## ottobock.

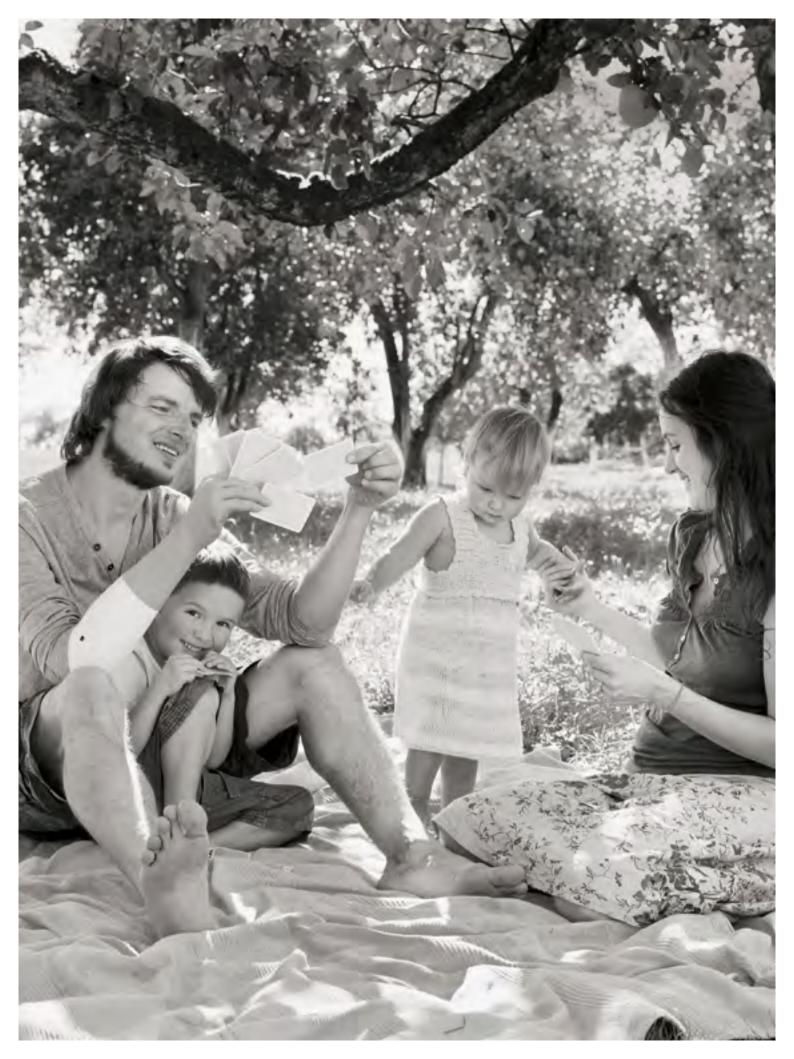
## Prosthetics 2017/2018

**Upper Limb** 









## Table of contents

1	Always at your service			Axon-Bus prostnetic system	
	Explanation of symbols and hazardous			accessories   rotation	
	substances	6		Axon-Bus elbow components	
	Substances			Axon-Bus battery management	
				Axon-Bus control elements	
2	MyoBock prosthetic solutions			Axon-Bus software	117
	for children			Tools for installation of the Axon-Bus	
				prosthetic system	118
	Overview of the MyoBock children's system				
	Terminal device		5	Body-Powered – exoskeletal	
	Prosthetic gloves		)		
	Accessories			Overview of active mechanical arm components	
	Lamination ring and accessories			Passive terminal devices	
	4in1 Controller and accessories			Terminal devices	
	Batteries and accessories			Spare parts and accessories	
	7in1 Controller and accessories			Prosthetic gloves	
	Elbow components			Cable-activated hook and accessories	133
	Accessories			Cable-activated hook for adults	
	Electrodes			with accessories	
	Accessories			Terminal devices	
	Tools for the children's system.	30		Robo-Wrist and accessories	
				MovoWrist-Flex and accessories	
3	MyoBock prosthetic solutions			Wrist joints and accessories	
ן ע				Elbow components and accessories	
	bebionic			Liners and accessories	158
	MyoBock adult system overview			Above- and below-elbow harnesses	
	Myo terminal device			with accessories	161
	MyoHand VariPlus Speed control programmes				
	Myo terminal device		6	Body-Powered – modular	
	SensorHand Speed control programmes		O	-	
	Myo terminal device	51		Overview of passive mechanical	
	Spare parts and accessories			arm components	
	for system electric hands			Terminal device and accessories	
	Myo prosthetic gloves			Prosthetic gloves	
	Accessories for Myo prosthetic gloves			Adapter	
	Myo Greifer			Terminal device and colour determination	
	Myo wrist joints and accessories			Physolino baby hand	
	Elbow components			Physolino baby hand and accessories	
	DynamicArm control programmes			Passive prosthetic hands for children	
	Elbow components			Passive prosthetic hands for women	
	ErgoArm Electronic plus switching modes			Passive prosthetic hands for men	
	Elbow components			Modular arm components	
	Shoulder joints			Shoulder joints and accessories	
	Electrodes			Elbow joint bars	
	Accessories for electrodes			Liners and accessories	
	Batteries and battery chargers with accessories			Body harnesses and accessories	225
	Cables and accessories				
	Control elements		7	Workshop equipment	
	Accessories		, ,	Special tools	238
	Myo software			Auxiliary materials	
	Myo service parts	. 100		number of the second se	473
/ <sub>1</sub>	Avon Rue proethatic avetam		Ind	lex	
4	Axon-Bus prosthetic system			Index	250
	Axon-Bus terminal devices			Article number index	
	Axon-Bus prosthetic gloves			Article Hulliber Hidex	434
	Axon-Bus prosthetic system accessories	110			





# 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 on every aspect of our products. For complex enquiries, our product experts and specialists in fabrication are there 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 and marketing concepts.

Visit www.ottobock.com to obtain up-to-date product information at any time.

How to reach us – Monday through Friday, 8 am to 5 pm T +49 5527 848-8-1706 export@ottobock.de

## Explanation of symbols and hazardous substances

i	Information sheet, poster
(II	Information material
	Instructions for processing or use
® TM	Products with these symbols are registered trademarks in their respective countries.
Q	Miniaturisation
⊕ੑ	Enlargement
4	Mixing ratio
A B	Two components: A-component, B-component
Z	Self-adhesive
<b>₽</b> º	Adhesive on both sides
40	Washable at 40 °C, gentle cycle
60	Washable at 60 °C
<b>₩</b>	Knowledge and application

×	Xi=Irritant
×	Xn=Hazardous to health
<b>&amp;</b> °	O=Oxidising
	F=Highly flammable
	F+=Extremely flammable
*	N=Environmentally hazardous
	C=Corrosive
	T=Toxic
***************************************	

<sup>\*</sup> 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.

## Explanation of symbols and hazardous substances

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

	Hazard classes	Hazard categories
<b>&amp;</b>	Inflammable gases Inflammable aerosols Inflammable liquids Inflammable solids Self-decomposing substances and mixtures Pyrophoric liquids	1 1, 2 1, 2, 3 1, 2 Types B, C, D, E, F
	Pyrophoric solids Substances and mixtures capable of self-heating Substances and mixtures that release inflammable gases upon contact with water	1 1, 2 1, 2, 3 Types B, C, D, E, F
	Organic peroxides	
<b>©</b>	Oxidising gases Oxidising liquids Oxidising solids	1 1, 2, 3 1, 2, 3
	Corrosive effect on metal Caustic Severe eye damage	1 1A, 1B, 1C 1
<b>&gt;</b>	Acute toxicity (oral, dermal, inhalative)	1, 2, 3
<b>(</b> )	Acute toxicity (oral, dermal, inhalative) Skin irritation Eye irritation Skin sensitisation Specific target organ toxicity (one-time exposure) Respiratory system irritation Anaesthetic effects	4 2 2 1 3
<b>\$</b>	Respiratory tract sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (one-time exposure) Specific target organ toxicity (repeated exposure) Aspiration hazard	1 1A, 1B, 2 1A, 1B, 2 1A, 1B, 2 1, 2 1, 2 1, 2
<b>\$</b>	Hazardous to water  – Acutely hazardous to water  – Chronically hazardous to water	1 1, 2

<sup>\*</sup> 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.





# MyoBock prostheses for children

#### Exploring the world

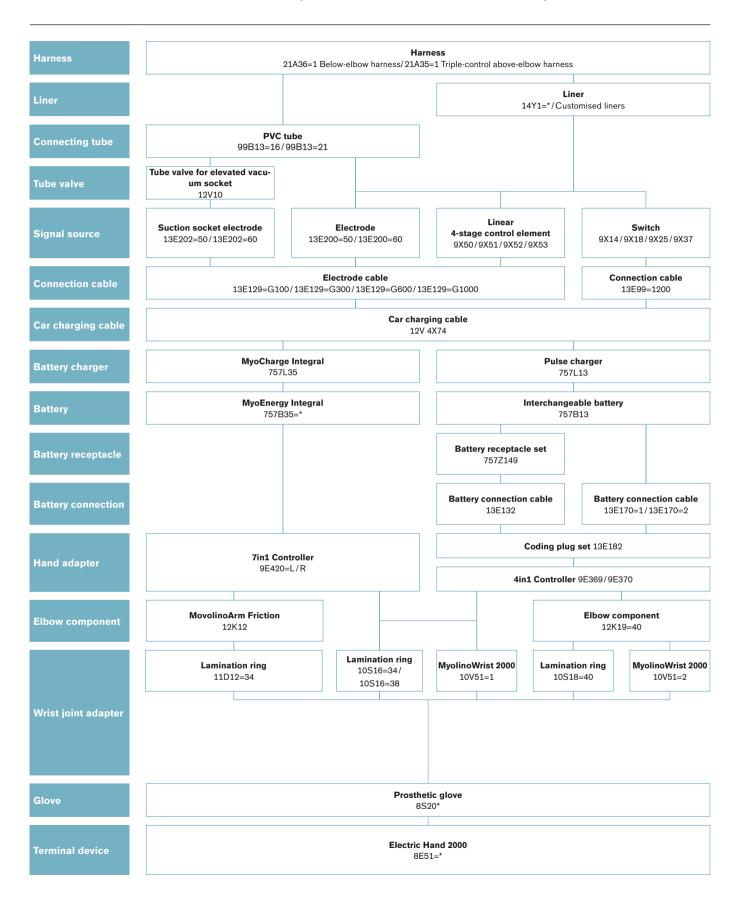
Fittings for children have always represented a major medical technology challenge, because children have special requirements in terms of functionality, flexibility and mobility. This is why it is important to offer a system that meets the individual needs of various age groups while simultaneously preparing the children for a future fitting with the system for

The innovative 7.4 volt system for children achieves these objectives. In combination with the Electric Hand 2000, the MyolinoWrist 2000 and the Myolino Skin Natural gloves, it uses myoelectric components from the adult segment in order to establish the foundation for a flowing transition in the prosthetic fitting process. The 12K12 MovolinoArm Friction is the perfect complement to the Ottobock portfolio for upper arm prostheses in children aged 3 to 5 years.

#### On the following pages you will find

- Terminal device
- Prosthetic gloves and accessories
- Lamination ring and accessories
- 4in1 Controller and accessories
- Batteries and accessories
- 7in1 Controller and accessories
- Elbow components and accessories
- Electrodes and accessories
- Tools for the children's system

## Overview of the MyoBock children's system





## Terminal device

#### Electric Hand 2000

#### Article no. 8E51

The Electric Hand 2000 can be used for children's hand prostheses with 4.8  $\ensuremath{\text{V}}$ and 7.4 V depending on the controller that is used, making it suitable for nearly all residual limb lengths.

#### **Key features**

- For MyoBock system 4.8/7.4 volt
- With finger filler (article no. 9E347=\*)
- Passive hand rotation and central sliding contact
- Without prosthetic glove, controller and lamination ring
- Available in four sizes:
  - Size 5 (for children aged 1 ½ to 3 years)
  - Size 5 ½ (for children aged 3 to 6 years)
  - Size 6 (for children aged 5 to 10 years)
  - Size 6  $\frac{1}{2}$  (for children aged 8 to 13 years)

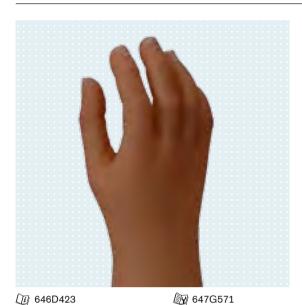
Article no.	Side	Size	Lamination ring	Prosthetic glove
8E51=L5	Left (L)	5	10S16=34	8S20(N)=136X41L
8E51=L5 ½	Left (L)	5 ½	10S16=34	8S20(N)=147X45L
8E51=L6	Left (L)	6	10S16=38	8S20(N)=162X56L
8E51=L6 ½	Left (L)	6 ½	10S16=38	8S20(N)=177X64L
8E51=R5	Right (R)	5	10S16=34	8S20(N)=136X41R
8E51=R5 ½	Right (R)	5 ½	10S16=34	8S20(N)=147X45R
8E51=R6	Right (R)	6	10S16=38	8S20(N)=162X56R
8E51=R6 ½	Right (R)	6 ½	10S16=38	8S20(N)=177X64R



(₫) 646D326 646D442

**₩** 647H58

## Prosthetic gloves



• Special cleaner for prosthetic gloves is found on page 14.

### MyolinoSkin Natural

#### Article no. 8S20N

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin. Please add an N before the = in the article number.

#### Example

- 8S20=136x41XL4 (standard glove)
- 8S20N=136x41XL4 (MyolinoSkin Natural)

The PVC-based material ensures that Skin Natural is very robust compared to other materials, and it has a relatively long life. This provides safety when using the gloves. Due to a special modern surface treatment, the Skin Natural gloves are also easy to clean.

Article no.	Side	Size	Sleeve length	Sleeve end circumference
8S20N=136X41L	Left (L)	5	210 mm	200 mm
8S20N=147X45L	Left (L)	5 ½	215 mm	200 mm
8S20N=162X56L	Left (L)	6	220 mm	210 mm
8S20N=177X64L	Left (L)	6 ½	240 mm	220 mm
8S20N=136X41R	Right (R)	5	210 mm	200 mm
8S20N=147X45R	Right (R)	5 ½	215 mm	200 mm
8S20N=162X56R	Right (R)	6	220 mm	210 mm
8S20N=177X64R	Right (R)	6 ½	240 mm	220 mm

- The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern. For available colours, please ask our Customer Service.
- Notice: The 8S20N=\* gloves are available in colours 2, 4, 6, 8, 11, 14 and 16.



(II) 646D49

**№** 647G468

### Prosthetic glove for children

Article no. 8S20

The prosthetic glove for children impresses with its natural appearance, durability and flexibility.

Article no.	Side	Size	Sleeve length	Sleeve end circumference
8S20=136X41L*	Left (L)	5	210 mm	200 mm
8S20=147X45L*	Left (L)	5 ½	215 mm	200 mm
8S20=162X56L*	Left (L)	6	220 mm	210 mm
8S20=177X64L*	Left (L)	6 ½	240 mm	220 mm
8S20=136X41R*	Right (R)	5	210 mm	200 mm
8S20=147X45R*	Right (R)	5 ½	215 mm	200 mm
8S20=162X56R*	Right (R)	6	220 mm	210 mm
8S20=177X64R*	Right (R)	6 ½	240 mm	220 mm

<sup>\*</sup> Available in 18 different shades.



## Prosthetic gloves

### Prosthetic glove for children

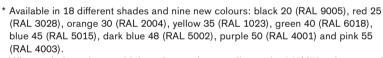
#### Article no. 8S20

Just like their parents, our youngest users value the high quality of their prosthetic gloves. That is why our standard prosthetic gloves are very robust and flexible. In addition, the coloured gloves for the Electric Hand 2000 are now available for an eye-catching appearance in everyday life: Nine new colours are now offered for selection.

#### **Benefits**

- Suitable for girls and boys
- Mechanical strength makes them durable, robust and tear-resistant with minimal abrasion
- Used in combination with the Electric Hand 2000
- Clean with special cleaner (article no. 640F12) and pump sprayer (article no. 640F13)

ide	Size	Sleeve length	Sleeve end circumference
eft (L)	5	210 mm	200 mm
eft (L)	5 ½	215 mm	200 mm
eft (L)	6	220 mm	210 mm
eft (L)	6 ½	240 mm	220 mm
ight (R)	5	210 mm	200 mm
ight (R)	5 ½	215 mm	200 mm
ight (R)	6	220 mm	210 mm
ight (R)	6 ½	240 mm	220 mm
	eft (L) eft (L) eft (L) eft (L) ight (R) ight (R)	eft (L) 5 eft (L) 5½ eft (L) 6 eft (L) 6½ eft (L) 6½ eft (R) 5 eft (R) 5½ eft (R) 5 ½ eft (R) 6	eft (L) 5 210 mm eft (L) 5 ½ 215 mm eft (L) 6 220 mm eft (L) 6 ½ 240 mm eft (R) 5 210 mm eft (R) 5 ½ 215 mm eft (R) 5 ½ 220 mm



When ordering, please add the colour code according to the 646M79 colour swatches to the end of the article number, e.g. 8S20=136X41L30.



(ii) 646D49

647G468



## Special cleaner

Article no. 640F12

In case of heavy soiling, the special cleaner for prosthetic gloves should be applied immediately (net contents: 460 g).





## Pump sprayer Article no. 640F13

The user should always keep a pump sprayer filled with special cleaner for Ottobock prosthetic gloves handy in order to be able to use the cleaner immediately in case of soiling (net contents: 90 g).

This container is empty on delivery!



## Donning spray Article no. 640F18

The donning spray for silicone liners and prosthetic gloves (silicone or PVC) is used among other things for the donning and removal of the liner or prosthetic

Article no.	Contents
640F18	90 ml
640F18=900	900 ml (refill)



## Lamination ring and accessories

#### Lamination ring, complete

Article no. 10S16

The lamination ring (article no. 10S16=\*) connects the Electric Hand 2000 (article no. 8E51) to the individually fabricated forearm socket. Relatively long below-elbow residual limbs can be fitted thanks to the low structural height since the lamination ring is laminated directly into the outer socket. The desired friction can be optimally adapted to the needs of the prosthesis wearer with the O-rings included in the scope of delivery. This permits a complete rotation of the Electric Hand 2000 (article no. 8E51).



#### O-rings (article no. 627F3)

- 1 pc. 627F3=26X1.0 (internal diameter: 26 mm, thickness: 1.0 mm)
- 1 pc. 627F3=19X1.5 (internal diameter: 19 mm, thickness: 1.5 mm)
- 1 pc. 627F3=16X1.5 (internal diameter: 16 mm, thickness: 1.5 mm)
- 1 pc. 627F3=11X1.5 (internal diameter: 11 mm, thickness: 1.5 mm)

Article no.	Diameter	Size	
10S16=34	34 mm	5 and 5 ½	
10S16=38	38 mm	6 and 6 ½	

### MyolinoWrist 2000

Article no. 10V51

The MyolinoWrist 2000 (article no. 10V51=\*) is a mechanical ball wrist joint with adjustable friction. When combined with the Electric Hand 2000 (article no. 8E51), the hand can be positioned in any direction, helping to significantly eliminate compensating movements of the arm. The additional degrees of freedom make motion sequences appear more natural. At the same time, the wrist joint promotes a physiologically correct posture.

Article no.	Wrist connection diameter	Weight	Overall length
10V51=1	40 mm	47 g	32 mm
10V51=2	40 mm	50 g	40 mm



**∭** 647G460

## Lamination ring and accessories



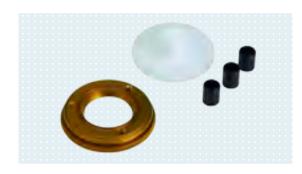
#### Lamination ring set

Article no. 11D61

The lamination ring set is compatible with the MyolinoWrist (article no. 10V51=1).

#### Set consisting of

- 1x lamination ring (article no. 11D3)
- 1x lamination dummy (article no. 11D9)
- 3x countersunk head screw (article no. 501S101=M3X8-KL-1)



## Lamination ring set

Article no. 11D21

The lamination ring set is compatible with the MyolinoWrist (article no. 10V51=2).

#### Set consisting of

- 1x lamination ring (article no. 11D2)
- 1x lamination dummy (article no. 11D9)
- 3x countersunk head screw (article no. 501S101=M3X8-KL-1)





#### 4in1 Controller LS

#### Article no. 9E369 or 9E370

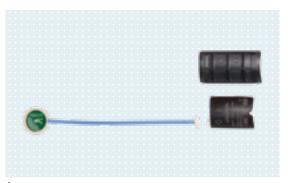
The 4in1 Controller LS extends fitting possibilities in the area of long belowelbow residual limbs and wrist disarticulations. Four different control versions can be selected via various coloured coding plugs. The 4in1 Controller LS is required for a fitting with an Electric Hand 2000 (article no. 8E51).

#### Consisting of

- Contact plate (article no. 9E371)
- Casting template (article no. 9E372)
- Controller for article no. 9E369 (article no. 9E373)
- Controller for article no. 9E370 (article no. 9E374)

Article no.	Size
9E369	5
9E370	5 ½, 6 and 6 ½

The contact plate (article no. 9E371) is included in the scope of delivery!



**№** 647H209

### Coding plug set

#### Article no. 13E184

The 4in1 Controller LS differentiates between four functions and between right and left arm prostheses using coloured coding plugs.

Article no.	Side	Colour	9E369	9E370
13E184=1	Left (L)	White	1 electrode, digital (EVO)	2 electrodes, digital
13E184=3	Left (L)	Green	2 electrodes, DMC	2 electrodes, DMC
13E184=5	Left (L)	Yellow	2 electrodes, DMC LowInput	2 electrodes, DMC LowInput
13E184=7	Left (L)	Orange	1 electrode, DMC Low (EVO)	1 electrode, EVO
13E184=2	Right (R)	Red	1 electrode, digital (EVO)	2 electrodes, digital
13E184=4	Right (R)	Blue	2 electrodes, DMC	2 electrodes, DMC
13E184=6	Right (R)	Purple	2 electrodes, DMC LowInput	2 electrodes, DMC LowInput
13E184=8	Right (R)	Black	1 electrode, DMC Low (EVO)	1 electrode, EVO



## Batteries and accessories



Replaceable battery

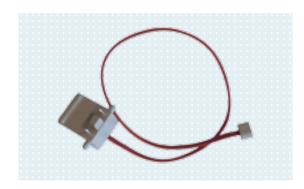
able integrated fuse (article no. 757Z170).

Article no. 757B13

Technical data			
Capacity	150 mA		
Average discharge level	4.8 V		
Final discharge level	4.4 V		
Dimensions (Lx WxH)	69x26.5x14.5 mm		
Weight	40 q		

Suitable for integration into all socket shapes. With on/off switch and replace-

- Only use the pulse charger (article no. 757L13) to charge the replaceable battery (article no. 757B13).
- Can only be used for MyoBock 4.8 V children's system.



## Battery connection cable

Article no. 13E132

The battery connection cable (length: 200 mm) is used to connect the replaceable battery (article no. 757B13) to the 4in1 Controller LS (article no. 9E369 or 9E370) or the switching unit (article no. 9E349 or 9E350).



## Batteries and accessories

### Battery receptacle set

Article no. 757Z149

Suitable for replaceable battery (article no. 757B13).

#### **Consisting of**

- Battery receptacle (article no. 757Z150)
- Locking insert with O-ring (627F1=3,1X1,6; article no. 757Z151)
- Casting template (article no. 757Z152)
- Spacer insert (article no. 757Z153)



**№** 647H6

## Pulse charger

Article no. 757L13

For simultaneous charging of one or two replaceable batteries (article no. 757B13). Housing made of impact and break-resistant plastic material, including power supply (article no. 757L16-2) with exchangeable EU and US plugs. The design conforms to recommended standards.

#### Technical data

Operating temperature	0 to +40 °C		
Dimensions (Lx WxH)	130 x 70 x 45 mm		
Supply voltage range	100–240 automatic adjustment V/AC		
Mains frequency	40–70 Hz		
Charging current for 757L13	Pulsed medium direct charging current, approx. 50 mA, reduction to trickle charging		
Charging time (for full charge)	approx. 5 h		
Weight	220 g		



647G260

### Car charging cable, 12 volt

Article no. 4X74

The cigarette lighter socket can be used to charge a MyoEnergy Integral (article no. 757B35=\*) or two EnergyPacks (article no. 757B20/757B21), X-ChangePacks (article no. 757B15) or replaceable batteries (article no. 757B13). Suitable for MyoBock battery chargers (article no. 757L35, 757L20, 757L14 and 757L13).





(ii) 646D442

[N 647G595

#### 7in1 Controller

Article no. 9E420

The 7in1 Controller (article no. 9E420) is a control system with 7.4 volt for the Electric Hand 2000 that processes muscle signals and sends them to the prosthetic hand. The 7in1 Controller provides seven programmes, some of which have been adopted from the adult system. Children benefit from the diverse possibilities: Individual adjustment of the prosthetic hand and simultaneous preparation for the adult system.

#### Choice of seven programme versions

- DMC plus: Control with 2 electrodes
- DMC LowInput: Control with 2 electrodes
- AutoControl LowInput: Control with 2 electrodes
- DigitalControl: Control with 2 electrodes
- VarioControl: Control with 1 electrode
- DoubleChannel: Control with 1 electrode
- EVO Digital: Control with 1 electrode

#### **Power supply**

Power is supplied to the 7in1 Controller and the prosthetic components by the MyoEnergy Integral battery system (article no. 757B35=\*).

Article no.	Length
9E420=L	Left (L)
9E420=R	Right (R)

The contact plate (article no. 9E414) is included in the scope of delivery!



#### MyolinoLink

Article no. 60X6

The MyolinoLink (article no. 60X6) is used for the wireless transfer of data between the 7in1 Controller and a PC with Bluetooth functionality. Patientspecific settings can therefore be changed without a cable connection. The MyolinoLink is connected to the charging receptacle of the MyoEnergy Integral prior to use. Integrated magnets secure the MyolinoLink to the charging receptacle. The range of the radio connection is about 5 metres.



### MyolinoSoft

#### Article no. 560X3

In order to offer patient-specific controller settings, adjustment software is also being used for the first time in a hand system for children. Rather than using specified settings, it works with various parameters, such as the patient side, control programme, switching threshold and gripping speed, which can be individually adjusted. This is especially advantageous for children due to their high mobility requirements.

The MyolinoSoft software (article no. 560X3) is designed for configuring the settings of the 7in1 Controller (article no. 9E420) and the Electric Hand 2000 connected to it. Seven programme versions are available.



647G578

#### **BionicLink**

#### Article no. 60X5

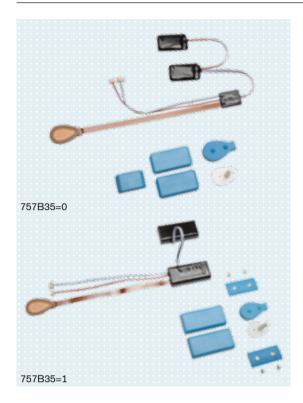
The BionicLink PC (article no. 60X5) supports wireless data communication between Ottobock products with a Bluetooth interface (e.g. DynamicArm) and a PC with USB port or USB hub.

#### The BionicLink is equipped with two LEDs

- The green LED indicates that the device is ready for use
- The blue LED indicates that a proper connection has been established between the product and the PC

A proper connection between the Ottobock product and a PC can only be established using corresponding Ottobock software products (e.g. ElbowSoft).





#### **MyoEnergy Integral**

Article no. 757B35=\*

The MyoEnergy Integral (article no. 757B35=\*) is an integrated power supply system made up of several components. The charging receptacle has contacts for the battery, indicates the current charge level and allows the prosthesis to be switched on and off and opened in an emergency. The communication cable with a 3-pin receptacle is used for the exchange of data.

The supply cable establishes the connection between the battery and the respective prosthetic component. The battery consists of two cells with different capacities. Suitable for the MyoBock system.

#### Consisting of

- Lamination dummy battery
- Lamination dummy charging receptacle
- · Drilling template for charging receptacle

Technical data	Article no. 757B35=0	Article no. 757B35=1	
Capacity	300 mAh	600 mAh	
Approx. output voltage	7.4 V	7.4 V	
Approx. charging time	2.5 h	2.5 h	
Technology	Lithium polymer	Lithium polymer	
Dimensions approx.	35 x 20 x 20 mm	2x 52 x 25 x 10 mm	

 You can order the dummy set for article no. 757B35=1 under article no. 757Z276=1.



647G534

#### MyoCharge Integral

Article no. 757L35

The MyoEnergy Integral integrated into the socket is charged using the MyoCharge Integral (article no. 757L35). This is done by simply connecting the charging plug to the charging receptacle on the outside of the socket. Thanks to an integrated magnet, the charging plug can be easily attached to the charging receptacle. The special contour of the charging receptacle and charging plug assures the quick, reliable positioning of the two components to each other. LEDs indicate the readiness of the battery charger and the current battery charge level.

#### Technical data

Operating temperature	0 to +60 °C
Storage temperature	-20 to +60 °C
Supply voltage	100-240 V
Mains frequency	50-60 Hz

- The MyoCharge Integral can be used for all versions of the MyoEnergy Integral (article no. 757B35=0, 757B35=1 and 757B35=3).
- The power supply (article no. 757L16-2) is included in the scope of delivery!



## Elbow components

### Elbow components for children

Article no. 12K19=40

Elbow component with manual elbow lock (10 locking positions in 8° increments) and an upper arm rotation joint (humeral rotation feature) with lamination ring. The elbow ball is made of beige plastic (corresponds to beige 2). The wrist connection has a diameter of 40 mm.

Article no.	Upper arm connection diameter	Size	Colour	Length	Circumference
12K19=40	54 mm	6 3/4	Beige	approx. 250 mm	210 mm



**∭** 647G469

#### MovolinoArm Friction

Article no. 12K12

The MovolinoArm Friction is available in one size. It is the perfect complement to the current Ottobock product portfolio, since it allows prostheses on the right and left side for children aged 3 to 5 years. The elbow is compatible with passive, body-powered and myoelectric arm prostheses and weighs a mere 182 g. The elbow has one friction setting for humeral rotation and one for flexion or extension of the forearm. Parents can easily set this friction setting. Another advantage is that the elbow is compatible with the components of the 7.4 volt system for children.

The MovolinoArm Friction features an impressive design that has a very realistic natural appearance.

The hand adapter of the MovolinoArm Friction is naturally compatible with the Electric Hand 2000. The wood adapter (article no. 10A40) is available for passive prostheses. The wrist joint, article no. 10V18=34 or 10V36=34, is compatible with body-powered prostheses.



647G570

Article no.	Upper arm connection diameter	Wrist connection diameter	
12K12	43.5 mm	34 mm	
•••••	• • • • • • • • • • • • • • • • • • • •	***************************************	

- Please note that the elbow (article no. 12K12) can only be used with the following batteries: article no. 757B35=0 and 757B35=1!
- Please note that one to two of the electrode cables, article no. 13E129=G100, are needed in addition!



Both joints can also be used in combination with the Electric Hand 2000 (article no. 8E51=\*).



### Lamination ring set

Article no. 13G21

The set consists of a lamination ring with lamination dummies and an O-ring. Notice: Only in combination with the 12K12 elbow.



### Lamination ring for children's forearm

Article no. 10S18=40

The lamination ring for children's forearms makes it possible to combine an Electric Hand 2000 (article no. 8E51) with an elbow component for children (art. no 12K19=40).

To do so, the lamination ring with a diameter of 33 mm is glued directly into the elbow component using Orthocryl sealing resin compact adhesive (article no. 636K18=1).



### Lamination ring

Article no. 13G8=54

Notice: Only in combination with the 12K19=40 elbow.



## Special key Article no. 709Z9

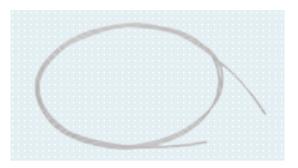
The special key (article no. 709Z9) is used to tighten the counter nut. The counter nut may become damaged when tightening in a vice or, for example, with pliers.



#### Perlon cable

Article no. 21A18

Article no.	Diameter	Length	Order by
21A18=2X1	2 mm	1 m	linear metres
21A18=2X5	2 mm	5 m	linear metres
21A18=2X10	2 mm	10 m	linear metres
21A18=2X25	2 mm	25 m	linear metres

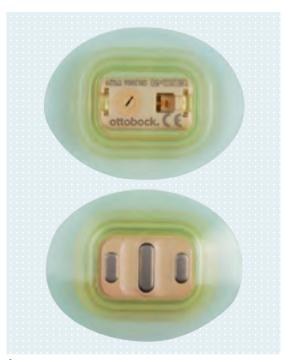


## Wrist joint lamination ring Article no. 11D12=34

The wrist joint lamination ring is used for the connection with the Children's Hand 2000. It consists of a copper friction ring, O-rings and a protective cover.



## Electrodes



#### Suction socket electrode

#### Article no. 13F202

This generation of electrodes is based on the familiar 13E200 electrode. Embedded into a mounting suspension of elastic material, this electrode creates an airtight seal between the inner socket and outer socket. If used correctly, the suction socket electrode (article no. 13E202) also prevents sweat from penetrating between the outer and inner socket, therefore effectively preventing damage to the electrical and mechanical components caused by corrosion.

The suction socket electrode can not only be used for standard sockets, but is also particularly suitable for application in elevated vacuum sockets. Combining the suction socket electrode with a tube valve (article no. 12V10) for an elevated vacuum socket creates a vacuum effect in the socket, optimising the hold of the residual limb in the socket. As with the 13E200 electrode, state-ofthe-art shielding and filtering technologies largely protect the suction socket electrode (article no. 13E202) against high frequency interference caused, for example, by mobile phones, walkie-talkies, computers or anti-theft systems in shopping centres so that the proper control of the myoelectrically controlled prosthesis is not affected.

The electrode contacts are made from pure titanium and are therefore suitable for people with allergies as well. The frequency filter's full protection effect will only be provided if the mains frequency and filter frequency are identical.

Article no.	HZ	Frequency bandwidth	Room temperature	Operating voltage U
13E202=50	50	90-450 Hz	-15 to +60 °C	4.8-7.2 V
13E202=60	60	90-450 Hz	-15 to +60 °C	4.8-7.2 V

- Use silicone grease (article no. 633F11) to seal the plug connection. Remove any excessive grease after connecting the electrode cable.
- Accessories for vacuum forming inner sockets, see page 244.
- Tube valve (article no. 12V10), see page 96.



#### Electrode

#### Article no. 13E200

These MyoBock electrodes are particularly sensitive in the range of low muscle signals. The change in amplification now takes place logarithmically, which enables enhanced differentiation of the signal level. Thanks to modern frequency shielding and filtering technologies, they are less sensitive to low and high frequency interferences that are emitted, for example, by mobile phones or shopping centre security systems. The electrode contacts are made from pure titanium and are therefore suitable for people with allergies as well. The electrode accessories (article no. 13E201) are included in the scope of delivery. The frequency filter's full protection effect will only be provided if the mains frequency and filter frequency are identical. The electrode cable connection with IDC termination weighs  $4.5 \text{ g} (27 \times 18 \times 9.5 \text{ mm}).$ 

Article no.	HZ	Frequency bandwidth	Room temperature	Operating voltage U
13E200=50	50	90-450 Hz	-15 to +60 °C	4.8-7.2 V
13E200=60	60	90-450 Hz	-15 to +60 °C	4.8-7.2 V

- Use silicone grease (article no. 633F11) to seal the plug connection. Remove any excessive grease after connecting the electrode cable.
- Accessories for vacuum forming inner sockets, see page 244.

### Electrode accessory set

Article no. 13E206

Suitable for suction socket electrodes (article no. 13E202).

#### **Consisting of**

- Casting template for inner socket (article no. 13E203)
- Socket screw with Allen head (article no. 503F3)
- Sensitivity adjustment tool (article no. 13E80)



#### Electrode accessories

Article no. 13E153

For laminated inner sockets with 13E200 electrode. Use an Allen wrench (article no. 709S10=2) for socket screws (article no. 503F3).

#### **Consisting of**

- Template for inner socket (article no. 13E191)
- Lamination template for outer socket (article no. 13E192)
- Lamination disc, serrated (article no. 507S15)
- Socket screw with Allen head (article no. 503F3)
- Sensitivity adjustment tool (article no. 13E80)



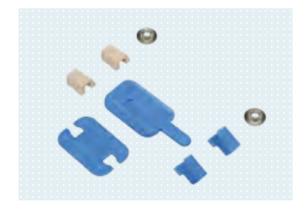
#### Electrode accessories

Article no. 13E201

For vacuum-formed inner sockets with electrode (article no. 13E200). Only available as a set. Electrode mounting brackets and setting nuts (article no. 29C5=M4X9) can also be ordered individually.

#### **Consisting of**

- One template for the inner and outer socket each
- Lamination dummy for electrode mounting bracket
- Electrode mounting bracket, beige (article no. 13E172)
- Setting nut (article no. 29C5=M4X9)

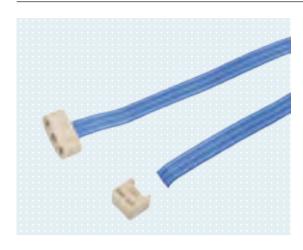


## Electrode mounting bracket set

Article no. 13E135

The electrode mounting bracket set is used for positioning and assembling the MyoBock electrodes on the interim plaster socket or the interim socket made of ThermoLyn (article no. 616T52 or 616T53). It is suitable for 13E200 electrodes.





