and distributor BroadBay launches distribuion in United States and Canada.
1953	The Munich site is opened. The wholesale business is expanded.	2018	Development of prosthetic feet GO.smart and GO.free. Florian Streifeneder joins the management as Member of the Executive Board.
1968	The plastics, Streifylen and Streifylast, are launched along with the requisite heat sources.		
1992	A production site is set up in Hungary to manufacture plastic products in small series.		
1993	The production and distribution division expands further. Move to the new company premises in Emmering, just outside Munich.		
1995	Export activities are stepped up.		
1997	Takeover of Maschinen-Schmid, the world market leader in socket router machinery.		
1998	The product range is extended by the prosthetics product division.		
1999	Traditional in-house production is extended and the product spectrum expanded by modular components. “Everything from a single source” – with our very own department for workshop planning we can now help to realize our clients’ wishes even better.		
2001	The new site in Emmering is extended by further storage space to 6,000 qm.		
2004	Establishment of distribution structure in China.		
2007	Streifeneder ortho.production GmbH is set up as an independent subsidiary.		
2009	Streifeneder ortho.production GmbH exports to more than 100 countries. Streifeneder ortho.production GmbH wins the “red dot design award” for the knee joint KINEGEN.stream.		



Quality is our Claim

We are convinced that only constant technical innovation and development is the key to a steady improvement of products and optimal patient care. We apply high standards to be able to offer each of our clients exactly those high-quality products he requires. Each of our products is subject to a continuous quality planning, quality control, quality monitoring and quality improvement. In order to be able to satisfy even most individual customer requirements and also in order to close product-related gaps in the market, it is essential to have our own production series with large lot sizes, but to also offer products with very individual unit numbers.

Despite the rapid development of the export business within the last years and the opening up of new markets such as Brazil, we still value Germany as our location to do business. We are proud of the quality standard “Made in Germany” and even in times of a continuously increasing cost pressure and growing competition due to globalization, we still produce predominantly in Germany.



Quality management

More than ninety years of experience, as well as the certified quality management system we introduced in 1998 according to EN ISO 13485; ensure highest quality level. This quality management system is applied to all business divisions. Especially our product development division makes sure that the high level of quality is not only maintained but steadily increased. Thus, we ensure that we always meet the raising demands of our clients in terms of product development, manufacturing and safety.



Increasing globalisation and changing international security and safety conditions have motivated the World Customs Organisation (WCO) to draft a „Framework of Standards to Secure and Facilitate Global Trade“ (SAFE) to establish a global framework for modern and effective risk management of

customs compliances. The aim is to guarantee the security and safety of a continual international supply chain from the product manufacturer to the end consumer. The concept of European Authorised Economic Operator is an EU Customs security programme that started in 2007 and recognises companies as reliable trade partners as they met the following common criteria: customs compliance, appropriate record-keeping, financial solvency and, where relevant, appropriate security and safety standards.

Streifeneder ortho.production GmbH, as a globally operating company, has met the challenge and is proud to announce that it has been granted Authorised Economic Operator (AEO-F) certification by German customs in January, 2013, which officially regards the company as a reliable trade partner. The certificate number is DE AEO-F 115235.

Because of this we can do even better at achieving our goal that you receive our products as quickly as possible. An important part of our delivery time concept and a valuable time saver. Part of our comprehensive safety concept is that our company is protected against entry by unauthorized persons and keep our shipments to you received the highest security and packaging standards. With this we contribute our share in building a secure supply chain.

Declaration of conformity

As manufacturer with sole responsibility, Streifeneder ortho.production GmbH declares that the products referred to in this catalog conform to the requirements of the regulation (EU) 2017/745 for medical devices (MDR). In order to comply with your documentation requirements, please paste the removable item labels of the products used onto the Streifeneder patient certificate and completely fill out the patient data. In case of a complaint, by means of this customer-/ patient documentation the compliance with all applicable technical guidelines for the supply with orthopaedic aids as well as the conformity with legal obligations due to the medical devices legislation can be documented.

| |

Contacting us

Communication is a must in a working relationship. Your personal contact to our staff members in the internal sales department as well as our field service is the base of our successful collaboration. It is our goal to react swiftly and efficiently to all of your wishes, to answer all of your questions and to keep all of the promises we make for our products. Please contact us, we are looking forward to hearing from you!

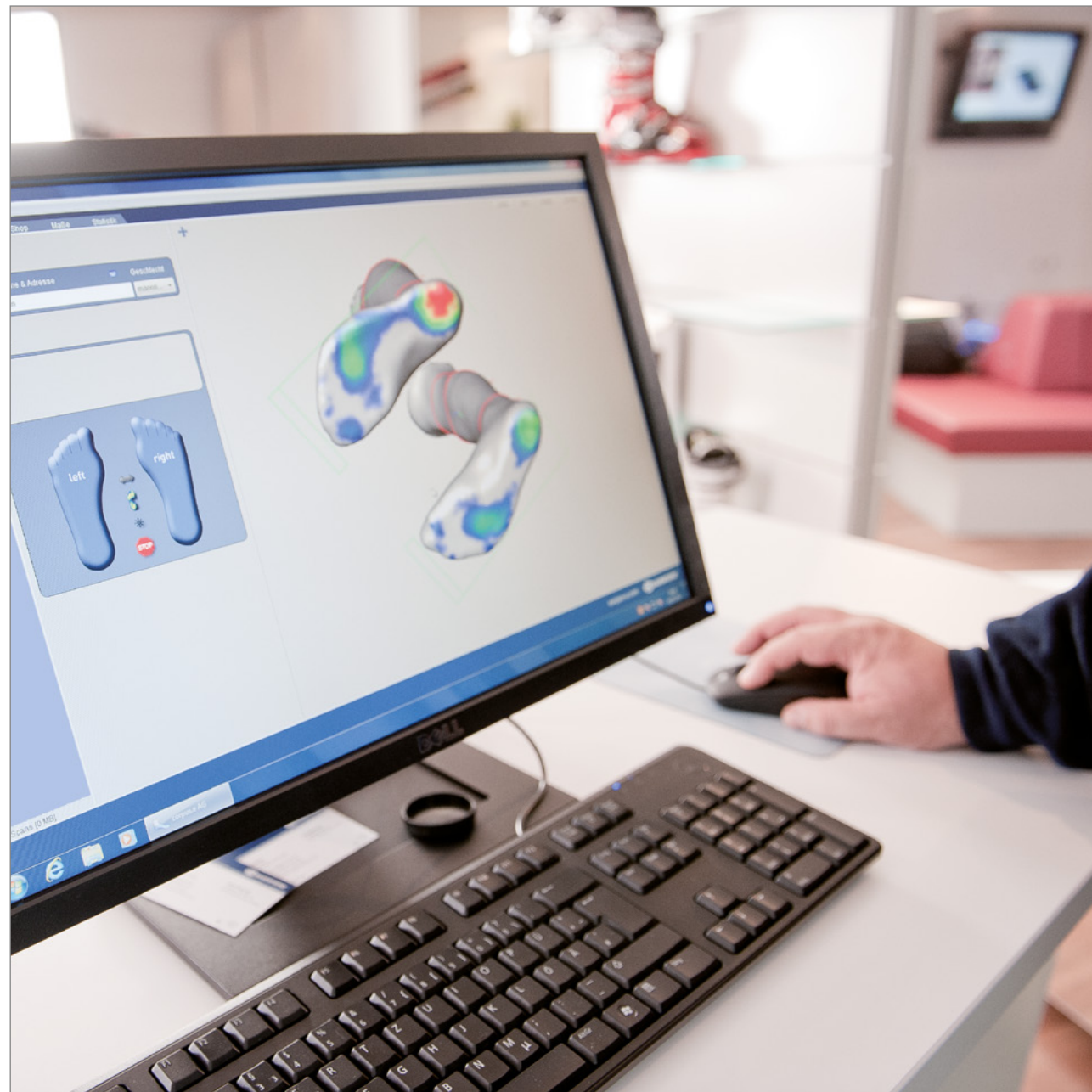


Via our general office switchboard at +49 8141 6106-0 your call will be directed to the staff member in charge. Of course, you can also send your request by email to service@streifeneder.de.

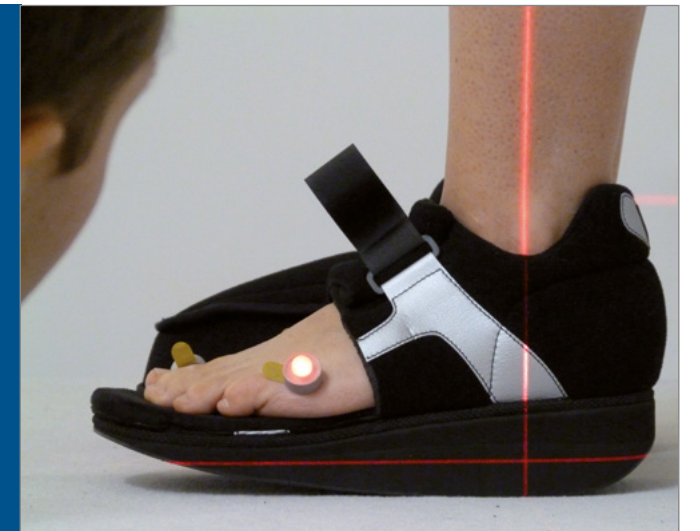
Development & Production

Experience technology, create technology, utilize technology – keep track of development and concentrate synergies. It is a vital part of our companys' philosophy to continually optimize our operational procedures and production processes. This is why we define the economic growth of our company by our perpetual increase in production efficiency. The creativity, the commitment and the special professional skills of each of our members of staff, as well as our state-of-the-art production facilities are our guarantor for satisfied customers.

Our equipment in terms of up-to-date drawing programs (3D-CAD), simulation software (FEM-calculation) to the point of multi-axial machining centers helps our engineers and orthopaedic technicians to assure and further expand our market position.



We subject ourselves and our products to highest quality standards. All of our orthoses have been extensively tested to prove their medical efficacy. Therefore our customers receive exactly what they can expect from us - best quality and long-lasting products. See the quality of our products and the comprehensive service that we have to offer for yourself!



Training Centre Streifeneder ortho.training

In order to stay competitive and in order to meet the growing requirements of the patients, it is no longer enough to just use high quality orthopaedic products. Profound practical skills on the basis of current scientific research and findings creates optimal conditions to always react competently and confidently in daily practice. In order to convey valuable expertise as well as detailed knowledge to specialists in orthopaedic and orthopaedic shoe technology as well as physiotherapy and podiatry, we have originated the Training Centre Streifeneder ortho.training in Emmering.

A spacious auditorium (AudiMax) with 160 seats and a fully equipped workshop with 15 work stations, a machine room as well as a patient fitting room and a plaster room on approx. 1.000 sqm offer more than optimal conditions for a qualified advanced and continuous education on the highest level. Modern tools such as multimedia equipment, a fully equipped gait analysis laboratory, course materials and teaching aids that meet the demands of our clients are also part of our standards.



Our meticulously elaborated seminar program comprehends more than 50 events per year centered around topics such as silicone processing, pre-preg processing, synthetic materials or gait analysis. With a flexible program planning on our part, we are also able to react to individual customer's wishes and to offer seminars about special subjects upon request. In order to guarantee an array of seminars that is as broad as possible we regularly invite high-carat external guest lecturers to our training centre Streifeneder ortho.training.

You can download our current seminar calendar with further information about all of our seminars from our website at www.streifeneder.com/training. Of course, we will also gladly send it to you by post or email. Please feel free to contact us at: training@streifeneder.de or by telephone +49 8141 6106-200. We are looking forward to hearing from you!



The human body is an exceptional complex synthesis of the arts, and functions only by the interaction of various body systems.

In order to better understand human anatomy, the body systems are distinguished as follows

- Bone and skeletal system: The bone system includes all bones (approx. 200) and joints.
- Muscular system: This contains also the auxiliary elements of the muscles such as e. g. tendons, ligaments, bursae and tendon sheaths. The muscle is able to contract, enabling two bones connected by a joint to move. The tendon connects the muscle to the bone and the effector is being moved.
- Locomotory system: Altogether, the bone system and the muscular system are named the musculoskeletal system (locomotion), and special attention is paid to this system here in our orthotics catalogue.
- Nervous system: Outside of the central nervous system (brain and spinal marrow), the peripheral nervous system is distinguished between motoric and autonomic nerves. The nervous system is responsible for receiving, processing and transmitting of stimuli and most important, has a coordination function.
- Sensory and skin system: By means of the sensory and skin system, environmental stimuli such as e. g. pressure, temperature, light and sounds can be processed.
- Vascular system: The vascular system is divided into arterial, venous and lymphatic vascular system.
- Internal organs: Heart and blood vessels, blood- and immune system, hormone glands, respiratory tract, digestive system, urinary and sexual organs.

Orthopaedics is the science of treatment of inherited or acquired deformities or functional disorders of the musculoskeletal system (bones, joints, muscles, tendons).

The musculoskeletal system is one of the largest organ systems of the human body and may be affected by many various deformations, e. g. growth, functional disorders, injuries and diseases.

The primary target of orthotics is to provide proper aids and appliances for restricted or non-functional body parts (joints).

Generally, supports, orthoses help to maintain physical abilities in the sense of

- Stabilisation
- Immobilisation
- Relief
- Guidance
- Correction

The construction of an orthosis not only depends on the anatomic condition of the corresponding body part, but also on the mechanical laws of static, dynamics and the lever rule.

A classic orthosis however is made of solid materials. It is firm, stiff, supports from the outside and works based on the materials used, e. g. a plastics brace immobilises and guides the joint.



Foot & Ankle Joint



Foot & Ankle Joint

The feet are the basis of the human body. They are the mostly used body parts and have to carry the complete body weight when walking upright. They bear all strains during walking, running and jumping. Alone the achilles tendon of the foot, is able to withstand a weight of approx. 1 ton. Despite its extreme stability, the foot is a filigree masterpiece of nature. It consists of 26 bones, 27 joints, 32 muscles and tendons, 107 ligaments and 1.700 nerve endings.

Roughly, the human foot can be divided into forefoot, midfoot and hind foot. The short and long foot muscles brace the foot arch and enable the foot to accomplish various movements. Normally, every healthy foot has a medial arch and a metatarsal arch, but there are also malpositions such as splay-, flat feet and pes valgus. Heel and forefoot are carrying the biggest part of the body weight, whereas there is relatively little weight load on the toes as well on the outer edges of the foot.



The connection joint between foot and lower thigh is the ankle joint. A distinction is made between upper and lower ankle joint. The upper ankle joint consists of shin bone, calf bone tip and ankle bone (Talus). It allows the motion between foot and lower thigh, and is responsible for lifting and lowering the foot. These movements are important for the flexing action during walking. Furthermore, they provide repulsion force for jumping. The upper ankle joint is the mostly loaded joint of the human body. It is especially injury-prone, because the natural stability of the joint decreases while lowering the foot. Therefore, the upper ankle joint is often sprained or twisted. When this happens, the ligaments of the upper ankle joint can become overstretched, strained or even torn. Fractures of the ankle, damages of the cartilage and joint injuries are possible further consequences. Existing malpositions of the foot and misloads on the joint, are the basis for further damages to the upper ankle joint.

Even though the lower ankle joint is anatomically divided into two sections, it forms one functional unit. In this joint, the foot moves against the ankle bone in the sense of lifting the inner foot edge (supination/inversion) respectively lifting the outer foot edge (pronation/eversion). It is used especially during standing on inclined ground or uneven terrain. The lower ankle joint guide is supported by an extensive ligament construction.

Orthopaedic aids are playing an important role for the treatment of foot- and ankle joint injuries as well as medical conditions of the locomotory system. Streifeneder ortho.production offers a wide range of orthoses, which are described in detail on the following pages.



MalleoSupport.fix / MalleoSupport.fix-cool

Ankle orthosis for stabilisation on one level

Mode of Action

- the anatomically shaped outer shells of the ankle orthoses (MalleoSupport.fix with moulding-foam padding, MalleoSupport.fix-cool with moulding-foam padding and air-gel cushion), stabilise the ankle joint together with the continuously adjustable hook- and loop fasteners and prevent uncontrolled motion in regards to pro- or supination
- padding made of moulding-foam and velours fabric of Coolmax-material for optimal wearing comfort during rehabilitation phase; coolable air-gel cushions for the acute phase

Indication


- capsular ligament injury at the upper ankle joint
- distortion of the upper ankle joint (supination trauma)
- chronic instability / ligament insufficiency
- post-surgical rehabilitation
- reduces the wearing period of cast protection

Contraindication

- material interactions / allergies
- do not wear directly on injured, irritated or damaged skin
- fresh, instable fractures
- angiopathy (oedemata)

Designation	hight	Size	Colour	Item-No.
MalleoSupport.fix-cool with air-gel cushion and moulding-foam padding	25 cm	One size	anthracite	50R1
MalleoSupport.fix with moulding-foam padding	25 cm	One size	anthracite	50R2
only air-gel cushion				50R11

The positive effect is only guaranteed if the orthosis is worn together with a shoe.

 MalleoSupport.fix resp. MalleoSupport.fix-cool can be worn on the left or right side. Do not use the moulding-foam padding together with the air-gel cushions!



50R1



air-gel cushion



50R2



ValguSupport.night

Hallux valgus correction splint (night splint)



- Mode of Action**
- ValguSupport.night is mainly worn at night and without shoes
 - constant wearing achieves stretching of the soft tissue and the joint capsule
 - by the effect of small forces, the big toe is brought into correct axial position

- Indication**
- hallux valgus – conservative and post-operative

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - blood circulatory and lymphatic disorders
 - sensory disorders of the feet (e.g. diabetes mellitus)
 - arthritis urica (gout attack)
 - not suitable for walking

Shoe size	side	Item-No.
34 – 36	left	192P1/L1
37 – 40	left	192P1/L2
41 – 48	left	192P1/L3
34 – 36	right	192P1/R1
37 – 40	right	192P1/R2
41 – 48	right	192P1/R3

 The correct size of the ValguSupport.night is determined by the patients' shoe size. The orthosis is worn without shoe.



Ankle Foot Orthosis

Foot postural support orthosis, made of Streifylen (PE)



- Mode of Action**
- optimal immobilisation of the lower leg
 - due to complete immobilisation, this orthosis can be used as night splint
 - ready to fit semi-finished product, made of thermoplastic mouldable polyethylene

- Indication**
- post-operative immobilisation of the lower leg
 - drop-foot prophylaxis
 - dorsal flexor – resp. peroneal paralysis

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - circulatory disorders, venous or lymphatic return disorders, lymph oedema
 - sensory disorders (e.g. polyneuropathy)
 - instable fractures of the lower leg

side	Ball width	Foot lenght	Colour	Item-No.
left	9.5 cm	26 cm	white	194P1/L1
left	10.5 cm	28 cm	white	194P1/L2
left	11.5 cm	30 cm	white	194P1/L3
right	9.5 cm	26 cm	white	194P1/R1
right	10.5 cm	28 cm	white	194P1/R2
right	11.5 cm	30 cm	white	194P1/R3
left	9.5 cm	26 cm	caucasian	194P2/L1
left	10.5 cm	28 cm	caucasian	194P2/L2
left	11.5 cm	30 cm	caucasian	194P2/L3
right	9.5 cm	26 cm	caucasian	194P2/R1
right	10.5 cm	28 cm	caucasian	194P2/R2
right	11.5 cm	30 cm	caucasian	194P2/R3



PeroSupport
Peroneal spring thermoplastically mouldable, made of polypropylene (PP), including calf pad

Mode of Action

- ready to fit semi-finished product allows quick and individual production of a function-adjuvant orthosis type AFO
- lower leg orthosis consists of injected polypropylene, which is a multi-phase copolymer and features an optimal combination of good impact resistance as well as high rigidity
- lower leg orthosis can be used for patients with dorsal-extension deficiency of the foot, resulting in drop foot gait
- lower leg orthosis limits the plantar flexion in the upper ankle joint and therefore causes lifting of the foot during swing phase

Indication

- drop foot
- peroneal paresis
- hemiplegics with mainly limp tip toe position

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- weight limit: 120 kg
- foot or ankle deformities
- swellings and dilation of the calf skin
- sensory disorders (e.g. polyneuropathy)
- diabetic foot syndrome/-ulcers
- heavy circulatory disorders/lymphoedema

size	side	shoe size	height/sole length	Item-No.
S	left	35 – 37	29 cm/23 cm	197P1/L1
M	left	37 – 39	31 cm/24 cm	197P1/L2
L	left	39 – 41	34 cm/26 cm	197P1/L3
XL	left	41 – 44	39 cm/28.5 cm	197P1/L4
S	right	35 – 37	29 cm/23 cm	197P1/R1
M	right	37 – 39	31 cm/24 cm	197P1/R2
L	right	39 – 41	34 cm/26 cm	197P1/R3
XL	right	41 – 44	39 cm/28.5 cm	197P1/R4

Spare part: Calf pad

side	Colour	Shoe size	Item-No.
left	white	35 – 37 mm	197P15/L1
left	white	37 – 39 mm	197P15/L2
left	white	39 – 41 mm	197P15/L3
left	white	41 – 44 mm	197P15/L4
right	white	35 – 37 mm	197P15/R1
right	white	37 – 39 mm	197P15/R2
right	white	39 – 41 mm	197P15/R3
right	white	41 – 44 mm	197P15/R4

The positive effect is only guaranteed if the orthosis is worn together with a shoe.

The one-piece closing calf pad is made of non-irritant, synthetic and smooth material and can be fixed to the orthosis in only one step. Due to this construction, riveting is not necessary any longer. The calf cushions are removable and machine washable. Orthosis can be finished by use of a hot-air gun.



PeroSupport.tec
Ankle-Foot-Orthosis, dynamic, made of carbon-Prepreg, including 2 sets of cushioning pads

Mode of Action

- the PeroSupport.tec ankle-foot-orthosis can be used for patients suffering from dorsal extension deficiency of the foot, resulting to the so-called “steppage gait”
- the PeroSupport.tec ankle-foot-orthosis limits the plantar flexion in the upper ankle joint and therefore causes the foot to lift during swing phase
- magnetic closure simplifies opening and closing with one hand
- great energy storage and -return by carbon-Prepreg material

Indication

- peroneal paresis
- weakness of dorsiflexion of the foot
- drop foot
- hemiplegics with mainly limp tip toe position

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- weight limit: 120 kg
- foot or ankle deformities
- swellings and dilation of the calf skin
- sensory disorders (e.g. polyneuropathy)
- diabetic foot syndrome/-ulcers
- heavy circulatory disorders/lymphoedema

Attention: Persons and patients with heart pacemakers or other implanted electronic systems must obey the warnings of their supplier about handling magnetic material.

Size	side	Shoe size	hight	Item-No.
XS	left	34 – 36	32.5 cm	197R4/L0
S	left	36 – 39	33.5 cm	197R4/L1
M	left	39 – 42	34.5 cm	197R4/L2
L	left	42 – 45	35.5 cm	197R4/L3
XL	left	45 – 48	37.5 cm	197R4/L4
XS	right	34 – 36	32.5 cm	197R4/R0
S	right	36 – 39	33.5 cm	197R4/R1
M	right	39 – 42	34.5 cm	197R4/R2
L	right	42 – 45	35.5 cm	197R4/R3
XL	right	45 – 48	37.5 cm	197R4/R4

Spare pads

Description	Size	side	Calf circum-ference	Item-No.
3 x pads, 1 x magnetic fastener, 10 x velcro dots	XS – XL	left + right	up to 52 cm	197R10

The positive effect is only guaranteed if the orthosis is worn together with a shoe.

The PeroSupport.tec may be customised to foot shape and -size by cutting the sole as per requirements. The supplied micro-fleece insole can be cut into shape as well. Carbon-pre-preg is not thermo-formable.

