

Otto Bock[®]

QUALITY FOR LIFE



Soft Orthoses Handbook

Braces & Supports





QUALITY FOR LIFE

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OUR COMPANY

Fit, Function, Comfort, Quality. The four cornerstones on which all Otto Bock products are created. In 1919, the company's founder, Otto Bock, pioneered the use of mass production in prosthetics and orthotics. Our high quality products revolutionized the industry and set a standard that is still being imitated, but not duplicated, today.

Our products consist of a wide range of soft orthosis, made from different types of high tech materials like PCM™, SpaceTex® and our unique Turbocast™ moldable material. Many of our products carry the Oeko-Tex™ certificate, which means the entire process from thread to complete product is environmentally friendly.

We designed this handbook to give you an overview of our soft orthoses product offering, tell you about the high tech materials used in these products, and provide you with helpful information on common conditions and choice of product.

Warranty

Otto Bock warrants its products to be free from defects in material and workmanship. Subject to normal wear and tear and when used in accordance with relevant instructions, Otto Bock will replace or credit to the original purchaser the item's cost (at Otto Bock's discretion) for a period of 90 days from the original date of purchase.

BENEFITS OF BRACING

Orthosis: "Ortho" is the Greek word for "straighten". An Orthosis is often called a brace or support.

Whether you lead a sedentary life or a very active one, injuries and joint alignment problems can limit your ability to participate in activities. A properly prescribed and fitted orthosis can considerably improve function.

Benefits of an Orthosis

Support – Controls excess movement. Limits the ability of the affected body part to get into an unstable and vulnerable position. This helps prevent injury and re-injury.

Warmth – Heat helps the muscles to relax, reduces stiffness, soreness and increases circulation, making it easier for oxygen to be absorbed.

Compression – Reduces swelling.

Protection – As muscles tire and reflexes slow from fatigue, stresses that were normally absorbed by muscles are transferred to the joints. The additional support of a brace can help reduce this stress.

Proprioception – Increases awareness of the injured body part.

Psychological effect – Feeling of security.

Exercise is an integral part of the rehabilitation process to maintain, regain and increase muscle strength and joint health. Consult your doctor/therapist for a rehabilitation program that is right for you.

MATERIAL DESCRIPTIONS

Innovative Material for Genu Direxa and Genu Carezza Knee Braces

Material consists of three layers. The outer layer is a bi-elastic woven textile which creates quality and durability within the fabric that is unmatched in the marketplace. The middle layer is a foam material which uniquely combines compression and breathability — required when worn over a long period of time — creating flexibility that gives different users the same level of wearing comfort. Finally, the inner layer is a brushed material that is very soft in texture creating maximum comfort; the vector grip within the material reinforces the fit, preventing the brace from slipping and falling out of position. Latex-free.

Oeko-Tex™

The Oeko-Tex™ certificate guarantees that the product is free from harmful substances and that the total production chain from thread to complete product is environmentally friendly. Latex-free.

PCM™/COMFORT™

PCM™ (Phase Change Material) was originally designed for NASA™ to protect astronauts against temperature extremes. If the temperature of the body increases, the PCM™ absorbs surplus heat. If the temperature falls again, they emit the previously stored heat, creating a personal comfort climate. Oeko-Tex™ approved. Latex-free.

Turbocast®

Turbocast® is moldable plastic material that is used to create individually fitted and reinforced hand supports, combining excellent comfort with unsurpassed stability. The Turbocast® material is heat moldable simply by using hot water. Latex-free.

Darlexx®

Breathable and comfortable, Darlexx® keeps the skin dry and ventilated. The inside fleece lining makes it comfortable and soft on the skin, providing superior comfort. Latex-free.

Neoprene™/Thermoprene™

Neoprene™ is shock absorbing, durable and can be washed many times without losing its shape or elasticity. Otto Bock uses pure Neoprene™, which is free from harmful fillers, so it's gentle on the skin. Otto Bock uses the brand of Neoprene™ called Thermoprene™ which has a closed cell structure. This means that every cell is completely isolated, so moisture cannot penetrate the cells, eliminating the risk of bacterial growth. Thermoprene™ is a synthetic rubber. Latex-free.

Softelle®

An elastic, woven textile that provides excellent stability and comfort. The material keeps the skin dry by wicking away moisture. Oeko-Tex™ approved. Latex-free.

Lycra®

Lycra® is the trademarked name for a brand of Spandex™ material. It is a synthetic fibre that is very stretchable and elastic.

SpaceTex™

SpaceTex™ is the special 3-D spacer fabric for excellent padding and wicking moisture away from the skin. It is breathable, has high compression recovery and high wearing comfort.

3-D Material

The material has quite high elasticity modulus, that provides the needed stability and compression around the wrist. Also the material outside is quite resistant to pilling and abrasion, material is easily treated and can be washed at normal washing conditions.

BRACES & SUPPORTS – BACK



A wide range of orthoses are available for the effective treatment of back pain and spinal injuries. The supports ensure an upright posture, activate the abdominal and back muscles and stabilize the spine. Patients can choose between low to high function supports, depending on the degree of pain. The Otto Bock hyperextension orthoses allows for treatment of spinal injuries, e.g. spinal fractures, in accordance with the indications. Moreover, they have proven to be beneficial in providing anterior vertebral unloading in the lumbar and thoracic areas of the spine. The goal of treatment is to relieve the pain and to restore the pain-free functioning of the spine for the long-term.



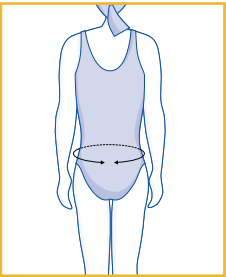
Indication:

- Pelvic dysfunction
- Low back pain
- Prevention

Material: Elastic

1041 DOSI SYMPHYSIOLYSIS

Size	Waist Circumference (cm)
XS	70 – 80
S	80 – 90
M	90 – 100
L	100 – 110
XL	110 – 120
XXL	120 – 130



Effects:

- Supports the pelvic joints
- Acts as a pain relieving brace

Features:

- A soft and comfortable support made from an elastic material
- Good fit
- Easy to wear when performing any kind of activity



7930 BACK SUPPORT BASIC

Size
Universal

Indications:

- Designed to prevent and relieve back pain

Material: Neoprene™/SBR

Effects:

- Provides a light support and keeps the back muscles warm

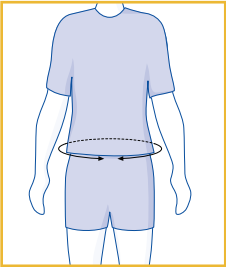
Features:

- Thin and flexible
- Can be used for preventative purposes



1048 DOSI STABLE

Size	Waist Circumference (cm)
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100



Indication:

- Low back pain
- Low back pain radiating down the leg (sciatica)
- Light to moderate degeneration of the lumbar spine (e.g. Osteoarthritis, Facet Syndrome)
- Vertebral disk protrusion

Material: Cotton

Effects:

- Stabilizing and relieving back support

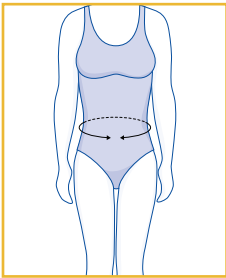
Features:

- A stable back support made from a strong cotton material with four metal splints
- The support has a flexible two-piece closure at the front



50R11 LUMBO SENA, WOMEN

Size	Waist Circumference (cm)
XS	70 – 80
S	80 – 90
M	90 – 100
L	100 – 110
XL	110 – 120
XXL	120 – 130



Indication:

Mild to moderate pain conditions due to:

- lumbar spine syndrome
- muscular imbalance
- irritation of the sacroiliac joint

Degenerative changes in the lumbar spine region: e.g.

- Osteoarthritis
- facet syndrome

Effects:

- Promotes sensorimotor functions and activates muscle stabilization in the lumbar spine
- Encourages anatomically correct posture
- Relieves the lumbar spine and reduces pain

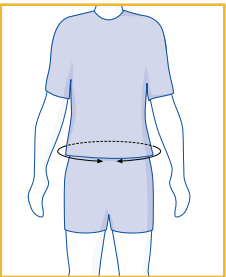
Features:

- The pad stabilizes the lumbosacral transition area
- SKINGUARD® Technology: antibacterial, odour-inhibiting, skin-friendly, climate-regulating, pleasantly soft, latex-free
- Massaging effect of the pad improves circulation, stimulates muscle function and reduces muscle tension



50R10 LUMBO SENA

Size	Waist Circumference (cm)
XS	70 – 80
S	80 – 90
M	90 – 100
L	100 – 110
XL	110 – 120
XXL	120 – 130



Indication:

Mild to moderate pain conditions due to:

- lumbar spine syndrome
- muscular imbalance
- irritation of the sacroiliac joint

Degenerative changes in the lumbar spine region: e.g.

- Osteoarthritis
- facet syndrome

Effects:

- Promotes sensorimotor functions and activates muscle stabilization in the lumbar spine region
- Supports anatomically correct posture
- Relieves the lumbar spine and reduces pain

Features:

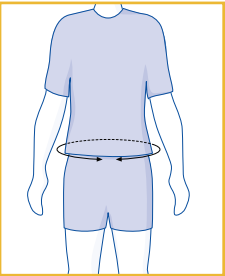
- The pad stabilizes the lumbosacral transition area
- SKINGUARD® Technology: antibacterial, odour-inhibiting, skin-friendly, climate-regulating, pleasantly soft, latex-free
- Massaging effect of the pad improves circulation, stimulates muscle function and reduces muscle tension

BRACES & SUPPORTS – BACK



1064 DOSI EQ X STABLE

Size	Waist Circumference (cm)
XS	56 – 64
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100
XXL	100 – 110



Indication:

- Low back pain
- Low back pain radiating down the leg (sciatica)
- Light to moderate degeneration of the lower lumbar spine and lower thoracic spine (e.g. Osteoarthritis, facet syndrome)
- Vertebral disk protrusion
- Beginning spondylolysis/spondylolisthesis

Material: Tactel

Effects:

- Extra stabilizing and relieving for the back

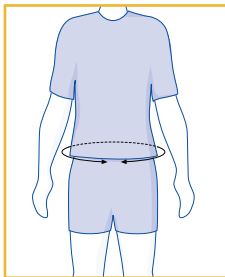
Features:

- Three points of support through firm straps
- Stable model made from the skin friendly material Tactel
- Metal splints and coil springs provide stabilization
- Non elastic strap closure on the back side to increase stabilization
- Easy to fit



1069 DOSI EQ X

Size	Waist Circumference (cm)
XS	56 – 64
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100
XXL	100 – 110



Indication:

- Low back pain
- Low back pain radiating down the leg (sciatica)
- Light to moderate degeneration of the lower lumbar spine (e.g. Osteoarthritis, facet syndrome)
- Vertebral disk protrusion
- Beginning spondylolysis/spondylolisthesis

Material: Tactel

Effects:

- Stabilizing and relieving back support

Features:

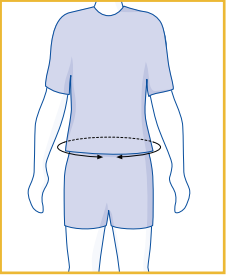
- A straight model with an adaptable cross strap for individual fitting
- Made from skin friendly material Tactel
- Stabilization through plastic splints and coil springs

BRACES & SUPPORTS – BACK



1079 DOSI EQ SI

Size	Waist Circumference (cm)
XS	56 – 64
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100
XXL	100 – 110



Indication:

- Low back pain
- Low back pain radiating down the leg (sciatica)
- Light to moderate degeneration of the lower lumbar spine (e.g. osteochondrosis, facet syndrome)
- Vertebral disk protrusion
- Beginning spondylolysis/spondylolisthesis
- Osteoarthritis

Material: Tactel

Effects:

- Stabilizing and relieving back support

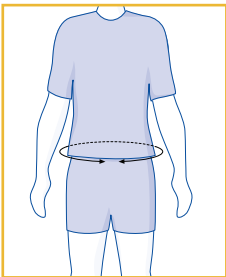
Features:

- A curved model with an adaptable cross strap for individual fitting
- Made from the skin friendly material Tactel
- Stabilization by plastic splints and coil springs



1070 DOSI EQ X HIGH

Size	Waist Circumference (cm)
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100
XXL	100 – 110



Indication:

- Back pain, back pain radiating down the leg (sciatica)
- Light to moderate degeneration of the lower lumbar spine and lower thoracic spine (e.g. osteochondrosis, facet syndrome)
- Vertebral disk protrusion
- Beginning spondylolysis/spondylolisthesis
- Osteoarthritis

Material: Tactel

Effects:

- Stabilizing and relieving back support

Features:

- High back support
- A straight model with an adaptable cross strap for individual fitting
- Made from the skin friendly material Tactel
- Stabilization by plastic splints and coil springs

BRACES & SUPPORTS – BACK



1068 DOSI EQ POSTURE SUPPORT

Size	Clothing Sizes (continental) Women	Clothing Sizes (continental) Men
XS	30 – 32	
S	34 – 36	46 – 48
M	38 – 40	48 – 50
L	42 – 44	52 – 54
XL	46 – 48	56 – 58

- Indication:**
- Postural weakness
 - Preventive purpose
 - Capacity overload of thoracic and lumbar spine
 - Postural reminder

Material: Tactel

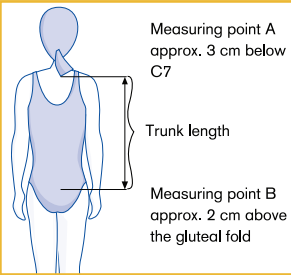
- Effects:**
- Increases the awareness of the body posture
 - Acts excellent when learning how to recognise a better body posture
 - Is to be used regularly during the day and can be accompanied with an exercise program

- Features:**
- A one-piece posture support with a back section and attached straps
 - Made from the skin friendly material Tactel
 - The back section is stabilized by coil springs
 - Can be used along with any other Otto Bock soft back supports



50R20 DORSO OSTEO CARE

Size	Trunk Length (cm)
S	39 – 41.5
M	42 – 44.5



- Indications:**
- Osteoporotic changes in the thoracic and lumbar spine
 - Follow-up treatment of the osteoporotic vertebral body fractures
 - The Dosi Osteo Care can be used during the stages of osteoporosis in which muscle action can be used and increased

