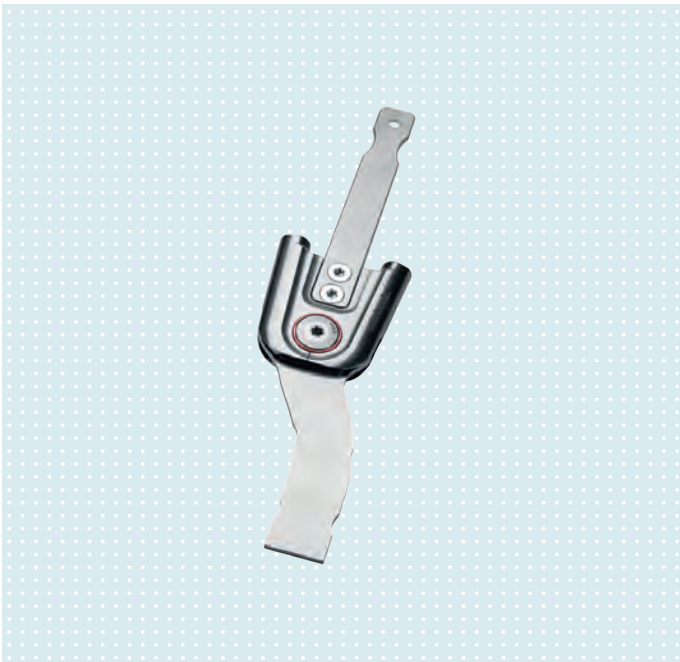


NeuroOrthopedics



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"Our goal is to offer maximum mobility, independence and quality of life for people with physical disabilities. User functionality is thus the standard against which we must measure all our products."

Professor Hans Georg Näder, President and CEO

A changing company

Ottobock develops medical technology products and high quality fitting concepts for people with limited mobility. Driven by a decisive, pioneering spirit, the prosthetist Otto Bock founded the company Orthopädische Industrie GmbH in Berlin in 1919. He had the courage to break new ground and set standards that would ultimately revolutionise an entire industry. Under the leadership of his son-in-law, Dr. Max Näder, Ottobock grew from a national to an international company.

Thanks to his creativity and inventive talent, Max Näder continued to set standards in orthopaedic technology with the development of products such as the modular leg prosthesis system and the myoelectrically-controlled upper limb prosthesis. The company began to establish an international network in 1958, when the first foreign branch was founded in the USA. After years of continuing this consistent and dynamic expansion under Professor Hans Georg Näder, Ottobock is now a global player and a strong corporate brand. In all aspects of our business, people are always our number one priority: we are committed to helping everyone achieve maximum mobility, independence and quality of life.

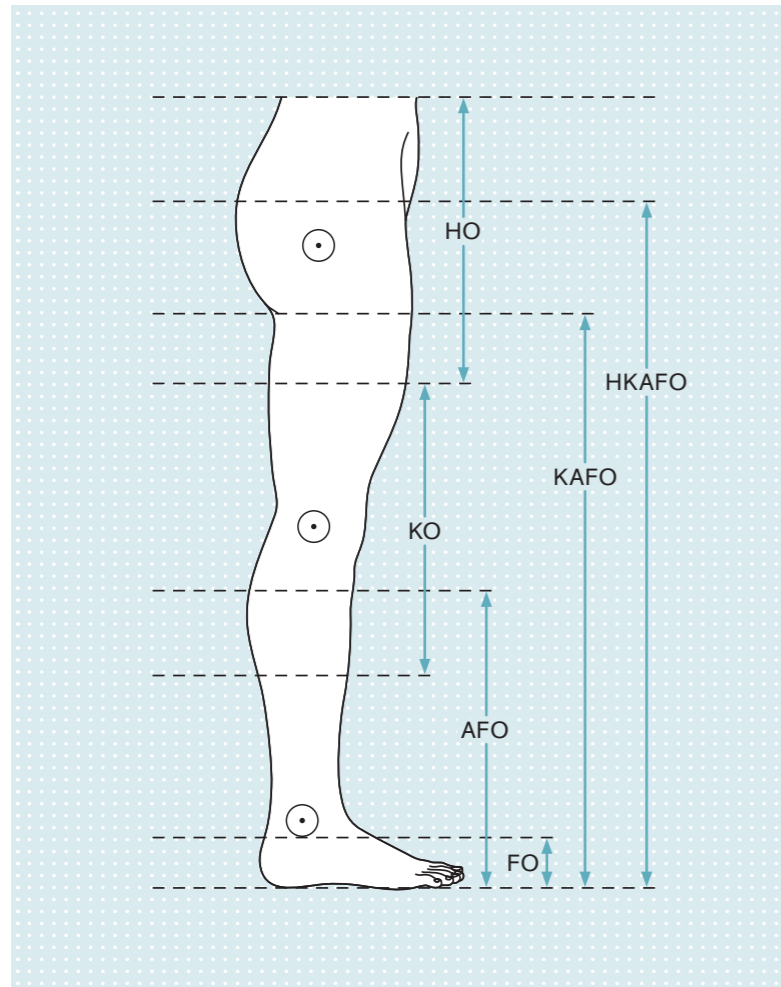
Ottobock HealthCare is simultaneously a family business and a modern, customer-oriented company. A network of distribution and service companies in 50 countries ensures that we are close to our customers. This helps us understand user needs and customer requirements and to integrate them into the products we develop. With its five business areas of Prosthetics, Orthotics, Neurorehabilitation, Mobility Solutions (wheelchairs and rehabilitation devices) and MedicalCare, the broad-based company is capable of offering its customers an unprecedented range of products, coordinated system solutions and extensive services.

We are committed to helping improve the quality of life of people with mobility needs by creating functional and technologically outstanding solutions – now and into the future. The role played by high-quality materials is just as essential as expert craftsmanship in providing fittings for people with physical limitations. Only the fitting team that attends to the patient can determine the patient's needs fully and establish the requirements for an individual orthosis. Consider, for example, a stroke patient who can only use one hand to put his orthosis on. For more information on paralysis fittings, please consult our reference "Orthosis Design for the Lower Extremity" (646A273) for medical specialists, therapists and orthopaedic technicians. Choose the components for your custom orthoses from the selection that follows.

Always at your service!

At Ottobock, we place great emphasis on CUSTOMER SERVICE. Our highly experienced representatives are standing by - ready to assist you with their comprehensive expertise, inform you about the latest developments, and advise you every aspect of our products. For more complex enquiries, our product experts and specialists from Fabrication will be delighted to help you. Our highly qualified team of field service employees can assist with special technical solutions and their on-site implementation. We also offer comprehensive service concepts.

Orthotics in general

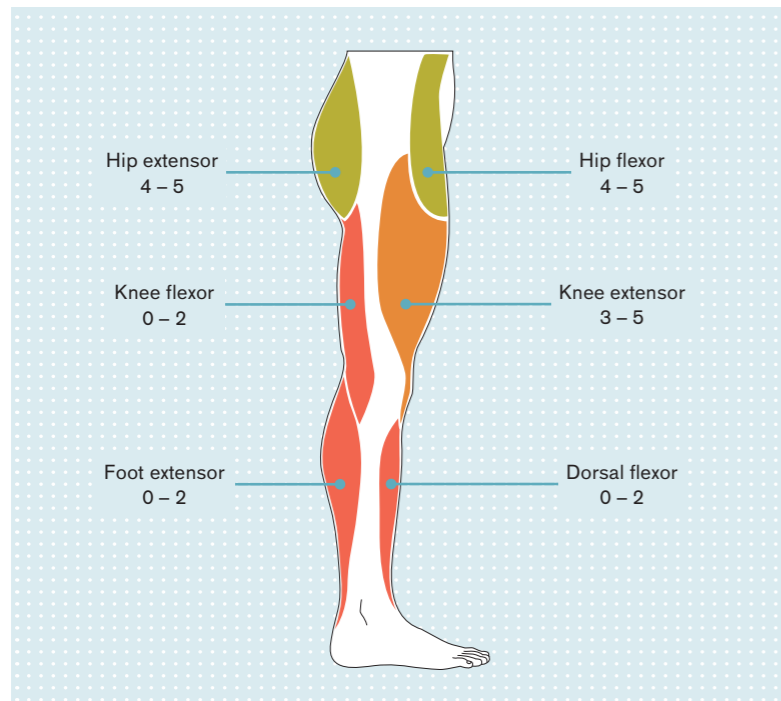


Global networking has also asserted itself in the medical technology sector. In order to work with the same terminology internationally, the abbreviations of the English terms for the different types of orthoses are used.

These are already used in many countries in the corresponding fitting or device lists. Only the abbreviations common for lower extremity orthoses are shown in the overview here, but these are widely used for the entire locomotor system.

Lower extremity orthosis types

HO	Hip orthosis
HKAFO	Hip-knee-ankle-foot orthosis
KAFO	Knee-ankle-foot orthosis
KO	Knee orthosis
AFO	Ankle-foot orthosis
FO	Foot orthosis



Muscle strength assessment according to Janda

0	No visible and/or palpable muscle contraction
1	Visible and/or palpable muscle contraction with no motoric effect
2	Distinct muscle contraction, movement with cancelling of gravity possible
3	Movement against gravity possible
4	Movement against low to medium resistance possible
5	Movement with normal strength

Searching, finding and ordering

Explanation of symbols

	Information sheet, poster		Recommended for lamination resin technique
	Information material		Recommended for prepreg technique
	Processing instructions/instructions for use		Recommended for joint bar/clamp technique
	Mixing ratio		Recommended for thermoplastic technique
	DVD		Products suitable for children
	Self-adhesive		Adjustment adapter size 1
	Washable at 40 °C, gentle cycle		Adjustment adapter size 2
	Washable at 60 °C		Adjustment adapter size 3
			Adjustment adapter size 4

Explanations of hazardous substance symbols (R/S phrases)*

	Xi Irritant		F+ Extremely flammable
	F Highly flammable		N Environmentally hazardous

Explanations of hazardous substance symbols (P/H phrases)*

Hazard classes	Hazard categories
	1
	1, 2
	1, 2, 3
	1, 2
	Types B, C, D, E, F
	1
	1
	1, 2
	1, 2, 3
	Types B, C, D, E, F
	4
	2
	2
	1
	3

* The hazardous substance symbols (R/S phrases and P/H phrases) printed in the catalogue correspond to the labelling requirements for hazardous substances at the time of printing. They refer to the raw material. Changes reserved.

○ Please note that the base colours shown in this catalogue may differ in actual effect.

This catalogue is organised into **7 sections**.

Tabs on the right-hand page margins as well as the subtitles (e.g. KAFO/ KO) at the top of every page also serve as quick and easy reference guides.

Art.Nr./Namenzeichen	Seite	Art.Nr./Namenzeichen	Seite	Art.Nr./Namenzeichen	Seite
17024 Klett-Flexband					
170021 Y-Klett					

Stichwortsuche	Index				
3 Buntschnee	198				
2 Phasen-Schuh	27				
A					
Aluminium	109, 114, 117				
C					
C-Orthozyl	235				
Art.Nr./Namenzeichen	Seite	Art.Nr./Namenzeichen	Seite	Art.Nr./Namenzeichen	Seite
1-2D					
10001	106, 109	10004	108	10007	107
4260	87	17004	123	17006	176, 171, 174
741	143	17012	148	17015	170, 171
742	143	17113	143	17104	148, 149
743	143	17105	143	17107	148
745	134	17108	74	17109	112
746	143	17109	74	17200	89, 90

The list of keywords lists all products in alphabetical order. Alternatively, the index lets you find the page numbers for products by reference number.



Ottobock Service Fabrication offers custom orthotics products and services. These are listed in the catalogue 646K71=D.



For more information or to place orders for products in the materials and tools category, please use the 646K1 Ottobock materials catalogue.

Searching, finding and ordering

Name of product

Brief product description

Illustration of product

ICONS for guidance

Notice



17M1 multifunction system ankle joint
 For integration in ankle foot orthoses with dorsal, plantar limitation or spring assist, incl. parallel alignment aid

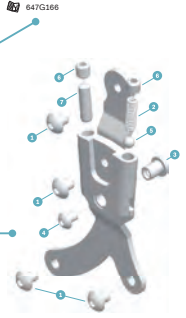
Article number	Gesamtlänge Oberteil - Fußbögel	Max. lower leg length	Max. body weight	Material	Qty.
17M1-1	120 mm	200 mm	100 kg	Stainless steel	Set
17M1-2	90 mm	200 mm	90 kg	Stainless steel	Set

• Scope of delivery see illustration

Available information material

Replacement parts graphic

Product components which serve as spare parts for service and repair.



Spare parts for 17M1

(1) Oval Allen head screw, retaining screw

Article number	Qty.
50158B-M5x8	Place

(2) Compression spring

Article number	For	Qty.
51302B-11x3.7	17M1	Place

(3) Bearing pin

Article number	Qty.
308B	Place

(4) Oval Allen head screw, retaining screw

Article number	Qty.
50158B-M5x8	Place

(5) Bearing ball

Article number	Material	Qty.
50971-5-0	Stainless steel	Place

(6) Set screw

Article number	Qty.
506211-M5x8	Place

(7) Stop pin

Article number	Qty.
506A8-2X18	Place
506A8-3X18	Place
506A8-5x18	Place
506A8-6x20	Place



Note: orthosis compendium
 Detailed explanations of the underlying illnesses relevant for custom orthotics, the biomechanics of standing and walking and the orthosis designs corresponding to the clinical pictures are found in our orthosis compendium for the lower extremity.

Article no. 646A273=GB



Adjustment adapters

The table that follows provides you with an overview of the adjustment adapters and shoulder screws for the joints listed in the table, to be used as an aid for the construction of lower limb orthoses. All adjustment adapters are included in the 743R6 adjustment set.

Article no.	Joint size	Adjustment adapter (size)	Shoulder screw	Page
17B105	=16	2	501A1=10x7xM4	134-136
17B105	=20	3	501A1=12x8xM6	134-136
17B106	=16	2	501A1=10x7xM4	134
17B106	=20	3	501A1=12x8xM6	134
17B20	=16, =20	3	501A1=14x9xM6	132-133
17B21	=16, =20	3	501A1=14x9xM6	132
17B23	=16, =20	3	501A1=14x9xM6	153-154
17B26	=16, =20	4	501A12=3	97, 99
17B3	=16, =20	4	501A12=3	97
17B33	=16, =20	3	501A1=14x9xM6	156-157
17B43	=16, =20	4	501A12=3	97
17B44	=16, =20	4	501A12=3	151
17B45	=16, =20	3	501A1=14x9xM6	153
17B46	=16, =20	4	501A12=3	100
17B47	=16, =20	4	501A12=3	97
17B53	=16	2	501A1=12x7xM4	39
17B53	=20	3	501A1=14x9xM6	39
17B54	=16	2	501A1=12x7xM4	27
17B54	=20	3	501A1=14x9xM6	27
17B57	=16	2	501A1=12x7xM4	27
17B57	=20	3	501A1=14x9xM6	27
17B59	=16	2	501A1=12x7xM4	39
17B59	=20	3	501A1=14x9xM6	39
17B62	=16	2	501A1=12x7xM4	27, 30
17B62	=20	3	501A1=14x9xM6	27, 30
17B63	=16	2	501A1=12x7xM4	39, 42-43
17B63	=20	3	501A1=14x9xM6	39, 42-43
17B71	=16 =20	4	501A12=3	100
17B91	=16, =20	3	501A1=14x9xM6	156
17B92	=16, =20	3	501A1=14x9xM6	153
17B95	=16	2	501A1=12x6xM4	137-139
17B95	=20	3	501A1=12x8xM6	137-139
17B96	=16	2	501A1=12x6xM4	137
17B96	=20	3	501A1=12x8xM6	137
17B98	=16	2	501A1=12x7xM4	43
17B98	=20	3	501A1=14x9xM6	43
17F24	=5, =4, =2	2	501A1=12x7xM4	23
17F34	=6, =5	2	501A1=12x6xM4	23-24
17F46	=6, =5	2	501A1=12x6xM4	21-22
17F47	=6, =5	2	501A1=12x6xM4	31-33
17F53	=6, =5	2	501A1=12x6xM4	57
17F63	=6, =5, =4	2	501A1=12x6xM4	21

Article no.	Joint size	Adjustment adapter (size)	Shoulder screw	Page
17F64	=6, =5, =4	2	501A1=12X6XM4	31
17F65	=6, =5	2	501A1=12X6XM4	57-58
17K29	=4	3	501A1=14X9XM6	123-125
17K29	=6, =5	2	501A1=12X6XM4	123-125
17K32	=4	3	501A1=14X9XM6	93
17K32	=6, =5	2	501A1=12X6XM4	93
17K33	=4	3	501A1=14X9XM6	93-94
17K33	=6, =5	2	501A1=12X6XM4	93-94
17K34	=4	3	501A1=14X9XM6	126-127
17K34	=6, =5	2	501A1=12X6XM4	126-127
17K42	=4	3	501A1=14X9XM6	123
17K42	=6, =5	2	501A1=12X6XM4	123
17K43		1		174
17K45		1		176
17K46		1		178
17K47		1		180
17LK3	=12 =14 =16 =20	4	30Y89	144, 146-147
17PK1 / 17PK1-WR		3	501T28=M6X35 501S84=M4X20	149-150, 163, 166
17PA1 / 17PA1-WR		3	501T28=M6X35 501S84=M4X20	59-61, 163-165
7U56		1		170

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The new Conventional Joint Bar System

Guidance notes for the Orthotist

The joint classification guide in this catalogue is for guidance only. The selection of the type of joint to be incorporated into the orthoses has to be made by a certified Orthotist who assesses the patient’s requirements prior to specifying the custom-made orthosis. The Orthotist will take a number of factors into account when selecting the type of joint to be used, such as the patient’s medical condition, weight, level of activity and weight-bearing or non weight-bearing status of the caliper.

2

The table below is for guidance only, as there are many external factors that can impact on durability of any components used and therefore safety of the patient.

3

Patient Activity Level		Patient Weight (up to)					
		19 Kg (42lbs)	26 Kg (56lbs)	51 Kg (112lbs)	76 Kg (168lbs)	102 Kg (224lbs)	115 Kg (252lbs)
Low	Non WB	Aluminium 16mm	Aluminium 16mm	Aluminium 16mm	Aluminium 20mm	Steel 16mm	Steel 20mm
	WB	Aluminium 16mm	Aluminium 20mm	Steel 16mm	Steel 16mm	Steel 20mm	Steel 20mm
Medium	Non WB	Aluminium 16mm	Aluminium 16mm	Aluminium 20mm	Aluminium 20mm	Steel 20mm	Steel 20mm
	WB	Steel 16mm	Steel 16mm	Steel 16mm	Steel 20mm	Steel 20mm	Steel 20mm
High	Non WB	Aluminium 20mm	Aluminium 20mm	Steel 16mm	Steel 20mm	Steel 20mm	Steel 20mm
	WB	Steel 20mm	Steel 20mm	Steel 20mm	Heavy duty	Heavy duty	Heavy duty

WB: Weight-bearing caliper

NWB: Non weight-bearing caliper

5

Activity Level Guide

LOW ACTIVITY = Indoor walker, patient has the ability or the potential to move slowly with the orthosis and can negotiate low environmental obstacles like single stairs. The amount of time and the distance that he/she can walk are limited due to his/her condition and will usually necessitate the use of walking aids.

MEDIUM ACTIVITY = Average walker patient has the ability or the potential to move slowly with the orthosis and can negotiate low environmental obstacles like curbs, single stairs or uneven ground. The amount of time and the distance that he/she can walk are limited due to his/her condition and may include the use of walking aids.

6

HIGH ACTIVITY = Active walker, the patient has the ability to move with the orthosis and can negotiate most environmental barriers. He/she also has the ability to move about open areas and can undertake occupational, therapeutic and other activities that do not expose the orthosis to above-average mechanical demands. Walking aids may not be necessary.

All the joints manufactured are available in aluminium and steel. Joints made from aluminium weigh less than steel joints of the same description, but will not be as strong and will also have a lower tolerance to impact. For this reason, aluminium joints are normally selected for non weight-bearing calipers and patients of low weight, and with low to medium activity levels.

7

Quick Reference Guide to new article numbers

Throughout 2016 Ottobock is rolling out a series of streamlined new conventional joints that both look good and perform better than ever. They won't snag on users' clothing, feature an improved locking mechanism and are fully serviceable – as well as being both designed and manufactured in the UK.

This short overview makes it easy for you to quickly find the correct article number which replaces the article that was previously ordered.

Dual Function Ankle Joints

	Previous Article No.	New Article No.
Adult Joint	17M1=1	17AD1=120
Child Joint	17M1=2	17AD1=93

Free-Motion Ankle Joints

	Previous Article No.	New Article No.
Adult Joint	17M2=1	17AF2=77
Child Joint	17M2=2	17AF2=63

Bale Lock Knee Joint

	Previous Article No.	New Article No.
Adult Joint		
Straight	17M30=20	17KL20=20
Straight	17M31=20	17KL20=20-A
Contoured	17M30=C20	17KL20=C-20
Contoured	17M31=C20	17KL20=C-20-A
Right	17M30=R20	17KL20=R-20
Right	17M31=R20	17KL20=R-20-A
Left	17M30=L20	17KL20=L-20
Left	17M31=L20	17KL20=L-20-A
Straight	MG-1C	17KL20=16-CS
Child Joint		
Straight	17M30=13	17KL20=13
Straight	17M32=13	17KL20=13-CS
Straight	17M31=13	17KL20=13-A
Service parts	17M30=20	17KL20=20

4 in 1 Option Ring Lock Knee Joint

	Previous Article No.	New Article No.
Adult Joint	17M20=20	17KL40=20
	17M20=16	17KL40=16
	17M21=20	17KL40=20-A
	17M21=16	17KL40=16-A
Child Joint	17M20=13	17KL40=13
	17M21=13	17KL40=13-A
Duchenne Bow/Chailey Kit	17MS20=C	17KL19=2

Posterior Off Set Free Motion Knee Joint

	Previous Article No.	New Article No.
Straight	17M10=16	17KF10=16
Straight	17M11=16	17KF10=16-A

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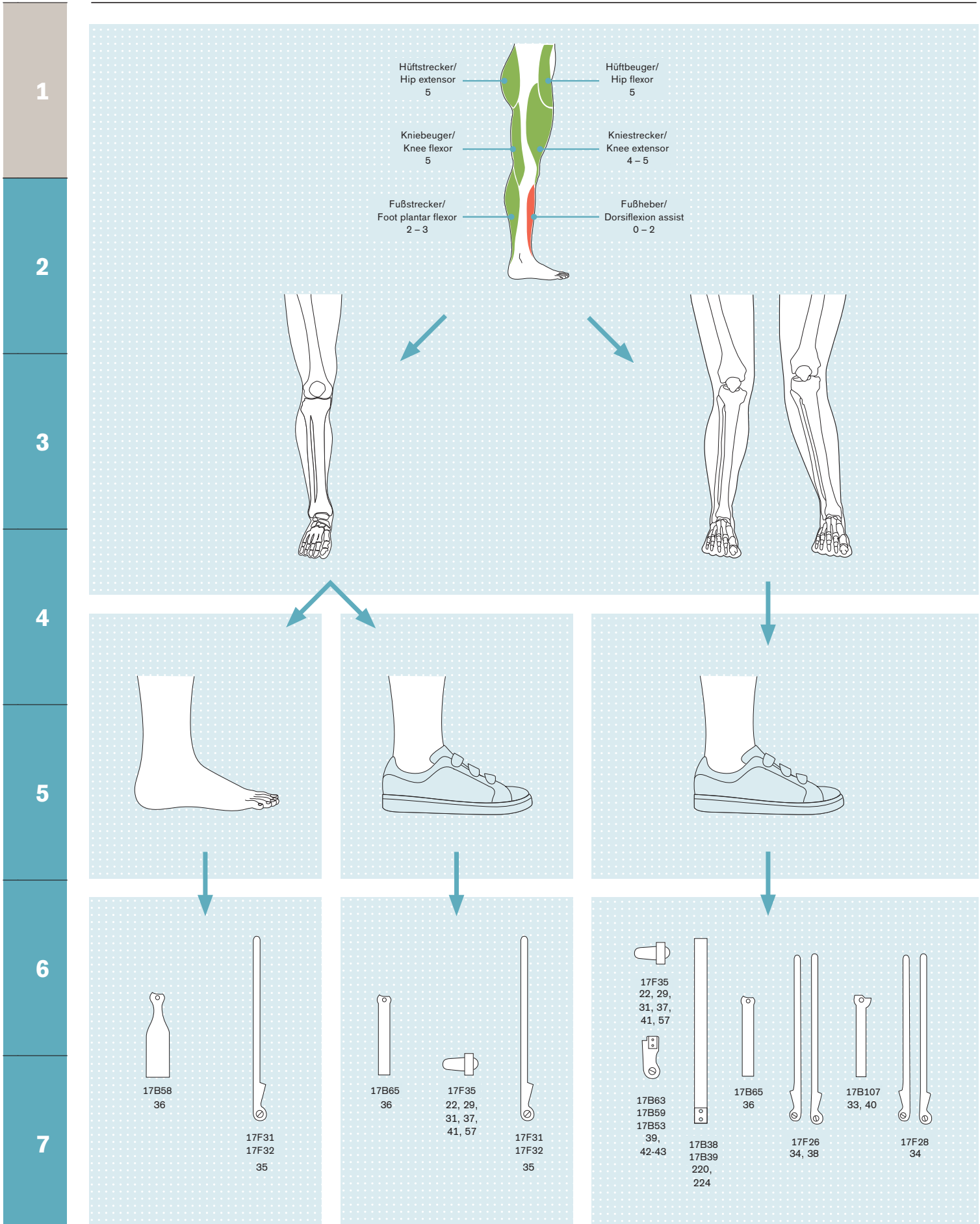
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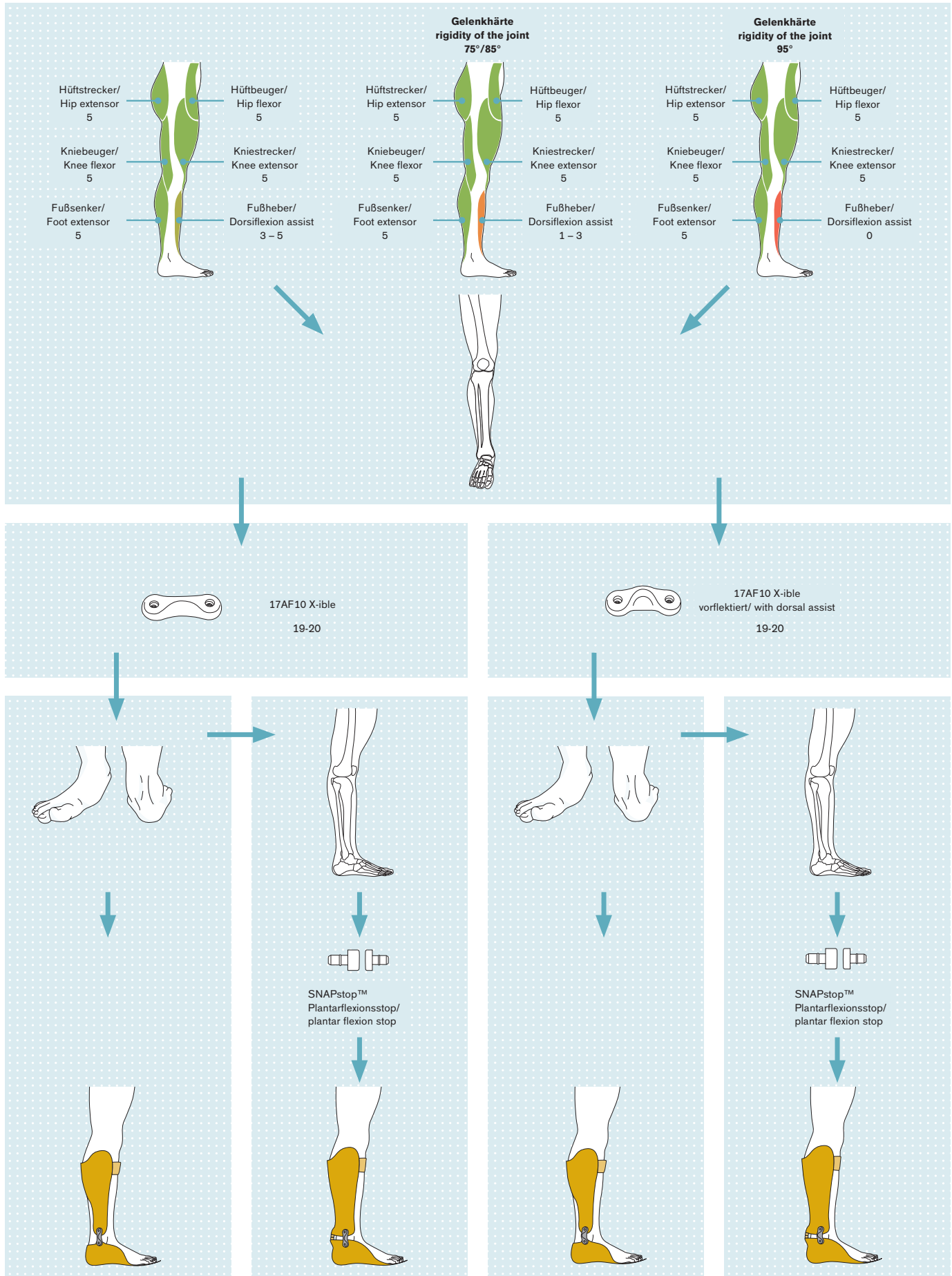
2 AFO

In this section, you will find all ankle joints and dynamic components; proven technology and outstanding function.

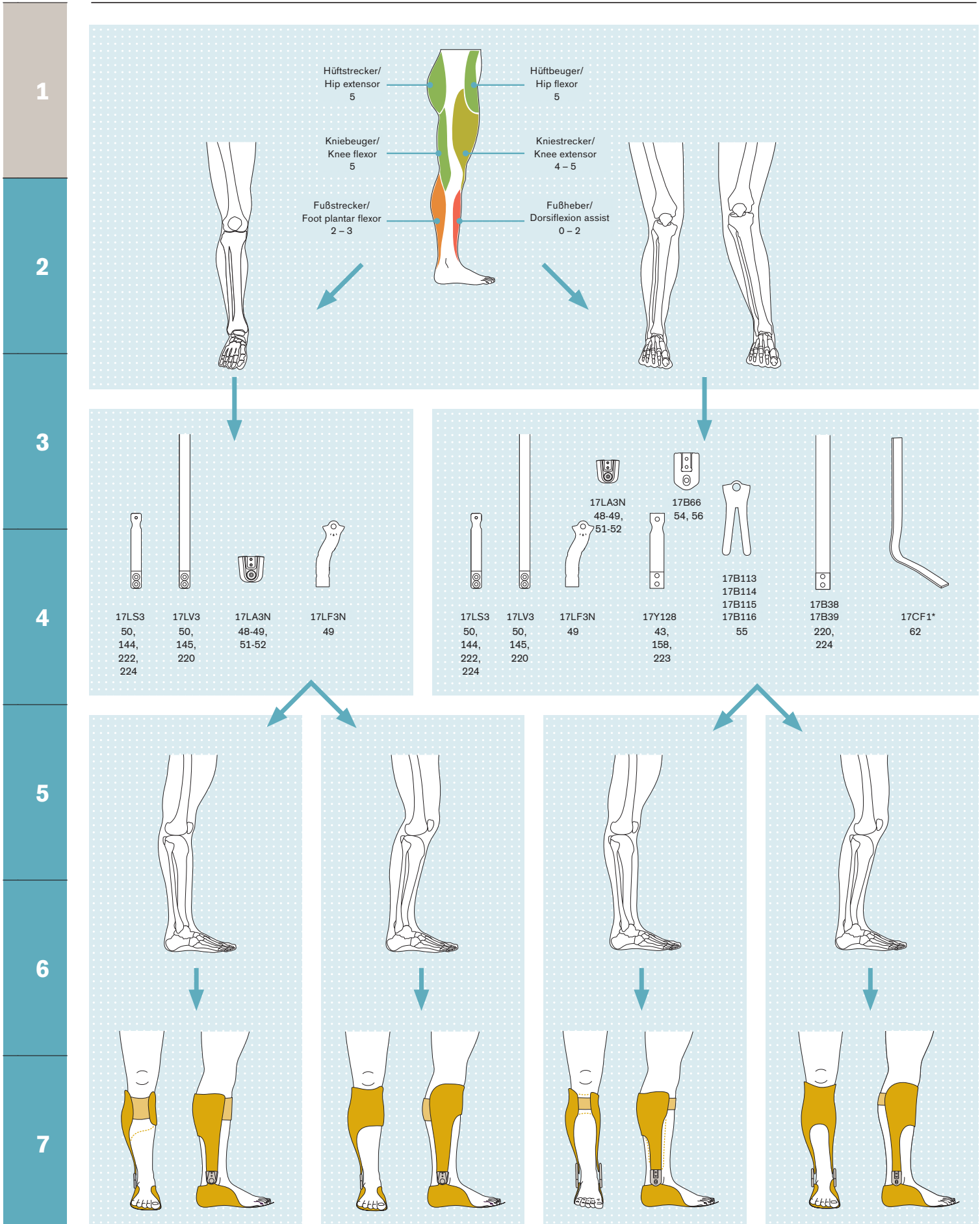
2.1 Selection Tool AFO	14
2.2 Selection Tool WalkOn	18
2.3 Flexible ankle joints	19
2.4 Free motion ankle joints	21
2.5 Ankle joints with dorsiflexion function	31
2.6 Multifunction ankle joints	45
2.7 Dynamic components	62
2.8 Prefabricated ankle foot orthoses	65

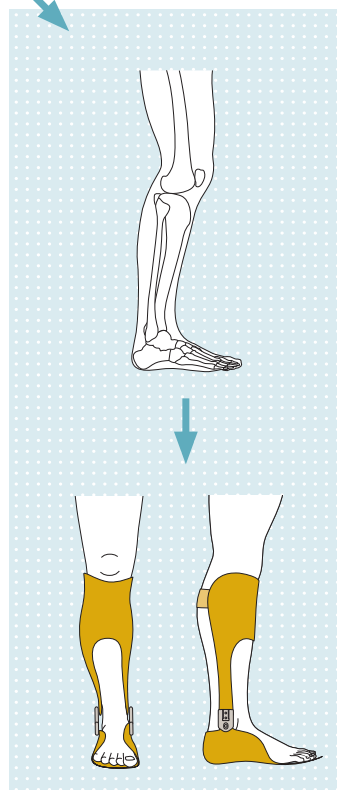
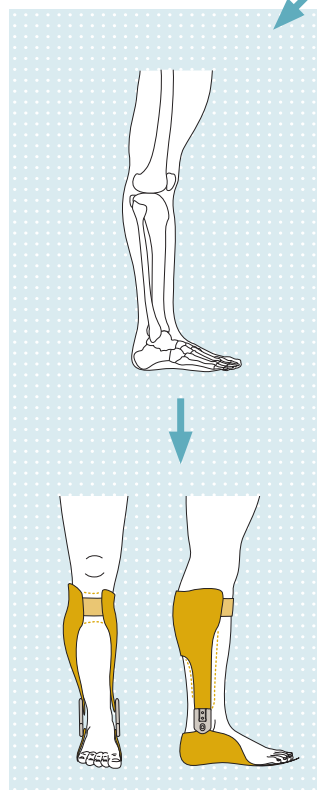
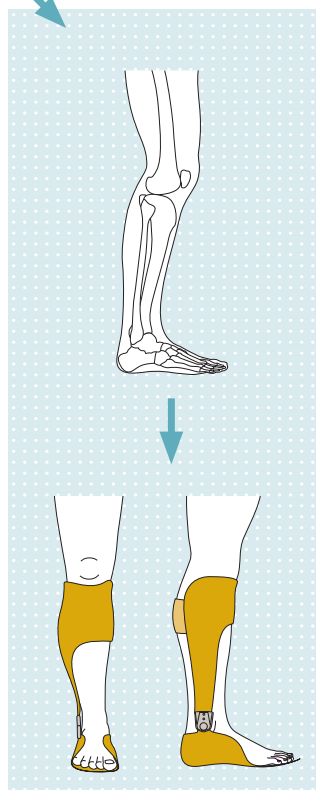
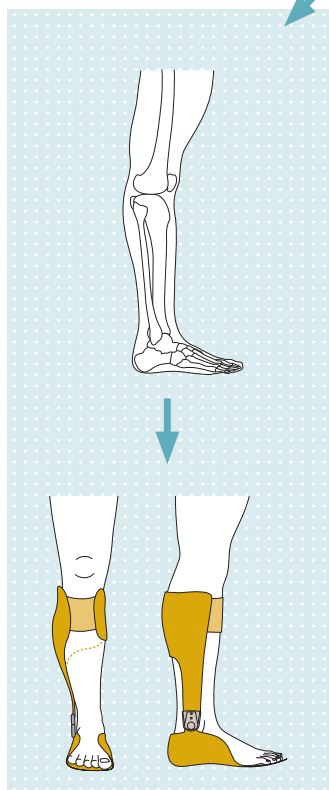
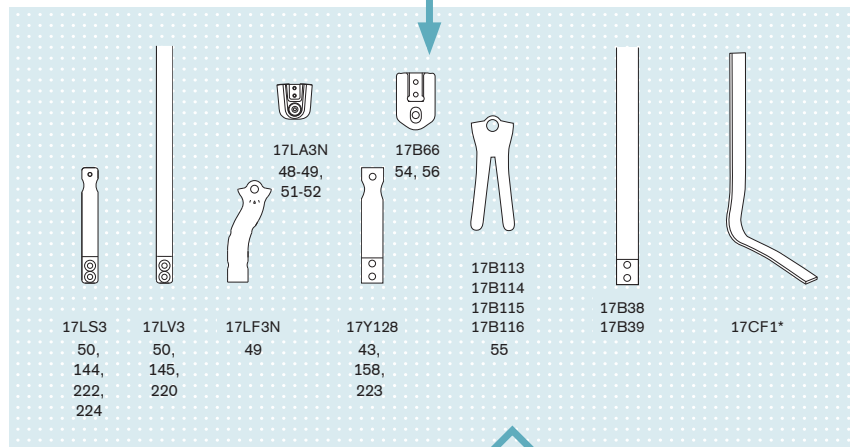
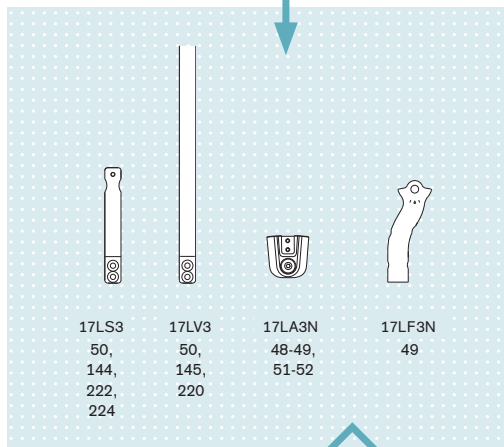
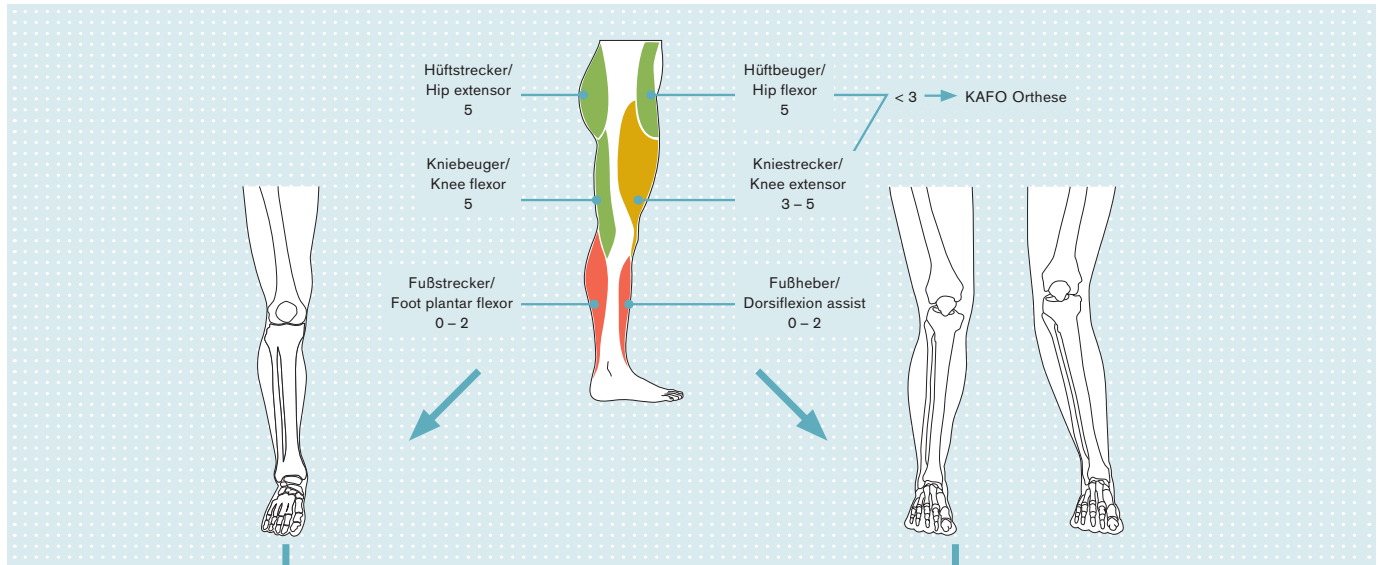
2 AFO
2.1 Selection Tool AFO

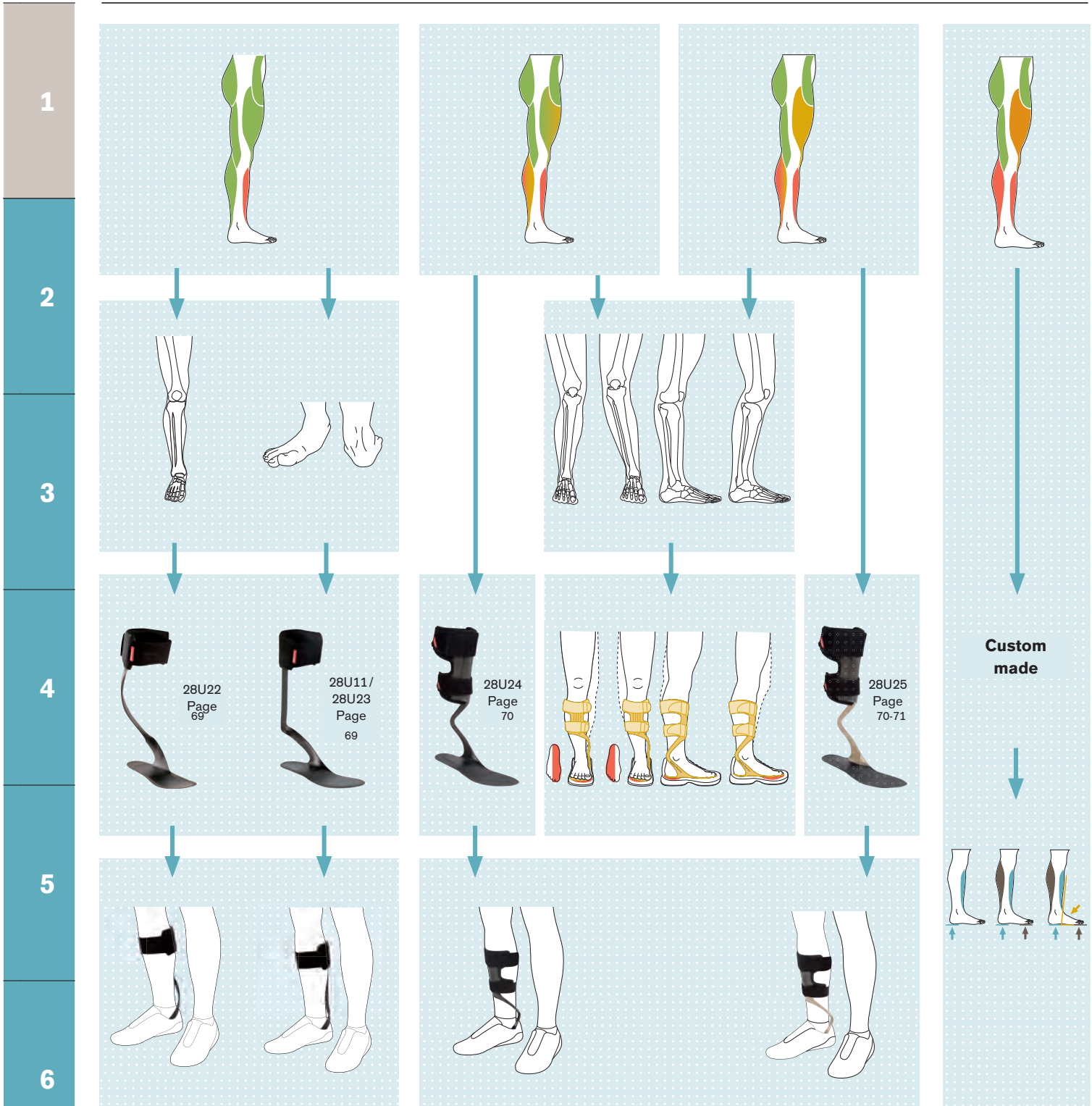




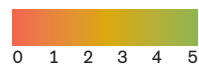
2 AFO
2.1 Selection Tool AFO







Muscle status by Janda



Article Number	Side	Shoe Size (E)	Shoe Size (US)
28U11	=L36-39 left	36-39	4.5-7
	=R36-39 right	36-39	4.5-7
28U22	=L39-42 left	39-42	7-8.5
	=R39-42 right	39-42	7-8.5
28U23	=L42-45 left	42-45	8.5-11.5
	=R42-45 right	42-45	8.5-11.5
28U25	=L45-48 left	45-48	11.5-14
	=R45-48 right	45-48	11.5-14



X-ible Joint

The 17AF10 X-ible joint is a self-aligning, flexible joint with free motion or dorsal support function. Its different versions enable the 17AF10 to be adapted to the user's individual needs. The lightweight, flat design makes the 17AF10 particularly attractive and the fabrication of thermoplastic orthoses especially efficient.

The user's activity level and functional requirements are the key factors for determining the correct joint size.

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17AF10 X-ible Joint



Stabilisation of the ankle joint in the frontal plane.

Article number	Size	Length	Qty.
17AF10=S	S	3.2 cm	2
17AF10=M	M	3.8 cm	2
17AF10=L	L	4.5 cm	2

2



17AF10 X-ible Joint



Pre-flexed to support dorsiflexion in the sagittal plane.

Article number	Size	Length	Grade of hardness	Nm	Qty.
17AF10=S-DA-LT	S	3.2 cm	75	0.5	2
17AF10=S-DA-MD	S	3.2 cm	85	0.75	2
17AF10=S-DA-ST	S	3.2 cm	95	1	2
17AF10=M-DA-LT	M	3.8 cm	75	2	2
17AF10=M-DA-MD	M	3.8 cm	85	2.5	2
17AF10=M-DA-ST	M	3.8 cm	95	4	2
17AF10=L-DA-LT	L	4.5 cm	75	3.4	2
17AF10=L-DA-MD	L	4.5 cm	85	4.3	2
17AF10=L-DA-ST	L	4.5 cm	95	6.2	2

- Gait analysis and muscle status are the key factors for determining the correct degree of hardness.

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17AFA X-ible Dummy

Article number	for	Qty.
17AFA=DY-S	17AF10=S 17AF10=S-DA-LT 17AF10=S-DA-MD 17AF10=S-DA-ST	2
17AFA=DY-M	17AF10=M 17AF10=M-DA-LT 17AF10=M-DA-MD 17AF10=M-DA-ST	2
17AFA=DY-L	17AF10=L 17AF10=L-DA-LT 17AF10=L-DA-MD 17AF10=L-DA-ST	2

6

7

17F46 / 17F63 Ankle joint bar for children



Free motion ankle joint, range of motion has to be established by grinding/filing the foot stirrup.



1

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Ankle joints and foot stirrups (stainless steel), side bars (light metal)



Article number	Bar length/width/thickness	Stirrup length from joint centre	Stirrup width	Head diameter	Qty.
17F46=6	230/12/3 mm	100 mm	14 mm	16 mm	Pair
17F46=5	230/12/3 mm	125 mm	16 mm	18 mm	Pair

3

Ankle joints and side bars (titanium), foot stirrups (stainless steel)



Article number	Bar length	Connection width	Head diameter	Qty.
17F63=4	250 mm	18 mm	22 mm	Piece
17F63=5	200 mm	15 mm	19 mm	Piece
17F63=6	150 mm	12 mm	16 mm	Piece

4

Matching foot stirrups for 17F46 and 17F63

17F50 Foot stirrup

Article number	for	Material	Qty.
17F50=100X2.5	17F46=6 17F63=6	Stainless steel	Piece
17F50=125X2.5	17F46=5 17F63=5	Stainless steel	Piece
17F50=145X2.5	17F63=4	Stainless steel	Piece



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17F35 System shoe plate, hardened with insert piece

Article number	for	Side	Length	Channel width	Material	Qty.
17F35=L90	17F46=6	left	90 mm	14 mm	Stainless steel	Piece
17F35=R90	17F46=6	right	90 mm	14 mm	Stainless steel	Piece
17F35=L105	17F46=5	left	105 mm	16 mm	Stainless steel	Piece
17F35=R105	17F46=5	right	105 mm	16 mm	Stainless steel	Piece

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17Y17=6X8X2.4 Brass bushing

Article number	For foot stirrup	Material	Qty.
17Y17=6X8X2.4	17F50=100x2.5 17F50=125x2.5	Brass	Piece

3

Spare parts for 17F46 and 17F63

(1) Bearing nut, hardened

Article number	Shoulder diameter	Shank length	Qty.
17Y93=6X5.2XM4	6 mm	5.2 mm	Piece

(2) Slotted truss head screw

Article number	Head diameter	Material	Qty.
501S32=M4X7.5X10	7.5 mm	Stainless steel	Piece

(3) Side bar

Article number	for	Length	Width	Thickness	Material	Qty.
17F52=12X3X220	17F46=6	220 mm	12 mm	3 mm	Aluminium	Piece
17F52=14X3X220	17F46=5	220 mm	14 mm	3 mm	Aluminium	Piece

(4) Joint

Article number	for	Head diameter	Clevis width	Material	Qty.
17F48=6	17F46=6	20 mm	2.5 mm	Stainless steel	Piece
17F48=5	17F46=5	22 mm	2.5 mm	Stainless steel	Piece

(5) Foot stirrup

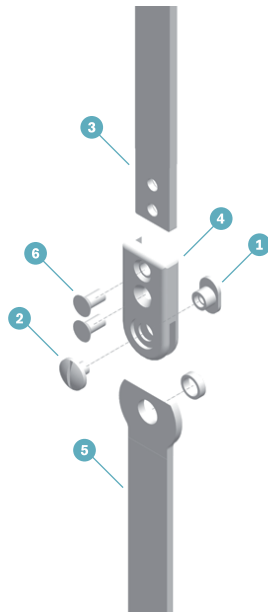
for 17F35 system shoe plate

Article number	for	Material	Qty.
17F50=100X2.5	17F46=6	Stainless steel	Piece
17F50=125X2.5	17F46=5	Stainless steel	Piece

(6) Countersunk rivet

Article number	for	Material	Qty.
504S6=4X8	17F46=5 17F46=6 17F63=5 17F63=6	Stainless steel	Piece
504S6=4X10	17F63=4	Stainless steel	Piece

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17F34 / 17F24 Ankle joint bar for children

Free motion ankle joint bar with range of motion +/- 30°, to be established by filing the upper foot bar section



647G2

Forged foot stirrup, flat bar profile, fixed joint, upper sections and foot stirrup



Article number	Bar length/width /thickness	Stirrup length from joint centre	Stirrup width	Head Ø	Material	Qty.
17F34=6	180/12/2 mm	115 mm	25 mm	16 mm	Stainless steel	Pair
17F34=5	240/14/2 mm	130 mm	30 mm	18 mm	Stainless steel	Pair

Forged foot stirrup, fixed joint, upper sections and foot stirrup



Article number	Bar length/width /thickness	Stirrup length from joint centre	Stirrup width	Head Ø	Material	Qty.
17F24=5	300/15/3 mm	130 mm	40 mm	20 mm	Stainless steel	Pair
17F24=4	300/15/3 mm	130 mm	40 mm	22 mm	Stainless steel	Pair
17F24=2	390/18/3 mm	150 mm	40 mm	24 mm	Stainless steel	Pair

Spare parts for 17F34 and 17F24

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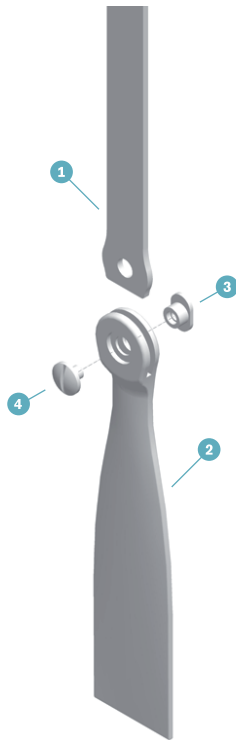
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(1) Ankle joint bar upper section

Article number	for	Bar length/width/ thickness	Material	Qty.
17A3=2	17F24=2	390/18/3 mm	Stainless steel	Piece
17A3=4	17F24=4	300/15/3 mm	Stainless steel	Piece
17A4=5	17F34=5	240/14/2 mm	Stainless steel	Piece
17A4=6	17F34=6	180/12/2 mm	Stainless steel	Piece

(2) Foot stirrup with bearing nut and slotted truss head screw

Article number	for	Stirrup length	Head diameter	Material	Qty.
17C3=2	17F24=2	150 mm	24 mm	Stainless steel	Piece
17C3=4	17F24=4	130 mm	22 mm	Stainless steel	Piece
17C4=5	17F34=5	130 mm	18 mm	Stainless steel	Piece
17C4=6	17F34=6	115 mm	16 mm	Stainless steel	Piece

(3) Bearing nut, hardened

Article number	for	Shoulder diameter	Shank length	Thread	Qty.
17Y93=6X4.75XM4	17F34=5 17F34=6	6 mm	4.75 mm	M4	Piece
17Y93=7X7XM5	17F24=2 17F24=4	7 mm	7 mm	M5	Piece

For repairs:

Bearing nut, hardened

Article number	for	Shoulder diameter	Shank length	Thread	Qty.
17Y93=6.5X4.75XM4 4	17F34=6 17F34=5	6.5 mm	4.75 mm	M4	Piece
17Y93=7X4.75XM4	17F34=6 17F34=5	7 mm	4.75 mm	M4	Piece
17Y93=7.5X7XM5	17F24=2 17F24=4	7.5 mm	7 mm	M5	Piece

(4) Slotted truss head screw

Article number	for	Length	Head Ø	Thread	Material	Qty.
501S32=M4X10X7.5	17F34=5 17F34=6	7.5 mm	10 mm	M4	Stainless steel	Piece
501S32=M5X12X9.5	17F24=2 17F24=4	9.5 mm	12 mm	M5	Stainless steel	Piece

*(when using 17Y84)

**Practical recommendation:**

On worn joints, the play can be reduced by replacing the bolts. Use an appropriate reamer to prepare the holes.

17AF2 Free motion ankle joint



For use in thermoplastic AFOs. No maintenance required. With parallel alignment tool.

Article number	Material	Total length upper section – foot stirrup	Version	Qty.
17AF2=77	Stainless steel	77.5 mm	Adults	Set
17AF2=63	Stainless steel	63.5 mm	Children	Set

- Simple tool for parallel adjustment is included in the delivery
- Scope of delivery: see illustration



Service parts for 17Y32 and 17Y35

709S10=2.5 Allen wrench 2.5 mm

Article number
709S10=2.5



709S10=3 Allen wrench 3 mm

Article number
709S10=3



501S89=M5X6 Fixing screw

Article number
501S89=M5X6



501S89=M5X8 Mounting screw

Article number
501S89=M5X8



501S89=M4X30 Alignment screw

Article number
501S89=M4X30



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29PK5 Alignment tube

Article number

29PK5

2



709S10=2.5 Allen wrench 2.5 mm

Article number

709S10=2.5

3



501S89=M4X6 Bearing pin screw

Article number

501S89=M4X6

4



501S89=M4X8 Fixing screw

Article number

501S89=M4X8

5



501S89=M4X30 Alignment screw

Article number

501S89=M4X30

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29PK5 Alignment tube

Article number

29PK5

7

17B62 / 17B57 / 17B54 System ankle joints

System ankle joints with range of motion +/- 30°, to be established by filing the foot stirrup



647G2

Contoured medial joint, straight lateral joint

Article number	System width	Head diameter	Clevis width	Length from joint centre	Material
17B62=16	16 mm	22 mm	2.5 mm	41 mm	Stainless steel
17B62=20	20 mm	24.5 mm	3 mm	41 mm	Stainless steel

Medial and lateral joint straight

Article number	System width	Head diameter	Clevis width	Length from joint centre	Single joint
17B57=16	16 mm	22 mm	2.5 mm	41 mm	17A57=16
17B57=20	20 mm	24 mm	3 mm	41 mm	17A57=20

Contoured medial and lateral joint

Article number	System width	Head diameter	Clevis width	Length from joint centre	Single joint
17B54=16	16 mm	22 mm	2.5 mm	41 mm	17A54=16
17B54=20	20 mm	24 mm	3 mm	41 mm	17A54=20

Matching foot stirrups for 17B62, 17B57, 17B54

17B55 System foot stirrup

with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B55=145X2.5	16 mm	2.5 mm	145 mm	Stainless steel	Piece
17B55=165X3	20 mm	3 mm	165 mm	Stainless steel	Piece



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17B100 System lamination foot stirrup
with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B100=16	16 mm	2.5 mm	63 mm	Stainless steel	Piece
17B100=20	20 mm	3 mm	63 mm	Stainless steel	Piece

2



17B61 System foot stirrup
Extra long, with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B61=250	20 mm	3 mm	250 mm	Stainless steel	Piece

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17B60 System foot stirrup
forked, with brass bushing



Article number	System width	Thickness	Fork length ant./post.	Material	Qty.
17B60=180	16 mm	2.5 mm	180/170 mm	Stainless steel	Piece
17B60=205	20 mm	3 mm	205/190 mm	Stainless steel	Piece

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17F36 System shoe stirrup

with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17F36=150X2.5	16 mm	2.5 mm	150 mm	Stainless steel	Piece
17F36=180X2.5	16 mm	2.5 mm	180 mm	Stainless steel	Piece
17F36=200X2.5	16 mm	2.5 mm	200 mm	Stainless steel	Piece
17F36=220X2.5	16 mm	2.5 mm	220 mm	Stainless steel	Piece
17F36=240X2.5	16 mm	2.5 mm	240 mm	Stainless steel	Piece
17F36=260X2.5	16 mm	2.5 mm	260 mm	Stainless steel	Piece
17F36=280X2.5	16 mm	2.5 mm	280 mm	Stainless steel	Piece
17F36=300X2.5	16 mm	2.5 mm	300 mm	Stainless steel	Piece

Article number	System width	Thickness	Length from joint centre	Material	Qty.
17F36=200X3	20 mm	3 mm	200 mm	Stainless steel	Piece
17F36=220X3	20 mm	3 mm	220 mm	Stainless steel	Piece
17F36=240X3	20 mm	3 mm	240 mm	Stainless steel	Piece
17F36=260X3	20 mm	3 mm	260 mm	Stainless steel	Piece
17F36=280X3	20 mm	3 mm	280 mm	Stainless steel	Piece
17F36=300X3	20 mm	3 mm	300 mm	Stainless steel	Piece

Up to 420 mm (16.5 in) extra length is available for an additional charge.