197P1

197P15



cuttable walking sole



Fidlock Magnetic Closure for orthoses

- Material**
- synthetic material and stainless steel
 - weight: 22 g
 - load capacity: 70 kg
 - magnetic flux density: in closed condition approx. 4mT at a distance of 25,4 mm to the closure

- Application**
- two-piece system to close strap connections of orthoses

- Characteristics**
- easy to handle with one hand, both sections close automatically
 - easy opening by pulling the zipper

PU = 1 pc.

Attention: Persons and patients with heart pacemakers or other implanted electronic systems must obey the warnings of their supplier about handling magnetic material.

Light width	Dimensions L x W	Strap passage	Item-No.
25 mm	74 x 33 x 13 mm	2 mm	44P20/25



PeroSupport.pro

Ankle-Foot-Orthosis with additional calf stabilisation, made of carbon-Pre-preg, dynamic, including 2 sets of cushioning pads

- Mode of Action**
- dynamic re-adjustment of the foot
 - restriction of plantar flexion and support of dorsal flexion
 - prevents lateral ankle twisting (supination position)
 - prevents side-slips (lateralisation)
 - great energy storage and -return by carbon-Prepreg material

- Indication**
- peroneal paresis
 - weakness of dorsiflexion of the foot
 - Malalignment of the ankle joint as a result of weakness of dorsiflexion of the foot

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - weight limit: 120 kg
 - deformation of the foot or ankle
 - swelling and extension of the calf skin
 - sensory insensitivity (e.g. diabetic polyneuropathy)
 - diabetic foot syndrome/ulcer
 - severe circulatory disorders/congestive oedema



calf-strap continuously adjustable by Y-hook- and loop fastener



cuttable walking sole

Size	side	Shoe size	hight	Item-No.
S	left	36 – 39	34 cm	197R6/L1
M	left	39 – 42	35 cm	197R6/L2
L	left	42 – 45	35 cm	197R6/L3
XL	left	45 – 48	36 cm	197R6/L4
S	right	36 – 39	34 cm	197R6/R1
M	right	39 – 42	35 cm	197R6/R2
L	right	42 – 45	35 cm	197R6/R3
XL	right	45 – 48	36 cm	197R6/R4

Spare pads

Description	Size	side	Calf circum-ference	Item-No.
calf pad with fastener, 12 hook and loop dots	36 – 42	left + right	up to 52 cm	197R7/1
calf pad with fastener, 12 hook and loop dots	42 – 48	left + right	up to 52 cm	197R7/2

The positive effect is only guaranteed if the orthosis is worn together with a shoe.

The PeroSupport.pro may be customised to foot shape and -size by cutting the sole as per requirements. The supplied micro-fleece insole can be cut into shape as well. Carbon-pre-preg is not thermo-formable.



PediSupport.dorsal

Foot Postural Support Orthosis (Dorsal Night Stabilisation Splint)



Mode of Action

- keeps the foot in a 90°-position
- prevention of a pes equinus position of the foot and thereby of a contraction of the achilles tendon
- slight elongation of the plantar fascia during night
- soothes plantar foot pain in the morning

Indication

- plantar fasciitis
- achilles tendonitis
- pes equinus position
- metatarsalgia
- for night postural support
- for contracture prophylaxis

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- plantar flexion contracture of more than 10°
- severe plantar flexion spasms
- not suitable for walking
- diabetic foot syndrome/-ulcers
- heavy circulatory disorders/lymphoedema

Size	Shoe size	Colour	Item-No.
M	36 – 39	black	191R1/M
L	40 – 44	black	191R1/L



PediSupport.night

Foot Postural Support Orthosis (Night Stabilisation Splint)



Mode of action

- keeps the foot in a 90°-position
- prevention of a pes equinus position of the foot and thereby of a contraction of the achilles tendon
- optimal immobilisation of the lower leg
- separate wedge to stretch the plantar fascia
- additional calf pad to take load of the heel for bedridden patients (see detail photo)

Indication

- plantar fasciitis
- post-operative immobilisation of the lower leg
- dorsal flexor – resp. peroneal paralysis
- for night postural support
- pes equinus position

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- plantar flexion contracture of more than 10°
- severe plantar flexion spasms
- not suitable for walking



calf pad for heel relief



wedge for stretching of the plantar fascia

Size	Shoe size	Colour	Item-No.
S	36 – 39	black/anthracite	190R1/S
M	39 – 41 mm	black/anthracite	190R1/M
L	41 – 44 mm	black/anthracite	190R1/L
XL	44 – 46	black/anthracite	190R1/XL



PneumoWalker

Pneumatic lower leg-foot orthosis for immobilisation in a defined position

- lightweight construction with stabilisation elements and integrated pneumatic system
- Mode of Action**
 - immobilisation of the lower leg-foot region in a defined position (90°-position)
 - an individually inflatable air chamber (integrated pneumatic system with ventilation unit) provides for a precisely fitting postural support of the foot and the lower leg within the shoe
 - especially lightweight construction with lateral stabilisation element made of aluminum
 - rounded sole stimulates a natural gait pattern
 - individual adjustment possibilities through hook and loop fasteners
 - soft, cushioned, washable interior shoe for high wearing comfort

Indication

- ligament, soft part or tendon injuries
- conservative and postoperative treatment of stable fractures of the foot, ankle and distal lower leg
- after hallux-valgus-surgery
- pre- or postoperative/posttraumatic immobilisation
- toe arthroplasty

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders
- weight limit: 120 kg
- not suitable for high activity
- use only with walking supports

Size	Shoe size	Item-No.
S	35 – 37.5	64R1/S
M	38 – 42.5	64R1/M
L	43 – 45.5	64R1/L
XL	> 46	64R1/XL

Replacement part

Description	Size	Item-No.
Inner Shoe	S	64R11/S
Inner Shoe	M	64R11/M
Inner Shoe	L	64R11/L
Inner Shoe	XL	64R11/XL

Delivery does include the inner shoe.

For better hygiene, the body protection tricot sleeve item-no. 99P12 can be pulled over the leg. Two separate paddings for additional cushioning of delicate areas and further padding to protect the toes are included in the delivery. The PneumoWalker can be worn on the right and the left side.



AeroWalker

Pneumatic lower leg-foot orthosis for immobilisation in a defined position

- shell construction with integrated air cushion
- Mode of Action**
 - immobilisation and stable resting position of the ankle- foot area in designated 90° position by hard shell construction
 - integrated, individually inflatable air chamber surrounds the entire foot from the ankle area to the mid foot and provides customised foot- and calf position in the shoe
 - rocker sole with profile benefits a natural gait pattern
 - adjustable, removable toe protection prevents concussion damages
 - rounded edge, slightly bent to the outside, in the calf area prevents bruises
 - low weight and breathability by slotted shell design
 - together with the heel wedges, item-no. 62R13, the AeroWalker can also be used for relief of injuries of the achilles tendon
 - soft, padded and washable inner shoe for high wearing comfort

Indication

- ligament, soft part or tendon injuries
- conservative and post-surgical therapy of stable fractures of the foot, the ankle and the distal lower leg
- severe ankle distortion
- after hallux-valgus-surgery
- pre- or postoperative/posttraumatic immobilisation
- toe arthroplasty

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders
- sensibility disorder/polyneuropathy
- weight limit: 200 kg
- not suitable for high activity
- use only with walking supports

Feature

- equipped with breathable, perforated padded inner sole

Size	Shoe size	Item-No.
S	35 – 37.5	68R1/S
M	38 – 42.5	68R1/M
L	43 – 45.5	68R1/L
XL	> 46	68R1/XL

Replacement part

Description	Size	Item-No.
Inner Shoe	S	68R11/S
Inner Shoe	M	68R11/M
Inner Shoe	L	68R11/L
Inner Shoe	XL	68R11/XL

Supplied with inner shoe and two underwear-stockings.

For hygienic reasons, two chaning socks, that protect the inner shoe, are included in the delivery. Thee separate cushions for protect of delicate areas are included also in delivery. The AeroWalker can be worn on the right and the left side.

64R1

64R11

68R1

68R11



AeroWalker.short

Pneumatic lower leg-foot orthosis for immobilisation in a defined position, short version



69R1



69R11

- shell construction with integrated air cushion

Mode of Action

- immobilisation and stable resting position of the ankle- foot area in designated 90° position by hard shell construction
- integrated, individually inflatable air chamber surrounds the entire foot from the ankle area to the mid foot and provides customised foot- and calf position in the shoe
- rocker sole with profile benefits a natural gait pattern
- adjustable, removable toe protection prevents concussion damages
- rounded edge, slightly bent to the outside, in the calf area prevents bruises
- low weight and breathability by slotted shell design
- soft, padded and washable inner shoe for high wearing comfort

Indication

- ligament, soft part or tendon injuries
- conservative and post-surgical therapy of stable fractures of the foot, the ankle and the distal lower leg
- severe ankle distortion
- after hallux-valgus-surgery
- pre- or postoperative/posttraumatic immobilisation
- toe arthroplasty

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders
- sensibility disorder/polyneuropathy
- weight limit: 200 kg
- not suitable for high activity
- use only with walking supports

Feature

- equipped with breathable, perforated padded inner sole

Size	Shoe size	Item-No.
S	35 – 37.5	69R1/S
M	38 – 42.5	69R1/M
L	43 – 45.5	69R1/L
XL	> 46	69R1/XL

Replacement part

Description	Size	Item-No.
Inner Shoe	S	69R11/S
Inner Shoe	M	69R11/M
Inner Shoe	L	69R11/L
Inner Shoe	XL	69R11/XL

Supplied with inner shoe and two underwear-sockings.

For hygienic reasons, two changing socks, that protect the inner shoe, are included in the delivery. These separate cushions for protect of delicate areas are included also in delivery. The AeroWalker.short can be worn on the right and the left side.



Heel wedges, 5-pc. Set

Mode of Action

- depending on orthosis size, use wedges of different sizes
- these are positioned over the black insole of the orthosis and firmly attached by means of the adhesive coat
- causes plantar flexion
- in the course of rehabilitation, the wedges can be removed according to the doctor's advice
- the wedges can be used for the right and left foot and can be individually customised
- the degree of plantar flexion is approx. 22° with three wedges, approx. 16° with two wedges and approx. 10° with one wedge

Indication

- due to plantar flexion, relief of achilles tendon during achilles tendonitis
- post-surgical care after achilles tendon reconstruction and achilles tendon ruptures

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Item-No.
One size	62R13



Anatomical Insole Blank for Walker

- for more comfort and better fit in pneumatic calf-foot orthoses
- anatomical shape for optimal support of the forefoot arch and medial arch of the foot
- individually adjustable e.g. by sanding
- blank provides time-saving customisation of the walker
- supplied with black micro-fleece cover for better cleaning
- 10 mm (average) thick soft foam (shore 15 – 18) for cushioning and shock absorption

Size	Length	Width	Item-No.
35 – 36	29.5 cm	11.5 cm	62R15/35...
37 – 38	30.5 cm	12.0 cm	62R15/37...
39 – 40	31.5 cm	12.5 cm	62R15/39...
41 – 42	33.0 cm	13.0 cm	62R15/41...
43 – 44	34.0 cm	13.5 cm	62R15/43...
45 – 46	35.5 cm	14.0 cm	62R15/45...
47 – 48	36.5 cm	14.5 cm	62R15/47...

Ordering example: „62R15/35“ + „L“ (left side) or „R“ (right side)



Silicone Heel Wedge

- Mode of Action**
- the silicone heel wedge (leg length compensation) consists of 100 % viscoelastic silicone
 - reduces the shock impact load within the body by up to 40 %
 - heel cups help to relieve pain and to avoid arthroses of ankle-, knee- and hip joint
 - the heel wedge is optimally suited for balancing out differences in leg length

- Indication**
- static spinal conditions
 - acute and chronic tendoperiosthosis
 - arthrosis of ankle-, knee- and hip joint

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin

Size	Shoe size	Thickness	Item-No.
S	35 – 37 mm	3 mm	192P20/3S
M	38 – 40 mm	3 mm	192P20/3M
L	41 – 43 mm	3 mm	192P20/3L
XL	44 – 46	3 mm	192P20/3XL
S	35 – 37 mm	5 mm	192P20/5S
M	38 – 40 mm	5 mm	192P20/5M
L	41 – 43 mm	5 mm	192P20/5L
XL	44 – 46	5 mm	192P20/5XL
S	35 – 37 mm	8 mm	192P20/8S
M	38 – 40 mm	8 mm	192P20/8M
L	41 – 43 mm	8 mm	192P20/8L
XL	44 – 46	8 mm	192P20/8XL
S	35 – 37 mm	10 mm	192P20/10S
M	38 – 40 mm	10 mm	192P20/10M
L	41 – 43 mm	10 mm	192P20/10L
XL	44 – 46	10 mm	192P20/10XL



Silicone Heel Cup

without heel spur pad

Mode of Action

- the heel cups consist of 100 % viscoelastic silicone
- provides soft and gentle tread
- heel cups help to relieve pain and to avoid arthroses of ankle-, knee- and hip joint
- relieves irritations of the achilles tendon

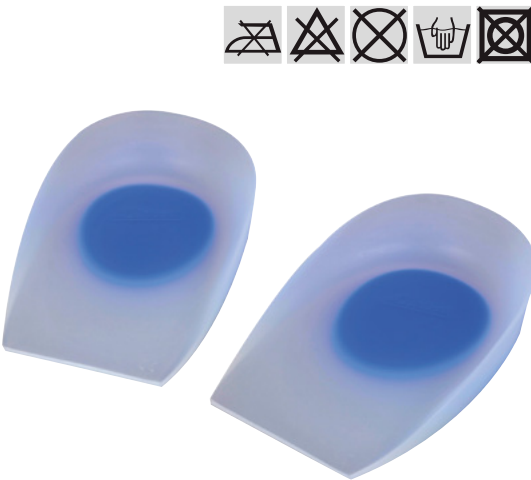
Indication

- arthrosis of ankle-, knee- and hip joint
- achillodynia

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Shoe size	Item-No.
S	36 – 38	192P11/S
M	39 – 41 mm	192P11/M
M/L	42 – 43	192P11/ML
L	44 – 46	192P11/L



Silicone Heel Cup

with heel spur pad

Mode of Action

- the heel cups consist of 100 % viscoelastic silicone
- provides soft and gentle tread
- heel cups help to relieve pain and to avoid arthroses of ankle-, knee- and hip joint
- relieves irritations of the achilles tendon
- due to the heel spur adjustment, an additional strain-relief of the heel spur root is achieved

Indication

- arthrosis of ankle-, knee- and hip joint
- achillodynia
- heel spur

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Shoe size	Item-No.
S	36 – 38	192P10/S
M	39 – 41 mm	192P10/M
M/L	42 – 43	192P10/ML
L	44 – 46	192P10/L



Silicone Insole

with heel- and longitudinal arch and metatarsal pad



made of 100 % silicone, full length, 5-point shock absorption and metatarsal pad

Mode of Action

- the silicone insoles can be inserted in all closed street- and sports shoes
- pads or foot supports already built into the shoe must be removed in order to make sufficient room for the silicone insole
- if necessary, length and width of the forefoot part may be cut to fit
- comfortable massage resp. alternating compression during wearing
- the metatarsal pad provides an erection of the transversal arch
- pain relief for forefoot- and toe deformities

Indication

- arthrosis of ankle-, knee- and hip joint
- degenerative spinal conditions
- heel spur
- achillodynia
- metatarsalgia

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Shoe size	Item-No.
XS	35 – 36	192P30/XS
S	37 – 38	192P30/S
M	39 – 40	192P30/M
L	41 – 42	192P30/L
XL	43 – 44	192P30/XL



Venus

Partial Foot Decompression Shoe, short version



Mode of Action

- the main feature of the Forefoot Relief Shoe is a forward rising and shortened outsole (negative heel).
- pressure relief and pressure distribution during the walking cycle
- benefits the healing process of wounds in the forefoot area
- the forefoot relief shoe encompasses the heel and tarsus with a softly padded socket
- Heel cap, hook- and loop straps and fasteners prevent slipping in the shoe
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- post-surgical for corrections and forefoot injuries

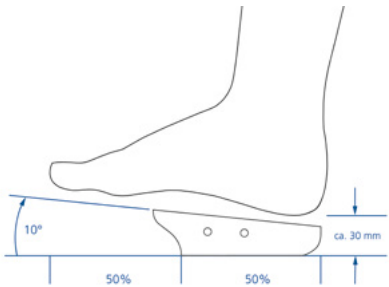
Contraindication

- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports
- weight limit: 120 kg

Special feature


In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.


Shoe size	Inner Shoe Length	Item-No.
36 – 38	approx. 160 mm	200R1/S
39 – 42	approx. 175 mm	200R1/M
43 – 46	approx. 190 mm	200R1/L
47 – 51	approx. 205 mm	200R1/XL



Foot pressure measurement: left daytime shoe, right Venus

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Venus can be worn on right or left side.



Accessories Venus

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
36 – 38	200R10/S
39 – 42	200R10/M
43 – 46	200R10/L
47 – 51	200R10/XL

Protection bracket, adjustable


Shoe size	Item-No.
36 – 38	200R14/S
39 – 42	200R14/M
43 – 46	200R14/L
47 – 51	200R14/XL



200R10



200R14



Mars

Heel Relief Shoe

Mode of Action

- a padded midfoot roll and a shortened sole construction towards the heel area
- pressure relief and pressure distribution during the walking cycle
- benefits the healing process of wounds in the heel area
- the heel relief shoe encompasses the ankle and tarsus with a softly padded socket
- Hook- and loop fasteners hold the foot in a predefined position and thus prevent slipping in the shoe
- the removable padded insole prevents pressure peaks in the forefoot area
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the heel area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- Other indication independent wound formation in the foot and ankle area
- postoperative and trauma

Contraindication


- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports
- weight limit: 120 kg

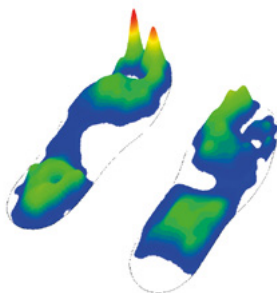
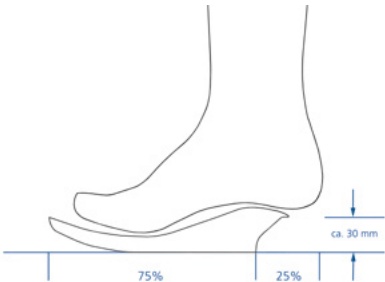

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 37 mm	approx. 225 mm	approx. 87 mm	203R1/S
38 – 40 mm	approx. 235 mm	approx. 90 mm	203R1/M
41 – 43 mm	approx. 255 mm	approx. 95 mm	203R1/L
44 – 46	approx. 275 mm	approx. 100 mm	203R1/XL

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Mars can be worn on right or left side.



Foot pressure measurement: left daytime shoe, right Mars



Accessories Mars

Heel Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
35 – 37 mm	203R11/S
38 – 40 mm	203R11/M
41 – 43 mm	203R11/L
44 – 46	203R11/XL

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
35 – 37 mm	203R10/S
38 – 40 mm	203R10/M
41 – 43 mm	203R10/L
44 – 46	203R10/XL

203R11

203R10



Mars S

Heel Relief Shoe

Mode of Action

- new sole construction with targeted shifting of the body's centre of gravity to the forefoot and comfortable rolling motion
- velcro longitudinal arch support allows the shoe to be adjusted to the left or right side
- this support can be subsequently processed (e.g. by grinding) or additionally built up - depending on the anatomy of the medial longitudinal arch, thus providing better medial support and relief at the heel.
- a particularly effective and continuous cushioning sole prevents plantar pressure points
- the socket is individually adjustable at the ankle, the top of the foot and the forefoot
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the heel area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- Other indication independent wound formation in the foot and ankle area
- postoperative and trauma

Contraindication


- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. flord Charcot foot).
- use only with walking supports
- weight limit: 120 kg

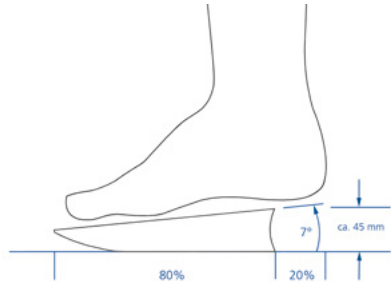
Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.

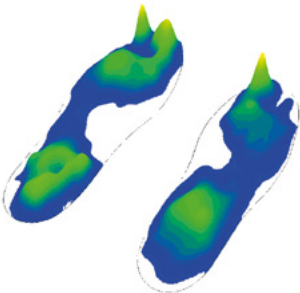
Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
34 – 36	approx. 240 mm	approx. 87 mm	213R1/S
37 – 39 mm	approx. 260 mm	approx. 91 mm	213R1/M
40 – 42	approx. 280 mm	approx. 100 mm	213R1/L
43 – 45	approx. 300 mm	approx. 105 mm	213R1/XL
46 – 48	approx. 320 mm	approx. 109 mm	213R1/XXL

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Mars S can be worn on right or left side!



Skizze



Foot pressure measurement: left daytime shoe, right Mars S



Mars S Accessories

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
34 – 36	213R10/S
37 – 39 mm	213R10/M
40 – 42	213R10/L
43 – 45	213R10/XL
46 – 48	213R10/XXL

Heel Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
34 – 36	213R11/S
37 – 39 mm	213R11/M
40 – 42	213R11/L
43 – 45	213R11/XL
46 – 48	213R11/XXL

Cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
34 – 36	213R12/S
37 – 39 mm	213R12/M
40 – 42	213R12/L
43 – 45	213R12/XL
46 – 48	213R12/XXL



213R10



213R11



213R12



Saturn

Forefoot Relief Shoe



Mode of Action

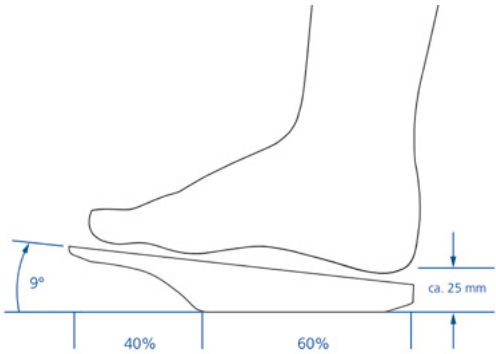
- main feature is an ascending outsole towards the front (negative heel)
- pressure relief and pressure distribution during the walking cycle
- benefits the healing process of wounds in the forefoot area
- the forefoot relief shoe embraces heel and tarsus with a softly padded shoe upper
- heel cap, hook- and loop fasteners prevent slipping within the shoe
- inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- wounds in the forefoot area caused by diabetes mellitus
- peripheral artery occlusions
- other wounds in the forefoot area
- post-surgical after corrections and forefoot injuries

Contraindication

- do not use for the above indications, if a sufficient pressure relief cannot be achieved
- do not wear directly on injured, irritated or damaged skin (before application, please cover the skin with wound dressing or a sock)
- do not use for instable or fracture prone diabetic neuro-osteoarthropathic foot syndrome, DNOAP (e.g. florid charcot foot)
- use only with walking supports
- weight limit: 120 kg
- Special feature



Foot pressure measurement: left balance shoe, right Saturn

In connection with wounds in the foot and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance”), please consult your attending physician or your medical supply store.

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
36 – 37	approx. 245 mm	approx. 96 mm	207R1/XS
38 – 39	approx. 258 mm	approx. 98 mm	207R1/S
40 – 41	approx. 271 mm	approx. 100 mm	207R1/M
42 – 43	approx. 284 mm	approx. 102 mm	207R1/L
44 – 45	approx. 297 mm	approx. 104 mm	207R1/XL

 Saturn can be worn on left or right side!