## Electrode cable with straight plug and plug connector

Article no. 13E129=G\*

Electrode cable to connect the electrode (article no. 13E200 / 13E202), control elements (article no. 9X52, 9X53 and 9X54) and elbow (article no. 12K12).

Article no.	Length	
13E129=G100	100 mm	
13E129=G300	300 mm	
13E129=G600	600 mm	
13E129=G1000	1,000 mm	

• The plug connector (article no. 13E121) is included in the scope of delivery!



## Finger cover Article no. 9E342

Consisting of thumb, index finger and middle finger.

Article no.	Size	
9E342=5	5	
9E342=5 ½	5 ½	
9E342=6	6	
9E342=6 ½	6 ½	



## Finger filler Article no. 9E347

Used to fill the little and ring fingers in the prosthetic glove (article no. 8S20).

Article no.	Side	Size
9E347=L5	Left (L)	5
9E347=L5 ½	Left (L)	5 ½
9E347=L6	Left (L)	6
9E347=L6 ½	Left (L)	6 ½
9E347=R5	Right (R)	5
9E347=R5 ½	Right (R)	5 ½
9E347=R6	Right (R)	6
9E347=R6 ½	Right (R)	6 ½

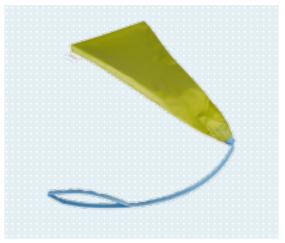


## EasyFit Arm donning sheath

#### Article no. OC1560

The EasyFit Arm donning sheath with valve opening (colour: green) saves strength and time when putting on an arm prosthesis. It feels comfortable when donning. It is made of high-quality material and is therefore very durable. It is also easy to clean in the washing machine. Also available in children's sizes.

Article no.	Size	Proximal residual limb circumference	Distal residual limb circumference	Sock length
OC1560=KIDS	KIDS	290 mm	150 mm	210 mm
OC1560=TR	TR	420 mm	220 mm	250 mm
OC1560=TH	TH	470 mm	280 mm	340 mm



Ø 646D536=M\_DE

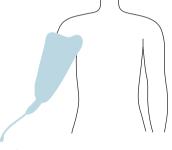
#### **Application example**



The EasyFit Arm donning sheath must be spread out fully before use.



2 Pull half (of the length) of the EasyFit Arm donning sheath over itself up to the lower seam. The loop must face out.



Pull the EasyFit Arm donning sheath like a sock over the residual arm, avoiding any wrinkles. Guide the socket over the residual limb so that the loop of the EasyFit Arm donning sheath can be pulled through the socket valve opening after applying the socket.



4 Finally, use the loop to slowly pull the EasyFit Arm donning sheath out of the prosthetic socket through the valve opening. If the residual limb is not properly positioned in the prosthetic socket, repeat the process.

#### Derma Protection ArmComfort

#### Article no. 453A1

Derma Protection ArmComfort makes the transition from the forearm socket to the upper arm more visually appealing and provides additional support for the prosthesis. The special polymer gel coating, high elasticity and anatomical fit also improve wearer comfort.

Article no.	Target group
453A1	Adults
453A1=1	Children



## Tools for the children's system

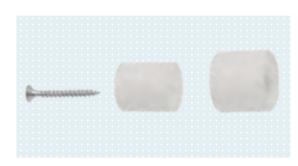


#### PVC connection tube

#### Article no. 99B13

The PVC connection tube serves as a connection channel between the inner and outer sockets.

Article no.	Colour	Diameter
99B13=16	Beige	16 mm
99B13=16-7	Black	16 mm
99B13=21	Beige	21 mm
99B13=21-7	Black	21 mm

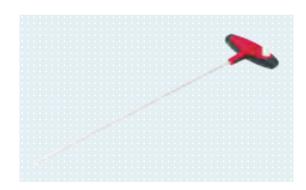


#### **Tube dummies**

#### Article no. 99B83

The tube dummies are used for fabricating vacuum-formed inner sockets.

Article no.	Diameter
99B83=16	16 mm
99B83=21	21 mm



## Alignment rod

Article no. 711M20

In combination with the mounting adapter (article no. 711M50), the alignment rod (hexagon) is suitable for installation and removal of the 4in1 Controller LS (article no. 9E369 and 9E370) as well as the 7in1 Controller (article no. 9E420) or for inserting and ejecting the switching units (article no. 9E349 and 9E350).



## Mounting adapter

Article no. 711M50

For installing the 4in1 Controller LS (article no. 9E369 and 9E370) as well as the 7in1 Controller (article no. 9E420=\*) in combination with the alignment rod (article no. 711M20).



## Tools for the children's system

## Alignment tool for children's component

Article no. 743A19

Suitable for lamination rings (article no. 10S16).

#### Consisting of:

- Alignment rod (article no. 743Y167)
- Lamination dummy for size 5 and 5  $\frac{1}{2}$  (article no. 743Y42=34)
- Lamination dummy for size 6 and 6  $\frac{1}{2}$  (article no. 743Y42=38)

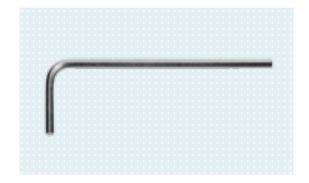
Article no.	Thread	Diameter	Length
743A19	M8	12 mm	169 mm



#### Allen wrench

Article no. 709S10=2

For socket screws (article no. 503F3) that connect the inner and outer socket.



## Allen wrench

Article no. 709S42

Offset Allen key for adjusting the friction of the MyolinoWrist 2000 (article no. 10V51).







# MyoBock prosthesis solution

#### Best quality for an optimum fitting

As far back as the 1960s, Ottobock set international standards with the development of the system electric hand and has since placed great emphasis on quality in the further development of myoelectric hand and arm prostheses – for optimal, individual medical devices. A sensor integrated in the thumb of the SensorHand Speed prevents grasped objects from slipping out of the hand. This prosthetic hand also sets new standards in terms of gripping force and gripping speed together with the MyoHand VariPlus Speed. The DynamicArm, an electronically controlled, active elbow joint with an innovative drive system and continuous vario-gear, results in especially normal physiological movement. A highly natural appearance can be achieved in combination with the hand-painted Skin Natural prosthetic gloves.

#### On the following pages you will find

- bebionic
- MyoBock adult system overview
- Myo terminal device
- MyoHand VariPlus Speed control programmes
- Myo terminal device
- SensorHand Speed control programmes
- Myo terminal device
- Spare parts and accessories for system electric hands
- Myo prosthetic gloves and accessories
- Myo Greifer
- Myo wrist joints and accessories
- Elbow components
- DynamicArm control programmes
- Elbow components
- ErgoArm Electronic plus switching modes
- Elbow components
- Shoulder joints
- Electrodes and accessories
- Batteries and battery chargers with accessories
- Cables and accessories
- Control elements and accessories
- Mvo software
- Mvo service parts

## bebionic

#### bebionic hand

The bebionic hand is a myoelectrically controlled prosthetic hand, offering the user five moveable fingers which are powered individually. Each finger and the thumb is driven by its own motor, allowing this hand to execute various grip types. The latest drive technology allows the integrated microprocessor to continuously control the finger position.

This makes it possible to reproduce all gripping patterns exactly. The hand also offers a special feature, the Auto-Grip function. The bebionic is available in sizes small, medium and large. The small hand is ideal for women and adolescents.



#### bebionic hand

Each finger of the bebionic hand moves entirely naturally. Eight different grip types can be controlled directly. The thumb of the bebionic hand can be positioned in two different basic positions. Like other myoelectric hand prostheses, it is easy to control. The appropriate glove is available in 19 different shades and in black.

Technical data	Small	Medium	Large
Maximum opening width – tripod grip	90 mm	105 mm	105 mm
Gripping force Power grip Tripod grip Key grip	140 N 36.6 N 26.5 N	140 N 36.6 N 26.5 N	140 N 36.6 N 26.5 N
Overall width, back of the hand	70 mm	83 mm	91 mm
Overall length (middle finger to end of palm)	160 mm	175 mm	180 mm
Hand circumference (without glove)	180 mm	210 mm	230 mm
Weight with quick-disconnect wrist unit With multi-flex wrist	390 g Not specified	591 g 691 g	598 g 698 g
Continuous opening/closing of the hand Tripod grip Power grip Key grip	0.5 sec. 1.0 sec. 1.0 sec.	0.5 sec. 1.0 sec. 1.0 sec.	0.5 sec. 1.0 sec. 1.0 sec.



## bebionic

## EQD wrist (quick-disconnect wrist unit)

#### Article no. BBHQD

The hand can be taken off with a rotating movement. The quick-disconnect wrist unit makes it possible for the user to quickly switch to other terminal devices.

#### **Example**

- BBHSMLQD-W (bebionic hand, small with quick-disconnect wrist unit, left, white)
- BBHSMLQD-B (bebionic hand, small with quick-disconnect wrist unit, left, black)

ack
ack
10



#### Short wrist

#### Article no. BBHSW

The short connection version for users with a long residual limb. The lamination ring is included in the scope of delivery. The hand can be rotated by the user with constant resistance. This resistance is adaptable.

#### **Example**

- BBHSMLSW-W (bebionic hand, small for short wrists with quick-disconnect wrist unit, left, white)
- BBHSMLSW-B (bebionic hand, small for short wrists with quick-disconnect wrist unit, left, black)

Article no.	Side	Size	Colour
BBHSMLSW	Left (L)	Small	White, black
BBHMDLSW	Left (L)	Medium	Black
BBHLGLSW	Left (L)	Large	Black
BBHSMRSW	Right (R)	Small	White, black
BBHMDRSW	Right (R)	Medium	Black
BBHLGRSW	Right (R)	Large	Black



## bebionic



#### Multi-flex wrist

#### Article no. BBHQD-MF

Permits passive movement of the wrist joint in all directions. The wrist joint can be locked in 30° flexion, 30° extension or the neutral position. Lateral movement is still possible even in the locked state. The multi-flex wrist can only be combined with the medium and large bebionic hand.

#### Example

• BBHMDLQD-MF (bebionic hand, medium with multi-flex wrist, left, black)

Article no.	Side	Size	Colour
BBHMDLQD-MF	Left (L)	Medium	Black
BBHLGLQD-MF	Left (L)	Large	Black
BBHMDRQD-MF	Right (R)	Medium	Black
BBHLGRQD-MF	Right (R)	Large	Black



## Flex-wrist (three-stage joint)

#### Article no. BBHQD-F

The flex-wrist allows the user to flex and extend the hand. The hand can be locked at an angle of 30° extension, 30° flexion and in the neutral position.

#### Example

- BBHSMLQD-W-F (bebionic hand, small with flex-wrist, left, white)
- BBHSMLQD-B-F (bebionic hand, small with flex-wrist, left, black)

Article no.	Side	Size	Colour
BBHSMLQD-F	Left (L)	Small	White, black
BBHMDLQD-F	Left (L)	Medium	Black
BBHLGLQD-F	Left (L)	Large	Black
BBHSMRQD-F	Right (R)	Small	White, black
BBHMDRQD-F	Right (R)	Medium	Black
BBHLGRQD-F	Right (R)	Large	Black

## bebionic

### Silicone glove

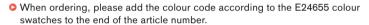
Article no. BBG\*

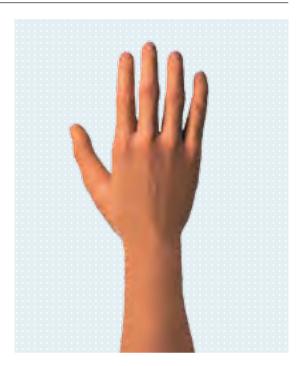
The glove for the bebionic hand is made of several layers of silicone with integrated fibre reinforcement. Unique TrueFinish $^{ extsf{TM}}$  micro-pigmentation combined with painted details on the palms, knuckles and nails creates a natural appearance. Easy handling when donning and doffing, easy to clean. 19 different skin colours (E0-E18) are available. The colour black is offered in addition.

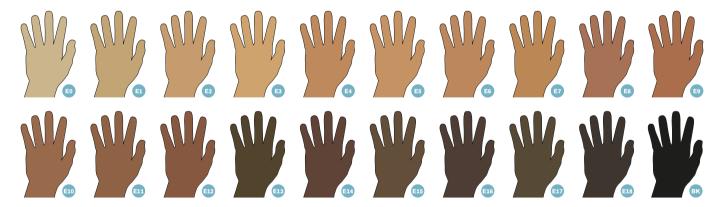
### Example

• BBGSML/E2 (silicone glove, small, left, colour E2)

Article no.	Side	Size	Colour
BBGSML/*	Left (L)	Small	E0-E18
BBGMDL/*	Left (L)	Medium	E0-E18
BBGLGL/*	Left (L)	Large	E0-E18
BBGSMR/*	Right (R)	Small	E0-E18
BBGMDR/*	Right (R)	Medium	E0-E18
BBGLGR/*	Right (R)	Large	E0-E18





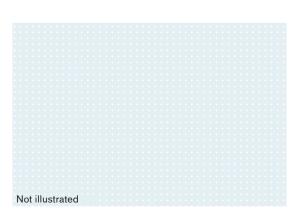


### Work glove, black

Article no. BBGT\*

Article no.	Side	Size	Colour
BBGTSML/BK	Left (L)	Small	Black
BBGTMDL/BK	Left (L)	Medium	Black
BBGTLGL/BK	Left (L)	Large	Black
BBGTSMR/BK	Right (R)	Small	Black
BBGTMDR/BK	Right (R)	Medium	Black
BBGTLGR/BK	Right (R)	Large	Black

O Notice: Black gloves are only available as standard gloves (without TrueFinish™).



## bebionic



## Battery cell

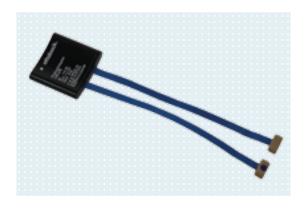
Article no. BBI-2200S

The bebionic hand has five drive motors and therefore requires a higher power supply than standard myo hands. Thanks to the removable casing, the two battery cells can be separated for a lighter prosthesis. With separate on/off switch.

Technical data	BBI-2200S
Capacity	2,200 mAh
Voltage (nominal)	7.4 V
Charging time	3–4 hours
Dimensions (Lx WxH)	18.5x36.5x70 mm (dual cell), 18.5x18.5x70 mm (single cell)
Weight	40 g



# Battery charger Article no. BBCBI



## AnalogAdapter

Article no. 13E100

The adapter enables the control of the analogue Ottobock hand systems in combination with the DynamicArm. The digital signal of the DynamicArm is converted to an analogue signal by the adapter.



# bebionic

## Lamination ring

Article no. 10S1

Lamination ring for system electric hands (article no. 8E38) or system electric Greifers (article no. 8E33) with lamination protection cover for gluing.

Article no.	Size
10S1=40	7
10S1=45	Small
10S1=50	Medium
10S1=54	Large



# Coaxial plug Article no. 9E169

Coaxial plug for connecting the two electrodes and the battery.

### **Consisting of**

- · Coaxial plug piece
- Lock ring (article no. 9E170)
- Oval head screw (article no. 501S50=M4X6)

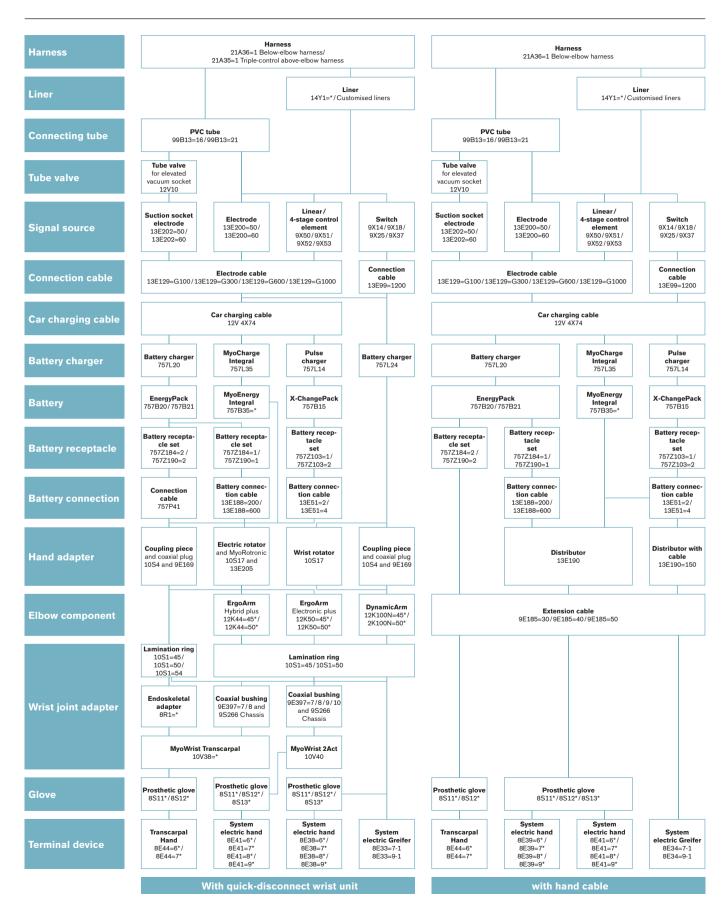


# Coupling piece Article no. 10S4

Coupling piece with lock ring.



# MyoBock adult system overview



## MyoHand VariPlus Speed

### Article no. 8E38=9

The MyoHand VariPlus Speed with quick-disconnect wrist unit is a further development from Ottobock. It combines the mechanical characteristics of the SensorHand Speed and the control options of the DMC VariPlus system electric Greifer. Thanks to the high gripping force (approx. 100 N) and speed (up to 300 mm/s), objects can be gripped quickly and precisely. A total of six different programmes can be selected and adapted according to patient indications using the MyoSelect (article no. 757T13). This permits optimum adaptation to the needs and abilities of the prosthesis user.

### The following control versions can be selected with the MyoSelect (article no. 757T13)

- DMC plus (white)
- AutoControl LowInput (red)
- VarioControl (blue)
- VarioDual (yellow)

The MyoHand VariPlus Speed can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). With central coaxial plug connection, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E38=9-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents
8E38=9-L7 3/4	Left (L)	7 ¾	8X18=L7 ¾	Men
8E38=9-L8 1/4	Left (L)	8 1⁄4	8X18=L8 1/4	Men
8E38=9-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents
8E38=9-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Men
8E38=9-R8 1/4	Right (R)	8 1⁄4	8X18=R8 1/4	Men

Static current	1 mA
Operating temperature	0 to +70°
Opening width	100 mm
Proportional gripping force approx.	0-100 N
Proportional speed	15-300 mm/sec
Weight (incl. system inner hand)	460 g

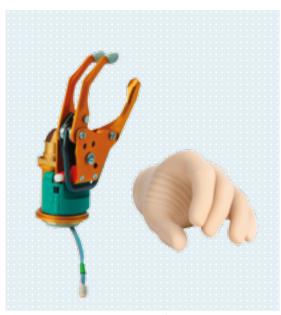
- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- ▶ For compatible prosthetic gloves, see pages 62–64.



646D321

647G504





(ii) 646D165 646D321

**№** 647G504

### MyoHand VariPlus Speed

Article no. 8E39=9

The MyoHand VariPlus Speed with lamination ring is a further development from Ottobock. It combines the mechanical characteristics of the SensorHand Speed and the control options of the DMC VariPlus system electric Greifer. Thanks to the high gripping force (approx. 100 N) and speed (up to 300 mm/s), objects can be gripped quickly and precisely. A total of six different programmes can be selected and adapted according to patient indications using the MyoSelect (article no. 757T13). This permits optimum adaptation to the needs and abilities of the prosthesis user.

### The following control versions can be selected with the MyoSelect (article no. 757T13)

- DMC plus
- · AutoControl LowInput
- VarioControl
- VarioDual
- · DigitalControl
- · DoubleChannel Control

The MyoHand VariPlus Speed can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a centrally guided flat cable, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E39=9-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents
8E39=9-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Men
8E39=9-L8 1/4	Left (L)	8 1⁄4	8X18=L8 1/4	Men
8E39=9-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents
8E39=9-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Men
8E39=9-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Men

Static current	1 mA
Operating temperature	0 to +70°
Opening width	100 mm
Proportional gripping force approx.	0-100 N
Proportional speed	15-300 mm/sec
Weight (incl. system inner hand)	460 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



### MyoHand VariPlus Speed

Article no. 8E41=9

The MyoHand VariPlus Speed with M12X1.5 threaded stud is a further development from Ottobock. It combines the mechanical characteristics of the SensorHand Speed and the control options of the DMC VariPlus system electric Greifer. Thanks to the high gripping force (approx. 80 N) and speed (up to 300 mm/s), objects can be gripped quickly and precisely. A total of six different programmes can be selected and adapted according to patient indications using the MyoSelect (article no. 757T13). This permits optimum adaptation to the needs and abilities of the prosthesis user.

### The following control versions can be selected with the MyoSelect (article no. 757T13)

- DMC plus
- AutoControl LowInput
- VarioControl
- VarioDual
- DigitalControl
- · DoubleChannel Control

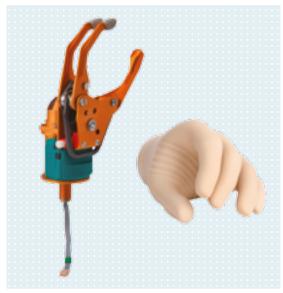
The MyoHand VariPlus Speed can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15).

It features a central cable outlet, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E41=9-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents
8E41=9-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Men
8E41=9-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Men
8E41=9-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents
8E41=9-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Men
8E41=9-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Men

Static current	1 mA
Operating temperature	0 to +70°
Opening width	100 mm
Proportional gripping force approx.	0-100 N
Proportional speed	15-300 mm/sec
Weight (incl. system inner hand)	460 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



☐ 646D165 646D321

₩ 647G504

# MyoHand VariPlus Speed control programmes

Programme 1	Open	Close	Indication
DMC plus	Sustained electrode signal     Speed: proportional     Adjustment regulator A	Sustained electrode signal Gripping force: proportional. After gripping once with maximum force, the EMG signal required to open the hand will be set to a higher value. Opening the MyoHand VariPlus Speed with unwanted electrode signals is prevented. Speed: proportional Adjustment regulator A	For patients with two strong electrode signals
Programme 2	Open	Close	Indication
AutoControl LowInput	Sustained electrode signal     Reduced proportionality range:     maximum speed once low     threshold has been reached     Speed: proportional     Adjustment regulator A	Sustained electrode signal     Gripping force: time proportional. After gripping once with maximum force, the EMG signal required to open the hand will be set to a higher value. Opening the MyoHand VariPlus Speed with unwanted electrode signals is prevented.     Speed: constant     Adjustment regulator B	For patients with two weak electrode signals
AutoControl LowInput	Sustained electrode signal Reduced proportionality range: maximum speed once low threshold has been reached Speed: proportional Adjustment regulator A	<ul> <li>Signal via the switch</li> <li>Gripping force: time proportional. After gripping once with maximum force, the EMG signal required to open the hand will be set to a higher value. Opening the MyoHand VariPlus Speed with unwanted electrode signals is prevented.</li> <li>Speed: constant</li> <li>Adjustment regulator B</li> </ul>	For patients with only one muscle and weak electrode signal
AutoControl LowInput	The MyoHand VariPlus Speed opens as long as the OPEN side of the switch is operated Speed: constant Adjustment regulator A	<ul> <li>The MyoHand VariPlus Speed closes as long as the CLOSE side of the switch is operated</li> <li>Gripping force: time proportional</li> <li>Speed: constant</li> <li>Adjustment regulator B</li> </ul>	For patients with a weak or no electrode signal
Programme 3	Open	Close	Indication
Vario Control	Increasing electrode signal through muscle contraction     Speed and strength of muscle contraction on the electrode     Speed: proportional     Adjustment regulator A	Declining electrode signal through muscle relaxation     Gripping force: proportional to the decline of the electrode signal     Speed: proportional     Adjustment regulator A	For users with one strong electrode signal or tendency to co-contrac- tion
VarioControl	Speed and strength of pull on the linear control element     Speed: proportional     Adjustment regulator A	<ul> <li>Speed of release of pull on the linear control element.</li> <li>Gripping force: proportional to the decrease of the pull on the linear control element</li> <li>Speed: proportional</li> <li>Adjustment regulator A</li> </ul>	For patients with a weak or no electrode signal



# MyoHand VariPlus Speed control programmes

Programme 4	Open	Close	Indication
VarioDual	Increasing electrode signal through muscle contraction on the first electrode     Speed and strength of muscle contraction on the electrode     Speed: proportional to the increase of the electrode signal     Adjustment regulator A	<ul> <li>Declining electrode signal through muscle relaxation on the first electrode</li> <li>Gripping force: proportional to the signal strength on the second electrode. If only the first electrode is used, the MyoHand VariPlus Speed closes up to the minimal gripping force.</li> <li>Increased gripping force: achieved by secondary gripping with a stronger electrode signal on the second electrode. After gripping once with maximum force, the EMG signal required to open the hand will be set to a higher value. Opening the MyoHand VariPlus Speed with unwanted electrode signals is prevented.</li> <li>Speed: proportional to the decline of the electrode signal on the first electrode / proportional to the signal strength on the second electrode.</li> <li>Adjustment regulator A</li> </ul>	For patients with two strong electrode signals
Programme 5	Open	Close	Indication
Digital Control	Sustained electrode signal     Adjustment regulator B	Sustained electrode signal     Gripping force: duration of the signal     Adjustment regulator B	For patients with two weak electrode signals
Digital Control	Sustained electrode signal     Adjustment regulator B	<ul><li>Signal via the switch</li><li>Gripping force: duration of the signal</li><li>Adjustment regulator B</li></ul>	For patients with only one muscle and weak electrode signals
Digital Control	The MyoHand VariPlus Speed opens as long as the OPEN side of the switch is operated Adjustment regulator B	<ul> <li>The MyoHand VariPlus Speed closes as long as the CLOSE side of the switch is operated</li> <li>Gripping force: duration of the signal</li> <li>Adjustment regulator B</li> </ul>	For patients with weak or no electrode signals
Programme 6	Open	Close	Indication
Double Channel Control	reaches the upper threshold within	Gripping force: duration of the signal	For patients with one strong electrode signal



646D165 646D321

**№** 647H495

### SensorHand Speed

Article no. 8E38=8

The SensorHand Speed with quick-disconnect wrist unit is suitable for all residual limb lengths, except wrist disarticulation residual limbs. Passive wrist rotation with ratchet lock (can be replaced by the friction ring (article no. 11S30)). The SensorHand Speed features the automatic SUVA Sensor grip stabilisation system, the FlexiGrip function as well as different control programmes for prostheses with one or two electrodes.

Coding plugs of various colours (article no. 13E184=\*) or the MyoSelect (article no. 757T13) are used to select the desired control mode. Please also note the information in the user manual regarding this.

White: DMC plus control (article no. 13E184=1)

Red: AutoControl LowInput control (article no. 13E184=2)

Green: AutoControl control (article no. 13E184=3)
Blue: VarioControl control (article no. 13E184=4)
Yellow: VarioDual control (article no. 13E184=5)

Purple: DMC plus control; SUVA sensors and FlexiGrip can be turned off

(article no. 13E184=6)

The SensorHand Speed can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). With central coaxial plug connection, automatic shut-off electronics with integrated on-off switch and low friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E38=8-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents
8E38=8-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Men
8E38=8-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Men
8E38=8-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents
8E38=8-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Men
8E38=8-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Men

Operating voltage	6/7.2 V
Opening width	100 mm
Proportional gripping force approx.	0-100 N
Proportional speed	15-300 mm/sec
Weight (incl. system inner hand)	462 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



### SensorHand Speed

### Article no. 8E39=8

The SensorHand Speed with lamination ring is suitable for wrist disarticulation residual limbs. Passive wrist rotation with friction. The SensorHand Speed features the automatic SUVA Sensor grip stabilisation system, the FlexiGrip function as well as different control programmes for prostheses with one or two electrodes. Coding plugs of various colours (article no. 13E184=\*) or the MyoSelect (article no. 757T13) are used to select the desired control mode. Please also note the information in the user manual regarding this.

White: DMC plus control (article no. 13E184=1)

Red: AutoControl LowInput control (article no. 13E184=2)

Green: AutoControl control (article no. 13E184=3) Blue: VarioControl control (article no. 13E184=4) Yellow: VarioDual control (article no. 13E184=5)

Purple: DMC plus control; SUVA sensors and FlexiGrip can be turned off

(article no. 13E184=6)

The SensorHand Speed can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-Change-Pack (article no. 757B15). It features a centrally guided flat cable, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E39=8-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents
8E39=8-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Men
8E39=8-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Men
8E39=8-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents
8E39=8-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Men
8E39=8-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Men

Operating voltage	6/7.2 V
Opening width	100 mm
Proportional gripping force approx.	0-100 N
Proportional speed	15-300 mm/sec
Weight (incl. system inner hand)	462 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



@ 646D165 646D321

647H495



 646D165 646D321

**∭** 646D495

## SensorHand Speed

Article no. 8E41=8

The SensorHand Speed with M12X1.5 threaded stud is suitable for all residual limb lengths, except wrist disarticulation residual limbs. It features the automatic SUVA Sensor grip stabilisation system, the FlexiGrip function as well as different control modes for prostheses with one or two electrodes. Coding plugs of various colours (article no. 13E184=\*) or the MyoSelect (article no. 757T13) are used to select the desired control mode. Please also note the information in the user manual regarding this.

White: DMC plus control (article no. 13E184=1)

Red: AutoControl LowInput control (article no. 13E184=2)

Green: AutoControl control (article no. 13E184=3) Blue: VarioControl control (article no. 13E184=4) Yellow: VarioDual control (article no. 13E184=5)

Purple: DMC plus control; SUVA sensors and FlexiGrip can be turned off

(article no. 13E184=6)

The SensorHand Speed can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-Change-Pack (article no. 757B15). It features a central cable outlet, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E41=8-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents
8E41=8-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Men
8E41=8-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Men
8E41=8-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents
8E41=8-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Men
8E41=8-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Men

Operating voltage	6/7.2 V
Opening width	100 mm
Proportional gripping force approx.	0-100 N
Proportional speed	15-300 mm/sec
Weight (incl. system inner hand)	462 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



# SensorHand Speed control programmes

Programme 1	Open	Close	Indication
DMC plus sensors • White coding plug • Two electrodes	Myo-signal via the electrode     Speed: proportional	Myo-signal via the electrode     Speed: proportional	Preferred programme for patients with two strong muscle signals
Programme 2	Open	Close	Indication
AutoControl LowInput  Red coding plug  Two electrodes	Myo-signal via the electrode     Speed: proportional	Myo-signal to the electrode, digital (short signal at any level)     Speed: constant	For patients with two weak muscle signals
AutoControl LowInput  Red coding plug  One electrode and any MyoBock switch	Myo-signal via the electrode     Speed: proportional	Signal via the switch     Speed: constant	For patients with only one muscle and weak muscle signal
AutoControl LowInput Red coding plug Any MyoBock switch	<ul> <li>Hand opens as long as the OPEN side of the switch is operated.</li> <li>Speed: constant</li> </ul>	Signal via the CLOSE side of the switch:     hand closes     Speed: constant	For patients with weak or no muscle signals
Programme 3	Open	Close	Indication
AutoControl • Green coding plug • One electrode	Quick, sustained myo-signal via the electrode     Speed: constant	Very slow muscle relaxation via the electrode: hand stops in an opened position Quick muscle relaxation via the electrode: hand closes Speed: constant	For patients with only one muscle and very weak muscle signal
AutoControl Green coding plug Any MyoBock switch	<ul> <li>Opens as long as the OPEN side of the switch is operated</li> <li>Speed: constant</li> </ul>	<ul> <li>Closes automatically as soon as the switch is released</li> <li>Speed: constant</li> </ul>	For patients with weak or no muscle signals
Programme 4	Open	Close	Indication
VarioControl  • Blue coding plug  • One linear control element	Speed and strength of muscle contraction on the electrode     Speed: proportional	Speed and level of muscle relaxation on the electrode     Speed: proportional	For patients with one muscle and strong muscle signal or tendency to co-contraction
VarioControl  • Blue coding plug  • One linear control element	Speed and force of pull on the linear control element.     Speed: proportional	Speed of release of pull on the linear control element     Speed: proportional	For patients with weak or no muscle signal
Programme 5	Open	Close	Indication
VarioDual • Yellow coding plug • Two electrodes	Speed and level of muscle contraction on the first electrode     Speed: proportional	<ul> <li>Speed and level of muscle relaxation on the first electrode</li> <li>Speed: proportional</li> <li>Gripping force proportional to strength of muscle signal on the second electrode</li> </ul>	Control for patients with two strong muscle signals
DMC plus (sensor system can be deactivated) • Purple coding plug • Two electrodes	Myo-signal via the electrode     Speed: proportional	Myo-signal via the electrode     Speed: proportional	Programme for patients with two strong muscle signals SUVA sensors and FlexiGrip can be switched off





### DMC plus system electric hand

### Article no. 8E38=6

The DMC plus system electric hand with quick-disconnect wrist unit is suitable for all residual limb lengths, except wrist disarticulation residual limbs. Passive wrist rotation with ratchet lock (can be replaced by the friction ring (article no. 11S30)). DMC plus control features a DMC and DMC plus control mode. The desired control option is selected with the integrated function plug (article no.

emergency.  Article no.	Side	Size	Inner hand	User
emergency.				
minion munion fi	.ii iiitegiuteu	onp ciuc	cii ilianco opcili	is possible in case of
O	,		0 1	ng possible in case of
			,	tic shut-off electronics with ositive back lock and system
•		,	U	(article no. 757B15). It
•	,	0, 0	,	757B35=*), the EnergyPack
O	U		1 ,	m electric hand can be
0 11 0	11 0		0 11 0	are determined by the
ment and con	trol systems	proportio	onally control b	oth the gripping speed and
opening the h	and with un	intended	l muscle signals	. Two independent measure-
hand after gra	asping once	with max	imum gripping	force. This reduces the risk of
1 1 0	F		c, a moner sign	ai is required to open the
	MC plus cor	itrol mod	e a higher cign	al is required to open the

Article no.	Side	Size	Inner hand	User
8E38=6-L7	Left (L)	7	8X18=L7	Women, adolescents
8E38=6-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents, men
8E38=6-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Women, adolescents, men
8E38=6-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Women, adolescents, men
8E38=6-R7	Right (R)	7	8X18=R7	Women, adolescents
8E38=6-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents, men
8E38=6-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Women, adolescents, men
8E38=6-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Women, adolescents, men

### **Technical data**

Operating voltage	6/7.2 V
Opening width	79–100 mm
Proportional gripping force	0-90 N
Proportional speed	15-130 mm/sec
Weight (incl. system inner hand)	355-457 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-65.



(ii) 646D44

647H326



#### Tip

- The Electric Hand size 7 closes the gap between the Electric Hand 2000 hand system for children and the well-known system electric hands for adults. It is particularly suitable for the fitting of adolescents or women with small, dainty hands.
- It is offered with the familiar Digital Twin and DMC plus control systems.
- The system electric hands can be operated with the MyoEnergy Integral and EnergyPack, Ottobock's Li-poly/ Li-ion battery technology.



(ii) 646D44

647H326



#### Tip

- The Electric Hand size 7 closes the gap between the Electric Hand 2000 hand system for children and the well-known system electric hands for adults. It is particularly suitable for the fitting of adolescents or women with small, dainty hands.
- · It is offered with the familiar Digital Twin and DMC plus control systems.
- The system electric hands can be operated with the EnergyPack, Ottobock's Li-ion battery technology.

## DMC plus system electric hand

Article no. 8E39=6

The DMC plus system electric hand with lamination ring is suitable for wrist disarticulation residual limbs. Passive wrist rotation with friction. DMC plus control features a DMC and DMC plus control mode. The desired control option is selected with the integrated function plug (article no. 13E185). In DMC plus control mode, a higher signal is required to open the hand after grasping once with maximum gripping force. This reduces the risk of opening the hand with unintended muscle signals. Two independent measurement and control systems proportionally control both the gripping speed and gripping force. Gripping speed and gripping force are determined by the strength of the muscle

The DMC plus system electric hand can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a centrally guided flat cable, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E39=6-L7	Left (L)	7	8X18=L7	Women, adolescents
8E39=6-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents, men
8E39=6-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Women, adolescents, men
8E39=6-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Women, adolescents, men
8E39=6-R7	Right (R)	7	8X18=R7	Women, adolescents
8E39=6-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents, men
8E39=6-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Women, adolescents, men
8E39=6-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Women, adolescents, men

Static current	1 mA
Operating voltage	6/7.2 V
Opening width	79–100 mm
Proportional gripping force	0-90 N
Proportional speed	15-130 mm/sec
Weight (incl. system inner hand)	355–457 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-65.