Material: SpaceTex® fabric

- Effects:**
- The upper body is raised into an upright position by retracting the shoulder girdle and abdomen
 - This is achieved with adjustable straps and an adaptable back plate
 - Thoracic and abdominal breathing is not restricted
 - Back muscles are activated

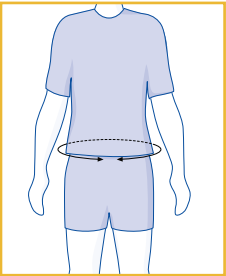
- Features:**
- Easy application using the backpack principle
 - SpaceTex® fabric in the areas of the back, axilla and abdominal support for greater comfort
 - Lightweight
 - All material components can be removed from the orthosis and washed
 - The orthosis is hardly noticeable and can be worn inconspicuously under clothes

BRACES & SUPPORTS – BACK



1055 DOSI COMFORT BACK SUPPORT

Size	Waist Circumference (cm)
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100
XXL	100 – 110



- Indication:**
- Low back pain
 - Low back pain radiating down the leg (sciatica)
 - Vertebral disk protrusion or prolapse (conservative treatment and postoperative stabilization)
 - Moderate degeneration of the lower lumbar spine, spondylolisthesis (vertebral gliding)
 - Spinal stenosis
 - Osteoarthritis

Material: PCM™ (Phase Change Material)

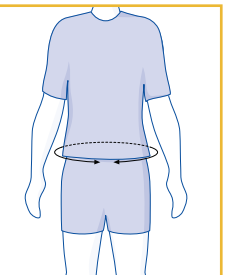
- Effects:**
- Supports and relieves the pressure on the spine

- Features:**
- An anatomically shaped back support
 - Four preshaped metallic splints
 - Flexible cross strap system
 - Excellent comfort is achieved by the benefits of the material along with the design of the support



1056 DOSI STABLE COMFORT BACK SUPPORT

Size	Waist Circumference (cm)
S	64 – 72
M	72 – 80
L	80 – 90
XL	90 – 100
XXL	100 – 110



- Indication:**
- Low back pain
 - Low back pain radiating down the leg (sciatica)
 - Vertebral disk protrusion or prolapse (conservative treatment and postoperative stabilization)
 - Moderate degeneration of the lumbar spine
 - Spondylolisthesis (vertebral gliding)
 - Spinal stenosis
 - Osteoarthritis

Material: PCM™ (Phase Change Material)

- Effects:**
- Extra stabilizing and relieving back support with four preshaped metal splints

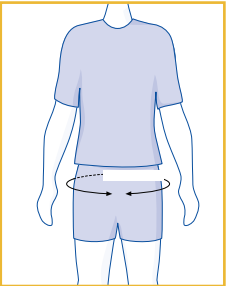
- Features:**
- Increased overall height compared to 1055
 - An anatomically shaped back support
 - Flexible cross strap system
 - Excellent comfort is achieved by the benefits of the material along with the design of the support

BRACES & SUPPORTS – BACK



50R30 LUMBO TRISTEP

Size	Pelvis Circumference (cm)
S	64 – 80
M	80 – 100
L	100 – 125



- Indication:**
- Post-operative stabilization of the lumbar spine
 - Post-operative correction
 - Facet syndrome
 - Lumbar spinal canal stenosis
 - Lumbar intervertebral foramina stenosis
 - Degenerative instability
 - Spondylolysis, spondylolisthesis
 - Herniated intervertebral disk
 - Follow-up treatment of vertebral body fractures of the lower lumbar spine (L4/L5)

- Effects:**
- Systematic rehabilitation process of the lumbar spine in three steps
 - Mobility and activity of the patient are increased step by step, while the stabilizing and securing function is gradually decreased during the course of therapy
 - The aim of the Lumbo TriStep is to restore muscular balance in the lumbar spine section

Therapy stage 1
During the phase of acute pain, it is important to secure and stabilize the affected structures of the lumbar spine.
Therapy stage 2
By removing the bridging component the patient's freedom of movement is increased, which helps to stimulate natural muscle function.
Therapy stage 3
The support element is completely removed. The Lumbo TriStep compresses and supports the muscles in the lumbar area. In this phase of therapy, the pad can be used optionally. The massaging effect of the pad improves blood circulation and stimulates muscle function.

- Features:**
- Lumbar spine bridging orthosis that can change stabilization level by removing components
 - Bridging element in stage 1
 - Autoadaptive support element adapts to the shape of the body
 - Lightweight and slim design
 - Optimal compression achieved by insertable, textile side parts
 - Easy application due to closures with pockets to grasp
 - A pad in stage 3 increases the blood circulation and stimulates muscle function

BRACES & SUPPORTS – NECK/SHOULDER/ELBOW



Problems in the neck/shoulder/elbow areas are quite common and Otto Bock has just the right solutions. A stable neck collar can help reduce pain and give you the support you need.

From arm abduction orthosis with static and dynamic design to epicondylitis support, a wide range of functional supports and orthoses are available and ensure suitable and indication-specific treatment. The products are notable for their high quality, advanced materials and production technology.



100/102 NECKY STRAIGHT 6/10 CM

Size	Neck Height (cm)
One size circumference	S 6 cm height
	M 10 cm height

- Indications:**
- Torticollis
 - Whiplash
 - Overuse
 - Degenerative changes
 - Stiffness

- Effects:**
- Relieves pain by limiting movement of the head and neck

Material: Polyester, Viscose, Acryl, Lycra®



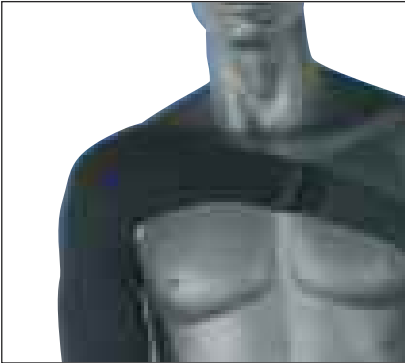
155 NECKY COMFORT NECK COLLAR

Size	Neck Height (cm)
One size circumference	S 6 cm height
	M 8 cm height
	L 10 cm height

- Indication:**
- Torticollis
 - Whiplash
 - Overuse
 - Degenerative changes

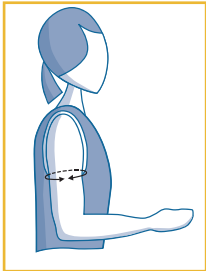
Material: PCM™ (Phase Change Material)

- Effects:**
- Relieves pain by limiting movement of the head and neck
- Features:**
- Anatomic cut provides superior comfort



7126 SHOULDER SUPPORT

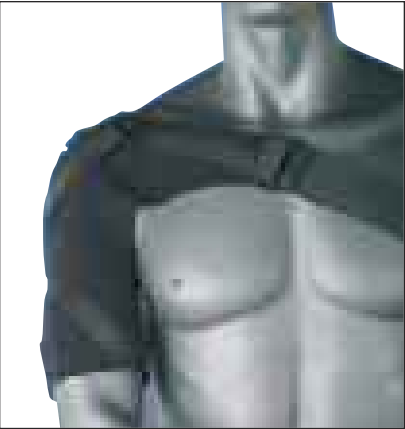
Size	Biceps Circumference (cm)
XS	24 – 28
S	28 – 32
M	32 – 35
L	35 – 38
XL	38 – 42



- Indication:**
- Acute and chronic shoulder pain
 - Degeneration of the rotator cuff
 - Tendomyopathies of the shoulder
 - Strains of the shoulder muscles

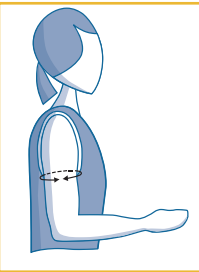
Material: Thermoprene™

- Effects:**
- Warming and pain relieving
- Features:**
- Warming and comfortable shoulder support
 - Increases awareness of the shoulder
 - Can be worn right or left



5055 ACRO COMFORT SHOULDER SUPPORT

Size	Biceps Circumference (cm)
XS	24 – 28
S	28 – 32
M	32 – 35
L	35 – 38
XL	38 – 42



- Indication:**
- Acute and chronic shoulder pain
 - Degeneration of the rotator cuff
 - Tendomyopathies of the shoulder
 - Strains of the shoulder muscles
 - Minor shoulder instabilities
 - Post-operative shoulder support (especially after arthroscopic surgery)

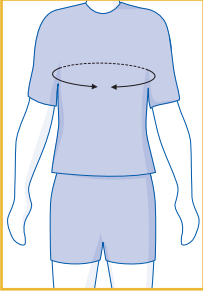
Material: PCM™ (Phase Change Material)

- Effects:**
- Stabilizing, limiting unwanted motion
- Features:**
- Anatomically designed shoulder support
 - A strap system makes it possible to adjust stability and flexibility
 - A silicone lining helps the brace stay in correct position
 - Can be worn on right or left



5065 OMO NEUREXA

Side	Size	Chest Circumference (cm)
left right	XS	79 – 86
left right	S	87 – 94
left right	M	95 – 102
left right	L	103 – 110
left right	XL	111 – 118



- Indication:**
- Shoulder pain and dysfunction including subluxation due to neurologic conditions such as:
- Stroke, hemiplegia
 - Brachial plexus injuries
 - Peripheral nerve damage in cervical spine and shoulder area

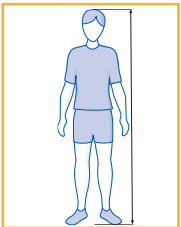
Material: PCM™ (Phase Change Material)

- Effects:**
- Support the shoulder by positioning of the humeral head
 - Improvement of body posture achieved through improved sensori-motor control and support
 - Facilitates gait training due to the improvement of body posture and symmetry
 - Pain relief
 - Positioned in slight external rotation to avoid spastic patterns
- Features:**
- PCM,™ allows the patient to wear the orthoses all day long
 - Soft and comfortable to wear
 - Muscle stimulation pads can be integrated into orthosis
 - Individual adjustment
 - Silicone strips on the inside to optimize function and prevent sliding



50A11 OMO IMMOBIL ROTATION

Side		Size	Body Height (cm)
left	right	S	150 – 165
left	right	M	165 – 175
left	right	L	from 175

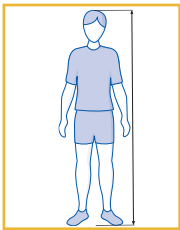


- Indication:**
Indications that require immobilization of the shoulder joint in 10°, 20° or 30° external rotation or a combination of abduction and external rotation, e.g.:
- Condition after anterior shoulder dislocation
 - Bankart lesion (conservative treatment and postoperative immobilization)
- Effects:**
- Functional shoulder positioning in 0°, 15°, 30°, 60° or 90° of abduction
 - Additional immobilization in 10°, 20° or 30° of external rotation
- Features:**
- Individually adaptable
 - Sturdy tubular frame construction
 - Hook-and-loop abduction wedge for quick abduction angle adjustment
 - Separate elements to set external rotation to 10°, 20° or 30°
 - All abduction and external rotation angles can be combined as desired
 - Breathable and washable pad
 - Easy to use
 - Easy to adjust – no need for tools
 - Attractive, low profile design



50A10 OMO IMMOBIL

Size	Body Height (cm)
S	150 – 165
M	165 – 175
L	from 175

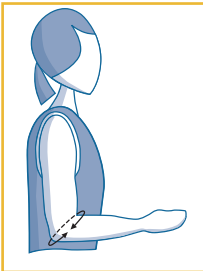


- Indication:**
Postoperative and post-traumatic conditions of the shoulder and arm requiring abducted positioning, e.g.:
- Rotator cuff surgery
 - Reduction of posterior shoulder dislocation
 - Subcapital fractures of the humerus
 - Shoulder impingement syndrome
 - Shoulder replacement surgery
 - Operative shoulder stabilization
- Effects:**
- Functional shoulder positioning in 0°, 15°, 30°, 60° or 90° of abduction
 - Relief of the shoulder joint and support of rehabilitation process
- Features:**
- Individually adaptable
 - Sturdy tubular frame construction
 - One version for left and right sides
 - Hook-and-loop abduction wedge for quick abduction angle adjustment
 - Breathable and washable pad
 - Easy to use
 - Easy to adjust – no need for tools
 - Attractive, low profile design
 - Service component 29A222 can be added for shoulder immobilization in external rotation

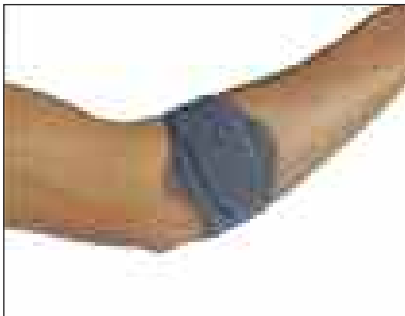


4801 EPIFLEX ELBOW SUPPORT

Size	Elbow Circumference (cm)
S	24 – 25
M	26 – 27
L	28 – 30
XL	31 – 33



- Indication:**
- Lateral epicondylitis (tennis elbow)
 - Medial epicondylitis (golfer's elbow)
- Material:** Neoprene™, Elastane, Polyethylene
- Effects:**
- Relieves the pressure on the tendon origin
 - Pain relieving
- Features:**
- Semi rigid plastic elbow clasp
 - Easy to apply and adjust
 - Lined with Neoprene™ which is warming and prevents migration
 - Can be applied to either arm



50A3 EPI FORSA PLUS

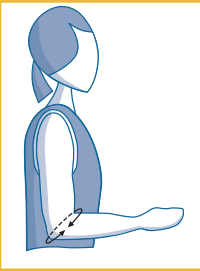
Size
Universal

- Indication:**
- Lateral epicondylitis (tennis elbow)
 - Medial epicondylitis (golfer's elbow)
- Material:** Polyamide, Velour
- Effects:**
- Targeted and controlled compression on the forearm muscles
 - Reduces load on the tendon insertion
- Features:**
- Optimal distribution of pressure due to stable, soft padded plastic core
 - Pad provides precise targeted compression
 - Can be applied to either arm
 - Flexible band provides dynamic, continuous regulation of pressure
 - Hook-and-loop closure allows for continuous adjustment
 - Universal size



7921 ELBOW SUPPORT

Size	Elbow Circumference (cm)
S	23 – 25
M	25 – 28
L	28 – 31
XL	31 – 33



Indication:

- For muscle strain
- Injury prevention

Material: Neoprene™/SBR

Effects:

- Warming

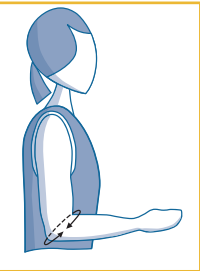
Features:

- Warmth and support of the elbow joint



7122 EPI ULNA

Size	Elbow Circumference (cm)
XS	21 – 23
S	23 – 25
M	25 – 28
L	28 – 31
XL	31 – 33
XXL	33 – 36



Indication:

- Lateral epicondylitis (tennis elbow)
- Medial epicondylitis (golfer's elbow)
- Irritations (post-operative, post-traumatic or chronic)
- Tendomyopathies and other soft tissue diseases

Material: Neoprene™

Effects:

- Warming
- Relieves the pressure on the tendon
- Pain relieving

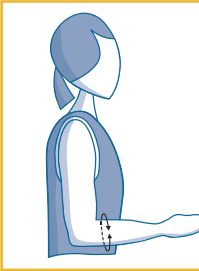
Features:

- Soft, warming elbow brace
- Adjustable width
- Two pads that can be placed on desired spots for pressure distribution are included



50A7 EPI SENA

Size	Forearm Circumference (cm)
XXS	17 – 19
XS	19 – 21
S	21 – 23
M	23 – 25
L	25 – 27
XL	27 – 29
XXL	29 31



Indication:

- Lateral/medial epicondylitis (tennis elbow, golfer's elbow)
- Irritations (post-operative, post-traumatic or chronic)
- Joint effusions and periarticular swellings (e.g. osteoarthritis or arthritis)
- Tendomyopathies and other soft tissue diseases (e.g. chronic bursitis) and injuries

Effects:

- Sensorimotor control and thus activation of muscle stabilization
- Targeted compression of edema, hematoma and effusions
- Pain relief
- Improves function of the elbow joint

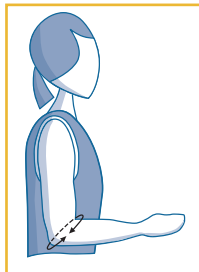
Features:

- SKINGUARD® Technology: antibacterial, odour-inhibiting, skin-friendly, climate-regulating, pleasantly soft, latex-free
- Three dimensional, flat-knit fabric
- Open mesh structure at crease elbow
- Compression-reduced edges
- Integrated anatomical silicone pads



7124 HYPER-EX WARM

Size	Elbow Circumference (cm)
XS	21 – 23
S	23 – 25
M	25 – 28
L	28 – 31
XL	31 – 33



Indication:

- Prevention of hyperextension of the elbow joint, e.g. after sprains, ligament injuries, and post-surgery
- Elbow pain
- Acute and chronic irritations of the elbow joint
- Post-traumatic and post-operative irritations
- Osteoarthritis of the elbow joint
- Acute and chronic bursitis in the elbow region
- Rheumatic joint effusions

Effects:

- Prevents hyperextension

Features:

- Bilateral metal hinges on each side of the elbow for lateral stabilization
- Cross over straps prevent hyperextension

Material: Neoprene™

BRACES & SUPPORTS – HAND & WRIST



Hands are considered to be our most frequently and intensively used tools. No wonder that their performance limit is stretched a bit from time to time. Repeated overloading of our hands can result in soft tissue irritations — both acute and chronic — in the wrist, finger and thumb joints. Otto Bock finger and hand orthoses are designed to treat these symptoms.

They are notable for their:

- User-friendliness
- High functionality
- Comfortable anatomical fit
- Lightweight

BRACES & SUPPORTS – HAND & WRIST

8910 WRIST SUPPORT BASIC

Size

Universal



Indication:

- Overuse
- Inflammatory problems

Effects:

- Provides a comfortable support to the wrist
- Warming
- Acts as a reminder

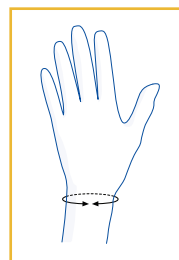
Features:

- Short and supple
- Leaves the palm uncovered
- One size, can be used for left or right

4067 CHILDREN'S WRIST SUPPORT



Side		Size	Wrist Circumference (cm)
left	right	XXXS	8.5 – 9.5
left	right	XXS	9.5 – 10.5
left	right	XS	10.5 – 11.5
left	right	S	11.5 – 13
left	right	M	13 – 14
left	right	L	13.5 – 15
left	right	XL	15 – 17



Indication:

- Acute and chronic wrist irritations
- Functional treatment of post-traumatic (e.g. sprains) and post-operative irritations of the wrist
- Functional treatment of tendinopathies
- Juvenile arthritis

Material: Darlexx®

Effects:

- Supports and stabilizes through a palmar splint

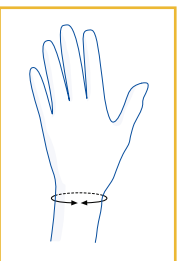
Features:

- Made from a soft and breathable material
- Adjustable thumb grip

4103 MANU 3D WRIST SUPPORT SHORT



Side		Size	Wrist Circumference (cm)
left	right	XS	14 – 15
left	right	S	15 – 16
left	right	M	16 – 17
left	right	L	17 – 18.5
left	right	XL	18.5 – 20
left	right	XXL	20 – 22



Indication:

- Acute and chronic overuse irritations
- Functional treatment tendinopathies
- Osteoarthritis

Material: 3D - Polyamide, Elastane, Softelle

Effects:

- Provides a comfortable support to the wrist
- Acts as a reminder

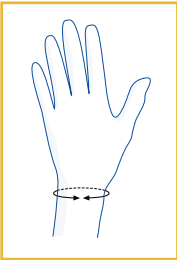
Features:

- Short, anatomically shaped wrist support
- Made from a material that does not absorb moisture and keeps skin dry
- Leaves the palm uncovered
- Adjustable thumb strap
- Wrap design



4026 DIAGONAL COMFORT THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	13 – 14
left	right	S	14 – 16
left	right	M	16 – 18
left	right	L	18 – 20
left	right	XL	20 – 22



- Indication:**
- Acute and chronic overuse irritations
 - Functional treatment of tendinopathies
 - Osteoarthritis

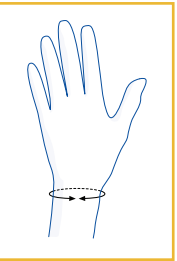
Material: Darlexx®

- Effects:**
- Supports the thumb joints
- Features:**
- Classic thumb support in a soft and breathable material
 - A flexible coil spring provides functional support



50A4 RHIZO FORSA THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	S	13 – 16.5
left	right	M	16.5 – 20.5



- Indication:**
- Injury to the collateral ligaments of the first metacarpophalangeal joint (e.g. skier's thumb)
 - Dislocations
 - Irritations and wear of the thumb saddle joint and the first metacarpophalangeal joint (e.g. rheumatoid arthritis)

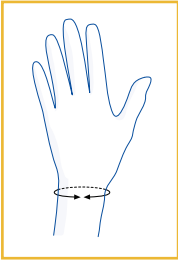
Material: Polyamide, Velour

- Effects:**
- Stabilizes the first metacarpophalangeal joint and the thumb saddle joint
- Features:**
- High stability with interior plastic core that can be shape-adapted if desired
 - Slim and light construction
 - Soft, skin-friendly and comfortable textile material
 - User-friendly hook-and-loop closure
 - The reversing loop can be easily repositioned (optional)



4084 THUMBOFORM SHORT THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	13 – 14
left	right	S	14 – 16
left	right	M	16 – 18
left	right	L	18 – 20
left	right	XL	20 – 22



- Indication:**
- Chronic, post-traumatic or post-operative irritations of the thumb saddle joint and the metacarpophalangeal joint
 - After ulnar collateral ligament lesions (skier's thumb)
 - Rheumatoid arthritis

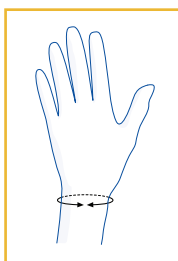
Material: Neoprene™/Turbocast®

- Effects:**
- Stabilizes the thumb joints
- Features:**
- A thumb brace with an inside pocket where the plastic insert is placed
 - A thermoplastic insert is placed in a pocket and is individually molded
 - Comfortable and stable brace



4085 THUMBOFORM LONG THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	13 – 14
left	right	S	14 – 16
left	right	M	16 – 18
left	right	L	18 – 20
left	right	XL	20 – 22



- Indication:**
- Chronic, post-traumatic or post-operative irritations in the area of the thumb saddle joint and the metacarpophalangeal joint
 - After ulnar collateral ligament lesions (skier's thumb)
 - Rheumatoid arthritis

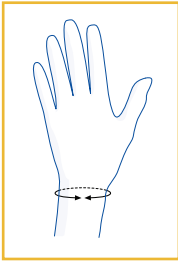
Material: Neoprene™/Turbocast®

- Effects:**
- Stabilizes the thumb joints
- Features:**
- A thumb brace with an inside pocket where the plastic insert is placed
 - A thermoplastic insert is placed in a pocket and is individually molded
 - Comfortable and stable brace
 - 2 cm longer than 4084



4086 THUMBOFORM EXTRA LONG THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	13 – 14
left	right	S	14 – 16
left	right	M	16 – 18
left	right	L	18 – 20
left	right	XL	20 – 22



Indication:

- de Quervain's disease
- Osteoarthritis
- Ligament injuries to the Carpal Metacarpal or Metacarpophalangeal joint
- Thumb hyperextension problems
- Pain in the wrist and thumb regions

Material: Neoprene™/Turbocast®

Effects:

- Provides excellent stability to the Carpal Metacarpal and Metacarpophalangeal joints of the thumb
- Limits wrist motion

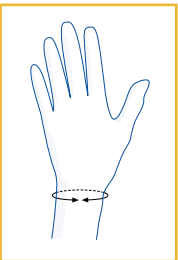
Features:

- Extra long thumb brace made from Neoprene™ providing an excellent fit
- A thermoplastic insert is placed in a pocket and is individually molded
- Free motion to the distal thumb joint (IP)
- A wide elastic hook and loop strap around the wrist provides extra wrist stability



4021 ULNAR DEVIATION WRIST SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	13 – 14
left	right	S	14 – 16
left	right	M	16 – 18
left	right	L	18 – 19
left	right	XL	19 – 20



Indication:

- Ulnar deviation (early stages), cumulative trauma

Material: Darlexx®

Effects:

- For day and night use to correct early stages of deviation and prevent further deformity

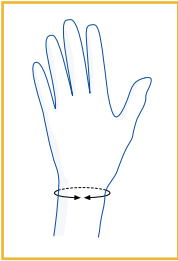
Features:

- Adjustable finger straps gently align the Metacarpophalangeal joints
- Removable stay to provide palmar support



4146 MANU 3D POLLEX WRIST & THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	14 – 15
left	right	S	15 – 16
left	right	M	16 – 17
left	right	L	17 – 18.5
left	right	XL	18.5 – 20
left	right	XXL	20 – 22



Indication:

- Acute and chronic wrist irritations
- Functional treatment of post-traumatic injuries (e.g. sprains, subluxations, luxations) and post-operative irritations of the wrist
- Carpal tunnel syndrome
- Functional treatment of tendinopathies
- de Quervain's disease
- After ulnar collateral ligament lesions
- Rheumatoid arthritis

Material: 3D - Polymide, Elasthane, Softelle

Effects:

- Provides excellent support to the wrist through a palmar, plastic splint and through the design of the brace
- A laterally placed coil spring supports the thumb

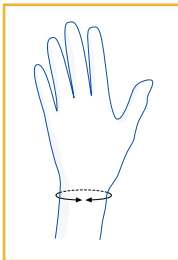
Features:

- An anatomical design makes this a very comfortable support
- Places the thumb in a functional position
- Easy to apply thanks to the clean design and the wide straps
- Adjustable thumb closure
- Made from a material that does not absorb moisture and thereby keeps your skin dry
- Wrap design



4025 MANU RHEUMA WRIST AND THUMB SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	14.5
left	right	S	15.5
left	right	M	17
left	right	L	18.5
left	right	XL	20
left	right	XXL	21.5



Indication:

- Rheumatoid arthritis
- Osteoarthritis
- Functional treatment of post-traumatic injuries (e.g. sprains, subluxations, luxations) and post-operative irritations of the wrist and thumb
- Functional treatment of tendinopathies

Material: Darlexx®

Effects:

- Supports the wrist and thumb effectively

Features:

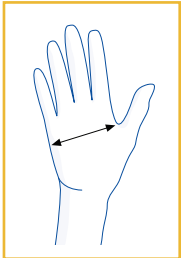
- Made from a soft and breathable material
- Flexible plastic palmar splint for the wrist and coil spring for the thumb
- Easy application through D-rings & circumferential design
- Straight model to fit the arthritic hand
- The placement of the hook and loop straps is chosen to avoid any pressure on ulnar head

BRACES & SUPPORTS – HAND & WRIST



50P13 MANU SENA

Side		Size	Wrist Circumference (cm)
left	right	XS	14 – 15
left	right	S	15 – 16
left	right	M	16 – 17
left	right	L	17 – 18
left	right	XL	18 – 19
left	right	XXL	19 – 20



Indication:

- Irritations such as tenosynovitis, tendomyopathy, light joint contusion, post-traumatic (distortions) and post-operative, reactive irritations and joint pain
- Rheumatoid arthritis
- Carpal tunnel syndrome
- Degenerative wrist problems (arthritis)
- Feeling of instability (e.g. snapping ulna)

Material: Polyamide and Lycra®

Effects:

- Support for targeted compression and stabilization of the wrist
- Supports sensorimotor functions and activates muscle stabilization

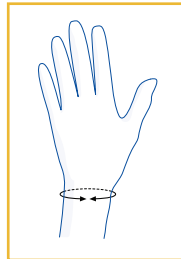
Features:

- SKINGUARD® Technology: antibacterial, odour-inhibiting, skin-friendly, climate-regulating, pleasantly soft, latex-free
- Skin-friendly and hard-wearing two-thread flat knit fabric (Polyamide and Lycra®) with an integrated radial pad
- Optional volar plastic splint and elastic wrist strap help to provide additional wrist stabilization