Accessories Saturn



Forefoot Protective Cap, with hook and loop fastener on the outside

Shoe size	Item-No.
36 – 37	207R10/XS
38 – 39	207R10/S
40 – 41	207R10/M
42 – 43	207R10/L
44 – 45	207R10/XL



Jupiter

Forefoot Relief Shoe with cube cushion sole



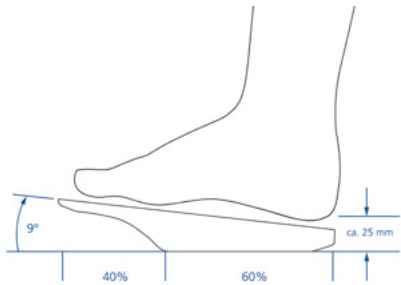
- Mode of Action**
- the main feature of the partial foot decompression shoe is a forward rising and shortened outsole (negative heel).
 - pressure relief and pressure distribution during the gait cycle
 - benefits the healing process of wounds in the forefoot area
 - the partial foot decompression shoe encompasses the heel and tarsus with a softly padded socket
 - Heel cap, hook- and loop straps and fasteners prevent slipping in the shoe
 - Cube cushion sole for selective pressure relief
 - improved slip protection by integrated anti-slip nubs
 - Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

- Indication**
- Wounds in the forefoot area caused by diabetes mellitus
 - peripheral artery occlusive disease (PAOD)
 - other indication independent wound formation in the forefoot area
 - post-surgical for corrections and forefoot injuries

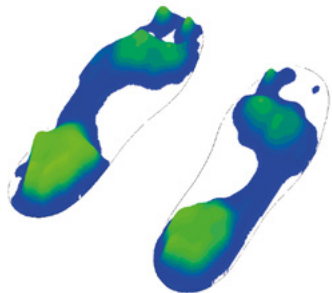
- Contraindication**
- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
 - do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
 - do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
 - use only with walking supports
 - weight limit: 120 kg

Special feature
In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.

Outsole with sole spot




Foto



Foot pressure measurement: left balance shoe, right Jupiter

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
31 – 33	approx. 220 mm	approx. 87 mm	205R1/XS
34 – 36	approx. 240 mm	approx. 91.5 mm	205R1/S
37 – 39 mm	approx. 260 mm	approx. 96 mm	205R1/M
40 – 42	approx. 280 mm	approx. 100.5 mm	205R1/L
43 – 45	approx. 300 mm	approx. 105 mm	205R1/XL
46 – 48	approx. 320 mm	approx. 109.5 mm	205R1/XXL
49 – 50	approx. 340 mm	approx. 115 mm	205R1/XXXL

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Jupiter can be worn on right or left side. To avoid a pelvic obliquity, use the balance shoe model Sirius.



Accessories Jupiter

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
31 – 33	205R10/XS
34 – 36	205R10/S
37 – 39	205R10/M
40 – 42	205R10/L
43 – 45	205R10/XL
46 – 48	205R10/XXL
49 – 50	205R10/XXXL



205R10

Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
31 – 33	205R12/XS
34 – 36	205R12/S
37 – 39	205R12/M
40 – 42	205R12/L
43 – 45	205R12/XL
46 – 48	205R12/XXL
49 – 50	205R12/XXXL



205R12



Merkur

Forefoot Relief Shoe with cube cushion sole



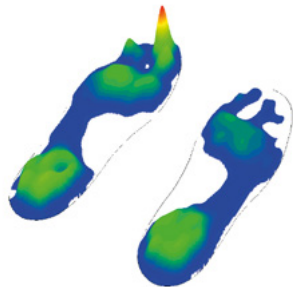
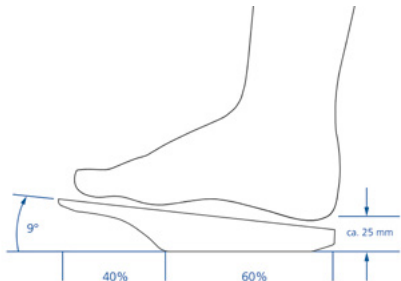
- Mode of Action**
- the main feature of the partial foot decompression shoe is a forward rising and shortened outsole (negative heel).
 - pressure relief and pressure distribution during the gait cycle
 - benefits the healing process of wounds in the forefoot area
 - the partial foot decompression shoe encompasses the heel and tarsus with a softly padded socket
 - Heel cap, hook- and loop straps and fasteners prevent slipping in the shoe
 - Cube cushion sole for selective pressure relief
 - improved slip protection by integrated anti-slip nubs
 - Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

- Indication**
- Wounds in the forefoot area caused by diabetes mellitus
 - peripheral artery occlusive disease (PAOD)
 - other indication independent wound formation in the foot and ankle area
 - post-surgical for corrections and forefoot injuries

- Contraindication**
- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
 - do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
 - do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
 - use only with walking supports
 - weight limit: 120 kg

Special feature
In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.

Outsole with sole spots



Foot pressure measurement: left balance shoe, right Merkur

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
31 – 33	approx. 220 mm	approx. 87 mm	201R1/XS
34 – 36	approx. 240 mm	approx. 91.5 mm	201R1/S
37 – 39 mm	approx. 260 mm	approx. 96 mm	201R1/M
40 – 42	approx. 280 mm	approx. 100.5 mm	201R1/L
43 – 45	approx. 300 mm	approx. 105 mm	201R1/XL
46 – 48	approx. 320 mm	approx. 109.5 mm	201R1/XXL

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 **The Model Merkur can be worn on right or left side. To avoid a pelvic obliquity, use the balance shoe model Sirius.**



Accessories Merkur

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
31 – 33	201R10/XS
34 – 36	201R10/S
37 – 39 mm	201R10/M
40 – 42	201R10/L
43 – 45	201R10/XL
46 – 48	201R10/XXL

Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
31 – 33	201R12/XS
34 – 36	201R12/S
37 – 39 mm	201R12/M
40 – 42	201R12/L
43 – 45	201R12/XL
46 – 48	201R12/XXL



201R10



201R12



Merkur A

Partial Foot Decompression Shoe (Post-Surgical Shoe) with cube cushion sole

- Mode of Action**
- main feature of the the Post-Surgical Shoe is a rigid, slightly ascending outsole towards the front (negative heel)
 - pressure relief and pressure distribution during the walking cycle
 - benefits the healing process of wounds in the forefoot area
 - the Post-Surgical Shoe encompasses the entire foot and ankle area with a softly padded upper
 - Hook- and loop fasteners at the wide flap prevent slipping within the shoe
 - Cube cushion sole for selective pressure relief
 - the flap can be opened widely and together with the individually adjustable hook- and loop fasteners, it provides sufficient space for bandaged feet
 - improved slip protection by integrated anti-slip nubs
 - Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

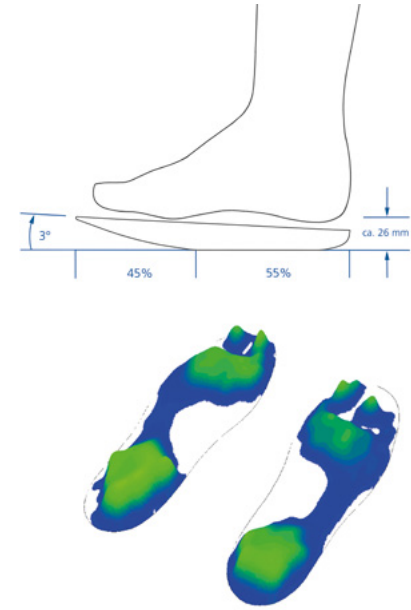
- Indication**
- Wounds in the foot- and ankle area caused by diabetes mellitus
 - peripheral artery occlusive disease (PAOD)
 - other indication independent wound formation in the foot and ankle area
 - postoperative and trauma
 - Gait unsteadiness (dizziness, visual impairment)

- Contraindication**
- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
 - do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
 - do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
 - use only with walking supports
 - weight limit: 120 kg

Special feature
In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.




Outsole with sole spots



Foot pressure measurement: left balance shoe, right Merkur A

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 238 mm	approx. 90 mm	202R1/36
37 – 38	approx. 251 mm	approx. 92.5 mm	202R1/38
39 – 40	approx. 264 mm	approx. 95 mm	202R1/40
41 – 42	approx. 277 mm	approx. 97.5 mm	202R1/42
43 – 44	approx. 290 mm	approx. 100 mm	202R1/44
45 – 46	approx. 303 mm	approx. 102.5 mm	202R1/46
47 – 48	approx. 316 mm	approx. 105 mm	202R1/48
49 – 50	approx. 330 mm	approx. 112.5 mm	202R1/50

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Merkur A can be worn on right or left side. To avoid a pelvic obliquity, use the balance shoe model Sirius.



Accessories Merkur A

Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
35 – 36	202R12/36
37 – 38	202R12/38
39 – 40	202R12/40
41 – 42	202R12/42
43 – 44	202R12/44
45 – 46	202R12/46
47 – 48	202R12/48
49 – 50	202R12/50



202R12



Uranus

Partial Foot Decompression Shoe (Post-Surgical Shoe) with cube cushion sole

Mode of Action

- main feature of the the Post-Surgical Shoe is a rigid, slightly ascending outsole towards the front (negative heel)
- pressure relief and pressure distribution during the gait cycle
- benefits the healing process of wounds in the forefoot area
- the Post-Surgical Shoe encompasses the entire foot and ankle area with a softly padded upper
- Hook- and loop fasteners at the wide flap prevent slipping within the shoe
- Cube cushion sole for selective pressure relief
- the flap can be opened widely and together with the individually adjustable hook- and loop fasteners, it provides sufficient space for bandaged feet
- improved slip protection by integrated anti-slip nubs
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the foot- and ankle area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- other indication independent wound formation in the foot and ankle area
- postoperative and trauma
- Gait unsteadiness (dizziness, visual impairment)

Contraindication

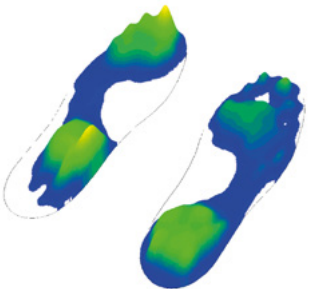
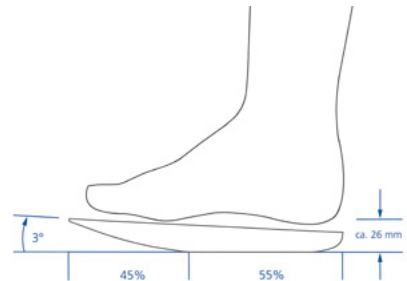
- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports
- weight limit: 120 kg

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.



Outsole with sole spots



Foot pressure measurement: left balance shoe, right Uranus

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 238 mm	approx. 90 mm	204R1/36
37 – 38	approx. 251 mm	approx. 92.5 mm	204R1/38
39 – 40	approx. 264 mm	approx. 95 mm	204R1/40
41 – 42	approx. 277 mm	approx. 97.5 mm	204R1/42
43 – 44	approx. 290 mm	approx. 100 mm	204R1/44
45 – 46	approx. 303 mm	approx. 102.5 mm	204R1/46
47 – 48	approx. 316 mm	approx. 105 mm	204R1/48
49 – 50	approx. 330 mm	approx. 112.5 mm	204R1/50

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Uranus can be worn on right or left side. To avoid a pelvic obliquity, use the balance shoe model Sirius.



Accessories Uranus



204R12



Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
35 – 36	204R12/36
37 – 38	204R12/38
39 – 40	204R12/40
41 – 42	204R12/42
43 – 44	204R12/44
45 – 46	204R12/46
47 – 48	204R12/48
49 – 50	204R12/50



Pluto S

Partial Foot Decompression Shoe (Post-Surgical Shoe) with cube cushion sole



Mode of Action

- main feature of the the Post-Surgical Shoe is a rigid, slightly ascending outsole towards the front (negative heel)
- pressure relief and pressure distribution during the gait cycle
- benefits the healing process of wounds in the forefoot area
- Hook- and loop fasteners at the wide flap prevent slipping within the shoe
- the front flap prevents lateralisation of the forefoot; the patient does not slip to the outer side and therefore gains an increased safety feeling (if it is not needed, the front flap can be cut off)
- Cube cushion sole for selective pressure relief
- the flap can be opened widely and together with the individually adjustable hook- and loop fasteners, it provides sufficient space for bandaged feet
- improved slip protection by integrated anti-slip nubs
- inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the foot- and ankle area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- other indication independent wound formation in the foot and ankle area
- postoperative and trauma
- Gait unsteadiness (vertigo, visual impairment)

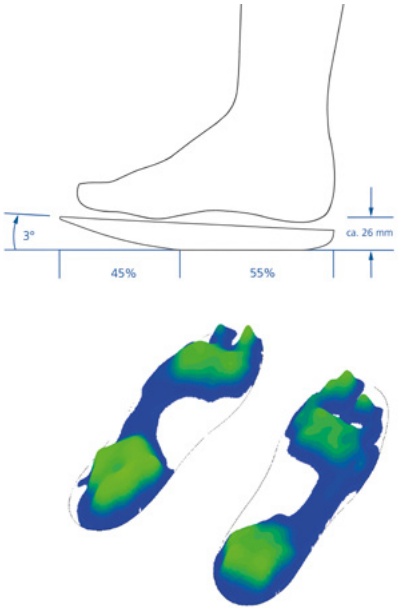
Contraindication

- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for instable or fracture prone diabetic neuro-osteoarthropathic
- use only with walking supports
- weight limit: 120 kg

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.

Outsole with sole spots



Foot pressure measurement: left balance shoe, right Pluto S

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 238 mm	approx. 90 mm	216R1/36
37 – 38	approx. 251 mm	approx. 92.5 mm	216R1/38
39 – 40	approx. 264 mm	approx. 95 mm	216R1/40
41 – 42	approx. 277 mm	approx. 97.5 mm	216R1/42
43 – 44	approx. 290 mm	approx. 100 mm	216R1/44
45 – 46	approx. 303 mm	approx. 102.5 mm	216R1/46
47 – 48	approx. 316 mm	approx. 105 mm	216R1/48
49 – 50	approx. 330 mm	approx. 112.5 mm	216R1/50

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Pluto S can be worn on right or left side. To avoid a pelvic obliquity, use the balance shoe model Sirius.



Accessories Pluto S

Cube cushion sole, asymmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
35 – 36	216R11/36
37 – 38	216R11/38
39 – 40	216R11/40
41 – 42	216R11/42
43 – 44	216R11/44
45 – 46	216R11/46
47 – 48	216R11/48
49 – 50	216R11/50

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
35 – 36	216R12/36
37 – 38	216R12/38
39 – 40	216R12/40
41 – 42	216R12/42
43 – 44	216R12/44
45 – 46	216R12/46
47 – 48	216R12/48
49 – 50	216R12/50



2016R11



216R12



Sirius

Balance Shoe mit cube cushion sole

Mode of Action

- the balance shoe is intended to compensate for the imbalance between the foot fitted with a relief shoe and the healthy side, thus avoiding negative effects on the knee or hip joint and on the spine due to the pelvic obliquity
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)
- improved slip protection by integrated anti-slip nubs

Indication

- Reduced mobility when walking and standing due to the difference in height when fitted with relief shoes
- to enable and maintain an appropriate walking function and to compensate for a pelvic obliquity that is worthy of treatment.

Contraindication

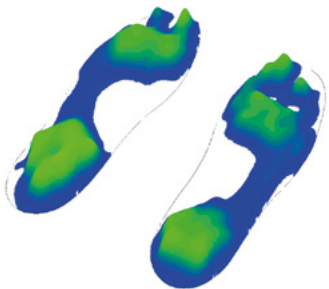
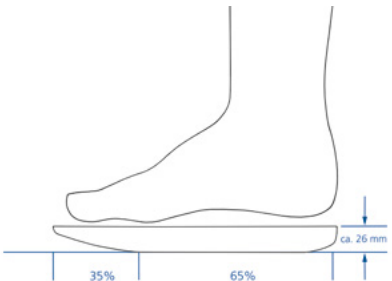
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports
- weight limit: 120 kg

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.



Outsole with sole spots



Foot pressure measurement: left balance shoe Sirius, right Pluto S

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	240 mm	89 mm	211R1/36
37 – 38	253 mm	92 mm	211R1/38
39 – 40	267 mm	95 mm	211R1/40
41 – 42	280 mm	98 mm	211R1/42
43 – 44	293 mm	101 mm	211R1/44
45 – 46	306 mm	104 mm	211R1/46
47 – 48	320 mm	107 mm	211R1/48
49 – 50	332 mm	110 mm	211R1/50

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

The Balance Shoe Sirius is only compatible with the relief shoe models Venus, Merkur, Merkur A, Jupiter, Saturn, Uranus and Pluto S from Streifeneder ortho.production GmbH.



Accessories Sirius

216R11



Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
35 – 36	216R11/36
37 – 38	216R11/38
39 – 40	216R11/40
41 – 42	216R11/42
43 – 44	216R11/44
45 – 46	216R11/46
47 – 48	216R11/48
49 – 50	216R11/50



Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
35 – 36	216R12/36
37 – 38	216R12/38
39 – 40	216R12/40
41 – 42	216R12/42
43 – 44	216R12/44
45 – 46	216R12/46
47 – 48	216R12/48
49 – 50	216R12/50

216R12



Apollo

Partial Foot Decompression Shoe with zero-heel technology (Post-Surgical Shoe)



Mode of Action

- the Post-Surgical Shoe follows the concept of zero heel technology with its pronounced roll-off sole and thus relieves the entire foot during the swing and stance phase
- benefits the healing process of wounds in the forefoot area
- the removable padded insole prevents pressure peaks in the foot sole area
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

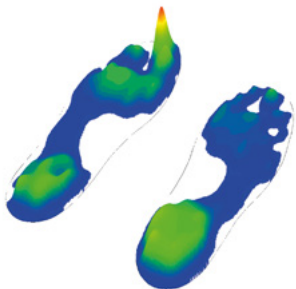
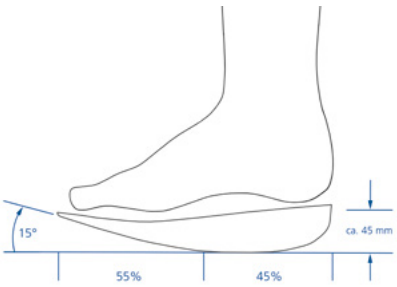
- post-operative for healing of surgical interventions and injuries to the forefoot, e.g. hallux valgus surgery

Contraindication

- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports
- weight limit: 120 kg

Special feature


In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store. Due to the shape of the roll-off sole, rapid mobilisation of the user is achieved. In the case of certain surgical procedures, such as the near-base conversion of the metatarsal, mobilisation must be discussed with the attending physician and, if necessary, a different therapeutic shoe model, e.g. Jupiter Item-No. 205R1, must be used.



Foot pressure measurement: left daytime shoe, right Apollo

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 239 mm	approx. 82 mm	209R1/36
37 – 38	approx. 252 mm	approx. 85 mm	209R1/38
39 – 40	approx. 265 mm	approx. 88 mm	209R1/40
41 – 42	approx. 279 mm	approx. 91 mm	209R1/42
43 – 44	approx. 292 mm	approx. 94 mm	209R1/44
45 – 46	approx. 305 mm	approx. 97 mm	209R1/46
47 – 48	approx. 319 mm	approx. 100 mm	209R1/48
49 – 50	approx. 331 mm	approx. 103 mm	209R1/50

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The Model Apollo can be worn on right or left side. Please do not use as a pair.



Accessories Apollo

Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
35 – 36	209R11/36
37 – 38	209R11/38
39 – 40	209R11/40
41 – 42	209R11/42
43 – 44	209R11/44
45 – 46	209R11/46
47 – 48	209R11/48
49 – 50	209R11/50



209R11



209R12

Forefoot Cap, hook-and-loop on the outside

Shoe size	Item-No.
35 – 36	209R12/36
37 – 38	209R12/38
39 – 40	209R12/40
41 – 42	209R12/42
43 – 44	209R12/44
45 – 46	209R12/46
47 – 48	209R12/48
49 – 50	209R12/50



Komet

Partial Foot Decompression Shoe in outdoor design and cube cushion sole



Mode of Action

- Pressure redistribution and relief in the forefoot area through a rigid (= stiff) roll-off sole
- benefits the healing process of wounds in the forefoot area
- Cube cushion sole for selective pressure relief
- reinforced heel area and straps in the forefoot area give the foot support
- adjustable hook- and loop fasteners on the flaps accommodate large-volume bandages
- wide angular sole shape in the forefoot area when using surgical techniques with Kirschner wire
- high slip resistance due to profiled outsole
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the forefoot area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- other indication independent wound formation in the foot and ankle area
- post-surgical for corrections and forefoot injuries

Contraindication

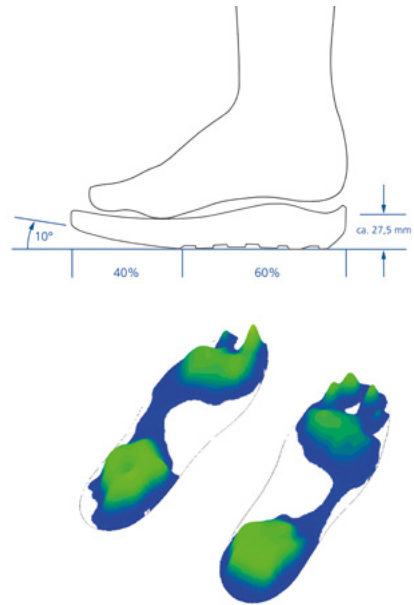
- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.



Outsole with sole spots



Foot pressure measurement: left daytime shoe, right Komet

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 242 mm	approx. 103 mm	217R1/36
37 – 38	approx. 255 mm	approx. 106 mm	217R1/38
39 – 40	approx. 268 mm	approx. 109 mm	217R1/40
41 – 42	approx. 282 mm	approx. 112 mm	217R1/42
43 – 44	approx. 295 mm	approx. 115 mm	217R1/44
45 – 46	approx. 308 mm	approx. 118 mm	217R1/46
47 – 48	approx. 322 mm	approx. 121 mm	217R1/48
49 – 50	approx. 335 mm	approx. 124 mm	217R1/50

Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

The Komet model can be worn on the right and left side! The cube cushion sole thickness is approx. 10 mm. The effective heel height is approx. 10 mm for all sizes.



Accessories Komet

Cube cushion sole, symmetrical shape, made of 10 mm soft foam, velour lamination

Shoe size	Item-No.
35 – 36	217R11/36
37 – 38	217R11/38
39 – 40	217R11/40
41 – 42	217R11/42
43 – 44	217R11/44
45 – 46	217R11/46
47 – 48	217R11/48
49 – 50	217R11/50

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	Item-No.
35 – 36	217R12/36
37 – 38	217R12/38
39 – 40	217R12/40
41 – 42	217R12/42
43 – 44	217R12/44
45 – 46	217R12/46
47 – 48	217R12/48
49 – 50	217R12/50



Luna

Longterm Surgical Shoe with cube cushion sole and reinforced outsole

Mode of Action

- the sandal-like, wide surgical shoe with raised toe edge is designed to accommodate large-volume dressings and protect them against slipping
- Cube cushion sole for selective pressure relief
- the stiffened outsole additionally relieves the injured foot
- the higher socket and the sturdily reinforced heel area provide a secure hold for the foot
- improved slip protection by integrated anti-slip nubs
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the foot- and ankle area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- other indication independent wound formation in the foot and ankle area
- postoperative and trauma

Contraindication

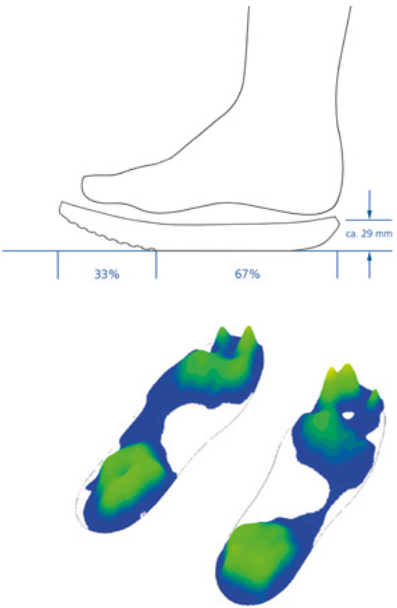
- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- do not use for unstable or fracture prone diabetic neuro-osteoarthropathic foot syndromes, DNOAP (e.g. florid Charcot foot).
- use only with walking supports

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.