17B64 System shoe stirrup

with brass bushing

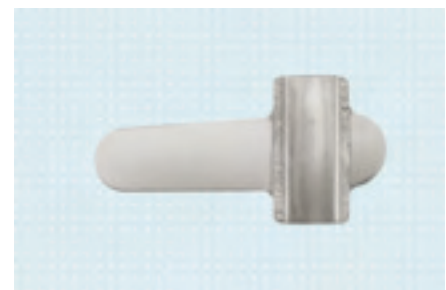


Article number	System width	Thickness	Channel width	Head diameter	Length from joint centre	Material	Qty.
17B64=145X2.5	16 mm	2.5 mm	19 mm	22 mm	145 mm	Stainless steel	Piece
17B64=165X3	20 mm	3 mm	22 mm	24 mm	165 mm	Stainless steel	Piece

17F35 System shoe plate, hardened

with insert piece

Article number	for	Side	System width	Length	Channel width	Material	Qty.
17F35=L120	17B64=145X2.5	left	16 mm	120 mm	19 mm	Stainless steel	Piece
17F35=R120	17B64=145X2.5	right	16 mm	120 mm	19 mm	Stainless steel	Piece
17F35=L150	17B64=165X3	left	20 mm	150 mm	22 mm	Stainless steel	Piece
17F35=R150	17B64=165X3	right	20 mm	150 mm	22 mm	Stainless steel	Piece



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17Y17 Brass bushing

Article number	System width	Qty.
17Y17=7X9X2.4	16 mm	Piece
17Y17=9X11X2.9	20 mm	Piece

2

Spare parts for 17B62, 17B57 and 17B54

(1) Bearing nut, hardened

Article number	System width	Shoulder diameter	Shank length	Thread	Qty.
17Y93=7X6.8XM5	16 mm	7 mm	6.8 mm	M5	Piece
17Y93=9X7.2XM6	20 mm	9 mm	7.2 mm	M6	Piece

(2) Slotted truss head screw

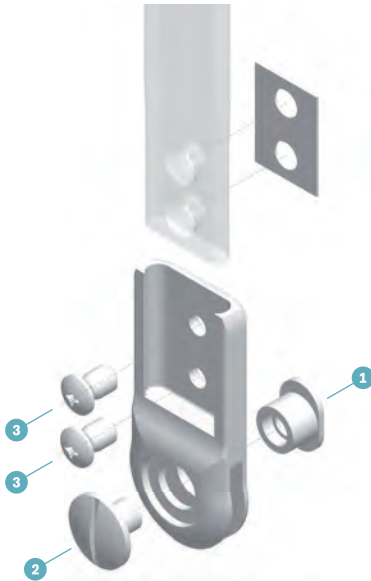
Article number	System width	Length	Head Ø	Thread	Total length	Material	Qty.
501S32=M5X12X9.5	16 mm	9.5 mm	12 mm	M5	9.5 mm	Stainless steel	Piece
501S32=M6X14X10	20 mm	10 mm	14 mm	M6	10 mm	Stainless steel	Piece

(3) Phillips oval countersunk head screw

Article number	for	Length	Material	Qty.
501T7=7.5X9XM5	System side bars	9 mm	Stainless steel	Piece

for system side bars

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17F47 / 17F64 Ankle joint bar for children



Joint with dorsiflexion function and foot stirrup with dorsal stop that can be filed



Ankle joints and foot stirrups (stainless steel), side bars (aluminium)



Article number	Bar length/width/thickness	Stirrup length from joint centre	Stirrup width	Head diameter	Qty.
17F47=5	230/14/3 mm	125 mm	16 mm	22 mm	Pair
17F47=6	230/12/3 mm	100 mm	14 mm	20 mm	Pair

Ankle joints and side bars (titanium), foot stirrups (stainless steel)



Article number	Side	Bar length	Connection width	Head diameter	Qty.
17F64=L4	left	250 mm	18 mm	22 mm	Piece
17F64=R4	right	250 mm	18 mm	22 mm	Piece
17F64=L5	left	200 mm	15 mm	19 mm	Piece
17F64=R5	right	200 mm	15 mm	19 mm	Piece
17F64=L6	left	150 mm	12 mm	16 mm	Piece
17F64=R6	right	150 mm	12 mm	16 mm	Piece

Accessories for 17F47 and 17F64

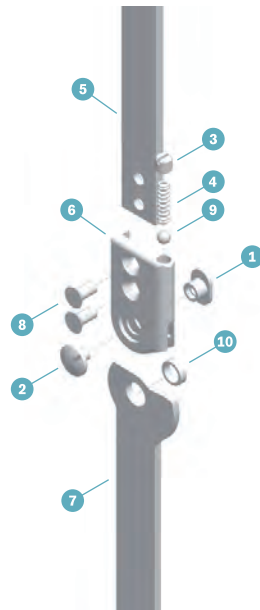
17F35 System shoe plate, hardened

with insert piece

Article number	for	Side	Length	Channel width	Material	Qty.
17F35=L90	17F47=6 17F64=6	left	90 mm	14 mm	Stainless steel	Piece
17F35=R90	17F47=6 17F64=6	right	90 mm	14 mm	Stainless steel	Piece
17F35=L105	17F47=5 17F64=5	left	105 mm	16 mm	Stainless steel	Piece
17F35=R105	17F47=5 17F64=5	right	105 mm	16 mm	Stainless steel	Piece
17F35=L120	17F64=4	left	120 mm	19 mm	Stainless steel	Piece
17F35=R120	17F64=4	right	120 mm	19 mm	Stainless steel	Piece



Spare parts for 17F47 and 17F64



(1) Bearing nut, hardened

Article number	for	Shoulder diameter	Shank length	Thread	Qty.
17Y93=6X5.2XM4	17F47=5	6 mm	5.2 mm	M4	Piece
	17F47=6				
	17F64=5				
	17F64=6				
17Y93=7X6.8XM5	17F64=4	7 mm	6.8 mm	M5	Piece

(2) Slotted truss head screw

Article number	for	Length	Thread	Material	Qty.
501S32=M4X10X7.5	17F47=5	7.5 mm	M4	Stainless steel	Piece
	17F47=6				
	17F64=5				
	17F64=6				
501S32=M5X12X9.5	17F64=4	9.5 mm	M5	Stainless steel	Piece

*(when using 17Y84)

(3) Set screw with slot

Article number	for	Size	Material	Qty.
17Y18=M6X11	17F64	4	Stainless steel	Piece
501G2=M5X5	17F47	5/6	Stainless steel	Piece
	17F64			

(4) Compression spring

Article number	for	Size	Qty.
513D18=4.7X31	17F47	4	Piece
	17F64		
513D19=3.8X20	17F64	5/6	Piece

(5) Side bar

Article number	for	Length	Material	Qty.
17F52=12X3X220	17F47=6	220 mm	Aluminium	Piece
17F52=14X3X220	17F47=5	220 mm	Aluminium	Piece
30E109=4	17F64=4	250 mm	Titanium	Piece
30E109=5	17F64=5	200 mm	Titanium	Piece
30E109=6	17F64=6	150 mm	Titanium	Piece

(6) Ankle joint

Article number	for	Head diameter	Clevis width	Material	Qty.
17F49=5	17F47=5	22 mm	2.5 mm	Stainless steel	Piece
17F49=6	17F47=6	20 mm	2.5 mm	Stainless steel	Piece
30U115=L4	17F64=L4	22 mm	2.5 mm	Titanium	Piece
30U115=R4	17F64=R4	22 mm	2.5 mm	Titanium	Piece
30U115=L5	17F64=L5	19 mm	2.5 mm	Titanium	Piece
30U115=R5	17F64=R5	19 mm	2.5 mm	Titanium	Piece
30U115=L6	17F64=L6	16 mm	2.5 mm	Titanium	Piece
30U115=R6	17F64=R6	16 mm	2.5 mm	Titanium	Piece

(7) Foot stirrup

Article number	for	Thickness	Stirrup length	Stirrup width	Material	Qty.
17F51=100X2.5	17F47=6 17F64=6	2.5 mm	100 mm	14 mm	Stainless steel	Piece
17F51=125X2.5	17F47=5 17F64=5	2.5 mm	125 mm	16 mm	Stainless steel	Piece
17B107=145X2.5	17F64=4	2.5 mm	145 mm	19 mm	Stainless steel	Piece

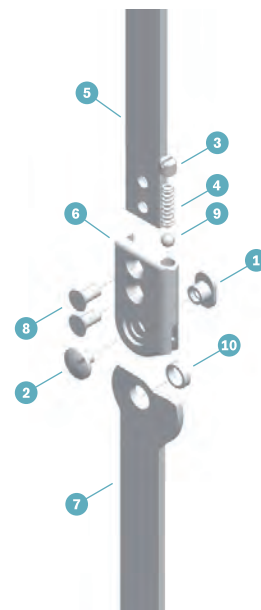
(8) Countersunk rivet

Article number	for	Material	Qty.
504S6=4X8	17F47=5 17F47=6 17F64=5 17F64=6	Stainless steel	Piece
504S6=4X10	17F64=4	Stainless steel	Piece

Article number	for	Size	Material	Qty.
509Y1=4.0	17F47 17F64	5/6	Stainless steel	Piece
509Y2=3/16	17F64	4	Stainless steel	Piece

(9) Brass bushing

Article number	for	Qty.
17Y17=7X9X2.4	17F64	Piece
17Y17=6X8X2.4	17F47 17F64	Piece



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647G3

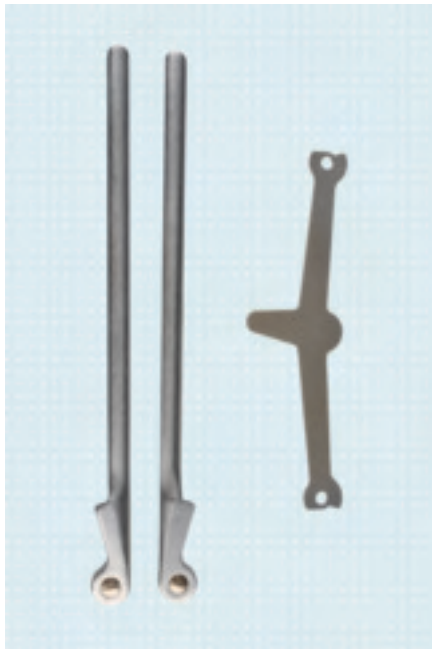
17F26 Ankle joint bars with shoe stirrup



Joints with rear compression spring

Article number	Shoe stirrup length	Shoe stirrup thickness	Upper section length	Joint head Ø	Material	Qty.
17F26=150	150 mm	2.5 mm	300 mm	26 mm	Stainless steel	Set
17F26=180	180 mm	2.5 mm	300 mm	26 mm	Stainless steel	Set
17F26=200	200 mm	3 mm	390 mm	28 mm	Stainless steel	Set
17F26=220	220 mm	3 mm	390 mm	28 mm	Stainless steel	Set
17F26=240	240 mm	3 mm	390 mm	28 mm	Stainless steel	Set
17F26=260	260 mm	3 mm	390 mm	30 mm	Stainless steel	Set
17F26=280	280 mm	3 mm	390 mm	30 mm	Stainless steel	Set
17F26=300	300 mm	3 mm	390 mm	30 mm	Stainless steel	Set

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647G3

17F28 Ankle joint bars with shoe stirrup



Joints with compression spring, aluminium bars, stainless steel shoe stirrups

Article number	Shoe stirrup length	Shoe stirrup thickness	Upper section length	Joint head Ø	Material	Qty.
17F28=150	150 mm	2.5 mm	300 mm	26 mm	Aluminium	Set
17F28=180	180 mm	2.5 mm	300 mm	26 mm	Aluminium	Set
17F28=200	200 mm	3 mm	390 mm	28 mm	Aluminium	Set
17F28=220	220 mm	3 mm	390 mm	28 mm	Aluminium	Set
17F28=240	240 mm	3 mm	390 mm	28 mm	Aluminium	Set
17F28=260	260 mm	3 mm	390 mm	30 mm	Aluminium	Set
17F28=280	280 mm	3 mm	390 mm	30 mm	Aluminium	Set
17F28=300	300 mm	3 mm	390 mm	30 mm	Aluminium	Set

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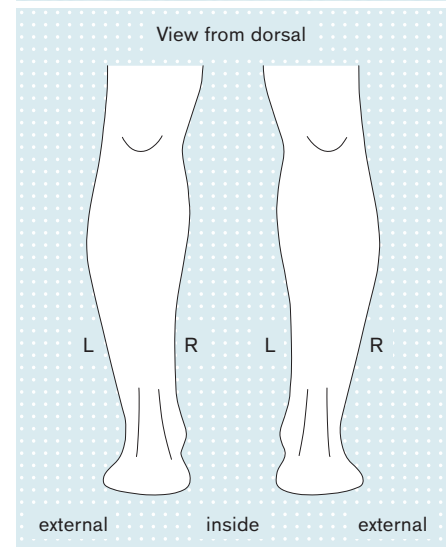
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17F31 Ankle joint bar



Article number	Side	Bar width	Head diameter	Clevis width	Material	Qty.
17F31=L26X2.5	left	15 mm	26 mm	2.5 mm	Stainless steel	Piece
17F31=R26X2.5	right	15 mm	26 mm	2.5 mm	Stainless steel	Piece
17F31=L28X3	left	16 mm	28 mm	3 mm	Stainless steel	Piece
17F31=R28X3	right	16 mm	28 mm	3 mm	Stainless steel	Piece
17F31=L30X3	left	17 mm	30 mm	3 mm	Stainless steel	Piece
17F31=R30X3	right	17 mm	30 mm	3 mm	Stainless steel	Piece

▸ Also as spare part for 17F26.



647G3

17F32 Ankle joint bar



Article number	Side	Bar width	Head diameter	Clevis width	Material	Qty.
17F32=L26X2.5	left	15 mm	26 mm	2.5 mm	Aluminium	Piece
17F32=R26X2.5	right	15 mm	26 mm	2.5 mm	Aluminium	Piece
17F32=L28X3	left	16 mm	28 mm	3 mm	Aluminium	Piece
17F32=R28X3	right	16 mm	28 mm	3 mm	Aluminium	Piece
17F32=L30X3	left	17 mm	30 mm	3 mm	Aluminium	Piece
17F32=R30X3	right	17 mm	30 mm	3 mm	Aluminium	Piece

▸ Also as spare part for 17F28.



647G3

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Matching foot stirrups for 17F26 und 17F28

17B58 Foot stirrup

Article number	Thickness	Bar width	Stirrup length	Head diameter	Material	Qty.
17B58=26X2.5X145	2.5 mm	16 mm	145 mm	26 mm	Stainless steel	Piece
17B58=28X3X165	3 mm	20 mm	165 mm	28 mm	Stainless steel	Piece
17B58=30X3X165	3 mm	20 mm	165 mm	30 mm	Stainless steel	Piece

2



17F33 Shoe stirrup

Article number	Thickness	Head diameter	Length from joint centre to joint centre	Material	Qty.
17F33=150X2.5	2.5 mm	26 mm	150 mm	Stainless steel	Piece
17F33=180X2.5	2.5 mm	26 mm	180 mm	Stainless steel	Piece
17F33=200X2.5	2.5 mm	26 mm	200 mm	Stainless steel	Piece
17F33=220X2.5	2.5 mm	26 mm	220 mm	Stainless steel	Piece
17F33=240X2.5	2.5 mm	26 mm	240 mm	Stainless steel	Piece
17F33=260X2.5	2.5 mm	26 mm	260 mm	Stainless steel	Piece
17F33=280X2.5	2.5 mm	26 mm	280 mm	Stainless steel	Piece
17F33=300X2.5	2.5 mm	26 mm	300 mm	Stainless steel	Piece
17F33=200X3	3 mm	28 mm	200 mm	Stainless steel	Piece
17F33=220X3	3 mm	28 mm	220 mm	Stainless steel	Piece
17F33=240X3	3 mm	28 mm	240 mm	Stainless steel	Piece
17F33=260X3	3 mm	30 mm	260 mm	Stainless steel	Piece
17F33=280X3	3 mm	30 mm	280 mm	Stainless steel	Piece
17F33=300X3	3 mm	30 mm	300 mm	Stainless steel	Piece

Up to 420 mm (16.5 in) extra length is available for an additional charge.

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17B65 Shoe stirrup

for 17F35 system shoe plate

Article number	System width	Thickness	Channel width	Head diameter	Length from joint centre	Material	Qty.
17B65=26X2.5X145	16 mm	2.5 mm	19 mm	26 mm	145 mm	Stainless steel	Piece
17B65=28X3X165	20 mm	3 mm	22 mm	28 mm	165 mm	Stainless steel	Piece
17B65=30X3X165	20 mm	3 mm	22 mm	30 mm	165 mm	Stainless steel	Piece

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17F35 System shoe plate, hardened

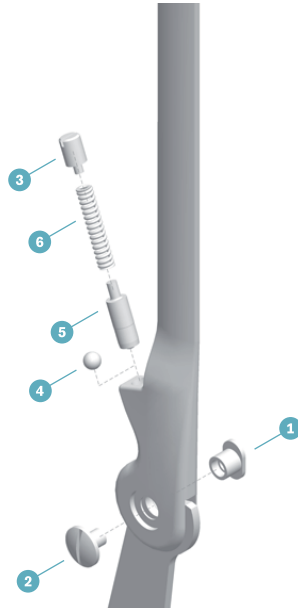
with insert piece

Article number	Side	System width	Length	Channel width	Insertion depth	Material	Qty.
17F35=L120	left	16 mm	120 mm	19 mm	60 mm	Stainless steel	Piece
17F35=R120	right	16 mm	120 mm	19 mm	60 mm	Stainless steel	Piece
17F35=L150	left	20 mm	150 mm	22 mm	80 mm	Stainless steel	Piece
17F35=R150	right	20 mm	150 mm	22 mm	80 mm	Stainless steel	Piece



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Spare parts for 17F26, 17F28, 17F31 and 17F32



(1) Bearing nut, hardened

Article number	Shoulder diameter	Shank length	Thread	Qty.
17Y93=7X6.8XM5	7 mm	6.8 mm	M5	Piece
17Y93=9X7.2XM6	9 mm	7.2 mm	M6	Piece

For repairs:

Bearing nut, hardened

Article number	Shoulder diameter	Shank length	Thread	Qty.
17Y93=7.5X6.8XM5	7.5 mm	6.8 mm	M5	Piece
17Y93=9.5X7.2XM6	9.5 mm	7.2 mm	M6	Piece

(2) Slotted truss head screw

Article number	Length	Head Ø	Thread	Total length	Material	Qty.
501S32=M5X12X9.5	9.5 mm	12 mm	M5	9.5 mm	Stainless steel	Piece
501S32=M6X14X10	10 mm	14 mm	M6	10 mm	Stainless steel	Piece

*(when using 17Y84)

(3) Set screw with slot

Article number	Thread	Thread length	Material	Qty.
17Y18=M6X11	M6	11 mm	Stainless steel	Piece
17Y18=M7X13	M7	13 mm	Stainless steel	Piece

(4) Ball bearing

Article number	Material	Qty.
509Y2=3/16	Stainless steel	Piece

(5) Thrust piece with ball

Article number	Qty.
17Y80	Piece

(6) Compression spring

Article number	Length	Shoulder diameter	Qty.
513D18=4.7X31	31 mm	4.7 mm	Piece
513D18=5.5X35	35 mm	5.5 mm	Piece
513D18=5.5X45	45 mm	5.5 mm	Piece

**Practical recommendation:**

On worn joints, the play can be reduced by replacing the bolts. Use an appropriate reamer to prepare the holes.

17B63 / 17B59 / 17B53 system ankle joints



Joint with dorsiflexion function and dorsal stop to be established by filing the foot stirrup



647G2

Contoured medial joint, straight lateral joint, with compression spring



Article number	Side	System width	Head Ø	Clevis width	Length from joint centre	Material	Qty.
17B63=L16	left	16 mm	26 mm	2.5 mm	57 mm	Stainless steel	Pair
17B63=R16	right	16 mm	26 mm	2.5 mm	57 mm	Stainless steel	Pair
17B63=L20	left	20 mm	28 mm	3 mm	66 mm	Stainless steel	Pair
17B63=R20	right	20 mm	28 mm	3 mm	66 mm	Stainless steel	Pair

Straight medial and lateral joint, with compression spring



Article number	System width	Head diameter	Clevis width	Length from joint centre	Single joint	Material	Qty.
17B59=16	16 mm	26 mm	2.5 mm	57 mm	17A59=L/R16	Stainless steel	Pair
17B59=20	20 mm	28 mm	3 mm	66 mm	17A59=L/R20	Stainless steel	Pair

Contoured medial joint and lateral joint, with compression spring



Article number	System width	Head diameter	Clevis width	Length from joint centre	Single joint	Material	Qty.
17B53=16	16 mm	26 mm	2.5 mm	57 mm	17A53=L/R16	Stainless steel	Pair
17B53=20	20 mm	28 mm	3 mm	66 mm	17A53=L/R20	Stainless steel	Pair



Practical recommendation:

- To isolate the joints for the lamination resin technique, we recommend 636K8=20x2x10 plastaband.
- The spring may show increased wear if it has been fully compressed.

1



Matching foot stirrups for 17B63, 17B59, 17B53

17B108 System foot stirrup

with brass bushing, dorsal stop can be filed, 20° plantar flexion



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B108=145X2.5	16 mm	2.5 mm	145 mm	Stainless steel	Piece
17B108=165X3	20 mm	3 mm	165 mm	Stainless steel	Piece

2

3



17B99 System lamination foot stirrup

free motion up to 20° dorsal extension and 20° plantar flexion, with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B99=16	16 mm	2.5 mm	63 mm	Stainless steel	Piece
17B99=20	20 mm	3 mm	63 mm	Stainless steel	Piece

4



17B101 System lamination foot stirrup

with dorsal stop and 20° plantar flexion, with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B101=16	16 mm	2.5 mm	63 mm	Stainless steel	Piece
17B101=20	20 mm	3 mm	63 mm	Stainless steel	Piece

5



17B107 Foot stirrup

with dorsal stop that can be filed, 20° plantar flexion and brass bushing



Article number	System width	Thickness	Head Ø	Length from joint centre	Material	Qty.
17B107=145X2.5	16 mm	2.5 mm	22 mm	145 mm	Stainless steel	Piece
17B107=165X3	20 mm	3 mm	24 mm	165 mm	Stainless steel	Piece

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17F70 System shoe stirrup

with brass bushing, dorsal stop can be filed, 20° plantar flexion



Article number	System width	Thickness	Length from joint centre to joint centre	Material	Qty.
17F70=150X2.5	16 mm	2.5 mm	150 mm	Stainless steel	Piece
17F70=180X2.5	16 mm	2.5 mm	180 mm	Stainless steel	Piece
17F70=200X2.5	16 mm	2.5 mm	200 mm	Stainless steel	Piece
17F70=220X2.5	16 mm	2.5 mm	220 mm	Stainless steel	Piece
17F70=240X2.5	16 mm	2.5 mm	240 mm	Stainless steel	Piece
17F70=260X2.5	16 mm	2.5 mm	260 mm	Stainless steel	Piece
17F70=280X2.5	16 mm	2.5 mm	280 mm	Stainless steel	Piece
17F70=300X2.5	16 mm	2.5 mm	300 mm	Stainless steel	Piece
17F70=200X3	20 mm	3 mm	200 mm	Stainless steel	Piece
17F70=220X3	20 mm	3 mm	220 mm	Stainless steel	Piece
17F70=240X3	20 mm	3 mm	240 mm	Stainless steel	Piece
17F70=260X3	20 mm	3 mm	260 mm	Stainless steel	Piece
17F70=280X3	20 mm	3 mm	280 mm	Stainless steel	Piece
17F70=300X3	20 mm	3 mm	300 mm	Stainless steel	Piece

Up to 420 mm (16.5 in) extra length is available for an additional charge.

17F35 System shoe plate, hardened

with insert piece

Article number	Side	System width	Length	Channel width	Insertion depth	Material	Qty.
17F35=L120	left	16 mm	120 mm	19 mm	60 mm	Stainless steel	Piece
17F35=R120	right	16 mm	120 mm	19 mm	60 mm	Stainless steel	Piece
17F35=L150	left	20 mm	150 mm	22 mm	80 mm	Stainless steel	Piece
17F35=R150	right	20 mm	150 mm	22 mm	80 mm	Stainless steel	Piece

17Y17 Brass bushing

Article number	System width	Qty.
17Y17=7X9X2.4	16 mm	Piece
17Y17=9X11X2.9	20 mm	Piece



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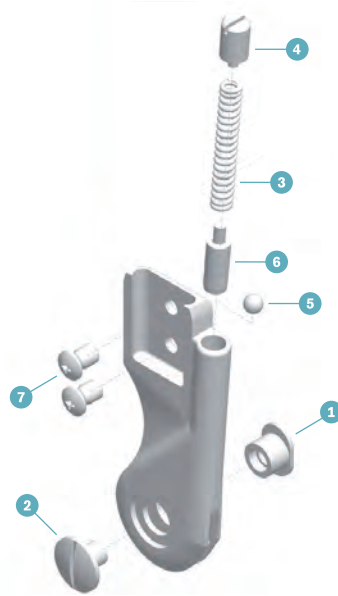
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Spare parts for 17B63, 17B59 and 17B53



(1) Bearing nut, hardened

Article number	System width	Shoulder diameter	Shank length	Thread	Qty.
17Y93=7X6.8XM5	16 mm	7 mm	6.8 mm	M5	Piece
17Y93=9X7.2XM6	20 mm	9 mm	7.2 mm	M6	Piece

(2) Slotted truss head screw

Article number	System width	Head Ø	Thread	Total length	Material	Qty.
501S32=M5X12XM9.5	16 mm	12 mm	M5	9.5 mm	Stainless steel	Piece
501S32=M6X14XM10	20 mm	14 mm	M6	10 mm	Stainless steel	Piece

*(when using 17Y84)

(3) Compression spring

Article number	System width	Length	Shoulder diameter	Qty.
513D18=4.7X31	16 mm	31 mm	4.7 mm	Piece
513D18=5.5X35	20 mm	35 mm	5.5 mm	Piece

(4) Set screw with slot

with slot and tenon

Article number	System width	Thread	Thread length	Material	Qty.
17Y18=M6X11	16 mm	M6	11 mm	Stainless steel	Piece
17Y18=M7X13	20 mm	M7	13 mm	Stainless steel	Piece

(5) Ball bearing

Article number	For system width	Size	Material	Qty.
509Y2=3/16	16 mm	4	Stainless steel	Piece

(6) Thrust piece with ball

Article number	For system width	Qty.
17Y80	20 mm	Piece

(7) Phillips oval countersunk head screw

Article number	for	Length	Material	Qty.
501T7=7.5X9XM5	System side bars	9 mm	Stainless steel	Piece

for system side bars

17B98 System ankle joint set for lamination technique

Ankle joints with rear coil spring and a foot stirrup with a dorsal stop that can be filed



Article number	Side	System width
17B98=L16	left	16 mm
17B98=R16	right	16 mm
17B98=L20	left	20 mm
17B98=R20	right	20 mm

The 17B98 set complements the 17B97 with coordinated components that were designed to facilitate the fabrication of a fibre composite AFO.



647H167

Scope of delivery

17B63 system ankle joints

Contoured medial joint, straight lateral joint, with compression spring

Article number	Side	System width	Head Ø	Clevis width	Length from joint centre	Material	Qty.
17B63=L16	left	16 mm	26 mm	2.5 mm	57 mm	Stainless steel	Pair
17B63=R16	right	16 mm	26 mm	2.5 mm	57 mm	Stainless steel	Pair
17B63=L20	left	20 mm	28 mm	3 mm	66 mm	Stainless steel	Pair
17B63=R20	right	20 mm	28 mm	3 mm	66 mm	Stainless steel	Pair



647G2

17Y128 System lamination bar

Article number	System width	Length	Thickness	Material	Qty.
17Y128=16X80	16 mm	80 mm	4 mm	Stainless steel	Piece
17Y128=20X80	20 mm	80 mm	4 mm	Stainless steel	Piece

- ⚠ **Attention! The system lamination bars must be used in pairs in the leg orthosis. Unilateral use can cause the lamination bar to break due to overloading.**



17B99 System lamination foot stirrup

free motion up to 20° dorsal extension and 20° plantar flexion, with brass bushing

Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B99=16	16 mm	2.5 mm	63 mm	Stainless steel	Piece
17B99=20	20 mm	3 mm	63 mm	Stainless steel	Piece



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501T7=7.5X9XM5 Phillips oval countersunk head screw

Article number	for	Length	Material	Qty.
501T7=7.5X9XM5	System side bars	9 mm	Stainless steel	Piece

for system side bars

2



504H1 Double hollow rivet

Article number	Head diameter	Package contents	Qty.
504H1=7-100	7 mm	6 piece(s)	Piece


3



636W19 Hardener

For 636W18 special adhesive

Article number	Net contents	Packaging format
636W19	0.1 kg	Tube

	636W18 special adhesive 100	:	646W19 hardener 70
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4



636W18 Special adhesive

For adhering metal to metal, wood to wood, e.g., for unilateral system bar

Article number	Net contents	Packaging format
636W18	0.1 kg	Tube



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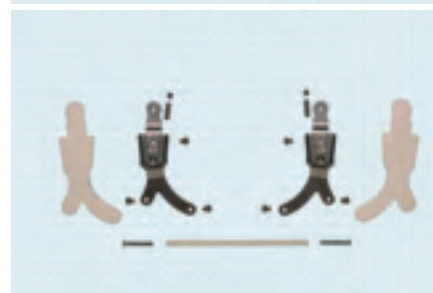
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17AD1 Multifunction ankle joint



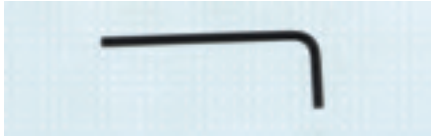
For use in thermoplastic ankle-foot orthoses. Dorsal and plantar limitation or spring support. With parallel alignment tool.

Article number	Max. body weight	Material	Max. lower leg length	Total length upper section – foot stirrup	Version	Qty.
17AD1=120	100 kg	Stainless steel	550 mm	120 mm	Adults	Set
17AD1=93	35 kg	Stainless steel	350 mm	93 mm	Children	Set



Service parts for 17Y32 and 17Y35

1



709S10=2.5 Allen wrench 2.5 mm

Article number

709S10=2.5

2

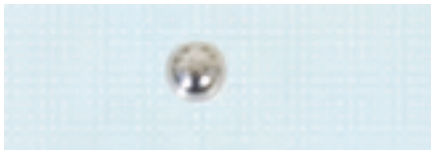


709S10=3 Allen wrench 3 mm

Article number

709S10=3

3



509Y1=5.0 Bearing ball

Article number

509Y1=5.0

4



501S32=M4X7.5X10 Screw

Article number

501S32=M4X7.5X10

5



17Y93=M4X6X6.1 Bearing nut

Article number

17Y93=M4X6X6.1

6



501F89=M5X6 Mounting screw

Article number

501F89=M5X6

7



501F89=M5X8 Mounting screw

Article number

501F89=M5X8



506A8=5X18 Straight Pin

Article number

506A8=5X18

513D83=1.1X3.7 Spring

Article number
513D83=1.1X3.7



1

501S89=M4X30 Alignment screw

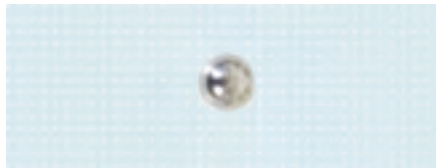
Article number
501S89=M4X30



2

506G21=M6X6 Threaded screw

Article number
506G21=M6X6



3

506G24=M6X6 Threaded screw, crimped

Article number
506G24=M6X6



4

29PK5 Alignment tube

Article number
29PK5



5

507U5=9.8X7.4X1.5 Red washer

Article number
507U5=9.8X7.4X1.5



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17LA3N Unilateral system ankle joint

5

The 17LA3 unilateral ankle joint is a multifunction system ankle joint with a foot-lifting effect. Various combination possibilities allow it to be quickly adjusted to the individual user's needs at any time. Its weight classification permits unilateral use for a patient weight of up to 100 kg and bilateral use for up to 160 kg. Despite its multifunctional features, it is small, light and inconspicuous – truly versatile.

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17LA3N Unilateral system ankle joint



Article number	System width	Max. body weight	Material	Qty.
17LA3N=10	10 mm	15 kg (unilateral)/22 kg (bilateral)	Steel	Piece
17LA3N=10-T	10 mm	15 kg (unilateral)/22 kg (bilateral)	Titanium	Piece
17LA3N=12	12 mm	20 kg (unilateral)/40 kg (bilateral)	Steel	Piece
17LA3=12-T	12 mm	20 kg (unilateral)/40 kg (bilateral)	Titanium	Piece
17LA3N=14	14 mm	50 kg (unilateral)/80 kg (bilateral)	Steel	Piece
17LA3N=14-T	14 mm	50 kg (unilateral)/80 kg (bilateral)	Titanium	Piece
17LA3N=16	16 mm	85 kg (unilateral)/120 kg (bilateral)	Steel	Piece
17LA3N=16-T	16 mm	85 kg (unilateral)/120 kg (bilateral)	Titanium	Piece
17LA3N=20	20 mm	110 kg (unilateral)/160 kg (bilateral)	Steel	Piece
17LA3N=20-T	20 mm	110 kg (unilateral)/160 kg (bilateral)	Titanium	Piece

- When using the product unilaterally, the next higher size must be used in cases where there is flexion contracture in the knee or hip greater than 10°; or distinct torsion or valgus/varus instabilities; or increased physical activity.
- For tubercle seat or valgus/varus malpositions greater than 10°, the product must be fitted bilaterally.



646D789=EN 647G1252

Accessories

17LF3N Foot stirrup for unilateral ankle joints

Free motion up to 20° plantar flexion and 20° dorsal extension, only in combination with the 17LA3N=* ankle joint



Article number	for	Material	Qty.
17LF3N=10	17LA3N=10	Stainless steel	Piece
17LF3N=12	17LA3N=12	Stainless steel	Piece
17LF3N=14	17LA3N=14	Stainless steel	Piece
17LF3N=16	17LA3N=16	Stainless steel	Piece
17LF3N=20	17LA3N=20	Stainless steel	Piece



17LF31N Foot stirrup for unilateral ankle joints

Free motion up to 20° plantar flexion and 20° dorsal extension, only in combination with the 17LA3N=* ankle joint



Article number	for	Material	Qty.
17LF31N=10	17LA3N=10	Stainless steel	Piece
17LF31N=12	17LA3N=12	Stainless steel	Piece
17LF31N=14	17LA3N=14	Stainless steel	Piece
17LF31N=16	17LA3N=16	Stainless steel	Piece
17LF31N=20	17LA3N=20	Stainless steel	Piece



1



17LS3 Lamination bar for unilateral joint system



Article number	Length	Width	Thickness	Material	Qty.
17LS3=10	80 mm	10 mm	5 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=10-T	80 mm	10 mm	5 mm bottom, 3 mm top	Titanium	Piece
17LS3=12	80 mm	12 mm	5 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=12-T	80 mm	12 mm	5 mm bottom, 3 mm top	Titanium	Piece
17LS3=14	100 mm	14 mm	6 mm bottom, 2.5 mm top	Stainless steel	Piece
17LS3=14-T	100 mm	14 mm	6 mm bottom, 2.5 mm top	Titanium	Piece
17LS3=16	130 mm	16 mm	6 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=16-T	130 mm	16 mm	6 mm bottom, 3 mm top	Titanium	Piece
17LS3=20	130 mm	20 mm	6 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=20-T	130 mm	20 mm	6 mm bottom, 3 mm top	Titanium	Piece

2

3



17LD1N Lamination dummy for unilateral ankle joint incl. shoulder screw

Article number	for	Material	Qty.
17LD1N=10	17LA3N=10	Stainless steel	Piece
17LD1N=12	17LA3N=12	Stainless steel	Piece
17LD1N=14	17LA3N=14	Stainless steel	Piece
17LD1N=16	17LA3N=16	Stainless steel	Piece
17LD1N=20	17LA3N=20	Stainless steel	Piece

4



17LV3 Side bar for unilateral joint system

Article number	Length	Width	Thickness	Material	Qty.
17LV3=12	270 mm	12	7 mm	Stainless steel	Piece
17LV3=14	270 mm	14	7 mm	Stainless steel	Piece
17LV3=16	400 mm	16	8 mm	Stainless steel	Piece
17LV3=20	470 mm	20	8 mm	Stainless steel	Piece

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702B11 Hole gauge

Article number	Material	To be used for
702B11	Tool steel	17LA3N, 17LK3

Spare parts for 17LA3

(1) Spare part set screwing

Article number	for	Qty.
17LA32N=10	17LA3N=10	Piece
17LA32N=12	17LA3N=12	Piece
17LA32N=14	17LA3N=14	Piece
17LA32N=16	17LA3N=16	Piece
17LA32N=20	17LA3N=20	Piece

(2) Set screw

Article number	for	Qty.
30Y349=12	17LA3N=10 17LA3N=12	Piece
30Y309=12	17LA3N=14	Piece
30Y309=20	17LA3N=16 17LA3N=20	Piece

(3) Buffer stop

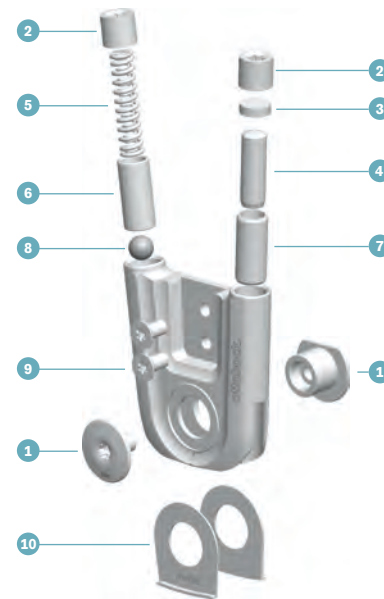
Article number	for	Qty.
30Y350=12	17LA3N=10 17LA3N=12	Piece
30Y350=14	17LA3N=14	Piece
30Y350=20	17LA3N=16 17LA3N=20	Piece

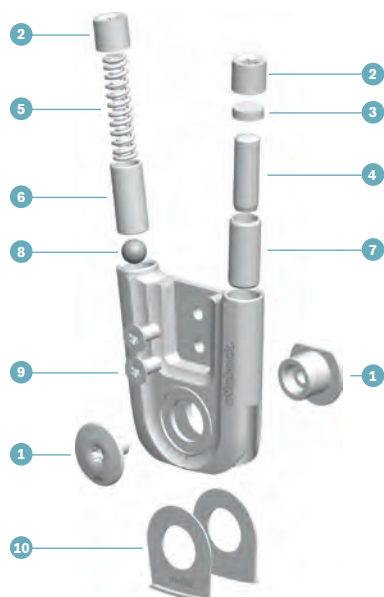
(4) Cylinder pin

Article number	for	Qty.
506A8=4X20	17LA3N=10 17LA3N=12	Piece
506A8=6X24	17LA3N=14	Piece
506A8=8X26	17LA3N=16 17LA3N=20	Piece

(5) Compression spring

Article number	for	Qty.
513D87=0.75X2.95X2	17LA3N=10 17LA3N=12	Piece
513D87=1.1X4.8X28	17LA3N=14	Piece
30Y254=16-1	17LA3N=16	Piece
30Y254=20-1	17LA3N=20	Piece





(6) Spring sleeve

Article number	for	Qty.
30Y345=12	17LA3N=10	Piece
	17LA3N=12	
30Y345=14	17LA3N=14	Piece
30Y345=20	17LA3N=16	Piece
	17LA3N=20	

(7) Stop sleeve

Article number	for	Qty.
30Y346=12	17LA3N=10	Piece
	17LA3N=12	
30Y346=14	17LA3N=14	Piece
30Y346=20	17LA3N=16	Piece
	17LA3N=20	

(8) Bearing ball

Article number	for	Qty.
509Y1=5.0	17LA3N=10	Piece
	17LA3N=12	
509Y1=7.0	17LA3N=14	Piece
509Y1=9.0	17LA3N=16	Piece
	17LA3N=20	

(9) Countersunk screw (hexalobular internal)

Article number	for	Qty.
501S137=M4X8	17LA3N=10	Piece
	17LA3N=12	
501S137=M4X10-2	17LA3N=14	Piece
501S137=M5X10-1	17LA3N=16	Piece
	17LA3N=20	

(10) Axial discs

Article number	for	Qty.	Scope of delivery
17LA33N=10	17LA3N=10	Two pieces	30Y344=10X0.70
			30Y344=10X0.75
			30Y344=10X0.80
			30Y344=10X0.85
			30Y344=10X0.90
17LA33N=12	17LA3N=12	Two pieces	30Y305=12X0.70
			30Y305=12X0.75
			30Y305=12X0.80
			30Y305=12X0.85
			30Y305=12X0.90
17LA33N=14	17LA3N=14	Two pieces	30Y305=14X0.70
			30Y305=14X0.75
			30Y305=14X0.80
			30Y305=14X0.85
			30Y305=14X0.90
17LA33N=16	17LA3N=16	Two pieces	30Y344=14X0.70
			30Y344=14X0.75
			30Y344=14X0.80
			30Y344=14X0.85
			30Y344=14X0.90
17LA33N=20	17LA3N=20	Two pieces	30Y305=20X0.70
			30Y305=20X0.75
			30Y305=20X0.80
			30Y305=20X0.85
			30Y305=20X0.90

Unilateral Joint System

Order form · fax:

Company	<input type="text"/>	Date	<input type="text"/>
Technician	<input type="text"/>	Signature	<input type="text"/>
Customer no.	<input type="text"/>		

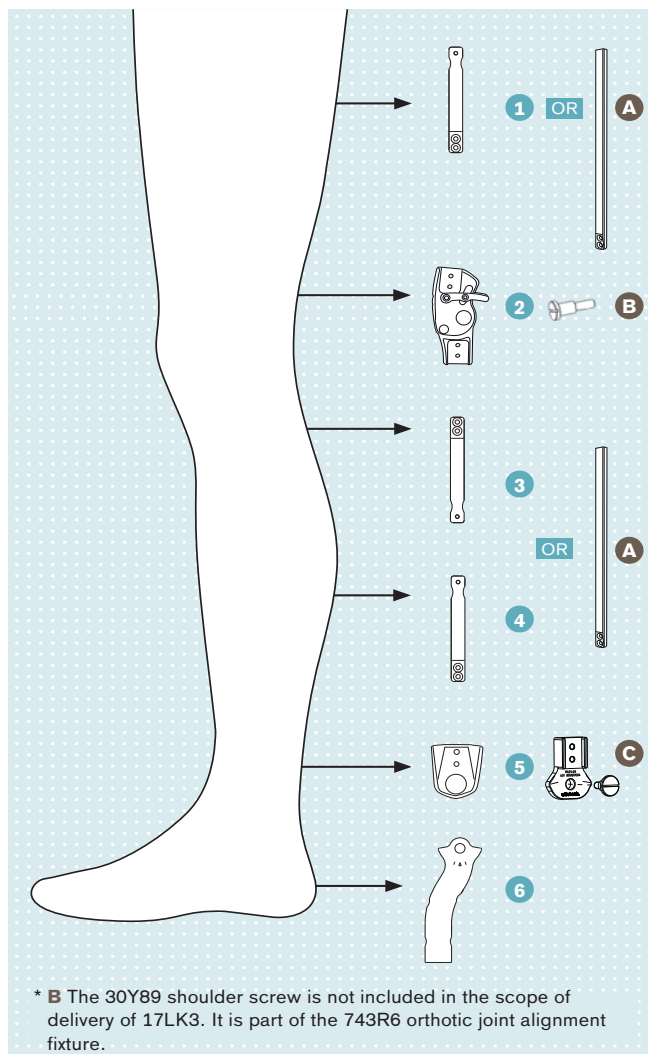
User information

Surname, first name Weight

Age Indication

Side Left Right Bilateral

The size chosen depends on the patient's weight and the conditions of use.



* B The 30Y89 shoulder screw is not included in the scope of delivery of 17LK3. It is part of the 743R6 orthotic joint alignment fixture.

1 Lamination bar 17LS3=* OR A Extension bar 17LV3=*

Steel version	Titanium version	Stainless steel version	Aluminium version
<input type="checkbox"/> 17LS3=10	<input type="checkbox"/> 17LS3=10-T	<input type="checkbox"/> 17LV3=12	<input type="checkbox"/> 17LV3=12-A
<input type="checkbox"/> 17LS3=12	<input type="checkbox"/> 17LS3=12-T	<input type="checkbox"/> 17LV3=14	<input type="checkbox"/> 17LV3=14-A
<input type="checkbox"/> 17LS3=14	<input type="checkbox"/> 17LS3=14-T	<input type="checkbox"/> 17LV3=16	<input type="checkbox"/> 17LV3=16-A
<input type="checkbox"/> 17LS3=16	<input type="checkbox"/> 17LS3=16-T	<input type="checkbox"/> 17LV3=20	<input type="checkbox"/> 17LV3=20-A
<input type="checkbox"/> 17LS3=20	<input type="checkbox"/> 17LS3=20-T		

2 Unilateral Knee Joint 17LK3=*

Steel version	Titanium version	Side	B Shoulder screw*
<input type="checkbox"/> 17LK3=12	<input type="checkbox"/> 17LK3=12-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89
<input type="checkbox"/> 17LK3=14	<input type="checkbox"/> 17LK3=14-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89
<input type="checkbox"/> 17LK3=16	<input type="checkbox"/> 17LK3=16-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89
<input type="checkbox"/> 17LK3=20	<input type="checkbox"/> 17LK3=20-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89

3, 4 Lamination bar 17LS3=* OR A Extension bar 17LV3=*

Steel version	Titanium version	Stainless steel version	Aluminium version
<input type="checkbox"/> 17LS3=10	<input type="checkbox"/> 17LS3=10-T	<input type="checkbox"/> 17LV3=12	<input type="checkbox"/> 17LV3=12-A
<input type="checkbox"/> 17LS3=12	<input type="checkbox"/> 17LS3=12-T	<input type="checkbox"/> 17LV3=14	<input type="checkbox"/> 17LV3=14-A
<input type="checkbox"/> 17LS3=14	<input type="checkbox"/> 17LS3=14-T	<input type="checkbox"/> 17LV3=16	<input type="checkbox"/> 17LV3=16-A
<input type="checkbox"/> 17LS3=16	<input type="checkbox"/> 17LS3=16-T	<input type="checkbox"/> 17LV3=20	<input type="checkbox"/> 17LV3=20-A
<input type="checkbox"/> 17LS3=20	<input type="checkbox"/> 17LS3=20-T		

5 Unilateral Ankle Joint 17LA3N=*

Steel version	Titanium version	C Optional lamination dummy with shoulder screw
<input type="checkbox"/> 17LA3N=10	<input type="checkbox"/> 17LA3N=10-T	<input type="checkbox"/> 17LD1N=10
<input type="checkbox"/> 17LA3N=12	<input type="checkbox"/> 17LA3N=12-T	<input type="checkbox"/> 17LD1N=12
<input type="checkbox"/> 17LA3N=14	<input type="checkbox"/> 17LA3N=14-T	<input type="checkbox"/> 17LD1N=14
<input type="checkbox"/> 17LA3N=16	<input type="checkbox"/> 17LA3N=16-T	<input type="checkbox"/> 17LD1N=16
<input type="checkbox"/> 17LA3N=20	<input type="checkbox"/> 17LA3N=20-T	<input type="checkbox"/> 17LD1N=20

6 Foot stirrup (Steel) 17LF3N=*

<input type="checkbox"/> 17LF3N=10	<input type="checkbox"/> 17LF3N=14	<input type="checkbox"/> 17LF3N=20
<input type="checkbox"/> 17LF3N=12	<input type="checkbox"/> 17LF3N=16	

1



17B66 Multifunction system ankle joint

Multifunction system ankle joint with up to 9 setting options (spring, fixed stop or spring stop)



2

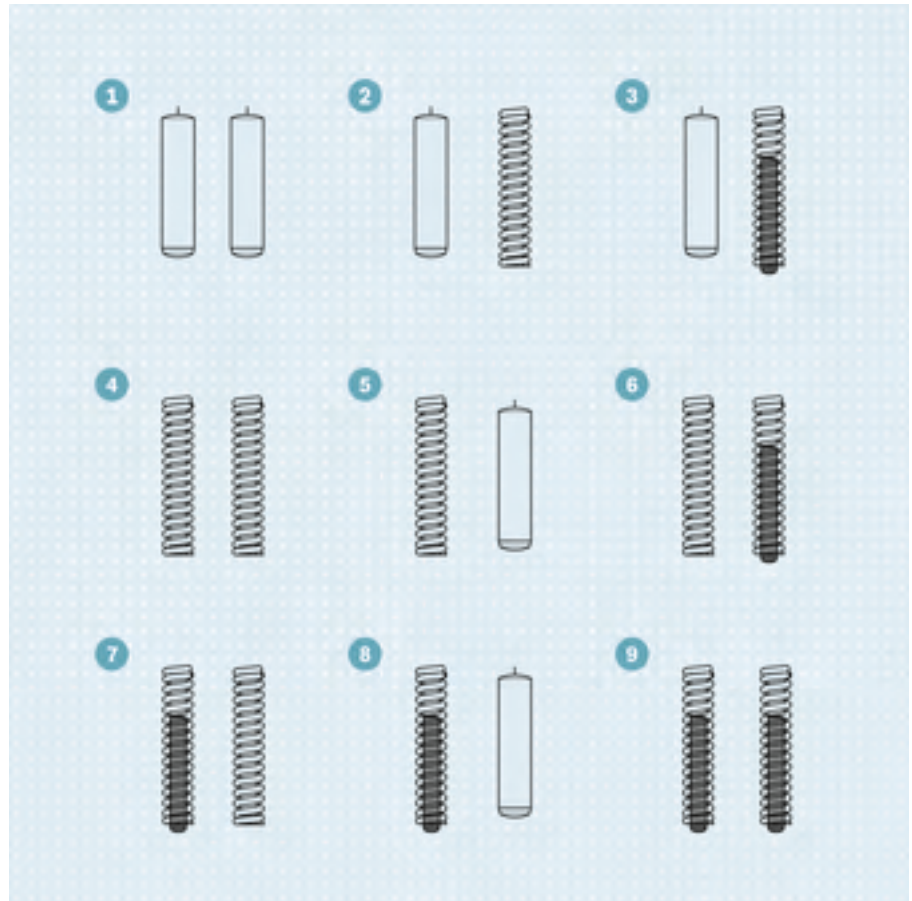
Article number	System width	Clevis width	Material	Qty.
17B66=16	16 mm	3 mm	Stainless steel	Pair with screws
17B66=20	20 mm	3 mm	Stainless steel	Pair with screws
17B66=A-16*	16 mm	3 mm	Stainless steel	Pair with screws
17B66=A-20*	20 mm	3 mm	Stainless steel	Pair with screws

*Medial and lateral joint straight, lateral bar connection

646A213

647G2
647G267

3



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Practical recommendation:

- The spring may show increased wear if it has been fully compressed.
- The cylinder pin is inside the spring. Using the cylinder pin can extend the life of the spring.

7

Accessories

17B113 System foot stirrup

Free motion up to 25° plantar flexion and 25° dorsal extension, with brass bushing



Article number	Material	Qty.
17B113	Stainless steel	Piece



1

17B114 System foot stirrup

free motion up to 25° plantar flexion and 25° dorsal extension, with brass bushing



Article number	Material	Qty.
17B114	Stainless steel	Piece



2

3

17B115 System foot stirrup

for 17F35=L/R150 system shoe plate
free motion up to 25° plantar flexion and 25° dorsal extension, with brass bushing for 17F35=L/R150 system shoe plate
free motion up to 25° plantar flexion and 25° dorsal extension, with brass bushing



Article number	Material	Qty.
17B115	Stainless steel	Piece



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17B116 System shoe stirrup

free motion up to 25° plantar flexion and 25° dorsal extension, with brass bushing free motion up to 25° plantar flexion and 25° dorsal extension, with brass bushing



Article number	System width	Thickness	Length from joint centre	Material	Qty.
17B116=180	20 mm	3 mm	180 mm	Stainless steel	Piece
17B116=200	20 mm	3 mm	200 mm	Stainless steel	Piece
17B116=220	20 mm	3 mm	220 mm	Stainless steel	Piece
17B116=240	20 mm	3 mm	240 mm	Stainless steel	Piece
17B116=260	20 mm	3 mm	260 mm	Stainless steel	Piece
17B116=280	20 mm	3 mm	280 mm	Stainless steel	Piece
17B116=300	20 mm	3 mm	300 mm	Stainless steel	Piece



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17Y17=9X11X2.9 Brass bushing

Article number	Material	Qty.
17Y17=9X11X2.9	Brass	Piece

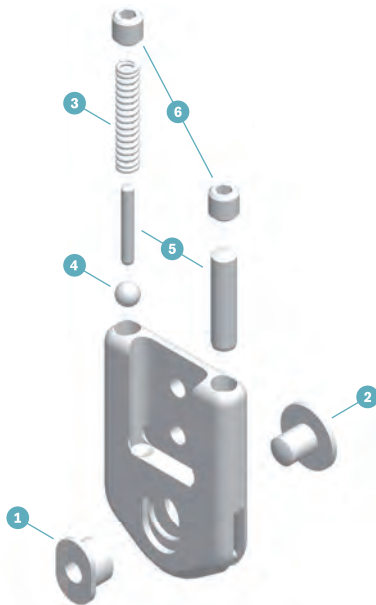
2

17B66=S Service set for 17B66

Article number	Qty.	Scope of delivery
17B66=S	Set	4x 513D18=4.7x31 4x 506A8=5x22 4x 506A8=2.5x18 4x 509Y1=5.0 4x 506G3=M6x6 2x 17Y93=9x6.25xM6 2x 501S32=M6x14x10

Spare parts for 17B66

3



(1) Bearing nut, hardened

Article number	For system width	Shoulder diameter	Shank length	Thread	Qty.
17Y93=9X6.25XM6	20/16 mm	9 mm	6.25 mm	M6	Piece

(2) Slotted truss head screw

Article number	For system width	Head Ø	Thread	Total length	Material	Qty.
501S32=M6X14X10	20/16 mm	14 mm	M6	10 mm	Stainless steel	Piece

*(when using 17Y84)

(3) Compression spring

Article number	Shoulder diameter	Qty.
513D18=4.7X31	4.7 mm	Piece

(4) Bearing ball

50 pieces are required to completely replace the unit.

Article number	for	Material	Qty.
509Y1=5.0	10A12 all-purpose hook	Stainless steel	Piece

(5) Stop pin (small)

Article number	Qty.
506A8=2.5X18	Piece
506A8=5X22	Piece

(6) Set screw

Article number	Qty.
506G3=M6X6	Piece

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17F53 / 17F65 System ankle joint for children

Multifunction system ankle joint



1

2

Ankle joints and foot stirrups stainless steel, side bars aluminium

Article number	Bar size	Joint (height / depth / width)	Material	Qty.
17F53=6	230/12/3 mm	38/6.5/24 mm	Stainless steel	Pair
17F53=5	230/14/3 mm	38/6.5/28 mm	Stainless steel	Pair



3

Ankle joints titanium, foot stirrups stainless steel

Article number	Bar size	Joint (height / depth / width)	Material	Qty.
17F65=6	150/12/3 mm	38/6.5/24 mm	Titanium	Piece
17F65=5	200/15/3 mm	38/6.5/28 mm	Titanium	Piece



4

Accessories for 17F53 and 17F65

17F54 Foot stirrup

Article number	for	Length	Material	Qty.
17F54=130X2.5	Metal soles	130 mm	Stainless steel	Piece



5

17F35 System shoe plate, hardened

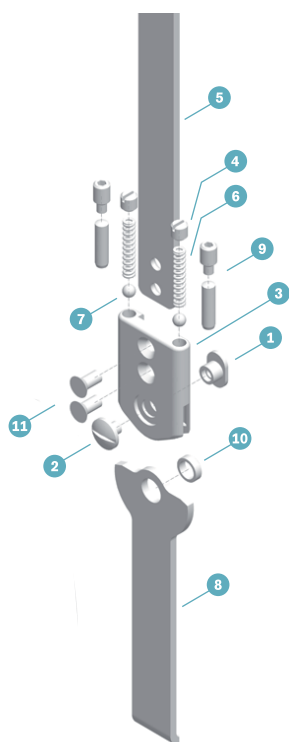
Article number	Length	Channel width	Material	Qty.
17F35=L90	90 mm	14 mm	Stainless steel	Piece
17F35=R90	90 mm	14 mm	Stainless steel	Piece
17F35=L105	105 mm	16 mm	Stainless steel	Piece
17F35=R105	105 mm	16 mm	Stainless steel	Piece



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Accessories for 17F53 and 17F65



(1) Bearing nut, hardened

Article number	Qty.
17Y93=6X5.2XM4	Piece

(2) Slotted truss head screw

Article number	Material	Qty.
501S32=M4X10X7.5	Stainless steel	Piece

(3) Ankle joint

Article number	for	Connection width	Head diameter	Clevis width	Material	Qty.
30U116=6	17F65=6	12 mm	16 mm	2.5 mm	Titanium	Piece
30U116=5	17F65=5	15 mm	19 mm	2.5 mm	Titanium	Piece

(4) Set screw with slot

Article number	Material	Qty.
501G2=M5X5	Stainless steel	Piece

(5) Side bar

Article number	for	Length	Material	Qty.
17F52=12X3X220	17F53=6	220 mm	Aluminium	Piece
17F52=14X3X220	17F53=5	220 mm	Aluminium	Piece
30E109=5	17F65=5	200 mm	Titanium	Piece
30E109=6	17F65=6	150 mm	Titanium	Piece

(6) Compression spring

Article number	Qty.
513D19=3.8X20	Piece

(7) Bearing ball

Article number	Material	Qty.
509Y1=4.0	Stainless steel	Piece

(8) Foot stirrup

Article number	Length	Material	Qty.
17F54=100X2.5	100 mm	Stainless steel	Piece
17F54=125X2.5	125 mm	Stainless steel	Piece

(9) Stop set

Reference number	Qty.
17Y155	Set

(10) Brass bushing

Article number	Length	Material	Qty.
17Y17=9X3X6	76 mm	Steel	Piece
17Y17=10X4.5X7	89 mm	Steel	Piece

(11) Countersunk rivet

Article number	Material	Qty.
504S6=4X8	Stainless steel	Piece

17PA1 CarbonIQ ankle joint



The 17PA1=20 ankle joint is a double-action joint and is based on the Ottobock 17B66 ankle joint. This type of joint offers by far the most versatile fitting. The 9 different possibilities for settings and combinations (see fig.) allow the joint's functions to be adapted to the user's requirements at any time, even if these change over the course of the fitting.

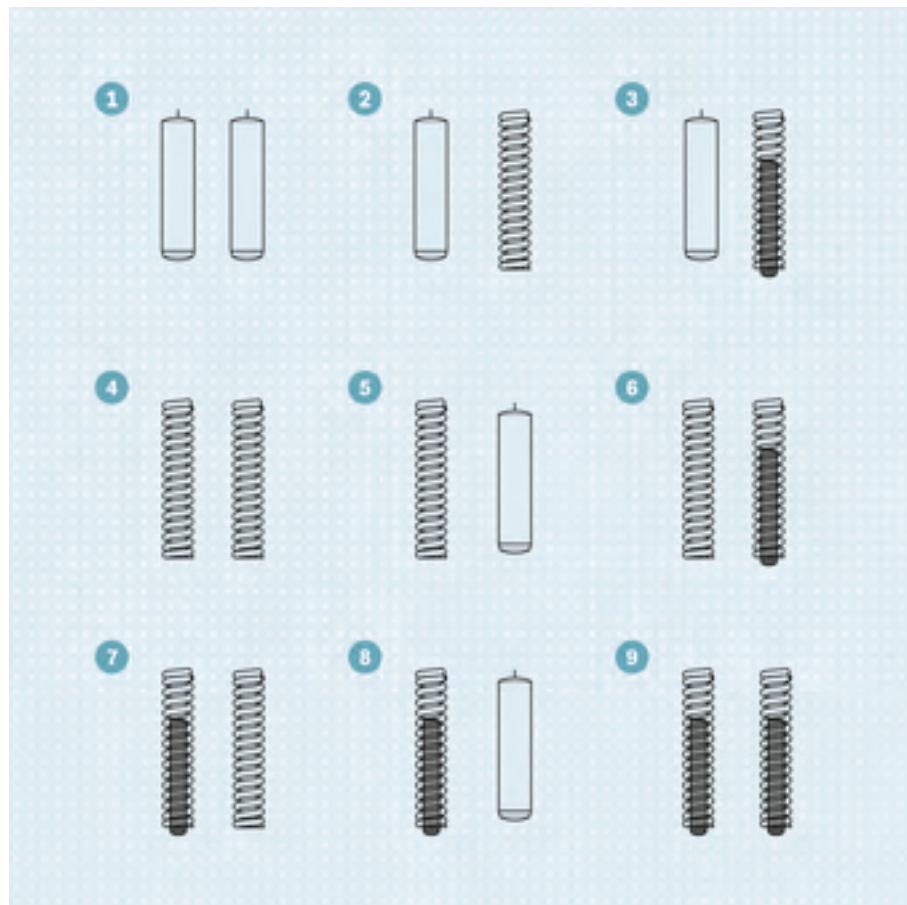
Different versions for influencing plantar flexion and dorsal extension are available.