4024 MANU RHEUMA FLEX WRIST SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	14.5
left	right	S	15.5
left	right	M	17
left	right	L	18.5
left	right	XL	20
left	right	XXL	21.5



Indication:

- Rheumatoid arthritis
- Osteoarthritis
- Acute and chronic wrist irritations
- Functional treatment of post-traumatic injuries (e.g. sprains, subluxations, luxations) and post-operative irritations of the wrist
- Functional treatment of tendinopathies

Material: Darlexx®

Effects:

- Supports the wrist through a flexible palmar splint

Features:

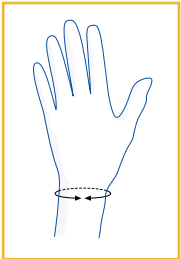
- Made from a soft and breathable material
- Easy application through D-rings & circumferential design
- Straight model to fit the arthritic hand
- The placement of the hook and loop straps is chosen to avoid any pressure on ulnar head
- Adjustable thumb strap

BRACES & SUPPORTS – HAND & WRIST



4143 MANU 3D BASIC WRIST SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	14 – 15
left	right	S	15 – 16
left	right	M	16 – 17
left	right	L	17 – 18.5
left	right	XL	18.5 – 20
left	right	XXL	20 – 22



Indication:

- Acute and chronic wrist irritations
- Functional treatment of post-traumatic injuries (e.g. sprains, subluxations, luxations) and post-operative irritations of the wrist
- Carpal tunnel syndrome
- Functional treatment of tendinopathies
- Osteoarthritis

Material: 3D - Polymide, Elasthane, Softelle

Effects:

- Provides excellent support to the wrist through a palmar, plastic splint and through the design of the brace

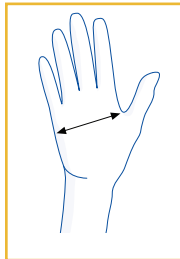
Features:

- Anatomical design makes this a very comfortable support
- Adjustable thumb strap
- Easy to apply thanks to the clean design and the wide straps
- Made from a material that does not absorb moisture and thereby keeps your skin dry
- Wrap design



50P12 MANU FORSA VOLAR

Side		Size	Hand Width (cm)
left	right	S	up to 8.5
left	right	M	from 8.5



Indication:

- Acute and chronic irritations in the wrist, e.g. carpal tunnel syndrome
- Post-traumatic/post-operative conditions which require a high degree of immobilization of the wrist
- Partial paralysis

Material: Velour

Effects:

- A high degree of immobilization of the wrist in a functional position

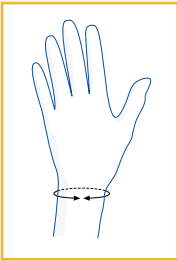
Features:

- A functional y-splint provides a stable volar support & ulnar/radial support
- For comfortable anatomical positioning the palm rests on a pad which is attached by hook and loop closure
- Soft, skin-friendly and comfortable velour for high comfort
- Circular hook and loop straps for easy adjustability and application
- Light weight
- Attractive design



4055 MANU COMFORT WRIST SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS – S	13 – 16
left	right	M – L	16 – 19
left	right	XL – XXL	19 – 23



Indication:

- Acute and chronic wrist irritations
- Functional treatment of post-traumatic injuries (e.g. sprains, subluxations, luxations) and post-operative irritations of the wrist
- Carpal tunnel syndrome
- Functional treatment of tendinopathies
- Osteoarthritis

Material: PCM™ (Phase Change Material)

Effects:

- Stabilizing the wrist through a palmar splint

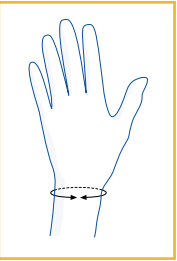
Features:

- A very comfortable wrist brace due to the design and the material
- Two coil springs on the dorsal side for extra stability
- Easy to apply through hook and loop closure with D-rings
- The central hook and loop strap is wide for optimal support



4058 MANU STABLE COMFORT WRIST SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS – S	13 – 16
left	right	M – L	16 – 19
left	right	XL – XXL	19 – 23



Indication:

- Acute and chronic wrist irritations
- Functional treatment of post-traumatic injuries (e.g. sprains, subluxations, luxations) and post-operative irritations of the wrist
- Carpal tunnel syndrome
- Functional treatment of tendinopathies
- Osteoarthritis
- Instability of the wrist
- Drop hand (paresis of the radial nerve)

Material: PCM™ (Phase Change Material)

Effects:

- Stabilizing the wrist through a palmar side splint

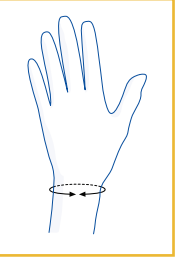
Features:

- A very comfortable wrist brace due to the design and the material
- Two coil springs on the dorsal side for extra stability
- Easy to apply through hook and loop closure with D-rings
- The central hook and loop strap is wide for optimal support
- 2 cm longer than 4055
- Wider, more rigid stay



4088 WRISTOFORM WRIST SUPPORT

Side		Size	Wrist Circumference (cm)
left	right	XS	13 – 14
left	right	S	14 – 16
left	right	M	16 – 18
left	right	L	18 – 20
left	right	XL	20 – 22



Indication:

- Tendonitis
- Post-operative management
- Post trauma
- Complex wrist injuries
- Carpal tunnel syndrome
- General wrist instabilities

Material: Neoprene™/Turbocast®

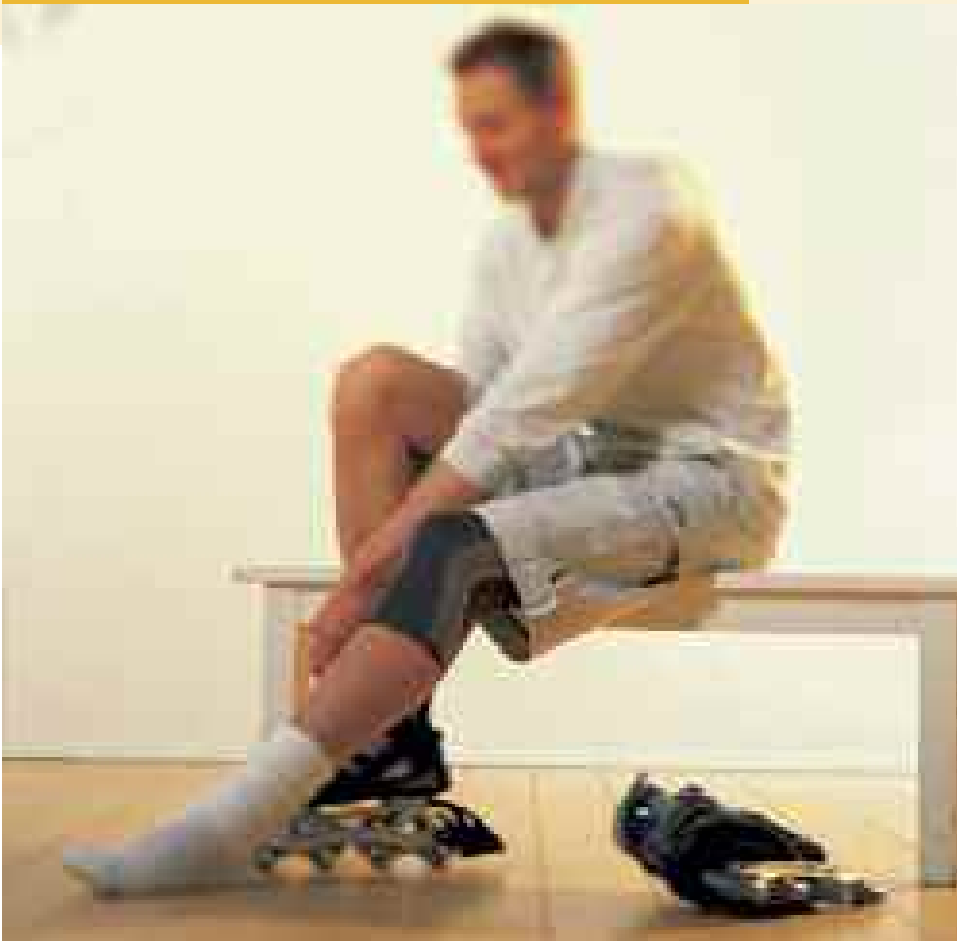
Effects:

- Provides excellent stability to the wrist
- Prevents wrist flexion and extension

Features:

- Extra stable wrist brace made, providing an excellent fit
- Stabilizes the wrist by a palmar splint and dorsal placed thermoplastic insert
- A dorsal thermoplastic insert is individually molded
- Full thumb motion maintained
- Non elastic wide hook and loop strap to ensure the stability
- Adjustable closure at the thumb

BRACES & SUPPORTS – KNEE

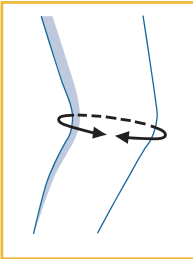


As our largest joint, the knee is subjected to great stress on a daily basis. Impact forces, frequently repeated wrong movements, axis deviations, overloading (e.g. overweight) and many other factors have negative effects on the knee. Impact forces such as falls in sports often compromise the ligamentous apparatus. These injuries require appropriate temporary treatment. Long-term overloading will lead to chronic pain such as gonarthrosis and requires suitable long-term therapeutic support. Otto Bock supports and orthoses offer complete solutions for postoperative and conservative therapy.

2041 ELASTIC KNEE STOCKING



Size	Mid Patella Circumference (cm)
XS	30
S	32.5
M	35.5
L	36.5
XL	41.5
XXL	45
XXXL	48



Indication:

- Knee pain
- Swelling

Material: Polyamide, Elasthane

Effects:

- Pain relief
- Swelling control
- Light support and increases awareness of the knee
- Increases proprioceptive awareness

Features:

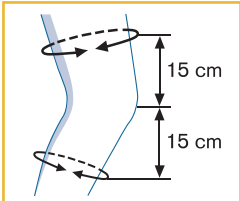
- Elastic knee sleeve in a flexible material with graduated knitting
- Thin
- Fits well underneath clothes

BRACES & SUPPORTS – KNEE

8361 GENU THERMA



Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain without ligament laxities or perception of instability
- Soft tissue irritations (e.g. tendomyopathies, tendonitis, swelling, light infusions)
- Overuse (e.g. sports)
- Long-term soft tissue irritations after injuries and/or surgery
- Beginning osteoarthritis

Material: SpaceTex®

Effects:

- Provides warmth and compression, which helps to reduce pain and improves blood circulation
- Supports sensorimotor control

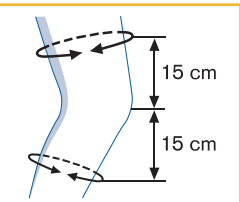
Features:

- Elastic and supple, made from a warming material
- Anatomic design with soft trimmings to provide excellent comfort and fit
- Can be used for left or right

8364 GENU THERMA PATELLA



Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain without ligament laxities or perception of instability
- Soft tissue irritations (e.g. tendomyopathies, tendonitis, swelling, light infusions)
- Overuse (e.g. sports)
- Long-term soft tissue irritations after injuries and/or surgery
- Beginning osteoarthritis
- Patello-femoral pain syndrome (e.g. chondromalacia, beginning osteoarthritis of the patello-femoral joint)

Material: SpaceTex®

Effects:

- Provides warmth and compression, which helps to reduce pain and improve blood circulation
- Supports sensorimotor control
- Reduces pressure on the patella

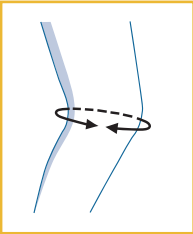
Features:

- Elastic and supple, made from a warming material
- Anatomic design with soft trimmings to provide excellent comfort and fit
- Opening for patella
- Can be used for left or right



7953 KNEE SUPPORT

Size	Mid Patella Circumference (cm)
S	30 – 33
M	33 – 36
L	36 – 39
XL	39 – 42



Indication:

- For preventing minor knee injuries

Material: Neoprene™/SBR

Effects:

- Provides warmth and acts as a pain relieving support
- Increases proprioceptive awareness
- Light compression

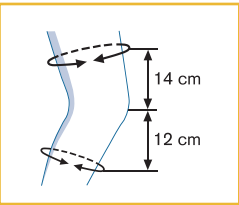
Features:

- A knee support offering warmth and pain relief



50K15 GENU SENSА

Size	12 cm below mid patella	14 cm above mid patella
XXS	25 – 28	35 – 38
XS	28 – 31	38 – 41
S	31 – 34	41 – 44
M	34 – 37	44 – 47
L	37 – 40	47 – 50
XL	40 – 43	50 – 53
XXL	43 – 46	53 – 56



Indication:

- Feeling of instability
- Irritations (post-operative, post-traumatic and chronic)
- Joint effusion and swelling (e.g. in case of osteoarthritis or arthritis)
- Knee pain caused by strain (tendomyopathies, insertion ligamentosis)

Effects:

- Relief and tracking of the patella
- Support of sensorimotor control and thus activation of muscle stabilization
- Targeted compression for edema, hematoma and effusions
- Pain relief
- Improves function of the knee joint

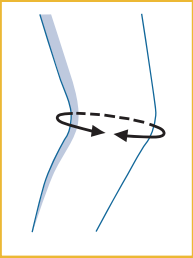
Features:

- SKINGUARD® Technology: antibacterial, odour-inhibiting, skin-friendly, climate-regulating, pleasantly soft, latex-free
- Three-dimensional, flat-knitted fabric
- Flexibility in the popliteal fossa
- Compression-reduced edges
- Integrated silicone pad
- Laterally positioned seam
- Medial and lateral coil springs



8385 GENU THERMA TENDON

Size	Mid Patella Circumference (cm)
S	35 – 38
M	38 – 41
L	41 – 44
XL	44 – 48



Indication:

- Osgood-Schlatter
- Jumper's Knee
- Anterior knee pain

Material: Neoprene™

Effects:

- Relieves the pressure on the patellar tendon insertion
- Provides pain relief

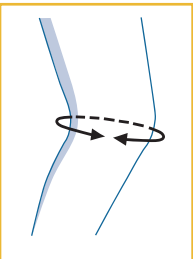
Features:

- Knee strap with a soft pad inside
- Excellent for sports and exercise
- Can be used for left or right