Outsole with sole spot



Foot pressure measurement: left daytime shoe, right Luna

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 239 mm	approx. 99 mm	210R1/36...
37 – 38	approx. 252 mm	approx. 102 mm	210R1/38...
39 – 40	approx. 265 mm	approx. 105 mm	210R1/40...
41 – 42	approx. 279 mm	approx. 108 mm	210R1/42...
43 – 44	approx. 292 mm	approx. 111 mm	210R1/44...
45 – 46	approx. 305 mm	approx. 114 mm	210R1/46...
47 – 48	approx. 319 mm	approx. 117 mm	210R1/48...
49 – 50	approx. 331 mm	approx. 120 mm	210R1/50...

Order example: 210R1/36 + L (left side) or R (right side). Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

 The removable cube cushion soles can be individually adjusted depending on the indication.



Accessories Luna

Cube cushion sole, asymmetrical shape, made of 10 mm soft foam, with velour lamination

Shoe size	side	Item-No.
35 – 36	right	210R13/36R
37 – 38	right	210R13/38R
39 – 40	right	210R13/40R
41 – 42	right	210R13/42R
43 – 44	right	210R13/44R
45 – 46	right	210R13/46R
47 – 48	right	210R13/48R
49 – 50	right	210R13/50R
35 – 36	left	210R13/36L
37 – 38	left	210R13/38L
39 – 40	left	210R13/40L
41 – 42	left	210R13/42L
43 – 44	left	210R13/44L
45 – 46	left	210R13/46L
47 – 48	left	210R13/48L
49 – 50	left	210R13/50L

Forefoot Protection Cap, hook-and-loop on the outside

Shoe size	side	Item-No.
35 – 36	right	210R12/36R
37 – 38	right	210R12/38R
39 – 40	right	210R12/40R
41 – 42	right	210R12/42R
43 – 44	right	210R12/44R
45 – 46	right	210R12/46R
47 – 48	right	210R12/48R
49 – 50	right	210R12/50R
35 – 36	left	210R12/36L
37 – 38	left	210R12/38L
39 – 40	left	210R12/40L
41 – 42	left	210R12/42L
43 – 44	left	210R12/44L
45 – 46	left	210R12/46L
47 – 48	left	210R12/48L
49 – 50	left	210R12/50L



Neptun

Longterm Surgical Shoe

Mode of Action

- the surgical shoe should accommodate existing, large-volume dressings and bandages and protect them from slipping and, in particular, protect the foot from cold and wetness (splash water).
- the post-surgical shoe encompasses the entire foot and ankle area with a softly padded socket
- Hook- and loop fasteners at the wide flap prevent slipping within the shoe
- the removable padded insole prevents pressure peaks in the foot sole area
- the flap can be opened widely and together with the individually adjustable hook- and loop fasteners, it provides sufficient space for bandaged feet
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

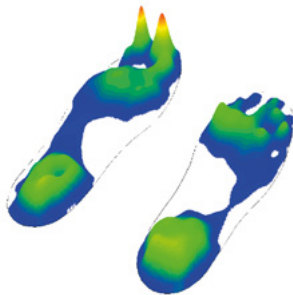
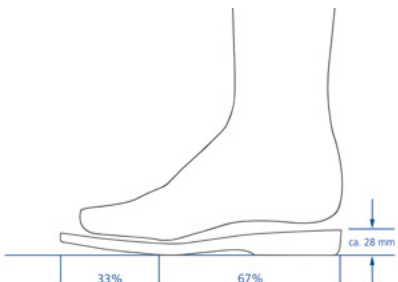
- Wounds in the foot- and ankle area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- other indication independent wound formation in the foot and ankle area
- postoperative and trauma

Contraindication

- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- use only with walking supports

Special feature


In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.




Foot pressure measurement: left daytime shoe, right Neptun

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
36	approx. 243 mm	approx. 93 mm	214R1/36...
37	approx. 249 mm	approx. 94.5 mm	214R1/37...
38	approx. 256 mm	approx. 96 mm	214R1/38...
39	approx. 263 mm	approx. 97.5 mm	214R1/39...
40	approx. 269 mm	approx. 99 mm	214R1/40...
41	approx. 276 mm	approx. 100.5 mm	214R1/41...
42	approx. 283 mm	approx. 102 mm	214R1/42...
43	approx. 290 mm	approx. 103.5 mm	214R1/43...
44	approx. 296 mm	approx. 105 mm	214R1/44...
45	approx. 303 mm	approx. 106.5 mm	214R1/45...
46	approx. 309 mm	approx. 108 mm	214R1/46...
47	approx. 315 mm	approx. 109.5 mm	214R1/47...
48	approx. 322 mm	approx. 111 mm	214R1/48...
49	approx. 327 mm	approx. 113 mm	214R1/49...
50	approx. 333 mm	approx. 114 mm	214R1/50...

Order example: 214R1/36 + L (left side) or R (right side). Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.



AccessoriesNeptun



214R12

Cube cushion sole, asymmetrical shape, made of 3 mm soft foam, velour lamination

Shoe size	side	Item-No.
36	right	214R12/36R
37	right	214R12/37R
38	right	214R12/38R
39	right	214R12/39R
40	right	214R12/40R
41	right	214R12/41R
42	right	214R12/42R
43	right	214R12/43R
44	right	214R12/44R
45	right	214R12/45R
46	right	214R12/46R
47	right	214R12/47R
48	right	214R12/48R
49	right	214R12/49R
50	right	214R12/50R
36	left	214R12/36L
37	left	214R12/37L
38	left	214R12/38L
39	left	214R12/39L
40	left	214R12/40L
41	left	214R12/41L
42	left	214R12/42L
43	left	214R12/43L
44	left	214R12/44L
45	left	214R12/45L
46	left	214R12/46L
47	left	214R12/47L
48	left	214R12/48L
49	left	214R12/49L
50	left	214R12/50L



Neptun B



Outsole with sole spots



Foot pressure measurement: left daytime shoe, right Neptun B



Longterm Surgical Shoe with wide outsole and especially high volume

Mode of Action

- the surgical shoe should accommodate existing, large-volume dressings and bandages and protect them from slipping and, in particular, protect the foot from cold and wetness (splash water).
- the post-surgical shoe encompasses the entire foot and ankle area with a softly padded socket
- Hook- and loop fasteners at the wide flap prevent slipping within the shoe
- the removable padded insole prevents pressure peaks in the foot sole area
- a particularly wide outsole, wide opening options in the flap and heel area provide a generous volume of space for bandaged feet
- the high shaft offers sufficient support
- improved slip protection by integrated anti-slip nubs
- the stiffened outsole additionally relieves the injured foot
- Inner lining fabric of the shoe as well as cover fabric of the padded insole are anti-bacterially equipped based on ammonium-silane-compound; this limits colonisation of the material with certain bacterial strains (e.g. Staphylokokkus aureus, Klebsiella pneumoniae)

Indication

- Wounds in the foot- and ankle area caused by diabetes mellitus
- peripheral artery occlusive disease (PAOD)
- other indication independent wound formation in the foot and ankle area
- postoperative and trauma
- Rehabilitation of lymphoedema, venous leg ulcer, elephantiasis, obesity

Contraindication

- Do not use for the above indications if sufficient pressure relief cannot be achieved through the application.
- do not wear directly on injured, irritated or damaged skin (Protective bandage, sock)
- use only with walking supports

Special feature

In connection with wounds in the foot, and ankle area, pressure complaints or other disorders can often be noticed too late or not at all. We therefore recommend that you check your feet, their bandages and orthopaedic aids daily. In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy („incompliance“), please consult your attending physician or your medical supply store.

Shoe size	Inner Shoe Length	Inner Shoe Width	Item-No.
35 – 36	approx. 239 mm	approx. 99 mm	215R1/36...
37 – 38	approx. 252 mm	approx. 102 mm	215R1/38...
39 – 40	approx. 265 mm	approx. 105 mm	215R1/40...
41 – 42	approx. 279 mm	approx. 108 mm	215R1/42...
43 – 44	approx. 292 mm	approx. 111 mm	215R1/44...
45 – 46	approx. 305 mm	approx. 114 mm	215R1/46...
47 – 48	approx. 319 mm	approx. 117 mm	215R1/48...
49 – 50	approx. 331 mm	approx. 120 mm	215R1/50...

Order example: 215R1/36 + L (left side) or R (right side). Please put the supplied plastic bag over the patient's foot prior to the first fitting. This will avoid contamination of the shoe with pathogens if size needs to be changed.

Foot & Ankle Joint



Accessories Neptun B

Cushion sole, asymmetrical shape, made of 8 mm soft foam, velour lamination



Shoe size	side	Item-No.
35 – 36	right	212R11/36R
37 – 38	right	212R11/38R
39 – 40	right	212R11/40R
41 – 42	right	212R11/42R
43 – 44	right	212R11/44R
45 – 46	right	212R11/46R
47 – 48	right	212R11/48R
49 – 50	right	212R11/50R
35 – 36	left	212R11/36L
37 – 38	left	212R11/38L
39 – 40	left	212R11/40L
41 – 42	left	212R11/42L
43 – 44	left	212R11/44L
45 – 46	left	212R11/46L
47 – 48	left	212R11/48L
49 – 50	left	212R11/50L

Knee Joint



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Knee Joint

The knee is our body's largest joint. It consists of the distal (away from the trunk) ending of the upper thigh bone and the proximal (close to the trunk) ending of the lower thigh bone. Contrary to other joints, these two bone endings do not directly link together. In order to increase the contact surface, to level out the uneven joint surfaces and to convert the enormous motion range of the knee joint, an intermediate layer is necessary – the menisci. These are c-shaped or round cartilage discs of fibroid structure. The knee joint is supported solely by ligaments. The most important ligaments are the intra-articular ligament, the lateral collateral ligament and the anterior and posterior cruciate ligament.

A speciality of the knee joint is the knee cap (patella). Located in the front of the joint, it slides in a guiding groove along the upper thigh bone during flexion and extension. It provides guidance for the quadriceps tendon, which is responsible for the extension of the knee joint. Depending on the activity, the pressure of the patella on the knee joint can reach far more than the twentyfold of the own body weight.

The knee joint has a very big motion range – it can be overextended by approximately 10° and during flexion, it reaches an angle of approximately 150° . In flexion, the joint is also able to perform rotary movements, during which the rotation to the outside of 40° is considerably bigger than the rotation to the inside of 10° .



The greatest load on the knee joint develops during the 90° -flexion, as the lever is in its longest position.



The knee joint is the most strained joint of our body.

With every step, it must absorb approximately three times the amount of our own body weight. Even during light activity, this figure increases remarkably.

Considering that each human being walks approximately fivethousand steps per day, in the course of a lifetime this adds up to a distance of approximately three times around the world. Or, relating to the absorbed weight, several millions of tons. This explains why the knee joint is subject to an increased wearout and furthermore, irritations, overstraining and injuries are very common.

In Germany, annually approximately 300.000 meniscus surgeries as well as approximately 100.000 cruciate ligament surgeries are performed annually. In x-rays, already every second German citizen older than 35 years shows provable signs of arthrosis.

Considering mechanical aspects, the knee is a hinge-sliding-joint. Consequently, it does not have a fixed centre of rotation, around which the joint is moving. When treating the knee with an orthosis, this is of high importance. As knee-orthoses have a fixed centre of rotation, it is especially important that the orthosis provides enough flexibility to follow the anatomical centre of rotation as good as possible.

Typical diseases, injuries and deformities of the knee joint and their treatment

Knock-knees (genu valgum) resp. bowlegs (genu varum)

With knock-knees, the lateral joint parts are overloaded, whereas with bowlegs, the medial joint parts are overloaded. During childhood, these leg deformities can be treated with long-term effect by use of orthopaedic insoles. Sometimes, more extensive manifestation requires the treatment with orthotic braces worn at night. Deformities during adulthood are treated with leg orthoses, to help preventing possible joint pain.

Overextension of the knee joint (genu recurvatum)

The knee joint may be overextended by more than the usual 5° – 10°. This causes an overstrain on the joint capsule as well as on the ligaments of the knee joint, which leads to increasing worsening of this deformity. For lighter cases, often a knee support with lateral reinforcement or a knee brace with extension lock are sufficient.

Surgery

After surgery, it is often necessary to completely immobilise the knee joint for a few days. Depending on the kind of surgery, the joint must be fixed with a knee brace in 0° extension, or in 20° flexion.

Inflammatory conditions

Inflammatory conditions, joint effusions and swellings, cartilage- and meniscus damages, arthrosis and arthritis, light deformities, postsurgical or traumatic irritations, bursitis or general light knee joint instabilities are advised to be treated with a compression-knee brace with lateral reinforcement and patella ring made of silicone.

Depending on the diagnosis, shoe insoles with lateral adjustments, softfoam insoles or shock absorbing silicone insoles as well as silicone heel-cushions can additionally relieve the knee joint.

GenuSupport

Hard Frame Knee Orthosis with 4-point principle for knee joint support and stabilisation with extension- and flexion restriction

Mode of Action

- hard frame knee orthosis with 4-point principle for knee joint control and stabilisation with extension-/flexion restriction at 0°, 10°, 20°, 30° and 45° (extension) 0°, 10°, 20°, 30°, 45°, 60°, 75°, 90° and 120° flexion)
- complete immobilisation adjustable at 0°, 10°, 20°, 30° and 45°

Indication

- anterior/posterior cruciate ligament ruptures (CL) with injuries of collateral and meniscal ligaments (e.g. "unhappy triad")
- isolated ruptures of cruciate ligaments
- lateral ligament ruptures and lesions
- post-operative therapy after reconstructional anterior cruciate ligament surgery
- conservative treatment and immobilisation of knee joint instabilities

Contraindication


- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Feature

- weight-optimised metal frame
- new aluminum-magnesium alloy
- extra high proximal lateral support
- easy manual finishing
- stable, interlocking double joint with sliding discs
- requires only one tool (2,5 mm allen key)
- new padding material with anti-slip effect
- split tibia-paddings
- various lateral knee joint paddings

Size	side	Thigh circumference	Colour	Item-No.
S	left	39 – 46 cm	titanium grey metallic / black	55R1/LS
M	left	46 – 53 cm	titanium grey metallic / black	55R1/LM
L	left	53 – 60 cm	titanium grey metallic / black	55R1/LL
XL	left	60 – 67 cm	titanium grey metallic / black	55R1/LXL
XXL	left	67 – 74 cm	titanium grey metallic / black	55R1/LXXL
S	right	39 – 46 cm	titanium grey metallic / black	55R1/RS
M	right	46 – 53 cm	titanium grey metallic / black	55R1/RM
L	right	53 – 60 cm	titanium grey metallic / black	55R1/RL
XL	right	60 – 67 cm	titanium grey metallic / black	55R1/RXL
XXL	right	67 – 74 cm	titanium grey metallic / black	55R1/RXXL

Outer orthosis length: approx. 43 cm

 The GenuSupport is adjustable from the outside and does not require doffing during exchange of the wedges for motion restriction.

Accessories GenuSupport

Replacement padding set for frame and straps, 10 pcs.

Size	side	Colour	Item-No.
S	left	black	55R10/LS
M	left	black	55R10/LM
L	left	black	55R10/LL
XL	left	black	55R10/LXL
XXL	left	black	55R10/LXXL
S	right	black	55R10/RS
M	right	black	55R10/RM
L	right	black	55R10/RL
XL	right	black	55R10/RXL
XXL	right	black	55R10/RXXL

Replacement knee padding set, 6 pcs.

Size	Colour	Item-No.
One size	black	55R11

Spare parts set

Description	Item-No.
Set consisting of: 26 x wedges, 4 x hook- and loop straps for fixating the pads, 1 x allen key 2.5 mm, 4 x adjustment screws	55R12

55R10

55R11

55R12

GenuSupport.frontal

Hard Frame Knee Orthosis with 4-point principle for knee joint support and stabilisation with extension- and flexion restriction, frontal donning

Mode of Action

- hard frame knee orthosis with 4-point principle for knee joint control and stabilisation with extension-/flexion restriction at 0°, 10°, 20°, 30° and 45° (extension) 0°, 10°, 20°, 30°, 45°, 60°, 75°, 90° and 120° (flexion)
- complete immobilisation adjustable at 0°, 10°, 20°, 30° and 45°
- easier donning of the knee orthosis for bed-ridden patients

Indication

- anterior/posterior cruciate ligament ruptures (CL) with injuries of collateral and meniscal ligaments (e.g. "unhappy triad")
- isolated ruptures of cruciate ligaments
- lateral ligament ruptures and lesions
- post-operative therapy after reconstructional anterior cruciate ligament surgery
- conservative treatment and immobilisation of knee joint instabilities

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin


Feature

- easy application of the knee orthosis to bedridden patients
- weight-optimised metal frame
- new aluminum-magnesium alloy
- extra high proximal lateral support
- easy manual finishing
- stable, interlocking double joint with sliding discs
- requires only one tool (2,5 mm allen key)
- new padding material with anti-slip effect
- split tibia-paddings
- various lateral knee joint paddings

Size	side	Thigh circumference	Colour	Item-No.
S	left	39 – 46 cm	titanium grey metallic / black	56R1/LS
M	left	46 – 53 cm	titanium grey metallic / black	56R1/LM
L	left	53 – 60 cm	titanium grey metallic / black	56R1/LL
XL	left	60 – 67 cm	titanium grey metallic / black	56R1/LXL
XXL	left	67 – 74 cm	titanium grey metallic / black	56R1/LXXL
S	right	39 – 46 cm	titanium grey metallic / black	56R1/RS
M	right	46 – 53 cm	titanium grey metallic / black	56R1/RM
L	right	53 – 60 cm	titanium grey metallic / black	56R1/RL
XL	right	60 – 67 cm	titanium grey metallic / black	56R1/RXL
XXL	right	67 – 74 cm	titanium grey metallic / black	56R1/RXXL

Outer orthosis length: approx. 43 cm

The GenuSupport.frontal is adjustable from the outside and does not require doffing during exchange of the wedges for motion restriction.



Accessories GenuSupport.frontal

Replacement padding set for frame and straps, 10 pcs.


Size	side	Colour	Item-No.
S	left	black	56R10/LS
M	left	black	56R10/LM
L	left	black	56R10/LL
XL	left	black	56R10/LXL
XXL	left	black	56R10/LXXL
S	right	black	56R10/RS
M	right	black	56R10/RM
L	right	black	56R10/RL
XL	right	black	56R10/RXL
XXL	right	black	56R10/RXXL

Replacement knee padding set, 6 pcs.


Size	Colour	Item-No.
One size	black	55R11

Spare parts set


Description	Item-No.
Set consisting of: 26 x wedges, 4 x hook- and loop straps for fixating the pads, 1 x allen key 2.5 mm, 4 x adjustment screws	55R12



56R10



55R11



55R12



Knee Brace, straight

Knee Orthosis for immobilisation

Mode of Action

- the threepart knee brace stabilises the leg in extended position and helps to relief pain (e.g. first aid treatment after knee injury); also helps to secure surgery results and to speed up the healing process
- mostly used for post-operative care after surgery

Indication

- first aid treatment after knee injuries for immobilisation
- the brace is indicated after surgery
- instability of the knee joint

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- venous insufficiency with thrombophilia
- lymph drain malfunctions (swellings distal from the applied support)
- the brace is not able to correct femur-, tibia- or fibula fractures
- do not apply the brace on missing or disturbed perception



Brace length	Colour	Thigh circumfe- rence	Item-No.
20 cm (for infants)	black		150R2/20
30 cm (for children)	black		150R2/30
35 cm (for children)	black		150R2/35
40 cm (for teenagers)	black	35 – 45 cm	150R2/40
45 cm	black	40 – 55 cm	150R2/45
50 cm	black	45 – 60 cm	150R2/50
55 cm	black	45 – 65 cm	150R2/55
60 cm	black	45 – 65 cm	150R2/60
65 cm	black	50 – 65 cm	150R2/65
70 cm	black	50 – 65 cm	150R2/70

Knee brace can be worn on the left or right side. Suitable for nearly all leg circumferences by means of adjustable hook- and loop fasteners.
For individual customisation, addition fabric is available by the metre, item-no. 49T8.



Knee Brace, 20° flexion

Knee Orthosis for immobilisation

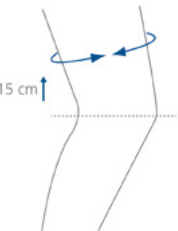



- Mode of Action
- the threepart knee brace stabilises the leg in functional position and helps to relief pain (e. g. first aid treatment after knee injury); also helps to secure surgery results and to speed up the healing process
 - by means of several hook- and loop fasteners, the knee joint is fixed into position
 - mostly used for post-operative care after surgery

- Indication
- first aid treatment after knee injuries for immobilisation
 - the brace is indicated after surgery
 - instability of the knee joint

- Contraindication
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - venous insufficiency with thrombophilia
 - lymph drain malfunctions (swellings distal from the applied support)
 - the brace is not able to correct femur-, tibia- or fibula fractures
 - do not apply the brace on missing or disturbed perception

Brace length	Colour	Thigh circumfe- rence	Item-No.
40 cm (for teenagers)	black	35 – 45 cm	150R1/40
50 cm	black	45 – 60 cm	150R1/50
55 cm	black	45 – 65 cm	150R1/55
60 cm	black	45 – 65 cm	150R1/60
65 cm	black	50 – 65 cm	150R1/65
70 cm	black	50 – 65 cm	150R1/70



 Knee brace can be worn on the left or right side. Suitable for nearly all leg circumferences by means of adjustable hook- and loop fasteners.
For individual customisation, addition fabric is available by the metre, item-no. 49T8.



Knieschiene, 20° gebeugt

Knee Orthosis for immobilisation



- Mode of Action
- the threepart knee brace stabilises the leg in functional position and helps to relief pain (e. g. first aid treatment after knee injury); also helps to secure surgery results and to speed up the healing process
 - by means of several hook- and loop fasteners, the knee joint is fixed into position
 - mostly used for post-operative care after surgery

- Indication
- first aid treatment after knee injuries for immobilisation
 - postsurgical
 - instability of the knee joint

- Contraindication
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - venous insufficiency with thrombophilia
 - lymph drain malfunctions (swellings distal from the applied support)
 - the brace is not able to correct femur-, tibia- or fibula fractures
 - do not apply the brace on missing or disturbed perception

Positionsnummer 23.04.01.1033

Schienenlänge	Farbe	Bestell-Nr.
40 cm (für Kinder)	silbergrau	160R1/40
50 cm	silbergrau	160R1/50
55 cm	silbergrau	160R1/55
60 cm	silbergrau	160R1/60
65 cm	silbergrau	160R1/65

Knee Joint



Knee Brace, straight

Mode of Action

- the three-part knee brace stabilises the leg in extended position and helps to relief pain (e.g. first aid treatment after knee injury); also helps to secure surgery results and to speed up the healing process
- mostly used for post-operative care after surgery

Indication

- first aid treatment after knee injuries for immobilisation
- postsurgical
- instability of the knee joint

Contraindication

- Material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- venous insufficiency with thrombophilia
- Lymphatic drainage disorders (swellings distal to the applied device)
- the brace is not able to correct femur-, tibia- or fibula fractures
- do not apply the brace on missing or disturbed perception

Positionsnummer 23.04.01.0046

Brace length	Colour	Item-No.
20 cm (for infants)	silver	160R2/20
30 cm (for children)	silver	160R2/30
40 cm (for children)	silver	160R2/40
45 cm	silver	160R2/45
50 cm	silver	160R2/50
55 cm	silver	160R2/55
60 cm	silver	160R2/60
65 cm	silver	160R2/65

without picture

Spare hook-and-loop strips

- for Knee brace 160R1 and 160R2

Length	Colour	Item-No.
150 cm	black	160R10

Pelvis & Hip Joint



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Pelvis & Hip Joint

The pelvis (pelvis major, pelvis minor) generally describes the body section between stomach and legs. The pelvis is a very stable, solid construction and outlines a closed, but not completely stiff bone ring. By means of the sacral bone, this bone ring is connected to the spine, and the pelvis surrounds the pelvic floor like a frame. The bony pelvis consists of both hip bones (ossa coxae), and together with the sacral bone (os sacrum), it forms the pelvic girdle. Due to its strength and stability, the pelvic girdle provides to the human body steadiness and an upright position.