Article number	Side	Max. body weight	Material	Qty.
17PA1=14	left and right	45 kg	Fibre-reinforced plastic	Pair
17PA1=20	left and right	100 kg	Fibre-reinforced plastic	Pair

- The CarbonIQ joints are splash proof!



646D578=EN 646T5=4.6EN 647G641



Accessories

17PF1 Foot stirrup

Article number	for	Material	Qty.
17PF1	17PA1=20	Stainless steel	Piece
17PF1=14	17PA1=14	Stainless steel	Piece



1

2

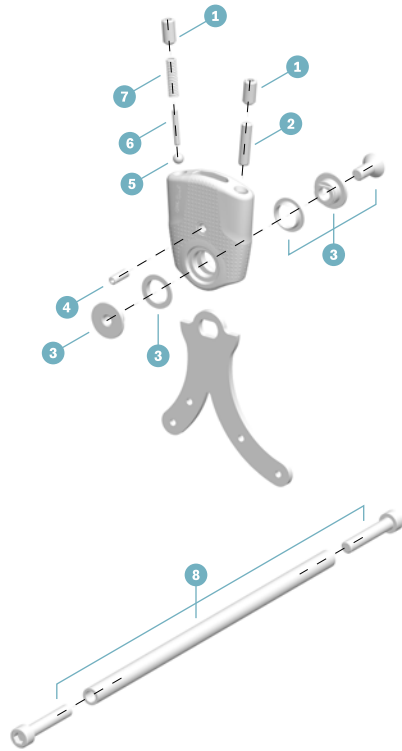
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Spare parts for 17PA1

(1) Set screw

Article number	Qty.
506G36=M6X14	Piece

(2) Stop pin (small)

Article number	Qty.
506A8=5X20	Piece

(3) Service set

Article number	Qty.	Scope of delivery
29PA1	Set	1x 501S84=M6X14 1x 30Y215 1x 509G10=12X13X3 1x 30Y214

(4) Set screw

Article number	Qty.
506G3=M4X12	Piece

(5) Bearing ball

Article number	Material	Qty.
509Y1=5.0	Stainless steel	Piece

(6) Stop pin (small)

Article number	Qty.
506A8=2.5X18	Piece

(7) Compression spring

Article number	Qty.
513D18=4.7X31-1	Piece

(8) Adjustment Aid

Article number	Qty.	Scope of delivery
29PK4	Set	1x 501T28=M6X35 1x 30Y216

Spare parts for 17PA1

(1) Set screw

Article number	Qty.
506G36=M6X6	Piece

(2) Set screw

Article number	Qty.
506G36=M6X14	Piece

(3) Stop pin (small)

Article number	Qty.
506A5=5XM6X6	Piece

(4) Service set

Article number	Qty.	Scope of delivery
29PA1=14	Set	1x30Y290 1x30y291 2x509G10=10x11x2.6 1x501S84=M5x14

(5) Set screw

Article number	Qty.
506G3=M4X12	Piece

(6) Bearing ball

Article number	Material	Qty.
509Y1=5.0	Stainless steel	Piece

(7) Stop pin (small)

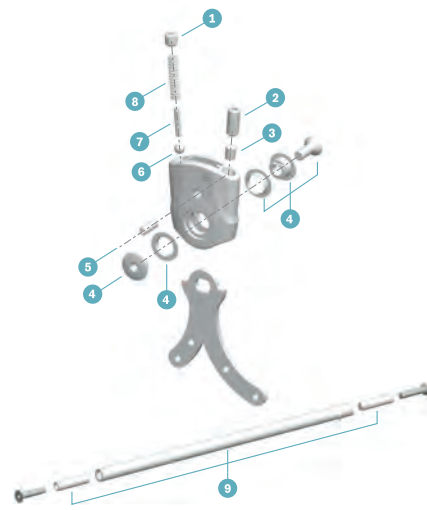
Article number	Qty.
506A5=2.5XM6X14	Set

(8) Compression spring

Article number	Qty.
513D88=0.9X3.9X28	Piece

(9) Adjustment Aid

Article number	Qty.	Scope of delivery
29PK4=14	Set	1x 30Y216 1x 30Y326 1x 501S84=M4X20



1



17CF1 Carbon Ankle Seven



How it works

The carbon springs are designed to initiate extension moments of the hip and knee during walking, and thus achieve extension and knee stability in the lower extremities. The energy generated during heel strike is stored in the carbon matrix and returned at toe-off. In contrast to conventional ankle foot orthoses, the limits in the plantar and dorsal direction are dynamic and without static restriction.

Indications

Paralysis or weakness/restriction

- of the foot lifting and foot lowering muscles while using a dynamic ankle foot orthosis,
- of the knee extensors while using a knee ankle foot orthosis (KAFO) with locked knee joint.

Diseases such as spina bifida or poliomyelitis are commonly indicated.

Benefits

- Positive influence on the gait pattern
- Very lightweight design
- 7° outward rotation supports physiological alignment of the foot
- Classification for straightforward product selection
- Suitable for thermoplastic and laminated orthoses

Selecting and ordering

The Carbon Ankle Seven is selected on the basis of the user's body weight and activity level.

- Normal activity level:

A normally active user participates in all everyday activities independently and also performs simple tasks.

- High activity level:

A highly active user is unrestricted in everyday life. The orthosis of a highly active user must support quick changes from walking to running and vice versa, for example, for those doing sports or caring for children.

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 646D232=EN

 647G346

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Classification of the Carbon Ankle Seven for AFOs

It is easy to find the right article number in the classification matrix shown below. Simply select the side (e.g. 17CF1=L9 for the left side with a normally active patient who weighs up to 30 kg/66 lbs).

The delivery includes detailed mounting instructions as well as the attachment material needed for the integration into an orthosis.

Article number	Max. body weight (normal activity)	Max. body weight (high activity)	Spring width	Qty.
17CF1=L/R1	100 kg	100 kg	30 mm	Piece
17CF1=L/R2	90 kg	80 kg	30 mm	Piece
17CF1=L/R3	80 kg	70 kg	30 mm	Piece
17CF1=L/R4	70 kg	60 kg	30 mm	Piece
17CF1=L/R5	60 kg	50 kg	30 mm	Piece
17CF1=L/R6	50 kg	-	25/30 mm	Piece
17CF1=L/R7	-	40 kg	25 mm	Piece
17CF1=L/R8	40 kg	30 kg	25 mm	Piece
17CF1=L/R9	30 kg	-	25 mm	Piece
17CF1=L/R10	-	20 kg	25 mm	Piece
17CF1=L/R11	20 kg	10 kg	22 mm	Piece
17CF1=L/R12	10 kg	-	22 mm	Piece



 646D232=EN

- The classification applies to AFOs that are intended to influence the knee joint.
- The use of the Carbon Ankle Seven carbon spring for KAFOs may require a deviation from the classification.
- The specified weights are important for functionality, not durability.

Single components 17CF1

Rosette washer

Article number	Qty.
507U9=M5	Piece
507U9=M4	Piece

Phillips oval countersunk head screw

Article number	Qty.
501S86=M5X14	Piece
501S86=M4X12	Piece

Welding nut

Article number	Qty.
502E3=M5X7.5	Piece
502E3=M4X6	Piece

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Carbon fibre footplate

Available in different versions to suit various indications, as a platform/basis for foot orthoses or in case of partial foot amputations:

- Replaces the steel spring insert for illnesses that require restricted mobility of the foot
- Improved gait efficiency and comfort through the control of excessive mobility or flexion limitation
- Redistribution of pressure to less sensitive areas for diabetes patients
- The carbon fibre footplates are not thermoformable.

Order example

Reference number	Size	Stiffness
SL=F	19	M

2

3

Reference number	SL=F	SL=AL	SL=AR	SL=HAL	SL=HAR	SL=CFP
Size	16 cm, 19 cm, 22 cm, 25 cm, 28 cm, 31 cm	16 cm, 19 cm, 22 cm, 25 cm, 28 cm, 31 cm	16 cm, 19 cm, 22 cm, 25 cm, 28 cm, 31 cm	16 cm, 19 cm, 22 cm, 25 cm, 28 cm, 31 cm	16 cm, 19 cm, 22 cm, 25 cm, 28 cm, 31 cm	22 cm, 25 cm, 28 cm, 31 cm
Stiffness	soft, medium, stiff, very stiff, extra stiff	soft, medium, stiff, very stiff, extra stiff	soft, medium, stiff, very stiff, extra stiff	soft, medium, stiff, very stiff, extra stiff	soft, medium, stiff, very stiff, extra stiff	soft, medium, stiff, very stiff, extra stiff
Version	flat	arched, left	arched, right	13 mm heel, arched left	13 mm heel, arched right	contoured

4



Morton's extension

For the treatment of Morton's neuroma, hallux rigidus, stress fractures and hallux malleus (Turf toe™) – 13 mm heel.

Order example

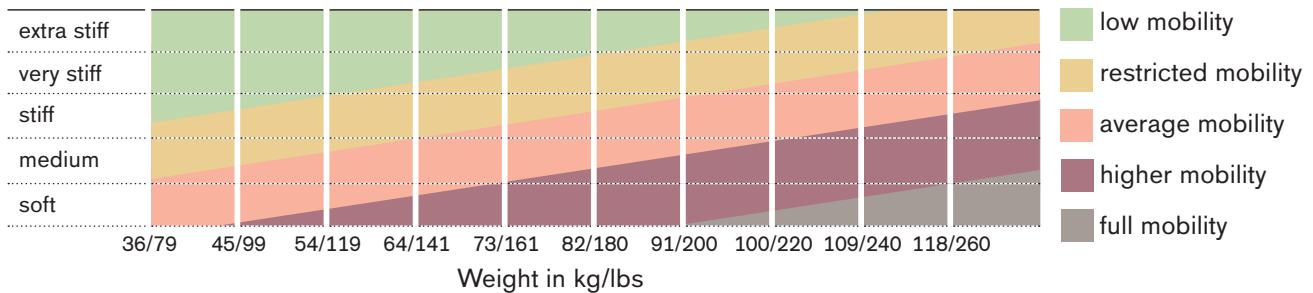
Reference number	-	Stiffness
SL=ME-F	-	M

Reference number	-	Side	-	Stiffness
SL=ME-C	-	L	-	M

5

Reference number	SL=ME-F	SL=MEL-F	SL=ME-C	SL=MEL-C
Side	-	-	left, right	left, right
Stiffness	medium, stiff	medium, stiff	medium, stiff	medium, stiff
Version	standard (20 cm) + flat	long (25.5 cm) + flat	standard (20 cm) + contoured	long (25.5 cm) + contoured

6



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- 1
- 2
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- 7

1



28U70 GoOn

Article number	28U70
Size	Universal

2

Spare parts for 28U70



29U70 Pad for GoOn incl. straps and Y-hook-and-loop

Article number	Size
29U70	Universal

3



29U25 Y-hook-and-loop

Article number	Size	Qty.
29U25=2	2	Piece

4



29U74 Visco-elastic pad

Article number	Size
29U74	Universal

5

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7

28U90 Ankle foot orthosis

Order example

Reference number	=	Side	Size	-	Colour
28U90	=	L	37-39	-	0

Reference number	28U90				
Size	35-37	37-39	39-41	41-44	44-47
Colour	transparent (0), black (7)				
Side	left (L), right (R)				
Height	290 mm	315 mm	345 mm	390 mm	415 mm



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Spare parts for 28U90

29U90 Calf pad with strap

Order example

Reference number	=	Size	-	Colour
29U90	=	37-39	-	9

Reference number	29U90				
Size	35-37	37-39	39-41	41-44	44-47
Colour	beige (9), black (7)				



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28U50 Malleo Neurexa^{pro}

Order example

Reference number	=	side	size
28U50	=	L	35-37

Reference number	28U50				
Size	35-37	37-39	39-41	41-44	44-47
Side	left (L), right (R)				

2

Benefits

- Flexible, as can be worn without a shoe
- Dynamic pronation strap for correction of supination position
- Can be worn as a day or night splint for the prevention of contractures

3

Indications

Can be used for dorsiflexor weakness, especially in case of an acute supination position of the foot due to spasticity, for example following a stroke or traumatic brain injury, in multiple sclerosis, neuromuscular atrophy or isolated peroneal paralysis.

Mode of action

- Thermoplastic ankle foot orthosis for the treatment of patients with an acute supination position of the foot with the beginnings of or emerging spasticity.
- The support given by the closure straps, combined with the elastic pronation strap ensures effective correction, even with acute hypertonicity of the lower leg musculature.
- The elastic strap can yield to the pressure when spasticity occurs and, after relaxation, maintain the foot in a neutral position.

4

Spare parts for 28U50

29S2 Strap piece

Article number	Total length
29S2=35-37	29 cm
29S2=37-41	33 cm
29S2=41-44	37 cm

5

29S1 Hook-and-loop closure

Article number	Side	Length
29S1=35-37	left and right	15 cm
29S1=37-39	left and right	16.5 cm
29S1=39-41	left and right	18 cm
29S1=41-44	left and right	20 cm

6

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28U11 WalkOn

Order example

Reference number	=	Side	Size
28U11	=	L	36-39

Reference number	28U11			
Size	36-39	39-42	42-45	45-48
Side	left (L), right (R)			
Height	350 mm	360 mm	370 mm	390 mm



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28U23 WalkOn Trimable

Order example

Reference number	=	Side	Size
28U23	=	L	36-39

Reference number	28U23			
Size	36-39	39-42	42-45	45-48
Side	left (L), right (R)			
Height	350 mm	360 mm	370 mm	390 mm



3

4

Spare parts for 28U11 and 28U23

623Z39 WalkOn calf pad with Outlast

Article number	Side	Size
623Z39=L	left	36-48
623Z39=R	right	36-48



5

28U22 WalkOn Flex

Order example

Reference number	=	Side	Size
28U22	=	L	36-39

Reference number	28U22			
Size	36-39	39-42	42-45	45-48
Side	left (L), right (R)			
Height	350 mm	360 mm	370 mm	390 mm



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Spare parts for 28U22

29U5 Calf pad

Article number	Side	Size
29U5=L1	left	43-50
29U5=R1	right	43-50
29U5=L2	left	31-42
29U5=R2	right	31-42

2

Accessories for 28U11 / 28U22 / 28U23



28Z10 Lateral pronation strap

A 28Z10 pronation strap can be used as additional option to counteract spastic supination of the foot.

Article number	Size
28Z10	Universal

- The lateral pronation strap is not part of the 28U11, 28U22 and 28U23 scope of delivery. **28Z10 is included in the 28U24 and 28U25 scope of delivery.**

3

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28U24 WalkOn Reaction

Order example

Reference number	=	Side	Size
28U24	=	L	36-39

Reference number	28U24			
Size	36-39	39-42	42-45	45-48
Height	333 mm	355 mm	377 mm	400 mm
Side	left (L), right (R)			

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28U25 WalkOn Reaction^{plus}

Order example

Reference number	=	side	size
28U25	=	L	36-39

Reference number	28U25			
Size	36-39	39-42	42-45	45-48
Side	left (L), right (R)			
Height	333 mm	355 mm	377 mm	400 mm

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Spare parts for 28U24 / 28U25

28Z10 Lateral pronation strap

A 28Z10 pronation strap can be used as additional option to counteract spastic supination of the foot.

Article number	Size
28Z10	Universal

- The lateral pronation strap is not part of the 28U11, 28U22 and 28U23 scope of delivery. **28Z10 is included in the 28U24 and 28U25 scope of delivery.**



1

29U23 Shin pad

Reference number	Size
29U23	Universal



2

29U25 Y-hook-and-loop

Article number	Size	Qty.
29U25=1	1	Piece
29U25=2	2	Piece



3

29U24 Pad for 28U24 and 28U25 incl. hook-and-loop closures

Reference number	29U24			
Size	36 - 39	39 - 42	42 - 45	45 - 48
Qty.	Piece			
Side	left (L), right (R)			



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28U25 WalkOn Reaction^{junior}



Order example

Reference number	=	side	size
28U25	=	L	24-27

Reference number	28U25			
Size	24-27	27-30	30-33	33-36
Side	left (L), right (R)			
Height	205 mm	245 mm	270 mm	294 mm



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Spare parts

29U24 Pad for 28U24 and 28U25 incl. hook-and-loop closures

Reference number	29U24			
Size	24-27	27-30	30-33	33-36
Qty.	Piece			
Side	left (L), right (R)			

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29U25 Y-hook-and-loop

Article number	Size	Qty.
29U25=2	2	Piece
29U25=3	3	Piece

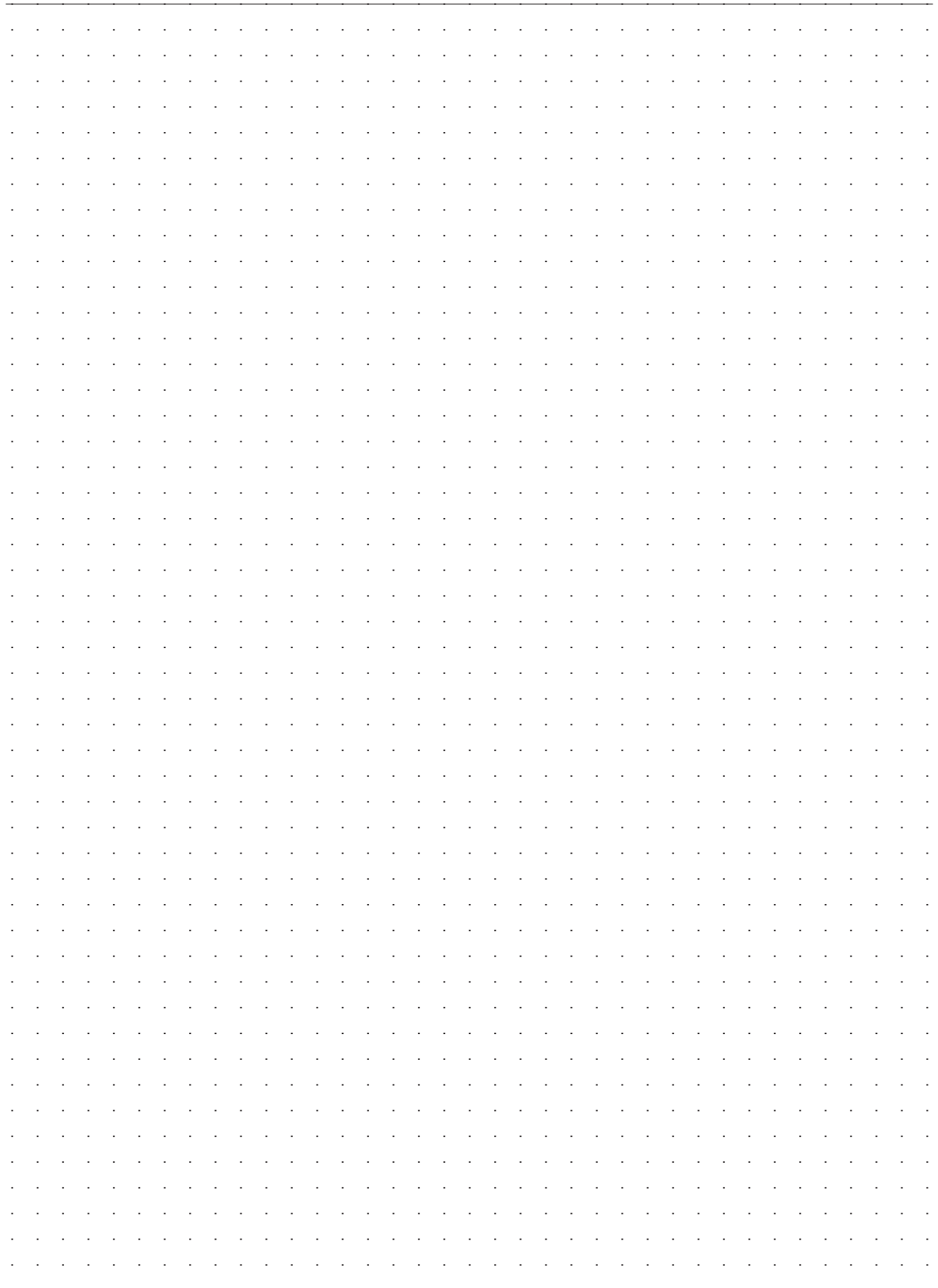
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3 KAFO/KO

All knee joints and knee joint systems, including traditional mechanical, and mechatronic, are presented in this section.

3.1 Selection Tool KAFO	76
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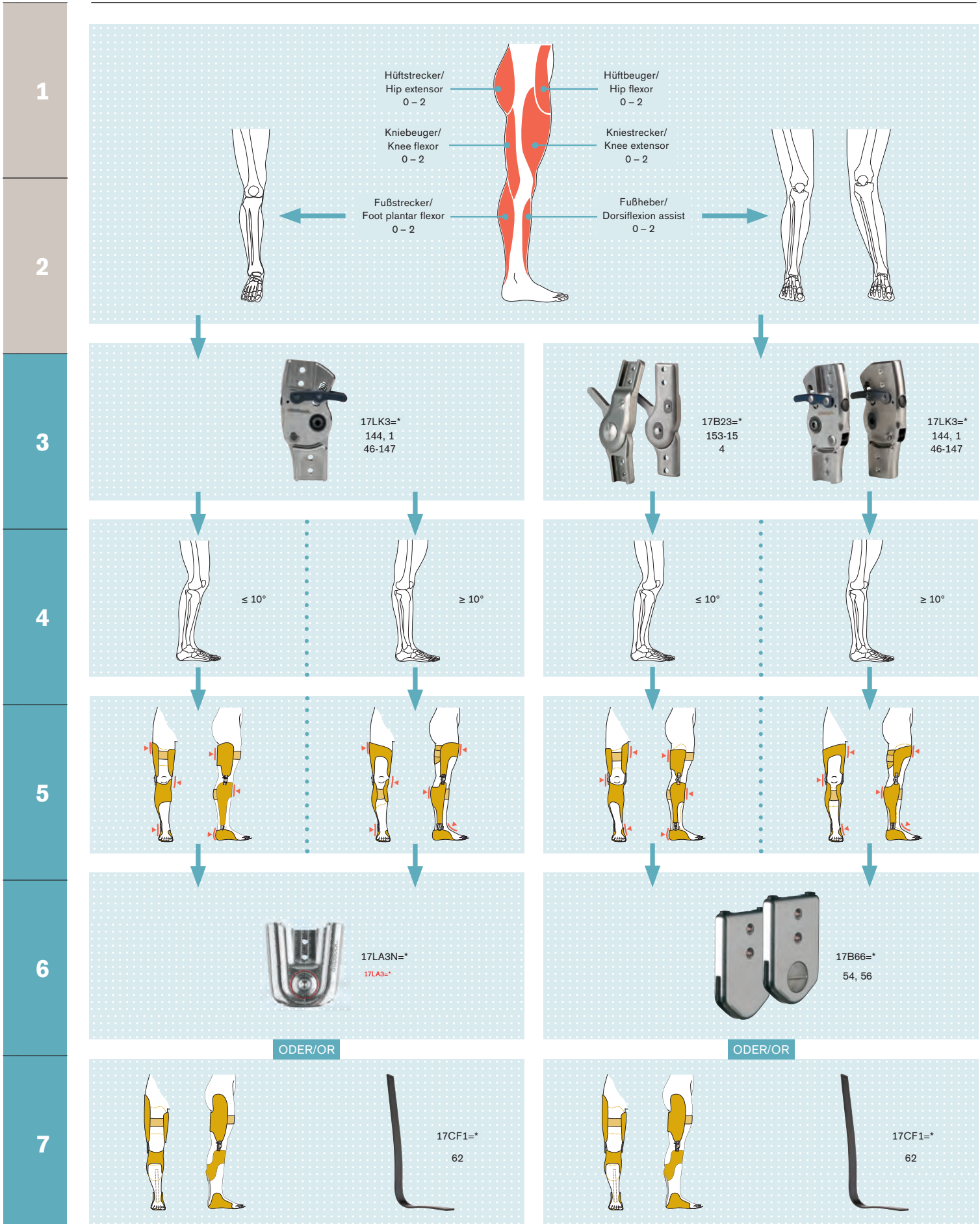
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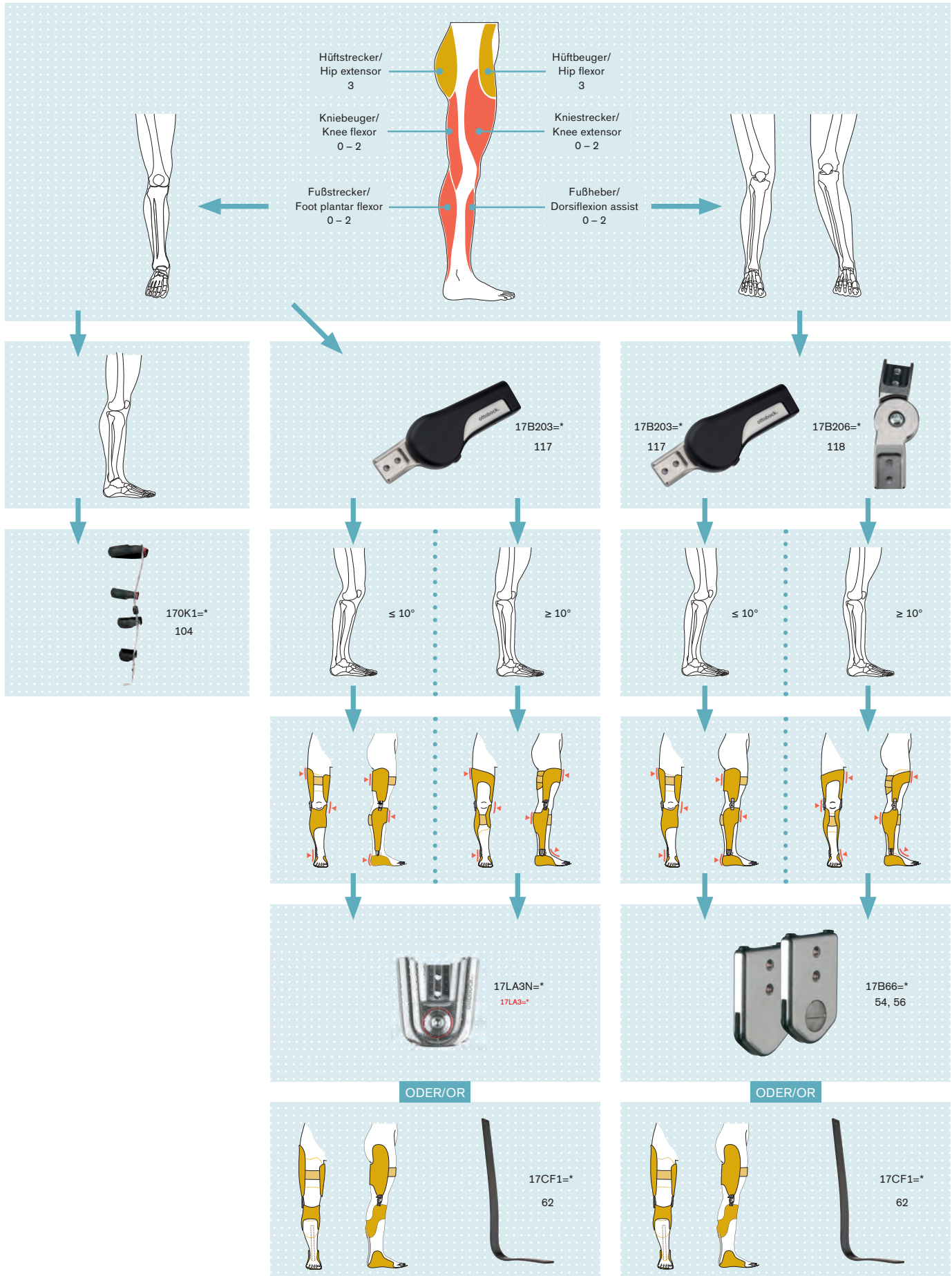
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3 KAFO/KO
3.1 Selection Tool KAFO





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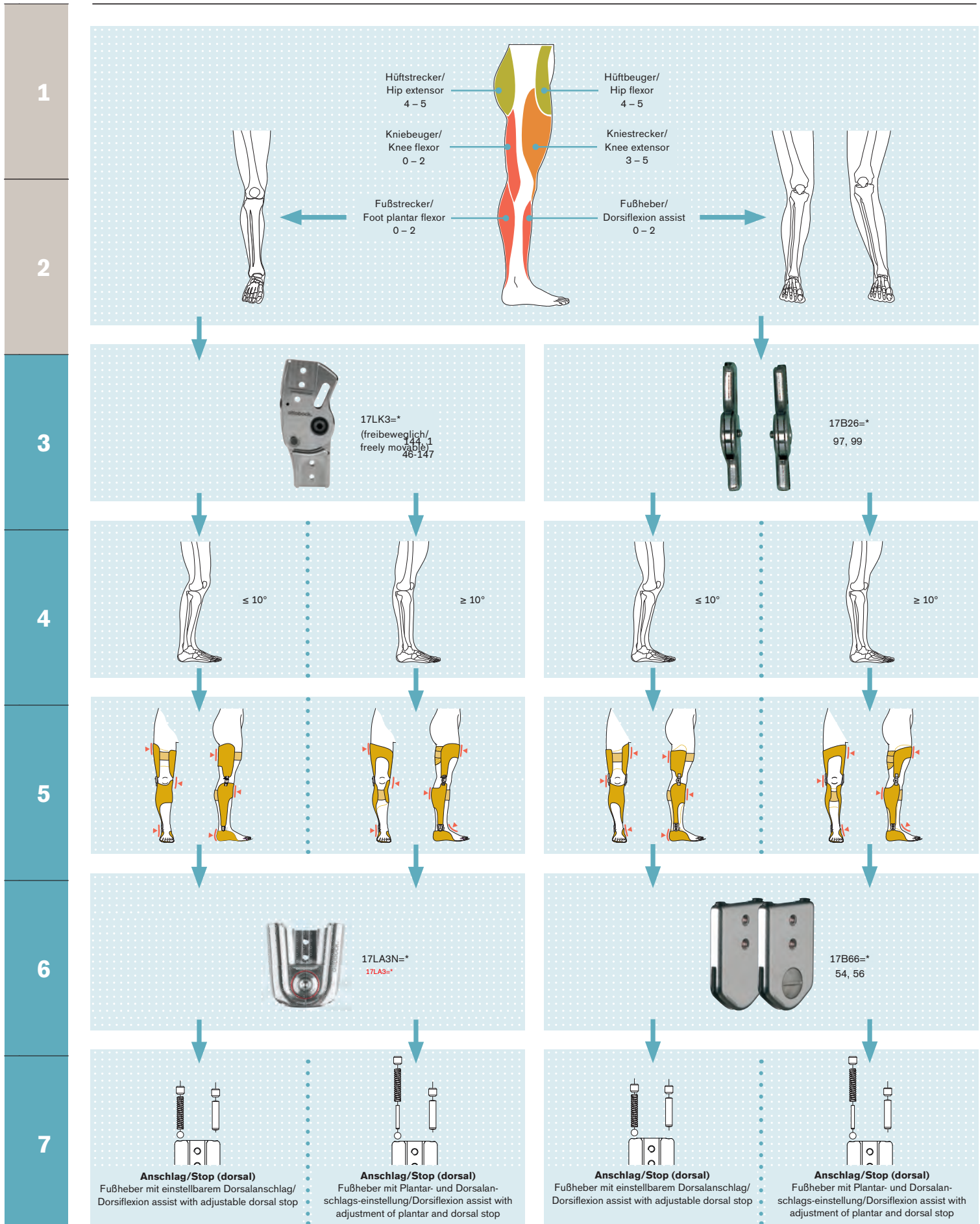
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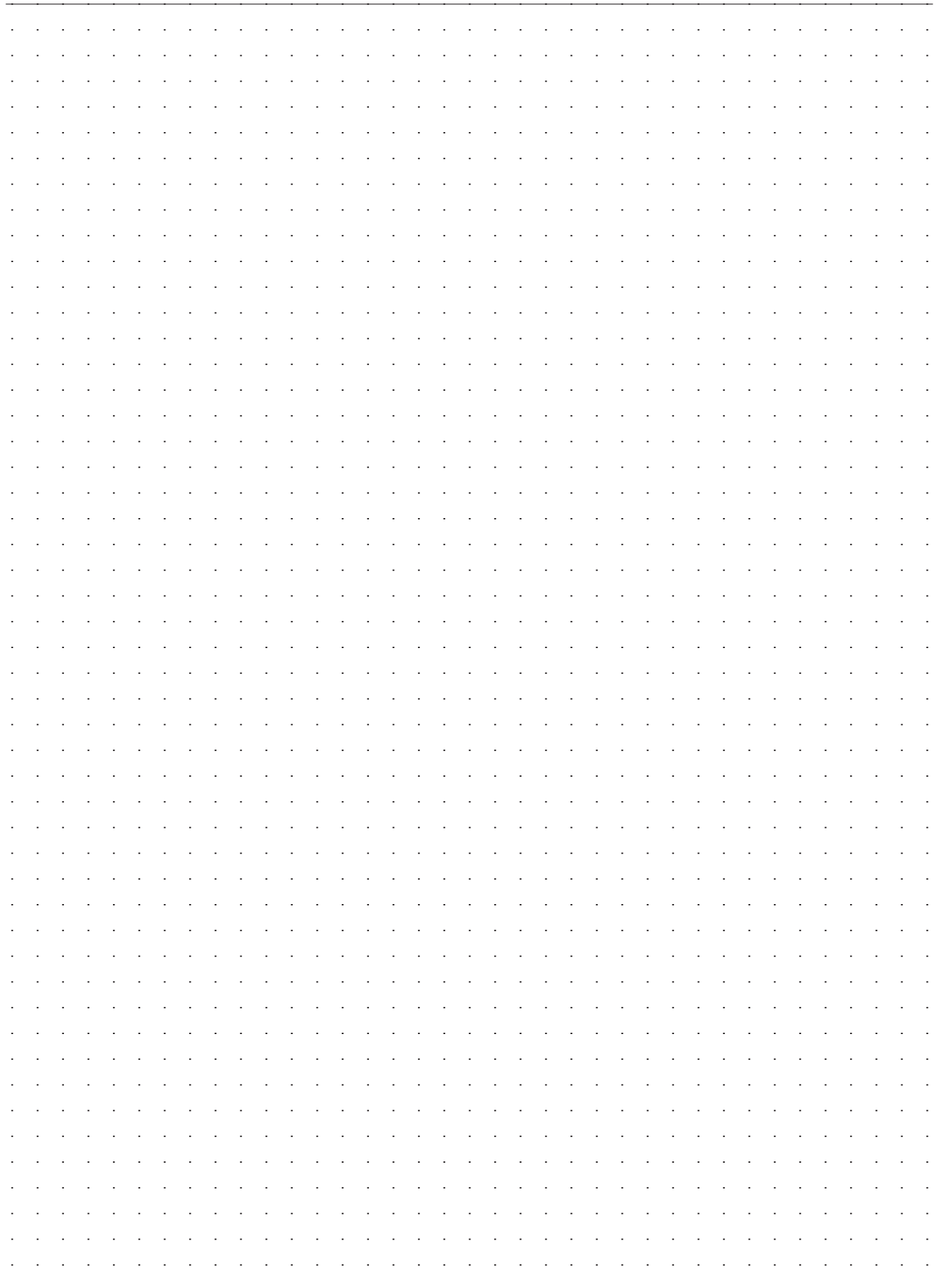
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C-Brace[®] – You'll always remember your first step

3

With the C-Brace[®], Ottobock has introduced the first orthotronic mobility system that allows the flexion resistance of the knee joint to be regulated, almost continuously, by mechatronics. This means that limitations due to locking knee joints are a thing of the past. The C-Brace[®] is currently the only orthotronic mobility system with microprocessor-controlled hydraulics that control the leg both in the stance and in the swing phase – hence the name **Stance and Swing Phase Control Orthosis (SSCO[®])**. This provides tremendous relief for the user in everyday life. The mechatronics of the SSCO[®] make new movement patterns possible, for example while walking on slopes or inclines, when sitting down while supporting weight on the affected leg, and when walking down stairs. Flexing the knee with the SSCO[®] closely matches the natural movement pattern of a sound leg. This makes all forms of walking easier. On level ground, the possibility of stance phase flexion results in a more natural and steadier gait pattern.

4

For the user, the C-Brace[®] therefore sets previously unimagined standards for mobility and safety. For you as the orthotist, the C-Brace[®] presents you as the orthotist with a fascinating new challenge and provides you with the incentive to blaze new trails in your profession.

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 646D642=EN
 643D643=M_DE
 646T5=3.2
 646D806=DE

 647G631
 646D458

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Key features at a glance

- One-of-a-kind SSCO® system
- Microprocessor-controlled stance and swing phase
- Entire gait cycle can be controlled dynamically and in real time
- System responds quickly to any situation

New options for users

- Flexion under load is possible for the first time, e.g. when sitting down, walking down stairs step-over-step and walking down inclines
- Controlled and stable gait characteristics on uneven terrain
- Individual operating modes can be set by the technician and selected by the user, depending on the situation, e.g. for cycling
- Natural body posture – helps reduce one-sided excessive physical strain and resulting problems
- Potential for reduced effort – for example when compared to locked systems
- Newfound mobility and a greater feeling of safety for significantly enhanced quality of life

Indications

In principle, the C-Brace® can be considered for all neurological indications of the lower extremity. The leading indications are incomplete paraplegia (lesion between L1 and L5) with very minor or no spasticity as well as post-polio syndrome, the condition following poliomyelitis.

The following applies:

- The patient must be able to fully stabilise the torso and to stand freely.
- The muscle strength of the hip extensors and flexors must permit the controlled swing-through of the affected leg.
- Compensation through hip movement must be possible.

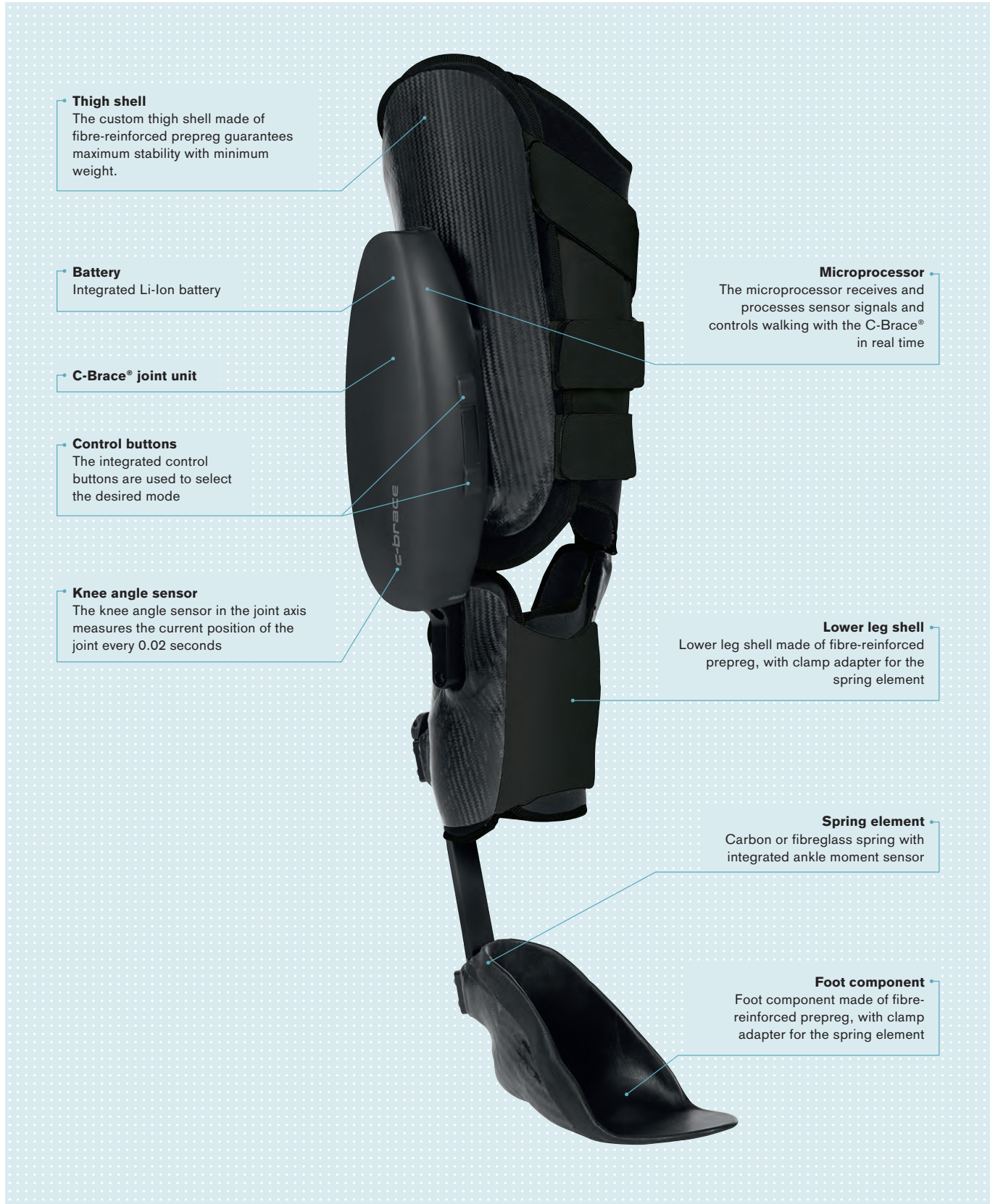
Contraindications

- Swing phase initiation is not possible
- Severe spasticity
- A flexion contraction of more than 15° in the knee and/or hip joint
- Genu varus or valgus of more than 10° that cannot be corrected
- Ankle arthrodesis: passive range of motion less than 2°
- Body weight > 125 kg
- Body size < 150 cm
- Shorter leg length > 15 cm

- **Certification is required for the C-Brace® orthotronic mobility system! Please contact your customer service representative or your regional contact person for this purpose.**
- **The C-Brace® is a product from Ottobock Service Fabrication.**
- **Detailed assistance for patient selection is found in the Information for Practitioners (646D642=EN)**

C-Brace® – with spring element

What's inside:



C-Brace® – ankle joint with integrated sensors

What's inside:

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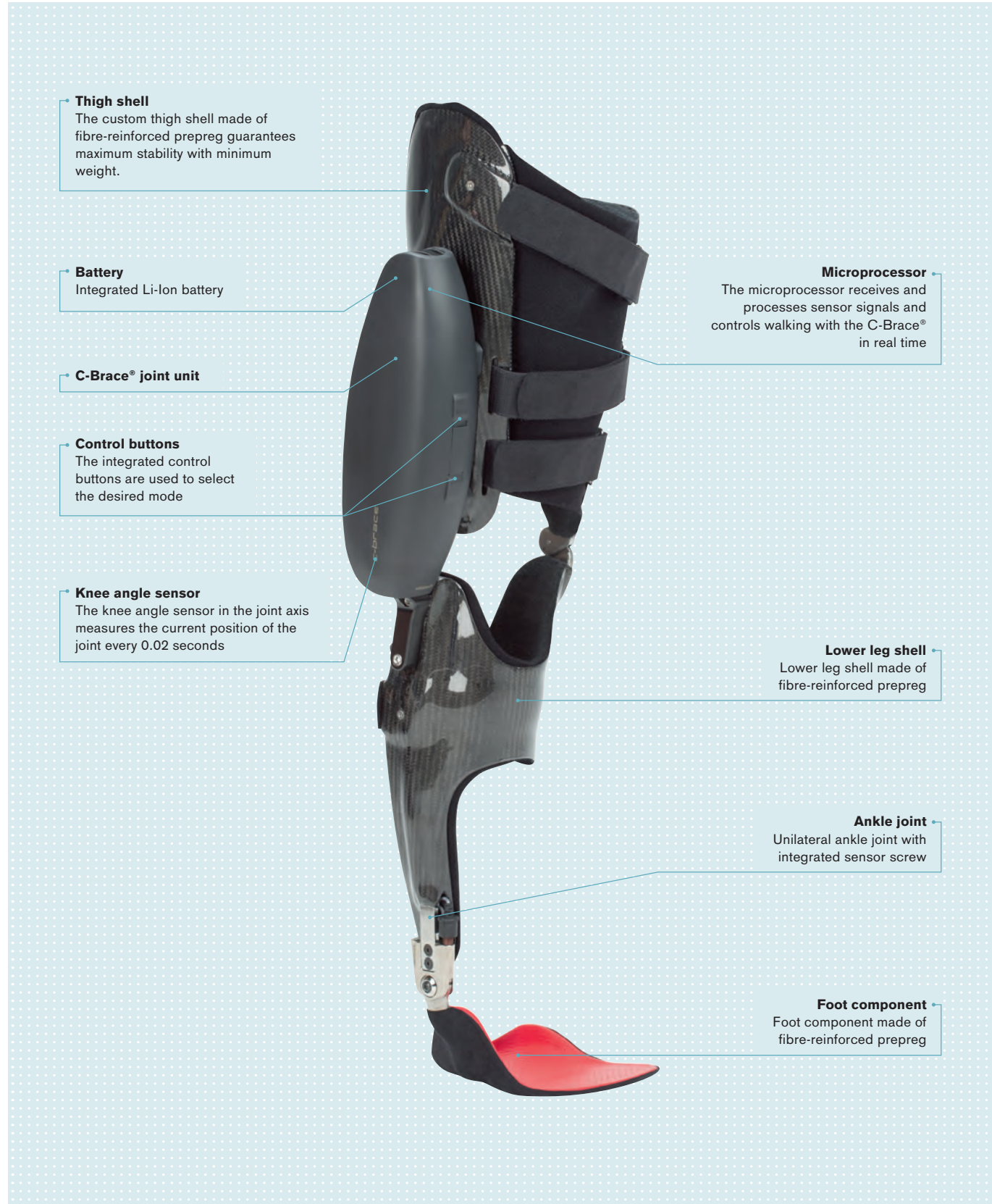
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Sensor screw in combination with unilateral ankle joint

The system ankle joint with integrated sensor expands the application spectrum of the C-Brace® orthotronic mobility system and enables new freedom for the user. The dorsal stop of the familiar 17LA3 unilateral system ankle joint is replaced by a sensor screw with integrated strain gauge, which transfers the load signal to the joint.

Benefits

- For unilateral and bilateral use (according to weight classification)
- Makes mobility in the ankle joint possible for the first time
- Slimmer orthosis design (conventional KAFO construction)
- Easier handling for the user

Article number	for	System width	Max. body weight	Material	Qty.
17A01	17LA3=16-T	16	85 kg (unilateral)	Titanium	Piece
17A01	17LA3=16-T	16	120 kg (bilateral)	Titanium	Piece
17A01	17LA3=20-T	20	110 kg (unilateral)	Titanium	Piece
17A01	17LA3=20-T	20	160 kg (bilateral)	Titanium	Piece

- Note the operating conditions for the 17LA3 unilateral system ankle joint. Furthermore, the C-Brace® joint unit limits the maximum allowable user weight to 125 kg.

17A01=P Cover for Sensor Ankle

The cover for the Sensor Ankle protects the cable leading to the sensor screw against external impact and therefore prevents a loss of contact.

Article number	for	Qty.
17A01=P-16-R	17LA3=16-T	Piece
17A01=P-16-L	17LA3=16-T	Piece
17A01=P-20-L	17LA3=20-T	Piece
17A01=P-20-R	17LA3=20-T	Piece

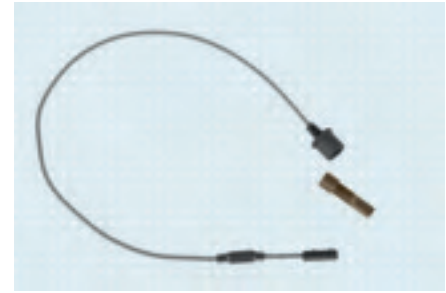
Spare parts

501C1 Screw

Article number	Qty.
501C1	Piece

29Y210 Cylinder pin

Article number	Qty.
29Y210=8X10	Piece



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 647G268 C-Soft Instructions for Use

Accessories

4X180 C-Soft – auto-adaptive software

With C-Soft, Ottobock has developed an innovative software that supports the quick and easy adjustment of the C-Brace® orthotronic mobility system.

Wireless communication between joint and laptop is performed via the BionicLink. Ottobock is the first company in the industry to use Bluetooth technology for this purpose. This allows you to focus entirely on your customer and on optimising the settings of the C-Brace®. During the fitting, your customer can move about freely without being impeded by cables.

The new software is notable for its user-friendliness. Settings are menu-driven and the program guides you step by step through the process. Additional visualisations and detailed explanations also facilitate the process. Even if you have little past experience with the adjustment of orthoses, you can provide your patient with precise and professional fittings. For example, the software helps you perform the necessary calculation of the maximum load.

3



60X7 BionicLink

With the BionicLink, Ottobock has introduced Bluetooth technology to the field of neuroorthopedics. Now the end-user can move freely and without restrictions while the C-Brace® is adjusted. This is because the BionicLink allows the settings to be modified under realistic conditions using a wireless remote. During trial walking, the orthopedic technician can concentrate fully on the adjustment process and the verification of the gait pattern thanks to Bluetooth technology.

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 646D225

60X5 BionicLink PC

The 60X7 BionicLink must be used in conjunction with the 60X5 USB Bluetooth adapter, since the performance of conventional Bluetooth receivers is not sufficient for proper function. The BionicLink is used in conjunction with the 4X180 C-Soft auto-adaptive software. With its user-friendly interface, C-Soft makes the adjustment process simpler and more systematic, thereby supporting you in providing your patient with an optimal fitting.

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757L16-2 Power supply

For C-Brace® orthotronic mobility system

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4E50-2 Battery charger

For C-Brace® orthotronic mobility system



1

Dynamic test orthosis

17B300=L/R-T-S Dynamic test orthosis

The dynamic test orthosis (DTO) is intended to verify the requirements for orthotic fitting with the C-Brace® orthotronic mobility system in controlled indoor areas. The DTO does not replace an orthosis but is rather intended for test purposes only and can be ordered through the MASC. It consists of an adaptable frame construction with C-Brace® joint unit and spring and the settings for the user are configured using C-Soft.

Article number	Side
17B300=L-T-S	left
17B300=R-T-S	right



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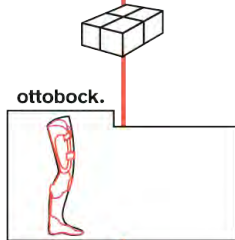
Your C-Brace® order made easy – overview of the procedure

1



Before a final recommendation for the C-Brace® orthotronic mobility system can be made, the dynamic test orthosis (DTO) is used to review whether the C-Brace® is suitable for the user. The user wears the test orthosis for this purpose. It can be ordered from Ottobock on loan.

2



If a fitting with the C-Brace® is possible, you take a plaster positive of the affected leg and mark the desired design options on it. Please also fill out the order form. You can use direct shipment to send your plaster positive to Ottobock Service Fabrication along with the order form. Alternatively, you can also send in the thermoplastic orthosis. For fabrication, please observe the contents of the technical information (646T5=3.2).

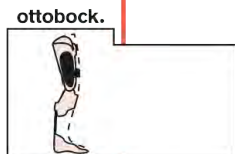
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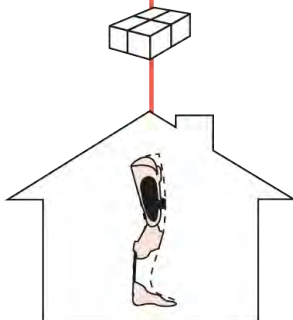


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Prior to fabrication of the final C-Brace® orthotronic mobility system, Ottobock sends you the thermoplastic test orthosis for a final verification of the fit.

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Ottobock Service Fabrication fabricates your final C-Brace® orthotronic mobility system according to your feedback and sends it to you, generally within no more than 20 working days. You receive the final C-Brace® orthotronic mobility system with optimised fit.

7

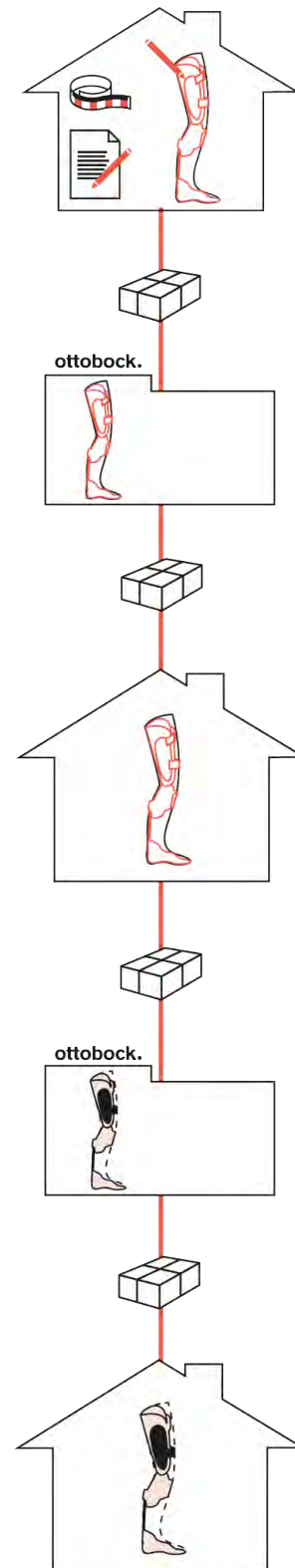
Your C-Brace® order made easy – overview of the procedure

Before a final recommendation for the C-Brace® orthotronic mobility system can be made, the dynamic test orthosis (DTO) is used to review whether the C-Brace® is suitable for the user. The user wears the test orthosis for this purpose. It can be ordered from Ottobock on loan.

If a fitting with the C-Brace® is possible, you take a plaster positive of the affected leg and mark the desired design options on it. Please also fill out the order form. You can use direct shipment to send your plaster positive to Ottobock Service Fabrication along with the order form. Alternatively, you can also send in the thermoplastic orthosis. For fabrication, please observe the contents of the technical information (646T5=3.2).

The prepreg functional module is fabricated by Ottobock, equipped with components on loan (frame, spring and joint), and sent to you within no more than 15 days. Then your patient can test this functional module for 8 weeks in everyday life, verifying the fit at the same time.

If the test phase is successful, Ottobock Service Fabrication fabricates the final C-Brace® orthotronic mobility system according to your feedback and sends it to you, usually within no more than 20 working days. You receive the final C-Brace® orthotronic mobility system with optimised fit.



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C-Brace[®] Orthotronic Mobility System

Order form

Contact	<input type="text"/>	Customer number	<input type="text"/>	Date	<input type="text"/>
Customer			Shipping address (if different from customer address)		
Company	<input type="text"/>	Company	<input type="text"/>		
Street	<input type="text"/>	Street	<input type="text"/>		
Postal code/city	<input type="text"/>	Postal code/city	<input type="text"/>		
E-mail	<input type="text"/>	Telephone	<input type="text"/>		
Patient ID	<input type="text"/>				

Information on the fitting

Age: Height: m Weight: kg

Affected side: right left bilateral

Initial fitting of C-Brace[®] orthotronic mobility system Follow-up fitting C-Brace[®] orthotronic mobility system

Diagnosis: Other illnesses/limitations:

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The customer will provide

Plaster positive for a thermoplastic test orthosis (SF300T=L/R) Plaster positive for the definitive orthosis (SF300F=L/R)

Thermoplastic test orthosis for prepreg function module Thermoplastic test orthosis for the definitive orthosis

Prepreg function module for the definitive orthosis Photos (frontal and sagittal)

Other:

Shipping to Ottobock

Pick-up service (free of charge)* Shipping by customer

* Applies to Germany and Austria

Comments

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C-Brace[®] Orthotronic Mobility System

Order form

Contact <input style="width: 90%;" type="text"/>	Customer number <input style="width: 90%;" type="text"/>	Date <input style="width: 90%;" type="text"/>
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Ordering options

- SF300T=L/R Thermoplastic test orthosis (to check fit and static alignment)
- SF300M=L/R Model of the thermoplastic test orthosis (SF300T=L/R)
- SF300PTM=L/R Prepreg test module¹
- SF300F=L/R Prepreg frame (including hook and loop pocket, unfinished carbon fibre look)¹
- SF300C Fabrication – padding and closures
- SF300S Surface design
- 17B300=L/R C-Brace[®] joint (including three-year warranty)
- 17CF2=4 Glass fibre spring
- 17CF2=1 Carbon spring
- 17CF2=HD Carbon spring, hard
- 17A01 Sensor screw (incl. cable) in combination with:

<input type="checkbox"/> 17LA3=16-T	<input type="checkbox"/> 17LA3=16-T (2 pieces)
<input type="checkbox"/> 17LA3=20-T	<input type="checkbox"/> 17LA3=20-T (2 pieces)
- Warranty extension to 5 years

¹ Please mark the position, size and thickness of the closures

Padding dummy

- Prepare the orthosis directly on the positive model, **without** allowing for any padding distance.
- The model is shaped without padding distance. Please take into account a padding distance for the:

<input type="checkbox"/> Thigh	von	mm
<input type="checkbox"/> Lower leg	von	mm
<input type="checkbox"/> Foot	von	mm

Comments

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Patient selection aid for the C-Brace[®] orthotronic mobility system

The selection aid helps to determine whether a patient is suitable for a C-Brace[®]. However, this document should be considered only an aid. For the final decision, please fit the patient with a dynamic trial orthosis (DTO).

Cognitive requirements

The patient must be capable of ensuring the proper handling, care and use of the orthosis (e.g. hearing acoustic signals).