8386 GENU THERMA CHONDRO

Size	Mid Patella Circumference (cm)
S	35 – 38
M	38 – 41
L	41 – 44
XL	44 – 48
XXL	48 – 51



Indication:

- Osgood Schlatter
- Jumper's Knee
- Anterior knee pain

Material: Neoprene™

Effects:

- Relieves the pressure on the patellar tendon insertion

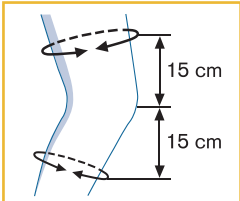
Features:

- Patella tendon strap
- The adjustable closure above the knee prevents the brace from migrating or rotating
- Excellent for sports and exercise
- Can be used for left or right



8360N GENU CAREZZA PATELLA STABILIZER

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Patello-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patello-femoral joint)
- Patello-femoral malalignment
- Stabilization after patella-luxation/-subluxation
- Stabilization after lateral release surgery

Material:

- Innovative material that combines compression and breathability

Effects:

- Keeps patella in correct position
- Prevents patella-luxation
- Supports sensorimotor control

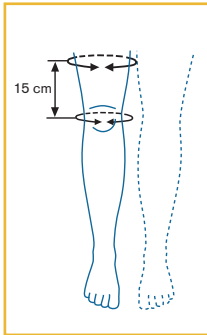
Features:

- Flexible patella stabilizer
- C-shaped pad, which is adjusted by two separate straps
- Short and supple, low model
- Comfortable to wear
- Low profile to fit underneath clothes
- Can be used for left or right



50K20 GENU TRACK

Size	Circumference 15 cm above patella centre
XS	33 – 38
S	38 – 46
M	46 – 53
L	53 – 61
XL	61 – 69
XXL	69 – 79



Indication:

- Patelloluxation and subluxation
- Patellofemoral pain syndrome
- After lateral release surgery
- After patella tendon injury
- Chondromalacia of the patella
- Arthritis

Material: SpaceTex®

Effects:

- Dynamic restraint of the guide pad reduces patella lateralization

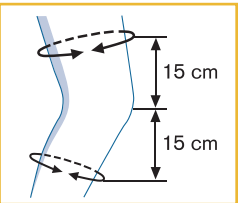
Features:

- Dynamic restraint of pressure on the guide pad
- Required pressure is individually adjustable
- Integrated 10° extension stops proprioceptively prevent hyperextension
- Breathable SpaceTex® material
- Popliteal fossa



8358N GENU CAREZZA PATELLA STABILIZER

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with no or minimal ligament laxities and no or light perception of instability
- Soft tissue irritations (e.g. tendomyopathies, insertion tendinitis, swellings, light infusions)
- Overuse (e.g. sports)
- Post-traumatic and post-surgical irritations
- Beginning osteoarthritis
- Patello-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patellofemoral joint)

Material:

- Innovative material that combines compression and breathability

Effects:

- Support and stabilization by medial & lateral coil springs
- Supports sensorimotor control

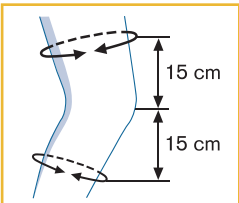
Features:

- Anatomic design with soft trimmings to provide excellent comfort and fit
- Two elastic straps



8362N GENU CAREZZA, WRAPAROUND

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with no or minimal ligament laxities and no or light perception of instability
- Soft tissue irritations (e.g. tendomyopathies, insertion tendonitis, swellings, light effusions)
- Overuse (e.g. sports)
- Post-traumatic and post-surgical irritations
- Beginning osteoarthritis
- Patello-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patellofemoral joint)

Material:

- Innovative material that combines compression and breathability

Effects:

- Support and stabilization by medial & lateral coil springs
- Supports sensorimotor control

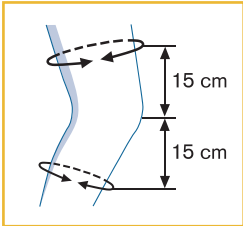
Features:

- Wraparound design for easy application
- Anatomic design with soft trimmings to provide excellent comfort and fit
- Two elastic straps
- Can be used for left or right



8356N GENU DIREXA

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with light to moderate ligament laxities and/or perception of instability
- Osteoarthritis with light to moderate degenerative ligament laxities and/or perception of instability (cruciate ligament accentuated)
- Post-traumatic and post-operative ligament laxities or perception of instability
- Rheumatoid arthritis
- Patella-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patello-femoral joint)

Material:

- Innovative material that combines compression and breathability

Effects:

- Sensorimotor performance improvements through controlled compression
- Pain relief and functional improvement of the knee joint
- Supports patellar tracking

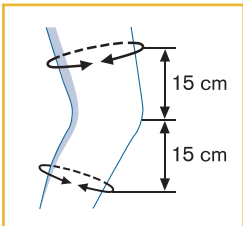
Features:

- Two elastic circular straps
- Grip tongues for easy brace positioning
- Anatomic design with soft trimmings
- Covered polycentric joints in a slim and light design
- Joints can easily be removed from the lateral and medial pockets
- Two elastic straps
- Can be used for left or right
- Provides greatest comfort even in hollow of the knee



8353N GENU DIREXA, WRAPAROUND

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with light to moderate ligament laxities and/or perception of instability
- Osteoarthritis with light to moderate degenerative ligament laxities and/or perception of instability
- Post-traumatic and post-operative ligament laxities or perception of instability
- Rheumatoid arthritis
- Patella-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patello-femoral joint)

Material:

- Innovative material that combines compression and breathability

Effects:

- Sensorimotor performance improvements through controlled compression
- Pain relief and functional improvement of the knee joint

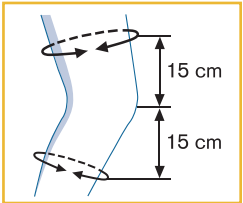
Features:

- Wraparound design for easy application
- Anatomic design with soft trimmings to provide excellent comfort and fit
- Covered polycentric joints in a slim and light design
- Joints can easily be removed from the lateral and medial pockets
- Two elastic straps
- Can be used for left or right
- Provides great comfort even in popliteal fossa



8357N GENU DIREXA STABLE

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with light to moderate ligament laxities and/or perception of instability with indication for permanent or temporary limitation of flexion and/or extension
- Osteoarthritis with light to moderate degenerative ligament laxities and/or perception of instability (ACL, PCL)
- Post-traumatic and post-operative ligament laxities or perception of instability
- Rheumatoid arthritis
- Patella-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patello-femoral joint)

Material:

- Innovative material that combines compression and breathability

Effects:

- Sensorimotor performance improvements through controlled compression
- Pain relief and functional improvement of the knee joint
- Protection from hyperextension
- Supports patellar tracking

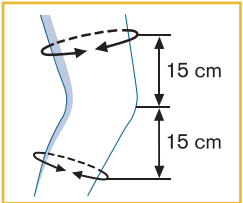
Features:

- Polycentric joints with changeable extension and flexion stops (extension 0°; 10°; 20°; 30°; 45°) (flexion 0°; 10°; 20°; 30°; 45°; 60°; 75°; 90°)
- Two non-elastic, circumferential strap systems
- Covered joint bars (suited for contact sport)
- Provides great comfort even in popliteal fossa
- Grip loops for easy brace positioning
- Can be used for left or right



8367N GENU DIREXA STABLE, WRAPAROUND

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with light to moderate ligament laxities and/or perception of instability with indication for permanent or temporary limitation of flexion and/or extension
- Osteoarthritis with light to moderate degenerative ligament laxities and/or perception of instability (cruciate ligament accentuated)
- Post-traumatic and post-operative ligament laxities or perception of instability
- Rheumatoid Arthritis
- Patello-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patello-femoral joint)

Material:

- Innovative material that combines compression and breathability

Effects:

- Sensorimotor performance improvements through controlled compression
- Pain relief and functional improvement of the knee joint
- Protection from hyperextension

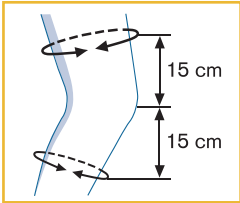
Features:

- Polycentric joints with gradual changeable and flexion stops (extension 0°; 10°; 20°; 30°; 45°) (flexion 0°; 10°; 20°; 30°; 45°; 60°; 75°; 90°)
- Two non-elastic, circumferential strap systems
- Covered joint bars (suited for contact sport)
- Provides great comfort even in popliteal fossa
- For patients with limited grip strength and hand function
- Can be used for left or right



8359N GENU DIREXA STABLE, LONG

Size	15 cm below mid patella	15 cm above mid patella
XS	32 – 35	40 – 44
S	35 – 38	44 – 48
M	38 – 41	48 – 52
L	41 – 44	52 – 56
XL	44 – 48	56 – 61



Indication:

- Knee pain with severe and/or complex ligament laxities and/or perception of instability with option to limit flexion and extension
- Protection of the knee joint in the rehabilitation phase after ligament surgery
- Pre-operative or chronic instability of the anterior and/or posterior cruciate ligament (ACL, PCL)
- Severe and/or complex post-traumatic instability of the knee
- Severe and/or complex degenerative instability of the knee (e.g. in severe osteoarthritis, rheumatoid arthritis)
- Functional conservative treatment of collateral ligament injuries
- Hyperextension of the knee
- Stabilization/limitation of range of motion in meniscopathies and after meniscal surgery
- Severe instability in patello-femoral pain syndrome (e.g. chondromalacia, chondropathy of the patella, beginning osteoarthritis of the patello-femoral joint)

Effects:

- Sensorimotor performance improvements through controlled compression
- Pain relief and functional improvement of the knee joint
- Protection from hyperextension
- Collateral stabilization
- Four-strap stabilization
- Supports patellar tracking

Features:

- Polycentric joints with changeable extension and flexion stops (extension 0°; 10°; 20°; 30°; 45°) (flexion 0°; 10°; 20°; 30°; 45°; 60°; 75°; 90°)
- Four non-elastic, circumferential strap systems
- Covered joint bars (suited for contact sport)
- Provides great comfort even in popliteal fossa
- Grip loops for easy brace positioning

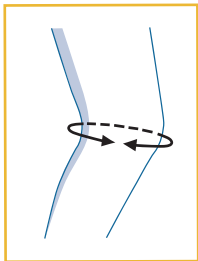
Material:

- Innovative material that combines compression and breathability



8156 COMBI STABLE KNEE SUPPORT

Size	Mid Patella Circumference (cm)
XS	28 – 30
S	30 – 33
M	33 – 36
L	36 – 39
XL	39 – 42
XXL	42 – 45



Indication:

- Patello-femoral pain syndrome
- Osteoarthritis with beginning or moderate degenerative ligament laxity/instability
- Post-traumatic and post-surgical laxities/instabilities
- Rheumatoid Arthritis

Effects:

- Stabilizes the knee
- Reduces the load on the knee

Features:

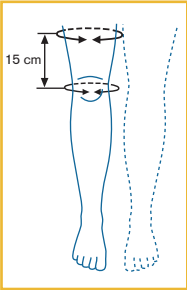
- Knee brace with covered, double jointed hinges on each side
- Velcro closure on thigh and calf
- Detachable patella pad for additional support
- Optional posterior knee straps to prevent hyperextension

Material: Thermorlene™



50K13 GENU AREXA

Side		Size	Circ. (cm) Knee joint	Circ. (cm) 15cm above mid patella
left	right	S	32 – 37	39 – 46
left	right	M	37 – 41	46 – 53
left	right	L	41 – 46	53 – 61
left	right	XL	46 – 50	61 – 69
left	right	XXL	50 – 56	69 – 79



Indication:

- Knee pain with severe and/or complex ligament laxities and/or perception of instability. Option to limit flexion and extension:
- Protection of the knee joint after surgery of the anterior cruciate ligament (ACL) and/or the collateral ligaments (MCL, LCL)
 - Preoperative or chronic instability of the anterior cruciate ligament (ACL)
 - Functional conservative treatment of collateral ligament injuries
 - Severe and/or complex post-traumatic instability of the knee (ACL, MCL, LCL)
 - Severe and/or complex degenerative instability of the knee (e.g. in severe osteoarthritis, rheumatoid arthritis)
 - Stabilization/limitation of range of motion after meniscal surgery

Effects:

- Provides optimal stabilization
- Limits the anterior drawer effect
- Provides collateral ligament stabilization
- Defined range of motion
- Protects against hyperextension

Features:

- Click 2 Go flexion and extension stops for tool free ROM adjustments
- Click 2 Go condyle baskets and width adapters
- Autoadaptive wings for high wearing comfort
- Anatomical strap pad to relieve the tibia edge and prevent rotation of the orthosis
- Comfortable paddings for frame and straps
- Circumferential straps around the knee to prevent migration
- Individually positionable distal knee strap
- Low profile and light weight design
- TechnoGel® pads for optimal fit and pressure point application
- Service friendly strap attachments



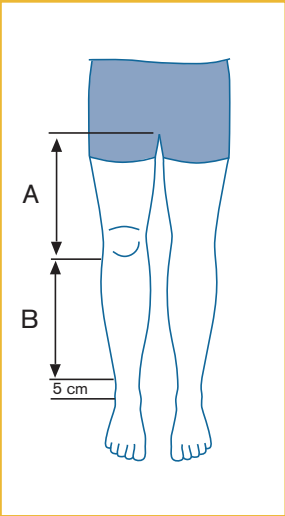
28K20/28K21 GENU ARTHRO

Thigh module (28K20)

Side		Size	Length Step height–popliteal space (A)
left	right	XS	70 – 80
left	right	S	80 – 90
left	right	M	90 – 100
left	right	L	100 – 110
left	right	XL	110 – 120

Transtibial module incl. foot part (28K21)

Side		Size	Length Popliteal space – 5cm above laterale malleolus (B)
left	right	XS	270 – 305
left	right	S	305 – 340
left	right	M	330 – 365
left	right	L	360 – 395
left	right	XL	395 – 430



28K20 and 28K21 must be purchased together

- Indication:**
- Medial osteoarthritis of the knee
 - Lateral osteoarthritis of the knee

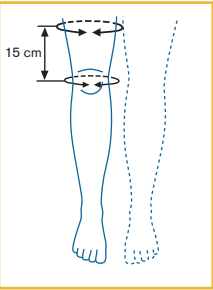
- Effects:**
- Relief of the affected knee joint by means of the classic 3-point pressure system that produces a varus or valgus moment.