### DMC plus system electric hand

### Article no. 8E41=6

The DMC plus system electric hand with M12X1.5 threaded stud is suitable for all residual limb lengths, except wrist disarticulation residual limbs. DMC plus control features a DMC and DMC plus control mode. The desired control option is selected with the integrated function plug (article no. 13E185). In DMC plus control mode, a higher signal is required to open the hand after grasping once with maximum gripping force. This reduces the risk of opening the hand with unintended muscle signals. Two independent measurement and control systems proportionally control both the gripping speed and gripping force. Gripping speed and gripping force are determined by the strength of the muscle

The DMC plus system electric hand can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a central cable outlet, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E41=6-L7	Left (L)	7	8X18=L7	Women, adolescents
8E41=6-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents, men
8E41=6-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Women, adolescents, men
8E41=6-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Women, adolescents, men
8E41=6-R7	Right (R)	7	8X18=R7	Women, adolescents
8E41=6-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents, men
8E41=6-R7 3/4	Right (R)	7 ¾	8X18=R7 ¾	Women, adolescents, men
8E41=6-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Women, adolescents, men

### **Technical data**

Operating voltage	6/7.2 V
Opening width	79–100 mm
Proportional gripping force	0-90 N
Proportional speed	15-130 mm/sec
Weight (incl. system inner hand)	355–457 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-65.



(ii) 646D44

647H326



#### Tip

- The Electric Hand size 7 closes the gap between the Electric Hand 2000 hand system for children and the well-known system electric hands for adults. It is particularly suitable for the fitting of adolescents or women with small, dainty hands.
- It is offered with the familiar Digital Twin and DMC plus control systems.
- · The system electric hands can be operated with the EnergyPack, Ottobock's Li-ion battery technology.



(ii) 646D44

647H398

## Transcarpal Hand DMC plus

Article no. 8E44=6

Its lamination plate makes it suitable for residual limb lengths from wrist disarticulation to transcarpal levels. Without hand rotation, i.e. active pronation and supination are essential (fine adjustment of the basic position is possible, however, after the socket has been completed). DMC plus control features a DMC and DMC plus control mode. In DMC plus control mode, a higher signal is required to open the hand after grasping once with maximum gripping force. This reduces the risk of opening the hand with unintended muscle signals. The desired control option is selected with the integrated function plug (article no. 13E185). In the DMC plus system, two independent measurement and control systems proportionally control gripping speed as well as gripping force. The Transcarpal Hand DMC plus can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a centrally guided flat cable, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E44=6-L7 1/4	Left (L)	7 1/4	8X24=L7 1/4	Women, adolescents
8E44=6-L7 ¾	Left (L)	7 ¾	8X24=L7 ¾	Men
8E44=6-L8 1/4	Left (L)	8 1/4	8X24=L8 1/4	Men
8E44=6-R7 1/4	Right (R)	7 1/4	8X24=R7 1/4	Women, adolescents, men
8E44=6-R7 ¾	Right (R)	7 ¾	8X24=R7 ¾	Men
8E44=6-R8 1/4	Right (R)	8 1/4	8X24=R8 1/4	Men

Operating voltage	6/7.2 V
Operating temperature	0 to +70 °C
Opening width	100 mm
Proportional gripping force	0-90 N
Proportional speed	15-130 mm/sec
Weight (incl. system inner hand)	308 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



### Digital Twin system electric hand

Article no. 8E38=7

The Digital Twin system electric hand with quick-disconnect wrist unit is suitable for all residual limb lengths, except wrist disarticulation residual limbs. Passive hand rotation with ratchet lock (can be replaced by the friction ring (article no. 11S30)). The Digital Twin control device features a digital and dual-channel control mode. The desired control option is selected with the integrated function plug (article no. 13E185). The Digital Twin system electric hand can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15).

It features a central coaxial plug connection, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. With potentiometer for adjusting the switching threshold (doublechannel control). An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E38=7-L7	Left (L)	7	8X18=L7	Women, adolescents
8E38=7-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents, men
8E38=7-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Women, adolescents, men
8E38=7-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Women, adolescents, men
8E38=7-R7	Right (R)	7	8X18=R7	Women, adolescents
8E38=7-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents, men
8E38=7-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Women, adolescents, men
8E38=7-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Women, adolescents, men



6/7.2 V
79 mm (size 7), 100 mm (size 7 ¼, 7 ¾, 8 ¼)
90 N
110 mm/sec
355–457 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- ▶ For compatible prosthetic gloves, see pages 62–65.



(ii) 646D44

**₩** 647H327



- The Electric Hand size 7 closes the gap between the Electric Hand 2000 hand system for children and the well-known system electric hands for adults. It is particularly suitable for the fitting of adolescents or women with small, dainty hands.
- It is offered with the familiar Digital Twin and DMC plus control systems.
- The system electric hands can be operated with the EnergyPack, Ottobock's Li-ion battery technology.



(ii) 646D44

647H327



#### Tip

- The Electric Hand size 7 closes the gap between the Electric Hand 2000 hand system for children and the well-known system electric hands for adults. It is particularly suitable for the fitting of adolescents or women with small, dainty hands.
- It is offered with the familiar Digital Twin and DMC plus control systems.
- · The system electric hands can be operated with the EnergyPack, Ottobock's Li-ion battery technology.

## Digital Twin system electric hand

Article no. 8E39=7

The Digital Twin system electric hand with lamination ring is suitable for wrist disarticulation residual limbs. Passive wrist rotation with friction. The Digital Twin control device features a digital and dual-channel control mode. The desired control option is selected with the integrated function plug (article no. 13E185). The Digital Twin system electric hand can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a centrally guided flat cable, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. With potentiometer for adjusting the switching threshold (double-channel control). An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E39=7-L7	Left (L)	7	8X18=L7	Women, adolescents
8E39=7-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents, men
8E39=7-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Women, adolescents, men
8E39=7-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Women, adolescents, men
8E39=7-R7	Right (R)	7	8X18=R7	Women, adolescents
8E39=7-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents, men
8E39=7-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Women, adolescents, men
8E39=7-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Women, adolescents, men

Operating voltage	6/7.2 V
Max. opening width	79 mm (size 7), 100 mm (size 7 ¼, 7 ¾, 8 ¼)
Max. gripping force	90 N
Maximum speed	110 mm/sec
Weight (incl. system inner hand)	355-457 g
***************************************	

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-65.



### Digital Twin system electric hand

Article no. 8E41=7

The Digital Twin system electric hand with M12X1.5 threaded stud is suitable for all residual limb lengths, except wrist disarticulation residual limbs. The Digital Twin control device features a digital and dual-channel control mode. The desired control option is selected with the integrated function plug (article no. 13E185). The Digital Twin system electric hand can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a central cable outlet, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. With potentiometer for adjusting the switching threshold (double-channel control). An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E38=7-L7	Left (L)	7	8X18=L7	Women, adolescents
8E38=7-L7 1/4	Left (L)	7 1/4	8X18=L7 1/4	Women, adolescents, men
8E38=7-L7 ¾	Left (L)	7 ¾	8X18=L7 ¾	Women, adolescents, men
8E38=7-L8 1/4	Left (L)	8 1/4	8X18=L8 1/4	Women, adolescents, men
8E38=7-R7	Right (R)	7	8X18=R7	Women, adolescents
8E38=7-R7 1/4	Right (R)	7 1/4	8X18=R7 1/4	Women, adolescents, men
8E38=7-R7 ¾	Right (R)	7 ¾	8X18=R7 ¾	Women, adolescents, men
8E38=7-R8 1/4	Right (R)	8 1/4	8X18=R8 1/4	Women, adolescents, men



Operating voltage	6/7.2 V
Max. opening width	79 mm (size 7), 100 mm (size 7 ¼, 7 ¾, 8 ¼)
Max. gripping force	90 N
Maximum speed	110 mm/sec
Weight (incl. system inner hand)	355–457 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-65.



☐ 646D44

647H327



### Tip

- The Electric Hand size 7 closes the gap between the Electric Hand 2000 hand system for children and the well-known system electric hands for adults. It is particularly suitable for the fitting of adolescents or women with small, dainty hands.
- It is offered with the familiar Digital Twin and DMC plus control systems.
- · The system electric hands can be operated with the EnergyPack, Ottobock's Li-ion battery technology.



(ii) 646D44

647H398

## Transcarpal Hand Digital Twin

Article no. 8E44=7

The Transcarpal Hand Digital Twin with lamination plate is suitable for residual limb lengths from wrist disarticulation to transcarpal levels. Without hand rotation, i.e. active pronation and supination are essential (fine adjustment of the basic position is possible, however, after the socket has been completed). The Digital Twin control device features a digital and dual-channel control mode. The desired control option is selected with the integrated function plug (article no. 13E185). The Transcarpal Hand Digital Twin can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a centrally guided flat cable, automatic shut-off electronics with integrated on-off switch, low-friction bevel gear, positive back lock and system inner hand. With potentiometer for adjusting the switching threshold. An integrated slip clutch makes opening possible in case of emergency.

Article no.	Side	Size	Inner hand	User
8E44=7-L7 1/4	Left (L)	7 1/4	8X24=L7 1/4	Women, adolescents
8E44=7-L7 ¾	Left (L)	7 ¾	8X24=L7 ¾	Men
8E44=7-L8 1/4	Left (L)	8 1/4	8X24=L8 1/4	Men
8E44=7-R7 1/4	Right (R)	7 1/4	8X24=R7 1/4	Women, adolescents, men
8E44=7-R7 ¾	Right (R)	7 ¾	8X24=R7 ¾	Men
8E44=7-R8 1/4	Right (R)	8 1/4	8X24=R8 1/4	Men

Operating voltage	6/7.2 V
Max. opening width	100 mm (size 7 ¼, 7 ¾, 8 ¼)
Max. gripping force	90 N
Maximum speed	110 mm/sec
Weight (incl. system inner hand)	308 g

- The electrodes must be adjusted with the MyoBoy (article no. 757M11)!
- For compatible prosthetic gloves, see pages 62-64.



# Spare parts and accessories for system electric hands

## System inner hand

Article no. 8X18

System inner hand for Ottobock system electric hands sizes 7, 7  $\frac{1}{4}$ , 7 3/4 and 8 1/4. Energy-saving, lightweight plastic version with partial reinforcement, with wire inserts in the fingers and sealing retainer ring or lock ring.

Article no.	Side	Size	Retainer ring or lock ring
8X18=L7	Left (L)	7	9S15=48
8X18=L7 1/4	Left (L)	7 1/4	9S187=7 ¼
8X18=L7 ¾	Left (L)	7 ¾	9S187=7 ¾
8X18=L8 1/4	Left (L)	8 1/4	9S187=8 ¼
8X18=R7	Right (R)	7	9S15=48
8X18=R7 1/4	Right (R)	7 1/4	9S187=7 ¼
8X18=R7 ¾	Right (R)	7 ¾	9S187=7 ¾
8X18=R8 1/4	Right (R)	8 1/4	9S187=8 ¼
***************************************			





## System inner hand

Article no. 8X24

The system inner hand for Ottobock Transcarpal Hands sizes 7 1/4, 7 <sup>3</sup>/<sub>4</sub> and 8 <sup>1</sup>/<sub>4</sub>.

Article no.	Side	Size	
8X24=L7 1/4	Left (L)	7 1/4	
8X24=L7 ¾	Left (L)	7 3/4	
8X24=L8 1/4	Left (L)	8 1/4	
8X24=R7 1/4	Right (R)	7 1/4	
8X24=R7 ¾	Right (R)	7 3/4	
8X24=R8 1/4	Right (R)	8 1/4	
***************************************			

<sup>○</sup> For compatible prosthetic gloves, see pages 62-65.



# Spare parts and accessories for system electric hands



## Lock ring

Article no. 9S187

For endoskeletal adapter and MyoWrist Transcarpal. Compatible with hand sizes 7 1/4, 7 3/4 and 8 1/4.

Article no.	Size
9S187=7 1/4	7 1/4
9S187=7 ¾	7 ¾
9S187=8 ¼	8 1/4



## Special thread

Article no. 624Z12

The special thread is used for sealing the system inner hand (article no. 8X24) of the Transcarpal Hand.



### Cable seal

Article no. 9E388

Cable seal for hand cable (article no. 9E53) with the Transcarpal Hand.



## Hexagon nut

Article no. 502S97=M5

Hexagon nut with flange for thwe Transcarpal Hand.

## Spare parts and accessories for system electric hands

### Tweezers

Article no. 8Y1



## Pinch gauge

Article no. 743F1

The pinch gauge is used to check the gripping force of system electric hands.



### **Derma Protection ArmComfort**

Article no. 453A1

Derma Protection ArmComfort makes the transition from the forearm socket to the upper arm more visually appealing and provides additional support for the prosthesis. The special polymer gel coating, high elasticity and anatomical fit also improve wearer comfort.

Article no.	Target group
453A1	Adults
453A1=1	Children



## EasyFit Arm donning sheath

Article no. OC1560

The EasyFit Arm donning sheath with valve opening (colour: green) saves strength and time when putting on an arm prosthesis. It feels comfortable when donning. It is made of high-quality material and is therefore very durable. It is also easy to clean in the washing machine. Also available in children's sizes.

Article no.	Size	Proximal residual limb wcircumference	Distal residual limb circumference	Sock length
OC1560=KIDS	KIDS	290 mm	150 mm	210 mm
OC1560=TR	TR	420 mm	220 mm	250 mm
OC1560=TH	TH	470 mm	280 mm	340 mm



@ 646D536=M\_DE



### Natural: MyoSkin Natural

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very lifelike appearance. The PVC-based material ensures that Skin Natural is very robust compared to other materials, and it has a relatively long life. This provides safety when using the gloves.

Due to a special modern surface treatment, the Skin Natural gloves are also easy to clean. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

> The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern. For available colours, please ask our Customer Service.



### (ii) 646D423

**№** 647G571

## MyoSkin Natural

Article no. 8S11N

The MyoSkin Natural (article no. 8S11N) is suitable for men.

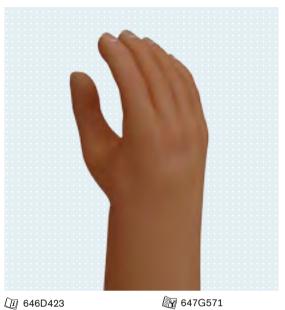
Article no.	Side	Size	Inner hand	Sleeve length	Sleeve end circumference
8S11N=190X76L	Left (L)	7 1/4	8X18=L7 ½, 8X24=L7 ½	300 mm	230 mm
8S11N=210X78L	Left (L)	7 ¾	8X18=L7 ¾, 8X24=L7 ¾	320 mm	250 mm
8S11N=225X80L	Left (L)	8 1/4	8X18=L8 ¼, 8X24=L8 ¼	350 mm	260 mm
8S11N=190X76R	Right (R)	7 1/4	8X18=R7 ¼, 8X24=R7 ¼	300 mm	230 mm
8S11N=210X78R	Right (R)	7 ¾	8X18=R7 ¾, 8X24=R7 ¾	320 mm	250 mm
8S11N=225X80R	Right (R)	8 1/4	8X18=R8 ¼, 8X24=R8 ¼	350 mm	260 mm



# MyoSkin Natural Article no. 8S12N

The MyoSkin Natural (article no. 8S12N) is suitable for women.

Article no.	Side	Size	Inner hand	Sleeve length	Sleeve end circumference
8S12N=190X78L	Left (L)	7 1/4	8X18=L7 1/4, 8X24=L7 1/4	460 mm	250 mm
8S12N=190X78R	Right (R)	7 1/4	8X18=R7 ¼, 8X24=R7 ¼	460 mm	250 mm



☐ 646D423

## MyoSkin Natural

Article no. 8S13N

The MyoSkin Natural (article no. 8S13N) is suitable for adolescents and women.

Article no.	Side	Size	Inner hand	Sleeve length	Sleeve end circumference
8S13N=7L	Left (L)	7	8X18=L7	280 mm	242 mm
8S13N=7R	Right (R)	7	8X18=R7	280 mm	242 mm



(i) 646D423

**№** 647G571

Special cleaner for prosthetic gloves is found on page



## Prosthetic glove for adolescents and men

Article no. 8S11

The Ottobock prosthetic glove for adolescents and men features an impressively natural appearance, durability and flexibility. Size 7 1/4 is suitable for adolescents and men, the three additional sizes for men.

Article no.	Side	Size	Inner hand	Sleeve length	Sleeve end circumference
8S11=190X76L	Left (L)	7 1/4	8X18=L7 ¼, 8X24=L7 ¼	300 mm	230 mm
8S11=210X78L	Left (L)	7 ¾	8X18=L7 ¾, 8X24=L7 ¾	320 mm	250 mm
8S11=225X80L	Left (L)	8 1/4	8X18=L8 ¼, 8X24=L8 ¼	350 mm	260 mm
8S11=190X76R	Right (R)	7 1/4	8X18=R7 ¼, 8X24=R7 ¼	300 mm	230 mm
8S11=210X78R	Right (R)	7 ¾	8X18=R7 ¾, 8X24=R7 ¾	320 mm	250 mm
8S11=225X80R	Right (R)	8 1/4	8X18=R8 ¼, 8X24=R8 ¼	350 mm	260 mm

Available in 18 different shades. When ordering, please add the colour code according to the 646M3 colour swatches to the end of the article number, e.g. 8S11=190X76L4



## Prosthetic glove for women

Article no. 8S12

The prosthetic glove for women features an impressively natural appearance, durability and flexibility.

Article no.	Side	Size	Inner hand	Sleeve length	Sleeve end circumference
8S12=190X78L	Left (L)	7 1/4	8X18=L7 ¼, 8X24=L7 ¼	460 mm	250 mm
8S12=190X78R	Right (R)	7 1/4	8X18=R7 ¼, 8X24=R7 ¼	460 mm	250 mm

Available in 18 different shades. When ordering, please add the colour code according to the 646M3 colour swatches to the end of the article number, e.g. 8S12=190x78L4



## Prosthetic glove for children and adolescents

Article no. 8S13

The prosthetic glove for children and adolescents features an impressively natural appearance, durability and flexibility.

Article no.	Side	Size	Inner hand	Sleeve length	Sleeve end circumference
8S13=7L	Left (L)	7	8X18=L7	280 mm	242 mm
8S13=7R	Right (R)	7	8X18=R7	280 mm	242 mm

O Available in 18 different shades. When ordering, please add the colour code according to the 646M3 colour swatches to the end of the article number, e.g. 8S13=7L4



Special cleaner for prosthetic gloves is found on page

# Accessories for Myo prosthetic gloves



## Special cleaner

Article no. 640F12

In case of heavy soiling, the special cleaner for prosthetic gloves should be applied immediately (net contents: 460 g).





## Pump sprayer

Article no. 640F13

The user should always keep a pump sprayer filled with special cleaner for Ottobock prosthetic gloves handy in order to be able to use the cleaner immediately in case of soiling (net contents: 90 g).

This container is empty on delivery!



## Donning spray

Article no. 640F18

The donning spray for silicone liners and prosthetic gloves (silicone or PVC) is used among other things for the donning and removal of the liner or prosthetic glove.

Article no.		Contents		
	640F18	90 ml		
	640F18=900	900 ml (refill)		

## Myo Greifer

## DMC VariPlus system electric Greifer

Article no. 8E33=9-1

The DMC VariPlus system electric Greifer with quick-disconnect wrist unit is based on Ottobock's DMC system (DMC= dynamic mode control). This system developed by Ottobock uses two independent measurement and control systems in order to optimally control the gripping speed and gripping force in accordance with the patient's muscle signal. It is suitable for all residual limb lengths, except wrist disarticulation residual limbs. Six different programmes can be selected and adjusted using the MyoSelect (article no. 757T13). They allow the prosthesis to be optimally adapted to the user's individual abilities and requirements. The DMC VariPlus system electric Greifer can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). With central coaxial plug connection, energy-saving, automatic shut-off electronics and on-off switch. Metal finger tips and grip surfaces covered with rubber for normal gripping functions.

#### **Technical data**

Operating voltage	6/7.2 V
Max. opening width	95 mm
Max. gripping force	0-160 N
Maximum speed	8–200 mm/sec
Weight	540 g





647G278

### DMC VariPlus system electric Greifer

Article no. 8E34=9-1

The DMC VariPlus system electric Greifer with lamination ring is based on Ottobock's DMC system (DMC= dynamic mode control): This system developed by Ottobock uses two independent measurement and control systems in order to optimally control the gripping speed and gripping force in accordance with the patient's muscle signal. Suitable for wrist disarticulation residual limbs. Six different programmes can be selected and adjusted using the MyoSelect (article no. 757T13). They allow the prosthesis to be optimally adapted to the user's individual abilities and requirements. The DMC VariPlus system electric Greifer can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). With central flat cable connection, energy-saving, automatic shut-off electronics and on-off switch. Metal finger tips and grip surfaces covered with rubber for normal gripping functions.

#### **Technical data**

Operating voltage	6/7.2 V
Max. opening width	95 mm
Max. gripping force	0-160 N
Maximum speed	8-200 mm/sec
Weight	520 g

The electrodes must be adjusted with the MyoBoy (article no. 757M11)!



647G278

## Myo Greifer



647H382

## Digital Twin system electric Greifer

Article no. 8E33=7-1

The Digital Twin control device with quick-disconnect wrist unit features a digital and dual-channel control mode. For all residual limb lengths, except wrist disarticulation residual limbs. The desired control option is selected with the integrated function plug (article no. 13E189). The Digital Twin electric Greifer can be operated with the MyoEnergy Integral (article no. 757B35=\*). the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). Passive Greifer rotation with ratchet lock (can be replaced with the friction ring (article no. 11S30)).

With central coaxial plug connection, automatic shut-off electronics and on-off switch. Metal finger tips and grip surfaces covered with rubber for normal gripping functions. With two potentiometers to adjust the switching threshold.

#### Technical data

Operating voltage	6/7.2 V
Max. opening width	95 mm
Max. gripping force approx.	160 N
Approx. max. gripping speed	180 mm/sec
Weight	540 g

The electrodes must be adjusted with the 757M11 MyoBoy!



647H382

## Digital Twin system electric Greifer

Article no. 8E34=7-1

The Digital Twin control device with lamination ring features a digital and dual-channel control mode. Suitable for wrist disarticulation residual limbs. Passive Greifer rotation with friction. The desired control option is selected with the integrated function plug (article no. 13E189). The Digital Twin electric Greifer can be operated with the MyoEnergy Integral (article no. 757B35=\*), the EnergyPack (article no. 757B20/757B21) or the X-ChangePack (article no. 757B15). It features a central flat cable outlet with automatic shut-off electronics and on-off switch. Metal finger tips and grip surfaces covered with rubber for normal gripping functions. With two potentiometers to adjust the switching threshold.

#### Technical data

Operating voltage	6/7.2 V
Max. opening width	95 mm
Max. gripping force approx.	160 N
Approx. max. gripping speed	180 mm/sec
Weight	520 g

The electrodes must be adjusted with the MyoBoy (article no. 757M11)!



## **MyoWrist Transcarpal**

### Article no. 10V38

The MyoWrist Transcarpal enables flexion and extension of a myoelectrically controlled Transcarpal Hand (article no. 8E44). Can be locked in five positions from -40° to +40°. Passive pronation and supination is possible thanks to the quick-disconnect wrist unit. In combination with the optional electric rotator (article no. 10S17), pronation and supination driven by an electric motor can be offered. Compatible with all 8E44=\* hands.

#### **Consisting of**

• Lock ring (article no. 9S267=\*)

Side	Size	
Left (L)	7 1/4	
Left (L)	7 3/4	
Left (L)	8 1/4	
Right (R)	7 1/4	
Right (R)	7 3/4	
Right (R)	8 1/4	
	Left (L) Left (L) Left (L) Right (R) Right (R)	Left (L) 7 1/4  Left (L) 7 3/4  Left (L) 8 1/4  Right (R) 7 1/4  Right (R) 7 3/4



647G351

#### **Technical data**

Exterior diameter	36 mm
Overall length	24.7 mm
Weight	85–89 g

The MyoWrist Transcarpal can also be used with the endoskeletal adapter (article no. 8R1)!

### Please note the accessories on the following page!

## **MyoWrist 2Act**

### Article no. 10V40

The MyoWrist 2Act (article no. 10V40) was developed especially for all versions of the system electric hands with threaded stud (article no. 8E41) to maintain a low structural height for the overall system. Flexion and extension is possible with five locking positions from -40° to +40° in 20° increments. Rotation is performed passively via the quick-disconnect wrist unit. Active rotation is also possible in combination with the MyoRotronic (article no. 13E205).

Exterior diameter	36 mm
Overall length	26 mm
Weight	55 g



647G459



Chassis Article no. 9S266

Chassis with quick-disconnect wrist unit.



## Coaxial bushing

Article no. 9E397

Article no.	Control	Wrist connection
9E397=7	Coaxial bushing (DMC plus)	8E41 with 10V40 + 8E44 with 10V38
9E397=8	Digital Twin control	8E41 with 10V40 + 8E44 with 10V38
9E397=9	SensorHand Speed control	8E41 with 10V40
9E397=10	VariPlus Speed control	8E41 with 10V40

The scope of delivery for article no. 9E397=7 and article no. 9E397=8 includes the cable connector, article no. 9E167!



Cable connector

Article no. 9E167



## Lamination ring

Article no. 10S1

Lamination ring for system electric hands (article no. 8E38) or system electric Greifers (article no. 8E33) with lamination protection cover for gluing.

Article no.	Size
10S1=40	7
10S1=45	7 and 7 1/4
10S1=50	7 % and system electric Greifer (article no. 8E33=*)
10S1=54	8 1/4

## Lamination ring

Article no. 9S110

Lamination ring for laminating all system electric hands (article no. 8E39) or system electric Greifers (article no. 8E34).

Article no.	Size
9S110=50	7, 7 1/4, 7 3/4, system electric Greifer (article no. 8E34=*)
9S110=54	8 1/4



## Lamination plate

Article no. 9S258

Lamination plate for Ottobock Transcarpal Hand (article no. 8E44).

Article no.	Side	Size
9S258=L7 1/4	Left (L)	7 1/4
9S258=L7 ¾	Left (L)	7 ¾
9S258=L8 1/4	Left (L)	8 1⁄4
9S258=R7 1/4	Right (R)	7 1/4
9S258=R7 ¾	Right (R)	7 ¾
9S258=R8 1/4	Right (R)	8 1/4



## Coaxial plug

Article no. 9E169

Coaxial plug for connecting the two electrodes and the battery.

### **Consisting of**

- · Coaxial plug piece
- Lock ring (article no. 9E170)
- Oval head screw (article no. 501S50=M4X6)



## Coupling piece

Article no. 10S4

Coupling piece with lock ring.





647H204

### Electric rotator

Article no. 10S17

Electric rotator for power-driven rotation of the system electric hand or system electric Greifer.

#### Consisting of

- Lock ring (article no. 11S4)
- Joint drive with coaxial plug (article no. 11S61)
- Lock ring (article no. 11S25)
- Protective cap (article no. 9E85)
- Protective plug (article no. 9E365)

#### Technical data

Operating voltage	6/7.2 V
Approx. no-load current	150 mA
Approx. stall current	1,000 mA
Idle speed	13.5 RPM
Angle of rotation	360°
Corresponds to a rotation angle of	81°/sec.
Weight	96 g



647G361

### MyoRotronic

Article no. 13E205

The MyoRotronic enables the proportional or digital control of the electric rotator (article no. 10S17). Compatible with all MyoBock system electric hands and system electric Greifers with quick-disconnect wrist unit. Not suitable for use with system electric hands for other manufacturers' systems. Five different programmes can be selected using the MyoSelect (article no. 757T13) and allow individual adaptation to the respective patient. The MyoRotronic (article no. 13E205) is operated with one or two electrodes (article no. 13E200) or suction socket electrodes (article no. 13E202), or a combination of one electrode and one linear control element (article no. 9X50/9X52). The scope of delivery includes a buzzer (article no. 13E183) for acoustic feedback on the switchover.

### **Power supply**

- MyoEnergy Integral 7.4 V (article no. 757B35)
- EnergyPack 7.2 V (article no. 757B20 / 757B21)
- X-ChangePack 6 V (article no. 757B15)

Static current	1 mA
Operating temperature	0 to +70 °C
Power off	load dependent between 30 ms and 10 s

- The MyoSelect (article no. 757T13) is required for program selection and adjustment of the MyoRotronic (article no. 13E205).
- When using the electric rotator (article no. 10S17) and the MyoRotronic (article no. 13E205), the distance between the residual limb end and wrist joint must be at least
- Rotation can be switched off using the connection cable (article no. 9X24).

## Myo wrist joints and accessories

## Endoskeletal adapter

#### Article no. 8R1

Endoskeletal adapter for long and short residual limb prostheses in combination with the Transcarpal Hand (article no. 8E44; not included in the scope of delivery!). The endoskeletal adapter allows the use of the Transcarpal Hand as a particularly short and lightweight prosthetic hand with quick-disconnect mechanism for prostheses for both long and short residual limbs.

#### Particularly lightweight

Compared to a conventional system electric hand (article no. 8E38), the weight is reduced by approx. 80-100 g (approx. -20%), depending on size and tube length, without functional constraints. In addition, the proximal position of the quick-disconnect mechanism is beneficial to the prosthesis wearer.

#### **Particularly short**

The shortest version of the Transcarpal Hand with the quick-disconnect mechanism of the endoskeletal adapter is 145 mm, whereas the comparable system electric hand is 170 mm (= -15%). Size 7 3/4 with system inner hand was measured in each case.

#### Consisting of

- Coding ring, brown (1 pc.)
- Plate (article no. 9S263=R/L)
- Threaded connector (article no. 9S264)
- Threaded connector (article no. 9S265)
- Lock ring (article no. 9S267=\*)
- Cable connector (article no. 9E167)
- Cable seal (article no. 9E388)
- Chassis (article no. 9S266)
- Coaxial bushing (article no. 9E397=8)
- Cover plate for coaxial bushing
- UHU-plus, endfest 300 (article no. 636W23)

Article no.	Side	To be used for the Transcarpal Hand
8R1=L7 1/4	Left (L)	8E44=6-L7 ¼, 8E44=7-L7 ¼
8R1=L7 ¾	Left (L)	8E44=6-L7 ¾, 8E44=7-L7 ¾
8R1=L8 1/4	Left (L)	8E44=6-L8 ¼, 8E44=7-L8 ¼
8R1=R7 1/4	Right (R)	8E44=6-R7 ¼, 8E44=7-R7 ¼
8R1=R7 ¾	Right (R)	8E44=6-R7 ¾, 8E44=7-R7 ¾
8R1=R8 1/4	Right (R)	8E44=6-R8 ¼, 8E44=7-R8 ¼

• The endoskeletal adapter (article no. 8R1) can also be combined with the wrist joints (article no. 10V38 and 10V40)!



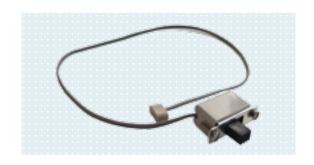
647H501

#### Connection cable

Article no. 9X24

Connection cable to deactivate rotation.

Only possible in programme 1 of 4-channel control!



## Elbow components



(ii) 646D229 646D120 646D626 646D26

**№** 647G152

#### DynamicArm Article no. 12K100N

DynamicArm with electric drive, continuously electronically controlled vario-gear, integrated Li-ion battery, BionicLink Bluetooth interface, electronically controlled AFB flexion aid and upper arm rotation joint (humeral rotation feature) with adjustable friction, forearm length max. 305 mm. The Dynamic-Arm is a microprocessor-controlled, elbow joint driven by an electric motor with movements that can be controlled very precisely. The elbow flexion and extension speed can be controlled proportionately. Likewise, pronation and supination of the wrist joint can be controlled proportionately via the integrated electronics of the electric rotator (article no. 10S17) (optional). Up to 6 kg can be actively lifted depending on the forearm length. When the user is active at a normal level, the integrated Li-ion battery with a capacity of 1,800 mAh will last approximately one day.

The BionicLink Bluetooth interface is integrated into the DynamicArm. In combination with the ElbowSoft software (article no. 646C42) and Bluetooth adapter (article no. 60X5), it supports wireless adjustments using a PC. In this way the prosthesis system can be optimised even while the patient is wearing the prosthesis. Nine different programmes allow the system to adapt to various requirements. Moreover, all essential parameters can be set individually.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter	Colour
12K100N=45	7-7 1/4	70 mm	45 mm	4
12K100N=45-7	7-7 1/4	70 mm	45 mm	7
12K100N=50	7 ¾-8 ¼	70 mm	50 mm	4
12K100N=50-1	7 3/4 - 8 1/4	70 mm	50 mm	11
12K100N=50-2	7 3/4 - 8 1/4	70 mm	50 mm	15
12K100N=50-7	7 3/4 - 8 1/4	70 mm	45 mm	7
13Z157=45	Cover			
13Z157=50	Cover			
642C42=*	ElbowSoft			

- The colour roughly corresponds to the glove colour according to the 646M3 colour swatches.
- This product requires certification. For further information, please contact our employees in customer service!



## Elbow components

## DynamicArm Plus

#### Article no. 12K110N

Like the DynamicArm, the DynamicArm Plus (article no. 12K110N) is a myoelectrically controlled, elbow joint driven by an electric motor. It is intended for fitting users with transhumeral or higher amputation levels who are using TMR, or are able to use more than two signals to control their prosthesis. Targeted Muscle Reinnervation (TMR) is the medical term for the surgical rerouting of nerves. The innovative prosthetic device enables the user to make more natural sequences of motion because the active joints can be controlled simultaneously. The user acts with the so-called phantom limb, which can be moved instinctively in the user's mental perception of their body. Learning thought control must be accompanied by intensive therapy. Apart from the advantages that control with more than two signals has to offer, it has the same features as the DynamicArm. Up to eight input signals can be processed in addition.

#### The DynamicArm Plus can be combined with other myoelectric prosthetic components from Ottobock, such as

- Electric rotator (article no. 10S17)
- SensorHand Speed (article no. 8E38=8\*)
- MyoHand VariPlus Speed (article no. 8E38=9\*)
- DMC VariPlus system electric Greifer (article no. 8E33=9)
- bebionic hand with EQD wrist (article no. BBH\*QD)

Other prosthetic components can not be used. Settings for the DynamicArm Plus can be configured using the software (article no. 646C57), the integrated Bluetooth module and a PC.

Description	Colour
DynamicArm Plus	4
DynamicArm Plus	4
DynamicArm Plus	11
DynamicArm Plus	15
DynamicArm Plus	Black
DynamicArm Plus	Black
Cover	Black
Cover	Black
ElbowSoft TMR	_
	DynamicArm Plus DynamicArm Plus DynamicArm Plus DynamicArm Plus DynamicArm Plus DynamicArm Plus Cover Cover

- The colour roughly corresponds to the glove colour according to the 646M3 colour swatches.
- O This product requires certification. For further information, please contact our employees in customer service!



(ii) 646D229 646D120

647G152

## Alignment aid for DynamicArm

#### Article no. 743A27

Alignment and foaming aid allows the alignment of an interim prosthesis for functional training in the rehabilitation phase.



# DynamicArm control programmes

Programme	Input	Switching version	DynamicArm flexion/extension	Electric rotator pronation/supination	System electric hand and Greifer	Indication
1	Two electrodes	Sequential switching with long or short co-contraction, with automatic switch-back to the hand     Vibration active	Proportional	Proportional	All control versions for two strong muscle signals	For patients with two strong muscle signals
2	Two electrodes	Short co-contraction with automatic switch-back to the hand     Vibration active	• Proportional	Not applicable	All control versions for two strong muscle signals	For patients with two strong muscle signals
3	Two electrodes and one switch	Sequential switching with switch impulse     With automatic switch-back to the hand     Vibration active	Proportional	• Proportional	All control versions for two strong muscle signals	For patients with two strong muscle signals
	Two switches	<ul> <li>Sequential switching with switch impulse</li> <li>With automatic switch-back to the hand</li> <li>Vibration active</li> </ul>	• Digital	• Digital	All control versions for switch control	For patients with weak or no muscle signals
4	Two electrodes and one switch	Switching back and forth with switch impulse     With automatic switch-back to the hand     Vibration active	Proportional	Not applicable	All control versions for two strong muscle signals	For patients with two strong muscle signals
	Two switches	<ul> <li>Switching back and forth with switch impulse</li> <li>With automatic switch-back to the hand</li> <li>Vibration active</li> </ul>	• Digital	Not applicable	All control versions for switch control	For patients with weak or no muscle signals
5	Two electrodes and one 4-stage control element	Direct switching with the impulse of a 4-stage control element     With automatic switch-back to the hand     Vibration active	Proportional	Proportional	All control versions for two strong muscle signals	For patients with two strong muscle signals
	One switch and one 4-stage control element	Direct switching with the impulse of a 4-stage control element     With automatic switch-back to the hand     Vibration active	• Digital	• Digital	All control versions for switch control	For patients     with weak or     no muscle signals

# DynamicArm control programmes

Programme	Input	Switching version	DynamicArm flexion/extension	Electric rotator pronation/supination	System electric hand and Greifer	Indication
6	Two electrodes and one linear control element	Four-channel control	Position control with linear control element	Digital	All control versions for two strong muscle signals	For patients with two strong muscle signals
7	Two electrodes and one linear control element	Co-contraction     With automatic switch-back to the hand     Vibration active	Position control with linear control element	• Proportional	All control versions with two electrodes	For patients with two strong muscle signals
8	Two electrodes and one linear control element	Not applicable	Position control with linear control element	Not applicable	All control versions with two electrodes	For patients with two muscle signals of any strength     Simultaneous control of DynamicArm and terminal device possible
	One switch and one linear transducer	Not applicable	Position control with linear control element	Not applicable	All control versions for switch control	For patients with weak or no muscle signals
9	One electrode and one linear control element	Not applicable	Position control with linear control element	Not applicable	All control versions with one electrode	For patients with one strong muscle signal     Possibility for simultaneous control of DynamicArm and terminal device

## Elbow components



647H437

## ErgoArm Electronic plus

Article no. 12K50

ErgoArm Electronic plus with internal electronic lock and EasyPlug (internal electrical connection), AFB flexion aid and upper arm rotation joint (humeral rotation feature), with adjustable friction. Plastic forearm shell (length: 305 mm, circumference: approx. 260 mm) and elbow ball made of plastic. The continuous electronic lock can be locked or unlocked either with myoelectric signals (e.g. two electrodes: co-contraction) or by means of a switch. Various programmes that can be accessed via MyoSelect and coloured coding plugs permit individual adaptation of the lock control system to the requirements of the respective user. The slip-stop function makes it possible to lower the forearm in a controlled manner without having to fully release and reactivate the lock (not included with every model!). The lock can bear a load of up to 230 N at a forearm length of 305 mm. The electrode and battery connection cables can be plugged into the elbow ball. Since there are no external cables, the risk of defects caused by broken cables is reduced and the cosmetic appearance is enhanced. The internal ratchetless lock can be unlocked or locked in any position, even under a load.