Functional deficit

Neuromuscular instability of the knee joint in the sagittal plane

Diagnosis (by the physician):

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Exclusion criteria

If any of the following apply to your patient, he or she cannot be fitted with a C-Brace[®] at this time:

-
- Swing phase initiation from a standing position is not possible**
 - Weight over 125 kg**
 - Height less than 150 cm (knee centre measurement)**
 - Severe spasticity**
 - Leg shortened more than 15 cm**
 - Knee flexion contracture more than 10°**
 - Hip flexion contracture more than 10°**
 - Insufficient neuromuscular trunk stability for the trial phase**
 - Genu varus or valgus of more than 10° (uncorrectable) – unacceptable for cosmetic reasons**
 - Diseases that preclude the use of an orthosis (e.g. oedema, extensive skin irritation)**
 - Orthoprosthesis**
-

17K33 / 17K32 Knee joint bars for children

Free motion knee joint bar



647G2

Joints not filed out, joint centre 15 mm to the posterior



Article number	Upper/lower bar length	Bar width/thickness	Joint head Ø	Material	Qty.
17K33=6	220 / 250 mm	12 / 3 mm	16 mm	Stainless steel	Pair
17K33=5	220 / 250 mm	14 / 3 mm	18 mm	Stainless steel	Pair
17K33=4	220 / 250 mm	16 / 3 mm	20 mm	Stainless steel	Pair

Knee joint extension stop can be adjusted by filing, flat bar profile, no posterior placement

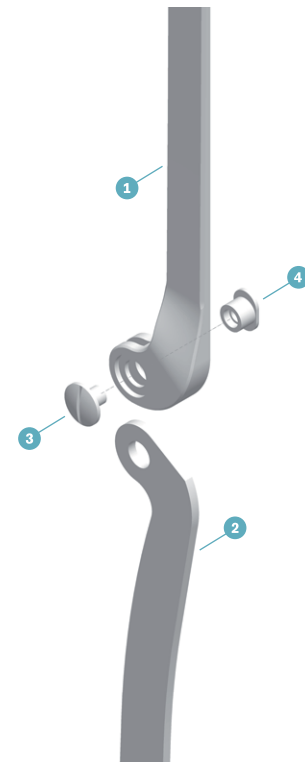


Article number	Upper/lower bar length	Bar width/thickness	Joint head Ø	Material	Qty.
17K32=6	220 / 250 mm	12 / 3 mm	16 mm	Stainless steel	Pair
17K32=5	300 / 320 mm	14 / 3 mm	18 mm	Stainless steel	Pair
17K32=4	410 / 390 mm	16 / 3 mm	20 mm	Stainless steel	Pair

Spare parts for 17K32 and 17K33

(1) Knee joint bar upper section

Article number	for	Side	Material	Qty.
17X9=L6	17K33=6	left	Stainless steel	Piece
17X9=R6	17K33=6	right	Stainless steel	Piece
17X8=L6	17K32=6	left	Stainless steel	Piece
17X8=R6	17K32=6	right	Stainless steel	Piece
17X9=L5	17K33=5	left	Stainless steel	Piece
17X9=R5	17K33=5	right	Stainless steel	Piece
17X8=L5	17K32=5	left	Stainless steel	Piece
17X8=R5	17K32=5	right	Stainless steel	Piece
17X9=L4	17K33=4	left	Stainless steel	Piece
17X9=R4	17K33=4	right	Stainless steel	Piece
17X8=L4	17K32=4	left	Stainless steel	Piece
17X8=R4	17K32=4	right	Stainless steel	Piece



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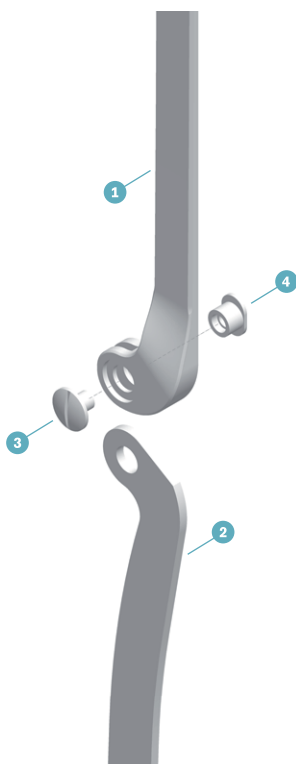
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(2) Knee joint bar lower section

Article number	for	Material	Qty.
17U9=6	17K33=6	Stainless steel	Piece
17U8=6	17K32=6	Stainless steel	Piece
17U9=5	17K33=5	Stainless steel	Piece
17U8=5	17K32=5	Stainless steel	Piece
17U9=4	17K33=4	Stainless steel	Piece
17U8=4	17K32=4	Stainless steel	Piece

(3) Slotted truss head screw

Article number	for	Thread	Length	Material	Qty.
501S32=M4X10X9.5	17K32=6	M4	9.5 mm	Stainless steel	Piece
	17K32=5				
	17K33=6				
	17K33=5				
501S32=M6X14X10	17K32=4	M6	10 mm	Stainless steel	Piece
	17K33=4				

(4) Bearing nut, hardened

Article number	for	Thread	Shank length	Shoulder diameter	Qty.
17Y93=6X6.7XM4	17K33=5	M4	6.7 mm	6 mm	Piece
	17K33=6				
17Y93=6.5X6.7XM4	17K33=5	M4	6.7 mm	6.5 mm	Piece
	17K33=6				
17Y93=9X7.2XM6	17K33=4	M6	7.2 mm	9 mm	Piece

Article number	for	Thread	Shank length	Shoulder diameter	Qty.
17Y93=6.5X6.7XM4	17K33=5	M4	6.7 mm	6.5 mm	Piece
	17K33=6				
17Y93=7X6.7XM4	17K33=5	M4	6.7 mm	7 mm	Piece
	17K33=6				
17Y93=9.5X7.2XM6	17K33=4	M6	7.2 mm	9.5 mm	Piece
17Y93=10X7.2XM6	17K33=4	M6	7.2 mm	10 mm	Piece

**Practical recommendation:**

- On worn joints, the play can be reduced by replacing the bolts. Use an appropriate reamer to prepare the holes.
- With 17K29/32/33/34/42 joint bars for children, the following shoulder screws can be used: 501A1=12x6xM4

17KF10 Posterior off set free motion knee joint



Article number	Material	Length upper/lower	Bar width/thickness	Weight	Qty.
17KF10=16	Stainless steel	390/570 mm	16/5 mm	1.39 kg	Pair
17KF10=16-A	Aluminium	390/570 mm	16/5 mm	0.68 kg	Pair



Spare parts

17Y93=M5X7X6.4 Bearing nut

Article number
17Y93=M5X7X6.4



501S32=M5X9X10 Joint screw

Article number
501S32=M5X9X10



17Y17=10X4.5X7 Bushing

Article number
17Y17=10X4.5X7



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507U5=10.6X7.4X1.5 Red washer

Article number

507U5=10.6X7.4X1.5

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17B26 / 17B47 / 17B3 / 17B43 system knee joints



Medial joint contoured bottom, straight top, straight lateral joint, free motion, with ball bearing, joint centre 16 mm to the posterior



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B26=L16	left	16 mm	33 / 38 mm	Stainless steel	Pair
17B26=R16	right	16 mm	33 / 38 mm	Stainless steel	Pair
17B26=L20	left	20 mm	33 / 38 mm	Stainless steel	Pair
17B26=R20	right	20 mm	33 / 38 mm	Stainless steel	Pair

Straight free motion medial and lateral joint with ball bearing, joint centre 16 mm to the posterior



Article number	System width	Length from joint centre upper/lower	Material	Qty.
17B47=16	16 mm	33 / 38 mm	Stainless steel	Pair
17B47=20	20 mm	33 / 38 mm	Stainless steel	Pair

Medial joint contoured bottom, straight top, straight lateral joint, free motion, with ball bearing, joint centre 22 mm to the posterior



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B3=L16	left	16 mm	33 / 38 mm	Stainless steel	Pair
17B3=R16	right	16 mm	33 / 38 mm	Stainless steel	Pair
17B3=L20	left	20 mm	33 / 38 mm	Stainless steel	Pair
17B3=R20	right	20 mm	33 / 38 mm	Stainless steel	Pair

Straight free motion medial and lateral joint with ball bearing, joint centre 22 mm to the posterior



Article number	System width	Length from joint centre upper/lower	Material	Qty.
17B43=16	16 mm	33 / 38 mm	Stainless steel	Pair
17B43=20	20 mm	33 / 38 mm	Stainless steel	Pair

1



Accessories for 17B26, 17B47, 17B3 and 17B43

System extension assist

with two rubber rings

Article number	for	Qty.
17Y32	System knee joints without lock	Piece
17Y35	System knee joints without lock	Piece

2



Service parts for 17Y32 and 17Y35

18Z1 / 18Z2 Rubber ring

Service parts for 17Y32 and 17Y35

Article number	for	Outside diameter	Inner Ø
18Z1=20.8X14.5	17Y32	20.8 mm	14.5 mm
18Z1=24.6X18.3	17Y32	24.6 mm	18.3 mm
18Z2=21X12.9	17Y35	21 mm	12.9 mm
18Z2=26.8X17.7	17Y35	26.8 mm	17.7 mm

3



501S27 Oval head screw, slotted

Article number	for	Material
501S27=M3X4	Cover plate	Stainless steel

4



501S43 Flat head screw

Article number
501S43=M3X4

5



501S79 Special screw

To attach the extension assist

Article number
501S79=M5X4.1X16.1

6



507S11 Serrated lock washer

Article number
507S11=5.3

7

509G2 Slide bearing (not illustrated)

Article number	for
509G2=5X7X5	17Y35

Spare parts for 17B26, 17B47, 17B3 and 17B43

(1) Ball bearing

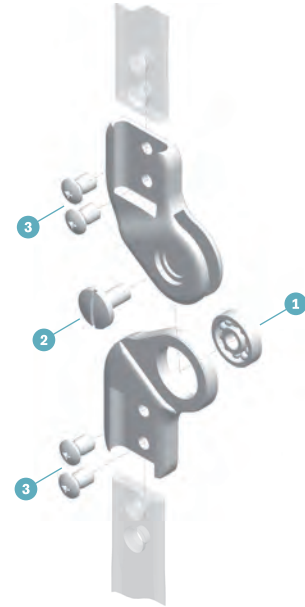
Article number	Qty.
509K11=5X16X4	Piece

(2) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A6=4X5XM5	Stainless steel	Piece

(3) Phillips oval countersunk head screw

Article number	Qty.
501T7=7.5X9XM5	Piece



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17B46 / 17B71 System knee joints

Polycentric system knee joint



2

Contoured medial joint, straight lateral joint, double joints with gear drive and ball bearings



Article number	System width	Length from joint centre upper/lower	Pivot point distance	Material	Qty.
17B46=16	16 mm	38 / 38 mm	18 mm	Stainless steel	Pair
17B46=20	20 mm	38 / 38 mm	18 mm	Stainless steel	Pair

3

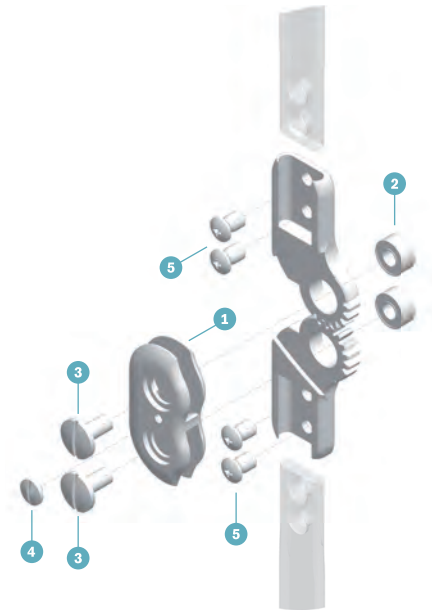
Straight medial and lateral joint, double joints with gear drive and ball bearings



Article number	System width	Length from joint centre upper/lower	Pivot point distance	Material	Qty.
17B71=16	16 mm	38 / 38 mm	18 mm	Stainless steel	Pair
17B71=20	20 mm	38 / 38 mm	18 mm	Stainless steel	Pair

4

Spare parts for 17B46 and 17B71



(1) Medial joint piece

Article number	Qty.
7Y19	Piece

(2) Ball bearing

Article number	Qty.
509K12	Piece

(3) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A6=5X5XM5	Stainless steel	Piece

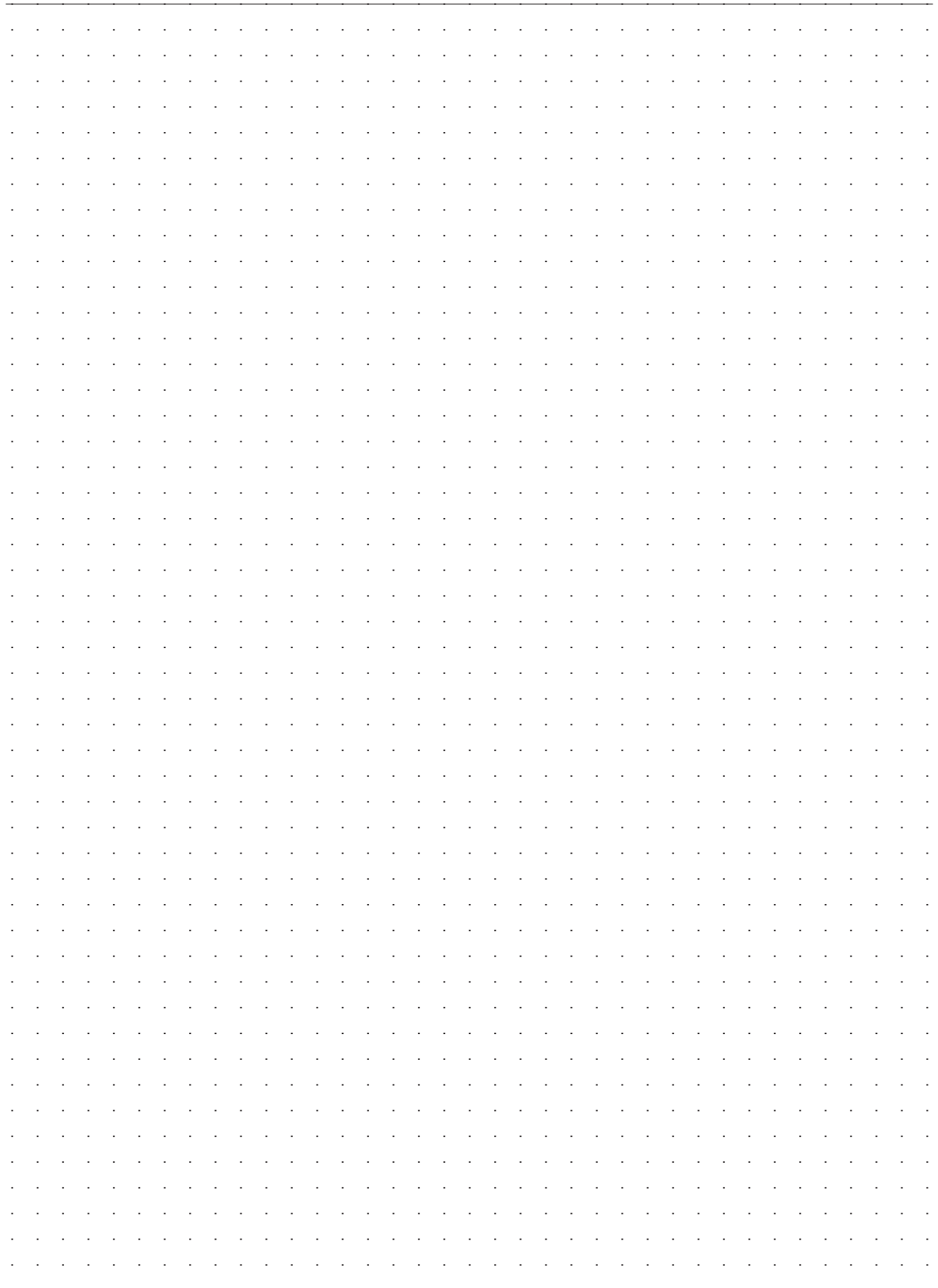
(4) Slotted oval head screw (set screw)

Article number	Material	Qty.
501S22=8XM3.5	Stainless steel	Piece

(5) Phillips oval countersunk head screw

Article number	Material	Qty.
501T7=7.5X9XM5	Stainless steel	Piece

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FreeWalk orthosis system with mechanical stance phase control

3

A smooth gait pattern with the FreeWalk orthosis: the Ottobock orthosis system locks the knee joint before the stance phase and unlocks it for the swing phase. The user can swing the leg through, which requires less energy when walking.

And because of the way it works, the lightweight, stable FreeWalk orthosis also lightens the load on the back, hips and knees. It is easy to don and doff. The FreeWalk provides the user with safety, stability and of course, increased mobility.

4

The FreeWalk was developed for users who, due to a partial paralysis or a complete failure of the knee extensors, are unable to stabilise their knee without making compensatory movements.

The knee joint is often stabilised through hyperextension achieved by compensating actions of the gluteal muscles (when the foot touches the ground, hip extension leads to knee extension). As a result, severe ligament instabilities and arthritic symptoms in the knee joint will develop over time. The FreeWalk orthosis helps correct these non-physiological movements. It also provides safer function for the user and allows for a more natural gait.

5

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1



170K1 FreeWalk orthosis

The FreeWalk orthosis is pre-fabricated for the first trial fitting according to your specifications. The tool kit and datasheets are needed to record the measurements needed for the fabrication of the orthosis.

Article number	Side	for patient weight up to	Colour
170K1=L-80-7	left	80 kg	black
170K1=R-80-7	right	80 kg	black
170K1=L-80-0	left	80 kg	Skin colour
170K1=R-80-0	right	80 kg	Skin colour

2



Article number	Side	for patient weight up to	Colour
170K1=L-120-7	left	120 kg	black
170K1=R-120-7	right	120 kg	black
170K1=L-120-0	left	120 kg	Skin colour
170K1=R-120-0	right	120 kg	Skin colour

3

- Delivery condition: as shown, but without foot part
- You may order a test orthosis in order to do a functional test with your patient. Please contact your customer service representative or regional contact person to discuss this further.

646A214=GB
646D183=GB
646D352=GB
646T5=4.1GB

647G1175
647G1174

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Functional principle



Stability in the stance phase:
The orthotic knee joint locks automatically when the knee is extended prior to heel strike. The patient can then stand securely and put pressure on the leg during the stance phase. The FreeWalk thus fulfills the functions of a locked orthosis.



Disengagement in the swing phase:
The patient releases the orthotic knee joint by extending his or her knee prior to toe-off and allowing a dorsal flexion of the upper ankle joint. This allows the patient to flex the leg and let it swing through freely.

Decision-making aid

One of the following prerequisites are given:

- Muscle strength of the hip extensors is 3 to 5 or
- Muscle strength of the knee extensors is 3 to 5 or
- Knee hyperextension

At the present time, the patient does not possess enough muscle strength. In the course of rehabilitation, it can be expected that sufficient muscle strength will be regained.

Knee stability in frontal plane

Knee stability in frontal plane

Yes

Valgus up to 15°

Yes

In case of a valgus deformity up to 15°, the 170D30 medial support has to be used.

By removing the steel cable, the FreeWalk can be turned into a locked orthosis. Patients with sufficient muscle strength can easily turn a locked orthosis back into a FreeWalk orthosis.

Body weight

up to 80 kg/176 lbs

up to 120 kg/264 lbs

170K1=L/R80 FreeWalk

170K1=L/R120 FreeWalk

170K1=L/R80-0 FreeWalk skin colour

170K1=L/R120-0 FreeWalk skin colour

170K1=L/R80-7 FreeWalk black

170K1=L/R120-7 FreeWalk black

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Information on the Ordering Process

1

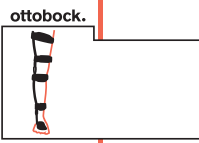
Please take measurements of the user and either create an outline drawing or take informative photos. Please see the 646T5=4.1 technical information for further details and fill out the order forms.



2



Please submit all forms to Ottobock Service Fabrication.

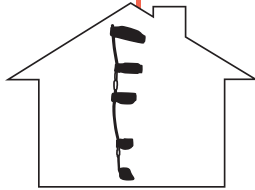


Ottobock Service Fabrication will fabricate a FreeWalk orthosis for you, and usually ships it after 5 working days.

3



4



You receive a FreeWalk orthosis with an exact fit, supporting a harmonious gait pattern and secure stance.

646D182=GB (Information for Physicians)

5

Accessories for 170K1



170D71 Triple control

- Extension of the indication through greater knee joint functionality
- Locked function
- Free function
- FreeWalk function

Article number	for patient weight up to	Colour	Qty.
170D71=0	80/120 (176/264 lbs) kg	Skin colour	Piece
170D71=7	80/120 (176/264 lbs) kg	black	Piece

647G437
 647G437=1
 647G437=2

7

170D30 Medial knee guide

- Extension of the indication
- 5° more valgus deformity can be fitted

Article number	for patient weight up to	Colour	Qty.
170D30=120-7	120 kg	black	Set



647G449

Spare parts for 170K1

170D100 Foam pads

Article number	for	Length	Colour	Qty.
170D100=1-0	170K1=120	large	Skin colour	Piece
170D100=2-0	170K1=120	large	Skin colour	Piece
170D100=1-7	170K1=120	large	black	Piece
170D100=2-7	170K1=120	large	black	Piece



170Z4 Hook-and-loop strap

Article number	for	Material	Colour	Qty.
170Z4=400-0	170K1=80/=120	Polyamide	skin colour	Piece
170Z4=400-7	170K1=80/=120	Polyamide	black	Piece
170Z4=600-0	170K1=80/=120	Polyamide	skin colour	Piece
170Z4=600-7	170K1=80/=120	Polyamide	black	Piece



170D29 Y-Hook-and-Loop with PU coating

Article number	for	Width	Colour	Qty.
170D29=38-0	170K1=80/=120	38 mm	skin colour	Piece
170D29=38-7	170K1=80/=120	38 mm	black	Piece



Practical recommendation:

We recommend using micro hook-and-loop on velour and hook on loop.

170D69 Pad button

Article number	Thread	Used for	Qty.
170D69	4	170D20 Strap guide loop for pad button	Piece



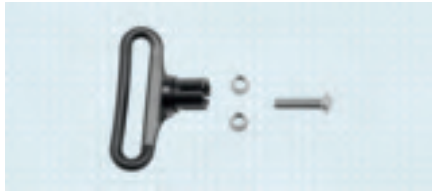
1



170D20 Strap guide loop for pad button

Article number	Colour	Qty.
170D20=0	skin colour	Piece
170D20=2	red	Piece
170D20=7	black	Piece

2



170D18 Strap guide loop with tube connection

Article number	for	Colour	Qty.
170D18=80-7	170K1=80	black	Piece
170D18=120-7	170K1=120	black	Piece
170D18=80-0	170K1=80	Skin colour	Piece
170D18=120-0	170K1=120	Skin colour	Piece

3



170Z120 Joint protector

Article number	for	Colour	Qty.
170Z120=7	170K1=L/R120/80	black	Set
170Z120=0	170K1=L/R120/80	Skin colour	Set

4



170Z99 Maintenance set for lock

Article number	for	Qty.
170Z99=2	170K1	Set

5



170X18 Maintenance set for FreeWalk

Article number	for	Qty.
170X18=2	170K1	Set

6

7

170X17 Adjustable ankle joint with universal foot part

Article number	Side	Qty.	Scope of delivery
170X17=L	left	Set	1x 170C11=R 1x 170D28 1x 501F9 1x 170F12 1x 170F13 2x 501T52=M4X4-1 2x 170D26
170X17=R	right	Set	1x 170C11=R 1x 170D28 1x 501F9 1x 170F12 1x 170F13 2x 501T52=M4X4-1 2x 170D26



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Spare parts for 170X16

(1) Ankle joint, lower part

Article number	Side	Qty.
170C11=L	left	Piece
170C11=R	right	Piece

2

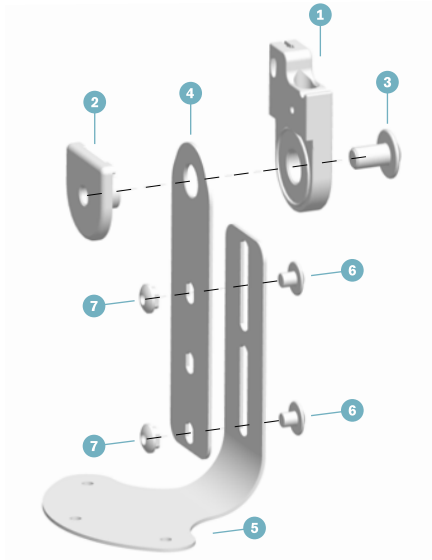
(2) Threaded plate

Article number	Qty.
170D28	Piece

(3) Screw with flattened half-round head

Article number	Qty.
501F7=M6X10-1	Piece

3



(4) Foot stirrup upper section

Article number	Qty.
170F12	Piece

(5) Foot stirrup lower section

Article number	Qty.
170F13	Piece

4

(6) Oval head flange screw

Article number	Qty.
501T52=M4X4-1	Pair

(7) Ankle setting nut

Article number	Qty.
170D26	Pair

5

Accessories for measuring

170W2 Tool kit

Article number	for	Qty.
170W2=M	Measuring and fine-tuning the FreeWalk orthosis	Piece

6



7

170W23 Calibration set

The calibration set enables quick and easy measurement using a photo. Please see the 646T5=4.1 technical information for further details.

Article number	Scope of delivery
170W23	170W22 calibration piece with loop strap and closure 170W4 tension band 623Z20=100 loop attachment points



 646T5=4.1

170W4 Tension band

Article number
170W4



743B4 Spring-tensioned measuring tape

Article number	Length
743B4	1,500 mm



170W14 Mounting aid

Article number
170W14



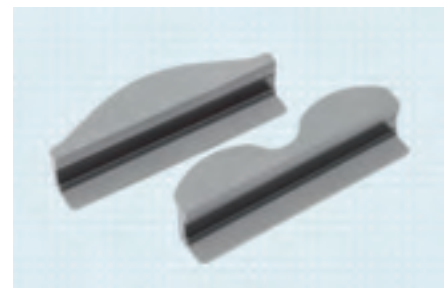
170W12 Pad holder bending aid

Article number
170W12=1
170W12=2



170W11 Frontal contour bending tool

Article number
170W11



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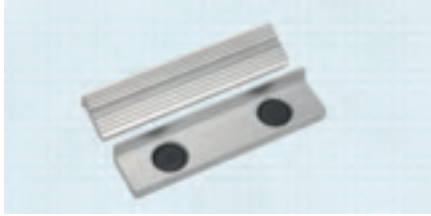
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170W13 Aluminium threaded jaws

Article number

170W13

2



170W18 Bending irons

Article number

170W18

3



170W19 Caliper

Article number

170W19

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Ottobock FreeWalk orthosis

Patient information

Contact	<input type="text"/>	Customer number	<input type="text"/>	Date	<input type="text"/>
Customer			Shipping address (if different from customer address)		
Company	<input type="text"/>		Company	<input type="text"/>	
Street	<input type="text"/>		Street	<input type="text"/>	
Postal code/city	<input type="text"/>	<input type="text"/>	Postal code/city	<input type="text"/>	<input type="text"/>
E-mail	<input type="text"/>		Telephone	<input type="text"/>	
Patient ID	<input type="text"/>				

Patient information

Male Female Left Right
 Age Height cm Weight
 Diagnosis.....

Clinical indications (characteristics)

Muscle strength of hip extensors (scale 0 – 5)* 5 4 3 2 1 0
 Muscle strength of hip flexors (scale 0 – 5)* 5 4 3 2 1 0
 Muscle strength of knee extensors (scale 0 – 5)* 5 4 3 2 1 0
 Hyperextension of the knee Yes No
 Active or passive mobility of the ankle at least 10° Yes No
 Pendulum motion in the hip possible to extend the knee joint at the end of the swing phase. Yes No
 Genu recurvatum (Instruction: in case of hyperextension > 5° T3 or T4 is moved to posterior, see measurement form.) Yes No°
 (*see 646T5=4.1D/646A214=D)

Contraindications

Knee flexion contraction Yes No°
 (Knee flexion contraction below 10° is acceptable.)
 Unstable varus position of the knee when fully extended Yes No
 (A redressed varus angle below 10° is acceptable.)
 Unstable valgus position of the knee when fully extended Yes No
 (A redressed valgus angle below 10° is acceptable; with medial knee support maximally 15°.)
 Spasticity Yes No
 Severe instability of the ankle joint Yes No
 (If yes, double ankle joints upon request.)

Comments:

.....

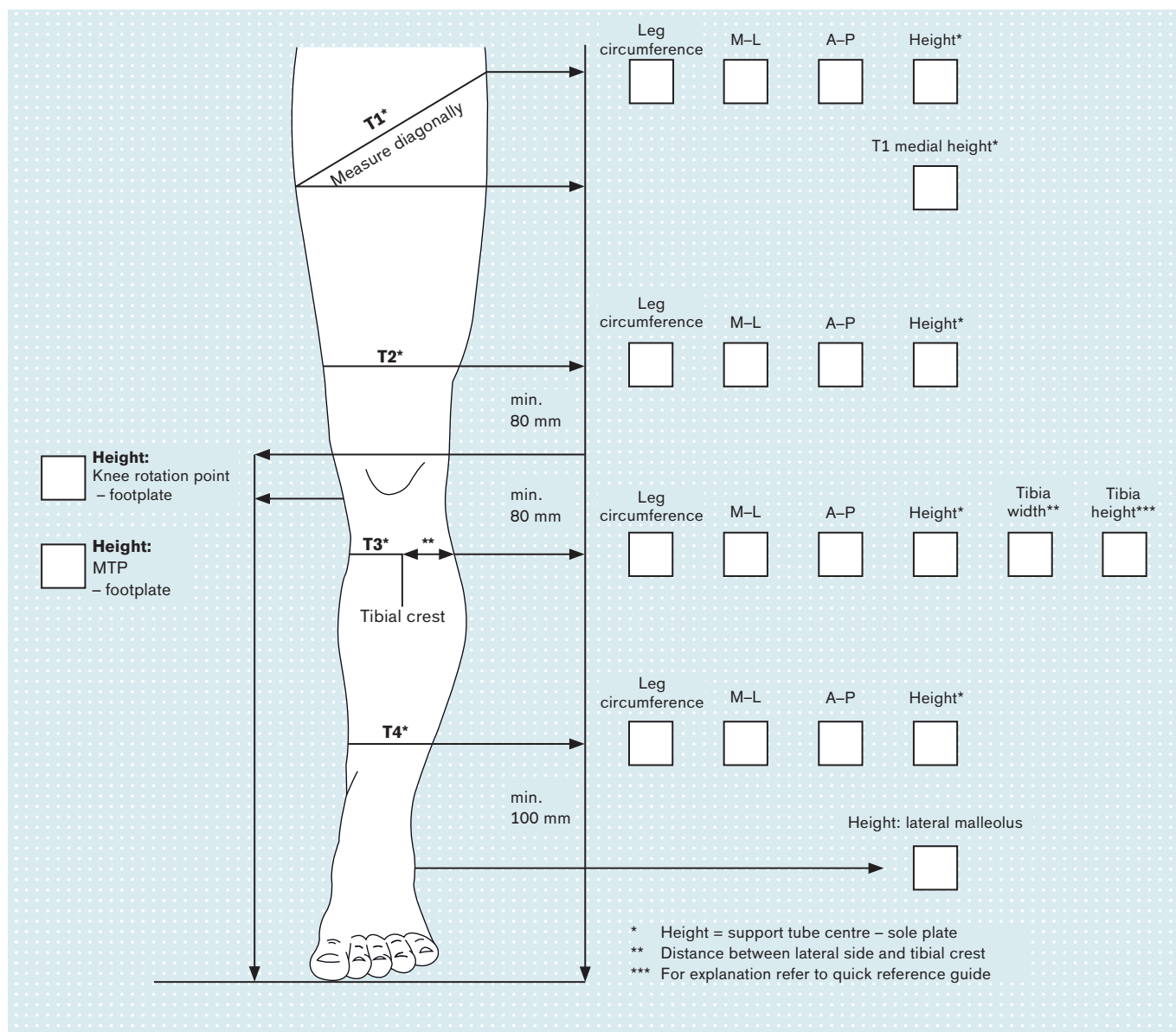
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Ottobock FreeWalk orthosis

Measurement form

Contact	<input type="text"/>	Customer number	<input type="text"/>	Date	<input type="text"/>
Customer			Shipping address (if different from customer address)		
Company	<input type="text"/>		Company	<input type="text"/>	
Street	<input type="text"/>		Street	<input type="text"/>	
Postal code/city	<input type="text"/>	<input type="text"/>	Postal code/city	<input type="text"/>	<input type="text"/>
E-mail	<input type="text"/>		Telephone	<input type="text"/>	
Patient ID	<input type="text"/>				



Ottobock FreeWalk orthosis

Measurement form

Contact	<input type="text"/>	Customer number	<input type="text"/>	Date	<input type="text"/>
Customer			Shipping address (if different from customer address)		
Company	<input type="text"/>		Company	<input type="text"/>	
Street	<input type="text"/>		Street	<input type="text"/>	
Postal code/city	<input type="text"/>	<input type="text"/>	Postal code/city	<input type="text"/>	<input type="text"/>
E-mail	<input type="text"/>		Telephone	<input type="text"/>	
Patient ID	<input type="text"/>				

Versions

Weight classes

- 170K1=80 Ottobock FreeWalk 80** (suitable up to 80 kg)
 170K1=120 Ottobock FreeWalk 120 (suitable up to 120 kg)

Side

- Left
 Right

Colour of hook and loop closures and pads

- Skin colour
 Black

Options

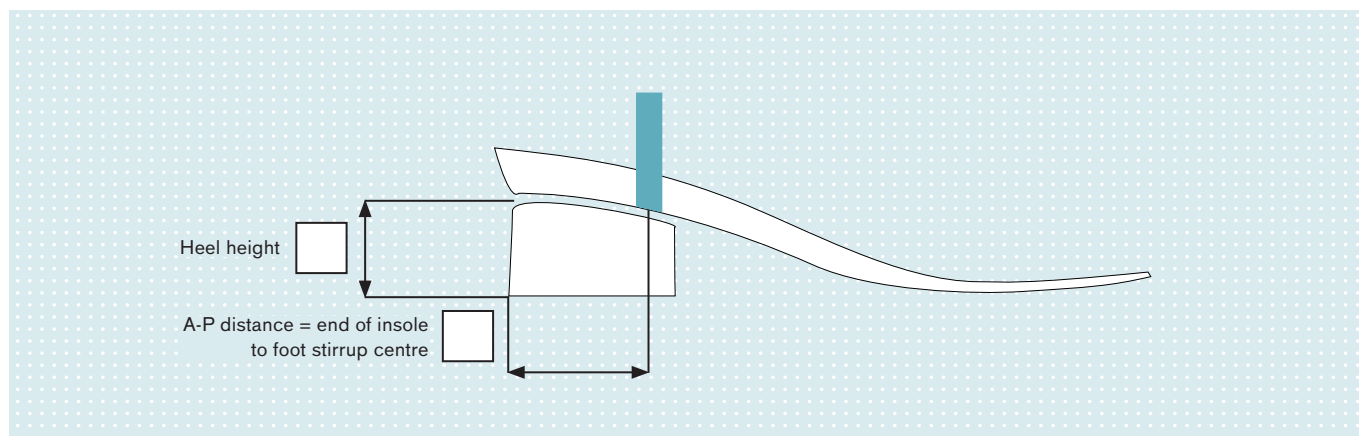
- Move T3 + T4 to posterior (in case of genu recurvatum > 5°)
 Medial knee support (surcharge) 170D30=80-7 / 120-7
 Without T4
 3-phase switch (surcharge) 170D50=L/R

Foot stirrup/insole

Assembly of foot stirrup and insole (surcharge); (insole has to be sent in by the customer.)

- Yes
 No

If yes, please indicate the following measurements:



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E-MAG Active



Functional description

The E-MAG Active is an electronically controlled system knee joint with secured stance phase and free swing phase that works independently from the ankle joint and foot sole. An intelligent sensor system measures the leg position while walking and controls the orthosis joint accordingly. Since the joint is activated independently of the ankle and sole of the foot, patients can take advantage of the functionality offered by the orthosis joint even if they do not have use of their ankle.

The new PreLock function further improves safety. It is activated at just 15°, before the knee joint locks at full extension.

Delivery condition

The E-MAG Active joint system is supplied in a case with all necessary components. The case contains a complete customised system, including a charger, a battery and the dummies required to build them into the orthosis. The E-MAG Active is suitable for a body weight of up to 100 kg/220 lbs (with use of the 17B206 medial support). Unilateral use of the joint is possible up to 85 kg/187 lbs as long as there are no non-physiological deviations in the frontal and sagittal planes. Furthermore, the matching bars can be ordered as special accessories.

Article number	Side	Flexion angle
17B203=L	left	5°
17B203=R	right	5°
17B203=L-7.5	left	7.5°
17B203=R-7.5	right	7.5°

- Certification of competence is recommended for the E-MAG Active and can be obtained using an e-learning tool.

Scope of delivery

- (1) Dummy for battery
 - (2) Dummy for electronics
 - (3) Dummy for battery receptacle
 - (4) Dummy for electronics receptacle
 - (5) Dummy for knee joint
 - (6) Receptacle for battery
 - (7) Lock unit for battery (317E20 connecting cable)
 - (8) Receptacle for electronic control unit with connecting cable
 - (9) 2x batteries
 - (10) Control electronics
 - (11) E-MAG Active knee joint
 - (12) AC adapter for battery charger
 - (13) Battery charger
- Installation instructions (not illustrated)
Instructions for use (not illustrated)
Quick start guide (not illustrated)



- 646A333=EN
- 646D1082=EN
- 646D1043
- 646A214=GB
- 647G1164
- 647G1165



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Practical recommendation:

Please take account of the relevant patient selection criteria when considering a stance phase control system. Further information is found in the 646A214* brochure for technicians and therapists.

Accessories for the E-MAG Active

1



17LS3=16 Lamination bar for unilateral joint system



Article number	Length	Width	Thickness	Material	Qty.
17LS3=16	130 mm	16 mm	6 mm bottom, 3 mm top	Stainless steel	Piece

2



17B206 medial support

Includes lamination dummy

Reference number	Max. body weight	Material	Qty.
17B206	100 kg	Stainless steel	Piece

3

Service sets for maintenance of the joint bearings

17BS203 Service set



Article number	for	Qty.
17BS203	E-MAG Active knee joint (17B203)	Piece

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Spare parts for E-MAG Active

- Attention! Please always indicate the **serial number** of the entire E-MAG Active when ordering spare parts, especially when ordering electronic components.

Article number	Description
30G70=L	E-MAG Active knee joint
30G70=R	E-MAG Active knee joint
317X203=L	Knee joint dummy
317X203=R	Knee joint dummy
317B20	Replaceable battery
317L20	Battery charger
757L16-2	Power supply
317B3	Control electronics

- Attention! The electronic unit is programmed to suit the existing system with the aid of the **serial number** of the entire package. Therefore, please always include the serial number on any communications.

Article number	Description	Consisting of
317E2	Electronics cable	
317Z12	Receptacle for control electronics	
317E20	Connecting cable	
317Z13	Receptacle set (electronics)	electronics receptacle dummy for receptacle dummy for electronics
317Z21	Receptacle set	battery receptacle dummy for receptacle dummy for battery



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17KL40 4 in 1 Option ring lock knee joint



2

Article number	Bar width / thickness	Material	Length upper/lower	Weight	Version	Qty.
17KL40=20	20/5 mm	Stainless steel	400/560 mm	1.7 kg	Adults	Pair
17KL40=16	16/5 mm	Stainless steel	400/560 mm	1.43 kg	Adults	Pair
17KL40=20-A	20/5 mm	Aluminium	400/560 mm	0.78 kg	Adults	Pair
17KL40=16-A	16/5 mm	Aluminium	400/560 mm	0.64 kg	Adults	Pair
17KL40=13	13/5 mm	Stainless steel	310/480 mm	0.95 kg	Children	Pair
17KL40=13-A	13/5 mm	Aluminium	310/480 mm	0.52 kg	Children	Pair

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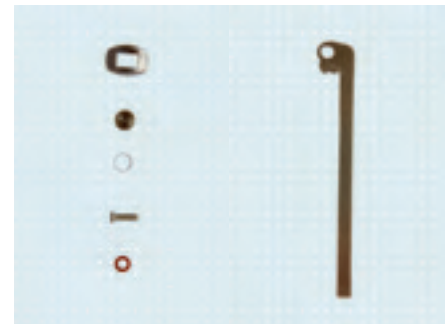
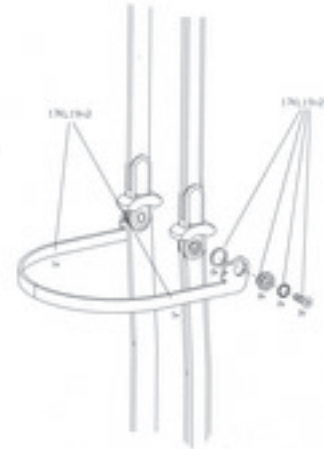
Accessories for 17B26, 17B47, 17B3 and 17B43

17KL19=2 Duchenne bow kit

Named after Duchenne muscular dystrophy, because flexion contractures occur at an early stage with patients suffering from this disease. The ring lock connection with the bow ensures that the joint is easy to release, even under heavy flexion load, but secure under load when closed.

Article number	for
17KL19=2	17KL40

- Components contained in the 17KL19=2 Duchenne bow kit (see illustration)



Service parts for 17Y32 and 17Y35

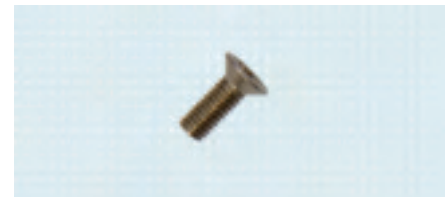
17Y13=9 Lock ring (ring lock option)

Article number
17Y13=9



501S32=M5X9X10 Joint screw

Article number
501S32=M5X9X10



513D83=0.5X3.7X22 Auto spring

Article number
513D83=0.5X3.7X22



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501S32=M3X12 Auto screw

Article number

501S32=M3X12

2



501D1 Spring-loaded thrust piece

Article number

501D1

3



501MS41=22X28.7 Screw face plate

Article number

501MS41=22X28.7

4



507U5=11.4X7.4X1.5 Red washer

Article number

507U5=11.4X7.4X1.5

5



17Y17=10X4.5X7 Bushing

Article number

17Y17=10X4.5X7

6



17Y93=M5X7X6.4 Bearing nut

Article number

17Y93=M5X7X6.4

7

17K29 / 17K42 Knee joint bars for children

Locked knee joint bar with ring lock



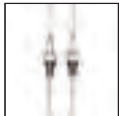
647G2
647G95

with ring lock, flat bar profile



Article number	Milled head Ø	Upper/lower bar length	Bar width/thickness	Material
17K29=4	20 mm	410/390 mm	16/3 mm	Stainless steel
17K29=5	18 mm	300/320 mm	14/3 mm	Stainless steel
17K29=6	16 mm	220/250 mm	12/3 mm	Stainless steel

with ring lock, flat bar profile, upper and lower sections (aluminium), joint (stainless steel)



Article number	Milled head Ø	Upper/lower bar length	Bar width/thickness	Material
17K42=4	20 mm	410/390 mm	16/3 mm	Upper and lower sections (aluminium), joints (stainless steel)
17K42=5	18 mm	300/320 mm	14/3 mm	Upper and lower sections (aluminium), joints (stainless steel)
17K42=6	16 mm	220/250 mm	12/3 mm	Upper and lower sections (aluminium), joints (stainless steel)

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Spare parts for 17K29 and 17K42

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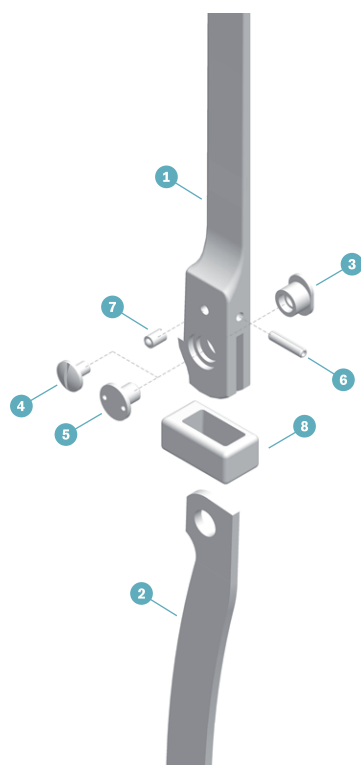
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(1) Knee joint bar upper section

Article number	for	Side	Material	Qty.
17X7=L4	17K29=4	left	Stainless steel	Piece
17X7=R4	17K29=4	right	Stainless steel	Piece
17X7=L5	17K29=5	left	Stainless steel	Piece
17X7=R5	17K29=5	right	Stainless steel	Piece
17X7=L6	17K29=6	left	Stainless steel	Piece
17X7=R6	17K29=6	right	Stainless steel	Piece
17X1=L4	17K42=4	left	Aluminium	Piece
17X1=R4	17K42=4	right	Aluminium	Piece
17X1=L5	17K42=5	left	Aluminium	Piece
17X1=R5	17K42=5	right	Aluminium	Piece
17X1=L6	17K42=6	left	Aluminium	Piece
17X1=R6	17K42=6	right	Aluminium	Piece

(2) Knee joint bar lower section

Article number	for	Material	Qty.
17U7=4	17K29=4	Stainless steel	Piece
17U7=5	17K29=5	Stainless steel	Piece
17U7=6	17K29=6	Stainless steel	Piece
17U11=4	17K42=4	Aluminium	Piece
17U11=5	17K42=5	Aluminium	Piece
17U11=6	17K42=6	Aluminium	Piece

(3) Bearing nut, hardened

Article number	for	Insertion length	Profile length	Shank length	Shoulder diameter	Qty.
17Y93=6X6.7XM4	17K42=6 17K42=5 17K29=6 17K29=5	5.45 mm	12 mm	6.7 mm	6 mm	Piece
17Y93=6.5X6.7XM4	17K42=6 17K42=5 17K29=6 17K29=5	5.45 mm	12 mm	6.7 mm	6.5 mm	Piece
17Y93=7X6.7XM4	17K42=6 17K42=5 17K29=6 17K29=5	5.45 mm	12 mm	6.7 mm	7 mm	Piece
17Y93=9X7.2XM6	17K42=4 17K29=4	6 mm	14 mm	7.2 mm	9 mm	Piece
17Y93=9.5X7.2XM6	17K42=4 17K29=4	6 mm	14 mm	7.2 mm	9.5 mm	Piece
17Y93=10X7.2XM6	17K29=4 17K42=4	6 mm	14 mm	7.2 mm	10 mm	Piece

(4) Slotted truss head screw

Article number	for	Material	Qty.
501S32=M4X10X9.5	Bar size 6 and 5	Stainless steel	Piece

(5) Two-hole screw

Article number	for	Material	Qty.
501S34=M6	Bar size 4	Stainless steel	Piece

(6) Clamping sleeve

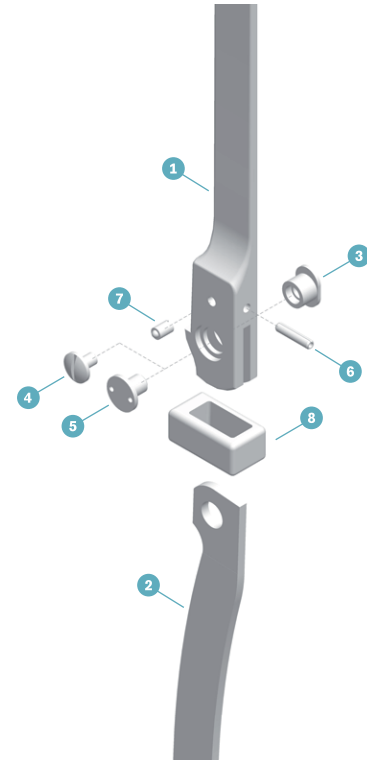
Article number	for	Material	Qty.
506S1=3X14	17K29	Stainless steel	Piece

(7) Spring-loaded thrust piece

Article number	for	Material	Qty.
501D1	17K29	Stainless steel	Piece

(8) Ring lock

Article number	for	Material	Qty.
17Y13=4	17K29=4 17K42=4	Stainless steel	Piece
17Y13=5	17K29=6/=5 17K42=6/=5	Stainless steel	Piece



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17K34 Knee joint bars for children

with Swiss lock, flat bar profile



Article number	Upper/lower bar length	Bar width/thickness	Joint head Ø	Material	Qty.
17K34=6	220/250 mm	12/3 mm	16 mm	Stainless steel	Pair
17K34=5	300/320 mm	14/3 mm	18 mm	Stainless steel	Pair
17K34=4	410/390 mm	16/3 mm	20 mm	Stainless steel	Pair

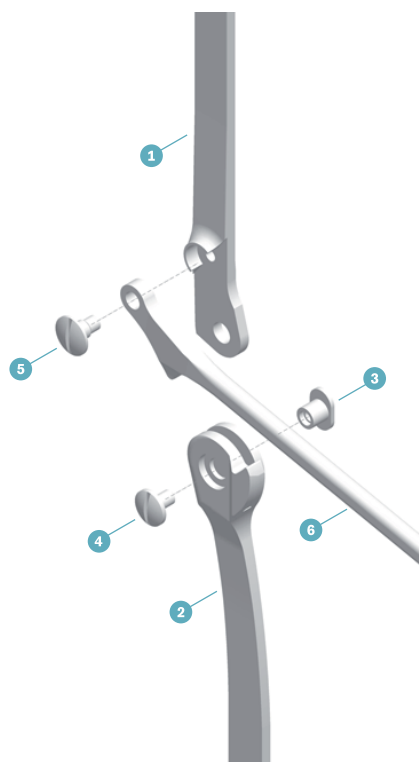
2

Spare parts for 17K34

(1) Knee joint bar upper section

Article number	for	Side	Material	Qty.
17X10=L6	17K34=6	left	Stainless steel	Piece
17X10=R6	17K34=6	right	Stainless steel	Piece
17X10=L5	17K34=5	left	Stainless steel	Piece
17X10=R5	17K34=5	right	Stainless steel	Piece
17X10=L4	17K34=4	left	Stainless steel	Piece
17X10=R4	17K34=4	right	Stainless steel	Piece

3



4

(2) Knee joint bar lower section

Article number	for	Side	Material	Qty.
17U10=L6	17K34=6	left	Stainless steel	Piece
17U10=R6	17K34=6	right	Stainless steel	Piece
17U10=L5	17K34=5	left	Stainless steel	Piece
17U10=R5	17K34=5	right	Stainless steel	Piece
17U10=L4	17K34=4	left	Stainless steel	Piece
17U10=R4	17K34=4	right	Stainless steel	Piece

5

(3) Bearing nut, hardened

Article number	for	Thread	Shank length	Shoulder diameter	Qty.
17Y93=6X6.7XM4	17K34=6 17K34=5	M4	6.7 mm	6 mm	Piece
17Y93=6.5X6.7XM4	17K34=6 17K34=5	M4	6.7 mm	6.5 mm	Piece
17Y93=7X6.7XM4	17K34=6 17K34=5	M4	6.7 mm	7 mm	Piece
17Y93=9X7.2XM6	17K34=4	M6	7.2 mm	9 mm	Piece
17Y93=9.5X7.2XM6	17K34=4	M6	7.2 mm	9.5 mm	Piece
17Y93=10X7.2XM6	17K34=4	M6	7.2 mm	10 mm	Piece

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Article number	for	Thread	Shank length	Shoulder diameter	Qty.
17Y93=6.5X6.7XM4	17K34=6 17K34=5	M4	6.7 mm	6.5 mm	Piece
17Y93=7X6.7XM4	17K34=6 17K34=5	M4	6.7 mm	7 mm	Piece
17Y93=9.5X7.2XM6	17K34=4	M6	7.2 mm	9.5 mm	Piece
17Y93=10X7.2XM6	17K34=4	M6	7.2 mm	10 mm	Piece

(4) Slotted truss head screw

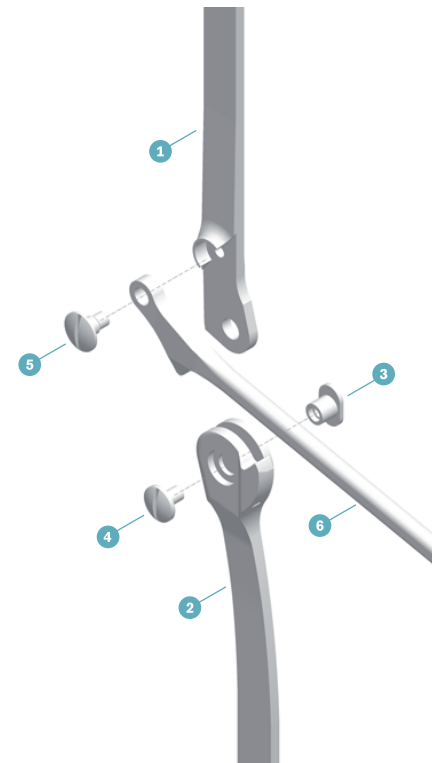
Article number	for	Thread	Length	Material	Qty.
501S32=M4X10X9.5	17K34=5 17K34=6	M4	9.5 mm	Stainless steel	Piece
501S32=M6X14X10	17K34=4	M6	10 mm	Stainless steel	Piece

(5) Oval head screw, slotted and partially threaded

Article number	for	Thread	Shoulder diameter	Head diameter	Material	Qty.
501A11=11X5XM4	17K34=5 17K34=6	M4	5 mm	11 mm	Stainless steel	Piece

(6) Lock lever

Article number	for	Side	Material	Qty.
17Y37=L	17K34=5 17K34=6	left	Stainless steel	Piece
17Y37=R	17K34=5 17K34=6	right	Stainless steel	Piece
17Y57=L	17K34=4	left	Stainless steel	Piece
17Y57=R	17K34=4	right	Stainless steel	Piece



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Practical recommendation:

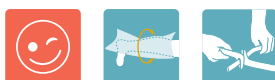
On worn joints, the play can be reduced by replacing the bolts. Use an appropriate reamer to prepare the holes.

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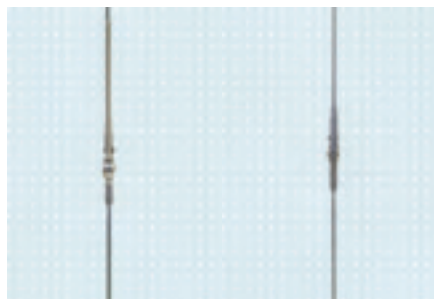
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17KL20 Bale lock knee joint



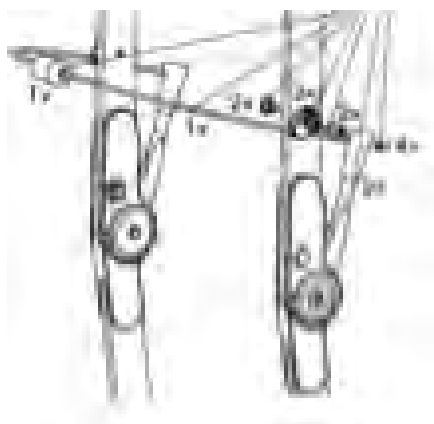
Article number	for	Bar width / thickness	Material	Length upper/lower	Weight	Version	Qty.
17KL20=20	Adults	20/5 mm	Stainless steel	400/560 mm	1.75 kg	Straight	Pair
17KL20=20-A	Adults	20/5 mm	Aluminium	400/560 mm	0.92 kg	Straight	Pair
17KL20=C-20	Adults	20/5 mm	Stainless steel	400/560 mm	1.75 kg	Offset	Pair
17KL20=C-20-A	Adults	20/5 mm	Aluminium	400/560 mm	0.92 kg	Offset	Pair
17KL20=R-20	Adults	20/5 mm	Stainless steel	400/560 mm	1.75 kg	Right	Pair
17KL20=R-20-A	Adults	20/5 mm	Aluminium	400/560 mm	0.92 kg	Right	Pair
17KL20=L-20	Adults	20/5 mm	Stainless steel	400/560 mm	1.75 kg	Left	Pair
17KL20=L-20-A	Adults	20/5 mm	Aluminium	400/560 mm	0.92 kg	Left	Pair
17KL20=16-CS	Adults	16/5 mm	Steel	400/560 mm	1.43 kg	Straight	Pair
17KL20=13	Children	13/5 mm	Stainless steel	300/490 mm	1.07 kg	Straight	Pair
17KL20=13-CS	Children	13/5 mm	Steel	300/490 mm	0.96 kg	Straight	Pair
17KL20=13-A	Children	13/5 mm	Aluminium	300/490 mm	0.6 kg	Straight	Pair

3



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17MS30=A Pull-release cable

The pull-release cable can be positioned anterior or posterior. Thanks to the change of direction, less force is required for pulling.

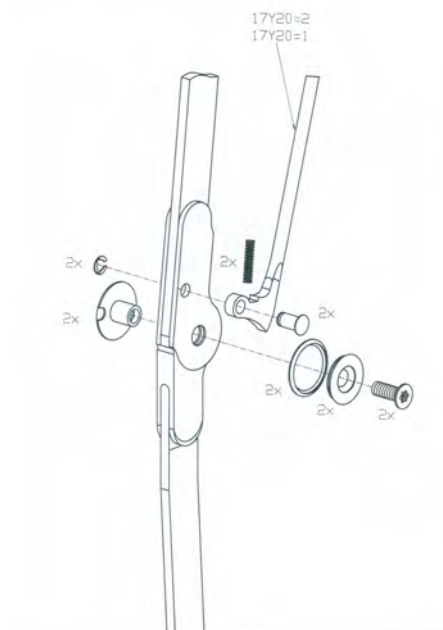
Article number	for
17MS30=A	17KL20=20 17KL20=20-A

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Delivery includes items needed for 1 pair

Article number	for	Qty.
17KL20=20	17KL20=20 17KL20=20-A	Pair



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Service parts for 17Y32 and 17Y35

17Y20=2 Lever

Article number
17Y20=2



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17Y93=M6X9X10 Bearing nut

Article number
17Y93=M6X9X10



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501S32=M6X11X16 Joint screw

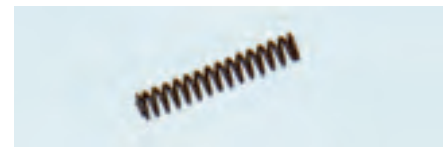
Article number
501S32=M6X11X16



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513D83=1X4.1X26.2 Screw

Article number
513D83=1X4.1X26.2



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170D5=120 Connecting pin

Article number
170D5=120



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Lock ring

Article number

507S96=4

2



507U5=25X20 Red washer

Article number

507U5=25X20

3



507U57=22X7.6 Screw disk

Article number

507U57=22X7.6

Service parts for 17Y32 and 17Y35

4



17Y20=1 Lever

Article number

17Y20=1

5



17Y93=M5X9X8 Bearing nut

Article number

17Y93=M5X9X8

6



501S32=M5X9X16 Joint screw

Article number

501S32=M5X9X16

7



513D83=1X4.1X22.8 Screw

Article number

513D83=1X4.1X22.8

4A101=5X12.8 Connecting pin

Article number

4A101=5X12.8



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Lock ring

Article number

507S96=4



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507U5=19X14 Red washer

Article number

507U5=19X14



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507U57=16X5.4 Screw disk

Article number

507U57=16X5.4



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17B42 / 17B20 / 17B21 Modular system knee joints

Locked knee joint with ring lock



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Medial and lateral joints straight, with ring lock

Article number	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B42=16	16 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B42=20	20 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair

4



Contoured medial joint, straight lateral joint, with ring lock

Article number	Side	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B20=L16	left	16 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B20=R16	right	16 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B20=L20	left	20 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B20=R20	right	20 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair

5



Lower segment of the medial joint contoured, upper segment straight, lateral joint straight, with ring lock

Article number	Side	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B21=L16	left	16 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B21=R16	right	16 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B21=L20	left	20 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair
17B21=R20	right	20 mm	25x4 mm	56 / 38 mm	Stainless steel	Pair

6

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Spare parts for 17B42, 17B20 and 17B21

(1) Ring lock

Article number	Material	Qty.
17Y31=25X9.5	Stainless steel	Piece

(2) Bearing nut, hardened

Article number	Thread	Profile length	Shank length	Shoulder diameter	Qty.
17Y93=9X7.2XM6	M6	14 mm	7.2 mm	9 mm	Piece

For repairs

Bearing nut, hardened

Article number	Thread	Profile length	Shank length	Shoulder diameter	Qty.
17Y93=9.5X7.2XM6	M6	14 mm	7.2 mm	9.5 mm	Piece

(3) Two-hole screw

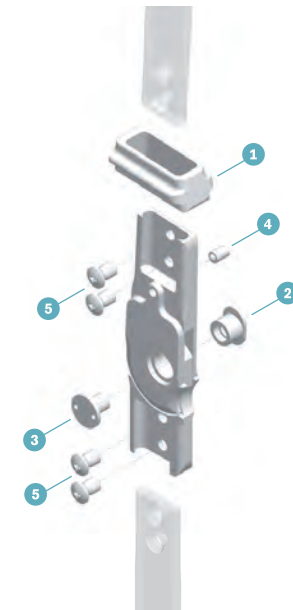
Article number	Material	Qty.
501S34=M6	Stainless steel	Piece

(4) Spring-loaded thrust piece

Article number	Material	Qty.
501D1	Stainless steel	Piece

(5) Phillips oval countersunk head screw

Article number	Material	Qty.
501T7=7.5X9XM5	Stainless steel	Piece



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Practical recommendation:

On worn joints, the play can be reduced by replacing the bolts. Use an appropriate reamer to prepare the holes.