Each of both hip bones consists of three bony parts: the ilium bone (os ilium), the seat bone (os ischii) and the pubic bone (os pubis). These three bones merge after reaching adolescence age, and then build the uniform hip bone in the hip joint socket (acetabular cup).

Looking at the shape of the pelvis, distinct gender gaps are noticeable. While the male pelvis is rather high and narrow, the female pelvis tends to be low and rather wider.



The hip joint (articulatio coxae) is a spheroidal joint and can be moved three-dimensionally. The upper thigh bone (femur) and the pelvis herein consitute the bony joint-duo.

The hip joint's three main directions of motion are

- Flexing – extending (flexion – extension)
- Spreading – tightening (abduction – adduction)
- Rotating outside – inside (outer – inner rotation)

In order to provide frictionless motion at the contact surfaces of the hip joint, the joint parts of the femur head and the joint socket are covered with a very smooth and thick cartilage layer. The joint mucous membrane constantly produces joint fluid (synovia), which lubricates the joint, protects it from shocks as well as nourishes it at the same time.

Next to the numerous hip- and thigh muscles, an enormous ligament construction holds the femoral head (caput femoris) in the hip socket (acetabulum). The most important and strongest ligament of the human body is the Os ilium thigh ligament (ligamentum iliofemorale), which has a tensile strength of approx. 350 kg.

J As time passed, evolution did not only form the brain of Homo erectus, it also formed the pelvis, which ensures today's human upright walk.

Hip dysplasia and hip dislocation (luxation)

Condition description

Hip dysplasia is an infantile maturing disorder with growth disturbance of the acetabulum roof. Without early therapy or use of proper orthopaedic aids, the femoral head can move out of the acetabulum (dislocation) and develop to a hip luxation.

Hip disorders are caused by the human upright position. While walking on two legs, the rear upper parts of the hip joint (acetabulum roof), are under increased strain. Due to the genderspecific differences in the shape of the pelvis, girls suffer from hip disorders 4 times more often than boys.

Therapy

Depending on the degree of the dysplasia, subluxation or luxation, there are different therapy methods. Conservative measures should be exploited before considering an extensive surgery. Therefore, the treatment should start as early as possible with a hip abduction support (harness) therapy. The prior therapy principles are to reduce load on the hip joint and a rather gentle, functional treatment by keeping the child in a sitting - squatting position.

Therapy aim

- To bring the femoral head into straight position in the acetabulum.
- To take tension off the capsule vessels.
- To allow the acetabulum roof to post-mature.

Hip joint arthrosis

Condition description

The most common hip disorder among adults resp. older persons is the hip joint arthrosis. Depending on age, the cartilage layer of the hip joint degenerates. Without the protecting cartilage layer, the hip joint loses its flexibility and in the course of time, deforms under the load of the own body weight. Next to pain therapy, further conservative treatments are applied to relieve the pain caused by the arthrosis.

Therapy

The pain in the hip joint can be relieved by wearing soft, shock-absorbing shoes and insoles and specific exercise to strengthen the muscles, e. g. swimming or riding a bicycle.

Unfortunately, the degenerative effects cannot be healed. Existing severe hip joint arthrosis most likely will require replacement by an artificial joint. Among others, nowadays there are minimally invasive surgery methods, during which a hip endoprosthesis (H-TEP) is implanted. Depending on surgery method, the use of result-maintaining orthopaedic aids is recommended.



Pavlik-Harness

Hip Abduction Support

Mode of Action

- gentle, painless and functional care for infants and young children
- the pavlik-harness leads to flexed and played position of the legs, and therefore to a centred adjustment of the femoral head and this reduces the pressure to the cartilaginous acetabular cup
- if used regularly, it helps the infantile acetabular cup to post-mature

Indication

- hip luxation
- hip dysplasia

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Colour	Age	Item-No.
0	white	1. – 5. month	130T20/0
1	white	5. – 10. month	130T20/1
2	white	10. – 15. month	130T20/2
3	white	from 15 months	130T20/3





iDeal Hip Abduction Support

Hip Abduction Support



- Mode of Action**
- due to the flexed abduction position, the iDeal hip abduction support leads to a centered adjustment of the femoral head and pressure reduction onto the cartilaginous acetabular cup of the hip joint
 - an over-extensive abduction is prevented by the integrated flexion-holding wedges
 - the soft design enables the infant to move (up to age of 3 months)

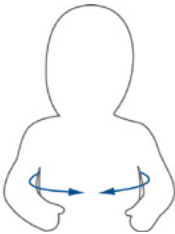
Indication

- hip dysplasia
- hip luxation

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Chest circumference	Item-No.
0	38 – 45 cm	130T26/0
1	45 – 52 cm	130T26/1
2	52 – 58 cm	130T26/2
3	55 – 62 cm	130T26/3



Hip Abduction Support „Listra“

Hip Abduction Support



- Mode of Action**
- leads to actively spread leg position by body's own muscle power
 - gentle centering of the femoral head reduces the pressure onto the cartilaginous acetabular cup of the hip joint
 - great freedom of movement in spread treatment position
 - no dangerous tissue tension of the soft tissues of the hip

Indication

- mild hip dysplasia

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Spreading width	Colour	Item-No.
12 cm	white/patterned	130T4/12
14 cm	white/patterned	130T4/14
16 cm	white/patterned	130T4/16
18 cm	white/patterned	130T4/18
20 cm	white/patterned	130T4/20
22 cm	white/patterned	130T4/22
24 cm	white/patterned	130T4/24
26 cm	white/patterned	130T4/26
28 cm	white/patterned	130T4/28
30 cm	white/patterned	130T4/30
32 cm	white/patterned	130T4/32

picture similar



Active-Hip Abduction Support, without flexion holding wedges

Active-Hip Abduction Support Shell



- Mode of Action**
- by gentle abduction, the Active-Hip Abduction Support leads to a centered position of the femoral head and pressure reduction onto the cartilaginous acetabular cup
 - leads to actively spread leg position by body's own muscle power
 - great motion range in abducted therapy position due to the conical shape of the abduction shell
 - absolutely no risky tissue tension in the soft tissue of the hip

Indication

- hip dysplasia

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

Size	Spreading width	Item-No.
12	12 cm	130T8/12
14	14 cm	130T8/14
16	16 cm	130T8/16
18	18 cm	130T8/18
20	20 cm	130T8/20
22	22 cm	130T8/22
24	24 cm	130T8/24
26	26 cm	130T8/26
28	28 cm	130T8/28



Active-Hip Abduction Support, with flexion holding wedges

Active-Hip Abduction Support Shell



- Mode of Action**
- by gentle abduction, the Active-Hip Abduction Support leads to a centered position of the femoral head and pressure reduction onto the cartilaginous acetabular cup
 - leads to actively spread leg position by body's own muscle power
 - great motion range in abducted therapy position due to the conical shape of the abduction shell
 - absolutely no risky tissue tension in the soft tissue of the hip
 - provides optimal adjustment of the hip to the acetabulum by flexion holding wedges

Indication

- hip dysplasia

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin

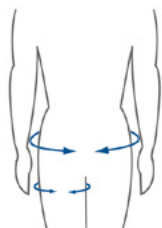
Size	Spreading width	Item-No.
12	12 cm	130T28/12
14	14 cm	130T28/14
16	16 cm	130T28/16
18	18 cm	130T28/18
20	20 cm	130T28/20
22	22 cm	130T28/22
24	24 cm	130T28/24
26	26 cm	130T28/26
28	28 cm	130T28/28

Pelvis & Hip Joint



Yale - Hip Brace

Hip Brace with rotation inhibiting stabilisation element, inclusive lining



Mode of Action

- due to the spiral shaped structure of the „stabilisator“ (thermoplastically mouldable), a centering force effects the hip joint, which holds the joint head inside the acetabulum
- the principle corresponds to the stabilisation of fixating „hip-leg-bandages“ used in orthopaedics and trauma surgery
- at the same time, the dynamic muscle stabilisation of the hip joint is not prevented and the remaining motion range guarantees a smooth and lively gait pattern
- flexion of the hip joint limited to approx. 80°
- abduction limited to approx. 20°
- concentrated reduction of the rotational level

Indication

- partial immobilisation of the hip joint, for special post-surgical care of minimally invasive total endoprosthesis implant of the hip (hip-TEP)

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- sensoric discomfort (pain)
- circulatory disorders, lymphoedema

Size	Pelvis circumference	Thigh circumference	side	Item-No.
S	up to 85 cm	up to 60 cm	left	74B1/LS
M	up to 105 cm	up to 70 cm	left	74B1/LM
L	up to 125 cm	up to 80 cm	left	74B1/LL
S	up to 85 cm	up to 60 cm	right	74B1/RS
M	up to 105 cm	up to 70 cm	right	74B1/RM
L	up to 125 cm	up to 80 cm	right	74B1/RL

replacement part

Description	Size	Side	Item-No.
Lining for hip brace	S	left	74B2/LS
	M	left	74B2/LM
	L	left	74B2/LL
Lining for hip brace	S	right	74B2/RS
	M	right	74B2/RM
	L	right	74B2/RL

Back & Spine



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Back & Spine

The spine consists of 24 separated and approx. 9 – 10 other vertebrae, which are ossified in the sacral and coccyx segment. In regards to function, they can be divided into following sections

- The cervical spine with totally 7 vertebrae (vertebrae cervicallis), which is also called cervical segment.
- The thoracic spine with totally 12 vertebrae (vertebrae thoricae), which is also called thoracic segment.
- The lumbar spine with totally 5 vertebrae (vertebrae lumbalis), which is also called lumbar segment.
- The sacral segment describes the sacral bone and coccygeal bone (os sacrum et os coccygis), which usually are ossified.

Specialties of the individual spinal sections

- The first cervical vertebrae body (atlas) carries the head and allows nodding movements as well as lateral movement; the second cervical vertebrae body-axis enables by its pivot-shape the rotating movement between neck and head.
- The spinous processes are positioned overlapping at the thoracic spine; therefore blocking rotation. This is also the spot where the thoracic rib bones emerge.
- At the lumbar spine, the condylar processes are positioned against each other in such a way that rotation is not possible. In this section, the vertebrae bodies and the spinal disks are developed very strongly.
- The junction from the lumbar spine to the sacral bone is clearly angled and is called promontorium. The sacral vertebrae are ossified to one block and are the connection to the pelvic girdle.
- The coccygeal is present only rudimentarily and is not important any more for human being.

Motion patterns of the spine

The human spine is curved in the shape of a double-S and as “elastic pole”, ensures the human upright walk (homo erectus). Further to the static tasks, e. g. carry loads, the spine is very flexible, especially in the upper sections.

Therefore, following motion sequences are possible

- Bending forwards (flexion)
- Extending backwards (extension)
- Tilting sideways (lateral flexion)
- Turning motion (rotation)



Next to respiratory diseases, back pain is the second most common reason for medical consultations.

Basic shape of a vertebrae

At the cylinder-shaped bone piece, there are 1 spinous process, 2 transverse processes and 4 condylar processes. At the transition from vertebral body to vertebral arch, the spinal nerves emerge from the intervertebral foramen. The vertebral arch surrounds the spinal cord and in the sum of the vertebral bodies, forms the vertebral canal.

Function

The vertebral body carries the load, the vertebral arch surrounds and protects the spinal cord, the processes function as lever for muscles and ligaments.

The vertebral disks

The 23 intervertebral disks, also called spinal disks, connect the single vertebral bodies and consist of an outer tissue ring (anulus fibrosus) and a soft gelatinous core (nucleus pulposus). These spacer disks allow motion in the spinal segment and have a shock absorbing function.



Nearly every one of us knows the subject “back pain” and has been affected by it at least once before. The trouble with the back can have plenty of causes. With the diagnosis of the orthopaedist, centre and extent of the pain are localised, and a therapy with medication, physiotherapy or orthopaedic aids will be initiated accordingly, or even be treated surgically. Like in nearly every therapy, major focus is put on immobilisation, erection and/or targeted motion by therapeutic exercise. Also, a change in lifestyle of the person affected (e. g. weight reduction, physiotherapy = PT) can contribute to gain positive control over back pain.

Common disease patterns

Cervical syndrome

Cervical syndrome is a collective term for all painful disorders in the segment of the cervical spine. By compression of the nerve roots many different diagnoses can be specified, such as stiff neck, migraine or pain radiating into shoulder or arm. During traffic accidents, the cervical spine is a predestined site for injuries, due to acceleration and at the same time inertness of the head (e.g. Cervical acceleration-deceleration). For taking load off the cervical spine, simple orthopaedic aids can be used.

Osteoporosis

Osteoporosis is a metabolic disease of the skeleton system with loss of bony substance ("bone thinning"). Due to the decreasing bone density, the fracture susceptibility increases especially at the disk bodies (respectively neck of femur, distal radius head). There, caused by the axial load, vertebral deformities ("fish vertebrae"), deck plate drops ("sinterings") and roundback deformity occur increasingly. Next to the development of a rounded back, this disease can cause pain. Bedriddenness and immobilisation (see hyperextension orthoses).

Low back pain syndrome

Low back pain syndrome is a collective term for pain in the section of the lumbar spine and also known as lumbalgy, lumbosacral radiculopathy and lumbago. The cause often lies in irritation or compression of the nerve roots by the spinal disks. Often, overweight in combination with weak abdominal and back muscles are responsible for this disease pattern (hollow-back = hyper-lordosis). Also, degenerative symptoms are often experienced in this spinal section and for the affected person, can also be rather painful.



CerviSupport.basic

Cervical Spine Stabilisation Support, anatomic without reinforcement

Mode of Action

- support, immobilisation and relief of the cervical spine prevents pathological load distribution
- great wearing comfort by breathable foam material and soft cotton cover
- with laryngeal notch
- foam with medium compression hardness (gross density: 31,0 kg/m³ and compression hardness: 6 kPa)

Indication

- distortions of the cervical spine (whiplash injury, acceleration trauma)
- post-surgical care
- arteria-vertebralis-syndrom
- wry neck

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- tracheostomy
- respiratory distress

Size	Neck circumference	Chin height	Colour	Item-No.
S	32 – 38 cm	7.5 cm	silver	130R1/7S
M	39 – 43 cm	7.5 cm	silver	130R1/7M
L	44 – 48 cm	7.5 cm	silver	130R1/7L
S	32 – 38 cm	9.0 cm	silver	130R1/9S
M	39 – 43 cm	9.0 cm	silver	130R1/9M
L	44 – 48 cm	9.0 cm	silver	130R1/9L
S	32 – 38 cm	11.0 cm	silver	130R1/11S
M	39 – 43 cm	11.0 cm	silver	130R1/11M
L	44 – 48 cm	11.0 cm	silver	130R1/11L



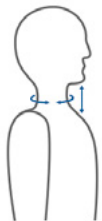
CerviSupport.stabil
Cervical Spine Stabilisation Support, anatomic with reinforcement



- Mode of Action**
- support, immobilisation and relief of the cervical spine prevents pathological load distribution
 - great wearing comfort by breathable foam material and soft cotton cover
 - foam with medium compression hardness (gross density: 31,0 kg/m³ and compression hardness: 6 kPa)
 - with laryngeal notch
 - with integrated reinforcement bar (restricts motion range of the head)

- Indication**
- distortions of the cervical spine (whiplash injury, acceleration trauma)
 - post-surgical care
 - arteria-vertebralis-syndrome
 - wry neck
 - post traumatic pain disorders
 - osteochondrosis/spondylarthrosis of the cervical spine

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - tracheostomy
 - respiratory distress



Size	Neck circumference	Chin height	Colour	Item-No.
S	32 – 38 cm	7.5 cm	silver	131R1/7S
M	39 – 43 cm	7.5 cm	silver	131R1/7M
L	44 – 48 cm	7.5 cm	silver	131R1/7L
S	32 – 38 cm	9.0 cm	silver	131R1/9S
M	39 – 43 cm	9.0 cm	silver	131R1/9M
L	44 – 48 cm	9.0 cm	silver	131R1/9L
S	32 – 38 cm	11.0 cm	silver	131R1/11S
M	39 – 43 cm	11.0 cm	silver	131R1/11M
L	44 – 48 cm	11.0 cm	silver	131R1/11L



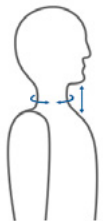
CerviSupport.philadelphia
Two-piece Cervical Spine Stabilisation Orthosis with sternum support



- Mode of Action**
- supports and immobilises the cervical spine by supporting the sternum and the shoulder at the chin and at the back of the head
 - complete immobilisation of the cervical spine through double shell principle

- Indication**
- Spondylarthrosis
 - Cervical syndrome
 - Tracheostomy
 - post-surgical care
 - post traumatic pain disorders
 - structural loosening of the upper cervical spine
 - simple and stable vertebral fractures

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin



Size	Neck circumference	Chin height	Colour	Item-No.
S	25 – 33 cm	6 cm	caucasian	135R1/6S
M	33 – 41 cm	6 cm	caucasian	135R1/6M
L	41 – 48 cm	6 cm	caucasian	135R1/6L
XL	48+ cm	6 cm	caucasian	135R1/6XL
S	25 – 34 cm	8 cm	caucasian	135R1/8S
M	33 – 42 cm	8 cm	caucasian	135R1/8M
XL	48+ cm	8 cm	caucasian	135R1/8XL
S	25 – 35 cm	11 cm	caucasian	135R1/11S
M	33 – 43 cm	11 cm	caucasian	135R1/11M
L	41 – 50 cm	11 cm	caucasian	135R1/11L
XL	48+ cm	11 cm	caucasian	135R1/11XL
S	25 – 36 cm	13 cm	caucasian	135R1/13S
M	33 – 44 cm	13 cm	caucasian	135R1/13M
L	41 – 51 cm	13 cm	caucasian	135R1/13L
XL	48+ cm	13 cm	caucasian	135R1/13XL



LumboMax.easy

Lumbar Spine Support for stabilisation, with tension strap and without lumbar pad



Mode of Action

- compression of the abdominal wall, causing augmentation of the intra-abdominal pressure
- straightening and delordosing of the lumbar spine by means of four flexible reinforcement rods in the lumbar area
- slight constraint of lateral movements and of rotation
- the compression of the support may be adjusted by additional lumbar belts, thereby relieving the back muscles

Indication

- lumbalgia
- lumbo-ischalgia
- irritative conditions of the sacroiliac joint (ilium-sacrum-joint)
- degenerative changes of the lumbar spine
- prophylaxis after discomfort of the lumbar spine

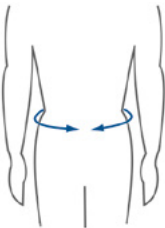
Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- breathing difficulties, shortness of breath

65R1 – silver

Size	Waist circumference	back hight	PCN	Item-No.
XS	55 – 65 cm	24 cm	11097735	65R1/XS
S	65 – 80 cm	24 cm	11097712	65R1/S
M	80 – 90 cm	24 cm	11097706	65R1/M
L	90 – 105 cm	24 cm	11097698	65R1/L
XL	105 – 120 cm	24 cm	11097729	65R1/XL
XXL	120 – 140 cm	24 cm	11097741	65R1/XXL

 The elastic, breathable fabric adjusts itself optimally to the anatomy of the body. The grip flap enables a comfortable donning and doffing of the support.



LumboMax.easy+

Lumbar Spine Support for stabilisation, with tension strap and lumbar pad



Mode of Action

- compression of the abdominal wall, causing augmentation of the intra-abdominal pressure
- straightening and delordosing of the lumbar spine by means of four flexible reinforcement rods in the lumbar area
- slight constraint of lateral movements and of rotation
- the compression of the support may be adjusted by additional lumbar belts, thereby relieving the back muscles
- adjustable back pad provides compression and improved blood circulation of the lumbar area

Indication

- lumbalgia
- lumbo-ischalgia
- irritative conditions of the sacroiliac joint (ilium-sacrum-joint)
- degenerative changes of the lumbar spine
- prophylaxis after discomfort of the lumbar spine

Contraindication

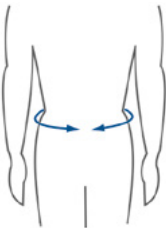
- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- breathing difficulties, shortness of breath



Size	Waist circumference	back hight	Colour	Item-No.
XS	55 – 65 cm	24 cm	silver	66R1/XS
S	65 – 80 cm	24 cm	silver	66R1/S
M	80 – 90 cm	24 cm	silver	66R1/M
L	90 – 105 cm	24 cm	silver	66R1/L
XL	105 – 120 cm	24 cm	silver	66R1/XL
XXL	120 – 140 cm	24 cm	silver	66R1/XXL



 The elastic, breathable fabric adjusts itself optimally to the anatomy of the body. The grip flap enables a comfortable donning and doffing of the support.





LumboSupport

Lumbar Orthosis with mobilisation functionality



Mode of Action

- normalisation of posture by active straightening of the upper body
- increases the intra-abdominal pressure
- slight delordosing and pelvic erection, therefore support of the dorsal vertebral body parts
- increased static and dynamic safety
- adjustable degree of stabilisation by removing the dorsal stabilisation element, the stabilising elements and the belt
- the breathable, innovative functional fibre Xtra-Dry increases the wearing comfort considerably

Indication

- post-surgical stabilisation of the lumbar spine area
- degenerative spinal disorders
- muscular insufficiency of the lumbar spine area
- chronic pain in the lumbar spine and iliosacral area
- ligamentoses
- hyper-lordosis of the lumbar spine

Contraindication

- Material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- hernia or other abdominal disorders
- obesity


40R1 - Woman

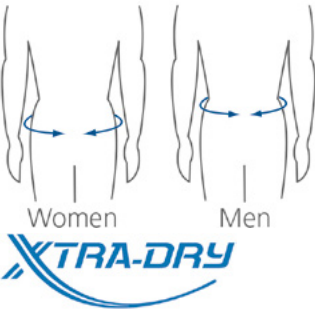
Size	Hip circumfe- rence	Colour	Item-No.
XS	65 – 75 cm	silver/anthracite	40R1/XS
S	76 – 86 cm	silver/anthracite	40R1/S
M	87 – 98 cm	silver/anthracite	40R1/M
L	99 – 111 cm	silver/anthracite	40R1/L
XL	112 – 125 cm	silver/anthracite	40R1/XL
XXL	126 – 140 cm	silver/anthracite	40R1/XXL

41R1 - Men

Size	Waist circumfe- rence	Colour	Item-No.
XS	66 – 76 cm	silver/anthracite	41R1/XS
S	77 – 88 cm	silver/anthracite	41R1/S
M	89 – 101 cm	silver/anthracite	41R1/M
L	102 – 115 cm	silver/anthracite	41R1/L
XL	116 – 130 cm	silver/anthracite	41R1/XL
XXL	131 – 146 cm	silver/anthracite	41R1/XXL

The front height is approx. 17 cm for both types (women's and men's sizes).
The back height is approx. 30 cm for both types (women's and men's sizes).

 Do not wear the LumoSupport directly on the skin. The orthosis must be worn on a T-shirt (e.g. Undershirt for Spinal Orthoses 145T20).