- Features:**
- Easy anatomical adaptability of the tubular frame
 - Lever for optimal load distribution
 - Unilateral joint
 - Pressure pads in 3 different thicknesses
 - Frame pads made of breathable SpaceTex®
 - Strap pads with easy quick release
 - Lightweight
 - Foot stirrup prevents brace translation



7940 THIGH SUPPORT

Size	Thigh Circumference (cm)
S	48 – 50
M	50 – 52
L	52 – 54
XL	54 –56



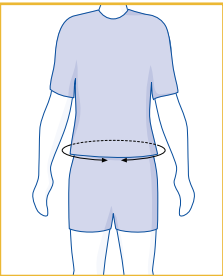
- Indication:**
- For strains and muscle injuries
- Material:** Neoprene™/SBR

- Effects:**
- Warming, which increases blood flow
 - Provides light compression
- Features:**
- A thigh support offering warmth and pain relief



7981 THERMAL SHORTS

Size	Waist Circumference (cm)
S	70
M	80
L	90
XL	100



- Indication:**
- For strains and inflammation in the groin, hips and lumbar region
- Material:** Neoprene™/SBR

- Effects:**
- Warming, which increases blood flow
 - Prevents and relieves stiff muscles
 - Provides a light compression
- Features:**
- Provides warmth and support and reduces stiffness

BRACES & SUPPORTS – ANKLE/FOOT

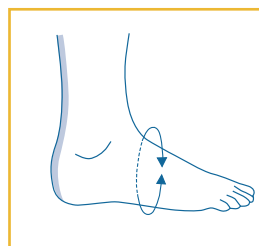


Our ankle supports and orthoses were developed in close collaboration with physicians and therapists. As a result, they are extremely functional. All products are notable for functionality in accordance with the indication for use, high wearer comfort and practice-oriented design. They are fabricated from state-of-the-art materials and meet patients individual requirements for fitting and physical therapy.

7973 ANKLE SUPPORT



Size	Circumference (cm)
S	20 – 22
M	22 – 24
L	24 – 26
XL	26 – 28

**Indication:**

- Achilles tendon tenderness and stiffness in the ankle joint

Material: Neoprene™/SBR

Effects:

- Warming, which increases blood flow

Features:

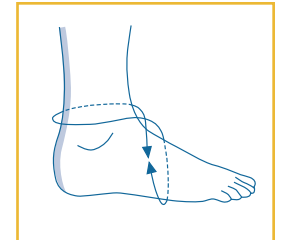
- Soft, flexible ankle support
- Fits easily into shoe

BRACES & SUPPORTS – ANKLE/FOOT

504 ELASTIC ANKLE SUPPORT



Size	Circumference (cm)
S	51 – 53
M	53 – 55
L	55 – 57
XL	57 – 59
XXL	59 – 61

**Indication:**

- Ankle sprain
- Slight instability of the ankle joint

Material: Viscose, Polyamide, Elasthane

Effects:

- Supports the ankle
- Swelling can be reduced by compression

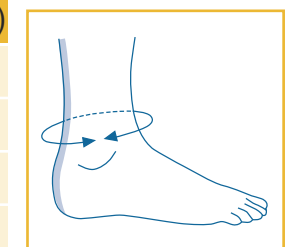
Features:

- Offers good support, yet very soft and comfortable
- Extremely flexible and can therefore be adapted to individual compression needs
- Can be used for all kinds of activities
- Fits easily into the shoe
- Looped around the ankle

50S5 MALLEO SENSA



Size	Above Ankle Circumference (cm)
XS	17 – 19
S	19 – 21
M	21 – 23
L	23 – 25
XL	25 – 27
XXL	27 – 29

**Indication:**

- Feelings of instability
- Irritations (post-operative, post-traumatic or chronic)
- Joint effusions and swellings with arthrosis and arthritis
- Tendomyopathies
- Ligament insufficiency

Material: Viscose, Polyamide, Elasthane

Effects:

- Support of sensorimotor control and thus activation of muscle stabilization
- Targeted compression for edema, hematoma, and effusions
- Pain relief
- Improves function of the ankle joint

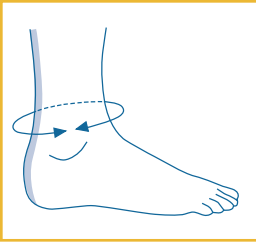
Features:

- SKINGUARD® Technology: antibacterial, odour-inhibiting, skin-friendly, climate-regulating, pleasantly soft, latex-free
- Three-dimensional, flat-knitted fabric
- Flexibility at the ankle joint
- Compression reduced edges
- Integrated anatomical Silicone pads



7175 MALLEOFORM ANKLE SUPPORT

Size	Above Ankle Circumference (cm)
XS	18 – 20
S	20 – 22
M	22 – 24
L	24 – 26
XL	26 – 28



Indications:

- Ankle sprains/strains
- Medial/lateral instabilities
- Ligament injuries

Material: Thermoprene™/Turbocast®

Effects:

- Comfortable, customized ankle stabilization

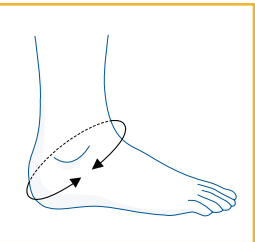
Features:

- Thermoprene material and a heat-moldable plastic insert that conforms to the patient's foot (in a process that's both quick and comfortable for the patient)
- Extra figure 8 strap to provide increased stability



50S3 MALLEO SPRINT

Size	Ankle Circumference (cm)
XS	25.5 – 28.0
S	28.0 – 30.5
M	30.5 – 33.0
L	33.0 – 35.5
XL	35.5 – 38.5



Indication:

- Chronic instability of the ankle joint
- Ligament instabilities
- Postoperative or posttraumatic treatment after ligament ruptures
- (Severe) ankle sprains (with ligament rupture)

Effects:

- The special exoskeletal reinforcement provides a high degree of stabilization with and without a shoe
- Limits eversion and inversion of the foot
- Does not limit plantar and dorsal flexion

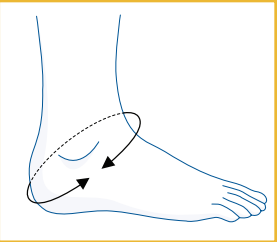
Features:

- The combination of a plastic skeleton and strap guide assures a high degree of stability and prevents undesired movements
- High level of wearer comfort thanks to an outstanding anatomical fit
- Easy entry to the orthosis
- Optimum hook closure system
- Can be applied left or right



50S8 MALLEO TRISTEP

Side		Size	Ankle Circumference (cm)
left	right	XS	25.5 – 29
left	right	S	29.5 – 31.5
left	right	M	32 – 34
left	right	L	34.5 – 36.5
left	right	XL	37 – 39



Indication:

- Acute and chronic ligament instability and injuries of the ankle
- Diseases and injuries of the peroneal tendon
- Inflammatory and degenerative joint diseases of the ankle
- Post-operative application for phase-adapted protection and rehabilitation after ligament reconstruction

Features:

- Auto-adaptive design offers a high level of wearer comfort
- Auto-adaptive medial and lateral stabilization elements offers a high level of wearer comfort
- Adjustments and removal of support elements without the use of tools
- The hook-and-loop closures are length adjustable
- Orthosis can be opened completely, so that applying is very comfortable
- Individual adjustment to patient needs, due to the optional function and stabilization elements

Phase I – Inflammation Phase: (Days 1–3)

Effects:

- Reducing pain
- Reducing swelling according to the RICE rule

Features:

- Malleo TriStep® is used with all its components
- Foot positioning in a slight pronation using the foot cup and pronation strap:
 - Assures sufficient stabilization
 - Allows inflammation to recede
 - Encourages primary healing
- Weight bearing on the foot as well as toe movements should be pain-free; use forearm crutches if necessary
- Foot cup is worn day and night, but not in a shoe

Phase II – Proliferation Phase: (Days 4–28)

Effects:

- Targeted mobilization under controlled loads
- Increasing the level of activity
- Improving muscular stability

Features:

- Red stabilizing elements and a support strap guarantee the required level of stability
- Over the course of therapy, the red elements can be replaced with the grey, more flexible ones
- Sports activities are possible, but should first be discussed with the attending physician / physiotherapist – The orthosis must be applied during sports activities
- Continuing to use the positioning splint at night is recommended since the foot automatically drops into the supination position, which increases the risk of recurrent ruptures

Phase III – Remodulation Phase: (Days 29–42)

Effects:

- Improving functional stability and mobility
- Improving coordination and balance

Features:

- Malleo TriStep® is only used as a support during this phase (proprioceptive effect/ neuromuscular training)
- Optional use of the stabilization strap
- Malleo TriStep® may also be worn for prevention (e.g. during sports)



509 HALLUX VALGUS COMFORT

Side		Size
left	right	Universal

Indication:

- Hallux Valgus

Material: PCM™ (Phase Change Material), Polyamide, Elasthane

- Effects:**
- The strap helps align the big toe, making it easier for the muscles to pull properly
 - Often provides pain relief
- Features:**
- Good fit
 - Can prevent and slow the development of the deformity
 - PCM™ padding provides excellent comfort



510 HALLUX VALGUS COMBO COMFORT

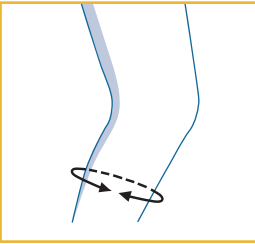
Side		Size
left	right	Universal

- Indication:**
- Hallux Valgus
- Material:** Polyamide, Elasthane
- Effects:**
- The strap helps align the big toe, making it easier for the muscles to pull properly
 - Often provides pain relief
- Features:**
- A longer strap than 509
 - Is wrapped around the ankle
 - Good fit
 - Can prevent and also decrease the development of the deformity
 - PCM™ padding provides excellent comfort



7960 CALF SUPPORT


Size	Calf Circumference (cm)
S	33 – 35
M	35 – 37
L	37 – 39
XL	39 – 41








- Indication:**
- Suitable for shin splints/periostitis and muscle tears
- Material:** Neoprene™/SBR
- Effects:**
- Provides a light support
 - Increases blood circulation and keeps the calf muscles warm
- Features:**
- Increases the blood flow and relieving pain
 - Thin and supple

Service Parts: 1048-1079
Additional Pads for Dosi Supports

Plastic Pad in Fabric Pocket		
Art. no.	Suitable for Supports	
1030	1064, 1069, 1070, 1079	







Service Parts: 50R20
Dorso Osteo Care

Back Pad			
	Art. no.	Size	
	29R249	S	
		M	
Abdominal Support			
	Art. no.	Size	
	29R261	universal	
Shoulder Straps			
	Art. no.	Size	
	29R260	universal	
Waist Straps			
	Art. no.	Size	
	29R262	universal	
Clip Rivets			
	Art. no.	Contents	Colour
	504K8	12-pack	white

Service Parts: 4024 – 4146

Splints

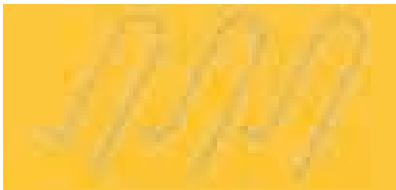
Art. no.	Plastic splints for 4024, 4025, 4055, 4143, 4146
4002	 = soft
4000	 = medium
4001	 = hard
Art. no.	Plastic splints for 4058
4014	 = hard
Art. no.	Aluminum splints for 4024, 4025, 4055, 4143, 4146
4014	

The support splints follow the contour of the wrist. They are pre-shaped to provide a functional resting position of the wrist as well as to fit to the shapes of the palm, wrist and forearm. Plastic splints can be custom-adapted with hot water (78 – 80 °C / 167 –176 °F). The material retains its shape and is environmentally friendly. Available in three rigidity ranges. The aluminum splints do not contain heavy metals such as chrome, nickel or zinc. They can be customized to the patient's individual contours.

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Spare Parts for Omo Immobil 50A10 and 50A11
29A222

Three elements for immobilization of the shoulder in 10°, 20°, 30° external rotation position.

External Rotation Set			
	Art. no.	Side	Size
	29A222=R-S/M	Right	S/M
	29A222=R-L	Right	L
	29A222=L-S/M	Left	S/M
	29A222=L-L	Left	L


29A217

Use the replacement cover while the fabric cover is being cleaned.

Replacement Cover		
	Art. no.	Size
	29A217=S	S
	29A217=M	M
	29A217=L	L


29A225

Suitable for daily arm muscle training. Physiotherapist can show the patient various exercises.

Exercise Ball		
	Art. no.	Size
	29A225	Universal

Service Parts: 50K13
Genu Arexa

Service Set



Art. no.	Side		Size
29K80	left	right	S
	left	right	M
	left	right	L
	left	right	XL
	left	right	XXL

Consisting of:

- 2 x Upper part pad
- 2 x Lower part pad
- 2 x Strap pad
- 1 x Frame pad
- 1 x Pad cover
- 1 x Tibia pad
- 2 x Textil cover for TechnoGel knee pad
- 2 x TechnoGel Knee pad
- 2 x Ergonomic closure
- 6 x Hook-and-loop Closure Y-design
 - Micro hook tape, back-to-back
- 12 x Plastic pin – upper part
- 12 x Plastic pin – lower part
- 2 x Stop set
- 6 x Strap
- 4 x Distance ring

Service Parts: 28K20/28K21
Genu Arthro

Hook-and-loop Straps

Art. no.	Strap Width		Length		Colour
	cm	inch	cm	inch	
170Z=400 - 7	3.8	1.5	40	15.8	black
170Z=900 - 7	3.8	1.5	90	35.4	black

Hook-and-loop Closure Y-Design

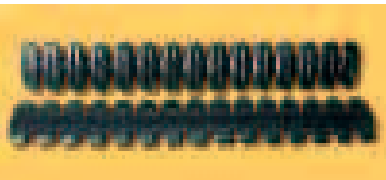
Art. no.	Strap Width		Colour
	mm	inch	
29Y161=40 - 7	3.8	1.5	black

Ergonomic Closure



Art. no.	Strap Width	
	cm	inch
170D20	3.8	1.5

Strap Pads



Art. no.	Strap Width		Length	
	cm	inch	cm	inch
29S29	3.8	1.5	44	17.3

Frame Pad



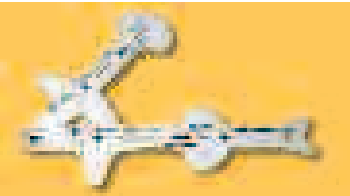
Art. no.	Side		Size
	left	right	
29S26	left	right	XS
	left	right	S
	left	right	M
	left	right	L
	left	right	XL

Foot Stirrup



Art. no.	Side	
	left	right
29K56	left	right

Measuring Template



Art. no.	
743A26	

COMMON CONDITIONS – BACK

CHRONIC BACK PAIN, COMPRESSED DISC, SCIATICA

Persistent long-term pain localized to the lumbar region (small of the back), possibly with pain radiating down the legs.