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17B105 / 17B106 System knee joints

Locked knee joint with wedge lock and pull-release cable



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Patent: WO 99/11206, EP 936891

Medial joint contoured bottom, straight top, lateral joint straight with wedge lock and pull-release cable

3



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B105=L16	left	16 mm	45/41 mm	Titanium	Pair
17B105=R16	right	16 mm	45/41 mm	Titanium	Pair
17B105=L20	left	20 mm	45/41 mm	Titanium	Pair
17B105=R20	right	20 mm	45/41 mm	Titanium	Pair

Medial and lateral joints straight, with wedge lock and pull-release cable

4



Article number	System width	Length from joint centre upper/lower	Material	Qty.
17B106=16	16 mm	45/41 mm	Titanium	Pair
17B106=20	20 mm	45/41 mm	Titanium	Pair

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Spare parts for 17B105 and 17B106

(1) Slotted truss head screw

Article number	Thread	Length	For system width	Material	Qty.
501S32=M5X10X10	M5	10 mm	16 mm	Stainless steel	Piece
501S32=M5X12X11	M5	11 mm	20 mm	Stainless steel	Piece

(2) Bearing nut, hardened

Article number	System width	Qty.
17Y93=7X8.5XM5	16 mm	Piece
17Y93=8X9XM5	20 mm	Piece

(3) Cover

Article number	Side	System width	Material	Qty.
17Y121=L16	left	16 mm	Titanium	Piece
17Y121=R16	right	16 mm	Titanium	Piece
17Y121=L20	left	20 mm	Titanium	Piece
17Y121=R20	right	20 mm	Titanium	Piece

(4) Bearing washer

Article number	For system width	Material	Qty.
4Z80=10.2X20X0.2	20 mm	Polyamide	Piece
4Z80=9.2X16X0.2	16 mm	Polyamide	Piece

(5) Compression spring

Article number	For system width	Qty.
513D19=0.63X4X20	20 mm	Piece

(6) Wedge lock, hardened

Article number	Qty.
17Y122	Piece

(7) Flat head screw

Article number	Qty.
17Y123=M4X10	Piece

(8) Brass bushing

Article number	For system width	Qty.
17Y17=7X9X5.4	16 mm	Piece
17Y17=8X10X5.4	20 mm	Piece

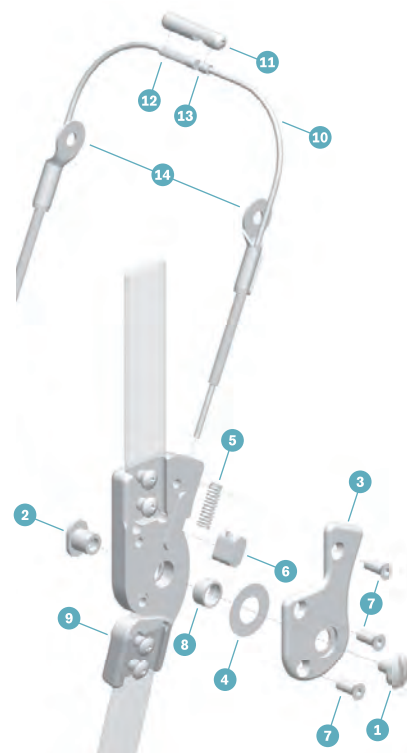
(9) Phillips oval countersunk head screw

Article number	Thread	Length	Head diameter	Material	Qty.
501T7=7.5X9XM5	M5	9 mm	7.5 mm	Stainless steel	Piece

for system side bars

(10) Perlon cable

Article number	Qty.
21A18=2	Metres



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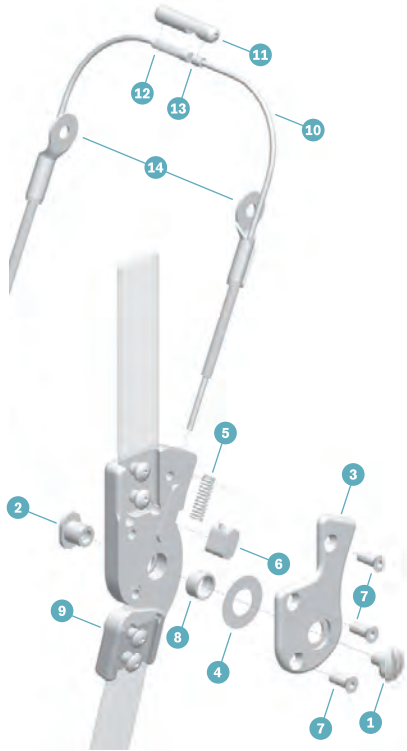
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(11) Coupling piece

for perlon cable

Article number	Qty.
21A7	Piece

(12) Spring

For coupling piece

Article number	Qty.
21A25	Piece

(13) Threaded sleeve

For screwing onto the 21A18=2 perlon cable

Article number	Package contents	Qty.
21A12	2 piece(s)	Piece

(14) Bracket

Article number	Qty.
21A5	Piece

Lamination dummy (not illustrated)

Article number	For system width	Qty.
17Y126=16	16 mm	Piece
17Y126=20	20 mm	Piece

17B95 / 17B96 System knee joints

Locked knee joint with wedge lock and cable pull release.
With 16 mm system width: suitable for body weight up to 50 kg/110 lbs.



647H235

Medial joint contoured bottom, straight top, lateral joint straight with wedge lock and pull-release cable



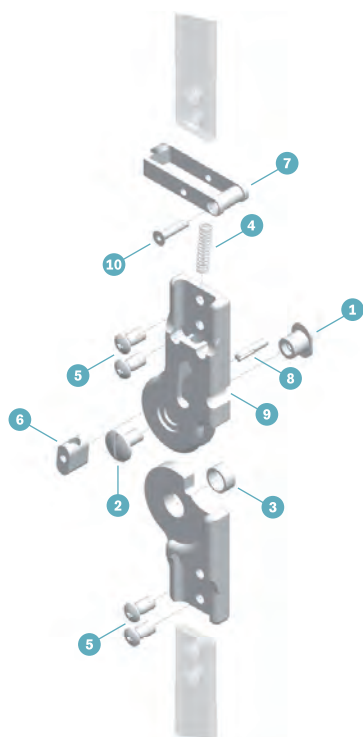
Article number	Side	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B95=L16	left	16 mm	23x4 mm	50/40 mm	Stainless steel	Pair
17B95=R16	right	16 mm	23x4 mm	50/40 mm	Stainless steel	Pair
17B95=L20	left	20 mm	30x5 mm	58/42 mm	Stainless steel	Pair
17B95=R20	right	20 mm	30x5 mm	58/42 mm	Stainless steel	Pair

Medial and lateral joints straight, with wedge lock and pull-release cable



Article number	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B96=16	16 mm	23x4 mm	50/40 mm	Stainless steel	Pair
17B96=20	20 mm	30x5 mm	58/42 mm	Stainless steel	Pair

Spare parts for 17B95 and 17B96



(1) Bearing nut, hardened

Article number	Thread	For system width	Shank length	Shoulder diameter	Qty.
17Y93=6X7.7XM4	M4	16 mm	7.7 mm	6 mm	Piece

(2) Bearing nut, hardened

Article number	Thread	For system width	Shank length	Shoulder diameter	Qty.
17Y93=6.5X7.7XM4	M4	16 mm	7.7 mm	6.5 mm	Piece
17Y93=8X8.5XM5	M5	20 mm	8.5 mm	8 mm	Piece

(3) Slotted truss head screw

Article number	For system width	Material	Qty.
501S32=M4X10X9.5	16 mm	Stainless steel	Piece
501S32=M5X12X11	20 mm	Stainless steel	Piece

(4) Brass bushing

Article number	For system width	Material	Qty.
17Y17=8X10X4.8	20 mm	Brass	Piece

(5) Compression spring

Article number	For system width	Qty.
513D19=0.5X3.3X14	16 mm	Piece
513D19=0.63X4X20	20 mm	Piece

(6) Countersunk head screw (allen screw)

Article number	For system width	Qty.
501S41=M3X12	16 mm	Piece
501S41=M3X14	20 mm	Piece

(7) Wedge lock, hardened

Article number	For system width	Qty.
17Y88=16	16 mm	Piece
17Y88=20	20 mm	Piece

(8) Locking rocker

Article number	For system width	Material	Qty.
30Z22=L16	16 mm	Stainless steel	Piece
30Z22=R16	16 mm	Stainless steel	Piece
30Z22=L20	20 mm	Stainless steel	Piece
30Z22=R20	20 mm	Stainless steel	Piece

(9) Notch pin for rocking locker

Article number	For system width	Material	Qty.
506K2=3X12	16 mm	Stainless steel	Piece
506K2=3X14	20 mm	Stainless steel	Piece

(10) Bushing for rocking locker

Article number	For system width	Material	Qty.
17Y89=16	16 mm	Brass	Piece
17Y89=20	20 mm	Brass	Piece

(11) Phillips oval countersunk head screw

Article number	Material	Qty.
501T7=7.5X9XM5	Stainless steel	Piece

for system side bars

Perlon cable (not illustrated)

Article number	Ø	Package contents	Qty.
21A18=3	2 mm	1 piece(s)	Metres

Coupling piece (not illustrated)

for perlon cable

Article number	Qty.
21A7	Piece

Spring (not illustrated)

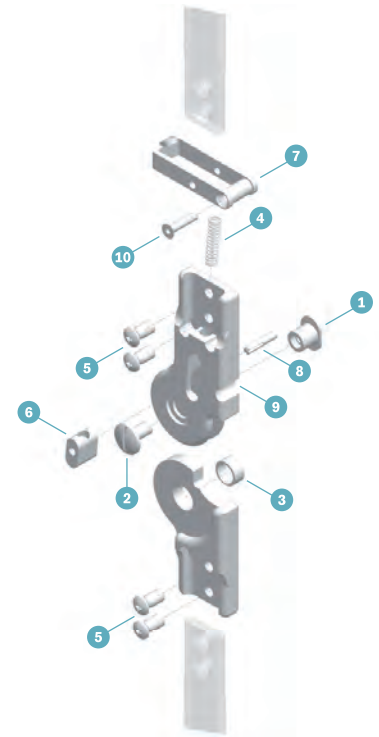
For coupling piece

Article number	Qty.
21A25	Piece

Threaded sleeve (not illustrated)

For screwing on the 21A18=2 perlon cable For screwing onto the 21A18=3 perlon cable

Article number	Package contents	Qty.
21A12	2 piece(s)	Piece



Practical recommendation:

On worn joints, the play can be reduced by replacing the bolts. Use an appropriate reamer to prepare the holes.

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17B200 E-MAG Control



Function

Thanks to electronic control with feedback function, your patient can safely unlock and lock the orthosis knee joint. Patients are informed of the state of the joint via adjustable profiles. The E-MAG Control offers your patients a crucial confidence boost for everyday activities. Even in case of restricted mobility or dependency on forearm crutches, your patient is always able to support and/or hold him or herself with both arms while activating the joint using a remote control. The enclosed system also prevents opening of the joint through an external impact. This means the patient no longer has to fear a lack of safety, even in confined spaces.

Delivery condition

The E-MAG Control joint system is supplied as a complete system in a case. You can order the optional medial support joint, matching joint bars and suitable crutches as special accessories. The case contains the entire matched system including a charger, a battery, and the required dummies for installation in an orthosis.

3

- 646S3=11.04GB 646D237=GB
- 647G310 646DV26
- 647G311
- 647G312

Article number	Qty.
17B200=L/R	Piece

4



Scope of delivery

- (1) Dummy for battery
 - (2) Dummy for electronics
 - (3) Dummy for battery receptacle
 - (4) Dummy for electronics receptacle
 - (5) Dummy for knee joint
 - (6) Receptacle for battery
 - (7) Lock unit for battery
 - (8) Receptacle for control electronics with underlying connecting cable
 - (9) Rechargeable battery
 - (10) Control electronics
 - (11) E-MAG knee joint [right/left]
 - (12) AC adapter for battery charger
 - (13) Remote control
 - (14) Battery charger
- Key for manual opening (not illustrated)

5



Practical recommendation:

To better fine-tune ankle joint motion in the orthosis, we recommend the 17LA3 system ankle joints.

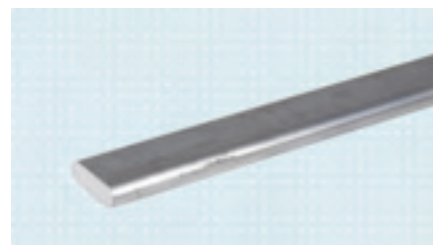
6

7

Accessories for E-MAG Control

17LS1 Unilateral system bar

Article number	Length	Width	Thickness	Material	Qty.
17LS1=2	100 cm	17.8 mm	7 mm	Aluminium	Piece



1

17B205 Medial support

Includes lamination dummy

Article number	Max. body weight	Material	Qty.
17B205=L	100 kg	Stainless steel	Piece
17B205=R	100 kg	Stainless steel	Piece



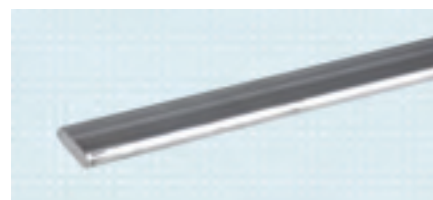
2

647G336

605P8 Light metal profile bar

Suitable for fabricating system bars, with rounded edges, strength approx. 400 N/mm²

Article number	Length	Width	Thickness	Qty.
605P8=14	2,000 mm	14 mm	5 mm	Piece
605P8=20	2,000 mm	20 mm	5 mm	Piece
605P8=20-12	305 mm	20 mm	5 mm	Piece



646A230=GB

4

With plastic grip and rubber capsule, height-adjustable in 25 mm increments, from 780 to 980 mm (floor to grip)

Article number	Colour	Qty.
22K2	silver anodised	Piece
22K4	blue	Piece



5

17BS200 Service set

Article number	for	Qty.
17BS200	E-MAG Control knee joint	Piece



6

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1



17BS205 Service set

Article number	for	Qty.
17BS205	17B205 medial support joint	Piece

2

Spare parts for E-MAG Control

- Attention! Please always indicate **the serial number** of the entire E-MAG when ordering spare parts, especially when ordering electronic components.

3



Article number	Description	Qty.
30G63=R/L	E-MAG knee joint	Piece
317X200=L	Dummy for knee joint	Piece
317X200=R	Dummy for knee joint	Piece
317B20	Replaceable battery	Piece
317L20	Battery charger	Piece
757L16-2	Power supply	Piece
317B10	Remote control	Piece
317B2	Control electronics	Piece

4

- Attention! The remote control as well as the electronic unit are programmed to the existing system with the aid of **the serial number** of the entire E-MAG. Therefore, please always include this number.

5

Article number	Description	Qty.
317E2	Electronics cable	Piece
317E20	Connecting cable	Piece
317Z12	Receptacle for control electronics	Piece
317Z20	Battery receptacle	Piece
30Y121	Key for manual opening	Piece

6

7



17LK3 Unilateral knee joint

The 17LK3 unilateral knee joint is a system knee joint with wedge lock. It is particularly attractive due to its lightweight construction. Its weight classification permits unilateral use for body weight up to 110 kg/240 lbs and bilateral use for up to 160 kg/350 lbs. The system is suitable for prepreg and lamination resin techniques. The scope of delivery includes a temporary switch for releasing the joint (such as for training on a therapy bike).

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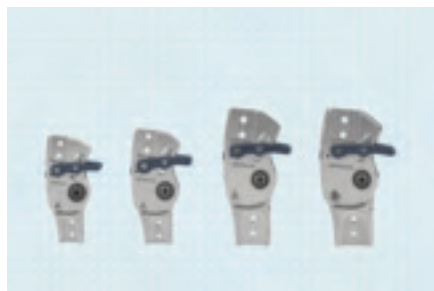
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1



17LK3 Unilateral knee joint

System knee joint with wedge lock



2

Article number	Side	System width	Max. body weight	Material	Qty.
17LK3=L12	left	12 mm	20 kg / 40 kg*	Steel	Piece
17LK3=L12-T	left	12 mm	20 kg / 40 kg*	Titanium	Piece
17LK3=R12	right	12 mm	20 kg / 40 kg*	Steel	Piece
17LK3=R12-T	right	12 mm	20 kg / 40 kg*	Titanium	Piece
17LK3=L14	left	14 mm	50 kg / 80 kg*	Steel	Piece
17LK3=L14-T	left	14 mm	50 kg / 80 kg*	Titanium	Piece
17LK3=R14	right	14 mm	50 kg / 80 kg*	Steel	Piece
17LK3=R14-T	right	14 mm	50 kg / 80 kg*	Titanium	Piece
17LK3=L16	left	16 mm	85 kg / 120 kg*	Steel	Piece
17LK3=L16-T	left	16 mm	85 kg / 120 kg*	Titanium	Piece
17LK3=R16	right	16 mm	85 kg / 120 kg*	Steel	Piece
17LK3=R16-T	right	16 mm	85 kg / 120 kg*	Titanium	Piece
17LK3=L20	left	20 mm	110 kg / 160 kg*	Steel	Piece
17LK3=L20-T	left	20 mm	110 kg / 160 kg*	Titanium	Piece
17LK3=R20	right	20 mm	110 kg / 160 kg*	Steel	Piece
17LK3=R20-T	right	20 mm	110 kg / 160 kg*	Titanium	Piece

* with bilateral use

3

4

- When using the product unilaterally, and in case of flexion contracture in the knee or hip > 10°, or distinct torsion or valgus/varus instabilities, or valgus/varus malpositions, or increased physical activity, the next higher size must be used!
- For tubercle seat the product must be fitted bilaterally.

Accessories

5



17LS3 Lamination bar for unilateral joint system

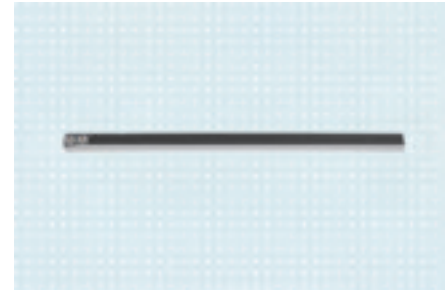
Article number	Length	Width	Thickness	Material	Qty.
17LS3=12	80 mm	12 mm	5 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=12-T	80 mm	12 mm	5 mm bottom, 3 mm top	Titanium	Piece
17LS3=14	100 mm	14 mm	6 mm bottom, 2.5 mm top	Stainless steel	Piece
17LS3=14-T	100 mm	14 mm	6 mm bottom, 2.5 mm top	Titanium	Piece
17LS3=16	130 mm	16 mm	6 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=16-T	130 mm	16 mm	6 mm bottom, 3 mm top	Titanium	Piece
17LS3=20	130 mm	20 mm	6 mm bottom, 3 mm top	Stainless steel	Piece
17LS3=20-T	130 mm	20 mm	6 mm bottom, 3 mm top	Titanium	Piece

6

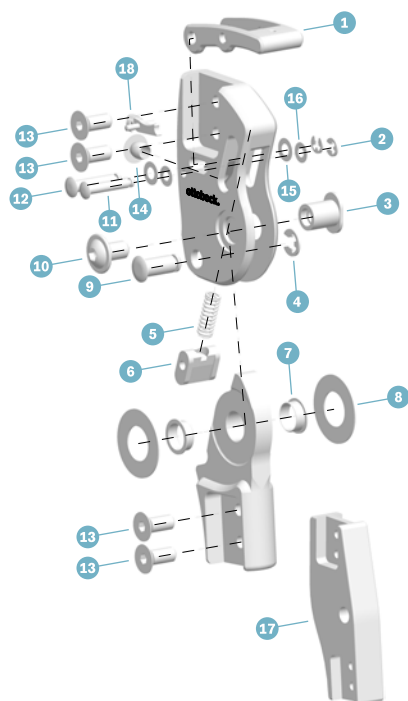
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17LV3 Side bar for unilateral joint system

Article number	Length	Width	Thickness	Material	Qty.
17LV3=12	270 mm	12	7 mm	Stainless steel	Piece
17LV3=12-A	270 mm	12	7 mm	Aluminium	Piece
17LV3=14	270 mm	14	7 mm	Stainless steel	Piece
17LV3=14-A	270 mm	14	7 mm	Aluminium	Piece
17LV3=16	400 mm	16	8 mm	Stainless steel	Piece
17LV3=16-A	400 mm	16	8 mm	Aluminium	Piece
17LV3=20	470 mm	20	8 mm	Stainless steel	Piece
17LV3=20-A	470 mm	20	8 mm	Aluminium	Piece



Spare parts for 17LK3



(1) Knee lever

Article number	for	Qty.
30Y265=12-A	17LK3=12	Piece
30Y265=14-A	17LK3=14	Piece
30Y265=16-A	17LK3=16	Piece
30Y265=20-A	17LK3=20	Piece

(2) Lock washer

Article number	for	Qty.
507S96=2.3	17LK3	Piece

(3) Bearing nut, hardened

Article number	for	Qty.
17Y93=9X9.2XM6	17LK3=12, =14	Piece
17Y93=9X10.75XM6	17LK3=16	Piece
17Y93=9X11.75XM6	17LK3=20	Piece

(4) Lock washer

Article number	for	Qty.
507S96=4	17LK3=16, =20	Piece
507S96=3.2	17LK3=12, =14	Piece

(5) Compression spring

Article number	for	Qty.
513D83=0.75X4.6X20	17LK3=14, =16, =20	Piece
513D83=0.75X4.3X19	17LK3=12	Piece

(6) Lock wedge

Article number	for	Qty.
17Y156	17LK3=12, =14	Piece
17Y157	17LK3=16	Piece
17Y158	17LK3=20	Piece

Lock wedges must always be replaced with identical lock wedges (=1, =2 or =3)

(7) Bushing

Article number	for	Qty.
30Y87=1	17LK3=16, =20	Piece
30Y87=3	17LK3=12, =14	Piece

(8) Bearing washers

Article number	for	Qty.
170Z93=1	17LK3=16, =20	Set

(9) Axle

Article number	for	Qty.
4A101=5X10.6	17LK3=12, =14	Piece
4A101=6X12.7	17LK3=16	Piece
4A101=6X13.7	17LK3=20	Piece

(10) Screw with flattened half-round head

Article number	for	Qty.
501F7=M6X8	17LK3=12, =14	Piece
501F7=M6X10	17LK3=16, =20	Piece

(11) Axle

Article number	for	Qty.
4A101=3.2X15.1	17LK3=12, =14	Piece
4A101=4X17.1	17LK3=16	Piece
4A101=4X18.1	17LK3=20	Piece

(12) Axle

Article number	for	Qty.
4A101=4X15.1	17LK3=12, =14	Piece
4A101=4X17.1	17LK3=16	Piece
4A101=4X18.1	17LK3=20	Piece

(13) Countersunk head screw (allen screw)

Article number	for	Qty.
501S41=M4X10	17LA3N=14	Piece
501S41=M5X12	17LA3N=16	Piece

(14) Protective plug

Reference number	for	Qty.
30Y91=1	17LK3=16, =20	Piece
30Y91=3	17LK3=12, =14	Piece

(15) Washer

Article number	for	Qty.
30Y267=4.2	17LK3 (all sizes)	Piece

(16) Washer

Article number	for	Qty.
30Y267=3.3	17LK3 (all sizes)	Piece

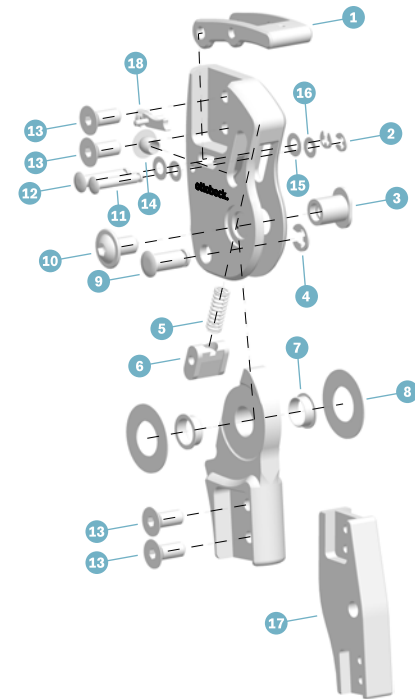
(17) Joint dummy

Article number	for	Qty.
30Y268=12	17LK3=12	Piece
30Y268=14	17LK3=14	Piece
30Y268=16	17LK3=16	Piece
30Y268=20	17LK3=20	Piece

The article number of the matching shoulder screw for the joint dummy is 30Y89.

(18) Temporary switch

Article number	for	Qty.
17Y162=3	17LK3=12, =14	Piece
17Y162=2	17LK3=16	Piece
17Y162=1	17LK3=20	Piece



Unilateral Joint System

Order form · fax:

Company	<input type="text"/>	Date	<input type="text"/>
Technician	<input type="text"/>	Signature	<input type="text"/>
Customer no.	<input type="text"/>		

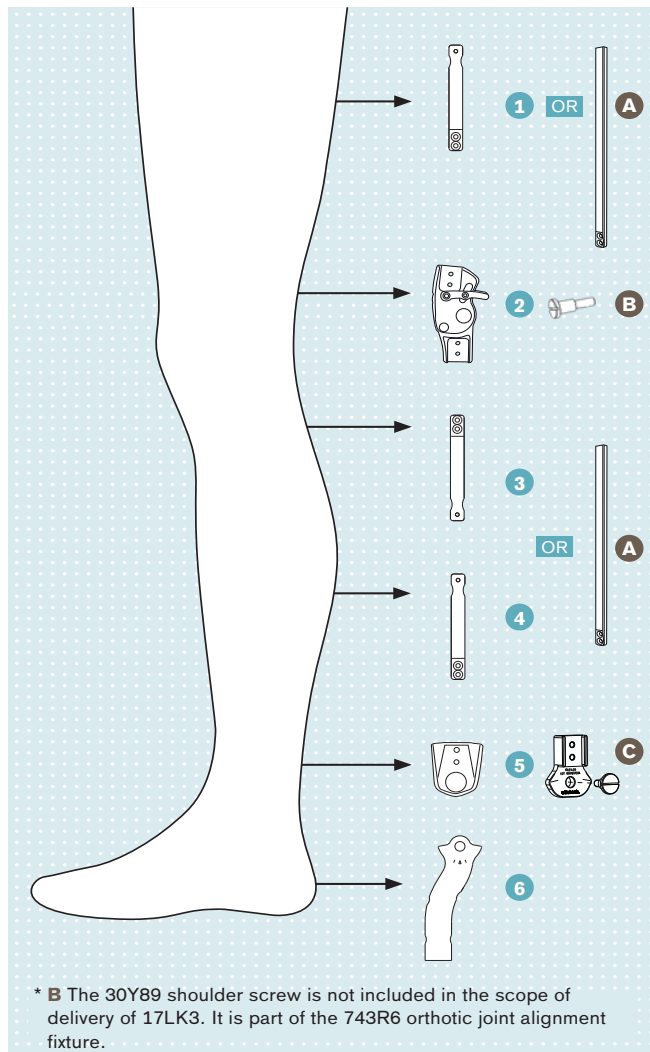
User information

Surname, first name Weight

Age Indication

Side Left Right Bilateral

The size chosen depends on the patient's weight and the conditions of use.



* **B** The 30Y89 shoulder screw is not included in the scope of delivery of 17LK3. It is part of the 743R6 orthotic joint alignment fixture.

1 Lamination bar 17LS3=* OR A Extension bar 17LV3=*

Steel version	Titanium version	Stainless steel version	Aluminium version
<input type="checkbox"/> 17LS3=10	<input type="checkbox"/> 17LS3=10-T	<input type="checkbox"/> 17LV3=12	<input type="checkbox"/> 17LV3=12-A
<input type="checkbox"/> 17LS3=12	<input type="checkbox"/> 17LS3=12-T	<input type="checkbox"/> 17LV3=14	<input type="checkbox"/> 17LV3=14-A
<input type="checkbox"/> 17LS3=14	<input type="checkbox"/> 17LS3=14-T	<input type="checkbox"/> 17LV3=16	<input type="checkbox"/> 17LV3=16-A
<input type="checkbox"/> 17LS3=16	<input type="checkbox"/> 17LS3=16-T	<input type="checkbox"/> 17LV3=20	<input type="checkbox"/> 17LV3=20-A
<input type="checkbox"/> 17LS3=20	<input type="checkbox"/> 17LS3=20-T		

2 Unilateral Knee Joint 17LK3=*

Steel version	Titanium version	Side	B Shoulder screw*
<input type="checkbox"/> 17LK3=12	<input type="checkbox"/> 17LK3=12-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89
<input type="checkbox"/> 17LK3=14	<input type="checkbox"/> 17LK3=14-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89
<input type="checkbox"/> 17LK3=16	<input type="checkbox"/> 17LK3=16-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89
<input type="checkbox"/> 17LK3=20	<input type="checkbox"/> 17LK3=20-T	<input type="checkbox"/> L <input type="checkbox"/> R	<input type="checkbox"/> 30Y89

3, 4 Lamination bar 17LS3=* OR A Extension bar 17LV3=*

Steel version	Titanium version	Stainless steel version	Aluminium version
<input type="checkbox"/> 17LS3=10	<input type="checkbox"/> 17LS3=10-T	<input type="checkbox"/> 17LV3=12	<input type="checkbox"/> 17LV3=12-A
<input type="checkbox"/> 17LS3=12	<input type="checkbox"/> 17LS3=12-T	<input type="checkbox"/> 17LV3=14	<input type="checkbox"/> 17LV3=14-A
<input type="checkbox"/> 17LS3=14	<input type="checkbox"/> 17LS3=14-T	<input type="checkbox"/> 17LV3=16	<input type="checkbox"/> 17LV3=16-A
<input type="checkbox"/> 17LS3=16	<input type="checkbox"/> 17LS3=16-T	<input type="checkbox"/> 17LV3=20	<input type="checkbox"/> 17LV3=20-A
<input type="checkbox"/> 17LS3=20	<input type="checkbox"/> 17LS3=20-T		

5 Unilateral Ankle Joint 17LA3N=*

Steel version	Titanium version	C Optional lamination dummy with shoulder screw
<input type="checkbox"/> 17LA3N=10	<input type="checkbox"/> 17LA3N=10-T	<input type="checkbox"/> 17LD1N=10
<input type="checkbox"/> 17LA3N=12	<input type="checkbox"/> 17LA3N=12-T	<input type="checkbox"/> 17LD1N=12
<input type="checkbox"/> 17LA3N=14	<input type="checkbox"/> 17LA3N=14-T	<input type="checkbox"/> 17LD1N=14
<input type="checkbox"/> 17LA3N=16	<input type="checkbox"/> 17LA3N=16-T	<input type="checkbox"/> 17LD1N=16
<input type="checkbox"/> 17LA3N=20	<input type="checkbox"/> 17LA3N=20-T	<input type="checkbox"/> 17LD1N=20

6 Foot stirrup (Steel) 17LF3N=*

<input type="checkbox"/> 17LF3N=10	<input type="checkbox"/> 17LF3N=14	<input type="checkbox"/> 17LF3N=20
<input type="checkbox"/> 17LF3N=12	<input type="checkbox"/> 17LF3N=16	

17PK1=* CarbonIQ knee joint with wedge lock



The 17PK1=* knee joint is a locked joint made of fibre-reinforced plastic with a pull-release cable. The locking system uses the latest technology for locked joints and offers a high level of security. It can be unlocked with one hand using the pull-release cable, making it very simple to use. The lock in the joint clicks into place automatically when standing up, without the risk of trapping clothes.

Medial and lateral joint straight

Article number	Side	Max. body weight	Material	Qty.
17PK1=14	left and right	45 kg	Plastic reinforced with carbon fibre	Pair
17PK1=20	left and right	100 kg	Plastic reinforced with carbon fibre	Pair



646D578=EN
646T5=4.6GB

647G641
647G642

Medial joint contoured, lateral joint straight

Article number	Side	Max. body weight	Material	Qty.
17PK1=L14	left	50 kg	Plastic reinforced with carbon fibre	Pair
17PK1=R14	right	50 kg	Plastic reinforced with carbon fibre	Pair
17PK1=L20	left	100 kg	Plastic reinforced with carbon fibre	Pair
17PK1=R20	right	100 kg	Plastic reinforced with carbon fibre	Pair

- The CarbonIQ joints are splash proof!

Spare parts for 17PK1

(1) Service set

Article number	Qty.	Scope of delivery
29PK1	Set	1x 501S146=4.0X12 1x 30Y206 1x 21A18=2 1x 513D52=1 1x 21A12 1x 30Y207

(2) Service set

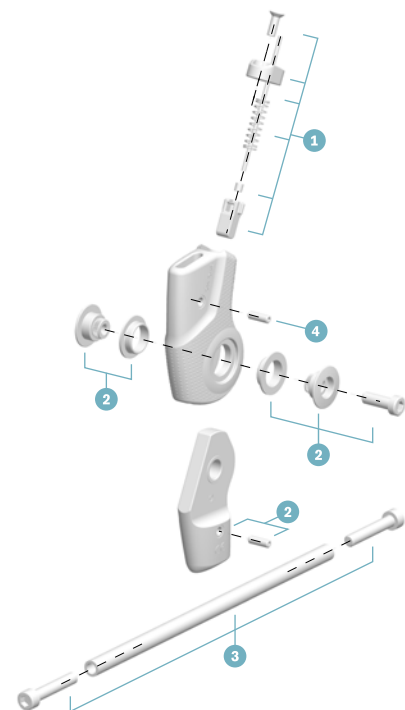
Article number	Qty.	Scope of delivery
29PK2	Set	1x 509G10=14X16X5 1x 30Y210 1x 501T39=M6X18 1x 30Y209

(3) Adjustment Aid

Article number	Qty.	Scope of delivery
29PK4	Set	1x 501T28=M6X35 1x 30Y216

(4) Set screw

Article number	Qty.
506G3=M4X12	Piece



Spare parts for 17PK1

1

(1) Service set

Article number	Qty.	Scope of delivery
29PK1=14	Set	1x 30Y286 1x 30Y287 1x 501S146=3.0X12 1x 513D30=0.53x4.97X2 1x 21A18=2 2x 21A12

2

(2) Service set

Article number	Qty.	Scope of delivery
29PK2=14	Set	1x 30Y285 1x 30Y288 2x 509G10=14X16X4.7 1x 501S84=M5X20

3

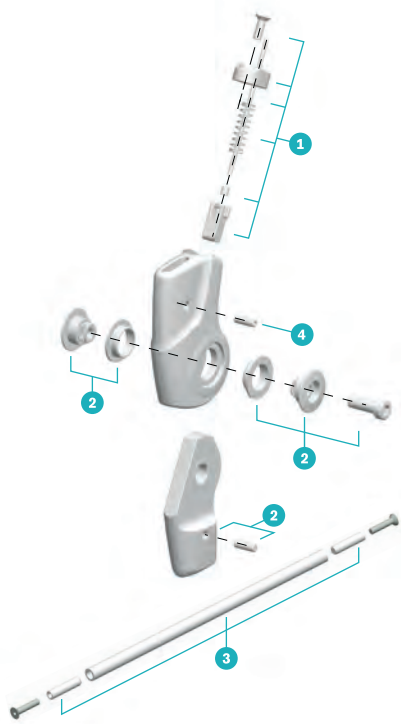
(3) Adjustment Aid

Article number	Qty.	Scope of delivery
29PK4=14	Set	1x 30Y216 1x 30Y326 1x 501S84=M4X20

4

(4) Set screw

Article number	Qty.
506G3=M4X12	Piece



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17B44 System knee joint

Locked knee joint with adjustable Swiss lock for positioning orthoses.
Flexion angle adjustment up to max. 16° knee flexion and 100 kg/220 lbs body weight possible in gait orthoses.



647G43

Contoured medial joint, straight lateral joint, Swiss lock with flexion adjustment



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B44=L16	left	16 mm	56 / 38 mm	Stainless steel	Pair
17B44=R16	right	16 mm	56 / 38 mm	Stainless steel	Pair
17B44=L20	left	20 mm	56 / 38 mm	Stainless steel	Pair
17B44=R20	right	20 mm	56 / 38 mm	Stainless steel	Pair

Spare parts for 17B44

(1) Lock plate

Article number	Side	For system width	Material	Qty.
17Y55=L	left	16 and 20 mm	Stainless steel	Piece
17Y55=R	right	16 and 20 mm	Stainless steel	Piece

(2) Knee cap ring plate

Article number	Side	For system width	Material	Qty.
17Y56=L	left	16 and 20 mm	Stainless steel	Piece
17Y56=R	right	16 and 20 mm	Stainless steel	Piece

(3) Lock lever

Article number	Side	For system width	Material	Qty.
17Y57=L	left	16 and 20 mm	Stainless steel	Piece
17Y57=R	right	16 and 20 mm	Stainless steel	Piece

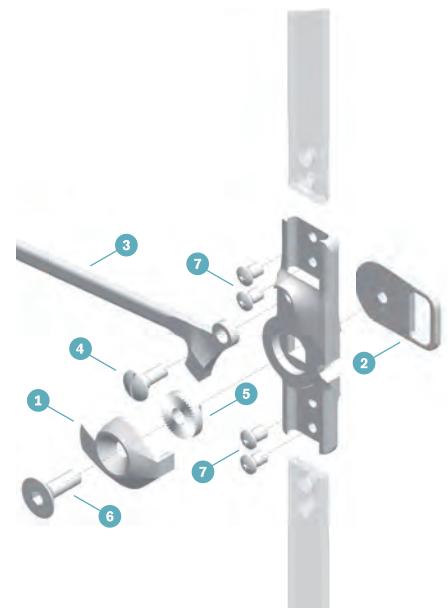
(4) Oval head screw

slotted and partially threaded

Article number	for	Material	Qty.
501A23	17Y57 lock lever	Stainless steel	Piece

(5) Bolt

Article number	Material	Qty.
17Y58	Stainless steel	Piece



1

(6) Countersunk allen head screw

Article number	Qty.
501S55=M6X20X16	Piece

2

(7) Phillips oval countersunk head screw

Article number	for	Length	Head diameter	Material	Qty.
501T7=7.5X9XM5	System side bars	9 mm	7.5 mm	Stainless steel	Piece
for system side bars					

3

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17B23 / 17B23K / 17B45 / 17B92 system knee joints



647H234

Contoured medial joint, straight lateral joint, with covered lock centrally fitted*, lock lever, with pull-release cable



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B23=L16	left	16 mm	56 / 38 mm	Stainless steel	Pair
17B23=R16	right	16 mm	56 / 38 mm	Stainless steel	Pair
17B23=L20	left	20 mm	56 / 38 mm	Stainless steel	Pair
17B23=R20	right	20 mm	56 / 38 mm	Stainless steel	Pair

Contoured medial joint, straight lateral joint, with covered lock eccentrically fitted*, lock lever, with pull-release cable



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B23=L16K	left	16 mm	56 / 38 mm	Stainless steel	Pair
17B23=R16K	right	16 mm	56 / 38 mm	Stainless steel	Pair
17B23=L20K	left	20 mm	56 / 38 mm	Stainless steel	Pair
17B23=R20K	right	20 mm	56 / 38 mm	Stainless steel	Pair

Straight medial and lateral joints, with centrally* fitted covered lock, lock lever points upward



Article number	System width	Length from joint centre upper/lower	Material	Qty.
17B45=16	16 mm	56 / 38 mm	Stainless steel	Pair
17B45=20	20 mm	56 / 38 mm	Stainless steel	Pair

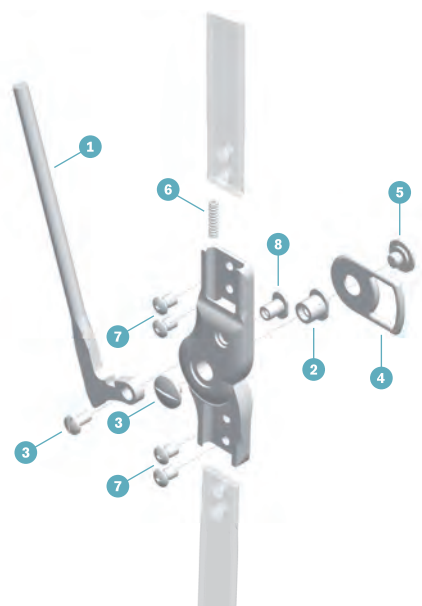
Medial joint contoured bottom, straight top, lateral joint straight, with centrally* fitted covered lock, lock lever points upward



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B92=L16	left	16 mm	56 / 38 mm	Stainless steel	Pair
17B92=R16	right	16 mm	56 / 38 mm	Stainless steel	Pair
17B92=L20	left	20 mm	56 / 38 mm	Stainless steel	Pair
17B92=R20	right	20 mm	56 / 38 mm	Stainless steel	Pair

* Attention: Eccentric and concentric locking lever constructions can not be mixed, otherwise the reliable barrier function can not be guaranteed!

Spare parts for 17B23/17B45/17B92



(1) Lock lever

Article number	Material	Qty.
17Y20=1	Stainless steel	Piece
17Y20=2	Stainless steel	Piece
Article number	Material	Qty.
17Y104	Stainless steel	Piece

(2) Bearing nut, hardened

Article number	Thread	For system width	Shank length	Shoulder diameter	Qty.
17Y93=9X9.2XM6	M6	16 and 20 mm	9.2 mm	9 mm	Piece

Article number	Thread	For system width	Shank length	Shoulder diameter	Qty.
17Y93=9.5X9.2XM6	M6	16 and 20 mm	9.2 mm	9.5 mm	Piece

(3) Slotted truss head screw

Article number	for	Thread	Length	For system width	Material	Qty.
501S32=M4X8X11.5	Lock lever	M4	11.5 mm	16 and 20 mm	Stainless steel	Piece
501S32=M6X14X12	Knee joint	M6	12 mm	16 and 20 mm	Stainless steel	Piece
501S32=M6X14X7.5	Knee joint*	M6	7.5 mm	16 and 20 mm	Stainless steel	Piece

*(when using 17Y84)

(4) Knee cap ring plate

Article number	Qty.
17Y84	Piece

(5) Oval head screw, slotted and partially threaded

Article number	for	Material	Qty.
501A11=14X9XM6	17Y45	Stainless steel	Piece

(6) Compression spring

Article number	for	Qty.
513D19=3.8X16	17B23 17B45 17B92 17B23K	Piece

(7) Phillips oval countersunk head screw

Article number	for	Thread	Length	Head diameter	Material	Qty.
501T7=7.5X9XM5	System side bars	M5	9 mm	7.5 mm	Stainless steel	Piece

for system side bars

(8) Bearing nut, hardened

for lock lever

Article number	Thread	For system width	Shank length	Shoulder diameter	Qty.
17Y93=6X9.15XM4	M4	16 and 20 mm	9.15 mm	6 mm	Piece

17MS30=A Service set

Article number	for	Qty.
17MS30=A	17B23K	Pair

- The pull-release cable can be positioned anteriorly or posteriorly.
- Thanks to the change of direction, less force is required for pulling.
- Side bars must be ordered separately.



647G303

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17B91 / 17B33 System knee joints



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647H234
647H46

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Medial joint contoured bottom, straight top, lateral joint straight, with covered lock, lock lever points downward

Article number	Side	System width	Material	Qty.
17B91=L16	left	16 mm	Stainless steel	Pair
17B91=R16	right	16 mm	Stainless steel	Pair
17B91=L20	left	20 mm	Stainless steel	Pair
17B91=R20	right	20 mm	Stainless steel	Pair

4



Medial joint contoured, lateral joint straight, with covered lock, lock lever points downward

Article number	Side	System width	Material	Qty.
17B33=L16	left	16 mm	Stainless steel	Pair
17B33=R16	right	16 mm	Stainless steel	Pair
17B33=L20	left	20 mm	Stainless steel	Pair
17B33=R20	right	20 mm	Stainless steel	Pair

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Practical recommendation:

Lamination aid for lamination resin technique: 17Y103

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Spare parts for 17B33/17B91

(1) Lock lever

Article number	Material	Qty.
17Y34	Stainless steel	Piece

(2) Bearing nut, hardened

Article number	Qty.
17Y93=9X9.2XM6	Piece

(3) Slotted truss head screw

Article number	for	Material	Qty.
501S32=M4X8X12	Lock lever	Stainless steel	Piece

*(when using 17Y84)

(4) Knee cap ring plate

Article number	Qty.
17Y84	Piece

(5) Oval head screw, slotted and partially threaded

Article number	for	Material	Qty.
501A11=14X9XM6	17Y41 17Y45	Stainless steel	Piece

For attachment of the knee cap ring plate

(6) Slotted truss head screw

Article number	for	Material	Qty.
501S32=M6X14X7.5	Knee joint*	Stainless steel	Piece
501S32=M6X14X12	Knee joint	Stainless steel	Piece

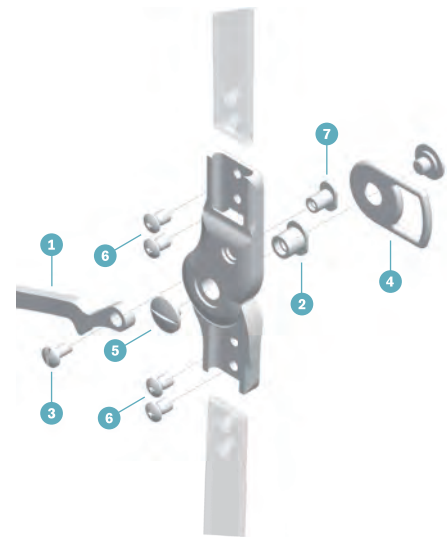
*(when using 17Y84)

(7) Screw set, Phillips

Article number	Qty.
17Y97	Set

(8) Bearing nut, hardened

Article number	for
17Y93=6X9.15XM4	lock lever



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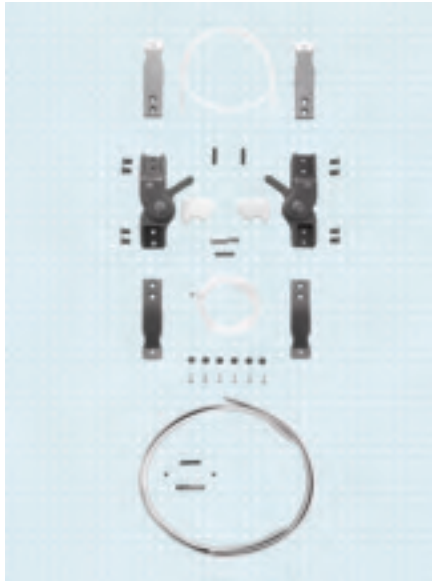
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17B97 System knee joint set

The 17B97 component set includes compatible components designed to facilitate the fabrication of fibre composite lower extremity orthoses. The system knee joints with covered lock and short lock lever have been specially designed for cable pull release.



Article number	Side	System width	Qty.
17B97=L16	left	16 mm	Set
17B97=R16	right	16 mm	Set
17B97=L20	left	20 mm	Set
17B97=R20	right	20 mm	Set

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647H160

Scope of delivery

(1) 17B23K System knee joints

Contoured medial joint, straight lateral joint, with covered lock eccentrically fitted*, lock lever, with pull-release cable



Article number	Side	System width	Length from joint centre upper/lower	Material	Qty.
17B23=L16K	left	16 mm	56 / 38 mm	Stainless steel	Pair
17B23=R16K	right	16 mm	56 / 38 mm	Stainless steel	Pair
17B23=L20K	left	20 mm	56 / 38 mm	Stainless steel	Pair
17B23=R20K	right	20 mm	56 / 38 mm	Stainless steel	Pair

*** Attention: Eccentric and concentric locking lever constructions can not be mixed, otherwise the reliable barrier function can not be guaranteed!**

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(2) 17Y103 Lamination aid for lamination resin technique

Reference number	Package contents	Qty.
17Y103	2 piece(s)	Piece

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(3) 17Y128 System lamination bar

Article number	Length	Thickness	System width	Material	Package contents	Qty.
17Y128=16X80	80 mm	4 mm	16 mm	Stainless steel	4 piece(s)	Piece
17Y128=20X80	80 mm	4 mm	20 mm	Stainless steel	4 piece(s)	Piece

*** Attention! The system lamination bars must be used in pairs in the leg orthosis. Unilateral use can cause the lamination bar to break due to overloading.**

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(4) 21A18 Perlon cable

Article number	Ø	Package contents	Qty.
21A18=2	2 x 800 mm	2 piece(s)	Metres
21A18=3	3 x 500 mm	1 piece(s)	Metres



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(5) 21A12 Threaded sleeve

Article number	for	Package contents	Qty.
21A12	For screwing onto the 21A18=2 perlon cable	2 piece(s)	Piece



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(6) 21A7 Coupling piece

Article number	for	Qty.
21A7	Perlon cable	Piece



3

(7) 21A25 Spring

Article number	for	Qty.
21A25	Coupling piece	Piece



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(8) 17Y106 PVC profile bars

Article number	Length	Width	Material	Qty.
17Y106=500X16	500 mm	16 mm	PVC profile material	Piece
17Y106=500X20	500 mm	20 mm	PVC profile material	Piece
17Y106=1000X16	1,000 mm	16 mm	PVC profile material	Piece
17Y106=1000X20	1,000 mm	20 mm	PVC profile material	Piece



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(9) 504H1 Double hollow rivet

Article number	Head diameter	Package contents	Qty.
504H1=7-100	7 mm	6 piece(s)	Piece



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(10) 636W19 Hardener

For 636W18 special adhesive

Article number	Net contents	Packaging format
636W19	0.1 kg	Tube

	636W18 special adhesive 100	:	646W19 hardener 70
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(11) 636W18 Special adhesive

For adhering metal to metal, wood to wood, e.g., for unilateral system bar

Article number	Net contents	Packaging format
636W18	0.1 kg	Tube

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 646F297=D

Accessories

4



17Y104 Short lock lever

Article number	Material	Qty.
17Y104	Stainless steel	Piece

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636K8 Plastaband

Article number	Length	Width	Colour
636K8=20X2X10	10 m	20 mm	grey

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Aqualine orthosis system

The Aqualine orthosis system is a waterproof walking aid for orthosis wearers, offering the user the greatest possible safety with simultaneous freedom of movement. The waterproof versions of the CarbonIQ knee and ankle joints form the heart of the Aqualine orthosis system. The individual components are resistant to corrosion; chlorine, salt water and soap do not impair their functionality.

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(1) Hook-and-loop strap

Article number	Length	Material	Colour	Qty.
170Z4=400-7	400 mm	Polyamide	black	Piece
170Z4=600-7	600 mm	Polyamide	black	Piece

(2) Light metal profile bar

Suitable for fabricating system bars, with rounded edges, strength approx. 400 N/mm²

Article number	Length	Width	Thickness	Qty.
605P8=14	2,000 mm	14 mm	5 mm	Piece
605P8=20	2,000 mm	20 mm	5 mm	Piece

(3) Waterproof CarbonIQ knee joint with wedge lock

Article number	Side	Max. body weight	Material	Qty.
17PK1=L14-WR	left	45 kg	Fibre-reinforced plastic	Pair
17PK1=R14-WR	right	45 kg	Fibre-reinforced plastic	Pair
17PK1=L20-WR	left	100 kg	Fibre-reinforced plastic	Pair
17PK1=R20-WR	right	100 kg	Fibre-reinforced plastic	Pair

(4) Antibacterial ThermoLyn PP-H

Polypropylene homopolymer

Article number	Length	Width	Colour
616T420=5	2,000 mm	5 mm	natural colour
616T420=6	2,000 mm	6 mm	natural colour

(5) Flat head screw

Article number	Qty.
501S84=M4X8	Piece

(6) Waterproof CarbonIQ ankle joint

Article number	Max. body weight	Material	Qty.
17PA1=14-WR	45 kg	Fibre-reinforced plastic	Pair
17PA1=20-WR	100 kg	Fibre-reinforced plastic	Pair

(7) Foot stirrup

Article number	for	Material	Qty.
17PF1	17PA1=20	Stainless steel	Piece
17PF1=14	17PA1=14	Stainless steel	Piece

(8) Outsole

Article number	Side	Size	Material	Qty.
29F18=L	left	37-40	Rubber plate with crepe profile	Piece
		40-43		
		43-46		
29F18=R	right	37-40	Rubber plate with crepe profile	Piece
		40-43		
		43-46		



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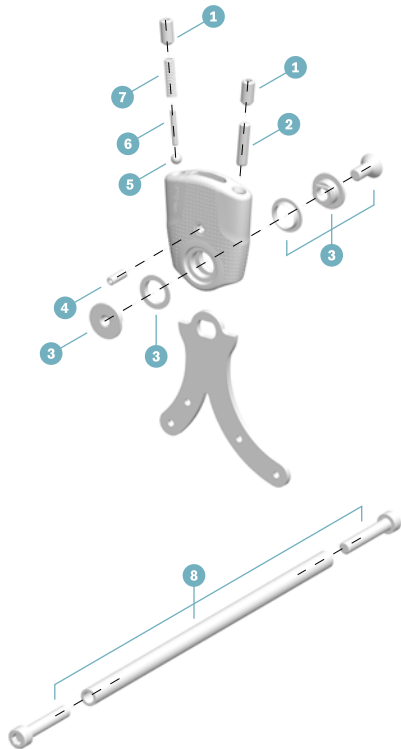
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Practical recommendation:

- All components in a waterproof walking aid should be waterproof and easy to wash.
- We generally recommend the use of a full-surface non-skid sole or a bathing shoe, as well as the use of a knee joint with lock.
- We recommend the use of antibacterial materials.
- The waterproof walking aid should minimise skin contact.

Spare parts for 17PA1=20-WR



(1) Set screw

Article number	Qty.
506G21=M6X14	Piece

(2) Stop pin (small)

Article number	Qty.
506A27=5M6X20	Piece

(3) Service set

Article number	Qty.	Scope of delivery
29PA1	Set	1x 501S84=M6X14 1x 30Y215 1x 509G10=12X13X3 1x 30Y214

(4) Set screw

Article number	Qty.
506G21=M4X12	Piece

(5) Bearing ball

Article number	Material	Qty.
509Y1=5.0	Stainless steel	Piece

(6) Stop pin (small)

Article number	Qty.
506A5=2.5XM6X18	Piece

(7) Compression spring

Article number	Qty.
513D18=4.7X31-2	Piece

(8) Adjustment Aid

Article number	Qty.	Scope of delivery
29PK4	Set	1x 501T28=M6X35 1x 30Y216

Spare parts for 17PA1=20-WR

(1) Set screw

Article number	Qty.
506G21=M6X14	Piece

(2) Threaded screw

Article number	Qty.
506G21=M6X6	Piece

(3) Stop pin (small)

Article number	Qty.
506A5=5XM6X6	Piece

(4) Service set

Article number	Qty.	Scope of delivery
29PA1=14	Set	1x30Y290 1x30y291 2x509G10=10x11x2.6 1x501S84=M5x14

(5) Set screw

Article number	Qty.
506G21=M4X12	Piece

(6) Bearing ball

Article number	Material	Qty.
509Y1=5.0	Stainless steel	Piece

(7) Stop pin (small)

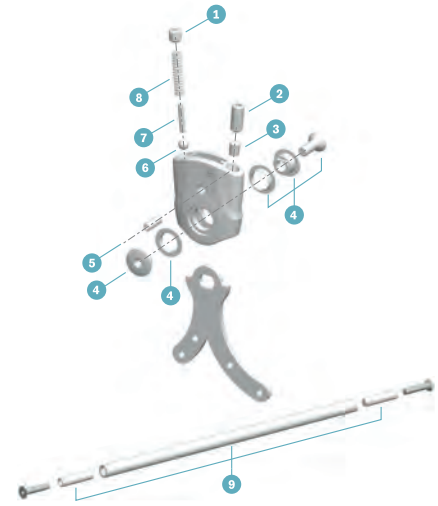
Article number	Qty.
506A5=2.5XM6X14	Set

(8) Compression spring

Article number	Qty.
513D88=0.9X3.9X28	Piece

(9) Adjustment Aid

Article number	Qty.	Scope of delivery
29PK4=14	Set	1x 30Y216 1x 30Y326 1x 501S84=M4X20



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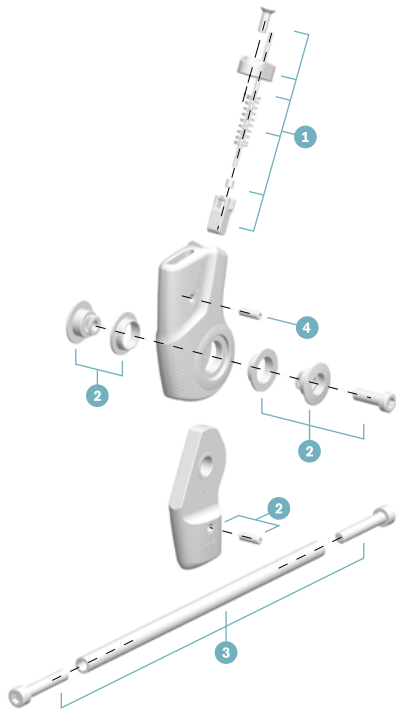
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Spare parts for 17PK1=L/R20-WR

(1) Service set

Article number	for	Qty.	Scope of delivery
29PK1	17PK1=L20 17PK1=R20	Set	1x 501S146=4.0X12 1x 30Y206 1x 21A18=2 1x 513D52=1 1x 21A12 1x 30Y207

(2) Service set

Article number	for	Qty.	Scope of delivery
29PK2	17PK1=L20 17PK1=R20	Set	1x 509G10=14X16X5 1x 30Y210 1x 501T39=M6X18 1x 30Y209

(3) Adjustment Aid

Article number	for	Qty.	Scope of delivery
29PK4	17PK1=L20 17PK1=R20	Set	1x 501T28=M6X35 1x 30Y216

(4) Set screw

Article number	Qty.
506G21=M4X12	Piece

Spare parts for 17PK1=L/R20-WR

(1) Service set

Article number	for	Qty.	Scope of delivery
29PK1=14	17PK1=L14 17PK1=R14	Set	1x 30Y286 1x 30Y287 1x 501S146=3.0X12 1x 513D30=0.53x4.97X2 1x 21A18=2 2x 21A12

(2) Service set

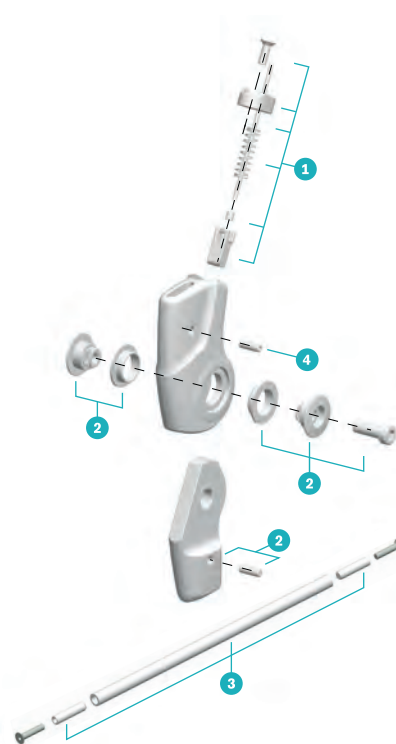
Article number	for	Qty.	Scope of delivery
29PK2=14	17PK1=L14 17PK1=R14	Set	1x 30Y285 1x 30Y288 2x 509G10=14X16X4.7 1x 501S84=M5X20

(3) Adjustment Aid

Article number	for	Qty.	Scope of delivery
29PK4=14	17PK1=L14 17PK1=R14	Set	1x 30Y216 1x 30Y326 1x 501S84=M4X20

(4) Set screw


Article number	Qty.
506G21=M4X12	Piece



Fax order form for Aqualine orthosis system

Fax order to: +49 5527 848-1414

Customer		Shipping address (if different from customer address)	
Customer no.	<input type="text"/>	Customer no.	<input type="text"/>
Company	<input type="text"/>	Company	<input type="text"/>
Street	<input type="text"/>	Street	<input type="text"/>
Postal code/city	<input type="text"/>	Postal code/city	<input type="text"/>
Phone number	<input type="text"/>	Phone number	<input type="text"/>
Orthotist	<input type="text"/>	Patient name	<input type="text"/>

Components for modular design	Quantity	Designation	Article number	Delivery unit
	<input type="text"/>	Loop strap	170Z4= <input type="checkbox"/> 600-7 <input type="checkbox"/> 400-7	600 mm / piece 400 mm / piece
	<input type="text"/>	Self-adhesive loop strap	623Z7= <input type="checkbox"/> W25 <input type="checkbox"/> W50	1 m
	<input type="text"/>	Y-hook-and-loop	170D21=38-7	Piece
	<input type="text"/>	Aluminium bar	605P8=20 605P8=14	2 m bar profile 1 m bar profile
	<input type="text"/>	Sintering powder	618T40=S	4 kg
	<input type="text"/>	Waterproof CarbonIQ knee joints	17PK1= <input type="checkbox"/> L20-WR <input type="checkbox"/> R20-WR <input type="checkbox"/> L14-WR <input type="checkbox"/> R14-WR	Pair
	<input type="text"/>	Antibacterial ThermoLyn® (PPH)	616T420= <input type="checkbox"/> 5mm thick <input type="checkbox"/> 6mm thick	2 x 1 m sheet
	<input type="text"/>	Flat head screw	501S84=M4x8	Piece
	<input type="text"/>	Waterproof CarbonIQ ankle joints	17PA1= <input type="checkbox"/> 20-WR <input type="checkbox"/> 14-WR	Pair
	<input type="text"/>	Foot stirrup	17PF1 (for size =20) 17PF1=14	Pair
	<input type="text"/>	Non-skid sole	29F18= <input type="checkbox"/> left <input type="checkbox"/> 37-40 <input type="checkbox"/> right <input type="checkbox"/> 40-43 <input type="checkbox"/> 43-46	Piece
	<input type="text"/>	Ottobock special adhesive	636W18 636W19	Piece

Date Place Signature

Aqualine orthosis system

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Joint bars for knee orthoses/lower limb prostheses

This section presents the various joint bars for fittings in case of knee joint injuries and transtibial amputations. Combining these two different fitting areas is helpful, since some patients with a transtibial amputation also require knee joint guidance, similar to a knee joint injury. Therefore the joint bars from another fitting system can be used to meet the various fitting requirements.