#### **Accessories for 12K50**

- Adapter (article no. 13Z68)
- · Alignment aid for ErgoArm (article no. 743A23)
- · Clamp stopple set (article no. 21A207)
- Forearm (article no. 12K48)
- AFB flexion aid (article no. 12K39)
- Cable harness (article no. 13E187)
- Elbow joint\* (article no. 12A14)
- Strap clamp\* (article no. 13G65)
- Band roller (article no. 13G66)
- Lamination ring (article no. 13Z47)
- Ball cap\* (article no. 13Z48)
- · Plug cover set (article no. 13Z49)
- Thread segment\* (article no. 13Z50)
- Hole covering\* (article no. 13Z51)

- Spring telescope (article no. 13Z52)
- Switch cable (article no. 13Z53)
- Lamination protection cover (article no. 13Z54) 6
- · Bracket cover\* (article no. 13Z56) 2
- Pressure piece\* (article no. 13Z57)
- Eccentric\* (article no. 13Z58)
- Lamination protection cover (article no. 13Z59) 4
- · Countersunk head screw (article no. 501S101=M4X12)
- · Countersunk head screw (article no. 501S84=M4X20)
- O-ring (article no. 627F13=60X2.5)
- Fixation fork (article no. 711M51) 1
- \* Marked articles are available in colour no. 11 by adding =1 and colour no. 15 by adding =2 at the end of the article number.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter	Colour
12K50=45	7-7 1/4	70 mm	50 mm	4
12K50=45-1	7-7 1/4	70 mm	50 mm	11
12K50=45-2	7-7 1/4	70 mm	50 mm	15
12K50=50	7 34-8 1/4	70 mm	50 mm	4
12K50=50-1	7 3/4 - 8 1/4	70 mm	50 mm	11
12K50=50-2	7 ¾-8 ¼	70 mm	50 mm	15

The colour roughly corresponds to the glove colour according to the 646M3 colour swatches.

# ErgoArm Electronic plus switching modes

Swite	hing mode	Lock	SLIP-STOP	Four-channel processor II	Hand
1	White	Press switch ▶ release = lock     Press switch ▶ release = unlock	• NO	All switching modes	All versions
2	Red	• Contraction = lock • Contraction = unlock	• NO	Only programme 1 (white) four-channel control or programme 9 adjustment cap	All versions with two electrodes
3	Green	Press and hold down switch = elbow mode  Electrode OPEN = unlock  Electrode CLOSE = lock  Release switch = hand mode	• YES	All switching modes	All versions with two electrodes
4	Blue	<ul> <li>Press switch ▶ release = elbow mode</li> <li>Electrode OPEN = unlock</li> <li>Electrode CLOSE = lock</li> <li>Press switch ▶ release = hand mode</li> </ul>	• YES	All switching modes	All versions with two electrodes
5	Yellow	Press switch ► release = elbow mode Electrode OPEN = unlock Electrode CLOSE = lock 10 s no electrode signal = hand mode or press switch ► release = hand mode	• YES	All switching modes	For patients with one strong electrode signal or tendency to co-contraction
6	Purple	Co-contraction = elbow mode Electrode OPEN = unlock Electrode CLOSE = lock Co-contraction = hand mode	• YES	Only programme 1 (white) four-channel control or programme 9 adjustment cap	Not recommended for hands with digital or Digital Twin control
7	Orange	Co-contraction = elbow mode Electrode OPEN = unlock Electrode CLOSE = lock 10 s no electrode signal = hand mode or co-contraction = hand mode	• YES	Only programme 1 (white) four-channel control or programme 9 adjustment cap	Not recommended for hands with digital or Digital Twin control

OVibration signal feedback for successful switching between hand and elbow is provided in programmes 3-7.

<sup>1</sup>x vibration = hand model (electrode signals control the hand)

<sup>2</sup>x vibration = elbow mode (electrode signals control the elbow)

## Elbow components



647H437

## ErgoArm Hybrid plus

#### Article no. 12K44

ErgoArm Hybrid plus with internal ratchetless lock, AFB flexion aid and upper arm rotation joint (humeral rotation feature), with adjustable friction. Plastic forearm shell (length: 305 mm, circumference: approx. 260 mm) and elbow ball made of plastic. The slip-stop function makes it possible to lower the forearm in a controlled manner without having to fully release and reactivate the lock. The lock can bear a load of up to 230 N at a forearm length of 305 mm. The electrode and battery connection cables can be plugged into the elbow ball. Since there are no external cables, the risk of defects caused by broken cables is reduced and the cosmetic appearance is enhanced. The internal ratchetless lock can be unlocked or locked in any position, even under a load.

#### Accessories for 12K44

- Adapter (article no. 13Z68)
- Alignment aid for ErgoArm (article no. 743A23)
- · Clamp stopple set (article no. 21A207)
- Forearm (article no. 12K48)
- AFB flexion aid (article no. 12K39)
- Cable harness (article no. 13E187)
- Elbow joint\* (article no. 12A14)
- Strap clamp\* (article no. 13G65)
- Band roller (article no. 13G66)
- Lamination ring (article no. 13Z47)
- Ball cap\* (article no. 13Z48)
- · Plug cover set (article no. 13Z49)
- Thread segment\* (article no. 13Z50)

- Hole covering\* (article no. 13Z51)
- Spring telescope (article no. 13Z52)
- Switch cable (article no. 13Z53)
- Lamination protection cover (article no. 13Z54) 5
- · Bracket cover\* (article no. 13Z56) 2
- Pressure piece\* (article no. 13Z57)
- Eccentric\* (article no. 13Z58)
- Lamination protection cover (article no. 13Z59) 4
- Countersunk head screw (article no. 501S101=M4X12)
- · Countersunk head screw (article no. 501S84=M4X20)
- O-ring (article no. 627F13=60X2.5) 3
- Fixation fork (article no. 711M51) 1
- \* Marked articles are available in colour no. 11 by adding =1 and colour no. 15 by adding =2 at the end of the article number.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter	Colour
12K44=45	7-7 1/4	70 mm	45 mm	4
12K44=45-1	7-7 1/4	70 mm	45 mm	11
12K44=45-2	7-7 1/4	70 mm	45 mm	15
12K44=50	7 ¾-8 ¼	70 mm	50 mm	4
12K44=50-1	7 3/4 - 8 1/4	70 mm	50 mm	11
12K44=50-2	7 ¾-8 ¼	70 mm	50 mm	15
***************************************				

The colour roughly corresponds to the glove colour according to the 646M3 colour swatches.



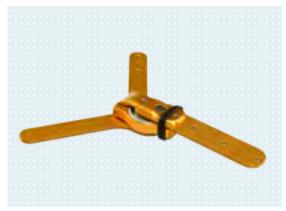
# Shoulder joints

## **MovoShoulder Swing**

#### Article no. 12S6

This shoulder joint opens up new possibilities for prosthetic devices in the shoulder area. The MovoShoulder Swing is ideal for prostheses with basic functions or in combination with high-tech components. The free swing of up to 40° reduces pressure from the prosthetic socket and allows even bilateral amputees to achieve natural, harmonious movements. Locking at 30° anteversion and unlocking is controlled by specific upper body motions or with the sound hand. No additional control elements such as switches or a body harness are required. Abduction of up to 20° facilitates more comfortable movement patterns during many activities of daily life. This especially applies to activities done close to the body or while sitting.

Article no.	Side	
12S6=L	Left (L)	
12S6=R	Right (R)	
	3 - ( )	
Technical data	<u> </u>	
Technical data Overall length	230 mm	

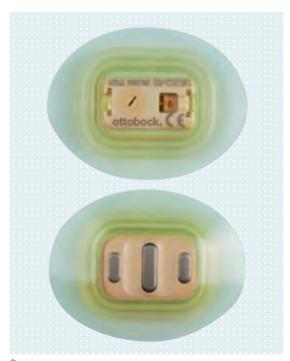


**₩** 647G349



· This joint can also be fitted in conjunction with the DynamicArm (article no. 12K100N and 12K110N).

## Electrodes



647G334

#### Suction socket electrode

#### Article no. 13F202

This generation of electrodes is based on the familiar 13E200 electrode. Embedded into a mounting suspension of elastic material, this electrode creates an airtight seal between the inner socket and outer socket. If used correctly, the suction socket electrode (article no. 13E202) also prevents sweat from penetrating between the outer and inner socket, therefore effectively preventing damage to the electrical and mechanical components caused by corrosion.

The suction socket electrode can not only be used for standard sockets, but is also particularly suitable for application in elevated vacuum sockets. Combining the suction socket electrode with a tube valve (article no. 12V10) for an elevated vacuum socket creates a vacuum effect in the socket, optimising the hold of the residual limb in the socket. As with the 13E200 electrode, state-ofthe-art shielding and filtering technologies largely protect the 13E202 suction socket electrode against high frequency interference caused, for example, by mobile phones, walkie-talkies, computers or anti-theft systems in shopping centres so that the correct function of the myoelectrically controlled prosthesis is not affected.

The electrode contacts are made from pure titanium and are therefore suitable for people with allergies as well. The frequency filter's full protection effect will only be provided if the mains frequency and filter frequency are identical.

Article no.	HZ	Frequency bandwidth	Room temperature	Operating voltage U
13E202=50	50	90-450 Hz	-15 to +60 °C	4.8-7.2 V
13E202=60	60	90-450 Hz	-15 to +60 °C	4.8-7.2 V

- Use silicone grease (article no. 633F11) to seal the plug connection. Remove any excessive grease after connecting the electrode cable.
- Accessories for vacuum forming inner sockets, see page 244.
- Tube valve (article no. 12V10), see page 96.



### Electrode

#### Article no. 13E200

These MyoBock electrodes are particularly sensitive in the range of low muscle signals. The change in amplification takes place logarithmically, which enables enhanced differentiation of the signal level. Thanks to modern frequency shielding and filtering technologies, it is less sensitive to low and high frequency interferences that are emitted, for example, by mobile phones or shopping centre security systems. The electrode contacts are made from pure titanium and are therefore suitable for people with allergies as well. The electrode accessories (article no. 13E201) are part of the electrode scope of delivery. The frequency filter's full protection effect will only be provided if the mains frequency and filter frequency are identical. The electrode cable connection with IDC termination weighs 4.5 g (27 x 18 x 9.5 mm).

Article no.	HZ	Frequency bandwidth	Room temperature	Operating voltage U
13E200=50	50	90-450 Hz	-15 to +60 °C	4.8-7.2 V
13E200=60	60	90-450 Hz	-15 to +60 °C	4.8-7.2 V

- Use silicone grease (article no. 633F11) to seal the plug connection. Remove any excessive grease after connecting the electrode cable.
- Accessories for vacuum forming inner sockets, see page 244.

## Accessories for electrodes

## Electrode accessory set

Article no. 13E206

Suitable for suction socket electrodes (article no. 13E202).

#### **Consisting of**

- Casting template for inner socket (article no. 13E203)
- Lamination disc, serrated (article no. 507S15)
- Socket screw with Allen head (article no. 503F3)
- Sensitivity adjustment tool (article no. 13E80)



#### Electrode accessories

Article no. 13E153

For laminated inner sockets with electrode (article no. 13E200). Use the Allen wrench (article no. 709S10=2) for socket screws (article no. 503F3).

#### **Consisting of**

- Template for inner socket (article no. 13E191)
- Casting template for outer socket (article no. 13E192)
- Lamination disc, serrated (article no. 507S15)
- Socket screw with Allen head (article no. 503F3)
- Sensitivity adjustment tool (article no. 13E80)



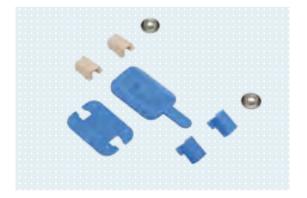
## Electrode accessories

Article no. 13E201

For vacuum-formed inner sockets with electrode (article no. 13E200). Only available as a set. The electrode mounting brackets and setting nuts (article no. 29C5=M4X9) can also be ordered individually.

#### Consisting of

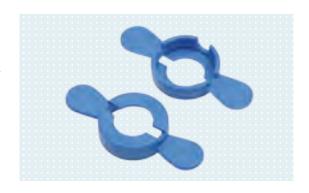
- One template for the inner and outer socket each
- Lamination dummy for electrode mounting bracket
- Electrode mounting bracket, beige (article no. 13E172)
- Setting nut (article no. 29C5=M4X9)

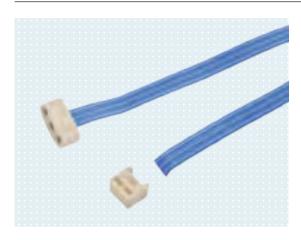


## Electrode mounting bracket set

Article no. 13E135

The electrode mounting bracket set is intended for positioning and assembling MyoBock electrodes on the interim plaster or ThermoLyn socket (article no. 616T52 or 616T53), and is suitable for electrodes (article no. 13E200).





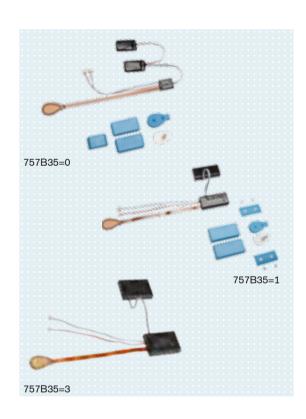
## Electrode cable with straight plug and plug connector

Article no. 13E129

Electrode cable to connect the electrode (article no. 13E200 / 13E202), control elements (article no. 9X52, 9X53 and 9X54) and elbow (article no. 12K12).

Article no.	Length
13E129=G100	100 mm
13E129=G300	300 mm
13E129=G600	600 mm
13E129=G1000	1,000 mm

The 13E121 plug connector is included in the scope of delivery!



## MyoEnergy Integral

Article no. 757B35=\*

The MyoEnergy Integral (article no. 757B35=\*) is an integrated power supply system made up of several components. The charging receptacle has contacts for the battery, indicates the current charge level and allows the prosthesis to be switched on and off and opened in an emergency. The communication cable with a 3-pin receptacle is used for the exchange of data. The supply cable establishes the connection between the battery and the respective prosthetic component. The battery consists of two cells with different capacities. Suitable for MyoBock system.

#### Consisting of

- · Lamination dummy battery
- · Lamination dummy charging receptacle
- · Drilling template for charging receptacle

Technical data	Article no. 757B35=0	Article no. 757B35=1	Article no. 757B35=3
Capacity	300 mAh	600 mAh	1,150 mAh
Output voltage	approx. 7.4 V	approx. 7.4 V	approx. 7.4 V
Charging time	approx. 2.5 h	approx. 2.5 h	approx. 2.5 h
Technology	Lithium polymer	Lithium polymer	Lithium-ion
Dimensions approx.	35 x 20 x 20 mm	2x 52 x 25 x 10 mm	2x 52x36x9 mm

▶ You can order the dummy set for article no. 757B35=1 under article no. 757Z276=1. You can order the dummy set for article no. 757B35=3 under article no. 757Z276=3.

## **MyoCharge Integral**

#### Article no. 757L35

The MyoEnergy Integral integrated into the socket is charged using the MyoCharge Integral (article no. 757L35). Simply place the charging plug against the charging receptacle on the outside of the prosthetic socket. Thanks to an integrated magnet, the charging plug can be easily attached to the charging receptacle. The special contour of the charging receptacle and charging plug assures the quick, reliable positioning of the two components to each other. LEDs indicate the readiness of the battery charger and the current charge level.

■¥ 647G534

#### Technical data

Operating temperature	0 to +60 °C
Storage temperature	-20 to +60 °C
Supply voltage	100-240 V
Mains frequency	50-60 Hz

- The MyoCharge Integral can be used for all versions of the MyoEnergy Integral (article no. 757B35=0, 757B35=1 and 757B35=3).
- The power supply (article no. 757L16-2) is included in the scope of delivery!

## EnergyPack

#### Article no. 757B2\*

The EnergyPack is suitable for integration into all socket types of the MyoBock system, even in case of long residual limbs. Compared to Ni-Cd batteries, Li-ion batteries have a lower self-discharge level, higher cell voltage and greater capacity. They have no memory effect.

Article no. 757B20	Article no. 757B21
900 mAh	800 mAh
approx. 3.5 h	approx. 3 h
Lithium-ion	Lithium-ion
65 g	51 g
	900 mAh approx. 3.5 h Lithium-ion

- Can only be used for MyoBock adult system.
- The following colours are available: -3 corresponds to black, -2 corresponds to colour 11, no colour code corresponds to colour 4



## Li-ion charger

#### Article no. 757L20

Li-ion charger for charging one or two EnergyPacks (article no. 757B20/757B21). Housing made of impact resistant plastic material, including power supply (article no. 757L16-2) with EU and additional US plug. The design conforms to recommended standards, protection class II.

#### **Technical data**

Operating temperature	0 to +50 °C
Mains frequency	47–63 Hz
Supply voltage	100-240 automatic adjustment V/AC
Charging time for EnergyPacks	Approx. 3.5 h (757B20) 3 h (757B21)



647H357



647H482

## X-ChangePack

Article no. 757B15

The X-ChangePack is suitable for integration into all socket types, even in case of long residual limbs. In comparison with Ni-Cd batteries, NiMh batteries have a considerably higher capacity with the same installed size. Recommended especially for retrofitting existing 6 volt prosthesis systems. Operating old prosthesis systems without energy management therefore does not pose any risk (the Ottobock 6-volt system is not suitable for operation with Li-ion batteries).

#### Technical data

Capacity	550 mAh
Nominal voltage	6 V
Dimensions (Lx WxH)	81x28x16 mm
Technology	Nickel metal hydride
Weight	77 g

- Only use the pulse charger (article no. 757L14) for charging the X-ChangePack (article no. 757B15).
- Can only be used for MyoBock adult system.



647G260

## Pulse charger

Article no. 757L14

Pulse charger for simultaneously charging one or two X-ChangePacks (article no. 757B15). Housing made of impact and break resistant plastic material, including power supply (article no. 757L16-2) with exchangeable EU and US plugs. The design conforms to recommended standards, protection class II.

#### Technical data

Operating temperature	0 to +40 °C
Dimensions (Lx WxH)	130 x 70 x 45 mm
Supply voltage range	100-240 V/AC
Mains frequency	40 – 70 Hz
Charging current for 757L14	Pulsed medium direct charging current, approx. 70 mA, reduction to trickle charging
Charging time (for full charge)	approx. 10 h
Weight	220 g
***************************************	

## Battery receptacle set

Article no. 757Z184=1

Battery receptacle set for EnergyPack (article no. 757B20).

#### **Consisting of**

- Battery receptacle (article no. 757Z185=1)
- Locking lever (article no. 757Z186)
- Casting template (article no. 757Z187=1)
- Foil template (article no. 757Z189=1)



647H369

## Battery receptacle

Article no. 757Z185=1

Battery receptacle without locking lever for EnergyPack (article no. 757B20).



### Battery receptacle set

Article no. 757Z184=2

Battery receptacle set with screw clamp connection for quick removal from socket. With integrated connection sockets for electrodes, hand cables or for connection cables (article no. 757P41 and 757P39) for connecting to the MyoBoy.

#### Consisting of

- Battery receptacle (article no. 757Z185=2)
- Locking lever (article no. 757Z186)
- Casting template (article no. 757Z187=1)
- Foil template (article no. 757Z189=1)
- Plug (article no. 757Z202)
- Set screw (article no. 506G1=M3X10)



## Battery receptacle

Article no. 757Z185=2

Battery receptacle with screw clamp connection, without locking lever, for EnergyPack (article no. 757B20). Notice: Please use the 757P41 connection cable here!

#### Consisting of

- Plug (article no. 757Z202)
- Set screw (article no. 506G1=M3X10)





647H369

## Battery receptacle set

Article no. 757Z190=1

Battery receptacle set for EnergyPack (article no. 757B21).

#### Consisting of

- Battery receptacle (article no. 757Z191=1)
- Locking lever (article no. 757Z186)
- Casting template (article no. 757Z192=1)



## Battery receptacle

Article no. 757Z191=1

Battery receptacle without locking lever, for 757B21 EnergyPack.



647H492

#### Battery receptacle set

Article no. 757Z190=2

With screw clamp connection for quick removal from socket. Integrated connection sockets for electrodes, hand cables or connection cables (article no. 757P41 and 757P39) for connecting to the MyoBoy. For EnergyPack (article no. 757B21).

#### Consisting of

- Battery receptacle (article no. 757Z191=2)
- Locking lever (article no. 757Z186)
- Casting template (article no. 757Z192=1)
- Foil template (article no. 757Z194=1)
- Plug (article no. 757Z202)
- Set screw (article no. 506G1=M3X10)



## Battery receptacle

Article no. 757Z191=2

Battery receptacle with screw clamp connection, without locking lever, for EnergyPack (article no. 757B21). Notice: Please use the 757P41 connection cable here!

#### Consisting of

- Plug (article no. 757Z202)
- Set screw (article no. 506G1=M3X10)

## Locking lever

Article no. 757Z186

Locking lever for battery receptacle (article no. 757Z184 and 757Z190).



## Locking lever

Article no. 757Z195

Locking lever for bilateral amputees with enlarged release lever for increased user comfort.



## Battery receptacle set

Article no. 757Z103=1

Battery receptacle set for X-ChangePack (article no. 757B15).

#### **Consisting of**

- Battery receptacle (article no. 757Z104=1)
- Cable retention piece with O-ring (article no. 757Z105=1)
- Casting template (article no. 757Z106=1)
- Spacer insert (article no. 757Z107=1)



**№** 647H6

## Battery receptacle set

Article no. 757Z103=2

The battery is installed 2.5 mm deeper. For X-ChangePack (article no. 757B15).

#### **Consisting of**

- Battery receptacle (article no. 757Z104=2)
- Cable retention piece with O-ring (article no. 757Z105=2)
- Casting template (article no. 757Z106=2)
- Spacer insert (article no. 757Z107=2)



## Plug

Article no. 757Z202

Notice: Plug for battery compartment with screw connection!





## Car charging cable, 12 volt

Article no. 4X74

A MyoEnergy Integral (article no. 757B35=\*) or two EnergyPacks (article no. 757B20/757B21), X-ChangePacks (article no. 757B15) or interchangeable batteries (article no. 757B13) can be charged via the cigarette lighter socket. Suitable for MyoBock battery chargers (article no. 757L35, 757L20, 757L14 and 757L13).



## Universal power supply

Article no. 757L16-2

Universal power supply for the MyoBock battery chargers (article no. 757L35, 757L20, 757L14), with exchangeable EU and US plugs.



## Adapter for Australia

Article no. 757S1=AUS

Adapter for Australia. Recommended for travel.



## Adapter for Great Britain

Article no. 757S1=GB

Adapter for Great Britain. Recommended for travel.



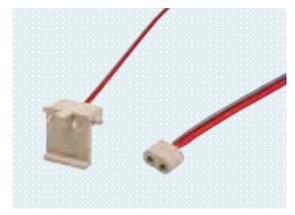
## Cables and accessories

## Battery connection cable

Article no. 13E51=\*

Battery connection cable to connect an X-ChangePack (article no. 757B15) with coaxial plug (article no. 9E169), MyoRotronic (article no. 13E205), the distributor (article no. 13E190 or 13E190=150), electric rotator (article no. 10S17 for switch control), ErgoArm Hybrid plus (article no. 12K44) or ErgoArm Electronic plus (article no. 12K50). Length 200 mm for X-ChangePack (article no. 757B15).

Article no.	Length
13E51=2	200 mm
13E51=4	600 mm



## Battery connection cable

Article no. 13E188

Battery connection cable for EnergyPack to connect the battery receptacle (article no. 757Z185=1 or 757Z191=1) with coaxial plug (article no. 9E169), electric rotator (article no. 10S17), MyoRotronic (article no. 13E205) or distributor (article no. 13E190 or 13E190=150).

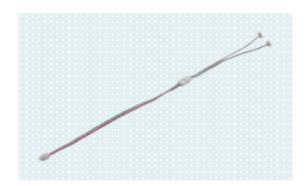
Article no.	Length
13E188=200	200 mm
13E188=600	600 mm



## Connection cable

Article no. 757P41

Battery connection cable to connect the battery receptacle (article no. 757Z185=2 or 757Z191=2) and coaxial plug (article no. 9E169) or MyoRotronic (article no. 13E205).



## Cables and accessories



# Distributor

Article no. 13E190

Distributor to connect the EnergyPack (article no. 757B20 or 757B21), electrodes (article no. 13E200 or 13E202) and system electric hands with hand cable (article no. 9E53), without extension cable.

Apply silicone grease (article no. 633F11) to the bushings prior to connection: provides corrosion protection!

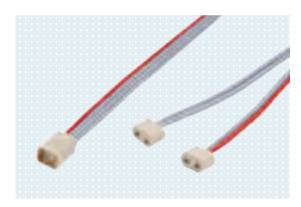


#### Distributor

Article no. 13E190=150

Distributor to connect the EnergyPack (article no. 757B20 or 757B21), electrodes (article no. 13E200 or 13E202) and system electric hands with hand cable (article no. 9E53) and extension cable. Length 150 mm for EnergyPack.

Apply silicone grease (article no. 633F11) to the bushings prior to connection: provides corrosion protection!

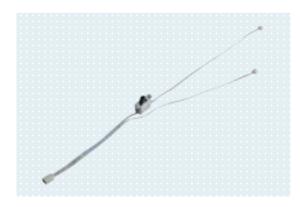


### Connection cable

Article no. 13E50

Connection cable to control electric pronation and supination with the electric rotator (article no. 10S17). Used to provide the electrical connection between the electric rotator and harness pull switch (article no. 9X14), cable pull switch (article no. 9X18) or rocker switch (article no. 9X25).

Article no.	Length
13E50=250	250 mm
13E50=1200	1,200 mm



### Connection cable with on/off switch

Article no. 13E97

Pronation and supination function can be turned off using the switch. The connection cable is used to provide the electrical connection between the electric rotator (article no. 10S17) and harness pull switch (article no. 9X14), cable pull switch (article no. 9X18) or rocker switch (article no. 9X25).

Article no.	Length
13E97=250	250 mm
13E97=1200	1,200 mm

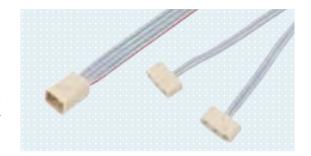


## Cables and accessories

#### Connection cable

#### Article no. 13E99=1200

Connection cable to control the opening and closing movements of the system electric hand (article no. 8E38=9, 8E38=7, 8E38=8) or system electric Greifer (article no. 8E33=\*). The connection cable is used for the electrical connection between the coaxial plug or electric rotator and harness pull switch (article no. 9X14), cable pull switch (article no. 9X18), rocker switch (article no. 9X25) or pressure switch (article no. 9X37). (Length: 1,200 mm).



#### Extension cable

#### Article no. 9E185

Extension cable to extend the hand cable of the system electric hand (article no. 8E39, 8E41, 8E44) or system electric Greifer (article no. 8E34) and connect to the battery receptacle (article no. 757Z185=2 or 757Z191=2).

Article no.	Length
9E185=30	300 mm
9E185=40	400 mm
9E185=50	500 mm





• Apply silicone grease (article no. 633F11) to the cable bushings prior to connection.

## Control elements



#### (1) 647H475

#### Control element

Article no. 9X50/9X51

The linear control element (article no. 9X50) for installation in a harness system allows continuous, proportional control of prosthetic components using harnesses. The 4-stage control element (article no. 9X53) allows for proportional control of prosthetic components at four different speed levels using harnesses. In combination with the DynamicArm (article no. 12K100), it offers the possibility to switch specifically between the various system components.

#### Technical data

Cable travel	8 mm
Max. actuating force	10 N
Weight	6 g

Connection cable (article no. 13E129=G\*) see page 28.



647H485

#### Control element

Article no. 9X52/9X53

The liner control element (article no. 9X52) for installation between the outer and inner socket of the prosthesis allows continuous, proportional control of prosthetic components using harnesses. The 4-stage control element (article no. 9X53) allows for proportional control of prosthetic components at four different speed levels using harnesses. In combination with the DynamicArm (article no. 12K100), it offers the possibility to switch specifically between the various system components.

#### Technical data

Cable travel	8 mm
Max. actuating force	10 N
Weight	11 g

Connection cable (article no. 13E129=G\*) see page 28.



**1** 647G400

### Harness pull switch

Article no. 9X14

The harness pull switch (weight: 19 g) for use within a harness or as a cable pull switch, is used to control the electric rotator (article no. 10S17), system electric hand (article no. 8E38=7, 8E38=8, 8E38=9 and 8E12) or system electric Greifer (article no. 8E33=7 and 8E33=9). The control cables can be connected after loosening the cover. Functional sequence: off – function 1 - off – function 2.

#### Scope of delivery

- 4 cap screws (article no. 501T16=M2X6)
- Ocnnection cable see page 92.

## Control elements

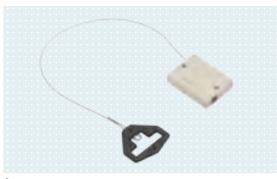
## Cable pull switch

#### Article no. 9X18

The cable pull switch (weight: 17 g) with steel cable, bow and wedge lock is for standard applications. The switch housing is attached to the socket with screws and the steel cable is connected to the harness or another pull cable so that the electric rotator (article no. 10S17), system electric hand (article no. 8E38=7, 8E38=8, 8E38=9 and 8E12) or system electric Greifer (article no. 8E33=\*) can be controlled. Functional sequence: off – function 1 – off – function 2.

#### Scope of delivery

- 2x oval head screws (article no. 501S46=M3X5)
- 2x oval head screws (article no. 501S46=M3X8)
- Onnection cable see page 92 and 93.



647G401

#### Rocker switch

#### Article no. 9X25

Rocker switch with four-conductor flat cable coming out the side, with female connector, for controlling the electric rotator (article no. 10S17), system electric hand (article no. 8E38=7, 8E38=8 and 8E12), system electric Greifer (article no. 8E33=\*).

#### **Connection cable**

- For opening and closing movements: connection cable (article no. 13E99)
- For pronation and supination: connection cable (article no. 13E50 or article no. 13E97)

#### Scope of delivery

- Oval head screw (article no. 501S46=M2X8 and article no. 501S46=M2X5)
- Ocnnection cable see page 84 and 85.



■ 647G402

#### Pressure switch

#### Article no. 9X37

Pressure switch for controlling the system electric hand (article no. 8E38=\*), system electric Greifer (article no. 8E33=\*) or electric rotator (article no. 10S17) in combination with the MyoRotronic (article no. 13E205). The switch's special feature allows the separate adjustment of both control points.

#### Scope of delivery

• Oval countersunk head screw (article no. 501S75=M2X8 and article no. 501S75=M2X5)

#### **Connection cable**

- Use the connection cable (article no. 13E99) for opening and closing
- movements. Connection cable (article no. 13E99=1200), see page 93.



**∭** 647H71

## Accessories

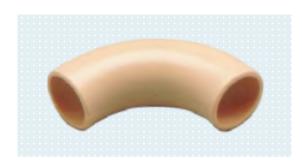


## Tube valve for elevated vacuum socket

Article no. 12V10

In combination with the MyoBock electrode (article no. 13E202), the tube valve creates an airtight socket seal.

The PVC connection tube (article no. 99B13) is already included in the scope of delivery.

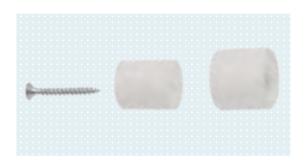


#### PVC connection tube

Article no. 99B13

The PVC connection tube serves as a connection channel between the inner and outer sockets.

Article no.	Colour	Diameter
99B13=16	Beige	16 mm
99B13=16-7	Black	16 mm
99B13=21	Beige	21 mm
99B13=21-7	Black	21 mm

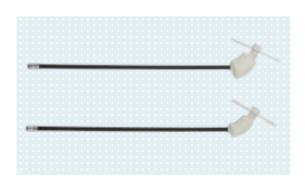


#### **Tube dummies**

Article no. 99B83

The tube dummies are used for fabricating vacuum-formed inner sockets.

Article no.	Diameter
99B83=16	16 mm
99B83=21	21 mm



## Magnetic centring aid

Article no. 711M77

The magnetic centring aid allows technicians to precisely determine the centre point of the PVC connection tube outside the outer socket in order to then mill the cut-out exactly. The centring aid is also highly elastic, which permits straightforward positioning in the inner socket.

Please note that the 711M77=1 is intended for the 7.4 V children's system and the 711M77=2 for the MyoBock system and Axon-Bus prosthetic system.



## Myo software

#### **PAULA**

#### Article no. 646C52

PAULA is a comprehensive software package which provides essential support for fabricating Upper Limb prostheses. The software assists O&P professionals with the planning, socket design and construction of myoelectrically controlled prostheses, hybrid prostheses, cable-controlled prostheses and passive prostheses. The integration into the Ottobock Data Station provides a common platform, offering O&P professionals a familiar user interface.

If you have questions related to installation, please contact our O&P Hotline employees!



(ii) 646D315

**№** 646G461

## **MyoBoy**

#### Article no. 757M11=X-Change

The MyoBoy provides optimum support for the O&P professional and patient when training muscle activity and for the realistic simulation of the MyoBock systems. The data that are collected allow the selection of the most suitable control system for the individual prosthesis.

#### **Consisting of**

- Quick reference guide (article no. 647G265=1)
- Ground electrode (article no. 757Z18)
- Electrode adapter (article no. 757P44)
- Electrode armband (article no. 757Z174)
- Screwdriver
- USB cable
- · Carrying case

#### **Optional**

- Test adapter (article no. 757P23)
- MyoBoy communication cable (article no. 757P39)



## Myo software



#### **BionicLink**

#### Article no. 60X5

The BionicLink (article no. 60X5) supports wireless data communication between Ottobock products with a Bluetooth interface (e.g. DynamicArm) and a PC with USB port or USB hub.

#### The BionicLink is equipped with two LEDs

- The green LED indicates that the device is ready for use
- The blue LED indicates that a proper connection has been established between the product and the PC

A proper connection between the Ottobock product and a PC can only be established using corresponding Ottobock software products (e.g. ElbowSoft).



647G341

## **ElbowSoft**

#### Article no. 646C42

The "ElbowSoft" software is to be used exclusively for adjusting the DynamicArm and any Ottobock system components connected to it: system electric hands (article no. 8E38=\*), system electric Greifers (article no. 8E33=\*), electric rotator (article no. 10S17), within the scope of an exoprosthetic device. Participation in Ottobock product training for the DynamicArm software is mandatory prior to using the product for the first time. To qualify for software updates, additional product training courses may be necessary.



## **MyoSelect**

#### Article no. 757T13

The MyoSelect (article no. 757T13) is used to identify and adjust MyoBock components, such as system electric hands, system electric Greifers, the MyoRotronic and ErgoArm Electronic plus. The MyoSelect is connected to the MyoBock component and then displays information on the type of component and the currently selected control mode on the integrated display. The multifunction button on the side can be used to select and adjust alternative control devices. It is also possible to adjust the speed of the MyoHand VariPlus Speed, SensorHand Speed and DMC VariPlus system electric Greifer to the individual needs of the patient using the MyoSelect. Please note that in order to be able to make adjustments with the MyoSelect, the components must be equipped with a black coding plug first! Components such as the MyoHand VariPlus Speed and DMC VariPlus system electric Greifer are only designed for use with the MyoSelect (article no. 757T13)!



# Myo software

## MyoBoy communication cable

Article no. 757P39

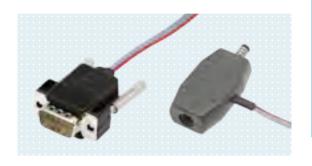
The MyoBoy communication cable connects the MyoBoy and battery receptacle (article no. 757Z185=2 or 757Z191=2), and permits signal measurement while the complete prosthesis is in use by the patient.