LumboVario.tec

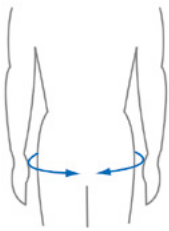
Flexion Orthosis with mobility function



35R1



35R1



Mode of Action

- LumboVario.tec is a multifunctional spinal orthosis to thoroughly stabilise and steady the entire lumbar spine, including the lumbo-sacral passage, within each therapy phase
- in the course of rehabilitation process, the spinal orthosis allows targeted training of the spine by removing stabilising elements of the orthosis (back shell and boning bars)
- construction pad for support of pendulous abdomen


Indication

- post-surgical after intervertebral disc-surgery of the lumbar spine (L1 – L5/S1)
- post-surgical after stabilising surgery or fusion (spondylodesis)
- spondylolisthesis (slight lumbar spondylolisthesis)
- narrowing of the vertebral canal (lumbar spinal canal stenosis)
- nerve root irritations due to narrowing at the foramen intervertebral
- degenerative instability (lumbar spondylarthrosis)
- bone cancer (osteosarcoma) of the lumbar spine
- inflammatory diseases of the lumbar spine (spondylitis)

Contraindication

- Material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- pressure sores in the areas concerned
- breathing difficulties, shortness of breath (Dyspnoea)
- vascular or other abdominal diseases
- missing perception (pain)

Size	Hip circumfe- rence	back hight	Features	Item-No.
1	75 – 90 cm	37 cm	high	35R1/1L
2	90 – 105 cm	37 cm	high	35R1/2L
3	105 – 120 cm	37 cm	high	35R1/3L
4	120 – 135 cm	37 cm	high	35R1/4L
1	75 – 90 cm	29 cm	low	30R1/1S
2	90 – 105 cm	29 cm	low	30R1/2S
3	105 – 120 cm	29 cm	low	30R1/3S

 Do not wear the LumboVario.tec directly on the skin. The orthosis must be worn on a T-shirt (e.g. Undershirt for Spinal Orthoses 145T20).



Spare Parts LumboVario.tec



30R100, knitted part



35R110, plastic shell



35R130, PA-bar

Spare parts: short type

Description	Size	Item-No.
knitted part	1	35R100/1L
	2	35R100/2L
	3	35R100/3L
	4	35R100/4L
plastic shell (Streifylast)	1	35R110/1L
	2	35R110/2L
	3	35R110/3L
	4	35R110/4L
PA-bars of the inner knitted part		35R130/L
Abdominal-pad with cotton cover		30R126

Spare parts: short type

Description	Size	Item-No.
knitted part	1	30R100/1S
	2	30R100/2S
	3	30R100/3S
plastic shell (Streifylast)	1	30R110/1S
	2	30R110/2S
	3	30R110/3S
PA-bars of the inner knitted part		30R130/S
Abdominal-pad with cotton cover		30R126



TL Support

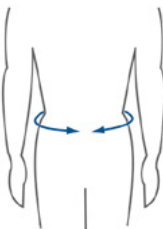
Abdominal and Rib Fracture Support



60B1



61B1



Mode of Action

- the TL support stabilises the outer ribcage and the abdominal area

Indication

- post-surgical
- abdominal dysbalance
- incisional hernia, incisional protection
- rib contusions
- rib fractures

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- missing perception
- breathing difficulties, shortness of breath

60B1 - Woman

Features	Size	Colour	Waist circumference	Item-No.
waisted	S	white	58 – 72 cm	60B1/S
waisted	M	white	71 – 87 cm	60B1/M
waisted	L	white	86 – 102 cm	60B1/L
waisted	XL	white	100 – 116 cm	60B1/XL

61B1 - Men

Features	Size	Colour	Waist circumference	Item-No.
straight	S	white	70 – 90 cm	61B1/S
straight	M	white	89 – 110 cm	61B1/M
straight	L	white	109 – 130 cm	61B1/L
straight	XL	white	125 – 150 cm	61B1/XL

The front and rear height of the women's and men's TL support is 25 cm.



Light TLSO Spinal Orthosis

Orthosis for the relief of the thoracic/lumbar spine, limits movement in the sagittal and frontal plane

- including fastening system, lordosis 0° or lordosis 15°, made of Streifylast (Soft-PE)

Mode of Action

- stabilisation of the entire torso
- partial support of the ventral vertebral bodies
- minimisation of rotation and lateral inclination of the torso
- ready to fit semi-finished product

Indication

- conservative therapy to immobilise lumbalgy, discopathy, spinal stenosis as well as compression fractures of the vertebral bodies
- used with reclination bracket item-no. 145R10, a reclination in the thoracal spinal segment is achieved
- preventative therapy for segment stabilisation in the thoracolumbar and lumbosacral spinal segment
- post-operative therapy for post-traumatic stabilisation of the spinal segments

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- blood circulatory disorders

145T0/...D or 145T15/...D - Woman

Chest / waist / hip	Lordose 0 ° item-no.	Lordose 15 ° item-no.
58 / 46 / 71 cm	145T0/1D	145T15/1D
63 / 51 / 76 cm	145T0/2D	145T15/2D
66 / 54 / 81 cm	145T0/3D	145T15/3D
69 / 58 / 86 cm	145T0/4D	145T15/4D
76 / 66 / 91 cm	145T0/5D	145T15/5D
84 / 74 / 97 cm	145T0/6D	145T15/6D
91 / 81 / 102 cm	145T0/7D	145T15/7D
91 / 84 / 109 cm	145T0/8D	145T15/8D
94 / 87 / 114 cm	145T0/9D	145T15/9D
101 / 96 / 117 cm	145T0/10D	145T15/10D

145T0/... or 145T15/... - Men

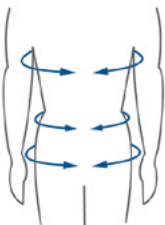
Chest / waist / hip	Lordose 0 ° item-no.	Lordose 15 ° item-no.
66 / 51 / 71 cm	145T0/1	145T15/1
71 / 61 / 76 cm	145T0/2	145T15/2
76 / 71 / 81 cm	145T0/3	145T15/3
84 / 76 / 86 cm	145T0/4	145T15/4
89 / 81 / 91 cm	145T0/5	145T15/5
94 / 86 / 97 cm	145T0/6	145T15/6
99 / 91 / 102 cm	145T0/7	145T15/7
109 / 97 / 109 cm	145T0/8	145T15/8
114 / 100 / 114 cm	145T0/9	145T15/9
117 / 104 / 117 cm	145T0/10	145T15/10



145T0



145T15



Fastener System for TLSO Spinal Orthosis

stable type

Material

- strap: textile leather
- hook and loop fasteners: polyamide
- guide roller and flap: metal

Characteristics

- smooth, rigid surface, can be cleaned with a damp cloth
- embossed markings for shortening and punching of rivet-holes
- high-quality and modern workmanship

PU = 1 piece

Colour	Width	Velcro area	Item-No.
white	25 mm	150 – 250 mm	145R12/25W
black	25 mm	150 – 250 mm	145R12/25S
dark blue	25 mm	150 – 250 mm	145R12/25DB
white	40 mm	150 – 350 mm	145R12/40W
black	40 mm	150 – 350 mm	145R12/40S
dark blue	40 mm	150 – 350 mm	145R12/40DB



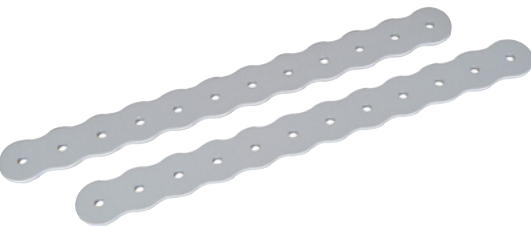
Reclination Bracket for Light TLSO Spinal Orthosis

- made of satinised and matte aluminum
- pre-drilled riveting holes
- adjustable angles by shifting the toothing
- wave-shaped edges for evenly rounding construction
- washable Subclavia-pads made of skin-friendly polyamid fabric
- adjustable velours strap with Y-hook and loop closure

PU = 1 pair

Size of the L-R-O	Item-No.
1 – 7	145R10/M
8 – 10	145R10/L





Reinforcement Boning for Light TLSO Spinal Orthosis

- made of satinised and matte aluminum
- pre-drilled riveting holes
- wave-shaped edges for evenly roundings when contouring

PU = 1 set

Length	Item-No.
25 cm	145R11/25
35 cm	145R11/35



Undershirt for Spinal Orthoses

Tanktop



The undershirt is used exclusively as underwear for spinal orthoses and furthermore also to isolate the skin surface during the casting process (plaster cast) for spinal orthoses.

Indication

- material interactions/allergies to the orthosis material
- friction and correction pressure
- hyperhidrosis
- temperature regulation
- insulation of skin surface during application of moulding technique

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin


Material

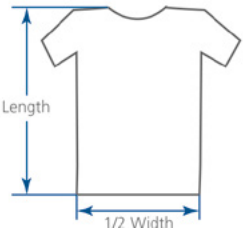
- 100 % combed cotton, Sanitized treated

PU = 1 piece

Size	Length	Width*	Item-No.
XS	63 cm	27 cm	145T21/XS
S	66 cm	28 cm	145T21/S
M	69 cm	30 cm	145T21/M
L	72 cm	32 cm	145T21/L
XL	75 cm	34 cm	145T21/XL
XXL	77 cm	37 cm	145T21/XXL
XXXL	79 cm	40 cm	145T21/XXXL

*width = 1/2 hem width, when stretched, length of the undershirt becomes shorter

 Sanitized® treatment prevents odor-creating bacteria growth!
Sanitized products are silver-free!





Undershirt for Spinal Orthoses

T-Shirt



The undershirt is used exclusively as underwear for spinal orthoses and furthermore also to isolate the skin surface during the casting process (plaster cast) for spinal orthoses.

Indication

- material interactions/allergies to the orthosis material
- friction and correction pressure
- hyperhidrosis
- temperature regulation
- insulation of skin surface during application of moulding technique

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin


Material

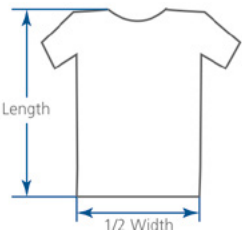
- 100 % combed cotton, Sanitized treated

PU = 1 piece

Size	Length	Width*	Item-No.
XS	63 cm	27 cm	145T20/XS
S	66 cm	28 cm	145T20/S
M	69 cm	30 cm	145T20/M
L	72 cm	32 cm	145T20/L
XL	75 cm	34 cm	145T20/XL
XXL	77 cm	37 cm	145T20/XXL
XXXL	79 cm	40 cm	145T20/XXXL

*width = 1/2 hem width, when stretched, length of the undershirt becomes shorter

 Sanitized® treatment prevents odor-creating bacteria growth!
Sanitized products are silver-free!



Undershirt for Spinal Orthoses

without sleeves



The undershirt is used exclusively as underwear for spinal orthoses and furthermore also to isolate the skin surface during the casting process (plaster cast) for spinal orthoses.

Indication

- material interactions/allergies to the orthosis material
- friction and correction pressure
- hyperhidrosis
- temperature regulation
- insulation of skin surface during application of moulding technique

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin


Material

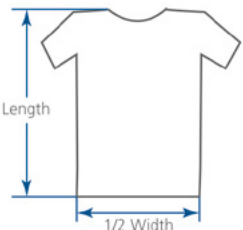
- 100 % combed cotton, Sanitized treated

PU = 1 piece

Size	Length	Width*	Item-No.
XS	63 cm	27 cm	145T23/XS
S	66 cm	28 cm	145T23/S
M	69 cm	30 cm	145T23/M
L	72 cm	32 cm	145T23/L
XL	75 cm	34 cm	145T23/XL
XXL	77 cm	37 cm	145T23/XXL
XXXL	79 cm	40 cm	145T23/XXXL

*width = 1/2 hem width, when stretched, length of the undershirt becomes shorter

 Sanitized® treatment prevents odor-creating bacteria growth!
Sanitized products are silver-free!





Undershirt for Spinal Orthoses

with sleeves

The undershirt is used exclusively as underwear for spinal orthoses and furthermore also to isolate the skin surface during the casting process (plaster cast) for spinal orthoses.

Indication

- material interactions/allergies to the orthosis material
- friction and correction pressure
- hyperhidrosis
- temperature regulation
- insulation of skin surface during application of moulding technique

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin


Material

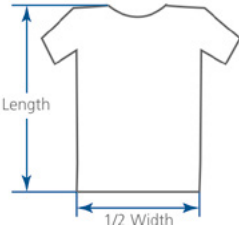
- 100 % combed cotton, Sanitized treated

PU = 1 piece

Size	Length	Width*	Item-No.
XS	63 cm	27 cm	145T22/XS
S	66 cm	28 cm	145T22/S
M	69 cm	30 cm	145T22/M
L	72 cm	32 cm	145T22/L
XL	75 cm	34 cm	145T22/XL
XXL	77 cm	37 cm	145T22/XXL
XXXL	79 cm	40 cm	145T22/XXXL

*width = 1/2 hem width, when stretched, length of the undershirt becomes shorter

 Sanitized® treatment prevents odor-creating bacteria growth!
Sanitized products are silver-free!



TLSO (Hyperextension Orthosis)

Orthosis for the relief of the thoracic/lumbar spine, limits movement in the sagittal and frontal plane

- frame construction with mobile pelvis bar

Mode of Action

- relieving and erecting function in the area of the lumbar spine and the lower thoracic spine by means of three-point-principle
- limits movement of the upper body rotation and lateral inclination by the frame construction
- the 3-point principle is realized by means of an anatomically shaped lumbar pad, the ventral pelvis bar, and the sternum pad, all of which are individually adjustable to the patient

Indication

- stable traumatic vertebral fractures (L5 – TH11)
- osteoporosis

Contraindication

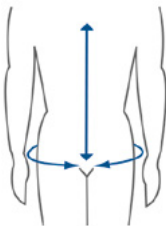
- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- thoracic morbus scheuermann
- flecnional-traction lesion



20R20



20R25




20R20 - with one-piece sternal pad

Size	Pelvis circumfe- rence	Distance centre chest/pubis	Item-No.
S	70 – 75 cm	39 – 45 cm	20R20/S
MS - short	75 – 90 cm	39 – 43 cm	20R20/MS
M	75 – 90 cm	42 – 49 cm	20R20/M
ML – long	75 – 90 cm	45 – 52 cm	20R20/ML
LS - short	90 – 105 cm	42 – 49 cm	20R20/LS
L	90 – 105 cm	45 – 52 cm	20R20/L
XLS – short	105 – 115 cm	45 – 52 cm	20R20/XLS
XL	105 – 115 cm	49 – 56 cm	20R20/XL

20R25 - with two-piece sternal pad

Size	Pelvis circumfe- rence	Distance centre chest/pubis	Item-No.
S	70 – 75 cm	39 – 45 cm	20R25/S
MS - short	75 – 90 cm	39 – 43 cm	20R25/MS
M	75 – 90 cm	42 – 49 cm	20R25/M
ML – long	75 – 90 cm	45 – 52 cm	20R25/ML
LS - short	90 – 105 cm	42 – 49 cm	20R25/LS
L	90 – 105 cm	45 – 52 cm	20R25/L
XLS – short	105 – 115 cm	45 – 52 cm	20R25/XLS
XL	105 – 115 cm	49 – 56 cm	20R25/XL

 Do not wear the orthosis directly on the skin. To facilitate optimal fit and high wearing comfort, we recommend to wear an undershirt (item-nr. 145T20 – 145T23) under the orthosis.



Spare Parts TLSO (Hyperextension Orthosis)
20R20/20R25



10R20

10R21

Pad cushion set

Designation	Sales unit	Size	Item-No.
Replacement cushion set for 20R20 (side pads, pelvis bar, sternum- and lumbar pad)	1 set	S	10R20/S
	1 set	MS	10R20/MS
	1 set	M	10R20/M
	1 set	ML	10R20/ML
	1 set	LS	10R20/LS
	1 set	L	10R20/L
	1 set	XLS	10R20/XLS
Replacement cushion set for 20R25 (side pads, pelvis bar, sternum- and lumbar pad)	1 set	XL	10R20/XL
	1 set	S	10R21/S
	1 set	MS	10R21/MS
	1 set	M	10R21/M
	1 set	ML	10R21/ML
	1 set	LS	10R21/LS
	1 set	L	10R21/L
Waist belt	1 set	XLS	10R21/XLS
	1 set	XL	10R21/XL
			10R14/S



TLSO (Hyperextension Orthosis)

Orthosis for the relief of the thoracic/lumbar spine, limits movement in the sagittal and frontal plane

- frame construction with symphysis pad

Mode of Action

- relieving and erecting function in the area of the lumbar spine and the lower thoracic spine by means of three-point-principle
- limits movement of the upper body rotation and lateral inclination by the frame construction
- the 3-point principle is realized by means of an anatomically shaped lumbar pad, the ventral pelvis bar, and the sternum pad, all of which are individually adjustable to the patient

Indication

- stable traumatic vertebral fractures (L5 – TH11)
- osteoporosis

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- thoracic morbus scheuermann
- flecnional-traction lesion



25R20




25R25

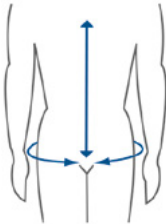
25R20 - with one-piece sternal pad

Size	Pelvis circumfe- rence	Distance centre chest/pubis	Item-No.
S	70 – 75 cm	39 – 46 cm	25R20/S
M	75 – 90 cm	42 – 49 cm	25R20/M
L	90 – 105 cm	45 – 52 cm	25R20/L
XL	105 – 115 cm	49 – 56 cm	25R20/XL

25R25 - with two-piece sternal pad

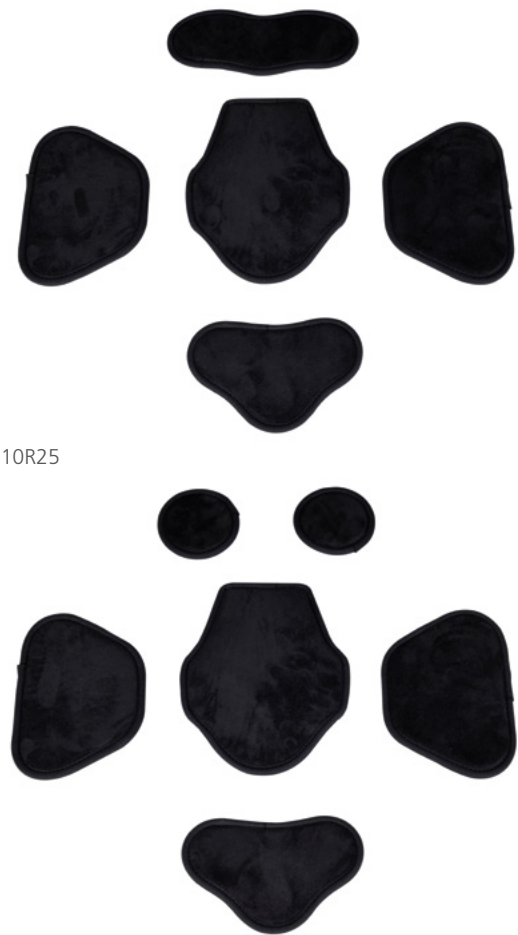
Size	Pelvis circumfe- rence	Distance centre chest/pubis	Item-No.
S	70 – 75 cm	39 – 46 cm	25R25/S
M	75 – 90 cm	42 – 49 cm	25R25/M
L	90 – 105 cm	45 – 52 cm	25R25/L
XL	105 – 115 cm	49 – 56 cm	25R25/XL

 Do not wear the orthosis directly on the skin. To facilitate optimal fit and high wearing comfort, we recommend to wear an undershirt (item-nr. 145T20 – 145T23) under the orthosis.





Spare Parts TLSO (Hyperextension Orthosis) 25R20/25R25



10R25

10R26

Pad cushion set

Designation	Sales unit	Size	Item-No.
Replacement cushion set for 25R20 (side pads, pelvis bar, sternum- and lumbar pad)	1 set	S	10R25/S
	1 set	M	10R25/M
	1 set	L	10R25/L
	1 set	XL	10R25/XL
Replacement cushion set for 25R25 (side pads, pelvis bar, sternum- and lumbar pad)	1 set	S	10R26/S
	1 set	M	10R26/M
	1 set	L	10R26/L
	1 set	XL	10R26/XL



TLSO (Hyperextension Orthosis)

Orthosis for the relief of the thoracic/lumbar spine, limits movement in the sagittal and frontal plane

- 3-point principle

Mode of Action

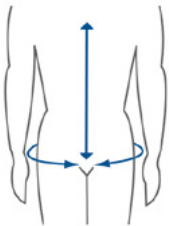
- relieving and erecting function in the area of the lumbar spine and the lower thoracic spine by means of three-point-principle
- forward tilt of the pelvis and strengthening of the lumbar lordosis
- relief of the vertebral bodies at increased loads on the lumbar vertebral joints
- the 3-point principle is realized by means of an anatomically shaped lumbar pad as well as customizable symphysis and sternum pad, all of which are individually adjustable to the patient

Indication


- stable traumatic vertebral fractures (L5 – TH11)
- hyper kyphosis of the lower thoracic spine
- osteoporosis

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- thoracic morbus Scheuermann
- flecnional-traction lesion



Size	Pelvis circumference	Distance centre chest/pubis	Item-No.
S	70 – 75 cm	39 – 46 cm	10R1/S
M	75 – 90 cm	42 – 49 cm	10R1/M
L	90 – 105 cm	45 – 52 cm	10R1/L
XLS – short	105 – 115 cm	39 – 46 cm	10R1/XLS
XL	105 – 115 cm	49 – 56 cm	10R1/XL

 Do not wear the orthosis directly on the skin. To facilitate optimal fit and high wearing comfort, we recommend to wear an undershirt (item-nr. 145T20 – 145T23) under the orthosis.



Spare Parts TLSO Hyperextension Orthosis 10R1



10R10

Pad cushion set

Designation	Sales unit	Size	Item-No.
Replacement cushion set (side pads, pelvis bar, sternum- and lumbar pad)	1 set	S	10R10/S
	1 set	M	10R10/M
	1 set	L	10R10/L
	1 set	XL	10R10/XL

Back & Spine

Shoulder Joint



Shoulder Joint

The shoulder girdle is an instrument for our body language. So, hanging shoulders are often an indication for frustration and depressiveness, shrugging the shoulders is a sign of cluelessness. However, shoulders drawn back with the chest bound forward signal self-confidence.

Considered functionally, the shoulder joint (articulatio humeri) is a spheroidal joint and compared to other joints, possesses the human body's widest motion range. It consists of shoulder blade (scapula) and collarbone (clavicula) and the joint head of the upper arm bone (caput humeri).

The great flexibility of the shoulder joint is facilitated by the uneven relation of the joint head and the joint socket. Thus, the joint head is considerably bigger than the joint socket, the latter is additionally enlarged by a cartilaginous joint lip (labrum glenoidale). The shoulder joint is surrounded by a joint capsule, which continuously emits new joint liquid (synovia) to the inside to provide the sliding process of the cartilaginous joint ends.

An inner muscle-tendon-cap* (which is often called "rotator cuff") secures, centers and protects the shoulder joint from loads and is supposed to prevent spontaneous luxating.

An outer muscle layer, especially of the delta muscle (musculus deltoideus) serves as most important abductor and is among others, responsible for the outer rotation of the shoulder joint.


(* musculus supraspinatus, musculus infraspinatus, musculus teres minor)



Regarded individually, the flexible and muscular suspension of the shoulder girdle to the trunk already allows a large range of various motion patterns. Thus, muscle groups prevent dropping of the shoulder girdle when carrying loads; or dropping of the trunk against the shoulder girdle for example when resting against something or hanging at a high bar.

In connection with the actual shoulder joint, following range of movements is possible

- Swing forwards (anteversion) = 170°
- Swing backwards (retroversion) = 40°
- Spreading (abduction) = 180°
- Tightening (adduction) = 40°
- Inner rotation = 100°
- Outer rotation = 90°

 The joint surfaces of the joint head of the upper arm (caput humeri) and the joint surfaces at the shoulder blade are joined in a relation of 1:4. Therefore, the joint possesses a wide motion range but is also injury-prone.

The most common injury of the shoulder joint is the joint-dislocation. This dislocation develops by a levering impact of violence onto the shoulder joint, usually consequently after a quick abduction- or outer rotation-movement of the arm. Far more seldom is a habitual shoulder luxation due to an inherited weakness of the joint capsule.

After a luxation, the person affected usually adopts a relieving posture; and holds his arm in order to avoid the partially very painful movements of the shoulder. After the anamnesis, the treating physician can require an x-ray in order to eliminate the possibility of fractures of the shoulder joint.