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7U56 Polycentric knee joint bars with gear drive

Joints with interchangeable stops to limit extension as well as flexion, concave half-round bar profile, joint bars of thermoplastic synthetic material, forming temperature of 150 °C/302 °F.



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647G65



Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Colour	Qty.
7U56=W	270 / 270 mm	16 mm	25/5.5 mm	white	Pair
7U56=B	270 / 270 mm	16 mm	25/2.5 mm	blue	Pair
7U56=S	270 / 270 mm	16 mm	25/5.5 mm	black	Pair

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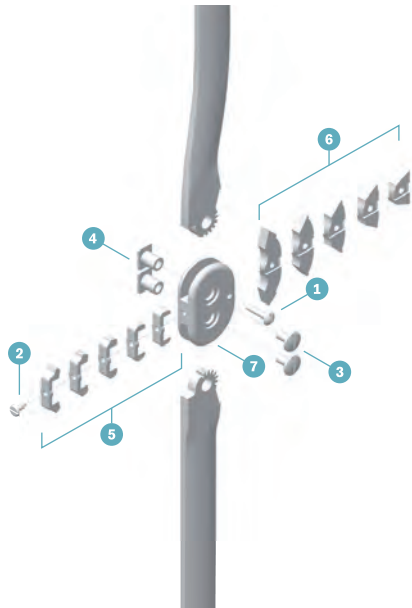


Practical recommendation:

To align the orthosis knee joints with the compromise pivot point according to Nietert, the 743Y56=1 size 1 adjustment adapter is aligned with the compromise pivot point. Therefore the compromise pivot point of the polycentric gear drive joints is centred between the two joint screws.

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Spare parts for 7U56



(1) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A11=8X3.5XM3.5	Stainless steel	Piece

(2) Sheet metal cap screw, slotted

Article number	Qty.
501B5=3.5X9.5	Piece

(3) Slotted truss head screw

Article number	Material	Qty.
501S32=M5X12X13	Stainless steel	Piece

(4) Bearing nut

Reference number	Material	Qty.
17Y67	Plastic	Piece

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(5) Extension stop

Article number	Range	Material	Colour	Qty.
17Y74=6	6°	Plastic	white	Piece
17Y74=10	10°	Plastic	Green	Piece
17Y74=20	20°	Plastic	yellow	Piece
17Y74=30	30°	Plastic	red	Piece
17Y74=40	40°	Plastic	brown	Piece

the colour "white" is the factory standard

(6) Flexion stop

Article number	Flexion angle	Material	Colour	Qty.
17Y78=0	0°	Plastic	blue	Piece
17Y78=40	40°	Plastic	brown	Piece
17Y78=60	60°	Plastic	red	Piece
17Y78=80	80°	Plastic	yellow	Piece
17Y78=100	100°	Plastic	Green	Piece

the colour "brown" is the factory standard

(7) Joint centre piece

Article number	Colour	Qty.
17Y63=52-W	white	Piece
17Y63=52-B	blue	Piece
17Y63=52-R	red	Piece
17Y63=52-S	black	Piece

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17K48 Polycentric knee joint bars with gear drive

Joints with interchangeable stops to limit extension as well as flexion. Concave half-round bar profile, anatomically pre-shaped, with adjustment slots. Thermoplastic joint bars have a forming temperature of 150 °C/302 °F.



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647G65



Article number	Side	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Joint thickness	Material	Qty.
17K48=L-7	left	190/190 mm	16 mm	25/5.5 mm	14 mm	Plastic	Pair
17K48=R-7	right	190/190 mm	16 mm	25/5.5 mm	14 mm	Plastic	Pair

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Practical recommendation:

To align the orthosis knee joints with the compromise pivot point according to Nietert, the 743Y56=1 size 1 adjustment adapter is aligned with the compromise pivot point. Therefore the compromise pivot point of the polycentric gear drive joints is centred between the two joint screws.

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Spare parts for 17K48



(1) Joint centre piece

Article number	Colour	Qty.
17Y63=52-S	black	Piece

(2) Bearing nut

Reference number	Material	Qty.
17Y67	Plastic	Piece

(3) Slotted truss head screw

Reference number	Material	Qty.
501S32	Stainless steel	Piece

(4) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A11=8X3.5XM3.5	Stainless steel	Piece

(5) Sheet metal cap screw, slotted

Article number	Qty.
501B5=3.5X9.5	Piece

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(6) Extension stop

Article number	Range	Material	Colour	Qty.
17Y74=6	6°	Plastic	white	Piece
17Y74=10	10°	Plastic	Green	Piece
17Y74=20	20°	Plastic	yellow	Piece
17Y74=30	30°	Plastic	red	Piece
17Y74=40	40°	Plastic	brown	Piece

the colour "white" is the factory standard

(7) Flexion stop

Article number	Flexion angle	Material	Colour	Qty.
17Y78=0	0°	Plastic	blue	Piece
17Y78=40	40°	Plastic	brown	Piece
17Y78=60	60°	Plastic	red	Piece
17Y78=80	80°	Plastic	yellow	Piece
17Y78=100	100°	Plastic	Green	Piece

the colour "brown" is the factory standard

(8) Phillips head screw with collar

Article number	Thread	Length	Material	Qty.
501Z13=M4X8	M4	8 mm	Stainless steel	Piece
501Z13=M4X10	M4	10 mm	Stainless steel	Piece

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17K43 Polycentric knee joint bars

with gear drive, free-motion joints, concave half-round bar profile, interchangeable stops to limit extension



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Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Joint thickness	Material	Qty.
17K43	340 / 300 mm	16 mm	21 / 2 mm	6 mm	Stainless steel	Pair

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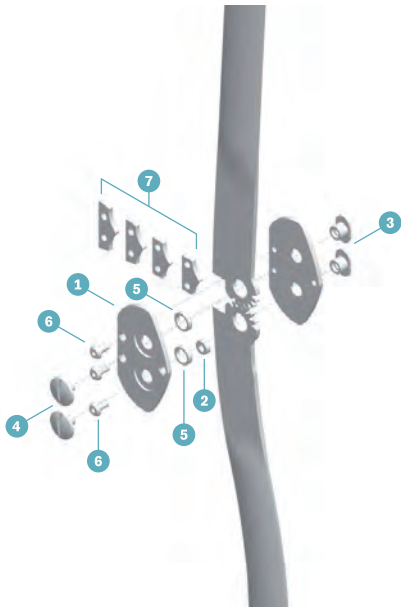


Practical recommendation:

To align the orthosis knee joints with the compromise pivot point according to Nietert, the 743Y56=1 size 1 adjustment adapter is aligned with the compromise pivot point. Therefore the compromise pivot point of the polycentric gear drive joints is centred between the two joint screws.

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Spare parts for 17K43



(1) Joint centre piece

Mounted with screws and stops

Reference number	Qty.
17Y127	Piece

(2) Brass bushing

For joint centre piece

Article number	Qty.
17Y17=3.1X6X2.1	Piece

(3) Bearing nut, hardened

Article number	Qty.
17Y93=6X5XM4	Piece

(4) Slotted truss head screw

Article number	Qty.
501S32=M4X12X8	Piece

(5) Brass bushing

Article number	Qty.
17Y17=6X8X2	Piece

7

(6) Oval head screw

with socket head

Article number	Qty.
501S42=M3X6	Piece

(7) Extension stop

Article number	Range	Material	Qty.
17Y90=6	6°	Stainless steel	Piece
17Y90=10	10°	Stainless steel	Piece
17Y90=20	20°	Stainless steel	Piece
17Y90=30	30°	Stainless steel	Piece

the 6° extension angle is the factory standard



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17K45 Polycentric knee joint bars

with gear drive, joints with interchangeable stops to limit extension and flexion, concave half-round bar profile



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647G2



Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Joint thickness	Material	Qty.
17K45	340 / 300 mm	16 mm	21 / 2 mm	6 mm	Stainless steel	Pair

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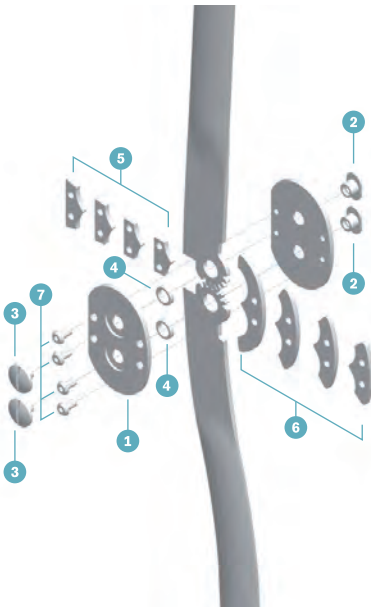


Practical recommendation:

To align the orthosis knee joints with the compromise pivot point according to Nietert, the 743Y56=1 size 1 adjustment adapter is aligned with the compromise pivot point. Therefore the compromise pivot point of the polycentric gear drive joints is centred between the two joint screws.

4

Spare parts for 17K45



(1) Joint centre piece

Includes screws and stops

Reference number	Qty.
17Y92	Piece

(2) Bearing nut, hardened

Article number	Qty.
17Y93=6X5XM4	Piece

(3) Slotted truss head screw

Article number	Material	Qty.
501S32=M4X12X8	Stainless steel	Piece

(4) Brass bushing

Article number	Qty.
17Y17=6X8X2	Piece

(5) Extension stop

Article number	Range	Material	Qty.
17Y90=6	6°	Stainless steel	Piece
17Y90=10	10°	Stainless steel	Piece
17Y90=20	20°	Stainless steel	Piece
17Y90=30	30°	Stainless steel	Piece

the 6° extension angle is the factory standard

7

(6) Flexion stop

Article number	Flexion angle	Material	Qty.
17Y91=0	0°	Stainless steel	Piece
17Y91=60	60	Stainless steel	Piece
17Y91=80	80°	Stainless steel	Piece
17Y91=100	100°	Stainless steel	Piece

the 100° flexion angle is the factory standard

(7) Oval head screw

with socket head

Article number	Qty.
501S42=M3X6	Piece

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17K46 Polycentric knee joint bars, short

with gear drive, joints with interchangeable stops to limit extension as well as flexion, upper and lower bars are curved and notched, for embedding into laminates and thermoplastic synthetic materials



2

647G2



Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Joint thickness	Material	Qty.
17K46	340/300 mm	16 mm	21/2 mm	6 mm	Stainless steel	Pair

3

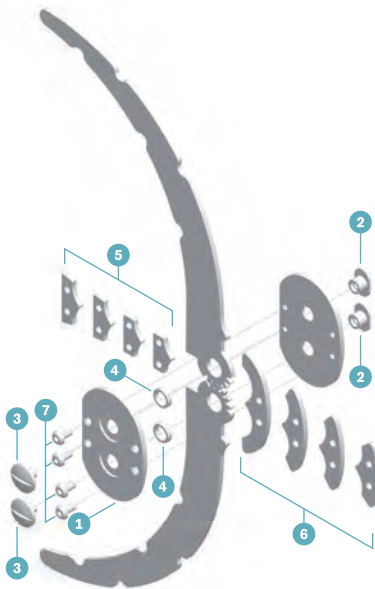


Practical recommendation:

To align the orthosis knee joints with the compromise pivot point according to Nietert, the 743Y56=1 size 1 adjustment adapter is aligned with the compromise pivot point. Therefore the compromise pivot point of the polycentric gear drive joints is centred between the two joint screws.

4

Spare parts for 17K46



(1) Joint centre piece

Includes screws and stops

Reference number	Qty.
17Y92	Piece

(2) Bearing nut, hardened

Article number	Qty.
17Y93=6X5XM4	Piece

(3) Slotted truss head screw

Article number	Material	Qty.
501S32=M4X12X8	Stainless steel	Piece

(4) Brass bushing

Article number	Qty.
17Y17=6X8X2	Piece

(5) Extension stop

Article number	Range	Material	Qty.
17Y90=6	6°	Stainless steel	Piece
17Y90=10	10°	Stainless steel	Piece
17Y90=20	20°	Stainless steel	Piece
17Y90=30	30°	Stainless steel	Piece

the 6° extension angle is the factory standard

7

(6) Flexion stop

Article number	Flexion angle	Material	Qty.
17Y91=0	0°	Stainless steel	Piece
17Y91=60	60	Stainless steel	Piece
17Y91=80	80°	Stainless steel	Piece
17Y91=100	100°	Stainless steel	Piece

the 100° flexion angle is the factory standard

(7) Oval head screw

with socket head

Article number	Qty.
501S42=M3X6	Piece

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17K47 Polycentric knee joint bars, short

with gear drive, free motion joints, upper and lower bars are curved and notched, for embedding into laminate and thermoplastic synthetic materials, interchangeable stops to limit extension



2

647G2



Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Joint thickness	Material	Qty.
17K47	340/300 mm	16 mm	21/2 mm	6 mm	Stainless steel	Pair

3

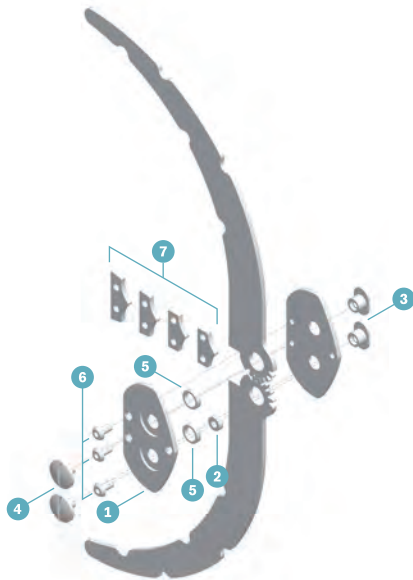


Practical recommendation:

To align the orthosis knee joints with the compromise pivot point according to Nietert, the 743Y56=1 size 1 adjustment adapter is aligned with the compromise pivot point. Therefore the compromise pivot point of the polycentric gear drive joints is centred between the two joint screws.

4

Spare parts for 17K47



(1) Joint centre piece

Mounted with screws and stops

Reference number	Qty.
17Y127	Piece

(2) Brass bushing

For joint centre piece

Article number	Qty.
17Y17=3.1X6X2.1	Piece

(3) Bearing nut, hardened

Article number	Qty.
17Y93=6X5XM4	Piece

(4) Slotted truss head screw

Article number	Material	Qty.
501S32=M4X12X8	Stainless steel	Piece

(5) Brass bushing

Article number	Qty.
17Y17=6X8X2	Piece

7

(6) Oval head screw

with socket head

Article number	Qty.
501S42=M3X6	Piece

(7) Extension stop

Article number	Range	Material	Qty.
17Y90=6	6°	Stainless steel	Piece
17Y90=10	10°	Stainless steel	Piece
17Y90=20	20°	Stainless steel	Piece
17Y90=30	30°	Stainless steel	Piece

the 6° extension angle is the factory standard

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7U30/7U33/7U53 Knee joint bars, light duty

Joints with ball bearing, concave half-round bar profile, forged upper and lower joint bars

2

 647G2

The head of the inner joint bar is offset to the outside, the head of the outer joint bar to the inside.

3



Article number	Side	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U30=L	left	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair
7U30=R	right	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair

Similar to 7U30 design, but with heads of both joints offset outside

4



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U33	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair

Similar to 7U30 design, but with heads of both joints offset inside

5



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U53	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair

6

7

Spare parts for 7U30, 7U33 and 7U53

(1) Knee joint bar upper part

with ball bearing

Article number	for	Material	Qty.
7A5=L	7U30=L 7U30=R 7U33 7U53	Stainless steel	Piece
7A5=R	7U30=L 7U30=R 7U33 7U53	Stainless steel	Piece

(2) Knee joint bar lower part

Article number	for	Material	Qty.
7B5=LA	7U30=L 7U53	Stainless steel	Piece
7B5=LI	7U30=L 7U33	Stainless steel	Piece
7B5=RA	7U30=R 7U53	Stainless steel	Piece
7B5=RI	7U30=R 7U33	Stainless steel	Piece

(3) Ball bearing

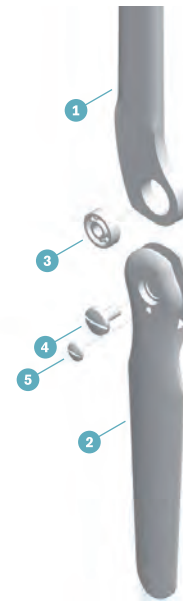
Article number	Qty.
509K11=5X16X4	Piece

(4) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A6=4X5XM5	Stainless steel	Piece

(5) Slotted oval head screw (set screw)

Article number	Material	Qty.
501S22=8XM3.5	Stainless steel	Piece



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7U32/7U42/7U54 Knee joint bars, light duty

Joints with ball bearing, joint centre placed to the posterior, concave half-round bar profile, forged upper and lower joint bars

2

647G2

The head of the inner joint bar is offset to the outside, the head of the outer joint bar to the inside.

3



Article number	Side	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U32=L	left	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair
7U32=R	right	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair

Similar to 7U32 design, but with heads of both bars offset outside

4



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U42	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair

647G2

Similar to 7U32 design, but with heads of both bars offset inside

5



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U54	24x4 mm	340/150 mm	20 / 2.3 mm	Stainless steel	Pair

6

7

Spare parts for 7U32, 7U42 and 7U54

(1) Knee joint bar upper part

with ball bearing

Article number	for	Material	Qty.
7A6=L	7U32=L 7U32=R 7U42 7U54	Stainless steel	Piece
7A6=R	7U32=L 7U32=R 7U42 7U54	Stainless steel	Piece

(2) Knee joint bar lower part

Article number	for	Material	Qty.
7B5=LA	7U32=L 7U54	Stainless steel	Piece
7B5=LI	7U32=L 7U54	Stainless steel	Piece
7B5=RA	7U32=R 7U54	Stainless steel	Piece
7B5=RI	7U32=R 7U42	Stainless steel	Piece

(3) Ball bearing

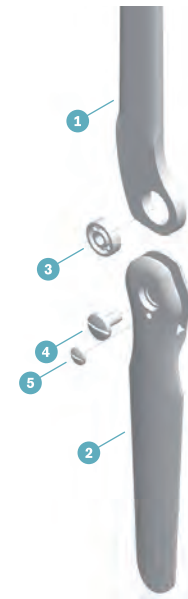
Article number	Qty.
509K11=5X16X4	Piece

(4) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A6=4X5XM5	Stainless steel	Piece

(5) Slotted oval head screw (set screw)

Article number	Material	Qty.
501S22=8XM3.5	Stainless steel	Piece



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7U12/7U43 Knee joint bars, light duty

Joints with ball bearing, concave half-round bar profile, forged upper and lower joint bars

2

The head of the inner joint bar is offset to the outside, the head of the outer joint bar to the inside.



Article number	Side	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U12=L	left	24x5 mm	410/150 mm	22 / 2.5 mm	Orthopaedic steel	Pair
7U12=R	right	24x5 mm	410/150 mm	22 / 2.5 mm	Orthopaedic steel	Pair

3

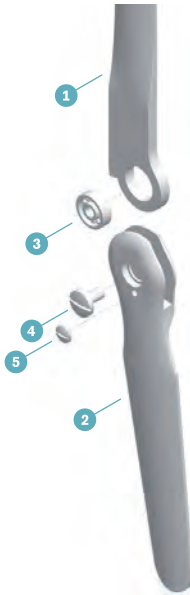
Similar to 7U12 design, but with heads of both bars offset outside



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U43	24x5 mm	410/150 mm	22 / 2.5 mm	Orthopaedic steel	Pair

4

Spare parts for 7U12 and 7U43



(1) Knee joint bar upper part

Article number	for	Material	Qty.
7A3=L	7U12=L 7U12=R 7U43	Orthopaedic steel	Piece
7A3=R	7U12=L 7U12=R 7U43	Orthopaedic steel	Piece

(2) Knee joint bar lower part

Article number	for	Material	Qty.
7B4=LA	7U12=L	Orthopaedic steel	Piece
7B4=LI	7U12=L 7U43	Orthopaedic steel	Piece
7B4=RA	7U12=R	Orthopaedic steel	Piece
7B4=RI	7U12=R 7U43	Orthopaedic steel	Piece

(3) Ball bearing

Article number	Qty.
509K11=5X16X5	Piece

(4) Oval head screw, slotted and partially threaded (ball bearing screw)

Article number	Material	Qty.
501A25	Stainless steel	Piece

(5) Slotted oval head screw (set screw)

Article number	Material	Qty.
501S22=8XM3.5	Stainless steel	Piece

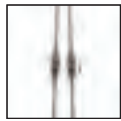
7

7U46 Knee joint bars, light duty

Joints with ball bearing, joint centre placed to the posterior, centred joint head, concave half-round bar profile, forged upper and lower joint bars, for swimming prostheses



647G2



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U46	18x4 mm	270/125 mm	20 / 1.75 mm	Stainless steel	Pair

Spare parts for 7U46

(1) Knee joint bar upper part
with ball bearing

Article number	for	Material	Qty.
7A14=L	7U46	Stainless steel	Piece
7A14=R	7U46	Stainless steel	Piece

(2) Knee joint bar lower part

Article number	for	Material	Qty.
7B7=L	7U46	Stainless steel	Piece
7B7=R	7U46	Stainless steel	Piece

(3) Ball bearing

Reference number	for
509K15	7U46

(4) Slotted oval head screw

Article number	for	Material	Qty.
501A12=2	7U46	Stainless steel	Piece

(5) Slotted oval head screw (set screw)

Article number	for	Qty.
501S22=6XM3	7U46	Piece



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7U27 Knee joint bars, light duty

Joints with gear drive and bushing, centred joint head, concave half-round bar profile, forged upper and lower joint bars

2

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647G9

3



Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Material	Qty.
7U27	340 / 150 mm	18 mm	20 / 3 mm	Stainless steel	Pair

4

Spare parts for 7U27

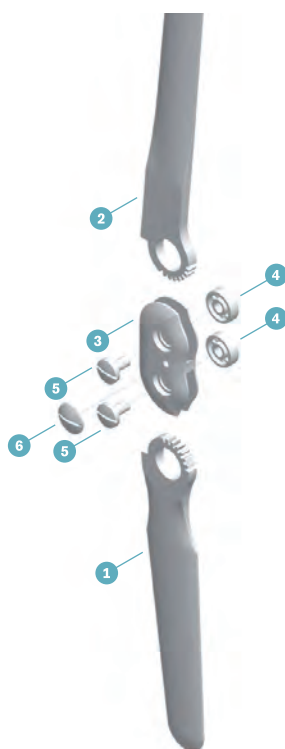
(1) Knee joint bar lower part

Article number	for	Material	Qty.
7B10=L	7U27	Stainless steel	Piece
7B10=R	7U27	Stainless steel	Piece

(2) Knee joint bar upper part

Article number	for	Material	Qty.
7A10=L	7U27	Stainless steel	Piece
7A10=R	7U27	Stainless steel	Piece

5



(3) Joint piece

complete with screws and bushings

Article number	Material	Qty.
7Y13	Stainless steel	Piece

(4) Bushing

Article number	Qty.
7Y14=10X8	Piece

(5) Joint screw

Slotted oval head screw

Article number	Material	Qty.
501A32	Stainless steel	Piece

(6) Slotted oval head screw (set screw)

Article number	Qty.
501S22=6XM3	Piece

7

7U2 Knee joint bars, medium duty

Joints with ball bearing, medial joint head offset outside, lateral joint head offset inside, concave half-round bar profile, forged upper and lower joint bars



Article number	Side	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U2=L	left	410/150 mm	24/3 mm	Orthopaedic steel	Pair
7U2=R	right	410/150 mm	24/3 mm	Orthopaedic steel	Pair

Spare parts for 7U2

(1) Knee joint bar upper part

with ball bearing

Article number	for	Material	Qty.
7A1=L	7U2=L 7U2=R	Orthopaedic steel	Piece
7A1=R	7U2=L 7U2=R	Orthopaedic steel	Piece

(2) Knee joint bar lower part

Article number	for	Material	Qty.
7B3=LA	7U2=L	Orthopaedic steel	Piece
7B3=LI	7U2=L	Orthopaedic steel	Piece
7B3=RA	7U2=R	Orthopaedic steel	Piece
7B3=RI	7U2=R	Orthopaedic steel	Piece

(3) Ball bearing

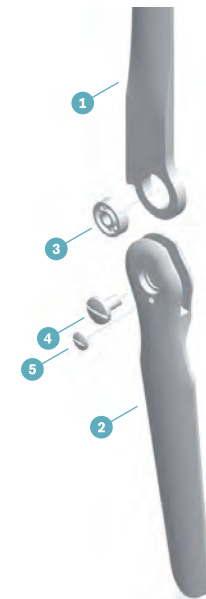
Article number	Qty.
509K11=5X16X5	Piece

(4) Oval head screw, slotted and partially threaded (ball bearing screw)

Article number	Material	Qty.
501A25	Stainless steel	Piece

(5) Slotted oval head screw (set screw)

Article number	Material	Qty.
501S22=8XM3.5	Stainless steel	Piece



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7U5 Knee joint bars, medium duty

Joints with ball bearing, joint centre placed to the posterior, medial joint head offset outside, lateral joint head offset inside, concave half-round bar profile, forged upper and lower joint bars

2



Article number	Side	Milled head	Upper part/lower part length	Bar width/thickness	Material	Qty.
7U5=L	left	26x5 mm	410/150 mm	24 / 3 mm	Orthopaedic steel	Pair
7U5=R	right	26x5 mm	410/150 mm	24 / 3 mm	Orthopaedic steel	Pair

3



Spare parts for 7U5

(1) Knee joint bar upper part with ball bearing

Article number	for	Material	Qty.
7A2=L	7U5=L 7U5=R	Orthopaedic steel	Piece
7A2=R	7U5=L 7U5=R	Orthopaedic steel	Piece

(2) Knee joint bar lower part

Article number	for	Material	Qty.
7B3=LA	7U5=L	Orthopaedic steel	Piece
7B3=LI	7U5=L	Orthopaedic steel	Piece
7B3=RA	7U5=R	Orthopaedic steel	Piece
7B3=RI	7U5=R	Orthopaedic steel	Piece

(3) Ball bearing

Article number	Qty.
509K11=5X16X5	Piece

(4) Oval head screw, slotted and partially threaded (ball bearing screw)

Article number	Material	Qty.
501A25	Stainless steel	Piece

(5) Slotted oval head screw (set screw)

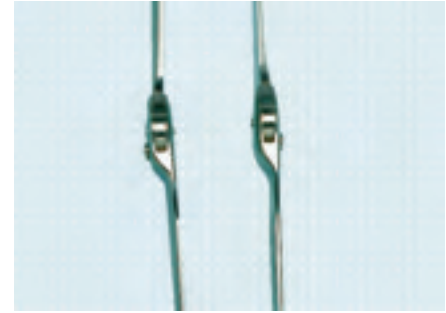
Article number	Material	Qty.
501S22=8XM3.5	Stainless steel	Piece

6

7

7U15/7U25 Knee joint bars, medium duty

Joints with ball bearing, joint centre placed to the posterior, concave half-round bar profile, forged nickel-plated upper and lower joint bars



The head of the inner joint bar is offset to the outside, the head of the outer joint bar to the inside.



Article number	Side	Milled head	Upper part/lower part length	Bar width/thickness	Qty.
7U15=L	left	26x5 mm	410/150 mm	24 / 3 mm	Pair
7U15=R	right	26x5 mm	410/150 mm	24 / 3 mm	Pair

7U15 Knee joint bars, medium duty

Joints with ball bearing, joint centre placed to the posterior, concave half-round bar profile, forged nickel-plated upper and lower joint bars

Similar to 7U15 design, but with heads of both bars offset inside



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Qty.
7U15=K	26x5 mm	410/150 mm	24 / 3 mm	Pair

Similar to 7U15 design, but with heads of both bars offset outside



Article number	Milled head	Upper part/lower part length	Bar width/thickness	Qty.
7U25	26 x 5 mm	410/150 mm	24 / 3 mm	Pair

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Spare parts for 7U15 and 7U25

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(1) Knee joint bar upper part, nickel-plated with ball bearing

Article number	for	Qty.
7A11=L	7U15=L 7U25	Piece
7A11=R	7U15=R 7U25	Piece

2

(2) Knee joint bar lower part, nickel-plated

Article number	for	Qty.
7B13=LA	7U15=L 7U15=K	Piece
7B13=LI	7U15=L 7U25	Piece
7B13=RA	7U15=R 7U15=K	Piece
7B13=RI	7U15=R 7U25	Piece

3

(3) Ball bearing

Article number	Qty.
509K11=5X16X5	Piece

4

(4) Oval head screw, slotted and partially threaded

Article number	Qty.
501A22	Piece

(5) Slotted oval head screw

Article number	Qty.
501S6=8xM3.5	Piece

5



7U10 Knee joint bars, medium duty

Joints with gear drive and ball bearings, centred joint head, concave half-round bar profile, forged upper and lower joint bars

6

647G9



Article number	Length from joint centre upper/lower	Pivot point distance	Bar width/thickness	Material
7U10	410 / 130 mm	24 mm	24 / 3 mm	Orthopaedic steel

7

Spare parts for 7U10

(1) Knee joint bar lower part

Article number	for	Qty.
7B8=L	7U10	Piece
7B8=R	7U10	Piece

(2) Knee joint bar upper part

Article number	for	Qty.
7A9=L	7U10	Piece
7A9=R	7U10	Piece

(3) Joint piece

Article number	Qty.
7Y12	Piece

(4) Ball bearing

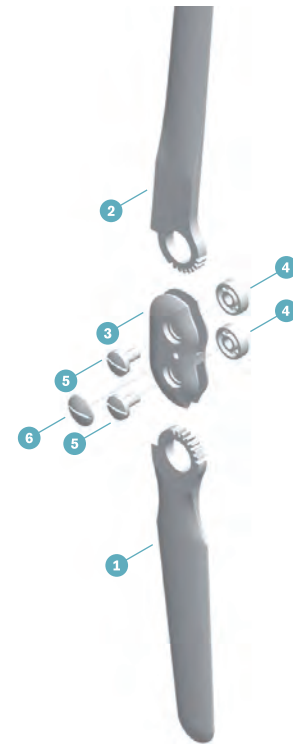
Article number	Qty.
509K11=5X16X5	Piece

(5) Flat head screw, slotted and partially threaded

Article number	for	Qty.
501A24	7U10	Piece

(6) Slotted oval head screw, nickel-plated set screw

Article number	Qty.
501S10	Piece



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7G3 Thigh bars

Joints with ball bearings, both joint heads offset outside, concave half-round bar profile, forged nickel-plated upper and lower joint bars

2



Article number	Milled head	Length from joint centre upper/lower	Bar width/thickness	Qty.
7G3	26 x 5 mm	410 / 150 mm	24 / 3 mm	Pair

3

Spare parts for 7G3

(1) Ball bearing

Article number	Qty.
509K11=5X16X4	Piece

(2) Oval head screw, slotted and partially threaded

Article number	Qty.
501A22	Piece

(3) Slotted oval head screw

Article number	Qty.
501S6=8xM3.5	Piece

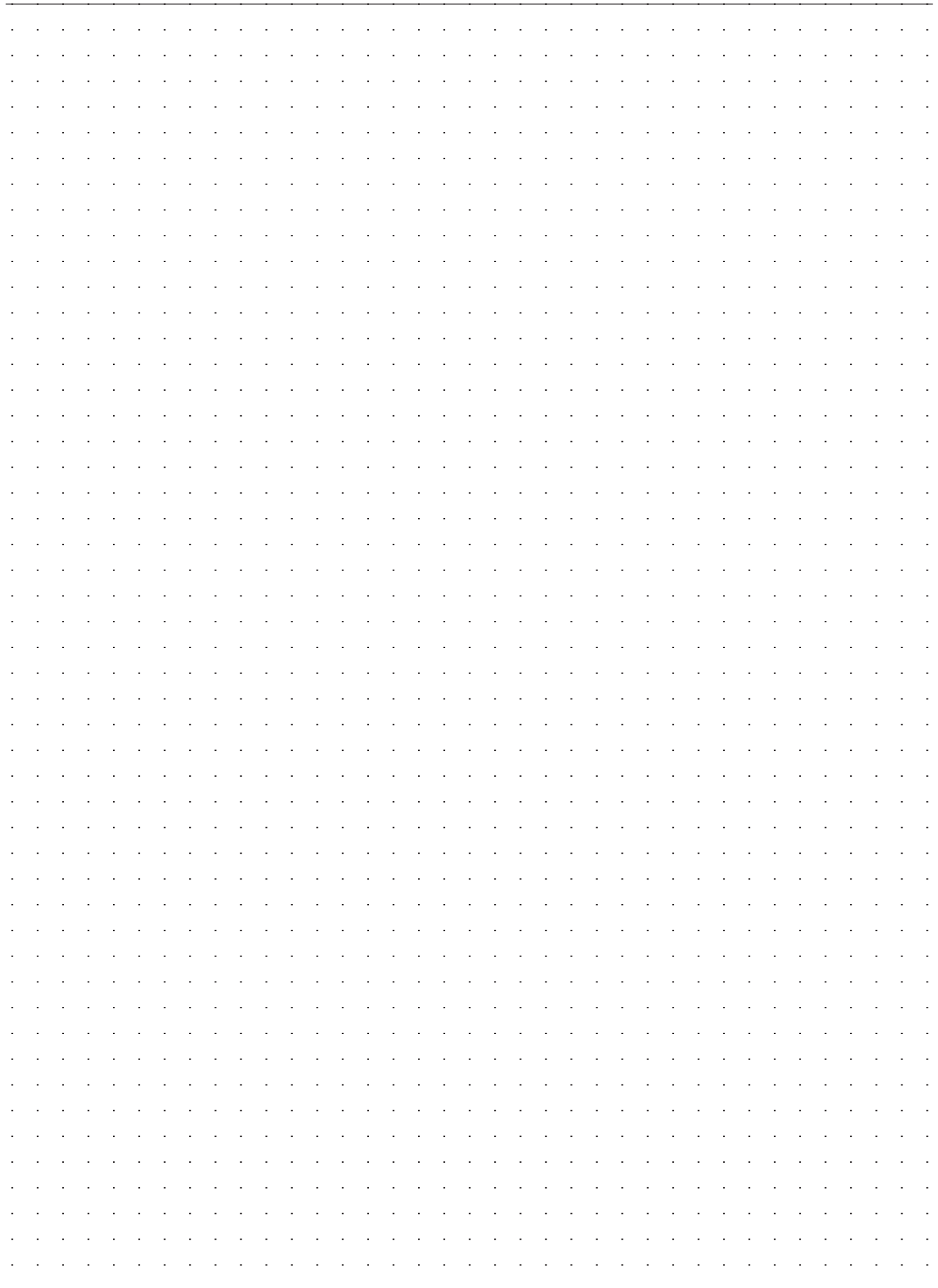
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4 HKAFO/HO

In this section you will find all hip joint systems, including classic components for hip rotation orthoses and reciprocal systems.

4.1 Cosa Junior/Cosa Active	198
4.2 Locked joints	201
4.3 Free-moving joints	206
4.4 RGO hip joint system	210

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28L100=* Cosa Junior / 28L101=* Cosa Active



The Cosa Active/Junior hip abduction orthosis uses pads between the legs to reduce the scissor gait which occurs in various forms of infantile cerebral palsy. Reducing hip adduction improves the overall gait pattern and control of the trunk in addition to stabilising the basis for standing and sitting.

The Cosa Active/Junior is delivered as a complete starter set 28L101=*/28L100=*. It consists of 2 pairs of 29L101=*/29L100=* pants to change and wash and 1 29L102=* pad set.

2

Indications

- Diplegia (spastic)
- Hip dysplasia
- Hip joint subluxation (congenital)
- Hypotonicity
- Tetraplegia (spastic)

3

Contraindications

- Hip joint luxation

4

Benefits

- Improved mobility through minimisation of scissor gait (more knee freedom, improved gait pattern)
- Improved trunk control
- More stable base for sitting and standing
- Can be combined with orthoses
- Can be worn day and night
- Easy to customise
- Easy care, machine washable (in laundry bag) at 40 degrees C (104 degrees F)
- Very comfortable

5

28L100 Cosa Junior

Article number	Size	Standard sizing	Body height	Hip circumference	Pad number	Thigh circumference
28L100=80	80	80	74-86 cm	57-59 cm	1	26-32 cm
28L100=92	92	92	86-98 cm	59-62 cm	1	26-32 cm
28L100=104	104	104	98-110 cm	62-64 cm	2	32-36 cm
28L100=116	116	116	110-122 cm	64-68 cm	2	32-36 cm

6

7

28L101 Cosa Active

Article number	Size	Standard sizing	Body height	Hip circumference	Pad number	Thigh circumference
28L101=128	128	128	122-134 cm	68-72 cm	3	36-44 cm
28L101=140	140	140	134-146 cm	72-78 cm	3	36-44 cm
28L101=152	152	152	146-158 cm	78-86 cm	4	44-54 cm
28L101=S	S	164 Women 34, 36, 38 Men 42, 44, 46	158-170 cm (164 Women 34 Men 42) from 170 cm (Women 36, 38 Men 44,46)	86-96 cm	4	44-54 cm
28L101=M	M	Women 40, 42 Men 48, 50	from 170 cm	96-105 cm	5	54-62 cm
28L101=L	L	Women 44, 46 Men 52, 54	from 170 cm	105-109 cm	5	54-62 cm

Spare parts for Cosa Junior/Cosa Active

29L102 Padding

Article number	for
29L102=1	Cosa Junior
29L102=2	Cosa Junior
29L102=3	Cosa Active
29L102=4	Cosa Active
29L102=5	Cosa Active

29L101 Pants

Article number	for
29L101=128	Cosa Active
29L101=140	Cosa Active
29L101=152	Cosa Active
29L101=S	Cosa Active
29L101=M	Cosa Active
29L101=L	Cosa Active

29L100 Pants

Article number	for
29L100=80	Cosa Junior
29L100=92	Cosa Junior
29L100=104	Cosa Active
29L100=116	Cosa Active

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17H34 / 17H26 Hip joint bar



Locked hip joint with ring lock and abduction joint



647G2



Article number	Side	Thickness	Milled head Ø	Upper/lower bar length	Material	Qty.
17H34=L	left	5 mm	30 mm	360 / 250 mm	Stainless steel	Piece
17H34=R	right	5 mm	30 mm	360 / 250 mm	Stainless steel	Piece



Article number	Side	Milled head Ø	Upper/lower bar length	Bar width/thickness	Material	Qty.
17H26=L5	left	20 mm	320 / 250 mm	14 / 4 mm	Stainless steel	Piece
17H26=R5	right	20 mm	320 / 250 mm	14 / 4 mm	Stainless steel	Piece

Spare parts for 17H26 and 17H34

(1) Oval head screw, slotted and partially threaded

Article number	for	Material	Qty.
501A21	17H26	Stainless steel	Piece
501A29=14X9X6.5XM6	17H34	Stainless steel	Piece

(2) Spring-loaded thrust piece

Article number	Material	Qty.
501D1	Stainless steel	Piece

(3) Clamping sleeve

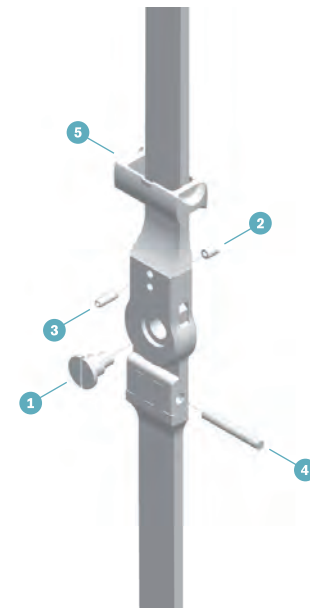
Article number	Material	Qty.
506S1=3.5X10	Stainless steel	Piece

(4) Rivet pin

Article number	Material	Qty.
506A12=4X22	Stainless steel	Piece

(5) Ring lock

Article number	Material	Qty.
17Y31=14X10	Stainless steel	Piece



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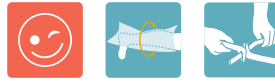
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17H33 / 17H28 Hip joint bar

Locked hip joint with ring lock



2

647G2



Article number	Side	Thickness	Milled head Ø	Upper/lower bar length	Bar width/thickness	Material	Qty.
17H33=L	left	5 mm	30 mm	360 / 250 mm	19 / 5 mm	Stainless steel	Piece
17H33=R	right	5 mm	30 mm	360 / 250 mm	19 / 5 mm	Stainless steel	Piece

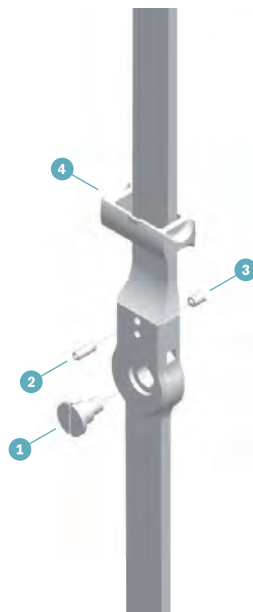
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Article number	Side	Width	Thickness	Milled head Ø	Upper/lower bar length	Material	Qty.
17H28=L5	left	14 mm	4 mm	20 mm	320 / 250 mm	Stainless steel	Piece
17H28=R5	right	14 mm	4 mm	20 mm	320 / 250 mm	Stainless steel	Piece

Spare parts for 17H28 and 17H33

4



(1) Oval head screw, slotted and partially threaded

Article number	for	Material	Qty.
501A21	17H28	Stainless steel	Piece
501A29=14X9X6.5XM6	17H33	Stainless steel	Piece

(2) Clamping sleeve

Article number	Material	Qty.
506S1=3.5X10	Stainless steel	Piece

(3) Spring-loaded thrust piece

Article number	Material	Qty.
501D1	Stainless steel	Piece

(4) Ring lock

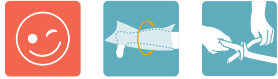
Article number	Material	Qty.
17Y31=14X10	Stainless steel	Piece

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17H35 Hip joint bar for children

with ring lock, joint centre piece with spherical bearing, for movement on all sides, flat bar profile



647G2



Article number	Side	Width	Thickness	Milled head Ø	Upper/lower bar length	Material	Qty.
17H35=L6	left	12 mm	4 mm	18 mm	320 / 250 mm	Stainless steel	Piece
17H35=R6	right	12 mm	4 mm	18 mm	320 / 250 mm	Stainless steel	Piece
17H35=L5	left	14 mm	5 mm	20 mm	320 / 250 mm	Stainless steel	Piece
17H35=R5	right	14 mm	5 mm	20 mm	320 / 250 mm	Stainless steel	Piece

Spare parts for 17H35

(1) Lower joint section

Article number	for	Material	Qty.
30H16=6	17H35=6	Stainless steel	Piece
30H16=5	17H35=5	Stainless steel	Piece

(2) Clamping sleeve

Article number	Material	Qty.
506S1=3.5X10	Stainless steel	Piece

(3) Spring-loaded thrust piece

Article number	Material	Qty.
501D1	Stainless steel	Piece

(4) Ring lock

Article number	Material	Qty.
17Y31=14X10	Stainless steel	Piece

(5) Joint centre piece

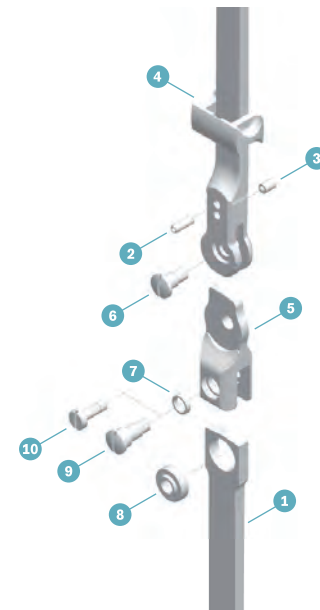
Article number	Side	Material	Qty.
30H15=L6	left	Stainless steel	Piece
30H15=R6	right	Stainless steel	Piece
30H15=L5	left	Stainless steel	Piece
30H15=R5	right	Stainless steel	Piece

(6) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A21	Stainless steel	Piece

(7) Spacer bushing

Article number	Material	Qty.
17Y86=8x6x2	Stainless steel	Piece



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(8) Joint bearing

Article number	for	Width	Material	Qty.
509K19=4X12X5	17H35= L/R6	5 mm	Stainless steel	Piece
509K19=6X14X6	17H35= L/R5	6 mm	Stainless steel	Piece

(9) Oval head screw, partially threaded

Article number	for	Material	Qty.
501A30=10X6XM5	Joint bearing for 17H35=L/R5	Stainless steel	Piece

2

(10) Oval head screw, partially threaded

Article number	for	Material	Qty.
501A31=8X4XM4	for joint bearing of 17H35=L/R6	Stainless steel	Piece

3



17H40 Hip joint bar with double lock

with double ring lock for locking at 90° and 180°, supplied in pairs, supports:

- locking for stable standing (180°)
- locking for stable sitting (90°)



4

Article number	Bar length upper/lower section	Bar width upper/lower section	Material	Qty.
17H40=5	33/31 cm	14/16 mm	Stainless steel	Pair
17H40=6	29.5/26.5 cm	12/13 mm	Stainless steel	Pair

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17B81 System hip joint

Locked hip joint with offset upper joint section and Swiss lock



647G2



Article number	Side	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B81=L16	left	16 mm	20x4 mm	66 / 42 mm	Stainless steel	Piece
17B81=R16	right	16 mm	20x4 mm	66 / 42 mm	Stainless steel	Piece
17B81=L20	left	20 mm	20x4 mm	66 / 42 mm	Stainless steel	Piece
17B81=R20	right	20 mm	20x4 mm	66 / 42 mm	Stainless steel	Piece

- The lock has to be fitted!

Spare parts for 17B81

(1) Lock lever

Article number	Side	Material	Qty.
17Y45=L35	left	Stainless steel	Piece
17Y45=R35	right	Stainless steel	Piece

(2) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A11=14X7XM6	Stainless steel	Piece

(3) Bearing nut, hardened

Article number	Shank length	Thread	Shoulder diameter	Qty.
17Y93=9X7.2XM6	7.2 mm	M6	9 mm	Piece

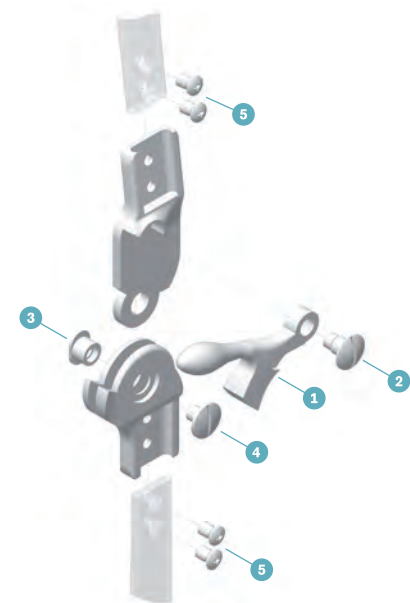
Article number	Shank length	Thread	Shoulder diameter	Qty.
17Y93=M4X6X6.1				Piece
17Y93=9.5X7.2XM6	7.2 mm	M6	9.5 mm	Piece

(4) Slotted truss head screw

Article number	Material	Qty.
501S32=M6X14X14	Stainless steel	Piece

(5) Phillips oval countersunk head screw

Article number	Material	Qty.
501T7=7.5X9XM5	Stainless steel	Piece



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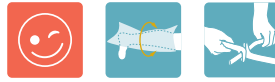
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17H32 / 17H29 Hip joint bar

Free-moving hip joint



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647G2



Article number	Side	Thickness	Milled head Ø	Upper/lower bar length	Bar width	Material	Qty.
17H32=L	left	5 mm	30 mm	360 / 250 mm	19 mm	Stainless steel	Piece
17H32=R	right	5 mm	30 mm	360 / 250 mm	19 mm	Stainless steel	Piece

3



Article number	Side	Width	Thickness	Milled head Ø	Upper/lower bar length	Bar width	Material	Qty.
17H29=L5	left	14 mm	4 mm	20 mm	320 / 250 mm	14 mm	Stainless steel	Piece
17H29=R5	right	14 mm	4 mm	20 mm	320 / 250 mm	14 mm	Stainless steel	Piece

Spare part for 17H29 and 17H32

Oval head screw, slotted and partially threaded, Stainless steel

4

Article number	for	Material	Qty.
501A21	17H29	Stainless steel	Piece
501A29=14X9X6.5XM6	17H32	Stainless steel	Piece

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17H23 Hip joint bar

Free-moving joint without stop, with thrust needle bearing, flat bar profile, for rotation orthosis, "Annastift" model; hip rotation orthosis



647G6



Article number	Side	Thickness	Milled head Ø	Upper/lower bar length	Bar width	Joint head Ø	Material
17H23=L	left	2 mm	20 mm	75 / 450 mm	24 mm	30 mm	Stainless steel
17H23=R	right	2 mm	20 mm	75 / 450 mm	24 mm	30 mm	Stainless steel

Accessories for 17H23

17Z8 Pelvic band

Article number	Length	Material	Qty.
17Z8=680	680 mm	Aluminium	Piece
17Z8=780	780 mm	Aluminium	Piece
17Z8=880	880 mm	Aluminium	Piece



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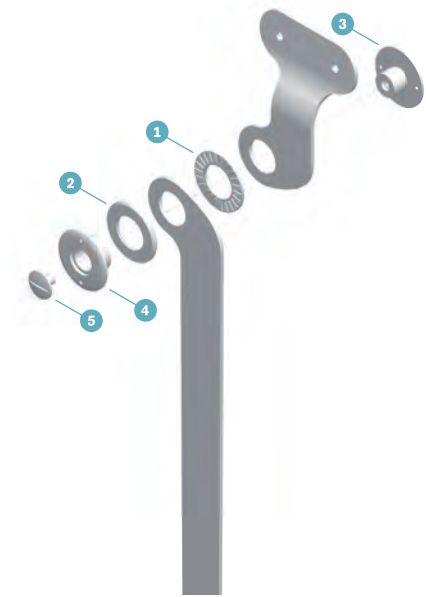
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Spare parts for 17H23

(1) Thrust needle bearing

Article number	Qty.
509N3	Piece

(2) Retainer ring for thrust needle bearing

Article number	Qty.
509N4	Piece

(3) Two-hole screw

Reference number	Material	Qty.
17Z49	Stainless steel	Piece

(4) Two-hole nut

Reference number	Material	Qty.
17Y50	Stainless steel	Piece

(5) Slotted oval head screw

Article number	Material
501S47	Stainless steel

17B82 System hip joint

Contoured upper joint section, free-moving, with ball bearing



647G2



Article number	Side	System width	Milled head	Length from joint centre upper/lower	Material	Qty.
17B82=L16	left	16 mm	25x5 mm	44/42 mm	Stainless steel	Piece
17B82=R16	right	16 mm	25x5 mm	44/42 mm	Stainless steel	Piece
17B82=L20	left	20 mm	25x5 mm	44/42 mm	Stainless steel	Piece
17B82=R20	right	20 mm	25x5 mm	44/42 mm	Stainless steel	Piece

Spare parts for 17B82

(1) Oval head screw, slotted and partially threaded

Article number	Material	Qty.
501A6=5X5XM5	Stainless steel	Piece

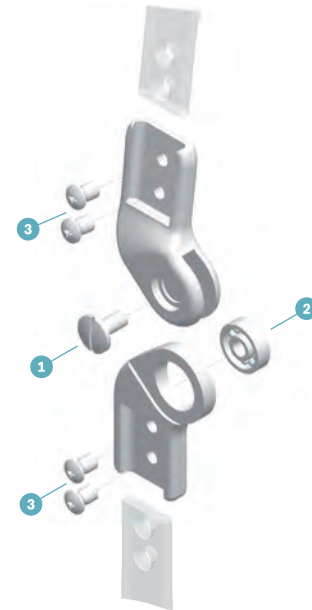
(2) Ball bearing

Article number	Qty.
509K11=5X16X5	Piece

(3) Phillips oval countersunk head screw

Article number	for	Thread	Head diameter	Material	Qty.
501T7=7.5X9XM5	System side bars	M5	7.5 mm	Stainless steel	Piece

for system side bars



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RGO hip joint system

The connection between the leg bars and the pelvic module is especially important for fittings with reciprocating gait orthoses. Our RGO (reciprocating gait orthosis) hip joint system helps users achieve pelvic rotation that imitates physiological rotation during walking. Thanks to the development of a bi-axial joint construction, pelvic rotation of 15° is possible without having to change the walking direction. The result: less effort, more effective gait pattern.

Indication

The reciprocating hip joint system was especially designed for patients with a body weight of up to 65 kg (143 lbs). It can be used with patients suffering from spina bifida or myopathies that come from other causes (e.g., traumatic paraplegia) with a lesion level of Th5 to L3. Restrictions must be made for patients with ICP, motor perception disorders, deficits of movement of the upper limbs, insufficient muscle strength in the shoulder girdle, loss of trunk mobility in frontal or sagittal plane, severe deformities of the skeletal system (e.g. scoliosis, dislocations), hip flexion contracture (> 20°), knee joint flexion contracture (> 15°), and torsional deformities of the legs.

17H100 RGO hip joint system



Article number	Body weight	Pelvic width	Age	Qty.
17H100=0	up to 65 kg kg	340 - 380	9 years and up	Set
17H100=1	up to 65 kg kg	270 - 330 mm	9 years and up	Set
17H100=2	up to 34 kg	200 - 260 mm	4-8 years	Set

- Please note that the pelvic tube is not included in the scope of delivery and therefore has to be ordered separately.



647H411

Special features of the Ottobock RGO hip joint system

- Easy to use modular system.
- Replacing individual components allows "growing" with the user.
- Lightweight alloy pelvic tube with high torsional strength allows for modular connection of joints.
- The bi-axial system allows for a pelvic rotation of 15° in the orthosis without changing the walking direction.
- Smooth and maintenance-free force transmission during walking through the push-pull cable system.
- Sitting joint lock release with pre-release of the locking mechanism.
- Safety button for re-locking in case of accidental pre-release of the sitting joint.
- Choice of thermoplastic or laminate materials for the integration of an individually fabricated pelvic module.
- Torso bar is easily disassembled.
- Torso bar hip flexion adjusts up to 10°.
- Prefabricated lightweight alloy thigh bars with 0 mm, 5 mm and 10 mm offset available.

Spare parts for 17H100 joint system

(1) Pelvic tube

Reference number	for	Material	Qty.
17Y130 / 17Y140	17H100=0 17H100=1	Aluminium	Piece
17Y140	17H100=2	Aluminium	Piece

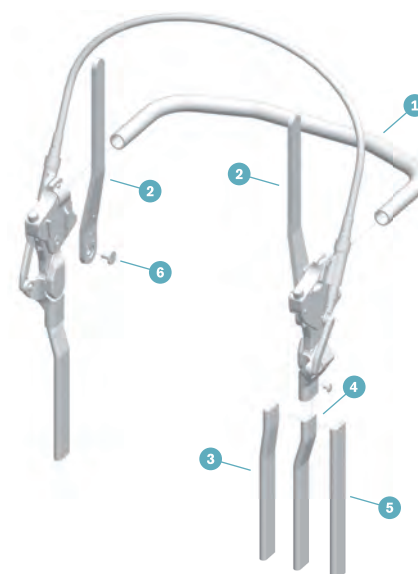
Must be ordered separately for each system.

(2) Torso bar

Article number	for	Side	Material	Qty.
17Y132=L	17H100=0 17H100=1	left	Aluminium	Piece
17Y142=L	17H100=2	left	Aluminium	Piece
17Y132=R	17H100=0 17H100=1	right	Aluminium	Piece
17Y142=R	17H100=2	right	Aluminium	Piece

(3) Thigh bar

Article number	for	Offset	Material	Qty.
17Y131=5	17H100=0 17H100=1	5 mm	Aluminium	Piece
17Y143=5	17H100=2	5 mm	Aluminium	Piece



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(4) Thigh bar

Article number	for	Offset	Material	Qty.
17Y131=10	17H100=0 17H100=1	10 mm	Aluminium	Piece
17Y143=10	17H100=2	10 mm	Aluminium	Piece

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(5) Thigh bar

Article number	for	Offset	Material	Qty.
17Y131=0	17H100=0 17H100=1	0 mm	Aluminium	Piece
17Y143=0	17H100=2	0 mm	Aluminium	Piece

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(6) Slotted truss head screw

Article number	Material	Qty.
501S32=M4X10X10	Stainless steel	Piece

*(when using 17Y84)

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Accessories for 17H100 joint system

636W19 Hardener

For 636W18 special adhesive

Article number	Net contents	Packaging format
636W19	0.1 kg	Tube

	636W18 special adhesive 100	:	646W19 hardener 70
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Danger

636W18 Special adhesive

For adhering metal to metal, wood to wood, e.g., for unilateral system bar

Article number	Net contents	Packaging format
636W18	0.1 kg	Tube



Attention

 646F297=D

616Z9 Shrinkable tubing

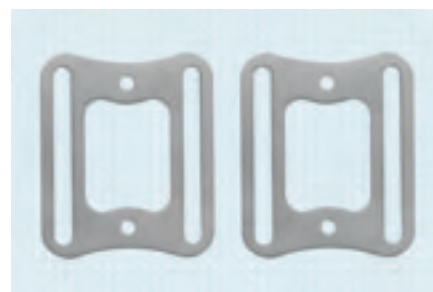
With rounded edges, e.g., for covering orthoses

Article number	for	Diameter	Colour	Qty.
616Z9=25.4X30	17H100=0	25.4 mm	black	Piece
	17H100=1			
616Z9=19X61	17H100=2	19 mm	black	Piece

Accessories for pelvic support

17Y161 Support fasteners

Reference number	for	Qty.
17Y161	Torso bars	Pair



17Y160 Buttock support fasteners

Article number	for	Qty.
17Y160=1	17H100=1/0	Pair
17Y160=2	17H100=2	Pair



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17LH100N Connector for the unilateral joint system

Article number	Knee joint size	Qty.
17LH100N=1	17LK3=20	Piece
17LH100N=2	17LK3=16	Piece

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Fax order form for RGO hip joint system

Fax order to: +49 5527 848-1414

Billing address		Shipping address (if different from customer address)	
Customer no.	<input type="text"/>	Customer no.	<input type="text"/>
Company	<input type="text"/>	Company	<input type="text"/>
Street	<input type="text"/>	Street	<input type="text"/>
Postal code/city	<input type="text"/>	Postal code/city	<input type="text"/>
Phone number	<input type="text"/>	Phone number	<input type="text"/>
Orthopaedic technician	<input type="text"/>	Patient name	<input type="text"/>

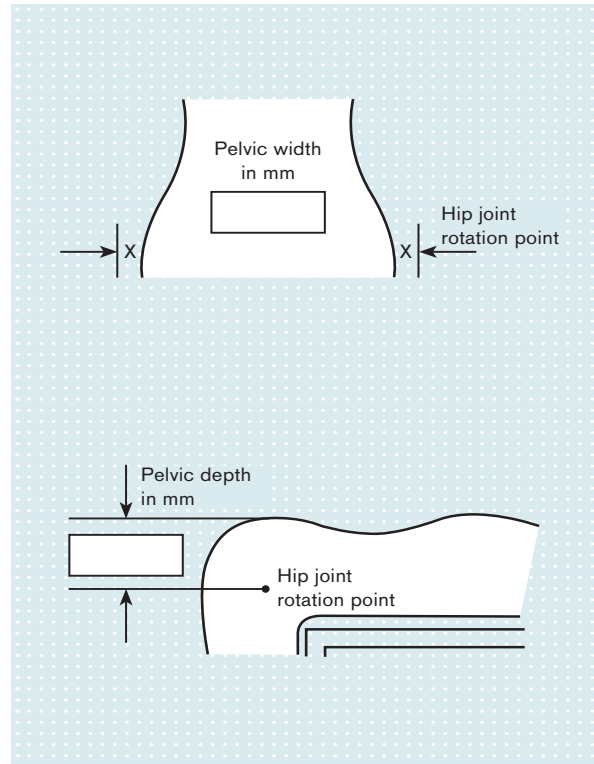
General information:

The RGO hip joint system is suitable for patients up to 65 kg. The system is available in three different versions. 17H100=2 for ages 4-8, up to a body weight of 34 kg. 17H100=1/ 0 for ages 9 and up, up to a body weight of 65 kg. Pelvic tubes are available in 1 cm increments for clear pelvic widths of 200 mm to 380 mm.