## Test adapter

Article no. 757P23

Test adapter for the system electric hand (article no. 8E38) and system electric Greifer (article no. 8E33).



## Myo service parts



#### Fingertip set

Article no. 9S138

Finger tip set for use without tip padding.

#### **Consisting of**

- Fingertip (pair)
- Fingertip blank pair (501S54=M3.3x8)
- Oval head countersunk screw (2 pieces)



## Rubber gripping pad set

Article no. 9S145

#### **Consisting of**

- Tip padding pair (9S146)
- Rubber pad pair (9S147=1PAA)
- Rubber pad pair (9S147=2PAA)
- Padded band (9S148)
- Fingertip blank set (9S149)



### Fingertip blank set

Article no. 9S149

The fingertip blank set is used for subsequent adaptation to special tasks.

#### **Consisting of**

- Stamped part (2 pieces)
- Fingertip blank pair (501S54=M3.3x8)
- Oval head countersunk screw (2 pieces)



## Fingertip (pair)

Article no. 9S234=PAA

Fingertip pair for use with tip padding.

#### Consisting of

- Fingertip blank pair (501S54=M3.3x8)
- Oval head countersunk screw (2 pieces)



# Myo service parts

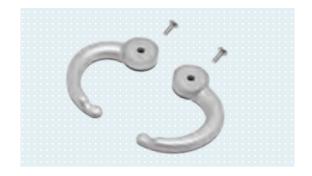
## Fingertip (pair)

Article no. 9S278=PAA

Fingertip pair for use without tip padding.

#### **Consisting of**

- Fingertip blank pair (501S54=M3.3x8)
- Oval head countersunk screw (2 pieces)



## Battery cover

Article no. 9S312



## Padded band

Article no. 9S148-1

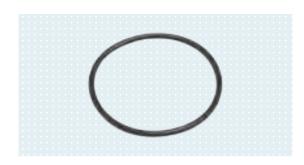


## Notched plate with inner gear teeth

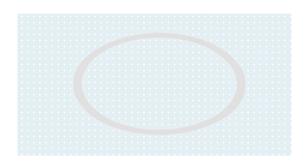
Article no. 11S6



# Myo service parts



Thrust washer Article no. 11S7



Washer Article no. 11S27



Friction ring with inner gear teeth Article no. 11S30

0	Notes
***************************************	
***************************************	
•••••	
•	





# Axon-Bus prosthetic system

# Perfect use of precision technology

The Axon-Bus prosthetic system is a new system for transradial and transhumeral prostheses. Axon stands for Adaptive eXchange Of Neuroplacement data. The Axon-Bus itself is a new Ottobock development for the field of exoprosthetics. It was derived from safety-related bus systems in the aviation and automotive industries and represents a true innovation from our Research and Development department.

The advantage is that it constitutes an optimised, self-contained data transmission system. The individual components communicate with each other perfectly, eliminating losses in terms of data transmission, speed and functionality. This results in a clear plus in safety and reliability for the user. This is achieved by a significant reduction in sensitivity to outside interference in comparison with conventional systems. In combination with the Michelangelo Hand, the Axon-Bus prosthetic system offers more degrees of freedom than ever before. The user benefits from enhanced hand functionality. The modular prosthesis system can be expanded with additional Axon-Bus components in future.

#### On the following pages you will find

- Axon-Bus terminal devices
- Axon-Bus prosthetic gloves
- Accessories Axon-Bus system
- Rotation
- Axon-Bus elbow components
- Axon-Bus battery management
- Axon-Bus control elements
- Axon-Bus software
- Tool for installation of the Axon-Bus prosthetic system

## Axon-Bus terminal devices



(ii) 646D501 646D592 646D593 646T334-EN

647G587

## Michelangelo Hand

Article no. 8E500

The Michelangelo Hand features complex gripping kinematics, an attractive natural appearance and low weight. Actively driven elements are the thumb, index finger and middle finger, while the ring finger and little finger passively follow the other fingers. The thumb drive permits electronic positioning. Rotating the thumb outward creates a wide open palm, so that additional movement options are possible. This results in seven different hand positions. The Michelangelo Hand can be combined with the active AxonRotation. This rotation unit assists users in numerous two-handed activities in everyday life and at work. Thanks to the flexible wrist joint mode, the various grip types of the Michelangelo Hand and the active AxonRotation, compensating body movements are reduced to a minimum. The Michelangelo Hand is worn with the AxonSkin prosthetic glove.

Article no.	Side	Size	User
8E500=L-M	Left (L)	7 3/4	Women, men
8E500=R-M	Right (R)	7 ¾	Women, men

#### **Technical data**

Operating voltage	11.1 V
Operating temperature	-10 to +60 °C
Storage temperature	-20 to +40 °C
Relative humidity max.	80% non-condensing
Max. opening width	120 mm
Max. gripping force in Opposition Mode	70 N
Max. gripping force in Lateral Mode	60 N
Max. gripping force in Neutral Mode	15 N
Maximum speed	325 mm/sec
Weight	520 g
***************************************	•••••••••••••••••••••••••••••••••••••••

## Axon-Bus terminal devices

## Michelangelo Hand Transcarpal

#### Article no. 8E550

For users with long residual limbs and a transcarpal amputation level. The numerous functions of the Michelangelo Hand are also featured in this product version. The available installation space for the required technical components was very small for the Michelangelo Hand Transcarpal, and led to the development of a new, space-saving design concept. The compact drive unit is integrated into the palm of the hand, making the overall length without the AxonWrist very short as well. The feed-through for the Axon signal cables was adjusted accordingly, and the hand shell was adapted as well. The new lamination ring allows the O&P professional to position the hand by +/-15°.

Article no.	Side	Size	User
8E550=L-M	Left (L)	M	Women, men
8E550=R-M	Right (R)	М	Women, men



(II) 646D501 646D592 646D593 646D553 646D646

#### Technical data

Operating temperature	-10 to +60 °C
Max. opening width	120 mm
Max. gripping force in Opposition Mode	70 N
Max. gripping force in Lateral Mode	60 N
Max. gripping force in Neutral Mode	15 N
Maximum speed	325 mm/sec
Weight	460 g

O Notice: The 711M116 adapter is needed one time to put on the gloves.

## AxonHook

#### Article no. 8E600

As a complement to the Michelangelo Hand (article no. 8E500), the AxonHook is designed to meet the performance needs of the most demanding users by increasing the number of functional tasks that are supported. This powerful and rugged terminal device for manual tasks ideally expands the functionality of the existing Michelangelo Hand. The integrated AxonWrist allows users to easily switch between the Michelangelo Hand and the AxonHook. All wrist functionality of the Michelangelo Hand is implemented in the AxonHook as well. Combined with the AxonRotation or also the AxonArm Ergo for aboveelbow prostheses, the AxonHook is the preferred choice for highly active prosthesis users.

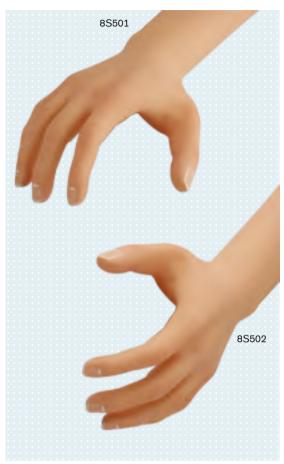
Article no.	Side
8E600=L	Left (L)
8E600=R	Right (R)
Technical data	

Max. opening width	130 mm
Max. gripping force approx.	110 N
Weight	400 g





# Axon-Bus prosthetic gloves



(ii) 646D646

**₩** 647G596

#### **AxonSkin Natural**

Article no. 8S501/8S502

The AxonSkin glove serves as structural protection for the Michelangelo prosthetic hand and creates a natural appearance for the user. It is intended exclusively for use with Ottobock's Michelangelo Hand.

Please use the 646M47 Skin Natural colour swatches to determine the colour. The Michelangelo Hand is locked with the help of the mounting tool (article no. 711M64) and mounting tool (article no. 711M1) in order to apply and remove the prosthetic glove.

Article no.	Side	Colour	User	
8S501=L-M2	Left (L)	2	Men	
8S501=L-M4	Left (L)	4	Men	
8S501=L-M6	Left (L)	6	Men	
8S501=L-M8	Left (L)	8	Men	
8S501=L-M11	Left (L)	11	Men	
8S501=L-M14	Left (L)	14	Men	
8S501=L-M16	Left (L)	16	Men	
8S501=R-M2	Right (R)	2	Men	
8S501=R-M4	Right (R)	4	Men	
8S501=R-M6	Right (R)	6	Men	
8S501=R-M8	Right (R)	8	Men	
8S501=R-M11	Right (R)	11	Men	
8S501=R-M14	Right (R)	14	Men	
8S501=R-M16	Right (R)	16	Men	
***************************************				

Article no.	Side	Colour	User
8S502=L-M2	Left (L)	2	Women
8S502=L-M4	Left (L)	4	Women
8S502=L-M6	Left (L)	6	Women
8S502=L-M8	Left (L)	8	Women
8S502=L-M11	Left (L)	11	Women
8S502=L-M14	Left (L)	14	Women
8S502=L-M16	Left (L)	16	Women
8S502=R-M2	Right (R)	2	Women
8S502=R-M4	Right (R)	4	Women
8S502=R-M6	Right (R)	6	Women
8S502=R-M8	Right (R)	8	Women
8S502=R-M11	Right (R)	11	Women
8S502=R-M14	Right (R)	14	Women
8S502=R-M16	Right (R)	16	Women
***************************************			



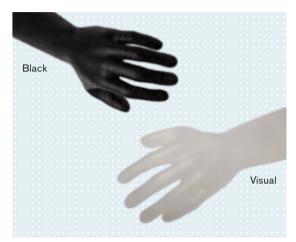
# Axon-Bus prosthetic gloves

# AxonSkin Visual / AxonSkin Black

### Article no. 8S500

The AxonSkin Visual and AxonSkin Black are two other versions of a PVC glove for the Michelangelo Hand. The Michelangelo Hand is locked with the help of the mounting tool (article no. 711M64) and mounting tool (article no. 711M1) in order to apply and remove the prosthetic glove.

Article no.	Side	Colour
8S500=L-M0	Left (L)	Visual
8S500=R-M20	Left (L)	Black
8S500=R-M0	Right (R)	Visual
8S500=R-M20	Right (R)	Black

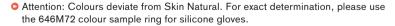


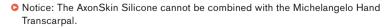
### AxonSkin Silicone

### Article no. 8S511

The first silicone glove for the Michelangelo Hand. It has a highly natural appearance thanks to the hand-coloured replication of the fingernails and knuckles. The AxonSkin Silicone is very low-maintenance and barely soils, so that simple cleaning with soap and water is usually sufficient.

Article no.	Side	Colour	User	
8S511=L-M2	Left (L)	2	Men	
8S511=L-M4	Left (L)	4	Men	
8S511=L-M6	Left (L)	6	Men	
8S511=L-M8	Left (L)	8	Men	
8S511=L-M10	Left (L)	10	Men	
8S511=L-M12	Left (L)	12	Men	
8S511=L-M14	Left (L)	14	Men	
8S511=R-M2	Right (R)	2	Men	
8S511=R-M4	Right (R)	4	Men	
8S511=R-M6	Right (R)	6	Men	
8S511=R-M8	Right (R)	8	Men	
8S511=R-M10	Right (R)	10	Men	
8S511=R-M12	Right (R)	12	Men	
8S511=R-M14	Right (R)	14	Men	

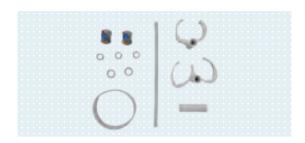






**₩** 647G861

# Axon-Bus prosthetic system accessories



# Mounting set

Article no. 757Z501

The mounting set (article no. 757Z501) includes various components which allow the technician to attach the AxonEnergy Integral and AxonMaster to the

Please note that this article is already included in the scope of delivery of the Axon-Bus prosthetic system.



# Michelangelo socket attachment block

Article no. 757Z504

The Michelangelo socket attachment block (article no. 757Z504) can be used for trial fittings with a ThermoLyn soft outer socket. The socket attachment block is used as a alternative to the lamination ring (article no. 10S500) and serves to secure the Michelangelo Hand.



# Michelangelo Hand dummy

Article no. 757Z505

The technician can use the dummy to determine the alignment and length of the Michelangelo prosthesis while taking measurements.



# Donning spray

Article no. 640F18

The donning spray for silicone liners and prosthetic gloves (silicone or PVC) is required among other things for donning and removal.

Article no.	Contents
640F18	90 ml
640F18=900	900 ml (refill)



# Pump sprayer

Article no. 640F13

The user should always keep a pump sprayer filled with special cleaner for Ottobock prosthetic gloves handy in order to be able to use the cleaner immediately in case of soiling (net contents: 90 g).

This container is empty on delivery!

# Axon-Bus prosthetic system accessories | rotation

# Special cleaner

Article no. 640F12

In case of heavy soiling, the special cleaner for prosthetic gloves should be applied immediately (net contents: 460 g).





### AxonRotation

Article no. 9S503

The active rotation feature is equipped with proportional control so the system is sensitive and functions exactly with the muscle signals. Proportional control is possible for both movements, rotation and the gripping function of the Michelangelo Hand. Rotation assists users in numerous bimanual (twohanded) activities in everyday life and at work.

#### **Technical data**

Pronation/supination	160°/160°
Idle speed	25 RPM
Max. torque	1.5 Nm
Weight	140 g



# **AxonRotation Adapter**

Article no. 9S501

The AxonRotation Adapter (article no. 9S501) in combination with an Axon-Bus terminal device such as the Michelangelo Hand (article no. 8E500), facilitates a fitting with components of Ottobock's modular Axon-Bus prosthetic system. The AxonRotation Adapter (article no. 9S501) allows passive pronation/supination (360°) (weight: approx. 90 g).

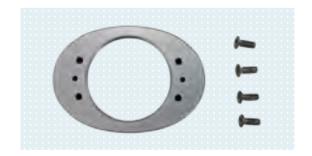


# Lamination ring

Article no. 10S500

The lamination ring (article no. 10S500) is the connecting element between the socket and the Michelangelo Hand. The technician integrates this lamination ring into the socket laminate.

Please note that this article is already included in the scope of delivery of the Axon-Bus prosthetic system.



# Axon-Bus elbow components



☐ 646D626

647G790

# AxonArm Ergo

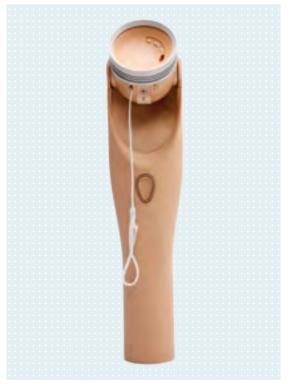
Article no. 12K501

With Easy Plug, flexion aid (AFB), mechanical slip-stop function, upper arm rotation joint, adjustable friction, elbow ball made of plastic, forearm that can be shortened (length: 305 mm), electronic ratchetless lock.

Passive elbow component with electronic lock that adapts the proven strengths of the familiar ErgoArm (article no. 12K50) for the new Axon-Bus prosthetic system. As a result, all of the advantages of the Michelangelo Hand (extraordinary functionality, natural design and trendsetting technology) are now also available to upper arm amputees.

Article no.	Size	Colour
12K501=M	7 3/4	4
12K501=M-1	7 3/4	11
12K501=M-2	7 3/4	15

- The colour roughly corresponds to glove colour according to the 646M47 colour
- The battery (article no. 757B501) is already included in the scope of delivery for the elbow.



(ii) 646D626

647G790

# AxonArm Hybrid

Article no. 12K500

This elbow component is especially well suited for use in hybrid prostheses together with the Axon-Bus prosthetic system. As a result, all of the advantages of the Michelangelo Hand (extraordinary functionality, natural design and trendsetting technology) are now also available to upper arm amputees. With Easy Plug, flexion aid (AFB), mechanical slip-stop function, upper arm rotation joint, adjustable friction, elbow ball made of plastic, forearm that can be shortened (length: 305 mm).

Article no.	Size	Colour
12K500=M	7 3/4	4
12K500=M-1	7 ¾	11
12K500=M-2	7 3/4	15

The colour roughly corresponds to glove colour according to the 646M47 colour swatches.

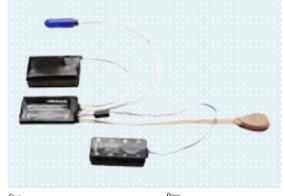


# Axon-Bus battery management

# AxonEnergy Integral

### Article no. 757B501

The AxonEnergy Integral (article no. 757B501) is used exclusively to provide power to the Axon-Bus prosthetic system. The battery consists of three Li-ion cells. The integrated electronics protect the battery against short circuits, overvoltage, undervoltage and charging outside the allowable temperature range. The Axon-Bus cable with the three-pin receptacle is used to exchange data and connects the respective prosthetic components to the battery. The AxonEnergy Integral (article no. 757B501) may only be used in conjunction with components in Ottobock's Axon-Bus prosthetic system. Only the Axon-Charge Integral (article no. 757L500) may be used for charging.



### ☐ 646D501

**№** 647G789

#### **Technical data**

Operating temperature	0 to +60 °C
Storage temperature	-20 to +40 °C
Transport temperature	-20 to +40 °C
Relative humidity max.	80% non-condensing
Capacity	1,150 mAh
Approx. output voltage	11.1 V
Approx. charging time	3.5 h
Dimensions (Lx WxH)	55x35x23 mm
Weight	90 g

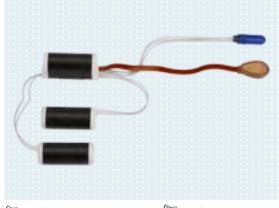
# **AxonEnergy Integral**

### Article no. 757B500

The AxonEnergy Integral (article no. 757B500) is used exclusively to provide power to the Axon-Bus prosthetic system. The battery consists of three Li-ion cells. The integrated electronics protect the battery against short circuits, overvoltage, undervoltage and charging outside the allowable temperature range. The Axon-Bus cable with the three-pin receptacle is used to exchange data and connects the respective prosthetic components to the battery. The AxonEnergy Integral (article no. 757B500) may only be used in conjunction with components in Ottobock's Axon-Bus prosthetic system. Only the Axon-Charge Integral (article no. 757L500) may be used for charging.

Technical data
----------------

Operating temperature	0 to +60 °C
Storage temperature	-20 to +40 °C
Transport temperature	-20 to +40 °C
Relative humidity max.	80% non-condensing
Capacity	1,500 mAh
Approx. output voltage	11.1 V
Approx. charging time	3.5 h
Dimensions (Lx WxH)	75x60x21 mm
Weight	142 g
•••••	



@ 646D501

647G592

# Axon-Bus battery management



# Lamination dummy set

Article no. 7577502

The lamination dummy set (article no. 757Z502) for the AxonEnergy Integral (article no. 757B500) includes dummies for lamination of the outer socket and for the charging receptacle recess.

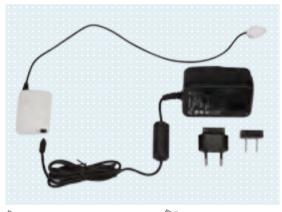
Please note that this article is already included in the scope of delivery of the Axon-Bus prosthetic system.



# Lamination dummy set

Article no. 757Z508

The lamination dummy set (article no. 757Z508) for the AxonEnergy Integral (article no. 757B501) includes dummies for lamination of the outer socket and for the charging receptacle recess. Please note that this article is already included in the scope of delivery of the Axon-Bus prosthetic system.



### (ii) 646D501

■ 647G593

# **AxonCharge Integral**

Article no. 757L500

The AxonCharge Integral (article no. 757L500) is used to charge the AxonEnergy Integral (article no. 757B500 / 757B501) of Ottobock's Axon-Bus prosthetic system. Charging is performed automatically after the charging plug has been connected to the charging receptacle of the AxonEnergy Integral (article no. 757B500 / 757B501). The charging plug is secured to the charging receptacle by the integrated magnet. The special contour of the charging receptacle and charging plug ensures quick, reliable positioning of the two components. LEDs indicate the readiness of the battery charger and the current battery charge level. The AxonCharge Integral (article no. 757L500) is intended solely for charging of the AxonEnergy Integral (article no. 757B500).

#### Technical data

Operating temperature	0 to +60 °C
Storage temperature	-20 to +40 °C
Transport temperature	-20 to +40 °C
Relative humidity max.	80% non-condensing



# Car charging cable

Article no. 4X500

The AxonCharge Mobile (article no. 4X500) is a power supply for 12-volt or 24-volt vehicle power networks (cigarette lighter plug) and, together with the AxonCharge Integral (article no. 757L500), is used to charge the AxonEnergy Integral (article no. 757B500). The car charging cable (article no. 4X500) can be used in a car or mobile home.

Notice: The Axon-Bus prosthetic system must not be used in combination with the 757L16-2 power supply.

# Axon-Bus control elements

### Suction socket electrode

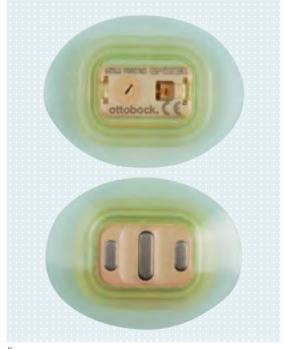
### Article no. 13E202

This generation of electrodes is based on the familiar 13E200 electrode. Embedded into a mounting suspension of elastic material, this electrode creates an airtight seal between the inner socket and outer socket. If used correctly, the 13E202 suction socket electrode also prevents sweat from penetrating between the outer and inner socket, therefore effectively preventing damage to the electrical and mechanical components caused by corrosion. The suction socket electrode can not only be used for standard sockets, but is also particularly suitable for application in elevated vacuum sockets. Combining the suction socket electrode with a 12V10 tube valve for an elevated vacuum socket creates a vacuum effect in the socket, ensuring optimal linkage between the residual limb and the socket. As with the 13E200 electrode, state-of-the-art shielding and filtering technologies largely protect the 13E202 suction socket electrode against high frequency interference caused, for example, by mobile phones, walkie-talkies, computers or anti-theft systems in shopping centres so that the correct function of the myoelectrically controlled prosthesis is not affected.

The electrode contacts are made from pure titanium and are therefore suitable for people with allergies as well. The frequency filter's full protection effect will only be provided if the mains frequency and filter frequency are identical.

Article no.	HZ	Frequency bandwidth	Room temperature	Operating voltage U
13E202=50	50	90-450 Hz	-15 to +60 °C	4.8-7.2 V
13E202=60	60	90-450 Hz	-15 to +60 °C	4.8-7.2 V

- Use silicone grease (article no. 633F11) to seal the plug connection. Remove any excessive grease after connecting the electrode cable.
- Accessories for vacuum forming inner sockets, see page 244.
- Tube valve (article no. 12V10), see page 96.



### Electrode

### Article no. 13E200

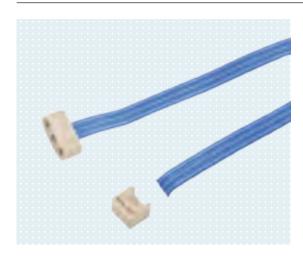
These MyoBock electrodes are particularly sensitive in the range of low muscle signals. The change in amplification now takes place logarithmically, which enables enhanced differentiation of the signal level. Thanks to modern frequency shielding and filtering technologies, they are less sensitive to low and high frequency interferences that are emitted, for example, by mobile phones or shopping centre security systems. The electrode contacts are made from pure titanium and are therefore suitable for people with allergies as well. The electrode accessories (article no. 13E201) are included in the scope of delivery. The frequency filter's full protection effect will only be provided if the mains frequency and filter frequency are identical. The electrode cable connection with IDC termination weighs 4.5 g (27 x 18 x 9.5 mm).

Article no.	HZ	bandwidth	temperature	Operating voltage U
13E200=50	50	90-450 Hz	-15 to +60 °C	4.8-7.2 V
13E200=60	60	90-450 Hz	-15 to +60 °C	4.8-7.2 V

- Use silicone grease (article no. 633F11) to seal the plug connection. Remove any excessive grease after connecting the electrode cable.
- Accessories for vacuum forming inner sockets, see page 244.



# Axon-Bus control elements



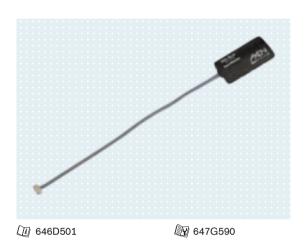
# Electrode cable with straight plug and plug connector

Article no. 13E129=G\*

Electrode cable to connect the electrode (article no. 13E200/13E202), the control elements (article no. 9X52, 9X53 and 9X54) and the elbow (article no.

Article no.	Length
13E129=G100	100 mm
13E129=G300	300 mm
13E129=G600	600 mm
13E129=G1000	1,000 mm

The plug connector (article no. 13E121) is included in the scope of delivery!



### AxonMaster

Article no. 13E500

The AxonMaster (article no. 13E500) is the central control unit of the Axon-Bus prosthetic system. The AxonMaster samples the patient's control signals and routes them to the corresponding prosthetic components via the Axon-Bus (joint control and power supply connection).

This makes it possible to control the prosthesis and switch between the prosthetic components. The AxonMaster also controls the data communication of the Axon-Bus. The AxonMaster (article no. 13E500) is intended exclusively for exoprosthetic devices for the Upper Limb and serves to control and coordinate all active Ottobock Axon-Bus prosthetic components within the system.

T	L :	I data
iec	nnica	ii data

Operating temperature	0 to +60 °C
Storage temperature	-20 to +40 °C
Transport temperature	-20 to +40 °C
Relative humidity max.	80% non-condensing
Power supply	757B500, 757B501
Operating voltage	11.1 V
Dimensions (Lx WxH)	53x28x9 mm
Weight	15 g
	•••••••••••••••••••••••••••••••••••••••



# Lamination dummy set for AxonMaster

Article no. 757Z503

The technician uses the lamination dummy set (article no. 757Z503) to determine the optimal position of the AxonMaster.

Please note that this article is already included in the scope of delivery of the Axon-Bus prosthetic system.

# Axon-Bus software

# AxonSoft

### Article no. 560X500

The AxonSoft software (article no. 560X500=\*) is intended exclusively as a tool for adjusting the AxonMaster (article no. 13E500) within the framework of unilateral or bilateral prosthetic fittings with the Michelangelo Hand and the Axon-Bus system components for the Upper Limb. The BionicLink (article no. 60X5) is the only permissible method of data transfer between the system components.

### Recommended hardware requirements for a PC with a 32-bit or 64-bit platform

- · At least 1 GB free hard drive space
- Graphics card with Open GL support
- Minimum resolution: 1024 x 768 at 96 DPI (higher DPI settings can result in errors in the display, depending on the resolution)
- 32-bit colour depth (16.7 million colours)
- CD-ROM or DVD-ROM drive
- 1 available USB port (if applicable)
- Mouse and keyboard (if applicable)

#### Minimum PC hardware requirements

- PC with a Pentium III/1 GHz processor, 32-bit (x86)
- 512 MB RAM (working memory)
- 1 GB free hard drive space
- Graphics card with Open GL support
- Resolution: 1024 x 768 at 96 DPI
- 32-bit colour depth (16.7 million colours)
- · CD-ROM drive
- 1 available USB port (if applicable)
- Mouse and keyboard (if applicable)



☐ 646D501

647G591

# BionicLink

### Article no. 60X5

The BionicLink (article no. 60X5) supports wireless data communication between Ottobock products with a Bluetooth interface (e.g. DynamicArm) and a PC with USB port or USB hub.

#### The BionicLink is equipped with two LEDs

- The green LED indicates that the device is ready for use
- The blue LED indicates that a proper connection has been established between the product and the PC

A proper connection between the Ottobock product and a PC can only be established using corresponding Ottobock software products (e.g. ElbowSoft).



# ■ Tools for installation of the Axon-Bus prosthetic system



# Mounting adapter for Michelangelo

Article no. 711M64

The mounting adapter is essential for the correct application of the AxonSkin glove in order to protect the mechanism of the Michelangelo Hand and for easier handling by the technician.



## Mounting tool

Article no. 711M1

One side with M12x1.5 exterior thread for prosthetic hands and the other side with M12x1.5 interior thread for Ottobock system electric hands and the Michelangelo Hand.



# Mounting plate

Article no. 711M2

The mounting plate is used to screw the mounting tool (article no. 711M1) to the workbench.



# Donning sphere

Article no. 711M114

The donning sphere was developed especially for the Michelangelo Hand and is used to briefly stretch the AxonSkin glove during donning.



# Donning tool

Article no. 711M116

The donning tool is used for the Michelangelo Hand Transcarpal.

0	Notes		
<u></u>			
<del></del>			
<del></del>		 	 
<del></del>		 	 
<b></b>		 	 





# **Body-Powered**

# Active mechanical arm components

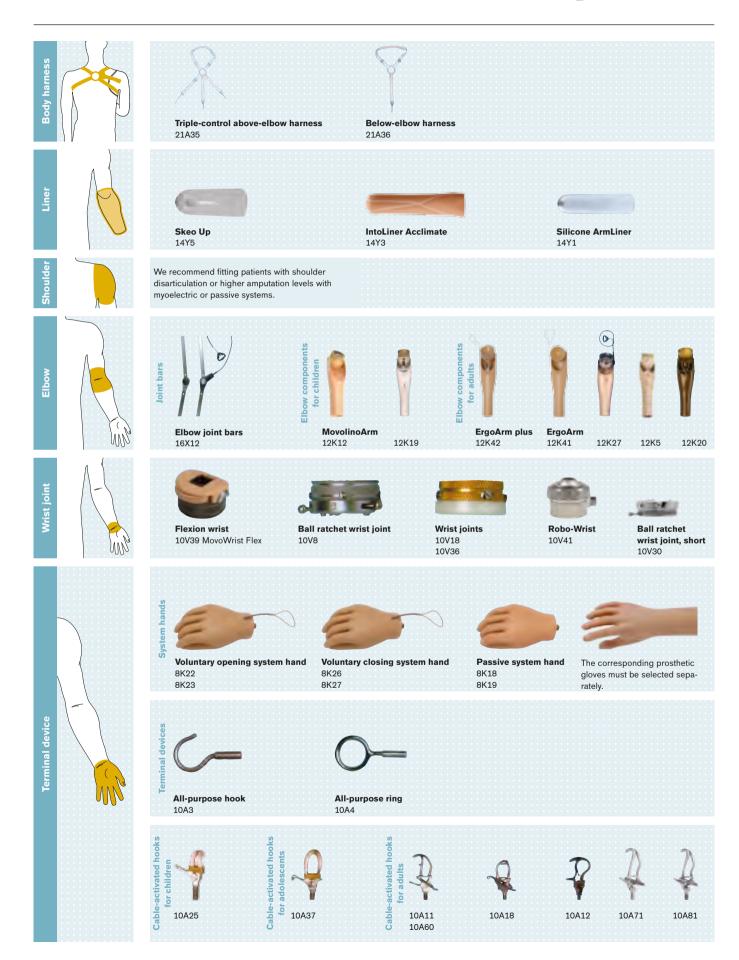
# Active gripping – cable-activated

The voluntary opening and voluntary closing system hands belong to the cable-controlled prostheses or "active prehensile arms" and are activated by a body harness system. The voluntary opening system hand is opened by pulling the cable and closes automatically. The voluntary closing system hand is closed by pulling the cable. Another pull releases the lock and opens the hand. The system inner hand conceals the mechanism and serves as the shaping element for the prosthetic glove. It is selected according to the size of the inner hand and is available in various models and colours.

### On the following pages you will find

- Overview of active mechanical arm components
- Passive terminal devices
- Terminal devices
- Spare parts and accessories
- Prosthetic gloves
- Cable-activated hook for adults with accessories
- Terminal devices
- Robo-Wrist and accessories
- MovoWrist-Flex and accessorie
- Wrist joints and accessories
- Elbow components and accessories
- Liners and accessories
- Above-elbow and below-elbow harnesses with accessories

# Overview of active mechanical arm components





# Passive terminal devices

# Passive system hand

### Article no. 8K18/8K19

The passive system hand is suitable for all residual limb lengths with passive prostheses. It is opened with the sound hand and closes independently. The system is lightweight and stable. With threaded stud (article no. 8K18: M12X1.5, 8K19:  $\frac{1}{2}$ "-20) and system inner hand. Available in sizes 6  $\frac{3}{4}$ (children), 7 1/4 (adolescents and women), 7 3/4 and 8 (men).

Article no.	Side	Size	Inner hand	Approx. weight
8K18=L6 ¾	Left (L)	6 3/4	8X14=L6 3/4	185 g
8K18=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	250 g
8K18=L7 ¾	Left (L)	7 ¾	8X14=L7 ¾	280 g
8K18=L8	Left (L)	8	8X14=L8	290 g
8K18=R6 ¾	Right (R)	6 ¾	8X14=R6 ¾	185 g
8K18=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	250 g
8K18=R7 ¾	Right (R)	7 ¾	8X14=R7 ¾	280 g
8K18=R8	Right (R)	8	8X14=R8	290 g

Article no.	Side	Size	Inner hand	Approx. weight
8K19=L6 ¾	Left (L)	6 3/4	8X14=L6 <sup>3</sup> / <sub>4</sub>	185 g
8K19=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	250 g
8K19=L7 ¾	Left (L)	7 ¾	8X14=L7 ¾	280 g
8K19=L8	Left (L)	8	8X14=L8	290 g
8K19=R6 ¾	Right (R)	6 ¾	8X14=R6 ¾	185 g
8K19=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	250 g
8K19=R7 ¾	Right (R)	7 ¾	8X14=R7 ¾	280 g
8K19=R8	Right (R)	8	8X14=R8	290 g





**№** 647G444

# Terminal devices



**₩** 647G445

# Voluntary opening system hand

Article no. 8K22

These system hands are suitable for all cable-controlled prostheses. They are opened by pulling the cable (active) and close independently with concurrent locking. Available with perlon cable on the back of the hand (outer pull), with threaded stud (article no. M12x1.5) and system inner hand in sizes 6 3/4 (children),  $7 \frac{1}{4}$  (adolescents and women),  $7 \frac{3}{4}$  and 8 (men).

Article no.	Side	Size	Inner hand	Approx. weight
8K22=L6 ¾	Left (L)	6 3/4	8X14=L6 3/4	215 g
8K22=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	300 g
8K22=L7 ¾	Left (L)	7 ¾	8X14=L7 ¾	330 g
8K22=L8	Left (L)	8	8X14=L8	340 g
8K22=R6 ¾	Right (R)	6 ¾	8X14=R6 ¾	215 g
8K22=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	300 g
8K22=R7 ¾	Right (R)	7 ¾	8X14=R7 ¾	330 g
8K22=R8	Right (R)	8	8X14=R8	340 g

○ The prosthetic glove must be ordered separately. See pages 130-132.



647G445

# Voluntary opening system hand

Article no. 8K23

These system hands are suitable for all cable-activated prostheses. They are opened by pulling the cable (active) and close independently with concurrent locking. Available with steel cable on the back of the hand (outer pull), with threaded stud (article no. 1/2"-20) and system inner hand in sizes 6 3/4 (children), 7 1/4 (adolescents and women) 7 3/4 and 8 (men).

○ The prosthetic glove must be ordered separately. See pages 130-132.



# Terminal devices

# Voluntary closing system hand

### Article no. 8K26

These system hands close by pulling the cable – a subsequent adjustment pull increases the gripping force - and lock in any gripping position (active). Through renewed activation of the cable, the hand is released and opens independently (double cable).

Available with perlon cable on the back of the hand (outer pull), with threaded stud (article no. M12X1.5) and system inner hand in sizes 7 1/4 (adolescents and women), 7 3/4 and 8 (men).

Article no.	Side	Size	Inner hand	Approx. weight
8K26=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	340 g
8K26=L7 ¾	Left (L)	7 ¾	8X14=L7 ¾	370 g
8K26=L8	Left (L)	8	8X14=L8	380 g
8K26=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	340 g
8K26=R7 ¾	Right (R)	7 ¾	8X14=R7 ¾	370 g
8K26=R8	Right (R)	8	8X14=R8	380 g





₩ 647G446

# Voluntary closing system hand

### Article no. 8K27

These system hands close by pulling the cable – a subsequent adjustment pull increases the gripping force – and lock in any gripping position (active). Through renewed activation of the cable, the hand is released and opens independently (double cable).

Available with steel cable on the back of the hand (outer pull), with threaded stud (1/2"-20) and system inner hand in sizes 7 1/4 (adolescents and women), 7 3/4 and 8 (men).

Article no.	Side	Size	Inner hand	Approx. weight
8K27=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	340 g
8K27=L7 ¾	Left (L)	7 ¾	8X14=L7 ¾	370 g
8K27=L8	Left (L)	8	8X14=L8	380 g
8K27=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	340 g
8K27=R7 ¾	Right (R)	7 ¾	8X14=R7 ¾	370 g
8K27=R8	Right (R)	8	8X14=R8	380 g

○ The prosthetic glove must be ordered separately. See pages 130–132.