Possible Causes

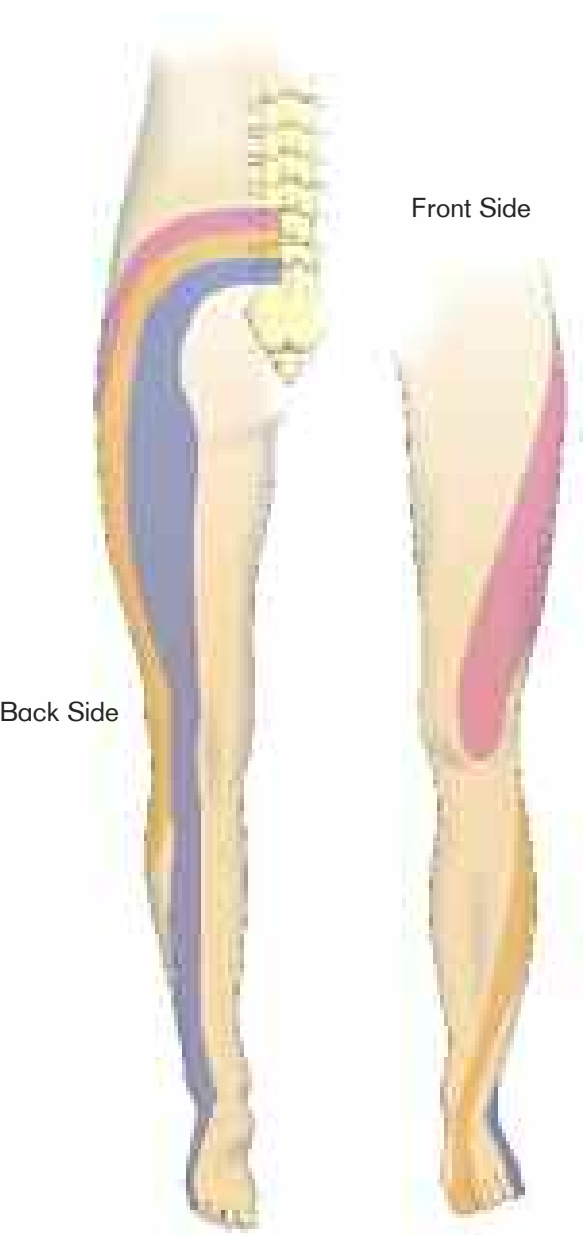
Repeated low back pain • Poor posture • Physical inactivity • Physically demanding work, e.g. heavy lifting • Poor working or sitting positions • Accident

Symptoms

Pain may be experienced when coughing or sneezing
Pain in the lumbar region, possibly with radiating pain, which often follows a specific pattern. The pain often intensifies when the nerve is trapped. Strength, sensation and reflexes may be affected

Treatment

Rest in the case of acute pain (approx. 1–3 days)
Contact a doctor or therapist for diagnosis
Mobility training, stabilization training and weight training program
Active posture correction
Avoid sitting if this causes more pain
Properly fitted back orthosis



COMMON CONDITIONS – BACK

LOWER BACK PAIN

Pain in the lumbar region, often rapid onset, possibly radiating down one side into the buttock/or leg.

Possible Causes

- Lifting while at the same time twisting the back, for example, when clearing snow
- Poor working position
- Poor warming up
- Stiff/short muscles

Symptoms

- Reduced mobility and stiffness in the lumbar region
- Cramps in the back muscles on one side of the body
- Sharp pain when executing certain movements

Treatment

- Rest in a pain free position
- Activity without pain over the first few days to increase circulation e.g. short walks
- Gradual increase in exercise in the form of mobility, stability and strength training
- Do not take part in activities which make the pain worse
- See a doctor or physiotherapist if the condition worsens or fails to get better
- Properly fitted back orthosis



COMMON CONDITIONS – BACK

WEAK BACK (BACK INSUFFICIENCY)

Pain is localized to the small of the back and adjacent areas. Symptoms may persist for a few days to weeks, alternating with pain-free periods.

Possible Causes

- Poor posture, hypermobility, overexertion
- Reduced trunk stability due to weak muscles
- Tense Muscles: Back of thigh, gluteal muscles and hip flexors

Symptoms

- Tiredness and pain in the small of the back
- Stiffness and pain in the mornings or after exertion
- Pain is accentuated after sitting for long periods of time, standing, lifting and working while leaning forward or after participation in sports

Treatment

- Active posture correction
- Stabilization training of the trunk and back muscles
- Strength training
- Stretching
- Properly fitted back orthosis



MUSCLE PAIN IN THE NECK AND SHOULDERS

Common among industrial workers, hairdressers and office workers where one-sided static working movements are being performed.

Possible Causes

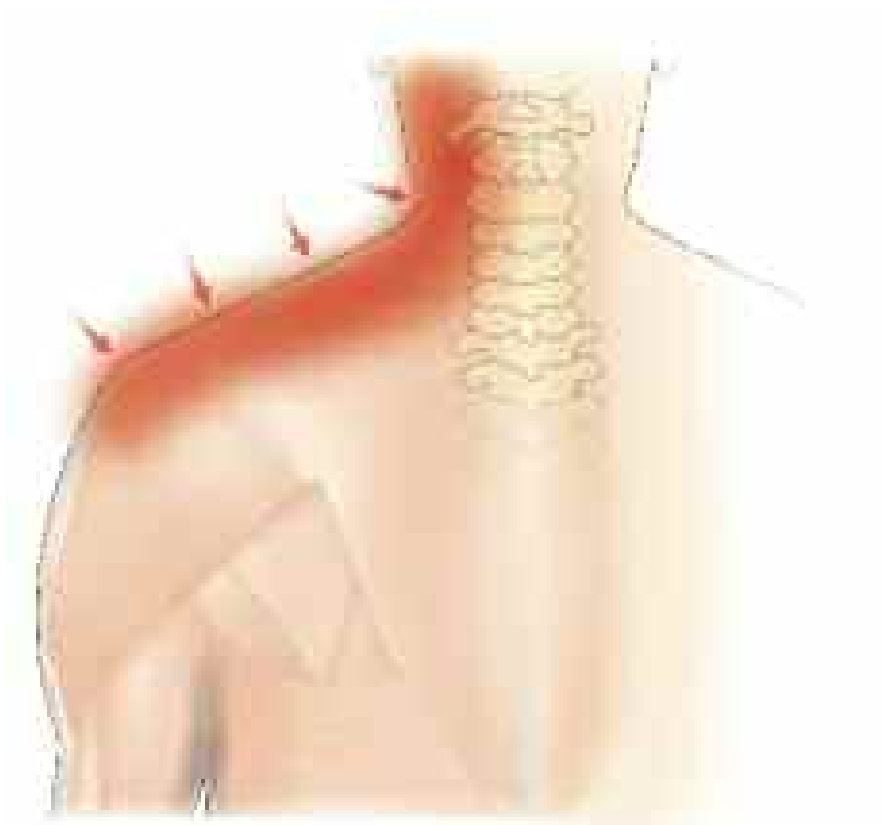
- Weak and/or short muscles in neck and shoulders
- Poor posture/working conditions
- Reduced ROM in the thoracic spine
- Stress/anxiety

Symptoms

- Pain, soreness and aches in neck and shoulders
- Stiffness when moving your head
- Headaches

Treatment

- Avoid static work movement
- Train weak muscles
- Stretch tight muscles
- ROM for thoracic spine
- Posture correction
- Properly fitted back orthosis



OVERUSE/INFLAMMATION IN MUSCLES AND TENDON INSERTIONS AROUND THE SHOULDER JOINT

Common problems among painters, carpenters, waitresses, hairdressers and many athletes.

Possible Causes

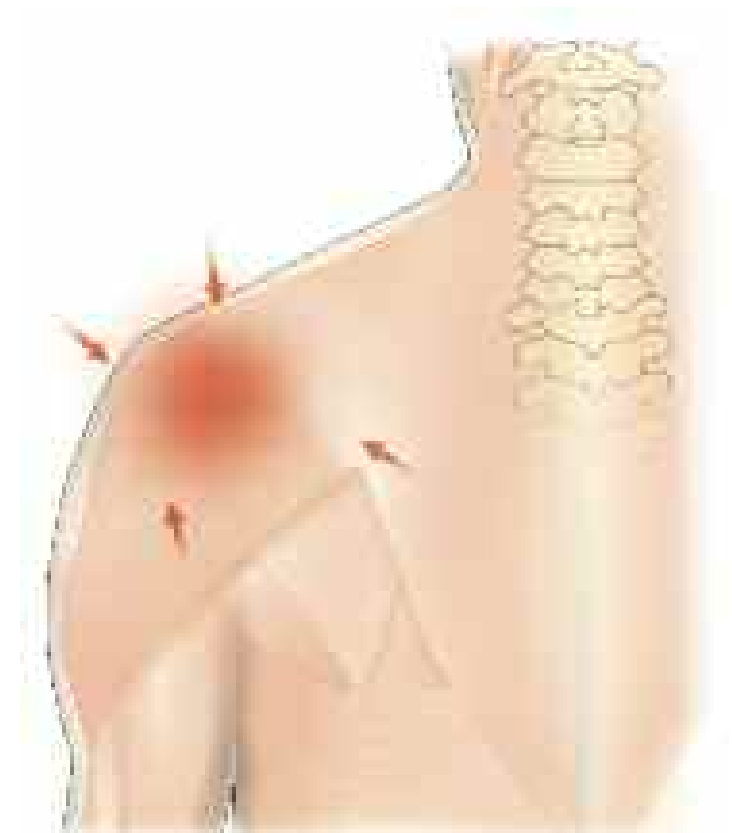
- Instability/degenerative changes
- Stiffness in the thoracic spine
- Poor posture
- Static work above the shoulders

Symptoms

- Pain and reduced strength in the shoulder
- Difficulty getting dressed, combing hair and/or sleeping on the shoulder
- Pain and soreness during and after activity

Treatment

- Avoid static work
- Adapt working positions
- Training of ROM, coordination, strength and stability
- Properly fitted back orthosis



COMMON CONDITIONS – ELBOW

EPICONDYLITIS, COMMONLY KNOWN AS TENNIS ELBOW OR GOLFER'S ELBOW

Can be acute due to overstrain and sometimes develops into a chronic condition.

Possible Causes

Repetitive unilateral/static work of the hand and forearm

Symptoms

Pain on the outside or inside of the elbow

Lack of strength

The trouble is aggravated by brushing teeth, writing, lifting, sports, or computer work

Treatment

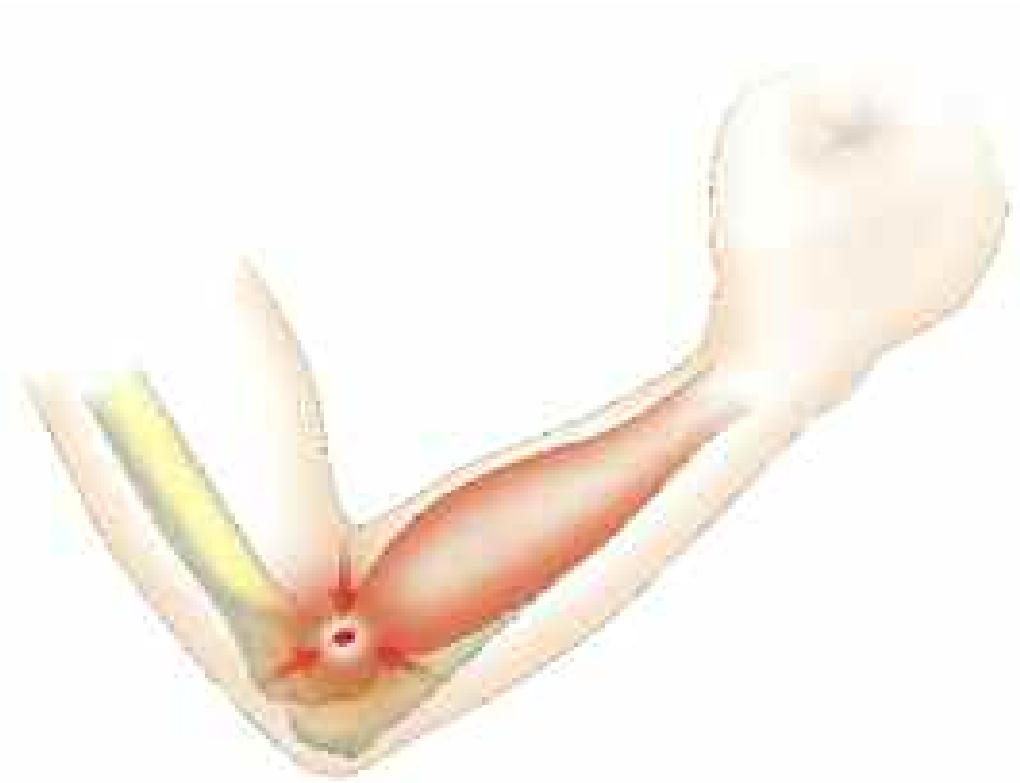
Eccentric training with bent or straight elbow

Stretching

Elbow support/orthosis

Adjust working space and equipment

Avoid activities that aggravate the symptoms



COMMON CONDITIONS – HAND

OSTEOARTHRITIS IN THE BASAL JOINT (CARPOMETACARPAL) OF THE THUMB

Osteoarthritis occurs when the cartilage loosens and its quality deteriorates and eventually disappears partly or completely. The defective cartilage causes an uneven load that makes the joint unstable and painful.