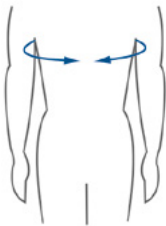

Therapy

Depending on the extent of the shoulder luxation, a quick and gentle reposition of the humerus head is initiated. The real reposition of the shoulder joint in the joint socket is done under local anaesthesia, by re-setting the dislocated joint with the so-called Hippo-krates-maneuver (respectively the Arlt-maneuver over an arm-rest of a chair).

Following after, the reset arm is immobilised for several weeks by means of a Gilchrist- or Desaultbandage, in order to achieve a cicatrisation of the torn capsule-li-gament structures of the shoulder joint.

Once a shoulder joint has been dislocated, it may luxa-te again due to the weakness of the joint capsule and if needed, must be treated by arthroscopic surgery.

30°



ClaviculaSupport

Shoulder Sling

Mode of Action

- fixation of the collar bone
- pulling back the entire shoulder girdle („rucksack sling“)
- relief of clavicle fractures
- Gentle posture promotes healing and reduces pain

Indication

- Conservative therapy of clavicle fractures


Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- open fractures
- missing perception

Size	Chest cir-cumference	Size women	Size men	Item-No.
XS	50 – 65 cm	/	/	120R1/XS
S	65 – 80 cm	up to 34	/	120R1/S
M	80 – 95 cm	36 – 40	up to 48	120R1/M
L	95 – 110 cm	42 – 48	50 – 52	120R1/L
XL	110 – 125 cm	48 – 52	56 – 60	120R1/XL

Item no. 120R1/XS is suitable for children (clothing size up to 140). Item no. 120R1/S is suitable for children (clothing size up to 176).

30°



OmoSupport.gilchrist

Shoulder Joint Sling for immobilisation in a defined position (Gilchrist's Sling)

Mode of Action

- fixation of the entire arm during shoulder injuries
- can also be worn over light clothing
- relieving posture benefits the healing process and reduces pain


Indication

- shoulder injuries such as distorsions, contusions
- subluxation and luxation of the shoulder joint, luxation fracture
- humeral head- and humeral shaft fractures
- injuries of the rotator cuff
- post-surgical care

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- arterial occlusions
- congestions of the lymphatic system

Size	Arm length	Size women	Size men	Item-No.
XS	40 – 48 cm	32 – 34	/	110R1/XS
S	48 – 52 cm	36 – 38	44 – 46	110R1/S
M	50 – 56 cm	40 – 42	48 – 50	110R1/M
L	54 – 60 cm	44 – 46	52 – 54	110R1/L
XXL	66 – 78 cm	52 – 54	58 – 60	110R1/XXL

 The OmoSupport.gilchrist can be worn on right or left side.

www.streifeneder.com/op 119

Shoulder Joint



OmoSupport.easy

Shoulder Joint Sling for immobilisation in a defined position



Mode of Action

- fixates the entire arm in flexed inner rotation position during the therapy of shoulder injuries
- relieving posture benefits the healing process and reduces pain
- healing process of humeral head fractures (upper arm shaft) will be improved and accelerated

Indication

- shoulder injuries such as distortions, contusions
- subluxation and luxation of the shoulder joint, luxation fracture
- humeral head- and humeral shaft fractures
- injuries of the rotator cuff
- post-surgical care

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- arterial occlusions
- congestions of the lymphatic system

Feature

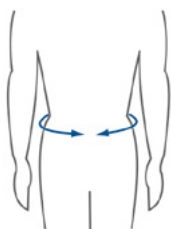
- simple size options: „2 fit for all“ – therefore low stock keeping
- simple handling: easy application of the shoulder sling without help
- partially flexible body strap: elastic insert of the body strap provides unrestricted breathing
- innovative hand pocket closure: individual adjustment even for bandaged limbs
- upper material with clinging structure for hook straps: individual adjustment



Size	Waist circumference	Colour	Item-No.
M	up to 100 cm	silver/black	105R1/M
L	100 – 140 cm	silver/black	105R1/L



The OmoSupport.easy can be worn on right or left side.



Arm & Elbow



Arm & Elbow

The arm resp. the free upper extremity is divided into upper arm (brachium), forearm (antebrachium) and hand (manus). The arm is the human body part with the greatest mobility of all, which is based on the construction of the shoulder joint.

The upper arm bone (humerus) is the longest bone of the arm. Its rounded head (caput humeri) is located proximally and is part of the shoulder joint.

Distally at the upper arm bone, two large upper arm condyles (epicondylus medialis et lateralis) are adjoined which are positioned laterally of the elbow joint.

The upper arm muscles can be divided into the bending (flexors) and extending (extensors) muscles. The most important upper arm muscles are positioned in the front, in order to bend the forearm (musculus biceps brachii et musculus brachialis). The muscles to extend the forearm (musculus triceps brachii) are located at the backside of the upper arm.



The elbow (cubitus) connects upper- and forearm, consists of crook of the arm (fossa cubitalis) and the elbow joint (articulatio cubiti). Due to the merging of upper arm bone, spoke bone and ulna bone, the elbow joint consists of three partial joints (articulatio humeroradialis, articulatio humeroulnaris, articulatio radioulnaris proximalis), which are surrounded by a common joint capsule. This capsule is reinforced by three ligaments: inner ligament, outer ligament and ring ligament.

During bending and extending the elbow, a hinge-like movement occurs between upper- and forearm. Because of the three-part construction (rotating and hinged joint) of the elbow joint, rotating movements of the forearm in the sense of supination and pronation are also possible, during which the spoke bone rotates around the ulna bone. Several large nerve cords run parallel along the upper arm bone and innervate the flexors (mainly nervus medianus) and extensors (mainly nervus radialis) of the forearm.

The forearm merges between elbow joint (articulatio cubiti) and wrist (carpus) and consists of two bones: the spoke bone (radius) and the ulna bone (ulna). The forearm muscles can be also divided into two groups – the bending (flexors) and extending (extensors) muscles. The muscles mostly merging from the forearm move the hand as effector.

The “ell” is one of the oldest nature measures. It measures the distance between elbow and second fingertip. Especially tailors used this measure. Why or when the second “l” was dropped from the word, is unknown.


This pain syndrome is a classic overload symptom caused by overstraining the forearm muscles by monotone, constantly repeating movements, incorrect postures or everyday techniques; as well as incorrect sleeping posture in lateral position. The orthopaedist differentiates between “tennis arm” (epicondylitis humeri radialis) and “golf elbow” (epicondylitis humeri ulnaris). The more common “tennis arm” is usually an irritation of the extension muscle insertion of the forearm, while the less common “golf elbow” concerns the insertion of the flexing forearm muscle. The corresponding condyle is sensitive to pressure and physical contact. Every mechanical strain against the extending or flexing musculature is painful.

Therapy

Several methods are available to treat an epicondylitis; besides medication with ointments or gels containing diclofenac, there are also physio-therapeutical approaches to heal this overload emergence. The painful section can be e. g. cooled with ice, treated with massage to loosen the musculature or therapied with electric stimulation by means of a TENS-unit. Orthopaedic aids such as an arm sling provide absolute immobilisation on the one hand or, on the other, are supporting a functional therapy with braces or supports such as D-E-S-A Epicondylitis Brace. Surgery is only necessary in very rare cases.

Prophylaxe

Man is a creature of habit. This truism can also be transferred to learned or trained behaviour- and motion patterns. Especially in our information society, computer work has become essential; which can be very stressful and straining for our hands operating the keyboard and the mouse. Once a painful overstrain has been developed, one will be forced to reconsider his habits. An approach to solve this would be e. g. an ergonomical designed keyboard or a new hand rest for the mouse, to protect oneself from overstraining.



D-E-S-A

Epicondylitis Brace to take to load off muscle groups

Mode of Action

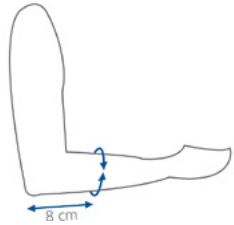

- according to Dr. med. Werner Zirngibl
- the silicone cover of the brace is comfortable wearing and is especially suitable for allergy sufferers
- tension relief for the entheses at the epicondylus
- the compressing effect to the forearm muscle eases the discomfort during physical strain
- with the hook- and loop fastener, the elastic belt strap is adjustable to various forearm circumferences

Indication

- entheses and insertion tendinopathy at epicondylus radialis and ulnaris, caused by physical strain

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- blood circulatory disorders
- paralysis (e. g. hemiparesis)



Size	Forearm circumference	side	PCN	Item-No.
1	240 – 260 mm	left	11097971	139T4/1L
2	270 – 290 mm	left	11097994	139T4/2L
3	300 – 320 mm	left	11098019	139T4/3L
4	330 – 350 mm	left	11098031	139T4/4L
1	240 – 260 mm	right	11097988	139T4/1R
2	270 – 290 mm	right	11098002	139T4/2R
3	300 – 320 mm	right	11098025	139T4/3R
4	330 – 350 mm	right	11098048	139T4/4R

www.streifeneder.com/op 125


Arm & Elbow

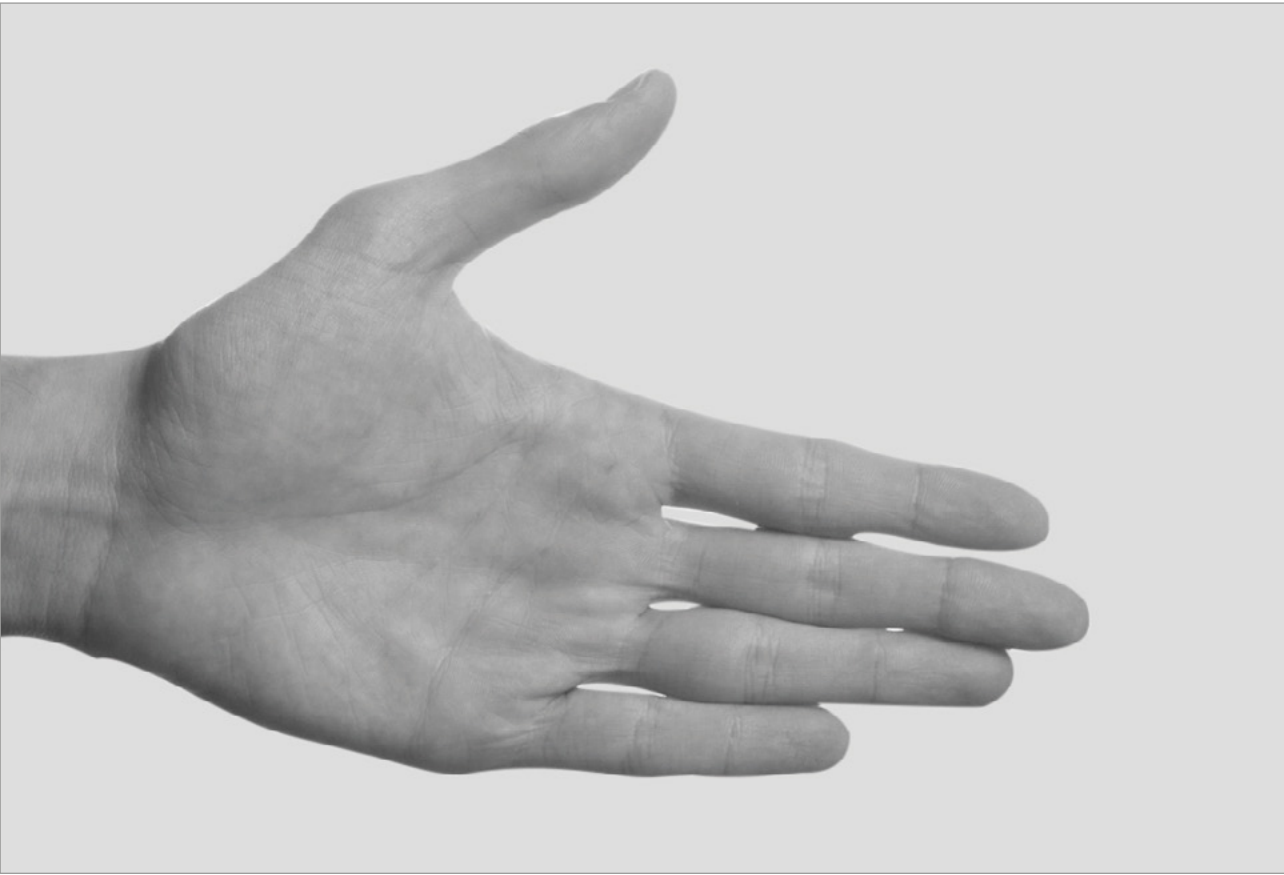
Hand & Wrist



Hand & Wrist

The hand is man’s most complex body part and serves as working instrument as well as communication- and expression medium. The perfect interaction of skin, muscles, nerves, tendons and bones makes the hand an incomparable tool. For many years, man is trying without success, to copy it in its perfection. Infants start to learn with their hands by grasping and thus understanding things; with our hands we stay in “touch” with our surroundings: we stroke, feel, do; and with them, we literally can “lend a hand”. The wrist is the connection link between forearm and hand. Anatomically, the wrist is shaped like an egg and allows the hand to bend (palmar flexion), to extend (dorsal extension) as well as spreading movements (radial- and ulnar-abduction). Only due to this combination of wrist and hand, the various, partially very complex motion patterns are possible.

 “Man is the most intelligent of all creatures, because he has hands”.
Anaxagoras (cited by Aristoteles)




Similar to the foot, the hand-skeleton can be divided into three sections: the bones of the hand root (carpus), the bones of the palm (metacarpus) and the bones of the fingers (digiti). Referring to the body centre, the 14 finger bones can be further divided:
The finger bones nearest to the body are called proximal phalanges, the ones in the middle are intermedial phalanges and the ones furthest away from the body are the distal phalanges.

The characterization of finger joints also functions according to this logic

- The finger joint nearest to the body is the metacarpophalangeal joint.
- The finger joint in the middle is the proximal interphalangeal joint.
- The finger joint furthest away from the body is the distal interphalangeal joint.

The thumb has a special status: it is the only (and first) finger without intermedial bone-part. While performing a power grip, it takes an opposing position in order to tightly grasp larger subjects.

 The eight bones of the wrist are arranged in two rows of four. The bones of the proximal row are: Scaphoid, Lunate, Triquetral and Pisiform. The bones of the distal row are: Trapezium, Trapezoid, Capitate and Hamate. An easy way to remember them all is with the mnemonic, “Some Lovers Try Positions That They Can’t Handle.” Another mnemonic that can be used is, “She Looks Too Pretty, Try To Catch Her.”

Day in, day out, our hands are subject to remarkable stress and strains. Therefore, many activities in job or leisure time, lead to increasing repetitive discomforts or injuries such as traumata, overload symptoms and degenerative joint diseases. Diseases of hand and wrist can have very individual characteristics and therefore require for their treatment a high degree of specialized knowledge.

Due to the plentitude of the multiplex disease patterns of hand or wrist, the carpal tunnel syndrome (CTS) as classical overload disease has been picked for particular description.

Causes

The carpal tunnel syndrome is a painful tightness of the inner carpal tendon sheaths. Inside the carpal tunnel (canalis carpi) of the inner wrist, runs a tendon compartment for the flexing tendons; which is additionally held at the wrist by means of a large circular ligament. The tissue of this “tunnel-like tube” can swell by mechanical overload or inflammation and irritate the nerve (nervus medianus) which causes the pain.

Symptoms


The person affected report pain or discomfort, as well as numbness of the hands, especially at night.

Diagnosis

Next to examination by palpation (touching) and provocation by overextending the wrist, the physician will determine the nerve conduction speed. This common test informs about disturbance of the stimulation transmission, often in direct comparison to the healthy hand.

Therapy

Lighter cases of carpal tunnel syndrome are treated by immobilising hand, wrist and forearm by wearing supports or wrist braces. Pain-relieving and anti-inflammatory medication, oint- ments and cooling compresses also help to relieve the symptoms. Whereas, heavy cases of CTS are treated by surgically incising or even severing the circular ligament.



PhalanxSupport

Stack Finger Splint Set

Mode of Action

- immobilisation of the fingers and the thumb
- immobilisation and protection of the finger end joint and finger stops
- hook and loop fasteners can be attached individually and guarantees necessary grip

Indication

- radiodorsal tendon rupture
- injuries of the fingertips and nail bed
- ligament sprain and lesion
- ruptures of the lateral parts of the pulley

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin



Description	Sales unit	Item-No.
transparent plastic box filled	66 finger splints in sizes 1 - 7, mixed	5R1

Spare part, Finger Splint with hook and loop strip

Size	Sales unit	Item-No.
1	10 pcs	5R1/1
2	10 pcs	5R1/2
3	10 pcs	5R1/3
4	10 pcs	5R1/4
5	10 pcs	5R1/5
5.5	10 pcs	5R1/5,5
6	10 pcs	5R1/6
7	10 pcs	5R1/7

 When judging the fit, please pay attention to not block circulation.



ManuSupport
Wrist Orthosis for immobilisation in two directions of movement




- Mode of Action**
- by means of the hook- and loop fastening system, consisting of three individually adjustable fasteners, the wrist orthosis can be optimally adapted to the hand shape
 - the mobility of the thumb maintains
 - the anatomically shaped and according to indication adjustable wide palm brace secures the hand in functional position therefore the extensor muscle of the forearm can relax and the enthesitis at the elbow is relieved
 - two spiral coils at the back of the hand increase stability
 - elastic insert facilitates the donning of the orthosis

- Indication**
- arthrosis
 - injuries of the wrist (e.g. distortion)
 - tendovaginitis
 - pain in the wrist (e.g. rheumatic pain)
 - carpal tunnel syndrome
 - ligament injuries
 - post-operative after injuries, surgery, after removing plaster casts

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - circulatory or lymphatic disorders
 - sensory discomfort

Colour: silver/black

Size	Wrist circumference	side	PCN	Item-No.
XS	13 – 15 cm	left	11096960	31B1/LXS
S	15 – 17 cm	left	11096925	31B1/LS
M	17 – 19 cm	left	11096919	31B1/LM
L	19 – 21 cm	left	11096902	31B1/LL
XL	21 – 23 cm	left	11096954	31B1/LXL
XS	13 – 15 cm	right	11097043	31B1/RXS
S	15 – 17 cm	right	11097008	31B1/RS
M	17 – 19 cm	right	11096983	31B1/RM
L	19 – 21 cm	right	11096977	31B1/RL
XL	21 – 23 cm	right	11097014	31B1/RXL

 Outer length of orthosis: approx. 19 cm



ManuSupport.rhizo
Wrist Orthosis with removable thumb fixation



- Mode of Action**
- the orthosis fixates wrist, thumb basal joint and carpometacarpal joint in a neutral function position; causing the extension muscle of the forearm to relax and relieving the ligament base of the elbow
 - the mobility of the distal phalanx of the finger is maintained (e.g. for writing)
 - adjustable dorsal and volar support for stabilisation of wrist and metacarpus
 - with its elastic insert, the wrist orthosis can be opened wide and therefore makes donning easier
 - belts with return protection simplify donning with one hand
 - flexible aluminium frame for adjustable thumb fixation
 - hook- and loop strap connection of thumb fixation with the hand orthosis provides individual position of the thumb fixation
 - during ongoing therapy, the thumb fixation may be completely removed; which increases the mobility of the thumb basal joint

- Indication**
- post surgical or post traumatic irritation of the wrist and thumb basal- and carpometacarpal joint
 - severe rhizarthritis
 - degenerative conditions of wrist and thumb
 - severe cases of tendovaginitis and carpal tunnel syndrome; as well as distortion

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - circulatory or lymphatic disorders
 - sensory discomfort

Size	Wrist circumference	side	Colour	Item-No.
S	14 – 16 cm	left	silver/black	89R1/LS
M	16 – 19 cm	left	silver/black	89R1/LM
L	19 – 21 cm	left	silver/black	89R1/LL
XL	21 – 23 cm	left	silver/black	89R1/LXL
S	14 – 16 cm	right	silver/black	89R1/RS
M	16 – 19 cm	right	silver/black	89R1/RM
L	19 – 21 cm	right	silver/black	89R1/RL
XL	21 – 23 cm	right	silver/black	89R1/RXL



ManuSupport.fix

Wrist Support for immobilisation in one direction of movement



- Mode of Action**
- the volar wrist orthosis holds the metacarpal area, the wrist and the forearm in a neutral resting position
 - easy customisation to the individual anatomy of wrist by simply bending and shaping the aluminium frame

- Indication**
- tendovaginitis
 - carpal tunnel syndrome
 - post-surgical immobilisation

- Contraindication**
- material interactions / allergies
 - do not wear directly on injured, irritated or damaged skin
 - angiopathy (oedemata)
 - sensory discomfort



Size	Wrist cir-cumference	side	Colour	Item-No.
S	15 – 17 cm	left	anthracite	85R1/LS
M	17 – 19 cm	left	anthracite	85R1/LM
L	19 – 21 cm	left	anthracite	85R1/LL
S	15 – 17 cm	right	anthracite	85R1/RS
M	17 – 19 cm	right	anthracite	85R1/RM
L	19 – 21 cm	right	anthracite	85R1/RL



ManuSupport.r-fix

Wrist Orthosis with thumb- and finger immobilisation, individually adjustable



- Mode of Action**
- the volar wrist orthosis ManuSupport.r-fix keeps fingers, thumb, wrist and forearm in a neutral resting position
 - customisation of the thumb splint to the individual thumb and wrist joint anatomy is achieved by simply bending and shaping the aluminium frame

- Indication**
- for night postural support
 - tendovaginitis
 - carpal tunnel syndrome
 - post-surgical immobilisation
 - wrist distortion
 - arthritis

- Contraindication**
- material interactions/allergies
 - do not wear directly on injured, irritated or damaged skin
 - angiopathy (oedemata)
 - sensory discomfort



Size	Wrist cir-cumference	side	Colour	Item-No.
S	15 – 17 cm	left	anthracite	80R1/LS
M	17 – 19 cm	left	anthracite	80R1/LM
L	19 – 21 cm	left	anthracite	80R1/LL
S	15 – 17 cm	right	anthracite	80R1/RS
M	17 – 19 cm	right	anthracite	80R1/RM
L	19 – 21 cm	right	anthracite	80R1/RL



RhizoSupport.light

Thumb Splint for immobilisation of saddle and basic joint of the thumb

Mode of Action

- stabilises the saddle joint of the thumb / metacarpophalangeal joint by means of the built-in aluminium frame
- customisation of the thumb splint to the individual thumb and wrist joint anatomy is achieved by simply bending and shaping the aluminium frame

Indication

- irritation of the thumb joints / metacarpophalangeal joint I
- rhiz-arthritis of the saddle joint of the thumb / trapeziometacarpal arthritis (TMC)
- ulnar collateral ligament lesion (skier's thumb)
- distortion / severe sprain of the thumb


Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- angiopathy (oedemata)

Feature

By cutting along the pre-defined lines (embossing lines), the height of the thumb splint may be adjusted. Depending on therapy goal, cutting along the embossing lines provides exposure and mobilisation of the thumb end joint.

Size	Wrist circumference	Item-No.
S	14 – 16 cm	87R1/S
M	16 – 18 cm	87R1/M
L	18 – 22 cm	87R1/L

 The RhizoSupport.light can be worn on left or right side by simply turning the hand loop.