**∭** 647G446

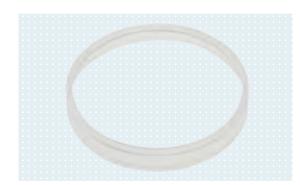




# System inner hand Article no. 8X14

System inner hand with finger support in the little and ring finger, and retainer ring (article no. 9S187).

Article no.	Side	Size	
8X14=L6 ¾	Left (L)	6 3/4	
8X14=L7 1/4	Left (L)	7 1/4	
8X14 =L7 <sup>3</sup> / <sub>4</sub>	Left (L)	7 3/4	
8X14=L8	Left (L)	8	
8X14=R6 ¾	Right (R)	6 3⁄4	
8X14=R7 1/4	Right (R)	7 1/4	
8X14=R7 ¾	Right (R)	7 3/4	
8X14=R8	Right (R)	8	

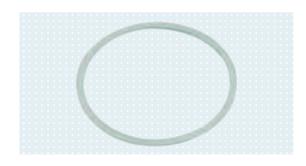


Lock ring

Article no. 9S187

Wide lock ring. Compatible with the system inner hand (article no. 8X14) in hand sizes  $7 \frac{1}{4}$ ,  $7 \frac{3}{4}$  and 8.

Article no.	Size
9S187=7 1/4	7 1/4
9S187=7 ¾	7 ¾
9S187=8 ¼	8 1/4



# Retainer ring

Article no. 9S15=42

Retainer ring to secure the system inner hand (article no. 8X14) size 6 3/4.



Suspension rosette

Article no. 21A8



## Chassis

Article no. 9S\* Chassis with threaded stud.

Article no.	Diameter	Threaded stud	Compatible with
9S10=40	40 mm	M12X1.5	8K18=L/R 6 ¾ 8K20=L/R 6 ¾ 8K22=L/R 6 ¾ 8K22=L/R 6 ¾ 8K24=L/R 6 ¾ 8K26=L/R 6 ¾
9S166=44-N	44 mm	M12X1.5	8K18=L/R 7 ¼ 8K20=L/R 7 ¼ 8K22=L/R 7 ¼ 8K24=L/R 7 ¼ 8K26=L/R 7 ¼
9S166=48-N	48 mm	M12X1.5	8K18=L/R 7 ¾ 8K18=L/R 8 8K20=L/R 7 ¾ 8K20=L/R 8 8K22=L/R 7 ¾ 8K22=L/R 8 8K24=L/R 7 ¾ 8K24=L/R 7 ¾ 8K24=L/R 8
9S52=40	40 mm	½"-20	8K19=L/R 6 ¾ 8K23=L/R 6 ¾ 8K27=L/R 6 ¾
9S185=44-N	44 mm	½"-20	8K19=L/R 7 1/4 8K21=L/R 7 1/4 8K23=L/R 7 1/4 8K27=L/R 7 1/4
9S185=48-N	48 mm	½"-20	8K19=L/R 7 ¾ 8K19=L/R 8 8K21=L/R 7 ¾ 8K21=L/R 8 8K23=L/R 7 ¾ 8K23=L/R 8 8K27=L/R 7 ¾ 8K27=L/R 7 ¾ 8K27=L/R 8



# Finger and thumb cover

Article no. 9S6

Finger and thumb cover compatible with hand sizes 6  $\frac{3}{4}$ , 7  $\frac{1}{4}$ , 7  $\frac{3}{4}$  and 8.





# Lamination ring

Article no. 9E94

Lamination ring available for hand sizes 6  $\frac{3}{4}$ , 7  $\frac{1}{4}$ , 7  $\frac{3}{4}$  and 8.

Article no.	Diameter	Size
9E94=44	44 mm	6 ¾
9E94=50	50 mm	7 ¼, 7 ¾ and 8



# Chassis

Article no. 9S96/9S184

Chassis for excessively long forearm and wrist disarticulation residual limbs. Compatible with lamination ring (article no. 9E94).

Article no.	Diameter	Size
9S96=40	40 mm	6 3/4
9S184=44-N	44 mm	7 1/4
9S184=48-N	48 mm	7 ¾ and 8



## Set screw

Article no. 506G4

Set screw for chassis. Four set screws are required per chassis.

Article no.	Compatible with
506G4=M3X5	Chassis article no. 9S96=40
506G4=M4X5	Chassis article no. 9S184



# Flange button head socket screw

Article no. 501T52=M3X6

The flange button head socket screw with the M3X6 thread is used to screw the chassis to the base plate of the system hand (all sizes). Two pieces are required.



# Flange button head socket screw

Article no. 501T52=M3X8

The flange button head socket screw with the M3X8 thread is used to screw the chassis to the cover plate of the system hand (all sizes). One screw is required.



# Prosthetic gloves



647G468 (standard glove) 647G571 (Skin Natural)

# Prosthetic glove for children

Article no. 8S6=170X65

The prosthetic glove for children is compatible with size 6 3/4, with long sleeve, and available in 18 colours.

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

Please add an N before the = in the article number.

#### Example

- 8S6=170X65L (standard glove)
- 8S6N=170X65L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S6=170X65L	Left (L)	6 ¾	300 mm
8S6=170X65R	Right (R)	6 ¾	300 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

# Prosthetic glove for adolescents

Article no. 8S4=190X76

The prosthetic glove for adolescents is available for size 7 1/4, with short sleeve, and in 18 colours.

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

Please add an N before the = in the article number.

#### Example

- 8S4=190X76L (standard glove)
- 8S4N=190X76L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S4=190X76L	Left (L)	7 1/4	215 mm
8S4=190X76R	Right (R)	7 1/4	215 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



# Prosthetic gloves

# Prosthetic glove for men

Article no. 8S11=210X78

The prosthetic glove for men is available in size 7 3/4, with long sleeve, and in 18 colours.

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

Please add an N before the = in the article number.

#### **Example**

- 8S11=210X78L (standard glove)
- 8S11N=210X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S11=210X78L	Left (L)	7 3/4	320 mm
8S11=210X78R	Right (R)	7 3⁄4	320 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

# Prosthetic glove for men

Article no. 8S4=220X80

Prosthetic glove for men available in size 8, with short sleeve, and in 18 colours.

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

Please add an N before the = in the article number.

### **Example**

- 8S4=220X80L (standard glove)
- 8S4N=220X80L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S4=220X80L	Left (L)	8	225 mm
8S4=220X80R	Right (R)	8	225 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

Special cleaner for prosthetic gloves is found on page 248.

# Prosthetic gloves



647G468 (standard glove) 647G571 (Skin Natural)

# Prosthetic glove for women

Article no. 8S5=195X78

The prosthetic glove for women is available in size 7  $\frac{1}{4}$ , with long sleeve, in 18 different colours.

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

Please add an N before the = in the article number.

#### **Example**

- 8S5=195X78L (standard glove)
- 8S5N=195X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S5=195X78L	Left (L)	7 1/4	340 mm
8S5=195X78R	Right (R)	7 1/4	340 mm

• The entire Skin Natural colour palette is produced with seven colours.
The new 646M47 colour scale helps when selecting the right pattern.

• Special cleaner for prosthetic gloves is found on page 248.

# Cable-activated hook and accessories

### Easy to open, simple to close

In cable-controlled prostheses, a cable-activated hook can be used as the terminal device instead of a system hand. It is opened by pulling a control cable and is closed automatically by spring or rubber elements. In addition to the cable-activated hooks for children and adolescents, the standard hooks for adults as well as all-purpose hooks have been included in this catalogue. The various connecting elements for attaching the cable-activated hooks to the wrist construction are described at the end of this section.

### Cable-activated hook for children

Article no. 10A25

Cable-activated hook for children with threaded stud made of light metal.

Article no.	Side	Threaded stud
10A25=LM12X1.5	Left (L)	M12X1.5
10A25=RM12X1.5	Right (R)	M12X1.5

Connecting elements for cable-activated hooks are listed on pages 117, 130 and 136.



**₩** 647G443

# Cable-activated hook for adolescents

Article no. 10A37

Cable-activated hook for adolescents with threaded stud made of light metal.

Article no.	Side	Threaded stud
10A37=LM12X1.5	Left (L)	M12X1.5
10A37=L½"-20	Left (L)	½"-20
10A37=RM12X1.5	Right (R)	M12X1.5
10A37=R½"-20	Right (R)	½"-20

Connecting elements for cable-activated hooks are listed on pages 117, 130 and 136.



647G443

# Cable-activated hook and accessories



Finger cover

Article no. 10Y1

Plastic finger cover in beige. Accessories for 10A37, 10A11 and 10A60 cable-activated hook.



Finger cover

Article no. 10Y8

Plastic finger cover in beige. Scope of delivery: 1 set with one cover with and without nubs each. Accessories for 10A25 cable-activated hook.



Rubber band

Article no. 10Y13



# Cable-activated hook and accessories

# MovoHook 2Grip

Article no. 10A71

The familiar MovoHook 2Grip cable-activated hooks are now also available with coated branches for an even better grip. This coating offers superior gripping security, especially where metal is very slippery on certain materials such as paper or glass. On the other hand, the coating does not adhere to textiles so sliding through a sleeve while getting dressed or undressed does not

The advantage of this is that finger covers are not required. The MovoHook 2Grip is made of aluminium (food grade) with coated branches for an even better grip (weight: 120 g) and has an opening width of 100 mm.

Article no.	Side	Threaded stud
10A71=LM12X1.5	Left (L)	M12X1.5
10A71=L½"-20	Left (L)	1⁄2"-20
10A71=RM12X1.5	Right (R)	M12X1.5
10A71=R½"-20	Right (R)	1⁄2"-20

Connecting elements for cable-activated hooks are listed on page 139.



**₩** 647G204

## MovoHook 2Grip

Article no. 10A81

The familiar MovoHook 2Grip cable-activated hooks are now also available with coated branches for an even better grip. This coating offers superior gripping security, especially where metal is very slippery on certain materials. However, the coating does not adhere to textiles so sliding through a sleeve while getting dressed or undressed does not pose a problem. The MovoHook 2Grip is made of food grade stainless steel with coated branches for an even better grip (weight: 250 g) and has an opening width of 100 mm. The advantage of this is that finger covers are not required. The advantage of this is that finger covers are not required.

Article no.	Side	Threaded stud
10A81=LM12X1.5	Left (L)	M12X1.5
10A81=L½"-20	Left (L)	½"-20
10A81=RM12X1.5	Right (R)	M12X1.5
10A81=R½"-20	Right (R)	½"-20

Connecting elements for cable-activated hooks are listed on page 139.



647G204



# Cable-activated hook for adults

Article no. 10A11

The standard hook is made of light metal.

Article no.	Side	Threaded stud
10A11=LM12X1.5	Left (L)	M12X1.5
10A11=L½"-20	Left (L)	½"-20
10A11=RM12X1.5	Right (R)	M12X1.5
10A11=R½"-20	Right (R)	½"-20

Onnecting elements for cable-activated hooks are listed on page 139.

**₩** 647G442



# Cable-activated hook for adults

Article no. 10A60

The standard hook is made of stainless steel.

Article no.	Side	Threaded stud
10A60=LM12X1.5	Left (L)	M12X1.5
10A60=L½"-20	Left (L)	1/2"-20
10A60=RM12X1.5	Right (R)	M12X1.5
10A60=R½"-20	Right (R)	½"-20

• Connecting elements for cable-activated hooks are listed on page 139.

**₩** 647G442

# Cable-activated hook for adults

Article no. 10A18

The cable-activated hook is made of light metal.

Article no.	Side	Threaded stud
10A18=LM12X1.5	Left (L)	M12X1.5
10A18=L½"-20	Left (L)	½"-20
10A18=RM12X1.5	Right (R)	M12X1.5
10A18=R½"-20	Right (R)	1/2"-20

<sup>•</sup> Connecting elements for cable-activated hooks are listed on page 139.



**№** 647G442

## Cable-activated hook for adults

Article no. 10A12

The all-purpose hook is made of stainless steel.

Article no.	Side	Threaded stud
10A12=LM12X1.5	Left (L)	M12X1.5
10A12=L½"-20	Left (L)	1⁄2"-20
10A12=RM12X1.5	Right (R)	M12X1.5
10A12=R½"-20	Right (R)	1/2"-20

• Connecting elements for cable-activated hooks are listed on page 139.



**₩** 647G442



Finger cover

Article no. 10Y1

Plastic finger cover in beige. Accessories for 10A37, 10A11 and 10A60 cable-activated hook.



# Double spring

Article no. 10Y2

Double spring as spare part for 10A11, 10A18 and 10A60 cable-activated



# Spring

Article no. 10Y12

The spring is required for the all-purpose hook (article no. 10A12). Three pieces are required to completely renew all springs.

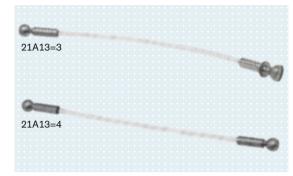


# Connection piece for cable-activated hook

Article no. 21A13

Connection piece for cable-activated hook with connection piece screw (article no. 21A9) and washer (article no. 21A10) or with ball head. Material: perlon cable.

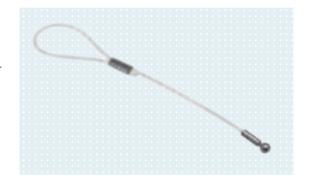
Article no.	Compatible with
21A13=3	10Y32=1, 10A11, 10A12, 10A60 Hook
21A13=4	10Y32=1, 10A71, 10A81 Hook



# Connection piece for hook

Article no. 21A44

Connection piece for hook with suspension rosette (article no. 21A8). Compatible with models with article no. 10A12, 10A18, 10A25 and 10A37 in combination with the article no. 21A35/21A36=\* body harnesses. Material: perlon cable.





Suspension rosette Article no. 21A8



Connection piece screw Article no. 21A9



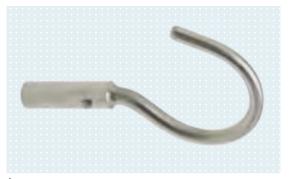
Washer Article no. 21A10

# Terminal devices

# All-purpose hook

Article no. 10A3

Nickel-plated all-purpose hook with standard stud.



**№** 647G455

# All-purpose ring Article no. 10A4

Nickel-plated all-purpose ring with standard stud.



**№** 647G455

# Robo-Wrist and accessories



### Robo-Wrist Article no. 10V41

The wrist joint can rotate cable-controlled or passive terminal devices by 360° and simultaneously flex them at any angle up to 43°. Rotation and flexion are locked simultaneously by pressing the pushbutton. Switching between different terminal devices is easy with the Quick-Change function and two included 10A31=1/2-20 adapters. The friction in the free-running state can be adjusted by turning the tension ring.

Article no.	Wrist joint	Lamination ring	Thread
10V41	Diameter 50 mm, height 41 mm	Diameter 43.5 mm, height 20 mm	1/2"-20



# Adapter for Robo-Wrist

Article no. 10A31=1/2-20

Standard adapter for the Robo-Wrist (article no. 10V41) with imperial interior thread ( $\frac{1}{2}$ "-20). For quickly exchanging terminal devices.



# Titanium adapter for Robo-Wrist

Article no. 10A32=1/2-20

Two-part titanium adapter for the Robo-Wrist (article no. 10V41) with imperial interior thread ( $\frac{1}{2}$ "-20). Intended for high-stress activities. The stability is increased by blocking the flexion/extension. Rotation with the wrist joint is still possible in this case.



# MovoWrist-Flex and accessories

## MovoWrist Flex

Article no. 10V39

The MovoWrist Flex wrist joint permits flexion and extension of a cable-controlled or passive terminal device and locking in five increments from -15° to +45° as well as 360° rotation with 20 different positions. Total length: 33 mm, of which 12 mm are visible on the distal end.

Article no.	Exterior diameter
10V39=45	45 mm
10V39=50	50 mm



**№** 647G375

# Adapter

Article no. 10A30

Adapter to connect a terminal device to the MovoWrist Flex wrist joint.

Article no.	Compatible with
10A30=M12X1.5	Terminal device with metric thread
10A30=½"-20	Terminal device with inch thread



# Lamination ring

Article no. 11D1

Lamination ring for MovoWrist Flex wrist joint. Please note the correct diameter of the joint when placing your order.

Article no.	Diameter
11D1=45	45 mm
11D1=50	50 mm



# Wrist joints and accessories



### **₩** 647G453

# Ottobock wrist joint

Article no. 10V18

Ottobock wrist joint with interior thread and cylindrical lamination ring. Thread: M12X1.5.

Article no.	Exterior diameter
10V18=34	34 mm
10V18=40	40 mm
10V18=45	45 mm
10V18=50	50 mm

**₩** 647G453

# Ottobock wrist joint

Article no. 10V36

Ottobock wrist joint with interior thread and cylindrical lamination ring. Thread: 1/2"-20.

Article no.	Exterior diameter
10V36=34	34 mm
10V36=45	45 mm
10V36=50	50 mm



# Cylindrical lamination ring

Article no. 11D20

Article no.	Exterior diameter	Compatible with
11D20=34	34 mm	Article no. 10V18=34
11D20=40	40 mm	Article no. 10V18=40, 10V32=40
11D20=45	45 mm	Article no. 10V18=45, 10V32=45, 10V34=45, 10V36=45
11D20=50	50 mm	Article no. 10V8, 10V9, 10V10, 10V18=50, 10V32=50, 10V34=50, 10V36=50



# Oval head screw (sheet metal screw)

Article no. 501S40

Oval head sheet metal screw as spare part for the cylindrical lamination ring article no. 11D20 for wrist joints article no. 10V18, 10V32, 10V34 and 10V36.

Article no.	Lamination ring diameter
501S40=3.5X9.5	28 and 34 mm
501S40=3.5X13	40, 45 and 50 mm



# Wrist joints and accessories

## Rubber friction ring

Article no. 11D27

Spare part for the Ottobock wrist joints article no. 10V18 and 10V36.

Article no.	Lamination ring diameter	Diameter
11D27=25	28 mm	25 mm
11D27=32	34, 40, 45 and 50 mm	32 mm



# Ball ratchet wrist joint

Article no. 10V8

The ball ratchet wrist joint with lock lever is used to connect the hand or the hook with attachment plate with stud (article no. 10A43). The joint body has a diameter of 50 mm.

Article no.	Weight	Overall length
10V8	120 g	25 mm



**₩** 647G452

# Ball ratchet wrist joint, short

Article no. 10V30

The short ball ratchet wrist joint with lock lever is intended for long belowelbow residual limbs. It is used to connect the hand or the hook with attachment plate with short stud (article no. 10A56). The joint body has a diameter of 50 mm.

Article no.	Weight	Overall length
10V30	100 g	19 mm



### Standard connector

Article no. 10V15

Standard connector for accommodating terminal devices with a standard stud (diameter: 13 mm) and for connecting to ball ratchet wrist joint (article no. 10V8). With attachment plate and stud.



**№** 647G455

# Wrist joints and accessories



#### **№** 647G455

# Ouick-disconnect wrist unit with standard connector

Article no. 11S33

Quick-disconnect wrist unit with standard connector for accommodating terminal devices with a standard stud (diameter: 13 mm) and for attachment to the Ottobock system wrist joint.

Article no.	Exterior diameter
11S33=40	40 mm
11S33=44	44 mm
11S33=48	48 mm

# Attachment plate with stud

Article no. 10A43

Attachment plate with stud to connect a cable-activated hook or system hand to the wrist joint (article no. 10V8). Made of stainless steel with a diameter of 50 mm and an interior thread.

Article no.	Interior thread
10A43=M12X1.5	M12X1.5
10A43=½"-20	1⁄2"-20

## Attachment plate with short stud

Article no. 10A56

Attachment plate with short stud to connect a cable-activated hook or system hand to the wrist joint (article no. 10V30). Made of stainless steel with a diameter of 50 mm and an interior thread.

Article no.	Interior thread
10A56=M12X1.5	M12X1.5
10A56=½"-20	½"-20



# Oval countersunk head screw, slotted

Article no. 501S27=M3X8

The oval countersunk head screw, slotted, made of stainless steel is compatible with article no. 10V8, 10V9, 10V10 and 10V25. The M4 thread with a head diameter of 7.2 mm has a thread length of 8 mm.

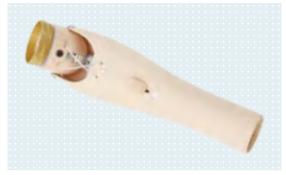


## Elbow components for children

Article no. 12K19=40

Elbow component with manual elbow lock (10 locking positions in 8° increments) and an upper arm rotation joint (humeral rotation feature) with lamination ring. The elbow ball is made of beige plastic (corresponds to glove colour 2). The wrist connection has a diameter of 40 mm.

Article no.	Upper arm connection diameter	Size	Colour	Length	Circum- ference
12K19=40	54 mm	6 ¾	2	approx. 250 mm	



**1** 647G469

### MovolinoArm Friction

Article no. 12K12

The MovolinoArm Friction is available in one size. It is the perfect complement to the current Ottobock product portfolio, since it allows prostheses on the right and left side for children aged 3 to 5 years. The elbow is compatible with passive, Body-Powered and myoelectric arm prostheses and weighs a mere 182 g. The elbow has one friction setting for humeral rotation and one for flexion or extension of the forearm. Parents can easily set this friction setting. A further advantage is that the elbow is compatible with the components of the 7.4 volt system for children. The MovolinoArm Friction features an impressive design that has a very realistic natural appearance.

The hand adapter of the MovolinoArm Friction is naturally compatible with the Electric Hand 2000. The wood adapter (article no. 10A40) is available for passive prosthetic hands. The wrist joint (10V18=34 or 10V36=34) is compatible with Body-Powered terminal devices.

Article no.	Upper arm connection diameter	Wrist connection diameter	Colour
12K12	43.5 mm	34 mm	4



**∭** 647G570



Both joints can also be fitted in conjunction with the Children's Hand 2000 (article no. 8E51=\*).



# Lamination ring set

Article no. 13G21

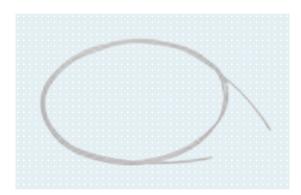
The set consists of a lamination ring with lamination dummies and an O-ring for the 12K12 elbow.



# Lamination ring

Article no. 13G8=54

For 12K19 elbow.



# Perlon cable

Article no. 21A18

Perlon cable with a diameter of 2 mm.

Article no.	Length	Order by
21A18=2X1	1 m	linear metres
21A18=2X5	5 m	linear metres
21A18=2X10	10 m	linear metres
21A18=2X25	25 m	linear metres

## Wrist joint lamination ring

Article no. 11D12=34

The wrist joint lamination ring is used for the connection with the Children's Hand 2000. It consists of a copper friction ring, O-rings and a protective cover. For 12K12 elbow.



# Wood hand adapter

Article no. 10A40

The wood hand adapter has a plastic threaded stud (M12x1.5) and is used to connect a passive inner hand to a forearm socket or elbow component. The diameter of the hand adapter is 60 mm, and modification to reduce that is possible.



# Ottobock wrist joint

Article no. 10V36=34

The Ottobock wrist joint has an exterior diameter of 34 mm, the thread ½"-20". For 12K12 elbow.



# Ottobock wrist joint

Article no. 10V18=34

The Ottobock wrist joint has an exterior diameter of 34 mm, the thread M12X1.5. For 12K12 elbow.





647H437

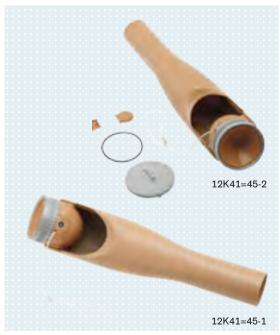
# ErgoArm plus

Article no. 12K42

Elbow for cable-controlled prostheses. With internal ratchetless lock, flexion aid (AFB = Automatic Forearm Balance) and upper arm rotation joint (humeral rotation feature), with adjustable friction, plastic forearm shell, elbow ball made of plastic, length: 305 mm, circumference: 250 mm. The slip-stop function makes it possible to lower the forearm in a controlled manner without having to fully release and reactivate the lock. The lock can bear a load of up to 230 N at a forearm length of approximately 305 mm. The internal ratchetless lock can be unlocked or locked in any position, even under a load. The flexion aid (AFB) supports joint flexion and facilitates natural free-swing behaviour.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter	Colour
12K42=45	6 3/4 - 7 1/4	70 mm	45 mm	4
12K42=45-1	6 ¾ – 7 ¼	70 mm	45 mm	11
12K42=45-2	6 ¾ -7 ¼	70 mm	45 mm	15
12K42=50	7 ¾-8 ¼	70 mm	50 mm	4
12K42=50-1	7 ¾-8 ¼	70 mm	50 mm	11
12K42=50-2	7 ¾-8 ¼	70 mm	50 mm	15

- The colour roughly corresponds to the glove colour according to the 646M3 colour
- Please note that the -1 and -2 versions are fabricated only after an order is received, so delivery is expected to take longer.



647H438

### **ErgoArm**

#### Article no. 12K41

Elbow for cable-controlled prostheses. With internal ratchetless lock, upper arm rotation joint (humeral rotation feature), with adjustable friction, plastic forearm shell, elbow ball made of plastic, length: 305 mm, circumference: 250 mm. The slip-stop function makes it possible to lower the forearm in a controlled manner without having to fully release and reactivate the lock.

The lock can bear a load of up to 230 N at a forearm length of approximately 305 mm. The internal ratchetless lock can be unlocked or locked in any position, even under a load.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter	Colour
12K41=45	6 3/4 - 7 1/4	70 mm	45 mm	4
12K41=45-1	6 3/4 - 7 1/4	70 mm	45 mm	11
12K41=45-2	6 ¾ -7 ¼	70 mm	45 mm	15
12K41=50	7 ¾-8 ¼	70 mm	50 mm	4
12K41=50-1	7 3/4 - 8 1/4	70 mm	50 mm	11
12K41=50-2	7 3/4 - 8 1/4	70 mm	50 mm	15

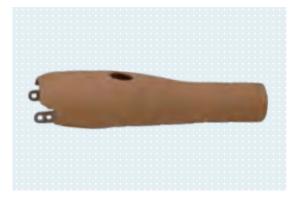
- The colour roughly corresponds to the glove colour according to the 646M3 colour swatches.
- Please note that the -1 and -2 versions are fabricated only after an order is received, so delivery is expected to take longer.



### Forearm

Article no. 12K48

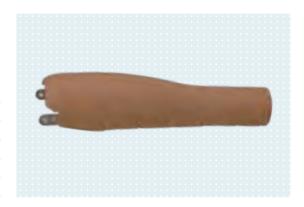
Article no.	Colour	Diameter	Compatible with
12K48=45	4	45 mm	12K42/44/50=45
12K48=45-1	11	45 mm	12K42/44/50=45
12K48=45-2	15	45 mm	12K42/44/50=45
12K48=50	4	50 mm	12K42/44/50=50
12K48=50-1	11	50 mm	12K42/44/50=50
12K48=50-2	15	50 mm	12K42/44/50=50



### Forearm

Article no. 12K49

Article no.	Colour	Diameter	Compatible with
12K49=45	4	45 mm	12K41=45
12K49=45-1	11	45 mm	12K41=45
12K49=45-2	15	45 mm	12K41=45
12K49=50	4	50 mm	12K41=50
12K49=50-1	11	50 mm	12K41=50
12K49=50-2	15	50 mm	12K41=50



# Elbow joint

Article no. 12A13

Article no.	Colour
12A13	4
12A13-1	11
12A13-15	15



# Clamp plate

Article no. 13G68

The clamp plate is available in colour 4.





Lamination ring Article no. 13Z47



Ball cap Article no. 13Z48

Article no.	Colour
13Z48	4
13Z48-1	11
13Z48-2	15



Thread segment

Article no. 13Z50

The thread segment is available in colour 4.



Hole covering

Article no. 13Z51

The hole covering is available in colour 4.

# Spring telescope

Article no. 13Z52



# Switch cable

Article no. 13Z53



# Lamination protection cover

Article no. 13Z55



### Bracket cover

Article no. 13Z56

Article no.	Colour
13Z56	4
13Z56-1	11
13Z56-2	15





Pressure piece Article no. 13Z57

The pressure piece is available in colour 4.



Eccentric Article no. 13Z58

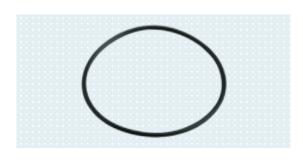
The eccentric is available in colour 4.



Countersunk head screw Article no. 501S84=M4X20



Countersunk head screw Article no. 501S101=M4X12



O-ring

Article no. 627F13=60X2.5

## Alignment aid for ErgoArm

Article no. 743A23

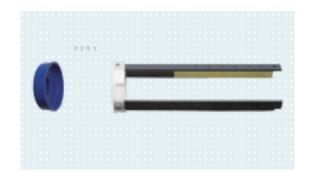
The alignment and foaming aid allows the alignment of an interim prosthesis for functional training in the rehabilitation phase.



# Alignment aid for DynamicArm

Article no. 743A27

Alignment and foaming aid allows the alignment of an interim prosthesis for functional training in the rehabilitation phase.



# Clamp stopple set

Article no. 21A207

The set is used to connect an ErgoArm forearm (article no. 12K48=\* or 12K49=\*) to the flexion cable of a triple-control above-elbow harness (article no. 21A35).

#### **Consisting of**

- Clamp stopple (10 pieces)
- Threaded nut, short (10 pieces)
- Twist drill, diameter: 5.5 mm (1 piece)



# Adapter

Article no. 13Z68

The adapter is used to mount an Ottobock elbow component (article no. 12K50) on a Hosmer lamination ring.





### **№** 647G470

# Elbow component with cable lock

Article no. 12K27

Thanks to the exterior joint construction and special technology for interior and exterior rotation of the forearm, this joint allows the distal residual limb to reach up to the joint ball. As a result, it is suitable for all residual limb lengths including elbow disarticulation. With single-sided, rotatable cable lock (18 locking positions in approx. 7.2° increments) and upper arm rotation joint (humeral rotation feature) with lamination ring. The beige elbow component made of plastic has a length of 270 or 300 mm and a circumference of 260 or 300 mm. The elbow ball is made of beige plastic (corresponds to skin colour 4).

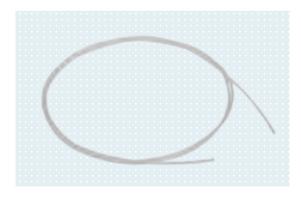
Article no.	Size	Upper arm connection diameter	Lamination ring diameter	Medial joint diameter
12K27=58X45	6 3/4 - 7 1/4	70 mm	45 mm	58 mm
12K27=58X50	7 %-8	70 mm	50 mm	58 mm
12K27=78X45	6 3/4 - 7 1/4	90 mm	45 mm	78 mm
12K27=78X50	7 3/4-8	90 mm	50 mm	78 mm



### Pull cable

Article no. 16Y26

The pull cable with threaded connection is a spare part for the elbow component (article no. 12K27) and the elbow joint bars (article no. 16X12 and 16X13).



## Perlon cable

Article no. 21A18

Perlon cable with a diameter of 2 mm.

Article no.	Length	Order by
21A18=2X1	1 m	linear metres
21A18=2X5	5 m	linear metres
21A18=2X10	10 m	linear metres
21A18=2X25	25 m	linear metres



# Elbow component with passive lock

Article no. 12K5

Elbow component with manual elbow locking (13 locking positions in approx. 8° increments) and upper arm rotation joint (humeral rotation feature). The plastic forearm shell has a length of approx. 270 mm and a circumference of approx. 245 mm. The elbow ball is made of beige plastic (corresponds to skin colour 4). It has a feedthrough for the 9E185=50-1 extension cable for simple myoelectrically controlled prostheses.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter
12K5=45	6 3/4 - 7 1/4	67 mm	45 mm
12K5=50	7 3/4 – 8 1/4	67 mm	50 mm



**₩** 647G469

# Elbow component with passive lock

Article no. 12K20

Elbow component with manual elbow locking (13 locking positions in approx. 8° increments) and upper arm rotation joint (humeral rotation feature). The plastic forearm shell has a length of approx. 270 mm and a circumference of approx. 245 mm. It is made of dark brown plastic (corresponds to skin colour 15). It has a feedthrough for the 9E185=50-1 extension cable for simple myoelectrically controlled prostheses.

Article no.	Size	Upper arm connection diameter	Lamination ring diameter
12K20=45	6 3/4 - 7 1/4	67 mm	45 mm
12K20=50	7 34-8	67 mm	50 mm



**₩** 647G469

## Lamination ring

Article no. 13G8=67

Lamination ring with an exterior diameter of 67 mm. Compatible with the elbow components article no. 12K5 and 12K20 and the modular kit article no. 12R6.



# Liners and accessories





#### Measure correctly!

For correct size selection, measure the circumference 3 cm proximal from the end of the residual limb. Subtract 1 to 2 cm from the measured circumference according to the soft tissue situation.

### Silicone ArmLiner

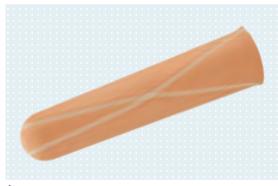
### Article no. 14Y1

The residual limb socket is of the utmost importance for the quality and comfort of an Upper Limb prosthesis. Using Ottobock ArmLiners, which were developed especially for the needs of Upper Limb prosthetics, clearly improves wearer comfort, ensures good residual limb adhesion and reduces frictional forces. An elbow envelopment can potentially be omitted if there is an adequate residual limb length. This enables unrestricted pronation and supination. For the fitting of below-elbow and above-elbow residual limbs.

#### Key features at a glance

- · Resistant to water, perspiration and weather
- · Odour-neutral
- · Good adhesion

Article no.	Length	Circumference 1	Circumference 2
14Y1=110	200 mm	110 mm	150 mm
14Y1=140	200 mm	140 mm	160 mm
14Y1=160	200 mm	160 mm	180 mm
14Y1=180	200 mm	180 mm	200 mm
14Y1=200	200 mm	200 mm	220 mm
14Y1=220	200 mm	220 mm	240 mm



647G772

### IntoLiner Acclimate

### Article no. 14Y3

Combined with a custom-made frame socket, the IntoLiner Acclimate constitutes the connection between the residual limb and the arm prosthesis. Wearer comfort is improved by the breathable, moisture wicking and antibacterial textile material. It equalises heat and cold. In order to fully benefit from these features, we recommend fabricating a custom frame socket. An example can be found in the 646T3=3.5\* technical information. For fitting below-elbow residual limbs with a residual limb length of 10 cm and up.

#### Key features at a glance

- · Temperature equalising
- · Moisture wicking, breathable and antibacterial
- · Available in various sizes
- · Adjustable to the residual limb length
- Washable at 30° C



#### Measure correctly!

· For correct size selection, measure the circumference 3 cm proximal from the end of the residual limb. Subtract 1 to 2 cm from the measured circumference according to the soft tissue situation.

Article no.	Length	Circumference 1
14Y3=140	290 mm	140 mm
14Y3=160	290 mm	160 mm
14Y3=180	290 mm	180 mm
14Y3=200	290 mm	200 mm
14Y3=220	290 mm	220 mm

The colour of the liner corresponds approximately to colour 4 of the 646M3 Ottobock prosthetic glove colour scale.

# Liners and accessories

## Skeo Up

### Article no. 14Y5

The further development of the proven Silicone ArmLiner (article no. 14Y1), complemented by components of the Skeo range for the lower limbs: Skeo Up (article no. 14Y5). A non-adhesive outer coating was applied to this liner, eliminating the need for donning spray and making it much easier to put on and take off. The roughened interior contour also reduces the perception of perspiration and feels comfortable on the skin. The new matrix improves tear resistance by reducing the lengthwise elongation. A pin is used to establish the connection to the lock built into the prosthetic socket.

#### Key features at a glance

- Suitable for residual limb sockets from a residual limb length of 10 cm on the upper arm and forearm
- Easier to put on and take off thanks to a special outer coating
- Very comfortable to wear due to roughened interior contour
- Highly robust thanks to new matrix
- · New design



**₩** 647G323

Article no.	Length	Circumference 1	Circumference 2
14Y5=110	200 mm	110 mm	150 mm
14Y5=140	200 mm	140 mm	160 mm
14Y5=160	200 mm	160 mm	180 mm
14Y5=180	200 mm	180 mm	200 mm
14Y5=200	200 mm	200 mm	220 mm
14Y5=220	200 mm	220 mm	240 mm
***************************************			



#### Measure correctly!

• For correct size selection, measure the circumference 3 cm proximal from the end of the residual limb. Subtract 1 to 2 cm from the measured circumference according to the soft tissue situation.

# Lock set

#### Article no. 14A1

Lock set for attaching an Ottobock Silicone ArmLiner (article no. 14Y1 and 14Y5) to the prosthetic socket.



### Pin

### Article no. 14A107

The pin is available in various lengths.

Article no.	Length
14A107	23 mm
14A107=1	28 mm
14A107=2	33 mm



# Liners and accessories



## Donning spray

Article no. 640F18

The donning spray is needed among other things for donning and removal of the liner or prosthetic glove (silicone, PVC).

Article no.	Contents	
640F18	90 ml	
640F18=900	900 ml (refill)	



### Derma Clean

Article no. 453H10

Derma Clean cleanses gently and reliably. It is pH-neutral, free of alkali and phosphates, and features an antibacterial formula.