The pelvic width must be measured between the two trochanters in both the sitting and prone position. When selecting the pelvic tube, also take into account the wall thickness of the pelvic module to be fabricated including the padding!

Please check the desired combination!

Combination	17H100=2 up to 34 kg (75 lbs)	17H100=1 up to 65 kg (143.3 lbs)	17H100=0 up to 65 kg (143.3 lbs)
17Y140=200	<input type="checkbox"/>		
17Y140=210	<input type="checkbox"/>		
17Y140=220	<input type="checkbox"/>		
17Y140=230	<input type="checkbox"/>		
17Y140=240	<input type="checkbox"/>		
17Y140=250	<input type="checkbox"/>		
17Y140=260	<input type="checkbox"/>		
17Y130=270		<input type="checkbox"/>	
17Y130=280		<input type="checkbox"/>	
17Y130=290		<input type="checkbox"/>	
17Y130=300		<input type="checkbox"/>	
17Y130=310		<input type="checkbox"/>	
17Y130=320		<input type="checkbox"/>	
17Y130=330		<input type="checkbox"/>	
17Y130=340			<input type="checkbox"/>
17Y130=350			<input type="checkbox"/>
17Y130=360			<input type="checkbox"/>
17Y130=370			<input type="checkbox"/>
17Y130=380			<input type="checkbox"/>



Date Place Signature

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5 Joint bars

This section contains all splints made of aluminium, steel and titanium.

5.1 Aluminium	218
5.2 Steel	220
5.3 Titanium	224
5.4 Raw material	225

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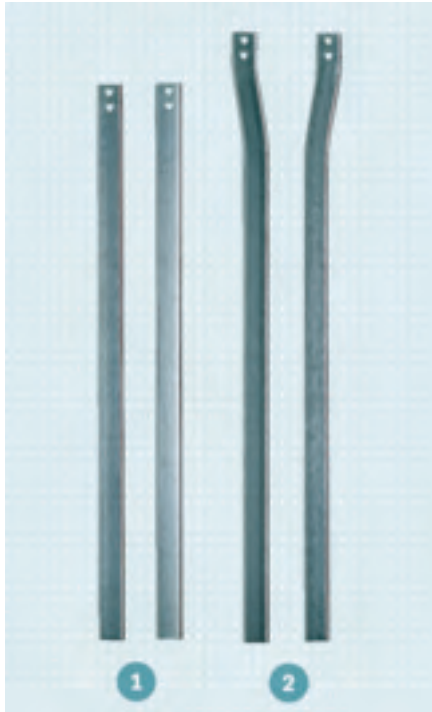
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647G78

17B39 System side bar extension set

consisting of two upper side bars and one each, left and right, lower side bars, with Ottobock special adhesive

Article number	System width	Thickness	Qty.
17B39=16	16 mm	5 mm	Set
17B39=20	20 mm	5 mm	Set

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Individual components of 17B39

(1) 17B6 Upper side bar

Article number	Length	Thickness	System width	Qty.
17B6=16	410 mm	5 mm	16 mm	Piece
17B6=20	410 mm	5 mm	20 mm	Piece

3

(2) 17B7 Lower side bar

Article number	Side	Length	Thickness	System width	Qty.
17B7=L16	left	450 mm	5 mm	16 mm	Piece
17B7=R16	right	450 mm	5 mm	16 mm	Piece
17B7=L20	left	450 mm	5 mm	20 mm	Piece
17B7=R20	right	450 mm	5 mm	20 mm	Piece

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17B41 System side bar extension set, extra long

consisting of two 17B6 upper side bars and one each, left and right, 17B104 lower side bars, with 636W28 Ottobock special adhesive

Article number	System width	Thickness	Qty.
17B41=16	16 mm	5 mm	Set
17B41=20	20 mm	5 mm	Set

Individual components of 17B41

(1) 17B6 Upper side bar

Article number	System width	Length	Thickness	Qty.
17B6=16	16 mm	410 mm	5 mm	Piece
17B6=20	20 mm	410 mm	5 mm	Piece

(2) 17B104 Lower side bar

Article number	Side	System width	Length	Thickness	Qty.
17B104=L16	left	16 mm	560 mm	5 mm	Piece
17B104=R16	right	16 mm	560 mm	5 mm	Piece
17B104=L20	left	20 mm	560 mm	5 mm	Piece
17B104=R20	right	20 mm	560 mm	5 mm	Piece



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17B85 System side bar extension set

concave, consisting of two 17B88 upper side bars and one each, left and right, 17B89 lower side bars, with 636W28 Ottobock special adhesive

Article number	System width	Thickness	Qty.
17B85=16	16 mm	5 mm	Set
17B85=20	20 mm	5 mm	Set

Individual components of 17B85

(1) 17B88 Upper side bar

Article number	System width	Length	Thickness	Qty.
17B88=16	16 mm	410 mm	5 mm	Piece
17B88=20	20 mm	410 mm	5 mm	Piece

(2) 17B89 Lower side bar

Article number	Side	System width	Length	Thickness	Qty.
17B89=L16	left	16 mm	450 mm	5 mm	Piece
17B89=R16	right	16 mm	450 mm	5 mm	Piece
17B89=L20	left	20 mm	450 mm	5 mm	Piece
17B89=R20	right	20 mm	450 mm	5 mm	Piece



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647G2

17B38 System side bar extension set

flat, consisting of two 17B4 and 17B4=T upper side bars and one each, left and right, 17B5 and 17B5=T lower side bars, with 636W28 Ottobock special adhesive

Article number	System width	Thickness	Qty.
17B38=16	16 mm	4 mm	Set
17B38=20	20 mm	4 mm	Set

2

Individual components of 17B38

(1) 17B4 Upper side bar

Article number	System width	Length	Thickness	Qty.
17B4=16	16 mm	410 mm	4 mm	Piece
17B4=20	20 mm	410 mm	4 mm	Piece

3

(2) 17B5 Lower side bar

Article number	Side	System width	Length	Thickness	Qty.
17B5=L16	left	16 mm	450 mm	4 mm	Piece
17B5=R16	right	16 mm	450 mm	4 mm	Piece
17B5=L20	left	20 mm	450 mm	4 mm	Piece
17B5=R20	right	20 mm	450 mm	4 mm	Piece

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17LV3 Side bar for unilateral joint system

Article number	Length	Width	Thickness	Material	Qty.
17LV3=12	270 mm	12	7 mm	Stainless steel	Piece
17LV3=14	270 mm	14	7 mm	Stainless steel	Piece
17LV3=16	400 mm	16	8 mm	Stainless steel	Piece
17LV3=20	470 mm	20	8 mm	Stainless steel	Piece

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17B40 System side bar extension set

extra long, flat, consisting of two 17B4 upper side bars and one each, left and right, 17B102 lower side bars, with 636W28 Ottobock special adhesive

Article number	System width	Thickness	Qty.
17B40=16	16 mm	4 mm	Set
17B40=20	20 mm	4 mm	Set

Individual components of 17B40

(1) 17B4 Upper side bar

Article number	System width	Length	Thickness	Qty.
17B4=16	16 mm	410 mm	4 mm	Piece
17B4=20	20 mm	410 mm	4 mm	Piece

(2) 17B102 Lower side bar

Article number	Side	System width	Length	Thickness	Qty.
17B102=L16	left	16 mm	560 mm	4 mm	Piece
17B102=R16	right	16 mm	560 mm	4 mm	Piece
17B102=L20	left	20 mm	560 mm	4 mm	Piece
17B102=R20	right	20 mm	560 mm	4 mm	Piece



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17B84 System side bar extension set

concave, consisting of two half-round 17B86 upper side bars and one each, left and right, 17B87 lower side bars, with 636W28 Ottobock special adhesive

Article number	System width	Thickness	Qty.
17B84=16	16 mm	4 mm	Set
17B84=20	20 mm	4 mm	Set

Individual components of 17B84

(1) 17B86 Upper side bar

Article number	System width	Length	Thickness	Qty.
17B86=16	16 mm	410 mm	4 mm	Piece
17B86=20	20 mm	410 mm	4 mm	Piece

(2) 17B87 Lower side bar

Article number	Side	System width	Length	Thickness	Qty.
17B87=L16	left	16 mm	450 mm	4 mm	Piece
17B87=R16	right	16 mm	450 mm	4 mm	Piece
17B87=L20	left	20 mm	450 mm	4 mm	Piece
17B87=R20	right	20 mm	450 mm	4 mm	Piece



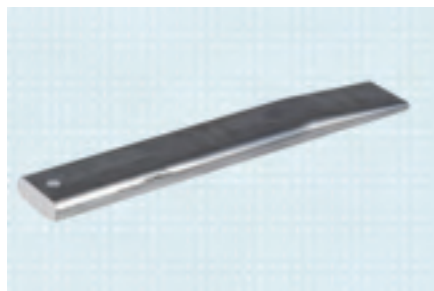
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Lamination bar for conventional lamination resin or prepreg technique

Article number	Length	Width
17LS2=2	130 mm	17.8 mm

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17LS3 Lamination bar for unilateral joint system

for 17LA3N, 17LK3



Article number	Length	Width	Qty.
17LS3=10	80 mm	10 mm	Piece
17LS3=12	80 mm	12 mm	Piece
17LS3=14	100 mm	14 mm	Piece
17LS3=16	130 mm	16 mm	Piece
17LS3=20	130 mm	20 mm	Piece

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17B83 Connection piece with flap

as connection between the system hip joint and the pelvic band

Article number	For system width	Length	Qty.
17B83=16	16 mm	150 mm	Piece
17B83=20	20 mm	150 mm	Piece

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17B8 Stainless steel compensation piece

to compensate for the length difference between the system knee and hip joints with and without lock, applicable for contoured joints with restrictions

Article number	For system width	Qty.
17B8=16	16	Pair
17B8=20	20 mm	Pair

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17Y61 Connector with lug

Article number	For system width	Qty.
17Y61=16	16 mm	Piece
17Y61=20	20 mm	Piece

17Y128 System lamination bar

System lamination bars are glued with 636W28 Ottobock special adhesive.

Article number	System width	Length	Thickness	Qty.
17Y128=16X80	16 mm	80 mm	4 mm	Piece
17Y128=20X80	20 mm	80 mm	4 mm	Piece
17Y128=16X100	16 mm	100 mm	4 mm	Piece
17Y128=20X100	20 mm	100 mm	4 mm	Piece

- ⚠ **Attention! The system lamination bars must be used in pairs in the leg orthosis. Unilateral use can cause the lamination bar to break due to overloading.**



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17Y129 System lamination bar with contoured calf

System lamination bars are glued with 636W28 Ottobock special adhesive.

Article number	Side	System width	Length	Thickness	Qty.
17Y129=L16	left	16 mm	100 mm	4 mm	Piece
17Y129=R16	right	16 mm	100 mm	4 mm	Piece
17Y129=L20	left	20 mm	100 mm	4 mm	Piece
17Y129=R20	right	20 mm	100 mm	4 mm	Piece

- ⚠ **Attention! The system lamination bars always have to be used in pairs in the leg orthosis. Unilateral use can cause the lamination bar to break due to overloading.**



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17B38 System side bar extension set

flat, consisting of two 17B4 and 17B4=T upper side bars and one each, left and right, 17B5 and 17B5=T lower side bars, with 636W28 Ottobock special adhesive

Article number	System width	Thickness	Length upper/lower	Qty.
17B38=16-T	16 mm	4 mm	410/450 mm	Set
17B38=20-T	20 mm	4 mm	410/450 mm	Set

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Individual components of 17B38

(1) 17B4 Upper side bar

Article number	System width	Length	Thickness	Qty.
17B4=16-T	16 mm	410 mm	4 mm	Piece
17B4=20-T	20 mm	410 mm	4 mm	Piece

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(2) 17B5 Lower side bar

Article number	Side	System width	Length	Thickness	Qty.
17B5=L16-T	left	16 mm	450 mm	4 mm	Piece
17B5=R16-T	right	16 mm	450 mm	4 mm	Piece
17B5=L20-T	left	16 mm	450 mm	4 mm	Piece
17B5=R20-T	right	16 mm	450 mm	4 mm	Piece

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17LS3 Lamination bar for unilateral joint system

for 17LA3N, 17LK3



Article number	Length	Width	Qty.
17LS3=10-T	80 mm	10 mm	Piece
17LS3=12-T	80 mm	12 mm	Piece
17LS3=14-T	100 mm	14 mm	Piece
17LS3=16-T	130 mm	16 mm	Piece
17LS3=20-T	130 mm	20 mm	Piece

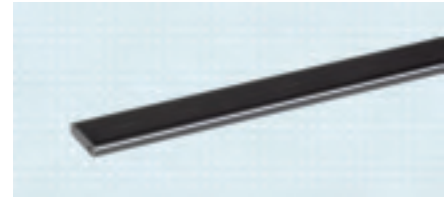
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651P4 Stainless steel profile rod

Suitable for fabricating system bars, with rounded edges, strength approx. 800-950 N/mm², spot weldable

Article number	For system width	Length	Width	Qty.
651P4=16	16 mm	2,000 mm	16 mm	Piece
651P4=20	20 mm	2,000 mm	20 mm	Piece

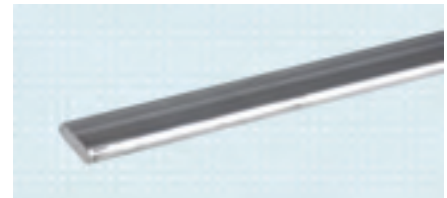


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605P8 Light metal profile bar

Suitable for fabricating system bars, with rounded edges, strength approx. 400 N/mm²

Article number	For system width	Length	Width	Thickness	Qty.
605P8=14		2,000 mm	14 mm	5 mm	Piece
605P8=16	16 mm	2,000 mm	16 mm	5 mm	Piece
605P8=20	20 mm	2,000 mm	20 mm	5 mm	Piece



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6 Miscellaneous

You will find all other components in this section, from upper extremity joint bars to correction joint systems.

6.1 Correction system joints	228
6.2 Upper extremity joint bars	234
6.3 Kits for spinal orthoses	244

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Correction system joints

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The objectives of contracture treatment are to restore joint functionality and avoid deformities. The static correction joint system for the upper and lower extremity (hand, elbow, knee, and ankle joints) is suitable for fittings for adults as well as children. It is used in positioning orthoses with the joints matching the known dimensions of the Ottobock portfolio of joint bars.

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The individually required angles are continuously adjustable by means of a worm gear. For orientation, control and targeted adjustment of the correction, an angle scale is printed on the joints.

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An easy-on, easy-off system has been developed for quick application and removal of the orthosis, allowing correction to be disengaged completely. Another setting option is the unlocking of the joint, which can be set to any extension stop angle. This allows for physiotherapeutic training as well as installation of a dynamic unit.

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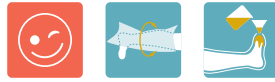
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17BK1 Correction system joints

Static joints for positioning orthoses



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Article number	Side	System width	Dynamic unit	Material	Qty.	Medial support
17BK1=L1	left	20 mm	17BK2=L1	Aluminium	Piece	17BK3=18
17BK1=R1	right	20 mm	17BK2=R1	Aluminium	Piece	17BK3=18
17BK1=L2	left	16 mm	17BK2=L2	Aluminium	Piece	17BK3=18
17BK1=R2	right	16 mm	17BK2=R2	Aluminium	Piece	17BK3=18
17BK1=L3	left	14 mm	17BK2=L3	Aluminium	Piece	17BK3=14
17BK1=R3	right	14 mm	17BK2=R3	Aluminium	Piece	17BK3=14
17BK1=L4	left	12 mm	17BK2=L4	Aluminium	Piece	17BK3=14
17BK1=R4	right	12 mm	17BK2=R4	Aluminium	Piece	17BK3=14

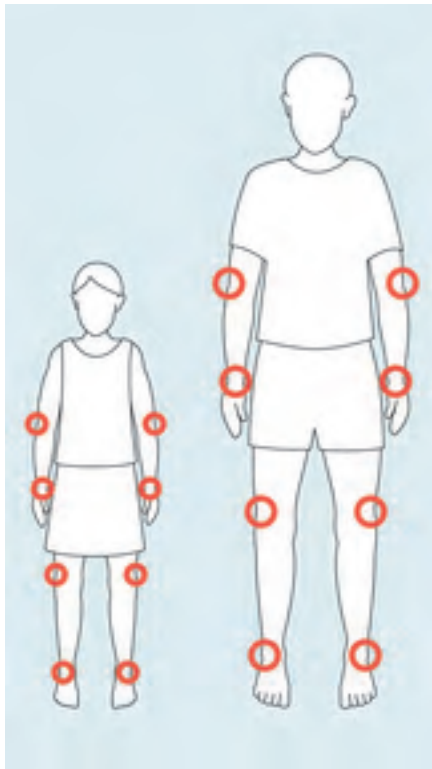
Delivery condition: The joint is supplied with an adjustment wrench.

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size recommendation

Body height	Wrist joint	Elbow joint	Knee joint	Ankle joint
Child up to 1 m	=L/R4	=L/R4	=L/R4	=L/R4
Child 1-1.40 m	=L/R4	=L/R3	=L/R3	=L/R3
Adults up to 1.60 m	=L/R4	=L/R3	=L/R2	=L/R2
Adults 1.60 - 1.90 m	=L/R3	=L/R2	=L/R1	=L/R1

- Attention: this information constitutes recommendations only. The correct size for the respective patient has to be determined and specified by the orthotist. The joints are used individually or in pairs depending on the application. We recommend to always use a medial support, e.g. an integrated plastic joint. In case of knee and ankle joints, bilateral fitting (in pairs) is mandatory. The left/right side indications refer to application of the joints on the wrist, knee joint or ankle joint. Due to anatomical characteristics, the sides must be reversed for elbow applications (right to left and left to right).



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Accessories for 17BK1

17BK2 Dynamic unit for correction system joint

The 17BK2 dynamic unit is available for all four sizes of the 17BK1 static correction system joint and, depending on the joint size, offers a maximum spring force of approx. 10 Nm.

Use of the 17BK2 dynamic unit allows for extension or flexion yielding, depending on the joint and indications. Spring force is used to slowly bring the joint back into the desired position.

The tension is continuously adjustable, allowing for individual dynamic treatment of contractures.



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Article number	for	Max. tension	Qty.
17BK2=L1	17BK1=L1	~ 10 Nm	Piece
17BK2=R1	17BK1=R1	~ 10 Nm	Piece
17BK2=L2	17BK1=L2	~ 6 Nm	Piece
17BK2=R2	17BK1=R2	~ 6 Nm	Piece
17BK2=L3	17BK1=L3	~ 6 Nm	Piece
17BK2=R3	17BK1=R3	~ 6 Nm	Piece
17BK2=L4	17BK1=L4	~ 3 Nm	Piece
17BK2=R4	17BK1=R4	~ 3 Nm	Piece

17BK3 Medial support for correction system joint

Article number	Material	Qty.
17BK3=14	Aluminium	Piece
17BK3=18	Aluminium	Piece

- Please note that the size and side of the static and dynamic units have to be identical.



Selection of Ottobock system joint bars matching the joints

17F52 Side bar

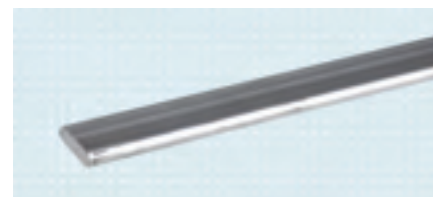
Article number	for	Length	Width	Thickness	Material	Qty.
17F52=12X3X220	17BK1=L4 17BK1=R4	220 mm	12 mm	3 mm	Aluminium	Piece
17F52=14X3X220	17BK1=L3 17BK1=R3	220 mm	14 mm	3 mm	Aluminium	Piece



605P8 Light metal profile bar

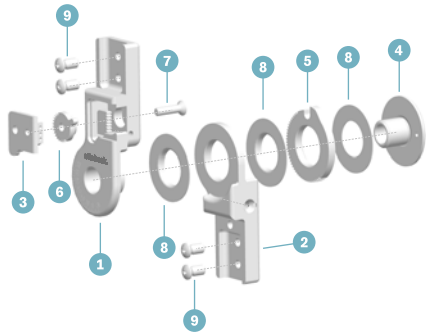
Suitable for fabricating system bars, with rounded edges, strength approx. 400 N/mm²

Article number	for	Length	Width	Thickness	Material	Qty.
605P8=16	17BK1=L2 17BK1=R2	2,000 mm	16 mm	5 mm	Aluminium	Piece
605P8=20	17BK1=L1 17BK1=R1	2,000 mm	20 mm	5 mm	Aluminium	Piece



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Spare parts for 17BK1



(1) Upper joint section

Article number	for	Side	Qty.
17X14=L1	17BK1=L1	left	Piece
17X14=R1	17BK1=R1	right	Piece
17X14=L2	17BK1=L2	left	Piece
17X14=R2	17BK1=R2	right	Piece
17X14=L3	17BK1=L3	left	Piece
17X14=R3	17BK1=R3	right	Piece
17X14=L4	17BK1=L4	left	Piece
17X14=R4	17BK1=R4	right	Piece

(2) Lower joint section

Article number	for	Side	Qty.
17U14=L1	17BK1=L1	left	Piece
17U14=R1	17BK1=R1	right	Piece
17U14=L2	17BK1=L2	right	Piece
17U14=R2	17BK1=R2	right	Piece
17U14=L3	17BK1=L3	left	Piece
17U14=R3	17BK1=R3	right	Piece
17U14=L4	17BK1=L4	left	Piece
17U14=R4	17BK1=R4	right	Piece

(3) Lock cover

Article number	for	Side	Qty.
30Y154=L1	17BK1=L1	left	Piece
30Y154=R1	17BK1=R1	right	Piece
30Y154=L2	17BK1=L2	left	Piece
30Y154=R2	17BK1=R2	right	Piece
30Y154=L3	17BK1=L3	left	Piece
30Y154=R3	17BK1=R3	right	Piece
30Y154=L4	17BK1=L4	left	Piece
30Y154=R4	17BK1=R4	right	Piece

(4) Joint nut

Article number	for	Qty.
30Y156=1	17BK1=L1	Piece
30Y156=2	17BK1=L2, 17BK1=R2	Piece
30Y156=3	17BK1=L3, 17BK1=R3	Piece
30Y156=4	17BK1=L4, 17BK1=R4	Piece

(5) Gear wheel

Article number	for	Qty.
30Y157=1	17BK1=L1, 17BK1=R1	Piece
30Y157=2	17BK1=L2, 17BK1=R2	Piece
30Y157=3	17BK1=L3, 17BK1=R3	Piece
30Y157=4	17BK1=L4, 17BK1=R4	Piece

(6) Set wheel with lever

Article number	for	Qty.
30Y212=1	17BK1=L1, 17BK1=R1, 17BK1=L2, 17BK1=R2, 17BK1=L3, 17BK1=R3	Piece
30Y212=2	17BK1=L4, 17BK1=R4	Piece

(7) Phillips flat head screw

Article number	for	Material
501T19=M4X16-1	17BK1=L1, 17BK1=R1	Stainless steel
501T19=M4X14-1	17BK1=L2, 17BK1=R2, 17BK1=L3, 17BK1=R3	Stainless steel
501T19=M3X12-1	17BK1=L4, 17BK1=R4	Stainless steel

(8) Washer set

Article number	for	Qty.
17BK1=S-1	17BK1=L1, 17BK1=R1	Piece
17BK1=S-2	17BK1=L2, 17BK1=R2	Piece
17BK1=S-3	17BK1=L3, 17BK1=R3	Piece
17BK1=S-4	17BK1=L4, 17BK1=R4	Piece

(9) Phillips oval countersunk head screw

Article number	for	Material	Qty.
501T7=7.5X11XM5	17BK1=L1, 17BK1=R1, 17BK1=L2, 17BK1=R2	Stainless steel	Piece
501S86=M4X8	17BK1=L3, 17BK1=R3, 17BK1=L4, 17BK1=R4	Stainless steel	Piece

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Upper extremity joint bars

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Although used less often than lower extremity joint bars, upper extremity joint bars are invaluable components for certain types of upper extremity orthoses and prostheses.

The articles listed in this section range from flexible joint connections to arm frames and a variety of elbow joint bars. Various joint locks - including a ratchet lock - can be selected to meet the individual needs of each patient.

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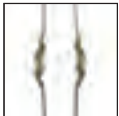


16U4 / 16U5 Polycentric elbow joint bars

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Free motion joints, concave half-round bar profile



Article number	for	Material	Qty.
16U4	Orthoses and prostheses	Stainless steel	2 pairs

3

Free motion joints, with step-up, concave half-round bar profile



Article number	for	Material	Qty.
16U5	Short forearm residual extremity	Stainless steel	Pair

4

Spare parts for 16U4 and 16U5

(1) Joint bolt, hardened

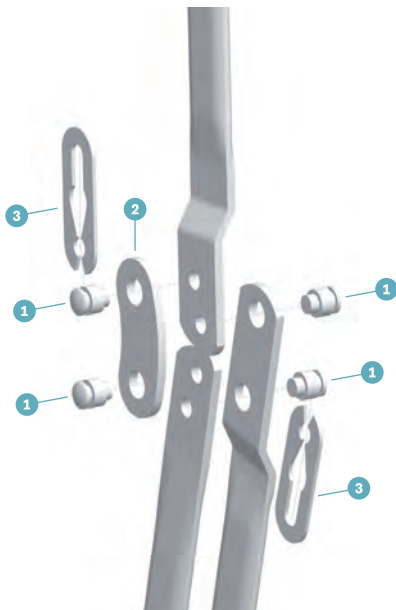
Article number	Qty.
16Y5	Piece

(2) Joint plate

Article number	Material	Qty.
16Y9	Stainless steel	Piece

(3) Spring cap

Article number	Material	Qty.
16Y6	Stainless steel	Piece



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16U7 Arm bar with joint

Free motion joint in flexion direction

Article number	Width	Length from joint centre	Material thickness	Material	Qty.
16U7	14 mm	307 mm	2.45 mm	Stainless steel	Pair

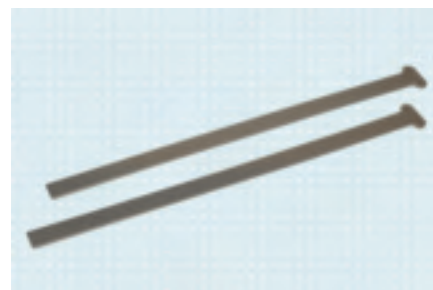


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16U8 Arm bar

Free motion joint in flexion direction

Article number	Width	Total length	Material thickness	Material	Qty.
16U8	14 mm	300 mm	2.45 mm	Stainless steel	Pair



2

Spare parts for 16U7

17F48 Joint

Article number	Material	Qty.
17F48=5	Stainless steel	Piece



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17Y17 Brass bushing

Article number	Material	Qty.
17Y17=6X8X2.4	Brass	Piece



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17Y93 Bearing nut, hardened

Article number	Qty.
17Y93=6X5.2XM4	Piece



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501S32 Slotted truss head screw

Article number	Material	Qty.
501S32=M4X10X10	Stainless steel	Piece



Rivet pin

Article number	Material	Qty.
506A12=4X9	Stainless steel	Piece



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16H1 Flexible joint connection

V-shape, three-point suspension

Article number	Qty.
16H1	Piece

2



16H2 Flexible joint bars

pair

Article number	Qty.
16H2	Pair

3



501S28 Flat head screw

Nickel plated

Article number	Qty.
501S28=M3.5X5	Piece

4



16U6 Arm frame

Article number	Width	Total length	Material thickness	Material	Qty.
16U6	14 mm	600 mm	2.45 mm	Stainless steel	Piece

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Practical recommendation:

The 16U6 arm frame can be combined with the 16U7 arm bar with elbow joint to form an above-elbow bar with a two-part joint. To obtain the required length, the ends of the 16U6 can be cut.

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16X12 Elbow joint bars

One joint bar with swivelling cable lock, 18 locking positions in 7.2° increments, second joint bar without lock, flat bar profile, joint bars suitable for both sides, for orthoses and prostheses

Article number	Head diameter	Material	Qty.
16X12	30 mm	Stainless steel	Pair



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Individual components of 16X12

(1) 16X13 Elbow joint bar with cable lock

Joint with swivelling cable lock, 18 locking positions in 7.2° increments, flat bar profile, suitable for both sides, for orthoses and prostheses

Article number	Head diameter	Material	Qty.
16X13	30 mm	Stainless steel	Piece

(2) 16X14 Elbow joint bar without lock

Free motion joint, flat bar profile

Article number	Head diameter	Material	Qty.
16X14	30 mm	Stainless steel	Piece

Spare parts and accessories for 16x12, 16x13, 16x14

16Y27 Joint piece with cable lock

18 locking positions in 7.2° increments - suitable for both sides

Article number	Qty.
16Y27	Piece



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16Y31 Joint piece without lock

Article number	Qty.
16Y31	Piece



16Y26 Pull cable

Article number	Qty.
16Y26	Piece



21Y79 Belt flap

Article number	Qty.
21Y79	Piece



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6 Miscellaneous

6.2 Upper extremity joint bars

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16Y32 Cover cap

Article number	Material	Qty.
16Y32	Plastic	Piece

2



501S59 Saucer head screw

Article number	Qty.
501S59	Piece

3



16Y29 Joint bar section

for use as upper or lower bar, suitable for both sides

Article number	Material	Qty.
16Y29	Stainless steel	Piece

4



16Y30 Modular connector

for the use of 16Y27 joint piece with cable lock for modular arm prosthesis

Article number	Material	Qty.
16Y30	Stainless steel	Piece

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16X4 Elbow joint bars

Joints with automatic ratchet lock, locks only in extension, releases at a max. flexion of approx. 135°, concave half-round bar profile



Article number	Bar width	Joint bar thickness	Head diameter	Material	Qty.
16X4	14 mm	2 mm	26 mm	Stainless steel	Piece

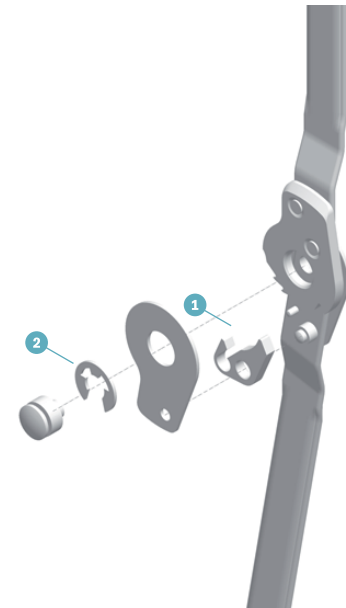
Spare parts for 16X4

(1) Locking latch

Article number	Material	Qty.
16Y7	Stainless steel	Piece

(2) Lock washer

Article number	Material	Qty.
16Y8	Stainless steel	Piece



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16X8 Elbow joint bar

This joint type is offered in one universal size and in pairs. It features a freely movable medial bar. Different incremental flexion and extension settings of the bar are possible: · in 30° increments · 180°; 150°; 120°; 90°; 60°; 30°

Reference number	Bar length	Bar width	Qty.
16X8	457 mm	12.7 mm	Pair

Indicated, for example, for fractures in the area of the elbow joint and post-operative follow-up treatment with flexion/extension settings defined by the physician

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17B70 Positioning joint

adjustable in 8° increments, used with adjustable positioning bars and static correction orthoses

Article number	For system width	Material	Qty.
17B70=12	12 mm	Stainless steel	Piece

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Spare parts for 17B70

(1) Bearing nut, hardened

Article number	Qty.
17Y93=7X4.8XM5	Piece

(2) Ring

Article number	Qty.
18Z3	Piece

(3) Spring band steel profile bar

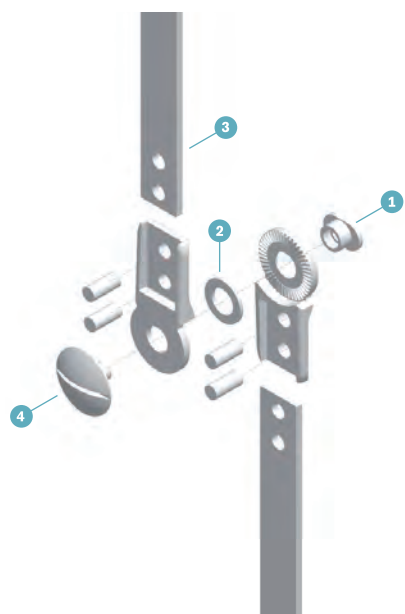
Extension material

Article number	Length	Width	Material	Qty.
651B1=12	2,000 mm	12 mm	Spring band steel	Piece

(4) Slotted truss head screw

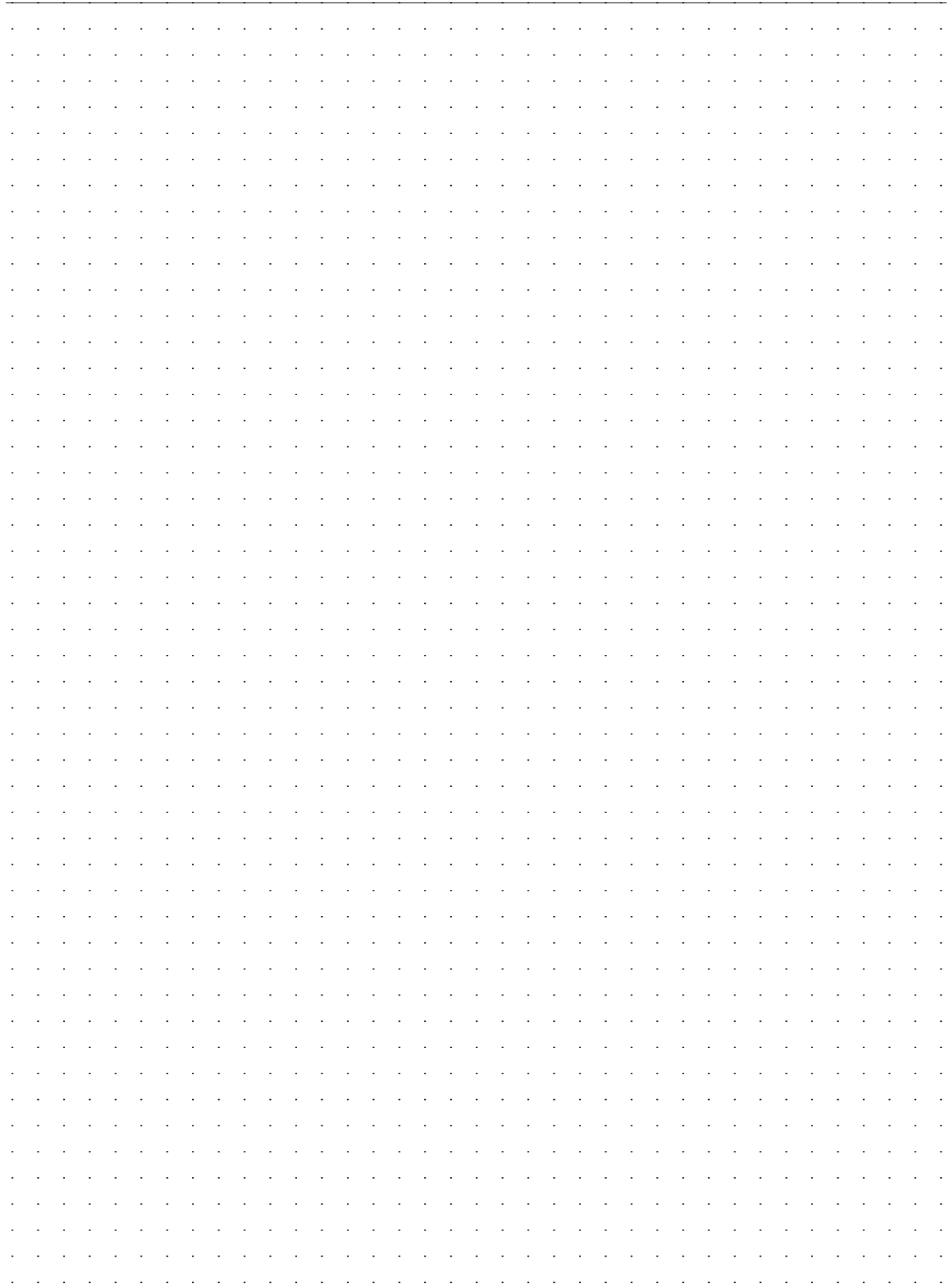
Stainless steel

Article number	Qty.
501S57	Piece

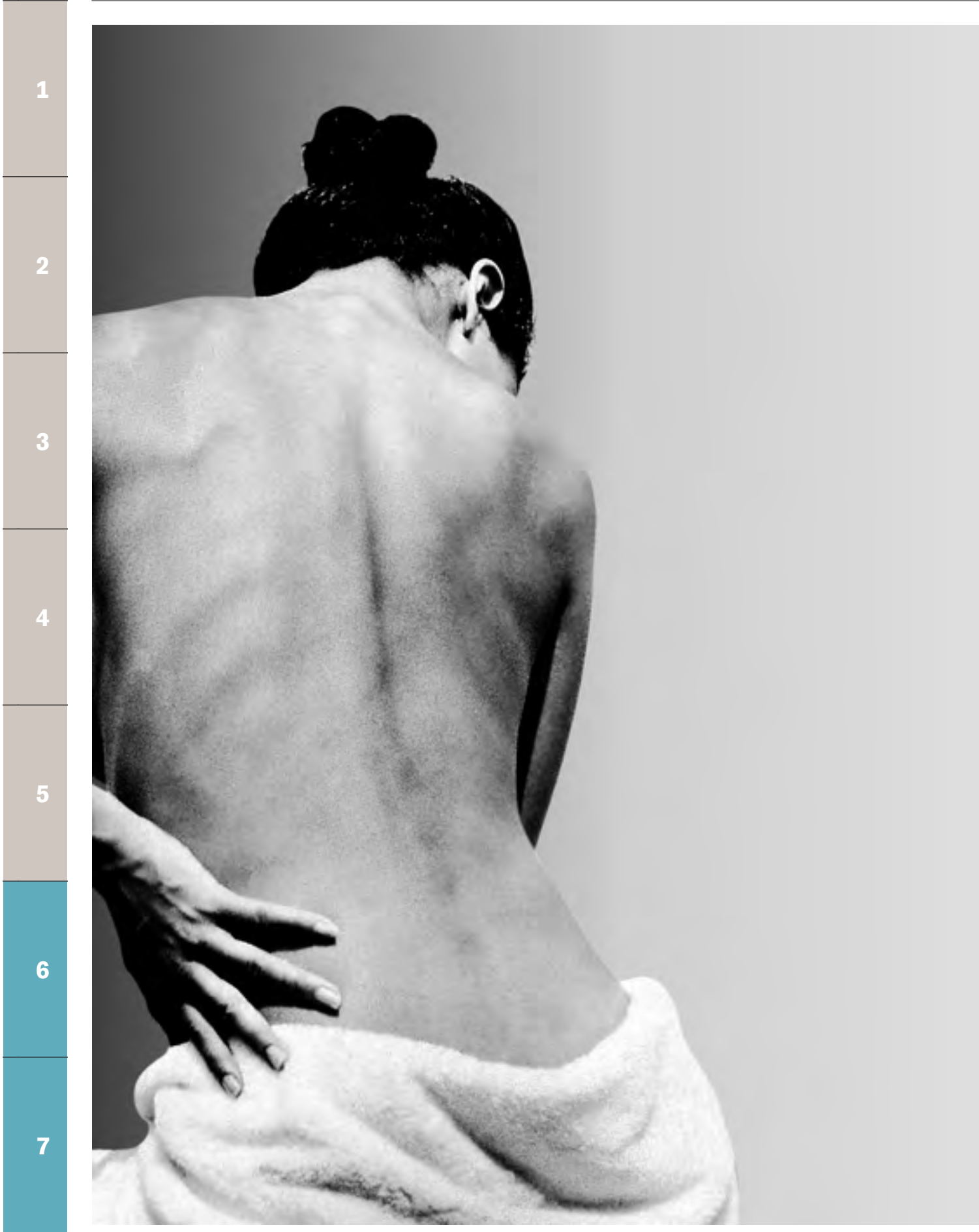


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Kits for spinal orthoses

3

This section presents two proven fitting options for the treatment of scoliosis patients. The Lyon kit was developed for the fabrication of a "Stagnara" corset, i.e., for postoperative treatment.

The Milwaukee kit is used for the familiar "Milwaukee" active scoliosis corset.

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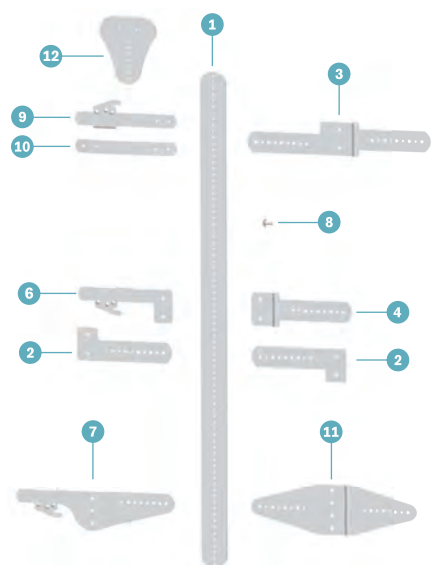
7



28R8 Kit for Lyon spinal orthosis

Article number	for age group	Qty.
28R8=2	juvenile (small)	Set
28R8=1	adolescent (large)	Set

Spare parts for 28R8



(1) Anterior and posterior uprights
with M4 threaded holes in 7.5 mm intervals

Article number	Length	Width	Thickness	Material	Package contents	Qty.
29R32=2	500 mm	25 mm	4 mm	Aluminum, polished	2 pcs	Piece
29R32=1	600 mm	30 mm	4 mm	Aluminum, polished	2 pcs	Piece

(2) Connection piece
single-sided, flat

Article number	Length	Material	Package contents	Qty.
29R60=2	105 mm	Stainless steel, polished	2 pcs	Piece
29R60=1	120 mm	Stainless steel, polished	2 pcs	Piece

(3) Connection hinge

flat, with unilateral hinge and opposing horizontal rigid connection, offset mounting planes

Article number	Length	Material	Qty.
29R62=2	195 mm	Stainless steel, polished	Piece
29R62=1	220 mm	Stainless steel, polished	Piece

(4) Hinge

single-sided, flat

Article number	Length	Material	Qty.
29R59=2	110 mm	Stainless steel, polished	Piece
29R59=1	120 mm	Stainless steel, polished	Piece

(5) Bar closure (without illustration)

3-position lock

Article number	Length	Material	Qty.
29R36=L	left	Stainless steel, polished	Piece
29R36=R	right	Stainless steel, polished	Piece

(6) Pelvic closure

right side, 3-position lock, offset flexible rigid connection on left side

Article number	Material	Qty.
29R49=R	Stainless steel, polished	Piece

(7) Slotted truss head screw/hessing screw

Article number	Material	Package contents	Qty.
501S16=M4X8X10	Stainless steel	6 pcs	Piece

(8) Bar closure, flexible

3-position lock

Article number	Size	Length	Material	Qty.
29R33=L3	3	100 mm	Stainless steel	Piece
29R33=R3	3	100 mm	Stainless steel	Piece
29R33=L1	1	300 mm	Stainless steel	Piece
29R33=R1	1	300 mm	Stainless steel	Piece

(9) Bar closure, flexible

with automatic ratchet lock, securely locks in both pushing and pulling directions

Article number	Size	Length	Qty.
29R120=1	1	200 mm	Piece

(10) Connection piece

bilateral, flat, polished

Article number	Length	Material	Qty.
29R38=2	170 mm	Spring band steel	Piece
29R38=1	200 mm	Spring band steel	Piece

(11) Pelvic hinge

flat

Article number	Length	Material	Qty.
29R55=2	50 mm	Stainless steel, polished	Piece
29R55=1	60 mm	Stainless steel, polished	Piece

(12) Chest harness

with M4 threaded holes in 7.5 mm intervals

Reference number	Material	Qty.
29R45	Aluminium	Piece

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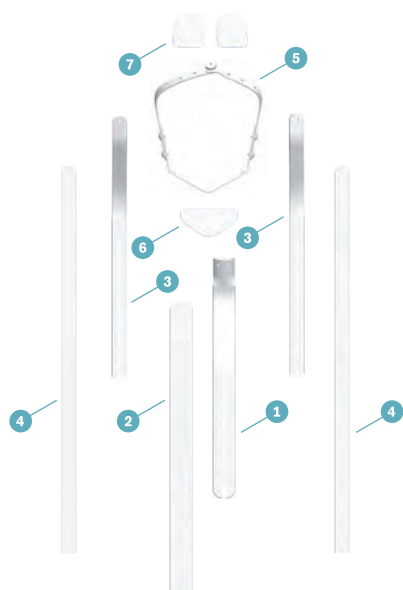
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28R10 Kit for Milwaukee spinal orthosis

Article number	for age group	With neck ring	Qty.
28R10=3	6 years and up	29R81=7	Set
28R10=2	10 years and up	29R81=5	Set
28R10=1	15 years and up	29R81=1	Set

Spare parts for 28R10



(1) Lower anterior upright

Upper section pre-shaped, 4.25 mm Ø holes alternating with 4x10 mm slots

Article number	Length	Width	Thickness	Material	Qty.
29R89=2	300 mm	25 mm	4 mm	Aluminium	Piece
29R89=1	300 mm	30 mm	4 mm	Aluminium	Piece

(2) Lower anterior upright

Lower section aluminum, matte, with M4 threaded holes at 7.5 mm intervals

Article number	Length	Width	Thickness	Material	Qty.
29R92=2	390 mm	25 mm	4 mm	Aluminium	Piece
29R92=1	420 mm	30 mm	4 mm	Aluminium	Piece

(3) Lower posterior upright

Upper section pre-shaped, matte, with 4.25 mm Ø holes, alternating with 4x10 mm slots (pair)

Article number	Length	Width	Thickness	Material	Qty.
29R94=1	350 mm	20 mm	4 mm	Aluminium	Pair

(4) Lower posterior upright

Lower section with threaded holes M4 at 7.5 mm intervals (pair)

Article number	Length	Width	Thickness	Material	Qty.
29R100=3	420 mm	20 mm	4 mm	Steel	Pair
29R100=1	510 mm	20 mm	4 mm	Aluminium	Pair

(5) Neck ring (head piece)

Article number	Material	Qty.
29R81=7	Stainless steel	Piece
29R81=6	Stainless steel	Piece
29R81=5	Stainless steel	Piece
29R81=4	Stainless steel	Piece
29R81=3	Stainless steel	Piece
29R81=2	Stainless steel	Piece
29R81=1	Stainless steel	Piece

(6) Mandible support

Article number	Size	Material	Qty.	Colour
29R84=3	small	Polyethylene	Piece	natural colour
29R84=2	medium	Polyethylene	Piece	natural colour

(7) Occipital support

Article number	Size	Material	Qty.	Colour
29R86=3	small	Polyethylene	Pair	natural colour
29R86=2	medium	Polyethylene	Pair	natural colour
29R86=1	large	Polyethylene	Pair	natural colour

Small parts not illustrated

Knurled nut

Stainless steel for neck ring

Reference number	Qty.
29R82	Piece

Half-round rivets

Article number	Package contents	Qty.
504R5=3X8,5	4 piece(s)	Piece

Oval head screw, slotted

Article number	Head diameter	Thread	Thread length	Package contents
501S27=M4X10	7.2 mm	M4	10 mm	6 pcs

Slotted truss head screw/hessing screw

Article number	Head diameter	Thread	Thread length	Package contents
501S16=M4X10X10	10 mm	M4	10 mm	6 pcs

Setting nut/insert nut

Article number	Length	Shoulder diameter	Head diameter	Thread	Material	Qty.
29C3=M4	3.6 mm	5 mm	10 mm	M4	Stainless steel	Piece

Oval head screw, slotted

Article number	Head diameter	Thread	Thread length	Package contents
501S27=M4X8	7.2 mm	M4	8 mm	10 pcs

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7 Materials and accessories

In this section, you will find a selection of materials, tools and accessories that are essential for modern orthosis fabrication.

Please note that this catalogue does not contain all tools and materials that can be used for the fabrication of orthoses and prostheses. For further tools and materials please refer to our catalogues "Materials, Components and Systems" (646K1) and "Consulting, Planning and Equipping" (646K10).

7.1 Alignment aids and measuring technology	252
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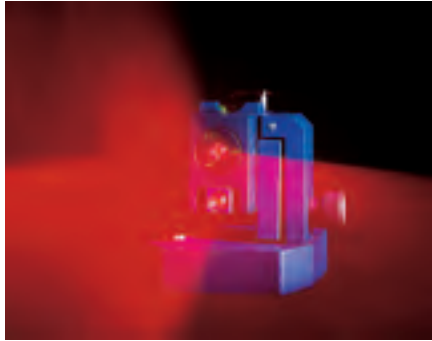


743L30=* LaserLine

Functional description

Linear laser beam used for the alignment of prostheses or orthoses. Horizontally adjustable housing and rotatable laser beam (with angle scale). The laser beam is easily visible in daylight. A second line laser can be swivelled vertically and horizontally. The laser can be charged using a battery charger. It can also be mounted on a stand.

2



Application description

The laser is mounted on the tripod. In addition, it can be used with an alignment apparatus. The laser beam is aligned using an angle measurement device.

Areas of application

Prosthetics

- Projection of the plumb line during prosthesis alignment and plaster removal
- Checking the knee joint axes
- Checking the neutral level of the pelvis
- Measuring flexion/extension angles and abduction/adduction angles

Diagnosis

- Measurement and demonstration of body positions and posture problems (e.g. lateral deviation in the case of scoliosis, knock-knee position)
- Measurement of lateral shifting of the foot in relation to the hip joint, and of the lower leg angle in relation to the plumb line in the case of varus/valgus (up to 10 cm)
- Documentation, before/after.

3



Documentation

- Upper laser rotatable by 225° (+45°, -180°), with angle scale for the control of the rotation angle, 2° graduation
- Lower laser with vertically projected line, can be swivelled horizontally by approx. ±9°
- Opening angle of the laser beams 100°
- Power supply: 4 batteries 1.2 V
- Battery charger 230V/50 Hz
- Red light of light emitting diodes (635 nm, laser class 2)
- Projected laser lines are visible even in daylight

4

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Article number	Electrical connection in V/Hz/kW	Weight net/gross	Colour	LxWxH
743L30=230	1 x 230V N/PE / 50Hz / 0.01kW	1.4/2 kg	blue (anodised)	150x130x150 mm

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Accessories for 743L20=230

625B3 Mignon battery

4 pcs required for 743L20=230
2 pcs required for 743L5

Article number	Volt	Qty./pack.
625B3	1.2	1 piece(s)



1

743X30 Stand

with scale for the LaserLine, for adjustment of the device in the vertical and horizontal direction

Article number	for	Weight
743X30	743L30 LaserLine	5 kg



2

757L100 Battery charger

Article number	for	Electrical connection in V/Hz/kW
757L100	743L30=* LaserLine	1 x 100-240/ 50-60/ 0,01



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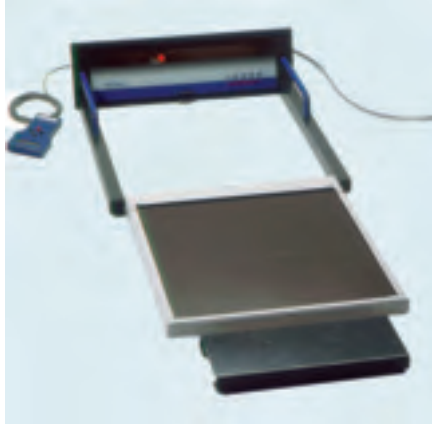
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743L100=110 743L100=* L.A.S.A.R. Posture

Good posture – the basis for mobility

The L.A.S.A.R.* Posture is used to visualise the position of the body's centre of gravity line, or load line, while the patient is standing. A laser projects the measured ground reaction force as the body's centre of gravity line/ load line on the body.

Classification of the body posture in the sagittal plane is visualised by comparing the distances between the ground reaction force and joint centres or body points. The bench alignment of orthopaedic devices is checked directly on the patient, and is adjusted under the conditions found in practice so that it is biomechanically correct.

The L.A.S.A.R.* Posture's low weight and simple operation make it easy and convenient to transport and use, for example in the clinic or at the patient's home.

The control and display unit can be used to call up the measured data on the display and control the measurement process via the function keys.

Laser: class 2

When operated properly, the limit values generally fall below those of laser class 1 (according to DIN 60825).

3

The L.A.S.A.R.* Posture consists of:

- Force measurement plate with four integrated force measuring cells
- Projection system with laser and line optics
- Positioning system with electronics and step motor
- Control and display unit
- Levelling plate

4

Fields of application for the L.A.S.A.R.* Posture

Optimisation or examination of static alignment in prosthetics, orthotics, orthopaedic foot care, incorrect posture of pelvis and legs, leg length discrepancy, physiotherapy, diagnostics, rehabilitation.

5

Article number	Dimensions (WxDxH) folded	Dimensions (WxDxH) unfolded	Electrical connection in V/Hz/kW	Weight
743L100=110	550 x 700 x 150 mm 21 5/8 x 27 1/2 x 5 7/8	550 x 1,200 x 150 mm 21 5/8 x 47 1/4 x 5 7/8	1 x 110 N/PE / 50/60 / 0.02	9.5 kg
743L100=230	550 x 700 x 150 mm 21 5/8 x 27 1/2 x 5 7/8	550 x 1,200 x 150 mm 21 5/8 x 47 1/4 x 5 7/8	1 x 230 N/PE / 50/60 / 0.02	9.5 kg

- We are happy to advise you about potential applications.



Practical recommendation:

The alignment of a leg orthosis can be examined directly on the patient and optimised under real-world conditions.

6

7

743A6 Orthotic alignment aid

for three-dimensional alignment of leg orthoses and positioning of knee and ankle joint points on a plaster negative or plaster positive.

Article number	Dimensions WxDxH	Weight
743A6	10 5/8 x 15 x 30 3/8 inch	14 kg



 647H416

1

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743A8 Knee pivot gauge

to determine the compromise pivot point according to Nietert, incl. rotation indicator

Article number	Material	To be used for
743A8	Steel	to determine the compromise pivot point according to Nietert (60:40 graduation)



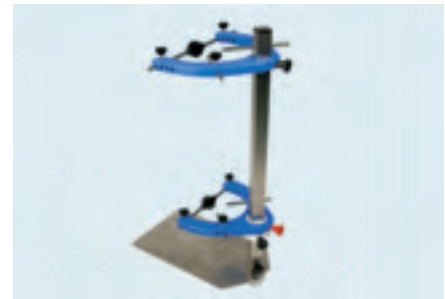
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743A7 Pivot point adjustment aid

to determine and establish the knee and ankle pivot point and reference lines on a plaster positive or negative

Article number	Material
743A7	Stainless steel



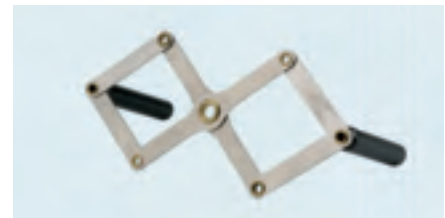
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743A80 50:50 Gauge

Article number	To be used for
743A80	for precisely determining the lateral centre line of a prosthetic socket



6

743A9 Foot casting aid

for an accurate foot impression with heel height and toe pitch on the forefoot

Article number	Material
743A9	Plastic/stainless steel



 647G146

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743R3 Parallel alignment tool

for adjusting and securing lower leg joint bars

Article number	Material	Weight
743R3	nickel plated	0.37 kg

2



743R5 Parallel alignment tool

for adjusting and securing double joint bars

Article number	Material	Weight
743R5	nickel plated	0.37 kg

3



743S1=* Ottobock diameter

Article number	Measurement range	Weight
743S1=40	15 3/4 inch	0.45 kg
743S1=60	23 5/8 inch	0.5 kg

4



743W2 Goniometre

Article number	Side piece length	Material	Weight
743W2	150 mm	Plastic	0.02 kg

5



743T3 Hip compass

Article number	Length	Measurement range	Material	Weight
743T3	340 mm	500 mm	Stainless steel	0.28 kg

6



743Y32 Hip levelling guide

for leg length check

Article number	Length	Material	Weight
743Y32	13 inch	Aluminium	0.26 kg

7



742A1 Contour scribe

for vertical scribing and transfer of body contours

Article number	Dimensions WxDxH	Material	Weight
742A1	45 x 56 x 180 mm	Plastic	0.062 kg

742A4 Marking gauge

Article number	Material	Weight
742A4	Tool steel	1.7 kg



1

743L5 Crosshair laser

Automatically levelling graticule laser with vertical and horizontal laser line. The laser lines can be switched individually and together form crossing lines. In addition, the laser is equipped with a laser spot. The laser beam is easily visible in daylight. It can also be mounted on a stand. The pendulum system can be locked for transportation.

Application description

The laser is mounted on the tripod. In addition, it can be used with an alignment apparatus. The laser beam is self-levelling.