Functional Thumb Splint with fabric lining

Thumb Support for the immobilisation of the saddle and base joint, made of soft polyethylene

Mode of Action

- immobilisation of the thumb-saddle joint and metacarpo-phalangeal joint of the thumb; as well as partial immobilisation of the radial carpus without great restriction of the grip function
- the thermoplastic material can be individually customised to the user's needs
- the attached hook- and loop fastener allows individual adjustment of the splint
- due to its functional concept with dirt-repellent and waterproof materials, the functional thumb splint can be worn at work and at home
- Including fabric lining made of cotton/elastane

Indication

- degenerative conditions of the thumb saddle joint
- arthrosis of the radial metacarpus
- skier's thumb
- lateral ligament lesions MP 1
- partial immobilisation of the radial carpus

Contraindication

- Material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- increasing swelling
- lymph drain malfunctions
- blood circulatory disorders

136T1 – white / 136T2 – peach

Size	Wrist circumference	side	PCN	Item-No.
S	14 – 16 cm	left	11097474	136T1/LK
M	16 – 18 cm	left	11097480	136T1/LM
L	18 – 22 cm	left	11097468	136T1/LG
S	14 – 16 cm	right	11097505	136T1/RK
M	16 – 18 cm	right	11097511	136T1/RM
L	18 – 22 cm	right	11097497	136T1/RG
S	14 – 16 cm	left	Not specified	136T2/LK
M	16 – 18 cm	left	Not specified	136T2/LM
L	18 – 22 cm	left	Not specified	136T2/LG
S	14 – 16 cm	right	Not specified	136T2/RK
M	16 – 18 cm	right	Not specified	136T2/RM
L	18 – 22 cm	right	Not specified	136T2/RG



136T1



136T2





Fabric Lining for Funtional Thumb Splint

- fabric lining for additional cushioning and hygiene of Funtional Thumb Splint item-no. 136T1 and 136T2
- material: 96 % cotton and 4 % elastane
- PU = 1 piece

white, for Item-No. 136T1

Size	Wrist circumfe- rence	side	Item-No.
S – M	14 – 18 cm	left / right	136T14
L	18 – 22 cm	left / right	136T15

beige, for item-no. 136T2

Size	Wrist circumfe- rence	side	Item-No.
S – M	14 – 18 cm	left / right	136T16
L	18 – 22 cm	left / right	136T17



136T14 / 136T15



136T16 / 136T17



Forearm and Hand Splint with Plastazote-lining

made of Streifylen (PE), 2 mm, including 3 self-adhesive hook and loop straps and rivets

Mode of Action

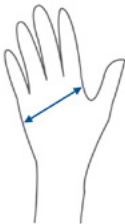
- optimal immobilisation of the wrist as well as finger- and thumb joints
- due to complete immobilisation, this orthosis can be used as night splint
- the thermoplastic material can be individually customised to the user's needs

Indication

- carpal tunnel syndrome
- wrist arthrosis
- rhiz-arthrosis
- wrist tendovaginitis
- chronic polyarthritis (CP)
- rheumatoid arthritis of the wrist with CP
- spastic contractures of the wrist

Contraindication

- material interactions / allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders, venous or lymphatic return disorders, lymph oedema
- sensibility disorders
- instable fractures of wrist and forearm

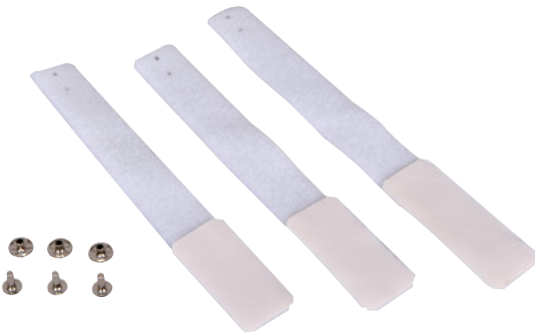


Size	Hand width	Colour	side	Item-No.
S	8 cm	white	left	193P3/L1
M	9 cm	white	left	193P3/L2
L	9.5 cm	white	left	193P3/L3
S	8 cm	white	right	193P3/R1
M	9 cm	white	right	193P3/R2
L	9.5 cm	white	right	193P3/R3

Hook and Loop Fastener System

for forearm positioning splints

- the hook and loop fastener system includes three self-adhesive hook and loop straps with three corresponding tubular rivets for attaching to forearm positioning splints

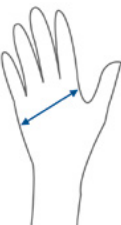


Size	Colour	Item-No.
S	white	60T50/1
M	white	60T50/2
L	white	60T50/3
S	peach	60T51/1
M	peach	60T51/2
L	peach	60T51/3



Forearm-Hand Splint

made of Streifylen (PE) or Streifylast (soft-PE), 4 mm



Mode of Action

- optimal immobilisation of the wrist as well as finger- and thumb joints
- due to entire immobilisation, this orthosis can be used as night splint
- the thermoplastic material can be individually adapted to fit the patients' needs

Indication

- carpal tunnel syndrome
- wrist arthrosis
- rhiz-arthrosis
- wrist tendovaginitis
- chronic polyarthritis (CP)
- CP with rheumatoid wrist
- spastic contractures of the wrist

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders, venous or lymphatic return disorders, lymph oedema
- sensibility disorders
- instable fractures of the wrist or forearm

193P1 and 193P2 - made of Streifylen (PE)

Size	Hand width	Colour	side	Item-No.
S	8 cm	white	left	193P1/L1
M	9 cm	white	left	193P1/L2
L	9.5 cm	white	left	193P1/L3
S	8 cm	white	right	193P1/R1
M	9 cm	white	right	193P1/R2
L	9.5 cm	white	right	193P1/R3
S	8 cm	peach	left	193P2/L1
M	9 cm	peach	left	193P2/L2
L	9.5 cm	peach	left	193P2/L3
S	8 cm	peach	right	193P2/R1
M	9 cm	peach	right	193P2/R2
L	9.5 cm	peach	right	193P2/R3

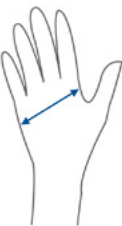
193P5 and 193P4 - made of Streifylast (soft PE)

Size	Hand width	Colour	side	Item-No.
S	8 cm	white	left	193P5/L1
M	9 cm	white	left	193P5/L2
L	9.5 cm	white	left	193P5/L3
S	8 cm	white	right	193P5/R1
M	9 cm	white	right	193P5/R2
L	9.5 cm	white	right	193P5/R3
S	8 cm	peach	left	193P4/L1
M	9 cm	peach	left	193P4/L2
L	9.5 cm	peach	left	193P4/L3
S	8 cm	peach	right	193P4/R1
M	9 cm	peach	right	193P4/R2
L	9.5 cm	peach	right	193P4/R3



Thumb-, Hand- and Forearm Orthosis

Wrist Orthosis welded construction with thumb immobilisation made of soft Streifylast (soft-PE)



Mode of Action

- the thumb-, hand- and forearm orthosis enables the support and immobilisation of the thumb joint and wrist with full mobility of the fingers
- the thermoplastic material as well as the attached hook- and loop fasteners allow individual customisation of the orthosis
- the orthosis is used at work or at home because of its functional structure and the dirt-resitant and water-resitant material
- equipment like fabric lining item-no. 193P0 separately available

Indication

- strains and distortions of wrist and thumb joints
- post-surgical immobilisation after fracture care
- functional support for radial nerve palsy
- rheumatoid arthritis
- immobilisation

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders, venous or lymphatic return disorders, lymph oedema
- sensibility disorders
- instable fractures of the wrist or forearm

Size	Hand cir- cumference	Colour	side	Item-No.
S	20 cm	white	left	193P6/L1
M	21.5 cm	white	left	193P6/L2
L	23 cm	white	left	193P6/L3
S	20 cm	white	right	193P6/R1
M	21.5 cm	white	right	193P6/R2
L	23 cm	white	right	193P6/R3
S	20 cm	peach	left	193P7/L1
M	21.5 cm	peach	left	193P7/L2
L	23 cm	peach	left	193P7/L3
S	20 cm	peach	right	193P7/R1
M	21.5 cm	peach	right	193P7/R2
L	23 cm	peach	right	193P7/R3



Hand- and Forearm Orthosis

Wrist Orthosis welded construction without thumb immobilisation made of Streifylast (soft-PE)



Mode of Action

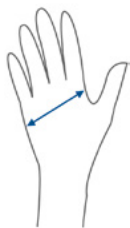
- the hand- and forearm orthosis immobilises and supports the wrist and the metacarpus in functional position without considerably limiting the ability to grasp
- the thermoplastic material as well as the attached hook- and loop fasteners allow individual customisation of the orthosis
- the orthosis is used at work or at home because of its functional structure and the dirt-resistant and water-resistant material
- equipment like fabric lining item-no. 193P0 separately available

Indication

- wrist strains and distortions
- post-surgical immobilisation after fracture care
- functional support for radial nerve palsy
- rheumatoid arthritis
- immobilisation

Contraindication

- material interactions/allergies
- do not wear directly on injured, irritated or damaged skin
- circulatory disorders, venous or lymphatic return disorders, lymph oedema
- sensibility disorders
- instable fractures of the wrist or forearm



Size	Hand circumference	Colour	side	Item-No.
S	20 cm	white	left	193P8/L1
M	21.5 cm	white	left	193P8/L2
L	23 cm	white	left	193P8/L3
S	20 cm	white	right	193P8/R1
M	21.5 cm	white	right	193P8/R2
L	23 cm	white	right	193P8/R3



Fabric Lining for Hand Orthoses

Fabric lining for additional cushioning and hygiene

- for item-no. 193P6, 193P7 and 193P8
- style: knitted in one single piece, very elastic
- material: 96 % cotton and 4 % elastane

PU = 1 Set (2 pcs.), applicable for left and right hand



Size	Hand Orthosis	Colour	Item-No.
M	Size 1 – 2	white	193P0/M
L	Size 3	white	193P0/L

Accessories



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Hook and Loop Fasteners with deflection-loop and flap

- Material
- 100 % polyamide
 - buckle made of white unbreakable plastic material

- Characteristics
- the hook- and loop closure system can be riveted or sewn to the work piece quickly and easily

PU = 10 pcs/colour

60T70 - coloured

Size W x L	Colour	Item-No.
25 x 350 mm	blue	60T70/25B
25 x 350 mm	yellow	60T70/25G
25 x 350 mm	red	60T70/25R
25 x 350 mm	black	60T70/25S
25 x 350 mm	white	60T70/25W
30 x 350 mm	blue	60T70/30B
30 x 350 mm	yellow	60T70/30G
30 x 350 mm	red	60T70/30R
30 x 350 mm	black	60T70/30S
30 x 350 mm	white	60T70/30W
38 x 350 mm	blue	60T70/38B
38 x 350 mm	yellow	60T70/38G
38 x 350 mm	red	60T70/38R
38 x 350 mm	black	60T70/38S
38 x 350 mm	white	60T70/38W
50 x 350 mm	blue	60T70/50B
50 x 350 mm	yellow	60T70/50G
50 x 350 mm	red	60T70/50R
50 x 350 mm	black	60T70/50S
50 x 350 mm	white	60T70/50W

60T60 – peach

Size W x L	Colour	Item-No.
25 x 420 mm	peach	60T60/25H
30 x 420 mm	peach	60T60/30H
38 x 420 mm	peach	60T60/38H
50 x 420 mm	peach	60T60/50H



Comfort pad for orthotic fasteners

Material

- skin side: polyamide (PA)
- outer side: polyester (PES) and polyvinylchloride (PVC) (blue) or polyester (PES) and polyamide (PA) (black)

Characteristics

- the pre-fabricated comfort pad replaces hand-crafted sliding pads for existing strap- and fastener systems
- protects pressure sensitive body areas such as e.g. tibial crest
- embossings for trimming
- suitable for strap widths 25, 30, 38 and 50 mm
- disinfectable

PU = 10 pcs.

Dimensions B x L	Colour	For belt width	Item-No.
65 x 140 mm	black	25, 30 mm	145R14/MS
65 x 140 mm	blue	25, 30 mm	145R14/MB
85 x 180 mm	black	38, 50 mm	145R14/LS
85 x 180 mm	blue	38, 50 mm	145R14/LB



Little ABC's of Orthopaedics

- A** **Abdomen** – area of the body between chest and pelvis
Abdominal – relating to the abdomen
Abduction – movement of a body part away from the midline of the body
Acetabulum – concave pelvic component of the hip joint receiving the femoral head
Adduction – movement of a body part towards the midline of the body
Alternating – exchanging, altering
Amelia – complete absence of one or several extremities
Anatomy – science of structure of organisms
Anesthesia – loss of feeling or sensation/narcosis
Anterior – front
Anteversion – forward tilt of a body part
Antivarus – against varus malalignment
Aponeurosis – a fibrous sheet of tissue by which certain muscles are attached to bones
Articulation, articulating – a joint, concerning a joint
Atrophy, to atrophy – shrinkage, wastage of biological tissue (e. g. muscle atrophy)
Axilla, axillary – the armpit, relating to the armpit
- B** **Bandage, to bandage** – wrapping, dressing; sense of: elastic support, applying bandages, taping
Biceps – two headed (e. g. biceps muscle)
Bow-leg – varus malalignment of the longitudinal axis of the leg
- C** **Calcaneus** – heel bone
Capsular – retaining to an articular capsule
Catalyser – chemical agent causing a chemical reaction (e. g. hardening powder, -paste)
Caudal – towards the tail, below, backside
Cerebrum, cerebral – the major part of the brain, occupying the upper part of the cranium, pertaining to the cerebrum
Cervical (cervical-region) – pertaining to the neck area
Chronic – long term (disease; opposite of acute)
Condyle, condylar – joint head, pertaining to the joint head
Congruence, congruent – match, matching, identical
Concave – hollow, curved inwards
Conservative – conciliatory, maintaining, in the sense of non-surgical
Constitution – physical shape
Contraction, to contract – tightening, shortening of soft tissue with joint malposition
Contralateral – reciprocal, located on the other side of the body
Contusion – bruise
Convex – curved to the front or outside

Little ABC’s of Orthopaedics

C **Claw foot** – flexion contraction of the toes
Cranial – head, above
Cyst – abnormal, closed sac-like structure within a tissue that contains a liquid, gaseous, or semisolid substance (e. g. Baker’s-cyst in the back of the knee)

D **Decubitus, decubital** – pressure damage, pressure sore
Derotation – correctional rotation
Detorsion – back rotation, correctional rotation (e. g. detorsion insole)
Dexter – right
Diagnosis, to diagnose – searching and finding a cause and details of disease
Digital – pertaining to finger or toe
Digitus – finger or toe
Dislocation, dislocate – shift, to shift
Distal – away, away from body
Distorsion – sprained, twisted (e. g. joints)
Dorsal – back side
Duroplast – synthetic material, which is, once it has hardened, not mouldable anymore by heat

E **Endogenous** – caused by inner reasons
Et – and
Exogenous – caused by outer reasons
Extension – stretching, extension of a body part
Extra – beyond
Extremities – limbs

F **Fascia** – covering around muscles and tendons
Femur – bone that extends from the pelvis to the knee
Fixation, fixed – position that cannot be altered passively
Flexion – bending a joint (opposite of extension)
Fracture – break in a bone
Frontal – to the front (front surface)

G **Gibbus** – curve in the spine causing a bump or hump on the back, strong kyphotic spine deformation
Gluteus, gluteal – buttocks muscle, pertaining to buttocks
Gocht manoeuvre – special technique to mold the plaster–cast for the ischium bar
Gonarthrosis, gonitis – inflammation of the knee joint

Little ABC’s of Orthopaedics

H **Haematoma** – bruise
Hallux – big toe
Hammer toe – flexed contraction position of a toe in the middle or end joint during dorsal tilting of the metacarpophalangeal joint
Heidelberg angle – AFO (ankle foot orthosis to lift the forefoot)
Hemi – half
Heterogenous – mixed combination, disparate
Hinge joint (Articulatio ginglymus) – single-axle joint (e. g. finger joint)
Hyper lordosis – lumbar lordosis, hollow back
Homogenous – uniform, congeneric
Hyper – prefix: more than the norm
Hypo – prefix: less than the norm

I **Idiopathic** – spontaneous, independent, starting without known reason (e. g. idiopathic scoliosis)
Immobilization, to immobilize – to prevent motion of a joint or segment
Incongruity, incongruent – mismatch, mismatched
Incontinence – inability to control urination or defecation
Indication, to indicate – advice, necessity, to advise, make something necessary
Infra – under or below
Initial – beginning
Insert – orthopaedic foot support, foot cushion for customized shoes
Instability, instable – missing stability, loose
Insufficiency, insufficient – functional weakness, inadequate
Interim treatment – temporary, tentative treatment before the final treatment
Irreversible – final, permanently
Ischium, ischial – seat bone, pertaining to the seat bone
Ischium bar – support point of the seat bone in prostheses or orthoses

K **KBM (abbreviation)** – Kondylen Bettung Münster
Knee cap – molded knee brace made of textile rubberlike fabric
Kyphosis – rather flat backward bent scoliosis

L **Lesion** – injury
Level Pelvis – aligned pelvis
Lateral – away from the center
Ligament, ligamentary – band of fibrous tissue connecting bones, concerning the ligaments
Longuette – oblong reinforcing material, usually several layers (e. g. plaster bandage)
Luxation, to luxate – sprain, to sprain

Little ABC’s of Orthopaedics

- M** Medial – inside, center, toward the mid-line
Metatarsal – long bones between the tarsal bones and the toes
Modular system – orthopaedic aid or prosthesis construction with various finished components (modular concept)
Morbus – disease, ailment
- N** Naviculare – short term for os naviculare = navicular bone of foot (or hand – scaphoid bone)
Necrosis – necrotic – dead tissue, mortified
Neuropathy, neuropathic – nervous disorder, nervous affection
- O** Oedema, oedematic – swelling, swollen
Orthosis – splint, brace device, corset, support
Orthopaedics – science of recognition and treatment of inherent or acquired defects of the musculoskeletal system (orthos = straight, right and paedia = childhood)
Orthoprosthesis – construction of a proximal orthotic element and a distal prosthetic element
Ossification, osseous – bone formation, bony
Osteomyelitis – infection of bone and bone marrow
Osteosynthesis – connection of two or more bones by means of metal plates, screws, nails or wires
- P** Pad – upholstering device in an orthosis or shoe
Palma, palmar – inner hand surface, pertaining to the inner hand surface
Palpation, to palpate – examination by touching with the hand
Paralysis, paralytic – loss of motor function, lame (only in the sense of limpness)
Paresis, paretic – loss of motor function (limp or spastic)
Patella – kneecap
Pathological – unnatural, abnormal, morbid
Pelvic obliquity – misaligned pelvis, asymmetrical pelvis height (e. g. caused by unequal leg length)
Periphery, peripheral – outer region, outside (e. g. peripheral arterial disease = PAD)
Peroneus, peroneal – retaining to the calf-bone (e. g. nervus peronaeus communis)
Peroneus–spring – ankle-foot orthosis to lift and guide the foot in case of limpness/loss of control
Pes – foot
Pes adductus – forefoot inverted, adducted, medially misaligned forefoot–position
Pes calcaneus – walking on the heel (steep slope position of the forefoot)
Pes cavus – contracted foot (excessive longitudinal arch of the foot)
Pes equinus – pointed foot (excessive plantar flexion of the whole foot)
Pes equinus varus adductus – club foot (combined malposition of the foot)
Pes planus – flat foot (collapsed medial arch)
Pes planus valgus – knock-flat foot (collapsed medial arch with kinked lower ankle joint)

Little ABC’s of Orthopaedics

- P** Plantar – pertaining to the foot sole
Poliomyelitis – paralysis caused by the polio virus infecting the anterior horn cells of the spinal cord
Pollex – thumb
Poly – prefix: multi, several
Post – prefix: after, behind
Posterior – behind, toward the back of...
Postoperative post op – after surgery
Pre – prefix: before, prior to
Pressure lesion – surface damage of skin and tissue due to extensive pressure exposure
Prevention – precaution
Prognosis, prognostic – preview, expected
Progredience, progredient – progression (of disease), advancing
progressive – advancing
Prominence, prominent – protrusion, protruding
Pronation – rotation of hand or foot in long axis facing outwards or dorsally
Prophylaxis, prophylactic – prevention, preventive
Prosthesis – externally applied device used to replace wholly, or in part, an absent or deficient limb segment
Proximal – nearest to the trunk; towards the trunk
Pseudo arthrosis – non-union of a fractured bone
PTB – (abbreviation) – patella tendon bearing = patella tendon – load principle
PTS – (abbreviation) – PTB–supracondylar prosthesis = lower leg prosthesis, reaching over femurcondyles
- Q** Quadriceps – short for Musculus quadriceps = four headed muscle in the anterior thigh
Quengel Hinged Brace – joint bending or stretching brace with hinges
- R** Radius – spoke bone, one of the forearm bones
Recidivism, recidiving – relapse, recurrence (of a disease), relapsing
Reclination, to reclinate – backward tilt, to tilt backwards
Redression, to redress – to force or bend back
Rehabilitation, to rehabilitate – enabling persons with disabilities to reach and maintain their optimal sensory, intellectual, psychiatric and/or social functional levels
Retroversion – backward turn
Reversible – convertible
Rotation, to rotate – turn, turning

- S** **Sagittal** – following the arrow, straight direction
Saddle joint (articulatio sellaris) – double-axis joint (e. g. thumb saddle joint Carpometacarpal-I-joint)
Shore-hardness – measuring unit for the degree of hardness of elastic materials
Sinister – left
Scoliosis, scoliotic – lateral deviation of the spine and rotation of the vertebrae around the long axis of the spine
Spasticity, spastic – cramping, cramped
Spina, spinal – referring to the spine (vertebral column)
Spondyle – retaining to the spine (e. g. spondyle arthrosis = arthrosis of the vertebral joints)
Subductus – laying underneath (e. g. digitus subductus = toe, laying crossed underneath)
Subluxation – partial dislocation of a joint
Superductus – laying over (e. g. digitus sperductus = toe, laying over dorsally)
Supination – rotation of hand or foot around long axis with palm forward or foot inward
Supination wedge – medial or inner elevation of an orthopaedic insole
Supra – prefix: upper, above
Swiss cam lock / Swiss lock system – detention of a splint joint (e. g. of an orthotic brace)
Symphysis – pubic symphysis, midline cartilaginous pubic bone connection (synchondrosis)
Symptom, symptomatic – sign, Indication of a disease, indicating a disease
Syndesmosis – slightly movable articulation where the contiguous bony surfaces are united by an interosseous ligament
Syndrome – disease pattern
Synostosis – bony fusion between two bones

- T** **Talus** – bone that articulates with the tibia and fibula to form the ankle joint
Tarsus, tarsal – heel part of the foot, pertaining to the heel part of the foot
Thermoplast – plastic material re-shapeable under heat application
Three-point-correction principle – correctional therapy by leverage effect with surface pressure-application at three contact points
Thomas splint – a long leg relief splint that extends from a ring at the hip to beyond the foot, e. g. for aseptic hip joint necrosis
Tonus – tension condition of muscles
Torsion – twisting
Trochanter – muscle insertion point, bony protrusion lateral-proximally at the femur
Tuber – hunch, knob (e. g. tuber ischiadicum)
Tuberosity – bony protrusion, muscle insertion/fixation point

- U** **Ulna** – inner and longer of the two bones of the forearm

- V** **Valgus** – X-shaped joint alignment
Varicosis – disease of the veins, varication
Varices – distended veins
Varus – O-shaped joint alignment
Ventral – relating to or situated on or close to the abdomen; abdominal, front
Vertex – centre of a curve, maximum of a curve
Volar – relating to the palm of the hand
V2A-steel – stainless steel

- W** **Walking** – milling, softening, staking e. g. orthopaedic leather

Source: “Children’s orthopaedic techniques by R. Bernbeck, J. Pramschiefer, H. D. Stolle”, published by Thieme, Stuttgart

Explanation of Symbols

Textile Care Symbols

	Hand wash
	30 °C delicates — reduce fill quantity one third
	30 °C normal wash
	40 °C normal wash
	60 °C normal wash
	95 °C normal wash
	Ironing with two dots – approx. 150 °C
	Do not iron
	Do not bleach
	No dry cleaning
	Low-temperature dry
	Do not tumble dry
	Spray disinfection

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10R1 113
10R10 113
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10R21 110
10R25 112
10R26 112
20R20 109
20R25 109
25R20 111
25R25 111
30R1 99
30R100 100
30R110 100
30R126 100
30R130 100
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35R1 99
35R100 100
35R110 100
35R130 100
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41R1 98
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50R1 19
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50R2 19
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