Article no.	Order by	Contents	
453H10	6 bottles	300 ml	
453H10=1	1 bottle	300 ml	



# Dummy set

Article no. 14A111

Dummy set for aligning a prosthesis with Ottobock Silicone ArmLiner. The set consists of a pin dummy with and without thread and a shape dummy for the lamination ring.



# Lock with release pin

Article no. 14A110

Lock with release pin serves as a spare part for article no. 14A1.

### Transhumeral soft harness

### Article no. 21A47

Ottobock offers the world's first soft harness for transhumeral prostheses with myoelectric or passive elbows. The harness, which consists of an arm sling and a sleeve, is completely removable and is not fastened to the socket with a strap. Users can put it on and take it off with one hand. Soft underarm padding and breathable materials, which are fully washable, help make the harness comfortable. The back cord guide also allows the arms to swing naturally, supporting more physiological movement. The harness is available in three sizes for both the right and left arms. Users can also make small adjustments themselves using a hook-and-loop closure.

Size	Side	Back width	Armhole circumference
S	L/R	30-36.6 cm	38-45.3 cm
М	L/R	36.6-43.2 cm	45.3-52.6 cm
L	L/R	43.2-50 cm	52.6-60 cm





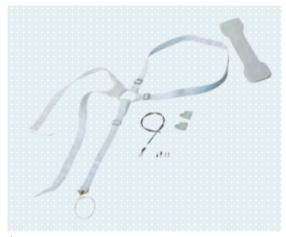
 647G1267 647G1279

# Triple-control above-elbow harness

### Article no. 21A35

The triple-control above-elbow harness is used to secure the prosthetic socket and control body-powered prostheses. It is suitable for prostheses on the right and left sides.

Article no.	Version	
21A35=1	with perion cable	
21A35=2	with steel cable	



647H455



### 647H455

### Below-elbow harness

Article no. 21A36

The below-elbow harness is intended for fixation of the prosthetic socket and for control of body-powered prostheses. It is suitable for prostheses on the right and left sides.

Article no.	Version
21A36=1	with perlon cable
21A36=2	with steel cable

## Bowden cable

Article no. 21A37=1

The Bowden cable is a spare part for article no. 21A35. Spiral length: 500 mm.



# Ball-shaft adapter

Article no. 10Y31

The ball-shaft adapter forms a connection element with the coupler, article no. 10Y32=\*.



Article no.	Compatible with
10Y31=1	21A18=2 Perlon cable
10Y31=2	651D4=2 Steel cable
10Y31=7	3/64" steel cable
10Y31=8	1/16" steel cable
10Y31=9	3/32" steel cable

# Coupler

Article no. 10Y32

The coupler forms a connection element with the ball-shaft adapter (article no. 10Y31=\*).

Article no.	Compatible with	
10Y32=1	21A18=2 Perlon cable	
10Y32=2	651D4=2 Steel cable	



# Ring

Article no. 21Y194

Harness ring with integrated cable guide.



### Stainless steel buckle

Article no. 21Y195=25

Stainless steel buckle for positioning and fixing the harness strap.



# Connecting bracket Article no. 21Y197=1





Axilla pad set

Article no. 21A38

Axilla pad set in white. Contents: 5 pieces.



# Strap buckle

Article no. 21Y199

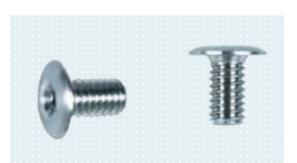
Strap buckle for a seamless connection of the elastic harness strap (article no. 623G23) to the prosthetic socket. Consisting of sleeve, lower part, upper part and spacer sleeve.



# Spacer sleeve

Article no. 21Y203

Spacer sleeve for strap buckle (article no. 21Y199).



### Socket screw with Allen head

Article no. 503F3

Socket screw (contents: 2 pieces) with Allen head. With M4 thread (length 7 mm). The head diameter is 8 mm.

# Elastic harness strap

Article no. 623G23

Elastic harness strap in white with tunnel-shaped cable guide. Order by the metre



# Harness strap

Article no. 623H23

White harness strap. Order by the metre

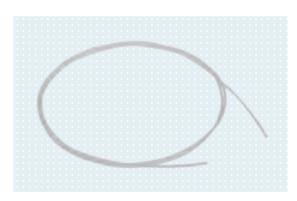


### Perlon cable

Article no. 21A18

Perlon cable with a diameter of 2 mm.

Article no.	Length	Order by
21A18=2X1	1 m	linear metres
21A18=2X5	5 m	linear metres
21A18=2X10	10 m	linear metres
21A18=2X25	25 m	linear metres



# Setting nut

Article no. 29C5

Setting nut (knurled), stainless steel.

Article no.	Thread	Length	Head diameter	Stud diameter
29C5=M4X9	M4	3.6 mm	9 mm	5.5 mm
29C5=M5X18	M5	3.6 mm	18 mm	6.5 mm





Countersunk head screw

Article no. 501S28=M3.5X5

Nickel-plated countersunk head screw for article no. 16H1 and 16H2.



Eyelet cable anchor, large Article no. 21A5



"D" ring

Article no. 21A16

"D" ring with a clearance width of 13 mm for flexion cable.



Lamination disc, serrated

Article no. 507S15

Serrated lamination disc with bore (diameter: 3 mm). Exterior diameter 13.8 mm (contents: 2 pieces).

# Threaded support fastener

Article no. 516S3

Threaded support fastener with M4 thread and a thread length of 5.5 mm.



Loop

Article no. 514Z3=25

Loop with a clearance width of 25 mm.



# Clamp buckle Article no. 514K3=27



Hollow rivet

Article no. 504H3=11-100

Hollow rivet with open lower part. Head diameter: 11 mm.





Screw coupling Article no. 10Y19=2

The screw coupling serves as a connection piece between a steel cable and perlon cable or spectra cable as well as between a perlon cable and perlon cable or spectra cable. Consisting of coupling sleeve and coupling screw, to be screwed to the 21A18=\* perlon cable or through which a spectra cable is to be threaded and then knotted.



Clamping tool

Article no. 736Y6

Clamping tool for crimping the coupling screw and clamp sleeve as well as the ball shaft fitting (article no. 10Y31=2) and coupler (article no. 10Y32=2) on the steel cable (article no. 651D4=2).

**₩** 647H13

0	Notes		
<u></u>			
<del></del>			
<del></del>		 	 
<del></del>		 	 
<b></b>		 	 





# **Body-Powered**

# Modular arm components

### Clever connection

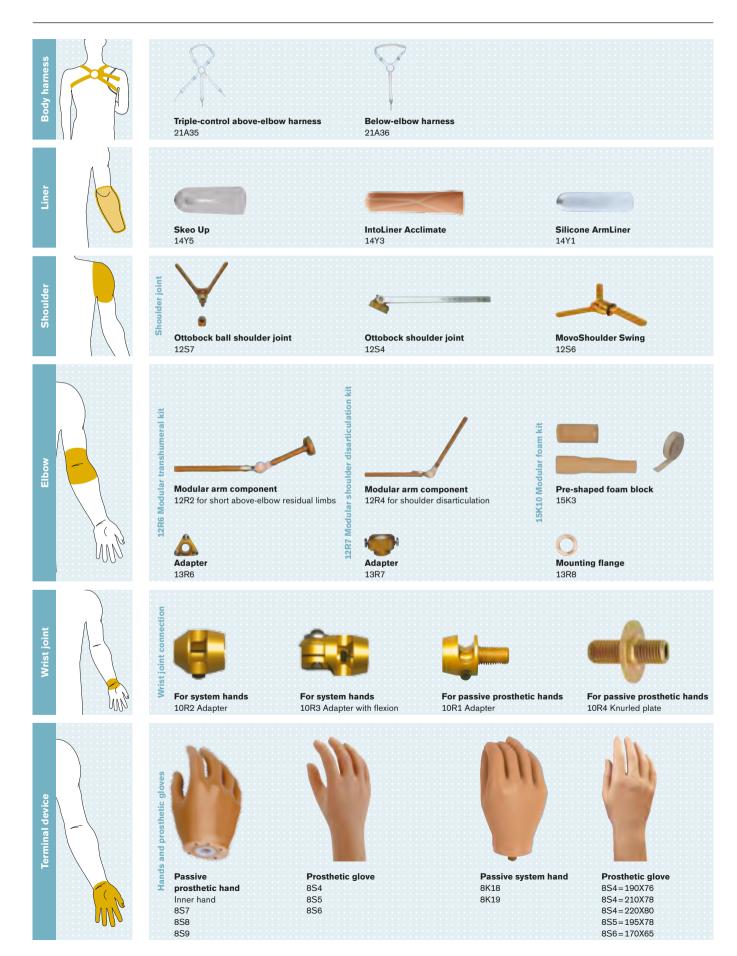
Tube skeleton designs with foam covers are characteristic for the modular system in Upper Limb prosthetics. This design is used primarily for fittings with passive arm prostheses for proximal amputation levels.

Corresponding modular arm components are available for transhumeral amputations at various residual limb lengths; they are connected to the prosthetic socket by a lamination ring and then concealed by a foam cover.

### On the following pages you will find

- Overview of passive mechanical arm components
- Terminal devices and accessories
- Prosthetic gloves
- Adapte
- Terminal device and colour determination
- Physolino baby hand and accessories
- Passive prosthetic hands for children
- Passive prosthetic hands for women
- Passive prosthetic hands for men
- Modular arm components
- Shoulder joints and accessories
- Elbow joint bars
- Liners and accessories
- Body harnesses and accessories

# Overview of passive mechanical arm components





# Terminal device and accessories

# Passive system hand

Article no. 8K18/8K19

The passive system hand is suitable for all residual limb lengths with passive prostheses. It is opened with the sound hand and closes independently. The system is lightweight and stable. With threaded stud (article no. 8K18: M12X1.5, 8K19:  $\frac{1}{2}$ "-20) and system inner hand. Available in sizes 6  $\frac{3}{4}$ (children),  $7 \frac{1}{4}$  (adolescents and women),  $7 \frac{3}{4}$  and 8 (men).

Article no.	Side	Size	Inner hand	Approx. weight
8K18=L6 ¾	Left (L)	6 3/4	8X14=L6 ¾	185 g
8K18=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	250 g
8K18=L7 ¾	Left (L)	7 3/4	8X14=L7 ¾	280 g
8K18=L8	Left (L)	8	8X14=L8	290 g
8K18=R6 ¾	Right (R)	6 ¾	8X14=R6 ¾	185 g
8K18=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	250 g
8K18=R7 ¾	Right (R)	7 ¾	8X14=R7 ¾	280 g
8K18=R8	Right (R)	8	8X14=R8	290 g

Article no.	Side	Size	Inner hand	Approx. weight
8K19=L6 ¾	Left (L)	6 3/4	8X14=L6 ¾	185 g
8K19=L7 1/4	Left (L)	7 1/4	8X14=L7 1/4	250 g
8K19=L7 ¾	Left (L)	7 3/4	8X14=L7 ¾	280 g
8K19=L8	Left (L)	8	8X14=L8	290 g
8K19=R6 ¾	Right (R)	6 ¾	8X14=R6 ¾	185 g
8K19=R7 1/4	Right (R)	7 1/4	8X14=R7 1/4	250 g
8K19=R7 ¾	Right (R)	7 3/4	8X14=R7 ¾	280 g
8K19=R8	Right (R)	8	8X14=R8	290 g





**№** 647G444

# ▶ Terminal device and accessories



# Lamination ring

Article no. 9E94

Lamination ring available for hand sizes 6  $\frac{3}{4}$ , 7  $\frac{1}{4}$ , 7  $\frac{3}{4}$  and 8.

Article no.	Diameter	Size
9E94=44	44 mm	6 3/4
9E94=50	50 mm	7 ¼, 7 ¾ and 8



# Chassis

Article no. 9S96/9S184

Chassis for excessively long forearm and wrist disarticulation residual limbs. Compatible with lamination ring (article no. 9E94).

Article no.	Diameter	Size
9S96=40	40 mm	6 3/4
9S184=44-N	44 mm	7 1/4
9S184=48-N	48 mm	7 ¾ and 8



### Set screw

Article no. 506G4

Set screw for chassis. Four set screws are required per chassis.

Article no.	Compatible with
506G4=M3X5	9S96=40 chassis
506G4=M4X5	9S184 chassis

# Terminal device and accessories

# System inner hand

Article no. 8X14

System inner hand with finger support in the little and ring finger, and retainer ring (article no. 9S187).

Article no.	Side	Size	
8X14=L6 <sup>3</sup> / <sub>4</sub>	Left (L)	6 3/4	
8X14=L7 1/4	Left (L)	7 1/4	
8X14 =L7 ¾	Left (L)	7 3/4	
8X14=L8	Left (L)	8	
8X14=R6 ¾	Right (R)	6 3/4	
8X14=R7 1/4	Right (R)	7 1/4	
8X14=R7 ¾	Right (R)	7 3/4	
8X14=R8	Right (R)	8	
***************************************			



# Lock ring, wide

Article no. 9S187

Wide lock ring. Compatible with the system inner hand (article no. 8X14) in hand sizes  $7 \frac{1}{4}$ ,  $7 \frac{3}{4}$  and 8.

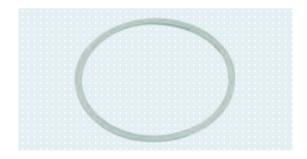
Article no.	Size
9S187=7 ¼	7 1/4
9S187=7 ¾	7 %
9S187=8 ¼	8 1/4



# Retainer ring

Article no. 9S15=42

Retainer ring to secure the system inner hand (article no. 8X14) size 6 3/4.



# Finger and thumb cover

Article no. 9S6

Finger and thumb cover compatible with hand sizes 6  $^{3}/_{4}$ , 7  $^{1}/_{4}$ , 7  $^{3}/_{4}$  and 8.



# Terminal device and accessories



### Chassis Article no. 9S67

Chassis with M12X1.5 threaded stud.

Article no.	Side	Diameter	Compatible with
9S67=L40	Left (L)	40 mm	8K18=L6 ¾
9S67=L44-N	Left (L)	44 mm	8K18=L7 1/4
9S67=L48-N	Left (L)	48 mm	8K18=L7 ¾ and 8K18=L8
9S67=R40	Right (R)	40 mm	8K18=R6 ¾
9S67=R44-N	Right (R)	44 mm	8K18=L7 1/4
9S67=R48-N	Right (R)	48 mm	8K18=L7 ¾ and 8K18=L8



### Chassis

Article no. 9S65

Chassis with 1/2"-20 threaded stud.

Article no.	Side	Diameter	Compatible with
9S65=L40	Left (L)	40 mm	8K19=L6 ¾
9S65=L44-N	Left (L)	44 mm	8K19=L7 1/4
9S65=L48-N	Left (L)	48 mm	8K19=L7 ¾
9S65=R40	Right (R)	40 mm	8K19=R6 ¾
9S65=R44-N	Right (R)	44 mm	8K19=L7 1/4
9S65=R48-N	Right (R)	48 mm	8K19=L7 ¾



# Flange button head socket screw

Article no. 501T52=M3X6

The flange button head socket screw with the M3X6 thread is used to screw the chassis to the base plate of the system hand (all sizes). Two pieces are required.



# Flange button head socket screw

Article no. 501T52=M3X8

The flange button head socket screw with the M3X8 thread is used to screw the chassis to the cover plate of the system hand (all sizes). One screw is required.



# Prosthetic gloves

## Prosthetic glove for children

Article no. 8S6\*

The prosthetic glove for children is available in size 6 3/4, with long sleeve, in 18 different colours. In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin. Please add an N before the = in the article number.

#### **Example**

- 8S11=210X78L (standard glove)
- 8S11N=210X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S6N=170X65L	Left (L)	6 3⁄4	300 mm
8S6N=170X65R	Right (R)	6 ¾	300 mm
8S6=170X65L	Left (L)	6 ¾	300 mm
8S6=170X65R	Right (R)	6 ¾	300 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

## Prosthetic glove for adolescents

Article no. 8S4=190X76

The prosthetic glove for adolescents is available in size 7 1/4, with short sleeve, in 18 different colours. In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin. Please add an N before the = in the article number.

#### **Example**

- 8S11=210X78L (standard glove)
- 8S11N=210X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S4N=190X76L	Left (L)	7 1/4	215 mm
8S4N=190X76R	Right (R)	7 1/4	215 mm
8S4=190X76L	Left (L)	7 1/4	215 mm
8S4=190X76R	Right (R)	7 1/4	215 mm

The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

Special cleaner for prosthetic gloves is found on page 248.

# Prosthetic gloves



647G468 (standard glove) 647G571 (Skin Natural)

## Prosthetic glove for men

Article no. 8S11=210X78

The prosthetic glove for men is available in size 7 3/4, with short sleeve, in 18 different colours. In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series.

The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin.

Please add an N before the = in the article number.

#### Example

- 8S11=210X78L (standard glove)
- 8S11N=210X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S11N==210X78L	Left (L)	7 3/4	220 mm
8S11N=210X78R	Right (R)	7 ¾	220 mm
8S11=210X78L	Left (L)	7 ¾	220 mm
8S11=210X78R	Right (R)	7 3⁄4	220 mm

The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

# Prosthetic glove for men

Article no. 8S4=220X80

The prosthetic glove for men is available in size 8, with short sleeve, in 18 different colours.

In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin. Please add an N before the = in the article number.

#### Example

- 8S11=210X78L (standard glove)
- 8S11N=210X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S4N=220X80L	Left (L)	8	225 mm
8S4N=220X80R	Right (R)	8	225 mm
8S4=220X80L	Left (L)	8	225 mm
8S4=220X80R	Right (R)	8	225 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.

Special cleaner for prosthetic gloves is found on page 248.



# Prosthetic gloves

# Prosthetic glove for women

### Article no. 8S5=195X78

The prosthetic glove for women is available in size 7 1/4, with long sleeve, in 18 different colours. Please indicate the colour code when ordering. For available colours, please ask our customer service. In addition to the standard prosthetic glove, Ottobock also offers the models in the Skin Natural series. The multilayer structure of the gloves gives them a depth effect so that they have a very vivid appearance. The outer translucent layer allows the coloured fibres of the material to shine through. This simulates the natural vein structure of human skin. Please add an N before the = in the article number.

#### **Example**

- 8S11=210X78L (standard glove)
- 8S11N=210X78L (Skin Natural)

Article no.	Side	Size	Sleeve length
8S5N=195X78L	Left (L)	7 1/4	340 mm
8S5N=195X78R	Right (R)	7 1/4	340 mm
8S5=195X78L	Left (L)	7 1/4	340 mm
8S5=195X78R	Right (R)	7 1/4	340 mm

• The entire Skin Natural colour palette is produced with seven colours. The new 646M47 colour scale helps when selecting the right pattern.



647G468 (standard glove) 647G571 (Skin Natural)

Special cleaner for prosthetic gloves is found on page 248.

# Adapter



₩ 647G454

# Adapter

Article no. 10R1

Adapter with M12X1.5 threaded stud to connect a passive inner hand to modular arm components.



**₩** 647G454

# Adapter

Article no. 10R2

Adapter with interior thread for connecting a hook or system hand to modular arm components.

Article no.	Connection diameter	Interior thread diameter
10R2=M12X1.5	20 mm	M12X1.5
10R2=½"-20	20 mm	½"-20



### **№** 647G454

# Adapter with flexion

Article no. 10R3

Flexion adapter with interior thread for connecting a hook or system hand to modular arm components.

Article no.	Connection diameter	Interior thread diameter
10R3=M12X1.5	20 mm	M12X1.5
10R3=½"-20	20 mm	½"-20



**₩** 647G454

# Knurled plate

Article no. 10R4

Knurled plate with threaded stud (bilateral) to connect a passive inner hand to the 10R2 and 10R3 adapters.

Article no.	Threaded stud	Compatible with
10R4=M12X1.5	M12X1.5	10R2=M12X1.5 Adapter 10R3=M12X1.5 Adapter with flexion
10R4=½"-20	M12X1.5, ½"-20	10R2=½"-20 Adapter 10R3=½"-20 Adapter with flexion



# Modular adapter for ArmLiners Article no. 13R11

To connect Ottobock arm liners (article no. 14Y1 and 14Y5) to the lock set (article no. 14A1). With Ottobock modular arm component (article no. 13R11).



**№** 647G164

#### Terminal device and colour determination

The following illustrations of the prosthetic hands are true to the original, and will help you and your patients select an individual artificial hand. The passive prosthetic hands consist of an inner hand and prosthetic glove. The standard inner hand is foam-formed with wire reinforcement in each finger. This results in high stability at a low weight. It is universally deployable thanks to a variety of adapters. The prosthetic glove's shape, colour and surface texture simulate the natural hand down to the details. The 43 different models for children, women and men are illustrated for the right hand and are marked for identification as in the table below.

Users	Prosthetic glove	Inner hand
Children	8S6=	8S9=
Women	8S5=	8S8=
Men	8S4=	8S7=

On each page of the illustrations, the order numbers for the prosthetic glove (1st line) and inner hand (2nd line) are listed below the prosthetic hand for the left and right sides respectively.

Side	Article no.	Check no.	Article no.	Side
	8S5=165X72L	40	8S5=167X72R	E
3	8S8=165X72L	40	8S8=167X72R	

#### **Determining the order number**

To precisely determine the correct size of the prosthetic glove and inner hand for a new prosthesis or partial hand prosthesis, measure your patient's "metacarpal circumference" (B) and "middle finger length" (C) according to the following sketch.

Then determine the reference number, taking into account the measurements for the "metacarpal circumference" (B) and "middle finger length" (C).

A = wrist circumference

**B** = metacarpal circumference

**C** = middle finger length

**D** = sleeve circumference

**E** = length to elbow (not specified for short sleeve)

	——Е	<u> </u>	
	7		
<b>B</b>	A /		1
←C→	G .		D
-			1

Α	В	С	D	E
140 mm	160 mm	68 mm	200 mm	384 mm

These measurements result, for example, in the following reference number for the prosthetic glove and corresponding inner hand. The real measurement of the inner hand is reduced by the material thickness of the prosthetic glove.

The final step in the selection process is to select the colour shade, i.e. the colour number. The standard gloves are available in 18 different shades. Free

Original glove colour samples for standard gloves can be requested under 646M3. Use 646M47 to order the original glove colour samples for the Skin Natural series (seven shades: 2, 4, 6, 8, 11, 14, 16). The complete reference number for your order is shown in the table to the side.

8S8=	165X72	L 		
8S5=	165X72			
8S8=	165X72	L	— 6 — ——	

A "T" must be added to the reference number if the inner hand is needed for a partial hand prosthesis.

8 <b>S</b> 8=	165X72	L	T

#### Notice

Some gloves are only produced on request. Please ask your



855-

All measurements are stated in mm. A measurement difference of ± 5 mm is reserved. The check number is always noted on the wrist of the inner hand!

# ▶ Terminal device and colour determination

### Prosthetic gloves and inner hands for children

Order reference number		Meas	asurements for the left hand				Measurements for the right hand								
Prosthetic glove	Inner hand	Reference number	Metacarpal circumfer- ence (B)	Middle finger length (C)	Wrist circumference (A)	Sleeve circumference (D)	Length to elbow (E)	Check no.	Reference number	Metacarpal circumfer- ence (B)	Middle finger length (C)	Wrist circumference (A)	Sleeve circumference (D)	Length to elbow (E)	Illustration on page
	1	115X38L	117	38	107	145	147	40	115X37R	106	35	103	133	165	190
		130X51L	120	40	106	146	205	41	134X52R	125	40	110	155	198	190
		142X50L	130	42	110	153	220	42	139X51R	130	41	110	162	225	191
8S6=	060-	151X58L	135	50	120	166	220	44	151X59R	137	50	123	168	230	191
030=	039=	158X54L	160	52	130	190	258	86	159X53R	160	57	130	185	250	192
		165X68L	160	63	134	184	280	48	158X68R	150	59	135	185	280	192
		168X70L	156	59	137	183	295	47	166X70R	160	65	140	176	300	193
		170X65L	157	54	141	188	291	43	170X65R	155	55	145	183	290	193

## Prosthetic gloves and inner hands for women

Order numbe	referer er	nce	Meas	sureme	nts for t	the left	hand			Measurements for the right hand					
Prosthetic glove	Inner hand	Reference number	Metacarpal circumfer- ence (B)	Middle finger length (C)	Wrist circumference (A)	Sleeve circumference (D)	Length to elbow (E)	Check no.	Reference number	Metacarpal circumfer- ence (B)	Middle finger length (C)	Wrist circumference (A)	Sleeve circumference (D)	Length to elbow (E)	Illustration on page
		165X72L	159	65	138	200	315	34	167X72R	163	63	131	199	330	194
		174X74L	157	63	137	190	315	32	175X76R	163	61	135	182	315	194
		180X80L	164	67	150	219	395	29	176X80R	170	69	152	217	365	195
		182X84L	167	67	143	220	345	28	190X84R	186	68	149	218	345	195
		184X75L	164	64	131	222	355	36	187X74R	183	65	143	226	325	196
		184X78L	172	66	154	223	300	37	184X78R	180	69	153	223	310	196
		185X75L	173	65	144	202	313	23	181X75R	171	65	147	206	310	197
8 <b>S</b> 5=	8 <b>S</b> 8=	188X79L	183	74	156	226	345	70	187X79R	182	74	159	235	355	197
		190X77L	175	66	138	213	335	20	190X77R	183	65	144	211	330	198
		190X93L	176	80	152	220	375	30	186X92R	184	81	154	214	380	198
		192X78L	179	68	150	230	340	24	191X78R	186	69	148	231	335	199
		194X82L	165	65	159	212	345	27	189X84R	178	69	152	210	365	199
		195X78L	187	65	153	217	345	38	195X78R	187	66	150	212	335	200
		195X79L	181	66	151	230	315	25	200X79R	199	70	157	244	330	200
		208X89L	193	75	165	234	385	19	210X89R	199	75	171	238	380	201

# ▶ Terminal device and colour determination

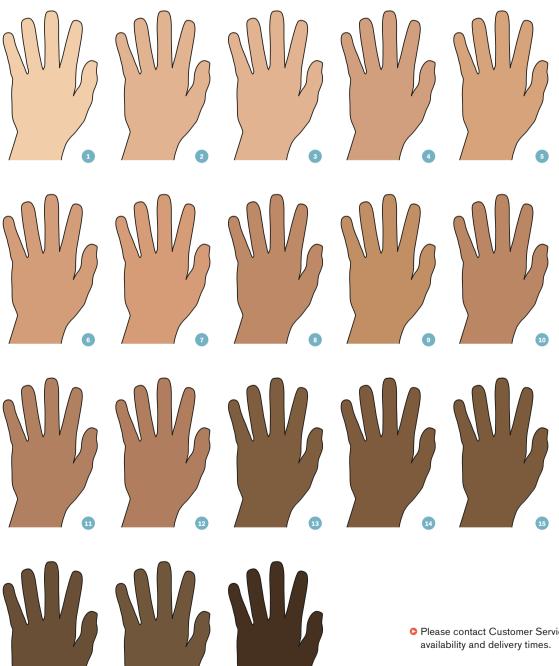
## Prosthetic gloves and inner hands for men

Order numbe		nce	Meas	sureme	nts for t	he left l	hand			Measurements for the right hand					
Prosthetic glove	Inner hand	Reference number	Metacarpal circumfer- ence (B)	Middle finger length (C)	Wrist circumference (A)	Sleeve circumference (D)	Length to elbow (E)	Check no.	Reference number	Metacarpal circumfer- ence (B)	Middle finger length (C)	Wrist circumference (A)	Sleeve circumference (D)	Length to elbow (E)	Illustration on page
		202X74L	193	70	155	229	375	58	206X76R	190	70	156	220	375	202
		203X83L	190	71	158	235	350	16	199X82R	185	70	155	230	340	202
		203X85L	200	73	161	230	375	15	206X85R	190	75	162	232	375	203
		205X81L	194	70	165	224	378	5	205X81R	180	65	170	220	380	203
		206X80L	198	71	177	250	380	60	205X80R	190	73	175	225	370	204
		206X87L	190	78	151	218	360	13	215X88R	193	75	164	240	370	204
		207X86L	187	76	152	229	360	57	209X86R	194	76	155	226	380	205
		208X85L	192	70	162	233	375	12	212X83R	193	73	165	232	370	205
		211X88L	194	75	161	244	370	59	212X86R	202	80	165	240	365	206
<b>8S4</b> =	8 <b>S</b> 7=	212X93L	194	78	157	244	410	56	215X93R	197	76	153	235	425	206
		213X85L	200	69	175	243	380	54	218X85R	195	67	180	245	390	207
		214X82L	210	69	169	252	338	17	215X83R	195	70	175	255	350	207
		218X85L	210	75	167	234	405	8	218X83R	190	70	162	237	390	208
		220X91L	210	75	175	255	410	11	214X90R	192	76	153	223	415	208
		221X81L	208	70	174	251	351	51	225X82R	210	67	173	240	360	209
		228X84L	233	73	176	250	375	53	222X84R	208	78	170	246	360	209
		228X88L	216	72	174	250	330	52	228X89R	213	77	182	255	325	210
		232X94L	220	76	173	257	420	55	230X93R	211	75	176	253	390	210
		238X92L	215	71	182	255	364	14	244X94R	207	70	179	260	370	211

## Terminal device and colour determination

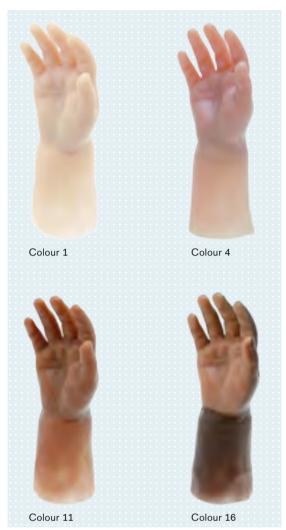
#### Colour determination

To determine the colour of a standard prosthetic glove, please use the 646M3 colour swatches. For a Skin Natural prosthetic glove, please use the 646M47 colour swatches. Please note that the colours shown here are only for orientation.



Please contact Customer Service for information on

## Physolino baby hand



**№** 647G360

#### Physolino baby hand

Article no. 8K5

Physolino baby hand for babies and toddlers. The hand is made of medical grade silicone. Suitable for a hand circumference of approx. 110 mm and a finger length of approx. 40 mm. The colour corresponds to approximately colour no. 1, 4, 11 or 16 of the Ottobock colour scale for prosthetic gloves. The Physolino baby hand is supplied with a lamination ring (article no. 11D31, diameter: 24 mm).

Article no.	Side	Colour
8K5=1L1	Left (L)	1
8K5=1L4	Left (L)	4
8K5=1L11	Left (L)	11
8K5=1L16	Left (L)	16
8K5=1R1	Right (R)	1
8K5=1R4	Right (R)	4
8K5=1R11	Right (R)	11
8K5=1R16	Right (R)	16
•••••		

The lamination dummy (article no. 743Y42) for the Physolino baby hand is found on page 189, compatible prosthetic gloves on pages 184-186.

## Physolino baby hand and accessories

#### Lamination ring for Physolino baby hand

Article no. 11D31

Lamination ring for Physolino baby hand, diameter 24 mm. Suitable for socket replacements.



#### Wood hand adapter

Article no. 10A40

The wood hand adapter has a plastic threaded stud (M12x1.5) and is used to connect a passive inner hand to a forearm socket or elbow component. The diameter of the hand adapter is 60 mm, and modification to reduce that is possible.



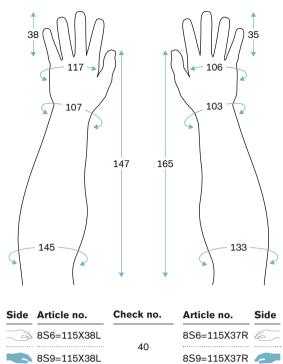
#### Lamination dummy

Article no. 743Y42=24

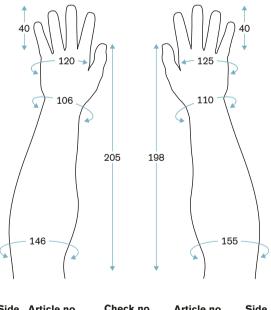
The lamination dummy can be used with the alignment rod of the alignment tool (article no. 743A18). Suitable for Physolino baby hand.