Areas of application

Applications in orthopaedics:

- Projection of the plumb line during plaster casting and prosthetic/orthotic alignment
- Display of abduction and adduction positions (angles in relation to plumb line) as well as flexion and extension positions
- Documentation, before/after
- Display of lateral shifting of the spinal column in the neck area in relation to the anal cleft
- Checking the level position of the pelvis
- Demonstration of body positions and posture problems (e.g., lateral deviation in the case of scoliosis, knock-knee position)

Standard equipment includes:

1x graticule laser, 1x operating instructions, 3x Mignon (AA) batteries (not rechargeable)

Article number	Dimensions WxDxH
743L5	108 x 66 x 92 mm



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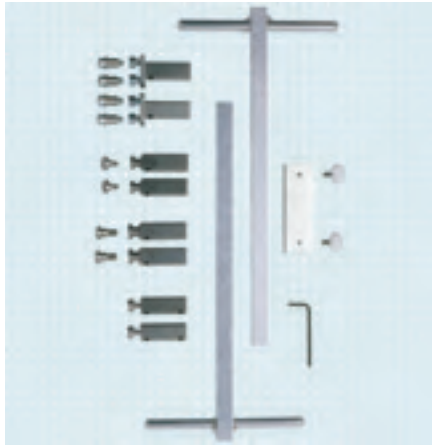
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743R6 Orthotic joint alignment fixture

Article number	Weight	To be used for
743R6	1 kg	as an aid for leg orthosis fabrication, suitable for the "structural orthosis fabrication" technique based on a drawing and for the lamination resin and vacuum-forming techniques based on a plaster cast

2

consisting of

3



(1) 743Y55 Alignment axis

Article number	Material
743Y55	Aluminium

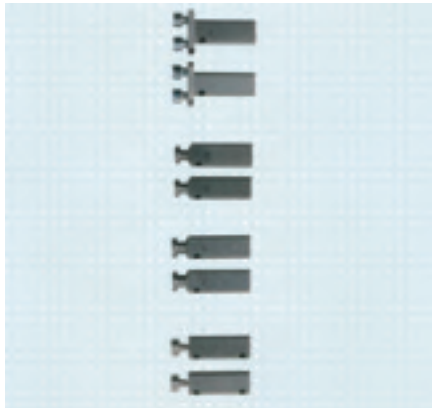
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(2) 743Y70 Parallel adapter

Article number	Width	Material
743Y70=50	50 mm	Aluminium
743Y70=80	80 mm	Aluminium

5



(3) 743Y56 adjustment adapter

Article number	Size	Material
743Y56=1	1	Stainless steel
743Y56=2	2	Stainless steel
743Y56=3	3	Stainless steel
743Y56=4	4	Stainless steel

6



(4) 743Y72 Allen screw with collar

Article number
743Y72

7

(5) 501A1 Shoulder screw

Article number	for	Thread
501A1=12X6XM4	743Y56=2 adjustment adapter	M4
501A1=12X7XM4	743Y56=2 adjustment adapter	M4
501A1=12X8XM6	743Y56=3 adjustment adapter	M6
501A1=14X9XM6	743Y56=3 adjustment adapter	M6

1

(6) 709S10=* Allen wrench

Article number	Side piece length	Material
709S10=2.5	57 x 20 mm	Nickel-plated chrome-vanadium steel



2

Accessories for 743R6

743Y47=* Locating bolt

Article number	for	For system width	Material
743Y47=1	adjustment adapter: 743Y56=* system knee joints: 17B36, 17B48, 17B90, 17B17, 17B16	16 mm	Stainless steel
743Y47=2	adjustment adapter: 743Y56=* system knee joints: 17B36, 17B48, 17B90, 17B17, 17B16	20 mm	Stainless steel



3

743Y46 Positioning aid

Article number	for	Material
743Y46	743Y56=* adjustment adapter	Stainless steel



4

743Y48 Adapter sleeve

The adapter sleeves are slid onto the 743Y55 alignment axis and positioned in the plaster negative. Adapter sleeve made of rigid foam for receiving the 743Y56 adjustment adapters in the plaster positive. The adapter sleeves are slid onto the 743Y55 alignment axis and positioned in the plaster negative.

Article number	Length	Material	Package contents
743Y48	290 mm 29 cm	Rigid foam	4 piece(s)



5

743Y49 Shoulder screw set

matching 743Y56=4 adjustment adapter

Article number	Package contents
743Y49	4 pairs

6

7

1



711S1=* Bending iron

Article number	711S1=6X4	711S1=8X6	711S1=9X7
Version	straight jaws		
Material	CV steel		
Jaw opening	1/8 and 1/4 inch	1/4 and 3/8 inch	1/4 inch and 3/8 inch
Length	9 5/8 inch		

2



711S4=* Bending iron

Article number	711S4=3X3.5	711S4=6X4	711S4=8X6
Version	rounded jaws		
Material	CV steel		
Jaw opening	1/8 inch	1/8 and 1/4 inch	6 and 8 mm 1/4 and 3/8 inch
Length	9 5/8 inch		

3



711S5 Bending iron

Article number	711S5
Version	round jaws
Material	CV steel
Jaw opening	1/8 and 1/4 inch

4



711S3 Bending iron

Article number	711S3
Material	Tool steel, high-alloy
For bar widths	4 and 6 mm
Length	500 mm

5



711S2 Steel bending iron set

Article number	711S2
Material	Steel
Package contents	3 pcs
To be used for	for use in vice (vise)
Scope of delivery	3 pcs

6



702B9 Hole gauge

Article number	702B9
Material	Tool steel
To be used for	for perfect-fit bore hole for oval head Philips screws (501T7=7.5x9xM5) for Ottobock system bars

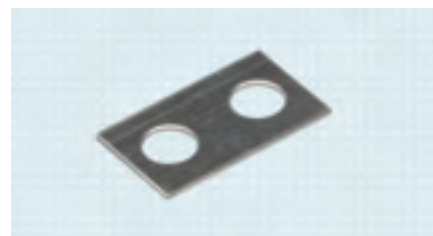
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702B11 Hole gauge

Article number	702B11
Material	Tool steel
To be used for	17LA3N, 17LK3

17Y42 Stainless steel shim plate

Article number	17Y42=12	17Y42=15
Material	Stainless steel	
For bar widths	16 mm	20 mm
Plate width	12 mm	15 mm



501T7 Phillips oval countersunk head screw

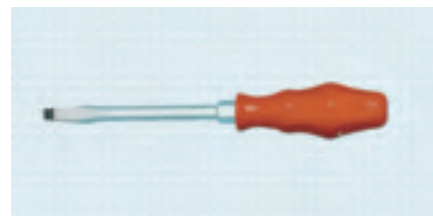
Article number	501T7=7.5X9XM5	501T7=7.5X11XM5
Material	Stainless steel	
Thread	M5	
Length	9 mm	11 mm



☛ Side bars must be ordered separately, see accessories.

710H7=* Screwdriver

Article number	710H7=3.5	710H7=4.5	710H7=5.5	710H7=7
Version	Hexagonal flange			
Material	CV steel, with plastic handle			
Blade width	3,5 mm	4,5 mm	5,5 mm	7 mm
Blade length	75 mm	90 mm	100 mm	125 mm



Article number	710H7=9	710H7=10	710H7=12
Version	Hexagonal flange		
Material	CV steel, with plastic handle		
Blade width	9 mm	10 mm	12 mm
Blade length	150 mm	175 mm	200 mm

710H8 Phillips screwdriver

Article number	710H8
Size	1
Version	short small shape, Phillips recess
Material	Vanadium-molybdenum steel, shiny nickel-plated
Blade length	25 mm
Total length	75 mm



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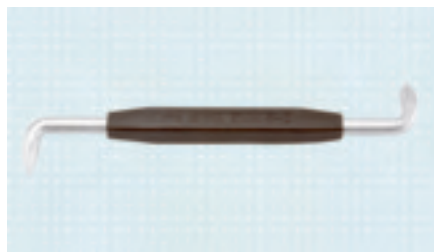
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710H9 Phillips angled screwdriver

Article number	710H9		
Size	1 and 2		
Version	Phillips recess		
Material	Vanadium-molybdenum steel, shiny nickel-plated, impact-resistant plastic handle		
Total length	100 mm		
Weight	0.025 kg		

2



710H5=* Phillips screwdriver

Article number	710H5=0	710H5=1	710H5=2
Size	0	1	2
Version	Phillips recess		
Material	CV steel, with plastic handle		
Blade length	60 mm	80 mm	100 mm

3



709Z5 Pin wrench

Article number	709Z5=7	709Z5=8
For binding head screws with two handles	501S34=M4 Two-hole screw	501S34=M6 Two-hole screw

4



709Z2 Pin wrench

Article number	709Z2
Version	Hardened tips, adjustment using conical screw
Material	Wooden handle
Length	220 mm
To be used for	Two-hole nuts

5



709Y8 Tip

Article number	709Y8
for	709Z2 adjustable pin wrench

6



709Z4 Pin wrench

Article number	709Z4
Version	forged, adjustable
Material	Wooden handle
Length	240 mm

7

718S2 Deburring knife

Article number	718S2
Version	Movable and replaceable blade, blade holder extends up to 100 mm
Material	Plastic magazine handle
To be used for	Plastic and metals



1

- Replacement blade:
718Y2 Replacement blades, 1 package = 10 pcs.

718Y2 Replacement blades

Article number	718Y2
for	718S2 Deburring knife
Package contents	10 pcs
Weight	0.015 kg
Scope of delivery	10 pcs



2

724S14 HSCO twist drill

Article number	724S14=3.0	724S14=3.3	724S14=4.0
Ø	3 mm	3.3 mm	4 mm



3

731B34 Taps

Article number	731B34=M4
for	Titanium material



4

726S9 Countersink

Article number	726S9=90X11.5
for	Titanium material



5

6

7



749F16=* Silicone sanding cones

Reference number	749F16=*		
Thread	5/8"	M16	1/2"-13
Weight	0.66 kg		
To be used for	for polishing and rounding edges of thermoplastic materials		
Scope of delivery	749F16= 5/8-1 Cone, tapered	749F16= M16-1 Cone, tapered	749F16= 1/2-1 Cone, tapered
	749F16= 5/8-2 Cone, tapered and pointed	749F16= M16-2 Cone, tapered and pointed	749F16= 1/2-2 Cone, tapered and pointed
	749F16= 5/8-3 Cone, round	749F16= M16-3 Cone, round	749F16= 1/2-3 Cone, round
	749F16= 5/8-4 Cone, round with grooves	749F16= M16-4 Cone, round with grooves	749F16= 1/2-4 Cone, round with grooves

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636W18 Special adhesive

For adhering metal to metal, wood to wood, e.g., for unilateral system bar

Article number	Net contents	Packaging format
636W18	0.1 kg	Tube



646F297=D

1

636W19 Hardener

For 636W18 special adhesive

Article number	Net contents	Packaging format
636W19	0.1 kg	Tube

	636W18 special adhesive 100	:	646W19 hardener 70
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2

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633G6 Special lubricant

Can be exposed to continuous temperatures ranging from -25 °C to +110 °C/-13 °F to +230 °F, cold and hot water, diluted alkalis and acids, for material combinations of metal/plastic, leather/plastic, plastic/plastic

Article number	Net contents	Packaging format
633G6	0.25 kg	Tube



4

633F14 Special lubricant

(Molycote paste DX, white)

for all accessible cogs and axles in system electric hands and system electric grippers

Article number	Net contents	Packaging format
633F14=0.050	0.05 kg	Tube
633F14=1	1 kg	Can



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637F1 Fluxing agent

For soldering with silver solder

Article number	Weight
637F1=0.100	0.1 kg
637F1=0.500	0.5 kg

2



Practical recommendation:

- If the paste is too thick for certain applications, it can be thinned with water.
- Flux residue can be removed with water or etching agent.

3



637L8 Silver solder

For soldering stainless steel, melting temperature 450 °C (842 °F)

Article number	Length
637L8=1.5X500	500 mm

4



637E1 Welding electrode

For welding stainless steel

Article number	Length
637E1=2X300	300 mm

5



618T40 Sintering powder

Melting temperature 105 – 108 °C (221 - 226 °F)

Article number	Net contents	Colour
618T40=H	4 kg	skin colour
618T40=W	4 kg	white
618T40=S	4 kg	black

6

- Other RAL colours are available upon request.
- Sintering devices are listed in the “Consulting, Planning and Equipping” catalogue (646K10=D).

7

618T60 Flame coating powder

For 746B1 flame coating spray gun

Article number	Net contents	Colour
618T60=1	1 kg	grey
618T60=3	1 kg	green
618T60=5	1 kg	blue
618T60=6	1 kg	white
618T60=7	1 kg	black
618T60=8	1 kg	brown



Other colours are available upon request.



Practical recommendation:

- Depending on the respective application, the recommended coating thickness is 0.3 – 1 mm.
- In order to achieve complete coverage of the surface to be coated, the powder should be applied in alternating horizontal and vertical layers, or in a rotational motion. If required, the plastic spray coat can be re-melted with a flame and compressed air – without the addition of further powder.

29C5 Setting nut

knurled

Article number	Thread	Length	Shoulder diameter	Head diameter	Material
29C5=M4X7X2.4	M4	2.4 mm	5.5 mm	7 mm	Stainless steel
29C5=M4X7	M4	3.6 mm	5.5 mm	7 mm	Stainless steel
29C5=M4X9	M4	3.6 mm	5.5 mm	9 mm	Stainless steel
29C5=M5X9	M5	3.6 mm	6.5 mm	9 mm	Stainless steel
29C5=M5X18	M5	3.6 mm	6.5 mm	18 mm	Stainless steel



29C4 Setting nut

With expanding slot, knurled

Article number	Thread	Length	Shoulder diameter	Head diameter
29C4	M4	4 mm	6 mm	7 mm



29C3 Setting nut/insert nut

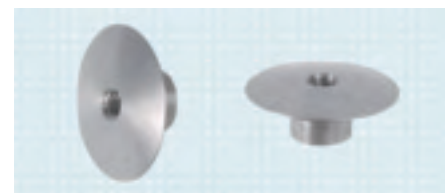
Insert nut

Article number	Thread	Length	Shoulder diameter	Head diameter	Material	Quantity unit
29C3=M4	M4	3.6 mm	5 mm	10 mm	Stainless steel	Piece



29C6 Setting nut

Article number	Thread	Length	Shoulder diameter	Head diameter	Material
29C6	M4	7.5 mm	6 mm	20 mm	Stainless steel



1



501T19 Phillips flat head screw

Article number	Thread	Length	Material
501T19=M4X6	M4	6 mm	Stainless steel
501T19=M4X8	M4	8 mm	Stainless steel
501T19=M4X9	M4	9 mm	Stainless steel
501T19=M4X10	M4	10 mm	Stainless steel
501T19=M4X12	M4	12 mm	Stainless steel
501T19=M4X16	M4	16 mm	Stainless steel
501T19=M4X20	M4	20 mm	Stainless steel

2

Article number	Thread	Length	Material
501T19=M5X6	M5	6 mm	Stainless steel
501T19=M5X8	M5	8 mm	Stainless steel
501T19=M5X10	M5	10 mm	Stainless steel
501T19=M5X12	M5	12 mm	Stainless steel
501T19=M5X18	M5	18 mm	Stainless steel

3



501T20 Phillips oval head screw

Article number	Thread	Length	Material
501T20=M3X6	M3	6 mm	Stainless steel

4

Article number	Thread	Length	Material
501T20=M4X5	M4	5 mm	Stainless steel
501T20=M4X6	M4	6 mm	Stainless steel
501T20=M4X8	M4	8 mm	Stainless steel
501T20=M4X10	M4	10 mm	Stainless steel
501T20=M4X12	M4	12 mm	Stainless steel

5

Article number	Thread	Length	Material
501T20=M5X8	M5	8 mm	Stainless steel
501T20=M5X10	M5	10 mm	Stainless steel

6



501Z13 Phillips head screw with collar

for attachment of 17K48

Article number	Thread	Length	Material	Quantity unit
501Z13=M4X4.5	M4	4.5 mm	Stainless steel	Piece
501Z13=M4X6	M4	6.0 mm	Stainless steel	Piece
501Z13=M4X8	M4	8 mm	Stainless steel	Piece
501Z13=M4X10	M4	10 mm	Stainless steel	Piece

7

501Z24 Flat head allen screw

Article number	Thread	Length	Material
501Z24=M4X4.5	M4	4.5 mm	Stainless steel
501Z24=M4X6	M4	6 mm	Stainless steel
501Z24=M4X8	M4	8 mm	Stainless steel
501Z24=M4X10	M4	10 mm	Stainless steel



1

29Y27 Phillips screw with plastic head

For belt attachments

Article number	Thread	Length	Colour
29Y27=M4X6-6	M4	6 mm	white
29Y27=M4X8-6	M4	8 mm	white
29Y27=M4X10-6	M4	10 mm	white
29Y27=M4X12-6	M4	12 mm	white
29Y27=M4X20-6	M4	20 mm	white
29Y27=M4X6-7	M4	6 mm	black
29Y27=M4X8-7	M4	8 mm	black
29Y27=M4X12-7	M4	12 mm	black
29Y27=M4X20-7	M4	20 mm	black



2

501S32 Slotted truss head screw

Article number	Thread	Length	Head Ø	Material	Quantity unit
501S32=M4X8X11.5	M4	11.5 mm	8 mm	Stainless steel	Piece
501S32=M4X10X9.5	M4	9.5 mm	10 mm	Stainless steel	Piece
501S32=M4X12X8	M4	8 mm	12 mm	Stainless steel	Piece



4

Article number	Thread	Length	Head Ø	Material	Quantity unit
501S32=M5X10X10	M5	10 mm	10 mm	Stainless steel	Piece
501S32=M5X12X9.5	M5	9.5 mm	12 mm	Stainless steel	Piece
501S32=M5X12X11	M5	11 mm	12 mm	Stainless steel	Piece
501S32=M5X12X13	M5	13 mm	12 mm	Stainless steel	Piece

5

Article number	Thread	Length	Head Ø	Material	Quantity unit
501S32=M6X14X7.5	M6	7.5 mm	14 mm	Stainless steel	Piece
501S32=M6X14X10	M6	10 mm	14 mm	Stainless steel	Piece
501S32=M6X14X12	M6	12 mm	14 mm	Stainless steel	Piece

6

7



17Y93 Bearing nut, hardened

1

Article number	Thread	Shoulder diameter	Insertion length	Shank length	Quantity unit
17Y93=6X4.75XM4	M4	6 mm	3.5 mm	4.75 mm	Piece
17Y93=6X5XM4	M4	6 mm	4.1 mm	5 mm	Piece
17Y93=6X5.2XM4	M4	6 mm	3.95 mm	5.2 mm	Piece
17Y93=6X6.7XM4	M4	6 mm	5.45 mm	6.7 mm	Piece
17Y93=6X7.2XM4	M4	6 mm	6 mm	7.2 mm	Piece
17Y93=6X7.7XM4	M4	6 mm	6.45 mm	7.7 mm	Piece
17Y93=6X9.15XM4	M4	6 mm	7.9 mm	9.15 mm	Piece
17Y93=6.5X4.75XM4	M4	6.5 mm	3.5 mm	4.75 mm	Piece
17Y93=6.5X6.7XM4	M4	6.5 mm	5.45 mm	6.7 mm	Piece
17Y93=6.5X7.7XM4	M4	6.5 mm	6.45 mm	7.7 mm	Piece
17Y93=6.5X9.15XM4	M4	6.5 mm	7.9 mm	9.15 mm	Piece
17Y93=7X4.75XM4	M4	7 mm	3.5 mm	4.75 mm	Piece
17Y93=7X6.7XM4	M4	7 mm	5.45 mm	6.7 mm	Piece

2

3

Article number	Thread	Shoulder diameter	Insertion length	Shank length	Quantity unit
17Y93=7X4.8XM5	M5	7 mm	3.55 mm	4.8 mm	Piece
17Y93=7X6.8XM5	M5	7 mm	5.55 mm	6.8 mm	Piece
17Y93=7X7XM5	M5	7 mm	5.5 mm	7 mm	Piece
17Y93=7X8.4XM5	M5	7 mm	7.2 mm	8.4 mm	Piece
17Y93=7X8.5XM5	M5	7 mm	7.6 mm	8.5 mm	Piece
17Y93=7.5X6.8XM5	M5	7.5 mm	5.55 mm	6.8 mm	Piece
17Y93=7.5X7XM5	M5	7.5 mm	5.55 mm	7 mm	Piece
17Y93=8X7.2XM5	M5	8 mm	6 mm	7.2 mm	Piece
17Y93=8X8.4XM5	M5	8 mm	7.2 mm	8.4 mm	Piece
17Y93=8X8.5XM5	M5	8 mm	7.4 mm	8.5 mm	Piece
17Y93=8X9XM5	M5	8 mm	7.6 mm	9 mm	Piece

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Article number	Thread	Shoulder diameter	Insertion length	Shank length	Quantity unit
17Y93=9X7.2XM6	M6	9 mm	6 mm	7.2 mm	Piece
17Y93=9X9.2XM6	M6	9 mm	8 mm	9.2 mm	Piece
17Y93=9.5X7.2XM6	M6	9.5 mm	6 mm	7.2 mm	Piece
17Y93=9.5X9.2XM6	M6	9.5 mm	8 mm	9.2 mm	Piece
17Y93=10X7.2XM6	M6	10 mm	6 mm	7.2 mm	Piece

6

7

21Y78 Hook-and-loop closure

With strap guide loop and bracket

Article number	Length	Width	Colour
21Y78=25-0	420 mm	25 mm	skin colour
21Y78=30-0	420 mm	30 mm	skin colour
21Y78=38-0	420 mm	38 mm	skin colour
21Y78=50-0	420 mm	50 mm	skin colour

Article number	Length	Width	Colour
21Y78=25-2	350 mm	25 mm	red
21Y78=30-2	350 mm	30 mm	red
21Y78=38-2	350 mm	38 mm	red
21Y78=50-2	350 mm	50 mm	red

Article number	Length	Width	Colour
21Y78=25-4	350 mm	25 mm	yellow
21Y78=30-4	350 mm	30 mm	yellow
21Y78=38-4	350 mm	38 mm	yellow
21Y78=50-4	350 mm	50 mm	yellow

Article number	Length	Width	Colour
21Y78=25-5	350 mm	25 mm	blue
21Y78=30-5	350 mm	30 mm	blue
21Y78=38-5	350 mm	38 mm	blue
21Y78=50-5	350 mm	50 mm	blue

Article number	Length	Width	Colour
21Y78=25-6	350 mm	25 mm	white
21Y78=30-6	350 mm	30 mm	white
21Y78=38-6	350 mm	38 mm	white
21Y78=50-6	350 mm	50 mm	white

Article number	Length	Width	Colour
21Y78=25-7	350 mm	25 mm	black
21Y78=30-7	350 mm	30 mm	black
21Y78=38-7	350 mm	38 mm	black
21Y78=50-7	350 mm	50 mm	black



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Practical recommendation:

Close before washing to protect the closure and/or other items in the wash.

1



623Z3 Hook-and-loop closure

With strap guide loop and clip, for 28U9 Lower Leg Orthoses

Article number	Size	Length	Width	Colour
623Z3=38X270	35-39	270 mm	38 mm	beige
623Z3=38X310	39-44	310 mm	38 mm	beige



2



Practical recommendation:

Close before washing to protect the closure and/or other items in the wash.

3



21Y122 Hook-and-loop closure

21Y122=50-7: both sides with hook strap and two strap guide loops

21Y122=38-7: with reinforced strap guide loop

Article number	Width	Colour
21Y122=50-7	50 mm	black
21Y122=38-7	38 mm	black



4



5



Practical recommendation:

Close before washing to protect the closure and/or other items in the wash.

6



514U2 Strap guide loop

Article number	Clear width	Material	Colour
514U2=20	20 mm	Plastic	white
514U2=25	25 mm	Plastic	white
514U2=30	30 mm	Plastic	white
514U2=38	38 mm	Plastic	white
514U2=50	50 mm	Plastic	white
514U2=38-7	38 mm	Plastic	black
514U2=50-7	50 mm	Plastic	black

7

21Y92 Roll loop

Article number	Clear width	Colour
21Y92=35	35 mm	white
21Y92=50	50 mm	white
21Y92=35-7	39 mm	black
21Y92=50-7	50 mm	black



1

623Z4 Micro hook-and-loop, self-adhesive

Article number	Width	Colour
623Z4=50-6	50 mm	white

• Please specify length when ordering.



2

3

623P5 Padding tape

For hook-and-loop closures, compatible with hook-and-loop

Article number	Length	Width	Colour
623P5=1	985 mm	65 mm	black
623P5=2	985 mm	55 mm	black



4

29S12 TR ring orthosis closure

Article number
29S12=1
29S12=2

5

616Z9 Shrinkable tubing

With rounded edges, e.g., for covering orthoses

Article number	Length	Colour	Quantity unit
616Z9=25.4X30	50 m	black	Piece
616Z9=19X61	50 m	black	Piece

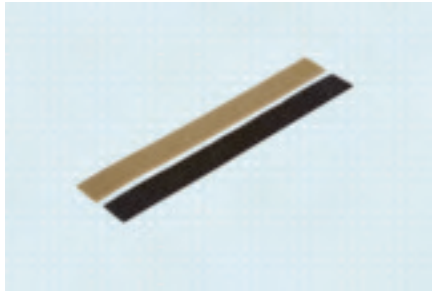


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Lybra® is a registered trademark of DuPont.

1



170Z4 Hook-and-loop strap

Made especially for FreeWalk orthosis

Article number	Length	Material	Colour	Quantity unit
170Z4=400-0	400 mm	Polyamide	skin colour	Piece
170Z4=400-7	400 mm	Polyamide	black	Piece
170Z4=600-0	600 mm	Polyamide	skin colour	Piece
170Z4=600-7	600 mm	Polyamide	black	Piece



2



Practical recommendation:

Close before washing to protect the closure and/or other items in the wash.

3



170D29 Y-Hook-and-Loop with PU coating

Article number	for	Width	Colour	Quantity unit
170D29=38-0	170K1=80/=120	38 mm	skin colour	Piece
170D29=38-7	170K1=80/=120	38 mm	black	Piece

4



Practical recommendation:

We recommend using micro hook-and-loop on velour and hook on loop.

5



170D17 Pad button

Article number	Thread	Quantity unit
170D17	4 mm	Piece

6



170D20 Strap guide loop for pad button

Article number	Colour	Quantity unit
170D20=0	skin colour	Piece
170D20=2	red	Piece
170D20=7	black	Piece

7

21B43 Tensioning clip

Article number	Length	Weight	Colour
21B43	5.6 cm	15 g	black
21B43=W	5.6 cm	15 g	white

• Please order 21B44 or 21B44=W strap along with the tensioning clip.



1

21B44 Strap, treated

For 21B43 tensioning clip

Article number	Length	Width	Colour	Order by
21B44	15.6 cm	1.5 cm	black	1 pc
21B44=W	15.6 cm	1.5 cm	white	1 pc



2

21B42 Strap

For 21B43 tensioning clip

Article number	Length	Width	Colour	Order by
21B42	17.5 cm	1.5 cm	black	1 pc
21B42=W	17.5 cm	1.5 cm	white	1 pc



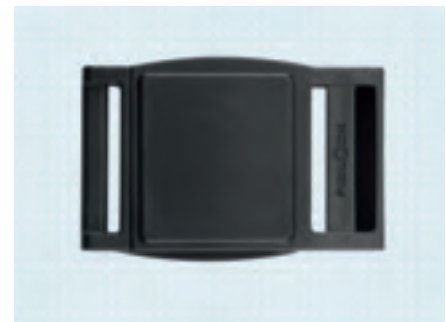
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514Z8 Safelock buckle

Magnetic closure that engages mechanically for use in orthosis fabrication

Article number	Length	Width	Height	Clear width	Colour	Order by	Quantity unit
514Z8=20-7	46 mm	22 mm	12 mm	20 mm	black	1 piece(s)	Piece
514Z8=30-7	62 mm	42 mm	10 mm	30 mm	black	1 piece(s)	Piece
514Z8=40-7	74 mm	48.8 mm	10 mm	40 mm	black	1 piece(s)	Piece



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514Z9 Safelock slider

Magnetic closure that engages mechanically for use in orthosis fabrication

Article number	Length	Width	Clear width	Colour	Order by	Quantity unit
514Z9=40-7	58 mm	47 mm	40 mm	black	1 piece(s)	Piece



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22K2 forearm crutches

With plastic grip and rubber capsule, height-adjustable in 25 mm increments, from 780 to 980 mm (floor to grip)

Article number	Colour	Quantity unit
22K2	silver anodised	Piece

Forearm crutch approved for integration of the E-MAG Control remote control

2



617R11 Thermopreregs PE/PP

Thermopreregs consist of thermoplastic material (PE or PP) with unidirectional continuous fibreglass threads (see illustration). The fibreglass rovings are blended into the cover layers of the profile and unevenly distributed along either side. The heat-weldable side contains a higher proportion of fibres than the opposite side to counteract distortion of the sheet material. This side can be easily recognised by its 2 mm edge radius and the "Ottobock" logo.

647H468

3

Application example



Prior to vacuum forming, pull stockinettes such as 81A1 nylon sock on a roll or 623T3 perlon stockinette over the plaster model. Cut 617R11=PE/PP Thermoprepreg and thermoplastic material to the required size and place into the pre-heated oven until appropriately heated for the vacuum forming process (e.g. ThermoLyn PP-H becomes transparent). Cut 617R11=PE/PP Thermoprepreg and thermoplastic material to the required size and place into the pre-heated oven until appropriately heated for the vacuum forming process (e.g. ThermoLyn PP-H becomes transparent). Cut 617R11=PE/PP thermoprepreg and thermoplastic material to the required size and place into the pre-heated oven until appropriately heated for the vacuum forming process (e.g., ThermoLyn PP-H becomes transparent).

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Remove the tailored thermoprepreg sheeting from the oven and place it on the model in the required position. While doing so, keep the oven door closed to prevent the tailored thermoplastic sheeting from cooling.

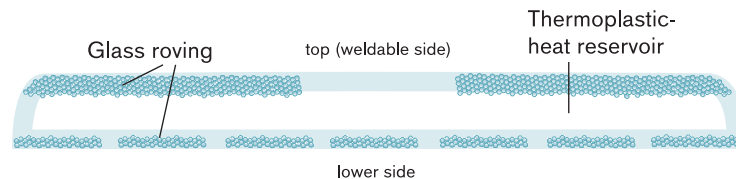
5



Immediately after shaping the thermoprepreg, vacuum form the thermoplastic sheeting over it.

6

Illustration showing cross section of the thermoplastic prepreg:



7

Article number	Length	Width	Order by
617R11=PE	1,200 mm	20 mm	Package of 3
617R11=PP	1,200 mm	20 mm	Package of 3

623P3 Terry cloth padding fabric

For padding in the field of orthotics

Upper material terry cloth, underside loop material

Compatible with hook-and-loop

Good padding characteristics

Comfortable to wear

Individual shaping possible



Article number	Length	Width	Thickness	Colour
623P3=1	1 m	1,460 mm	4 mm	blue
623P3=2	2 m	1,460 mm	4 mm	blue
623P3=5	5 m	1,460 mm	4 mm	blue
623P3=10	10 m	1,460 mm	4 mm	blue



Article number	Length	Width	Thickness	Colour
623P3=H1	1 m	1,460 mm	4 mm	skin colour
623P3=H2	2 m	1,460 mm	4 mm	skin colour
623P3=H5	5 m	1,460 mm	4 mm	skin colour
623P3=H10	10 m	1,460 mm	4 mm	skin colour



Article number	Length	Width	Thickness	Colour
623P3=S1	1 m	1,460 mm	4 mm	black
623P3=S2	2 m	1,460 mm	4 mm	black
623P3=S5	5 m	1,460 mm	4 mm	black
623P3=S10	10 m	1,460 mm	4 mm	black



646F295=D

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Practical recommendation:

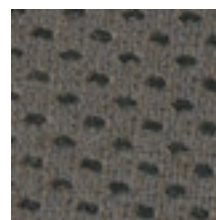
Can be combined with 623Z4 micro hook-and-loop. Apply 636W71 CP contact adhesive to the micro hook-and-loop and attach it to the surface to be padded.

623F62 ComforTex air

For soft inner sockets, density 0.20 g/cm³, hardness 40° Shore A, thermoformable between 120 to 170°C/248 to 338°F on a hotplate or in a convection oven, washable, skin-friendly

For manufacturing reasons, the plates can either be smooth on one side and rough on the other, or smooth on both sides.

Article number	Length	Width	Thickness	Colour
623F62=1-7	1 m	1,400 mm	4 mm	black
623F62=2-7	2 m	1,400 mm	4 mm	black
623F62=5-7	5 m	1,400 mm	4 mm	black



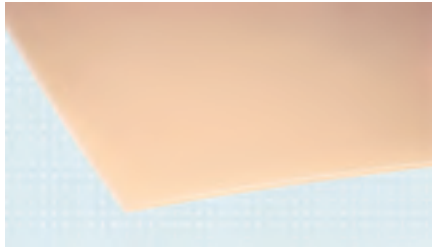
646F295=D



Practical recommendation:

Can be combined with 623Z4 and 623Z163 micro hook-and-loop. Apply 636W71 CP contact adhesive to the micro hook-and-loop and fasten it to the surface to be padded.

1



616T73 ThermoLyn Pedilon

Low-temperature polyester, can be stretched when heated, heat to 60°C/140°F in water bath.

Thanks to ThermoLyn Pedilon's low forming temperature of 60°C/140°F, it can be moulded directly on the patient's body. This eliminates the need for fabricating casts or models, a time-consuming process. This sheet material is especially well suited to clinical use where the patient must be treated immediately.

 646F265=D

 646D300=D

2

Application example



Place the pre-cut ThermoLyn Pedilon into warm water at approximately 60°C/140°F in the 759P1=220 water pan. The material becomes transparent when it reaches its moulding temperature. Remove the pre-cut material with a wooden spatula and allow the water to drip off.

3



Moisten hand and forearm well with cold water. Place the warm ThermoLyn Pedilon over the hand and forearm.

4



Final product: hand positioning orthosis

5



Article number	Length	Width	Thickness
616T73=NPX60X43X2	60 cm	43 cm	2 mm
616T73=NPX90X60X3.2	90 cm	60 cm	3.2 mm
616T73=NPX90X60X4	90 cm	60 cm	4 mm
616T73=FPX60X43X1.6	60 cm	43 cm	1.6 mm
616T73=FPX60X43X2	60 cm	43 cm	2 mm
616T73=MPX60X43X2	60 cm	43 cm	2 mm
616T73=MPX60X45X2.5	60 cm	45 cm	2.5 mm
616T73=MPX60X45X3.2	60 cm	45 cm	3.2 mm
616T73=GPX60X43X2	60 cm	43 cm	2 mm
616T73=GPX60X45X3.2	60 cm	45 cm	3.2 mm
616T73=GPX90X60X4	90 cm	60 cm	4 mm

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7

616T3 ThermoLyn trolene

Flexible polyethylene, opaque, processing temperature 125°C/257°F for hotplates, convection ovens and infrared ovens.

Polyethylene sheet, used as exterior mould.

Article number	Length	Width	Thickness	Colour
616T3=1	1,000 mm	500 mm	1 mm	natural colour
616T3=2	1,000 mm	500 mm	2 mm	natural colour
616T3=2000X1000X2	2,000 mm	1,000 mm	2 mm	natural colour
616T3=2000X1000X3	2,000 mm	1,000 mm	3 mm	natural colour
616T3=40X32X2	40 mm	32 mm	2 mm	natural colour



646F265=EN

646D300=GB



Practical recommendation:

Can also be used as a dummy material, e.g. with lamination technique.

616T120 ThermoLyn PP-C Silvershield®

The new 616T120 ThermoLyn polypropylene copolymer is a thermoplastic sheet material that uses copolymerisation to combine the benefits of polypropylene and the toughness of polyethylene. The polypropylene copolymer (PP-C) obtained in this way shows considerably increased impact strength in comparison with a homopolymer polypropylene (PP-H), especially at low temperatures.

Article number	Length	Width	Thickness	Colour
616T120=2	2,000 mm	1,000 mm	2 mm	natural colour
616T120=3	2,000 mm	1,000 mm	3 mm	natural colour
616T120=4	2,000 mm	1,000 mm	4 mm	natural colour
616T120=5	2,000 mm	1,000 mm	5 mm	natural colour
616T120=6	2,000 mm	1,000 mm	6 mm	natural colour



646F265=GB
646S1=14.06D

646D300=GB

SilverShield® is a registered trademark of North Sea Plastics.

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646F265=GB

646D300=GB
646D119=GB

616T20 ThermoLyn PP-H

Processing temperature 215°C/419°F (heating plate), 185°C/365°F (convection oven), 185°C/365°F (infrared oven)



Article number	Length	Width	Thickness	Colour
616T20=400X400X10	400 mm	400 mm	10 mm	natural colour
616T20=400X400X12	400 mm	400 mm	12 mm	natural colour
616T20=400X400X15	400 mm	400 mm	15 mm	natural colour
616T20=2000X2	2,000 mm	1,000 mm	2 mm	natural colour
616T20=2000X3	2,000 mm	1,000 mm	3 mm	natural colour
616T20=2000X4	2,000 mm	1,000 mm	4 mm	natural colour
616T20=2000X5	2,000 mm	1,000 mm	5 mm	natural colour
616T20=2000X6	2,000 mm	1,000 mm	6 mm	natural colour
616T20=2000X8	2,000 mm	1,000 mm	8 mm	natural colour
616T20=2000X10	2,000 mm	1,000 mm	10 mm	natural colour
616T20=2000X12	2,000 mm	1,000 mm	12 mm	natural colour
616T20=2000X15	2,000 mm	1,000 mm	15 mm	natural colour

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Practical recommendation:

The low impact value means great care must be taken during machining in order to avoid brittle fractures (stress concentration).

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646F265=D

646D695=DE
646D119=D
646D300=D

616T420 Antibacterial ThermoLyn PP-H



Article number	Length	Width	Thickness	Colour
616T420=2	2,000 mm	1,000 mm	2 mm	natural colour
616T420=3	2,000 mm	1,000 mm	3 mm	natural colour
616T420=4	2,000 mm	1,000 mm	4 mm	natural colour
616T420=5	2,000 mm	5 mm	5 mm	natural colour
616T420=6	2,000 mm	6 mm	6 mm	natural colour
616T420=8	2,000 mm	1,000 mm	8 mm	natural colour
616T420=10	2,000 mm	1,000 mm	10 mm	natural colour
616T420=12	2,000 mm	1,000 mm	12 mm	natural colour
616T420=15	2,000 mm	1,000 mm	15 mm	natural colour

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Practical recommendation:

The low impact value means great care must be taken during machining in order to avoid brittle fractures (stress concentration).

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ThermoLyn PE 200

Hard polyethylene with low shrinkage, processing temperature 180°C/356°F (heating plate), 165°C/329°F (convection oven), 165°C/329°F (infrared oven)



Article number	Length	Width	Thickness	Colour
616T19=2-0	2,000 mm	1,000 mm	2 mm	skin colour
616T19=3-0	2,000 mm	1,000 mm	3 mm	skin colour
616T19=4-0	2,000 mm	1,000 mm	4 mm	skin colour
616T19=5-0	2,000 mm	1,000 mm	5 mm	skin colour
616T19=6-0	2,000 mm	1,000 mm	6 mm	skin colour



Article number	Length	Width	Thickness	Colour
616T58=3	2,000 mm	1,000 mm	3 mm	blue
616T58=4	2,000 mm	1,000 mm	4 mm	blue
616T58=5	2,000 mm	1,000 mm	5 mm	blue
616T58=6	2,000 mm	1,000 mm	6 mm	blue



Article number	Length	Width	Thickness	Colour
616T60=3	2,000 mm	1,000 mm	3 mm	red
616T60=4	2,000 mm	1,000 mm	4 mm	red
616T60=5	2,000 mm	1,000 mm	5 mm	red
616T60=6	2,000 mm	1,000 mm	6 mm	red



Article number	Length	Width	Thickness	Colour
616T61=3	2,000 mm	1,000 mm	3 mm	yellow
616T61=4	2,000 mm	1,000 mm	4 mm	yellow
616T61=5	2,000 mm	1,000 mm	5 mm	yellow
616T61=6	2,000 mm	1,000 mm	6 mm	yellow



Article number	Length	Width	Thickness	Colour
616T95=2	2,000 mm	1,000 mm	2 mm	natural colour
616T95=3	2,000 mm	1,000 mm	3 mm	natural colour
616T95=4	2,000 mm	1,000 mm	4 mm	natural colour
616T95=5	2,000 mm	1,000 mm	5 mm	natural colour
616T95=6	2,000 mm	1,000 mm	6 mm	natural colour
616T95=8	2,000 mm	1,000 mm	8 mm	natural colour
616T95=10	2,000 mm	1,000 mm	10 mm	natural colour
616T95=12	2,000 mm	1,000 mm	12 mm	natural colour



646F265=GB

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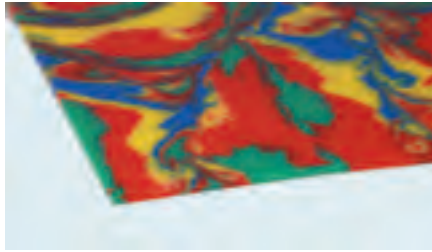
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Plastazote® is a registered trademark of Zotefoams.



646F265=EN 646D300=GB

ThermoLyn RCH 500

Homogenous thermoplastic material with high level of stiffness, processing temperature 195°C/383 °F (hotplate), 185°C/365°F (convection oven), 185°C/365°F (infrared oven), special dimensions and/or other thicknesses available on request.

Order example

Reference number = Length x Thickness Colour

616T22 = 950 x 1 N

	Reference number	616T22	616T22
	Length	950 mm	1,910 mm
	Width	910 mm	910 mm
	Thickness	1 mm, 2 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm	1 mm, 2 mm, 3 mm, 4 mm, 5 mm, 6 mm, 7 mm, 8 mm, 10 mm
	Colour	natural colour (N)	natural colour (N)

	Reference number	616T22	616T22
	Length	950 mm	1,910 mm
	Width	910 mm	910 mm
	Thickness	2 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm	2 mm, 3 mm, 4 mm, 5 mm, 7 mm
	Colour	skin colour (H)	skin colour (H)

	Reference number	616T22	
	Length	1,910 mm	
	Width	910 mm	
	Thickness	3 mm, 4 mm, 5 mm	
	Colour	graffiti (G)	

Order example

Reference number = Length x Thickness

616T43 = 950 x 2

	Reference number	616T43
	Length	950 mm, 1,910 mm
	Width	910 mm
	Thickness	2 mm, 3 mm, 4 mm, 5 mm, 6 mm
	Colour	red

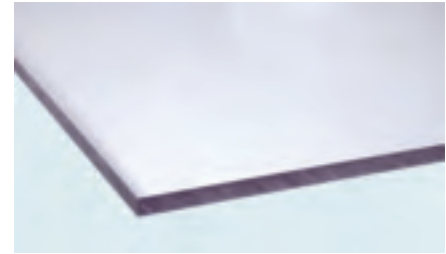
	Reference number	616T44
	Length	950 mm, 1,910 mm
	Width	910 mm
	Thickness	2 mm, 3 mm, 4 mm, 5 mm, 6 mm, 8 mm, 10 mm
	Colour	blue

◦ Special dimensions and/or other thicknesses are available upon request!

616T83 ThermoLyn clear

The processing temperature for heating plates, convection and infrared ovens is 165 °C/329 °F. The transparency of the check socket made of ThermoLyn clear facilitates precise verification of the fit and skin discolouration on the residual limb. By warming the socket, it is possible to reform the thermoplastic at, for example, pressure points.

Article number	Length	Width	Thickness	Colour
616T83=8	400 mm	400 mm	8 mm	clear
616T83=10	400 mm	400 mm	10 mm	clear
616T83=12	400 mm	400 mm	12 mm	clear
616T83=15	400 mm	400 mm	15 mm	clear
616T83=20	400 mm	400 mm <td 20 mm	clear	
616T83=1250X1025X3	1,250 mm	1,025 mm	3 mm	clear
616T83=1250X1025X4	1,250 mm	1,025 mm	4 mm	clear
616T83=1250X1025X6	1,250 mm	1,025 mm	6 mm	clear



646F265=D

646D300=D
646D119=D
646D695=DE

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Practical recommendation:

For working on edges we recommend hot air or 634A80 SuperSkin cleaning agent.

519L5 Silicone parting agent

CFC-free, compact and solvent-free, for parting, gliding and lubricating, protects rubber, plastic and elastomers from becoming brittle

Article number	Net contents
519L5	0.4 l



Danger

Elastic plaster bandages

Article number	Length	Width	Order by
699G1=8	2 m	8 cm	Package of 10
699G1=10	2 m	10 cm	Package of 10
699G1=12	2 m	12 cm	Package of 10
699G1=15	2 m	15 cm	Package of 10
699G1=24	2 m	24 cm	Package of 10
699G1=35	2 m	35 cm	Package of 10



646A230=GB

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699G3 Cellona® plaster bandages

Article number	Length	Width	Order by
699G3=6	2 m	6 cm	Package of 10
699G3=8	2 m	8 cm	Package of 10
699G3=10	2 m	10 cm	Package of 10
699G3=12	2 m	12 cm	Package of 10
699G3=15	2 m	15 cm	Package of 10
699G3=20	2 m	20 cm	Package of 10

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Cellona® is a registered trademark of Lohmann.

699G30 Cellacast Xtra® synthetic rigid bandages

Synthetic bandage material for exceptionally lightweight support with high strength. Used for immobilisation after fractures, operations and orthopaedic corrections; for treatment of joint and bone disorders; ideal for promoting mobilisation and for bandaging child patients. The synthetic bandage material is an alternative to conventional plaster impressions. This material is also used for temporary fixation of prosthetics (socket protection). Cellacast Xtra® casting tapes are lightweight, air permeable, X-ray transparent, and waterproof once hardened.



Article number	Length	Width	Colour	Order by
699G30=5-3	3.6 m	5 cm	green	Package of 10
699G30=7.5-3	3.6 m	7.5 cm	green	Package of 10
699G30=10-3	3.6 m	10 cm	green	Package of 10
699G30=12.5-3	3.6 m	12.5 cm	green	Package of 10

Article number	Length	Width	Colour	Order by
699G30=5-4	3.6 m	5 cm	yellow	Package of 10
699G30=7.5-4	3.6 m	7.5 cm	yellow	Package of 10
699G30=10-4	3.6 m	10 cm	yellow	Package of 10
699G30=12.5-4	3.6 m	12.5 cm	yellow	Package of 10

Article number	Length	Width	Colour	Order by
699G30=5-5	3.6 m	5 cm	blue	Package of 10
699G30=7.5-5	3.6 m	7.5 cm	blue	Package of 10
699G30=10-5	3.6 m	10 cm	blue	Package of 10
699G30=12.5-5	3.6 m	12.5 cm	blue	Package of 10

Article number	Length	Width	Colour	Order by
699G30=5-9	3.6 m	5 cm	cream	Package of 10
699G30=7.5-9	3.6 m	7.5 cm	cream	Package of 10
699G30=10-9	3.6 m	10 cm	cream	Package of 10
699G30=12.5-9	3.6 m	12.5 cm	cream	Package of 10

Article number	Length	Width	Colour	Order by
699G30=5-13	3.6 m	5 cm	orange	Package of 10
699G30=7.5-13	3.6 m	7.5 cm	orange	Package of 10
699G30=10-13	3.6 m	10 cm	orange	Package of 10
699G30=12.5-13	3.6 m	12.5 cm	orange	Package of 10



Practical recommendation:

- For processing, we recommend using 641H9=2 latex-free examination gloves.
- To prevent the bandage from sticking to the skin, cover all surfaces that will come in contact with the bandage with a body protection stockinette (e.g., 81A1 nylon sock-on-a-roll) before applying the bandage.

Cellacast Xtra® is a registered trademark of Lohmann.

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617H19 Orthocryl lamination resin 80:20

For stiff laminate

Article number	Net contents
617H19=0.900	0.9 kg
617H19=4.600	4.6 kg
617H19=25	25 kg

	Resin	:	hardener	:	colour paste
	100		2-3		3

2



 646F351=EN

• 642K13 filling set is available for containers of 25 kg and over.

3



Practical recommendation:

For sheet casting, use only 616F4 PVA film or 99B81 PVA bags.

642K13 filling set is available for containers of 25 kg and over.

In order to ensure that all air bubbles are eliminated from the reinforcement, please observe the following:


- Make sure that the plaster model is under a constant vacuum from the outset.
- Cast the resin all at once, and not gradually, which is done with conventional resins.

4




617H119 Orthocryl lamination resin 80:20 pro

Article number	Net contents
617H119=0.900	0.9 kg
617H119=4.600	4.6 kg
617H119=25	25 kg

	Resin	:	hardener	:	colour paste
	100		2-3		3

5



 646D718=DE
646F351=EN

• 642K13 filling set is available for containers of 25 kg and over.

6



Practical recommendation:

For sheet casting, use only 616F4 PVA film or 99B81 PVA bags.

642K13 filling set is available for containers of 25 kg and over.

In order to ensure that all air bubbles are eliminated from the reinforcement, the following has to be observed:


- Make sure that the plaster model is under a constant vacuum from the outset.
- Cast the resin all at once, and not gradually, which is done with conventional resins.

7

617H55 C-Orthocryl

Lamination resin for carbon fibre technique
Tip for use: cast carbon on carbon


Article number	Net contents
617H55=0.900	0.9 kg
617H55=4.600	4.6 kg
617H55=25	25 kg

	Resin	:	hardener	:	colour paste
	100		2-3		3

642K13 filling set is available for containers of 25 kg and over.



 646F351=EN

 646D119=EN
646D695=EN

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Practical recommendation:

- Casting carbon on carbon, no filter layers are required.
- For sheet casting, use only 616F4 PVA film or 99B81 PVA bags.

634A28 Thinner for Orthocryl resins

For thinning Orthocryl resins

Article number	Net contents
634A28	0.8 kg

642K13 filling set is available for containers of 25 kg and over.



617P37 Hardening powder

For Orthocryl resins, with 1 g measuring spoon

Article number	Net contents
617P37=0.030	0.03 kg
617P37=0.150	0.15 kg



Practical recommendation:

Applies to all Orthocryl resins: add max. 3% 617P37 hardening powder.

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617Z2 Pigment paste

For lamination resins

Article number	Net contents	Colour	Packaging format
617Z2=0.180	0.18 kg	light skin colour	Tube
617Z2=1	1 kg	light skin colour	Can

2



Attention

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Pigment pastes

For lamination resins

Article number	Net contents	Colour
617Z3	0.25 kg	tan skin colour
617Z4	0.25 kg	white
617Z5	0.25 kg	yellow
617Z6	0.2 kg	red
617Z7	0.25 kg	blue
617Z9	0.25 kg	black



Attention

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Practical recommendation:

Mix resin colour paste and lamination resin well. Once mixing is complete, add hardener.

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642B2 Measuring cup

With scale

Article number	Order by
642B2=50	100 piece(s)
642B2=100	100 piece(s)
642B2=200	100 piece(s)
642B2=400	100 piece(s)
642B2=1000	100 piece(s)

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Practical recommendation:

- Since foams and hardeners have different densities, a precise 1 to 1 mixing ratio is required. We recommend using a measuring cup to ensure this mixing ratio.
- Add slightly more than the required amount of liquid foam, since a small amount often remains in the measuring cup.

7

99B81 PVA bags

For working with Orthocryl and polyester lamination resins
10 per package

Article number	Length	Width	Thickness	Order by
99B81=60X11X4	60 cm	11 cm	0.08 mm	10 piece(s)
99B81=70X19X5	70 cm	19 cm	0.08 mm	10 piece(s)
99B81=70X27X5	70 cm	27 cm	0.08 mm	10 piece(s)
99B81=100X19X5	100 cm	19 cm	0.08 mm	10 piece(s)
99B81=100X26X5	100 cm	26 cm	0.08 mm	10 piece(s)
99B81=100X30X5	100 cm	30 cm	0.08 mm	10 piece(s)
99B81=100X36X5	100 cm	36 cm	0.08 mm	10 piece(s)
99B81=120X50X10	120 cm	50 cm	0.08 mm	10 piece(s)
99B81=130X19X5	130 cm	19 cm	0.08 mm	10 piece(s)
99B81=130X22X5	130 cm	22 cm	0.08 mm	10 piece(s)
99B81=130X26X5	130 cm	26 cm	0.08 mm	10 piece(s)



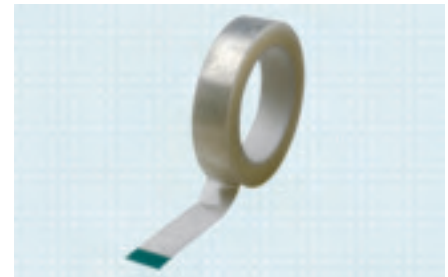
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627B40 Polyethylene adhesive tape

For sealing damaged PVA sheeting

Article number	Length	Width	Colour	Order by
627B40	33 m	25 mm	transparent	1 roll



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636K8 Plastaband

Plastic tape for sealing, filling and protection during work with lamination resin, e.g., for orthotic joints

Article number	Length	Width	Thickness	Colour
636K8=20X2X10	10 m	20 mm	2 mm	grey



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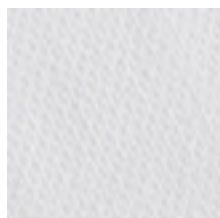


623T3 Nylon stockinette, white

For lamination resin reinforcements

Article number	Length	Width	Weight
623T3=4	45.4 m	4 cm	0.5 kg
623T3=6	27.7 m	6 cm	0.5 kg
623T3=8	20.8 m	8 cm	0.5 kg
623T3=10	37 m	10 cm	1 kg
623T3=12	33.3 m	12 cm	1 kg
623T3=15	27 m	15 cm	1 kg
623T3=20	20 m	20 cm	1 kg
623T3=25	13.5 m	25 cm	1 kg
623T3=30	11.1 m	30 cm	1 kg
623T3=40	8.8 m	40 cm	1 kg

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623T9 Nylglas stockinette, white

Blend of nylon and fibreglass, for lamination resin reinforcements

Article number	Length	Width	Weight
623T9=4	36.4 m	4 cm	0.5 kg
623T9=6	31.2 m	6 cm	0.5 kg
623T9=8	35.7 m	8 cm	1 kg
623T9=10	32.2 m	10 cm	1 kg
623T9=12	26.3 m	12 cm	1 kg
623T9=15	23.8 m	15 cm	1 kg
623T9=20	18 m	20 cm	1 kg
623T9=25	15.2 m	25 cm	1 kg
623T9=30	11.6 m	30 cm	1 kg

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81A1 Nylon sock

Article number	Length	Width	Weight
81A1=8	101.5 m	8 cm	1 kg
81A1=10	84.6 m	10 cm	1 kg
81A1=12	67.8 m	12 cm	1 kg
81A1=15	52.5 m	15 cm	1 kg
81A1=20	48 m	20 cm	1 kg

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All Ottobock reinforcement materials are photographed from top to bottom. Lengthwise (warp), crosswise (weft)

616G15 Braided carbon fiber stockinette

For fabricating stiff lamination resin side struts, clasps and connectors; offers good torsional capabilities in many widths

Article number	Length	Width
616G15=20X5	5 m	20 mm
616G15=20X10	10 m	20 mm
616G15=20X25	25 m	20 mm
616G15=20X50	50 m	20 mm
616G15=50X5	5 m	50 mm
616G15=50X10	10 m	50 mm
616G15=50X25	25 m	50 mm
616G15=50X50	50 m	50 mm
616G15=80X5	5 m	80 mm
616G15=80X10	10 m	80 mm
616G15=80X25	25 m	80 mm
616G15=80X50	50 m	80 mm
616G15=120X5	5 m	120 mm
616G15=120X10	10 m	120 mm
616G15=120X25	25 m	120 mm
616G15=120X50	50 m	120 mm



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Practical recommendation:

Facilitates excellent sandwich properties in conjunction with 17Y106 PVC profile as the core material, especially in prosthetics.

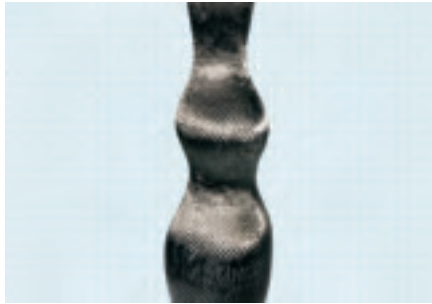
17Y106 PVC profile bars

Article number	Length	Width	Material	Quantity unit
17Y106=500X16	500 mm	16 mm	PVC profile material	Piece
17Y106=500X20	500 mm	20 mm	PVC profile material	Piece
17Y106=1000X16	1,000 mm	16 mm	PVC profile material	Piece
17Y106=1000X20	1,000 mm	20 mm	PVC profile material	Piece



All Ottobock reinforcement materials are photographed from top to bottom. Lengthwise (warp), crosswise (weft)

1



616G2 Carbon fiber unidirectional stockinette

For axial reinforcement (bending forces) of thin-walled, high-strength resin laminates. The circular woven carbon fiber unidirectional stockinette contains an elastic weft thread, allowing the carbon threads to keep a 0° orientation independently of their diameter.

These carbon fiber unidirectional stockinette were designed specifically for use with acrylic resins (e.g. 617H55 C-Orthocryl).

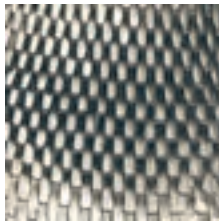
The advantage of the Carbon fiber unidirectional stockinette is that, for shaped models, cutting or forming is not needed to the extent it is needed with other types of carbon fibre cloth. Thanks to the elastic weft thread, the carbon fiber unidirectional stockinette adapts to the model. This can help save a lot of valuable working time during the fabrication of resin laminates.


Note: if the resin laminate is to have radial strength (torsional forces), additional reinforcement materials are required. In this case we recommend using our 616G15 carbon fibre stockinette.

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 646S1=23.04

Article number	Length	Width
616G2=20X5	5 m	20 mm
616G2=40X5	5 m	40 mm
616G2=70X5	5 m	70 mm
616G2=100X5	5 m	100 mm
616G2=150X5	5 m	150 mm

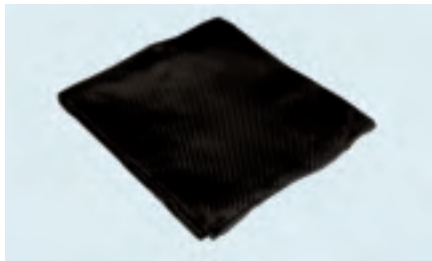
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Practical recommendation:

If the laminate is to have radial strength (torsional forces), additional reinforcement materials are required. In this case we recommend using our 616G15 carbon fibre stockinette.

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616G12 Bi-directional carbon fiber

For partial high-strength laminate reinforcements

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 647G51

Article number	Length	Width
616G12=1	1 m	1,200 mm
616G12=2	2 m	1,200 mm
616G12=5	5 m	1,200 mm
616G12=10	10 m	1,200 mm
616G12=20	20 m	1,200 mm
616G12=30	30 m	1,200 mm

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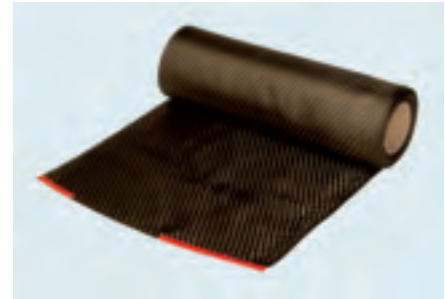
All Ottobock reinforcement materials are photographed from top to bottom. Lengthwise (warp), crosswise (weft)

616B17 Carbon fibre mesh

For partial high-strength laminate reinforcements in lower limb prostheses as well as in orthoses.

Work that involves the fabric edge (which is not sewn) is also easier, because the edge does not need to be glued down.

Article number	Length	Width
616B17=50X1	1 m	50 mm
616B17=50X5	5 m	50 mm
616B17=50X10	10 m	50 mm
616B17=100X1	1 m	100 mm
616B17=100X5	5 m	100 mm
616B17=100X10	10 m	100 mm
616B17=300X1	1 m	300 mm
616B17=300X5	5 m	300 mm
616B17=300X10	10 m	300 mm



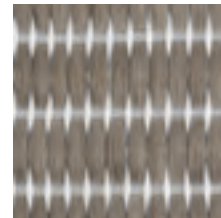
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616B2 Carbon-fibreglass webbing

Unidirectional, easy to shape, drapable

Article number	Length	Width
616B2=25X5	5 m	25 mm
616B2=25X10	10 m	25 mm
616B2=25X20	20 m	25 mm
616B2=25X50	50 m	25 mm
616B2=50X5	5 m	50 mm
616B2=50X10	10 m	50 mm
616B2=50X20	20 m	50 mm
616B2=50X50	50 m	50 mm



3

4

5

6

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All Ottobock reinforcement materials are photographed from top to bottom. Lengthwise (warp), crosswise (weft)

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