Possible Causes

Age

Hereditary

Earlier injury

Symptoms

Local pain in and around the joint

Motion pain may increase over the years, intense pain may appear

Resting pain

Swelling

Strength

Decreased grip

Treatment

A firm splint or an elastic thumb brace

A night splint for proper positioning

Ergonomic advice

Daily training and active ROM without the brace



COMMON CONDITIONS – HAND

CARPAL TUNNEL SYNDROME

A type of (compression) neuropathy (nerve damage) caused by compression and irritation of the median nerve in the wrist. The nerve is compressed within the carpal tunnel, a bony canal in the palm side of the wrist that provides passage for the median nerve to the hand.

Possible Causes

- Hormonal factors
- Pregnancy
- Repetitive movement
- Rheumatic diseases
- Earlier wrist fractures

Symptoms

- Tingling, prickling sensations and numbness in the thumb, index finger, middle finger and half of the ring finger
- Pain and numbness that is intensified at night
- Reduced grip strength

Treatment

- Night brace to keep the wrist in a neutral position
- If the hand is swollen it should be kept high while resting
- Cooling
- A wrist brace makes it easier to perform daytime activities
- Consult a doctor/therapist if a night splint has been used for more than 3 weeks, with remaining or increasing pain or if sensation is reduced both day and night



COMMON CONDITIONS – KNEE

OSTEOARTHRITIS – DAMAGE TO THE KNEE

Osteoarthritis occurs when the cartilage wears, loosens and its quality deteriorates – eventually disappearing partly or completely. The defective cartilage causes an uneven load, making the joint painful and unstable.

Possible Causes

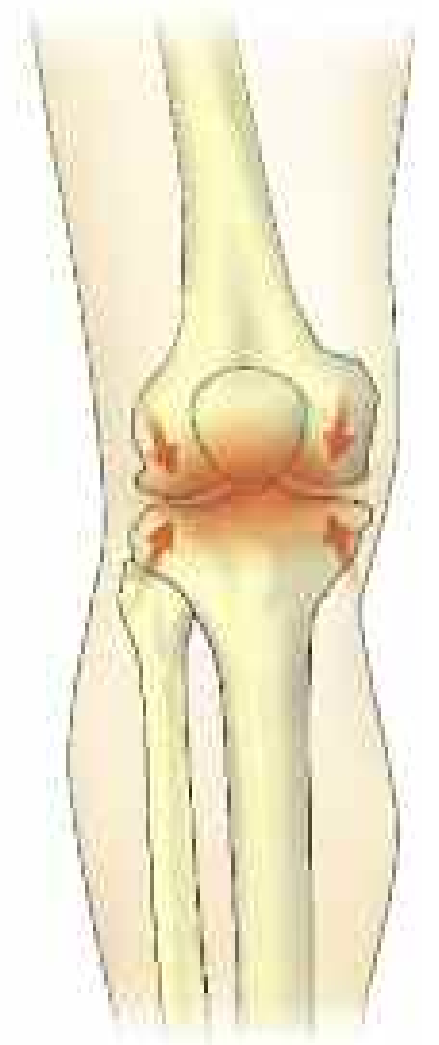
- Age
- Genetic and anatomical preconditions
- Overweight
- Earlier injuries

Symptoms

- Pain on pressure and/or when resting
- Restricted mobility
- Swelling, stiffness

Treatment

- Brace to ease pain and enhance security
- Rehabilitation program with stretching



COMMON CONDITIONS – KNEE

JUMPER'S KNEE

Rupture or inflammation of the patellar (kneecap) tendon due to overloading.

Possible Causes

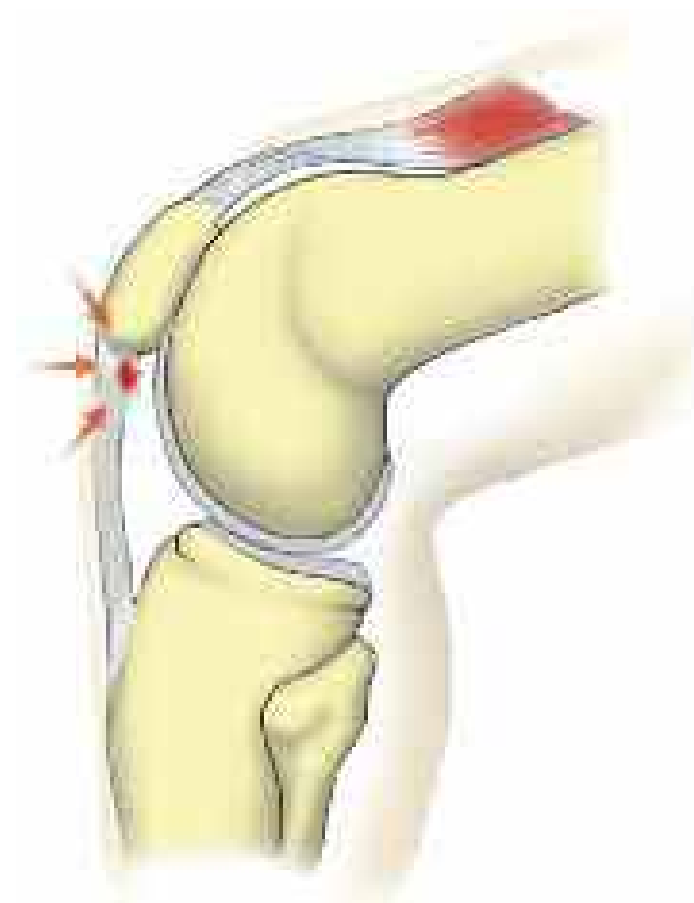
- Overloading of the patellar tendon
- Reduced strength in the front thigh muscle
- Insufficient rehabilitation after earlier injury

Symptoms

- Pain in the patellar tendon in connection with activity
- Pain and stiffness during and after exertion
- Stiffness in the mornings
- Swelling under the patella and pain caused by pressure

Treatment

- Orthotics to lessen the pressure on the patellar tendon
- Avoid activity that causes pain
- Rehabilitation program
- Stretching
- Properly fitted support



COMMON CONDITIONS – KNEE

OSGOOD-SCHLATTER DISEASE

Overload and inflammation of the point where the patellar tendon meets the lower leg (growth zone).
Mainly affects children during growth periods and usually is outgrown.

Possible Causes

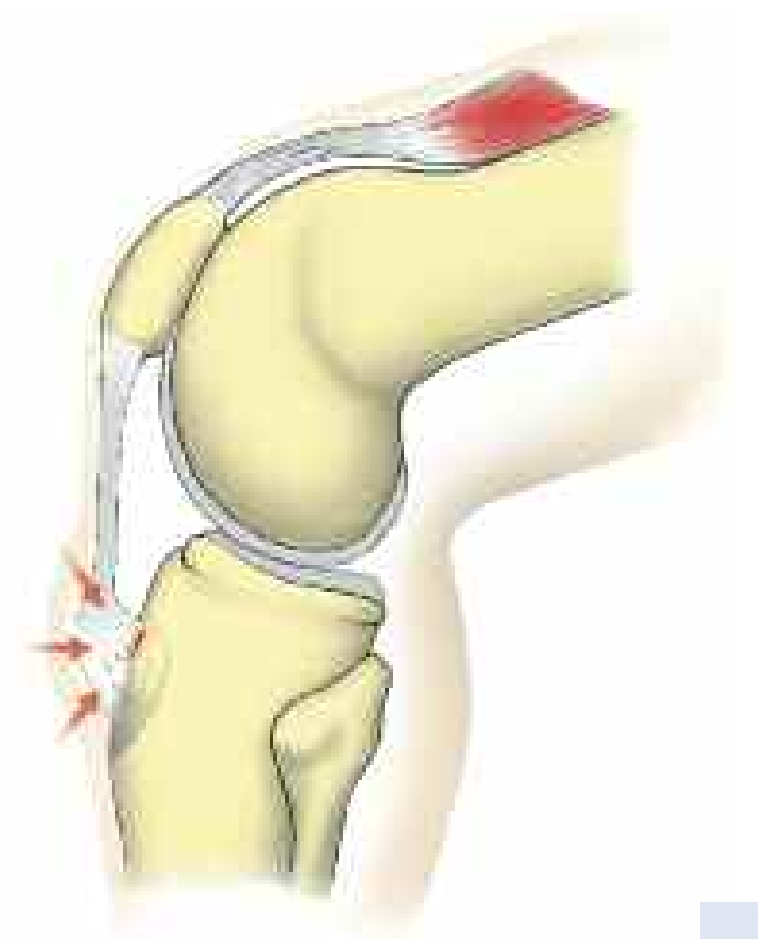
- The exact cause is not known, but the pain is often accentuated if a lot of exercise is done without rest and recovery periods.

Symptoms

- Pain, swelling and tenderness at the point where the tendon meets the shin bone
- A bulge may appear where the tendon attaches

Treatment

- Brace for warmth and pressure relief
- Stretching, training
- Proper footwear
- Properly fitted support



PATELLOFEMORAL PAIN SYNDROME

A common condition of the knee affecting both active and inactive people. The pain is often triggered in connection with physical activity.

Possible Causes

- Anatomical and genetic predisposition
- Muscular imbalance in the leg
- Weakness and tightness in the front thigh muscles
- Hyperpronation
- Overloading the joint
- Incorrect position of the patella

Symptoms

- Pain in the front of the knee, during or after exertion
- Pain when walking up or down stairs
- Pain when crouching, or when standing up from a sitting position
- Pain when sitting for a long period of time
- Locking sensation

Treatment

- Brace that offers support for the patella
- Rehabilitation program
- Special footwear



DAMAGE TO THE MENISCUS (CARTILAGE)

This injury may be sustained on both the inside and the outside of the knee. Can occur during sport, twisting or when standing up.

Possible Causes

- Severe twisting
- Hyperextension
- Deep knee bending

Symptoms

- Pain when twisting, hyperextending or bending
- Locking sensation
- Pain, impaired mobility of the knee
- Swelling
- Reduced strength in the front thigh muscle

Treatment

- Emergency attention if severe
- Possibly surgery
- Rehabilitation program
- No return to sport until satisfactory mobility, strength, balance and coordination have been achieved
- Use a brace to complement rehabilitation



COMMON CONDITIONS – KNEE

DAMAGE TO THE LATERAL LIGAMENT IN THE KNEE

Partial or total rupture of the lateral ligament may occur on either the inside or the outside of the knee.

Possible Causes

- Severe twisting
- Severe movement, e.g. a blow or collision with the outside or inside of the knee

Symptoms

- Pain on the inside or outside of the knee at time of injury
- Pain when bending the knee
- Tenderness when pressed
- Sensation of staggering or unsteadiness

Treatment

- Emergency attention if severe
- Brace to facilitate activity and rehabilitation
- Rehabilitation program



COMMON CONDITIONS – KNEE

DAMAGE TO THE CRUCIATE LIGAMENT IN THE KNEE (ACL AND PCL)

One of the most common and most problematic sports knee injuries.

Possible Causes

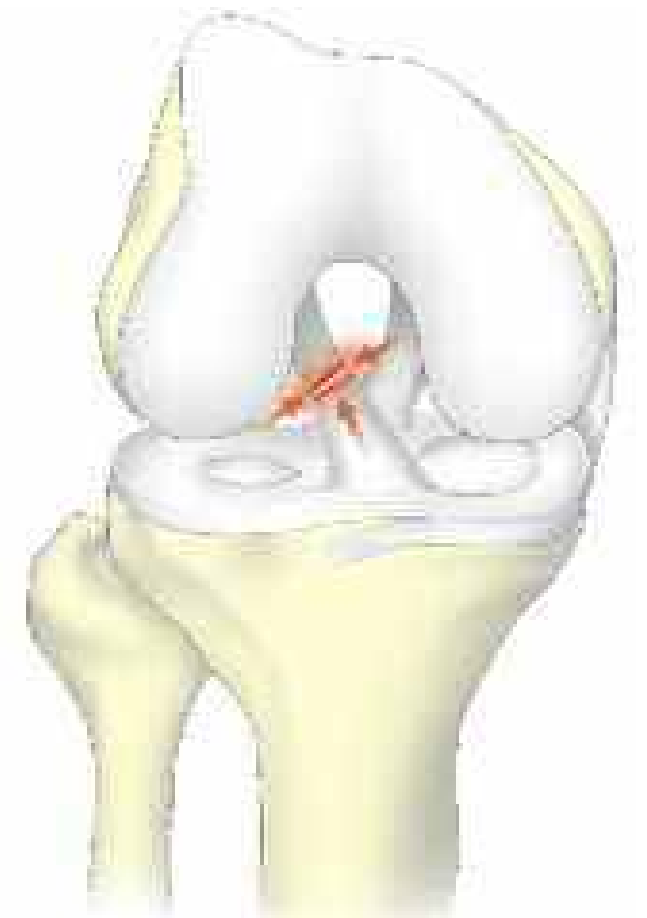
- Severe twisting
- Severe movement, e.g. a blow or collision with the outside or inside of the knee
- Hyperextension

Symptoms

- Immediate pain upon injury
- Difficulty applying pressure to the injured joint
- Swelling in the knee
- Instability
- Impaired mobility and muscle function

Treatment

- Emergency attention if severe
- Possibly surgery
- Rehabilitation program
- Brace to facilitate activity and rehabilitation



COMMON CONDITIONS – ANKLE/FOOT

SPRAINED ANKLE LIGAMENT INJURIES

One of the most common ankle injuries. Usually caused when the foot is twisted, causing the ligaments to stretch or rupture.

Possible Causes

- Twisting
- Insufficient rehabilitation period after previous injury/sprain
- Reduced balance and coordination in the ankle joint

Symptoms

- Pain and swelling
- Reduced ROM
- Pain on weight bearing
- Bruising
- Pressure pain around the ankle

Treatment

- Emergency attention if necessary
- Ankle support during rehabilitation



COMMON CONDITIONS – ANKLE/FOOT

HALLUX VALGUS (BUNIONS)

Tilting of the toe away from the midline of the body. A bony prominence forms at the big toe joint.

Possible Causes

- Age
- Inappropriate footwear
- Genetics
- A foot that pronates or rolls inward excessively when walking

Symptoms

- Bony protrusion on the big toe
- Friction and pain when wearing shoes

Treatment

- Buy well-fitting shoes with a wide toe box
- Use bunion shields or pads to cushion the bunion while walking
- Use a positioning strap to help correct and prevent further formation
- Consult a doctor



NOTES



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