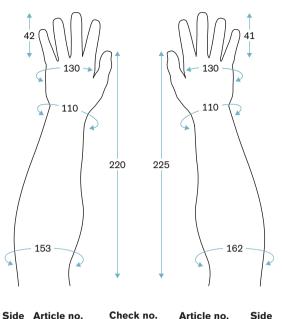


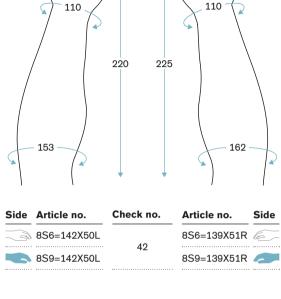


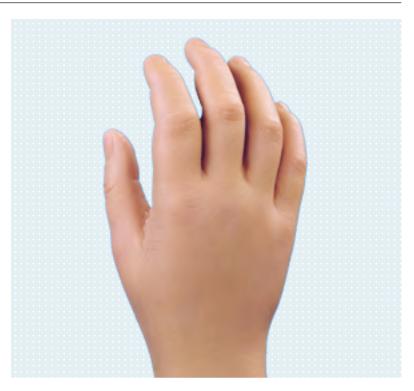


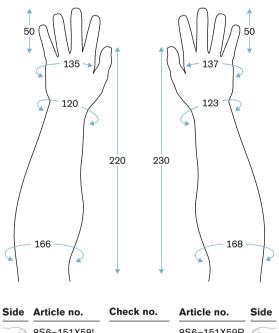


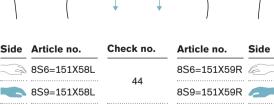




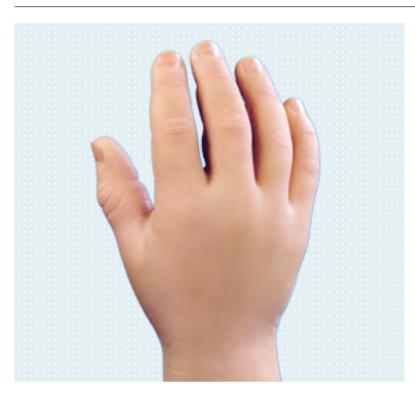


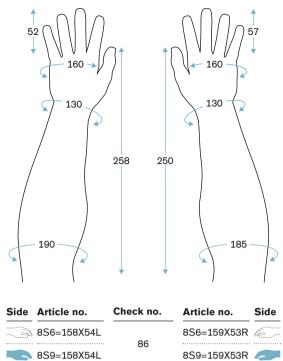




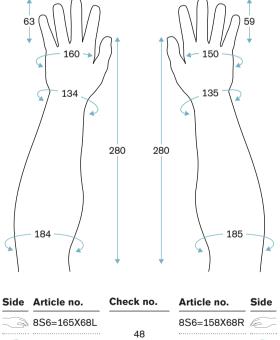






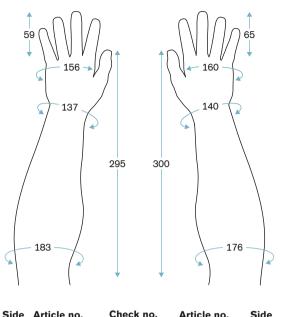


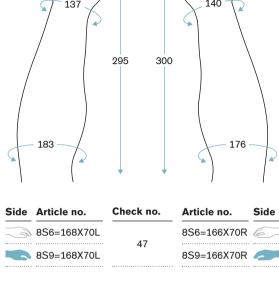




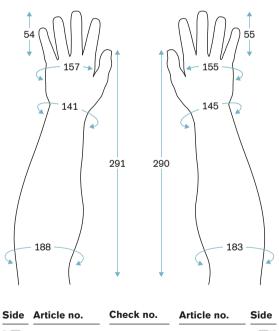
8S9=158X68R

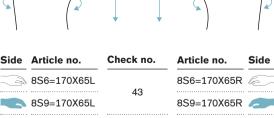
8S9=165X68L





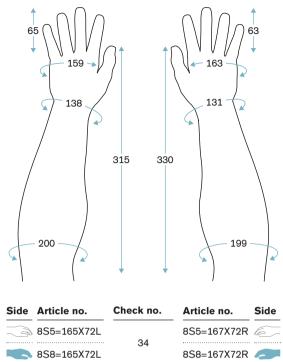




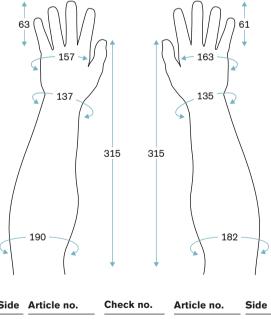


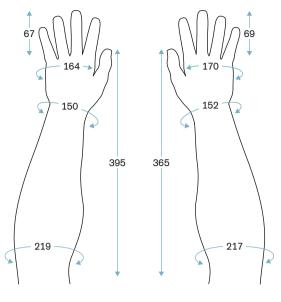




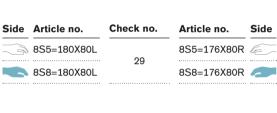


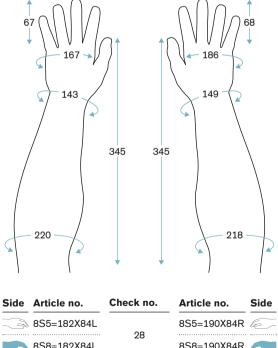






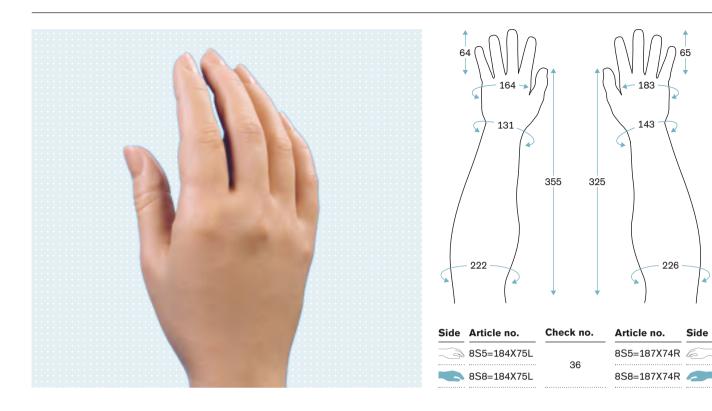




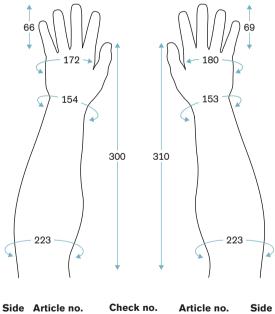












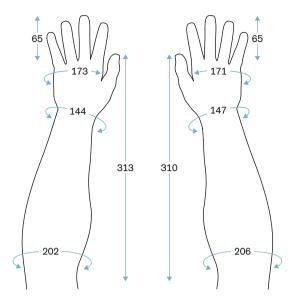
37

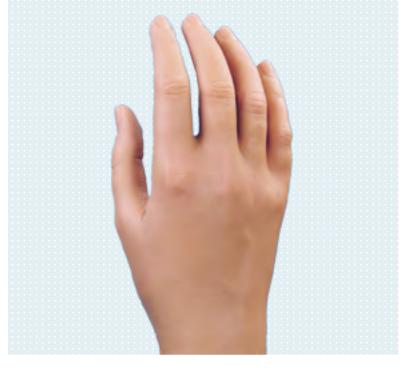
8S5=184X78R 🥖

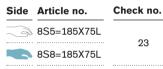
8S8=184X78R

8S5=184X78L

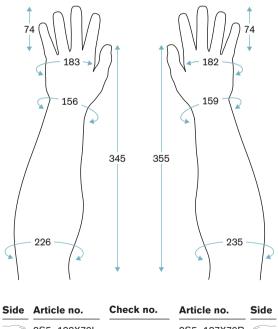
8S8=184X78L

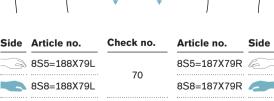






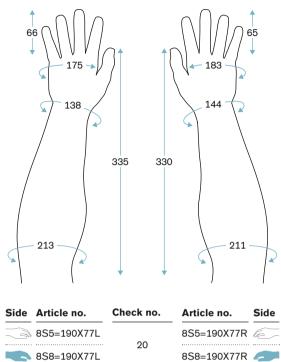




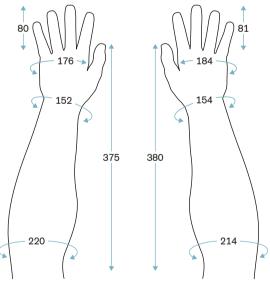




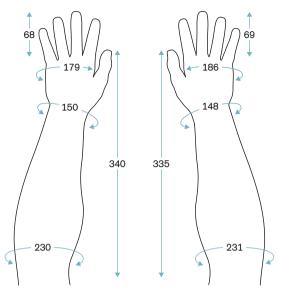


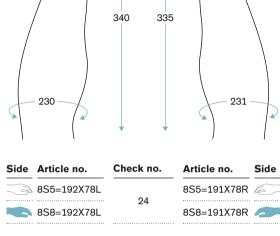




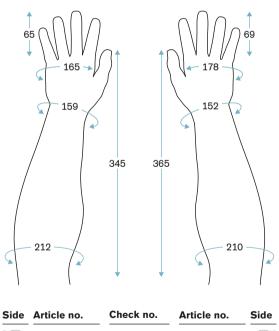


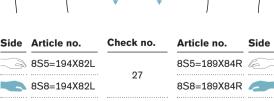
Side	Article no.	Check no.	Article no.	Side
<u></u>	8S5=190X93L	30	8S5=186X92R	E
-	8S8=190X93L	30	8S8=186X92R	
				• • • • • • • • • • • • • • • • • • • •





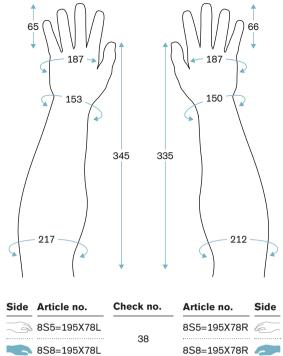




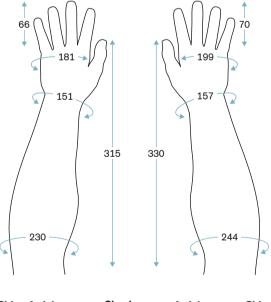




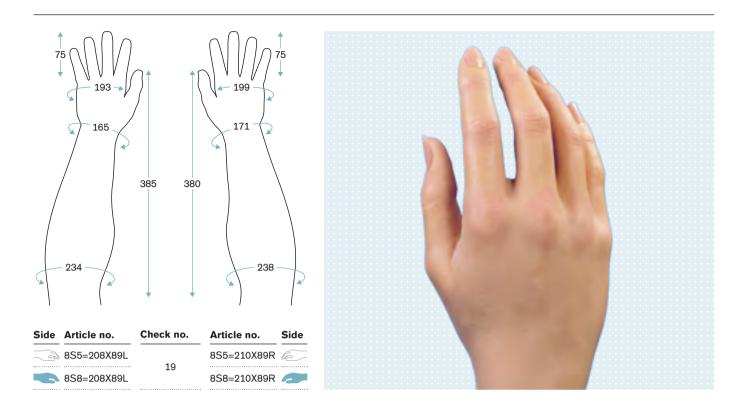


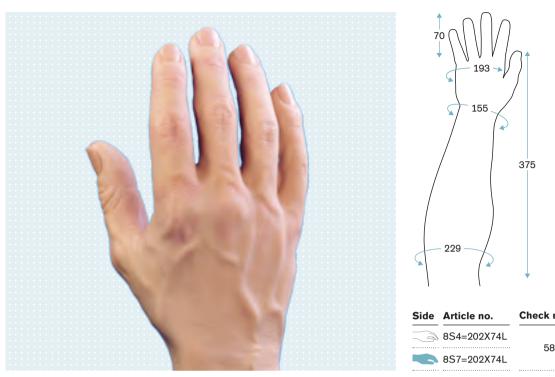


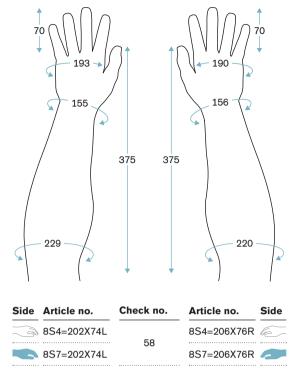




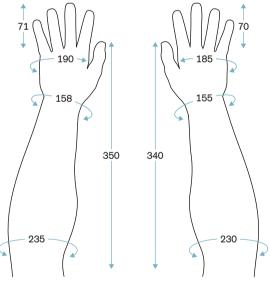
Side	Article no.	Check no.	Article no.	Side
	8S5=195X79L	25	8S5=200X79R	E
-	8S8=195X79L	25	8S8=200X79R	









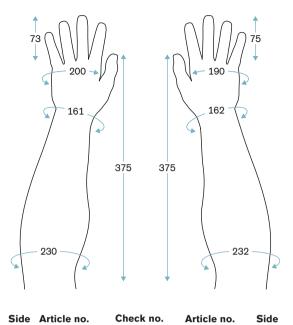


Side	Article no.	Check no.	Article no.	Side
	8S4=203X83L	16	8S4=199X82R	E
-	8S7=203X83L	10	8S7=199X82R	

8S4=206X85R 🥖

8S7=206X85R

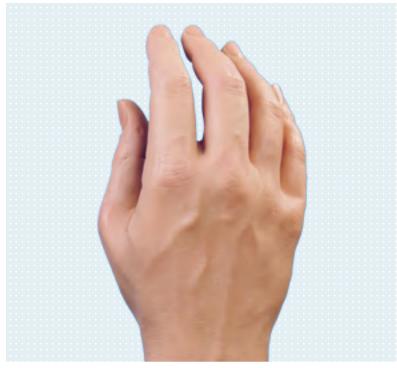
8S7=205X81R

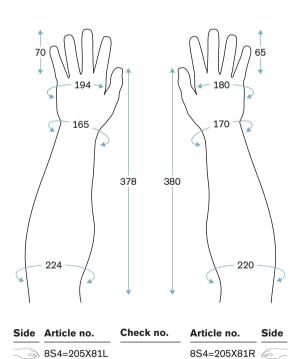


15

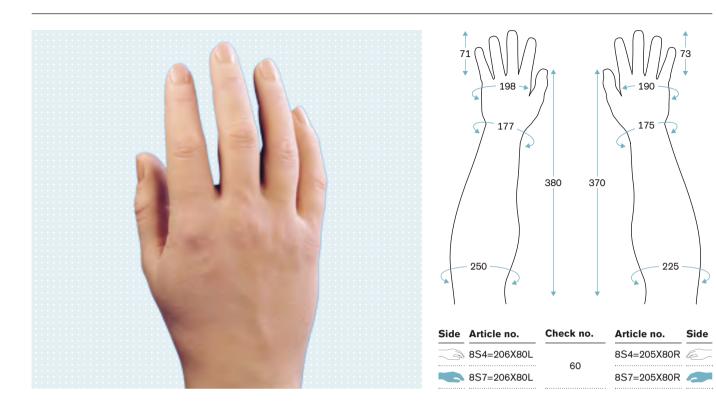
N 8S7=203X85L

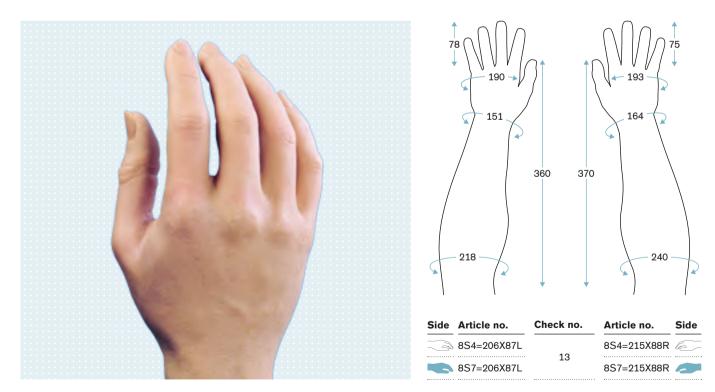
8S7=205X81L

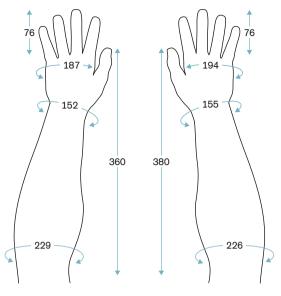


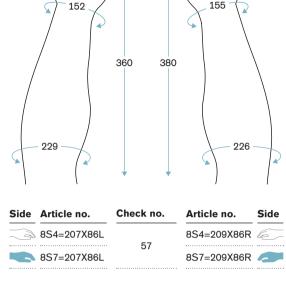


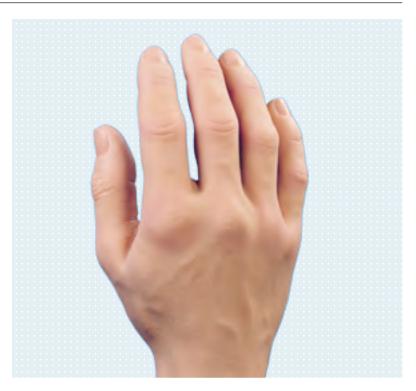


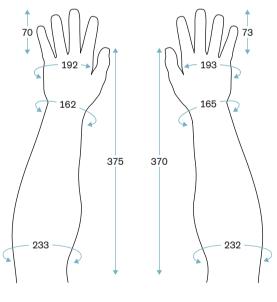




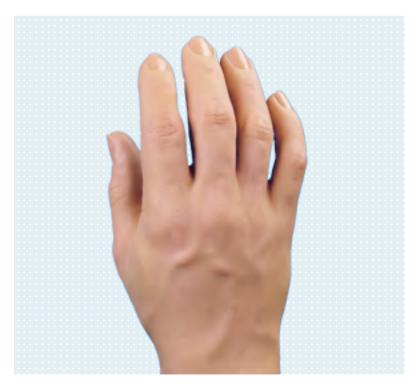




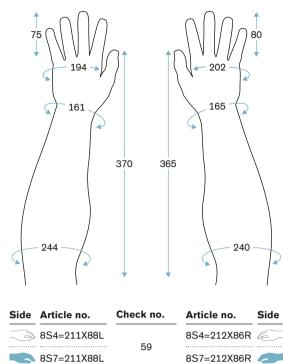




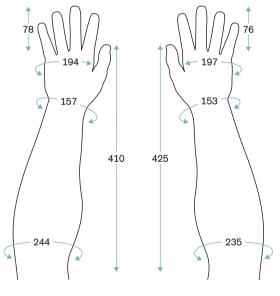




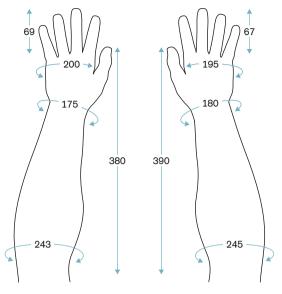


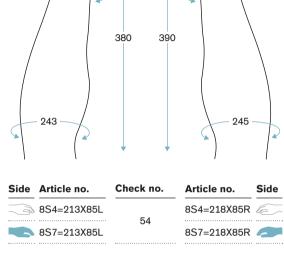


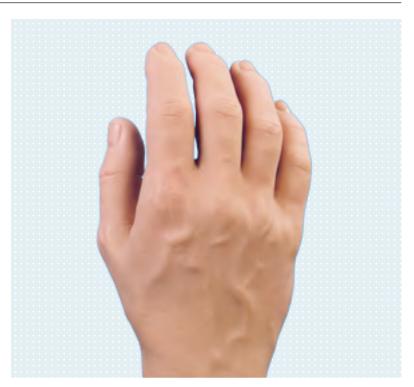


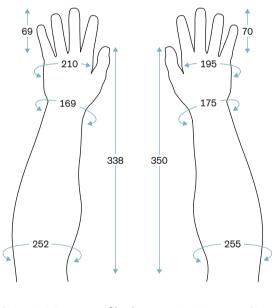


Side	Article no.	Check no.	Article no.	Side
	8S4=212X93L	56	8S4=215X93R	æ
	8S7=212X93L	36	8S7=215X93R	





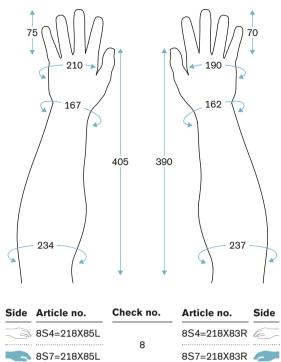




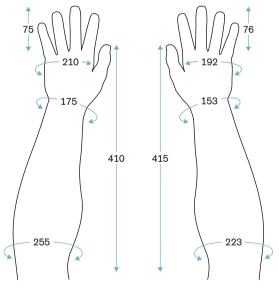




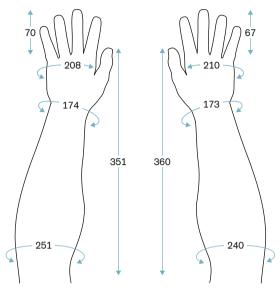


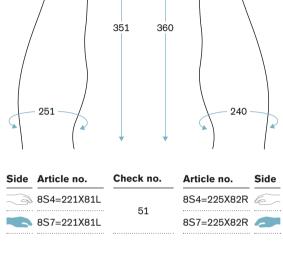




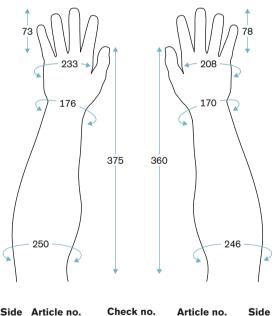


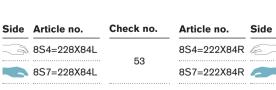
Side	Article no.	Check no.	Article no.	Side
3	8S4=220X91L	11	8S4=214X90R	æ
-	8S7=220X91L	11	8S7=214X90R	
5	8S7=220X91L		8S7=214X90R	6



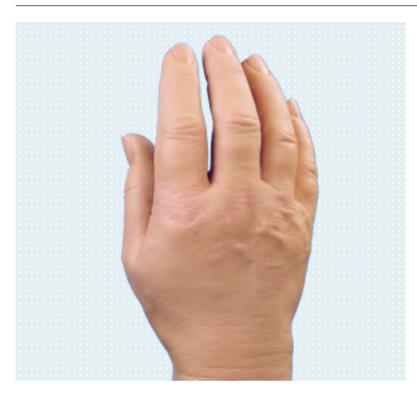


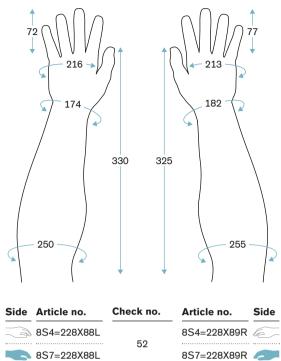




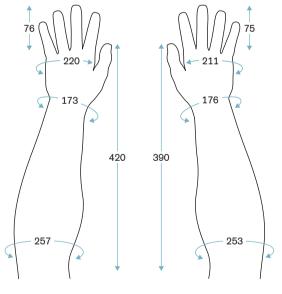




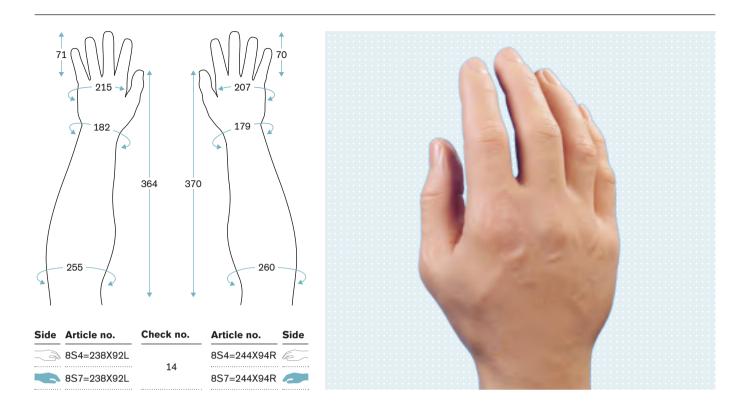








Side	Article no.	Check no.	Article no.	Side
	8S4=232X94L		8S4=230X93R	E
-	8S7=232X94L	55	8S7=230X93R	
5	8S7=232X94L	55	8S7=230X93R	4



## Modular arm components



#### ₩ 647G471

#### Transhumeral modular kit

Article no. 12R6

The modular structural component set contains the components for an upper arm prosthesis. Suitable for short and long above-elbow residual limbs with passive elbow lock as well as upper arm and forearm rotation.

#### Key features at a glance

- · Passive elbow lock
- Upper arm and forearm rotation
- · Tubes can be individually shortened in the defined range
- · Article no. 13R6 for long residual limbs included

Article no.	Side
12R6=L	Left (L)
12R6=R	Right (R)

#### Shoulder disarticulation modular kit

Article no. 12R7

The modular structural component set contains the components for a prosthesis for a shoulder disarticulation with passive elbow lock.

#### Key features at a glance

- · Passive elbow lock
- Upper arm and forearm rotation
- Tubes can be individually shortened in the defined range
- · Adapter (article no. 13R7 for 12S4) included

Article no.	Side
12R7=L	Left (L)
12R7=R	Right (R)



647G471

#### Foam modular kit

Article no. 15K10

The foam modular kit is compatible with forearms with a circumference of 300 mm. Equipped with a perlon frizz stockinette, length approx. 2 m (article no. 623T8=9). Colour: beige. The 13R8=64 mounting flange is also included in the scope of delivery.

# Modular arm components

#### Flexion cable retainer

Article no. 13Y1

Flexion cable retainer for forearm tube.



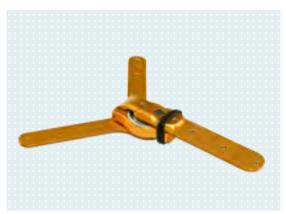
### Connection disc with groove

Article no. 13R9

Connection disc with groove for attaching the perlon frizz stockinette to the

Article no.	Exterior diameter	Size
13R9=45	45 mm	6 3/4
13R9=50	50 mm	7 1/4
13R9=55	55 mm	7 ¾ and 8
13R9=65	65 mm	Passive prosthetic hands, adaptable

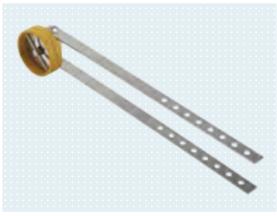




647G349



· This joint can also be fitted in conjunction with the DynamicArm (article no. 12K100N and 12K110N).



**₩** 647G473



647G473

#### MovoShoulder Swing

Article no. 12S6

This shoulder joint opens up new possibilities for prosthetic devices in the shoulder area. The MovoShoulder Swing is ideal for prostheses with basic functions or in combination with high-tech components. The free swing of up to 40° reduces pressure from the prosthetic socket and allows even bilateral amputees to achieve natural, harmonious movements, Locking at 30° anteversion and unlocking is controlled by specific upper body movements or with the sound hand. No additional control elements such as switches or a body harness are required. Abduction of up to 20° facilitates more comfortable movement patterns during many activities of daily life. This especially applies to activities done close to the body or while sitting.

Article no.	Side
12S6=L	Left (L)
12S6=R	Right (R)
Technical data	
Technical data Overall length	230 mm

#### Ottobock shoulder joint

Article no. 12S4

This should joint has two axes with separate friction and two arm bars.

lechnical data			
Overall length	210 mm		
Lamination ring diameter	43 mm		
Weight	134 a		

#### Ottobock ball shoulder joint

Article no. 12S7

Ottobock ball shoulder joint with M12X1.5 threaded stud (Weight: 78 g).

#### Lamination ring

Article no. 13Z16=43

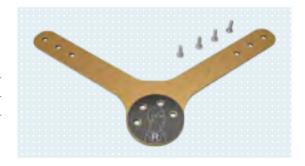
Spare part for Ottobock shoulder joint, article no. 12S4.



#### Shoulder bracket set

Article no. 13D2

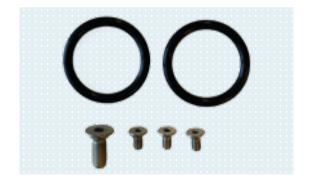
Article no.	Side	Compatible with
13D2=L	Left (L)	12S6=L
13D2=R	Right (R)	12S6=R



### O-ring set

Article no. 13D1

Spare part for MovoShoulder Swing shoulder joint, article no. 12S6.





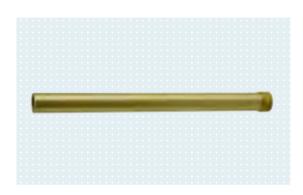
### Modular elbow joint

Article no. 13R1

Modular elbow joint with passive lock.

Article no.	Side
13R1=L	Left (L)
13R1=R	Right (R)

**∭** 647G471



### Light metal piping

Article no. 13R3

Gold anodised light metal piping with a length of 250 mm, with reinforced ring and glide bushing.



#### Lamination ring

Article no. 13G8=67

Lamination ring with an exterior diameter of 67 mm. Compatible with article no. 12K5, 12K20 and 12R6.



#### Truss head screw

Article no. 501S35=M4X6

Truss head screw for article no. 12R6, 12R7, 13R5, 13R6 and 13R7.

#### Cap screw

Article no. 501Z2=M4X18

Cap screw for article no. 12R6, 12R7 and 13R5.



### Adapter

Article no. 10R5

Adapter for connecting the light metal piping (article no. 13R3/13R4) and adapters (article no. 13R6/13R7) to the elbow joint. For hand and upper arm rotation.



#### Set screw

Article no. 506G1=M6X10

Set screw for article no. 10R5, 12R6 and 12R7.



#### Joint ball

Article no. 13X5

Spare part for Ottobock ball shoulder joint, article no. 12S7.





Joint clamp Article no. 13X4

Spare part for Ottobock ball shoulder joint, article no. 12S7.



Friction ring

Article no. 13X3

Spare part for Ottobock ball shoulder joint, article no. 12S7.



Adapter

Article no. 10R2=M12X1.5

Adapter for connecting modular arm components to the ball shoulder joint (article no. 12S7) with M12X1.5 interior thread.



# Shoulder joints and accessories

### Light metal piping

Article no. 13R4

Gold anodised light metal piping with reinforced ring and glide bushing (length: 120 mm).



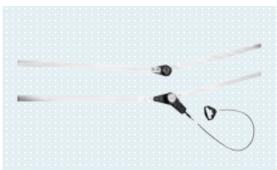
### Adapter

Article no. 13R6

Adapter to connect the lamination ring (article no. 13G8) and elbow joint using the adapter, article no. 10R5.



### Elbow joint bars

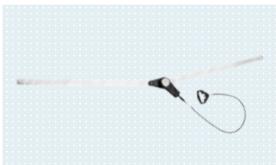


#### **1** 647G472

#### Elbow joint bars

Article no. 16X12

Elbow joint bars with one joint bar and swivelling cable lock, 18 ratchet positions in 7.2° increments. The second joint bar is without a lock, flat bar profile, joint bars suitable for both sides, for arm prostheses. Head diameter 30 mm, joint bar length 320 mm (top and bottom), joint bar width/thickness: 14/2 mm.

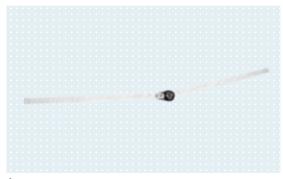


# **₩** 647G472

#### Elbow joint bar with cable lock

Article no. 16X13

Joint with swivelling cable lock, 18 locking positions in 7.2° increments, flat bar profile, suitable for both sides, for arm prostheses. Head diameter 30 mm, joint bar length 320 mm (top and bottom), joint bar width/thickness: 14/2 mm.



#### **∭** 647G472

### Elbow joint bar without cable lock

Article no. 16X14

The joint is freely moveable with a flat joint bar profile. Head diameter 30 mm, joint bar length 320 mm (top and bottom), joint bar width/thickness: 14/2 mm.

### Elbow joint bars

#### Joint piece with cable lock

Article no. 16Y27

Joint piece with cable lock. 18 locking positions in 7.2° increments, suitable for both sides. With joint bracket and socket screws (oval head screws). Compatible with article no. 12K27, 16X12 and 16X13.



**∭** 647G472

#### Joint piece without lock

Article no. 16Y31

Joint piece without lock, compatible with article no. 16X12 and 16X14. With joint bracket and socket screws.



#### Pull cable

Article no. 16Y26

Pull cable with threaded connection, compatible with models with article no. 12K27, 16X12 and 16X13.



#### Belt flap

Article no. 21Y79

Belt flap with wedge lock, compatible with models with article no. 16X12 and 16X13.





# 



#### Measure correctly!

 For correct size selection, measure the circumference 3 cm proximal from the end of the residual limb. Subtract 1 to 2 cm from the measured circumference according to the soft tissue situation.

#### Silicone ArmLiner

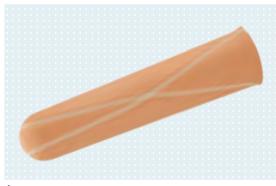
#### Article no. 14Y1

The residual limb socket is of the utmost importance for the quality and comfort of an Upper Limb prosthesis. Using Ottobock ArmLiners, which were developed especially for the needs of Upper Limb prosthetics, clearly improves wearer comfort, ensures good residual limb adhesion and reduces frictional forces. An elbow envelopment can potentially be omitted if there is an adequate residual limb length. This enables unrestricted pronation and supination. For the fitting of below-elbow and above-elbow residual limbs.

#### Key features at a glance

- · Resistant to water, perspiration and weather
- · Odour-neutral
- · Good adhesion

Article no.	Length	Circumference 1	Circumference 2
14Y1=110	200 mm	110 mm	150 mm
14Y1=140	200 mm	140 mm	160 mm
14Y1=160	200 mm	160 mm	180 mm
14Y1=180	200 mm	180 mm	200 mm
14Y1=200	200 mm	200 mm	220 mm
14Y1=220	200 mm	220 mm	240 mm



**№** 647G772

#### IntoLiner Acclimate

#### Article no. 14Y3

Combined with a custom-made frame socket, the IntoLiner Acclimate constitutes the connection between the residual limb and the arm prosthesis. Wearer comfort is improved by the breathable, moisture wicking and antibacterial textile material. It equalises heat and cold. In order to fully benefit from these features, we recommend fabricating a custom frame socket. An example can be found in the 646T3=3.5\* technical information. For fitting below-elbow residual limbs with a residual limb length of 10 cm and up.

#### Key features at a glance

- · Temperature equalising
- · Moisture wicking, breathable and antibacterial
- · Available in various sizes
- · Adjustable to the residual limb length
- Washable at 30° C



#### Measure correctly!

· For correct size selection, measure the circumference 3 cm proximal from the end of the residual limb. Subtract 1 to 2 cm from the measured circumference according to the soft tissue situation.

Article no.	Length	Circumference 1
14Y1=140	290 mm	140 mm
14Y1=160	290 mm	160 mm
14Y1=180	290 mm	180 mm
14Y1=200	290 mm	200 mm
14Y1=220	290 mm	220 mm

The colour of the liner corresponds approximately to colour 4 of the 646M3 Ottobock prosthetic glove colour scale.



#### Skeo Up

#### Article no. 14Y5

The Skeo Up represents the further development of the proven 14Y1 Silicone ArmLiner, complemented by components from the Skeo range for the lower limbs. A non-adhesive outer coating was applied to this liner, eliminating the need for donning spray and making it much easier to put on and take off. The roughened interior contour also reduces the perception of perspiration and feels comfortable on the skin. The new matrix improves tear resistance by reducing the lengthwise elongation. A pin is used to establish the connection to the lock built into the prosthetic socket.

#### Key features at a glance

- Suitable for residual limb sockets from a residual limb length of 100 cm on the upper arm and forearm
- Easier to put on and take off thanks to a special outer coating
- Very comfortable to wear due to roughened interior contour
- · Highly robust thanks to new matrix
- · New design

Article no.	Length	Circumference 1	Circumference 2
14Y5=110	200 mm	110 mm	150 mm
14Y5=140	200 mm	140 mm	160 mm
14Y5=160	200 mm	160 mm	180 mm
14Y5=180	200 mm	180 mm	200 mm
14Y5=200	200 mm	200 mm	220 mm
14Y5=220	200 mm	220 mm	240 mm
***************************************			



**∭** 647G323



#### Measure correctly!

• For correct size selection, measure the circumference 3 cm proximal from the end of the residual limb. Subtract 1 to 2 cm from the measured circumference according to the soft tissue situation.



Lock set

Article no. 14A1

Lock set for attaching an Ottobock Silicone ArmLiner (article no. 14Y1 and 14Y5) to the prosthetic socket.

**№** 647H347



# Donning spray Article no. 640F18

The donning spray is needed among other things for donning and removal of the liner or prosthetic glove (silicone, PVC).

Article no.	Contents
640F18	90 ml
640F18=900	900 ml (refill)



#### Derma Clean

Article no. 453H10

Derma Clean cleanses gently and reliably. It is pH-neutral, free of alkali and phosphates, and features an antibacterial formula.

Article no.	Order by	Contents
453H10	6 bottles	300 ml
453H10=1	1 bottle	300 ml



#### Derma Repair

Article no. 453H14

Derma Repair moisturises and promotes the regeneration of dry, sore skin. It reduces the effects of excessive strain and soothes irritated skin. Thanks to the antibacterial effect, it protects the skin against damaging external influences and makes it more resilient.

Derma Repair regulates moisture and makes the skin noticeably more supple and elastic. And it improves skin function by promoting the skin's blood circulation and supporting cell growth.

Article no.	Order by	Contents
453H14	6 bottles	200 ml
453H14=1	1 bottle	200 ml



#### Derma Prevent

#### Article no. 453H12

Derma Prevent is used for the prevention of chafing and inhibits contact with external allergens. It covers highly stressed skin with a protective coating and leaves it soft and supple.

It also inhibits perspiration and odour formation through the individual release of an active substance.

#### Key features at a glance

- For Polytol sockets
- Oily consistency
- Prevents static friction between socket and clothing

Article no.	Order by	Contents
453H12	6 bottles	100 ml
453H12=1	1 bottle	100 ml





#### Measure correctly!

• To reduce the static friction of Polytol, rub a thin layer of Derma Prevent on the inside and outside of the socket. Do not apply Derma Prevent to those places where double-sided adhesive tape or a self-adhesive hook or loop strap will be attached later on.



Dummy set Article no. 14A111

Dummy set for aligning a prosthesis with Ottobock Silicone ArmLiner. The set consists of a pin dummy with and without thread and a shape dummy for the lamination ring.



Pin

Article no. 14A107

The pin is available in various lengths.

Article no.	Length
14A107	23 mm
14A107=1	28 mm
14A107=2	33 mm



### Lock with release pin

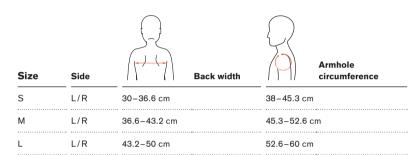
Article no. 14A110

Lock with release pin serves as a spare part for article no. 14A1.

#### **Transhumeral** soft harness

Article no. 21A47

Ottobock offers the world's first soft harness for transhumeral prostheses with myoelectric or passive elbows. The harness, which consists of an arm sling and a sleeve, is completely removable and is not fastened to the socket with a strap. Users can put it on and take it off with one hand. Soft underarm padding and breathable materials, which are fully washable, help make the harness comfortable. The back cord guide also allows the arms to swing naturally, supporting more physiological movement. The harness is available in three sizes for both the right and left arms. Users can also make small adjustments themselves using a hook-and-loop closure.







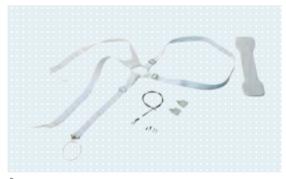
 647G1267 647G1279

### Triple-control above-elbow harness

Article no. 21A35

The triple-control above-elbow harness is used to secure the prosthetic socket and control body-powered prostheses. It is suitable for prostheses on the right and left sides.

Article no.	Version
21A35=1	with perlon cable
21A35=2	with steel cable



647H455

#### Below-elbow harness

Article no. 21A36

The below-elbow harness is intended for fixation of the prosthetic socket and for control of body-powered prostheses. It is suitable for prostheses on the right and left sides.

Article no.	Version
21A36=1	with perlon cable
21A36=2	with steel cable



**₩** 647H455

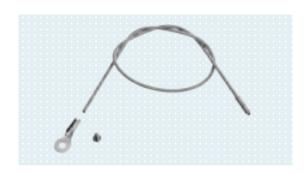


#### Sleeve protection pad

Article no. 15Y1

Rubber sleeve protection pad with leather cover.

Article no.	Length	Width
15Y1=16	16 cm	85 mm
15Y1=18	18 cm	85 mm



#### Bowden cable

Article no. 21A37=1

The Bowden cable is a spare part for article no. 21A35. Spiral length: 500 mm.



### Ball-shaft adapter

Article no. 10Y31

The ball-shaft adapter forms a connection element with the coupler, article no. 10Y32=\*.

Article no.	Compatible with
10Y31=1	21A18=2 Perlon cable
10Y31=2	651D4=2 Steel cable
10Y31=7	3/64" steel cable
10Y31=8	1/16" steel cable
10Y31=9	3/32" steel cable



### Coupler

Article no. 10Y32

The coupler forms a connection element with the ball-shaft adapter, article no. 10Y31=\*.

Article no.	Compatible with	
10Y32=1	21A18=2 Perlon cable	
10Y32=2	651D4=2 Steel cable	

#### Ring

Article no. 21Y194

Harness ring with integrated cable guide.



#### Stainless steel buckle

Article no. 21Y195=25

Stainless steel buckle for positioning and fixing the harness strap.



### Connecting bracket

Article no. 21Y197=1

Connecting bracket in white.



#### Axilla pad set

Article no. 21A38

Axilla pad set in white. Contents: 5 pieces.





Strap buckle

Article no. 21Y199

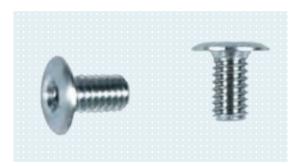
Strap buckle for a seamless connection of the elastic harness strap (article no. 623G23) to the prosthetic socket. Consisting of sleeve, lower part, upper part and spacer sleeve.



Spacer sleeve

Article no. 21Y203

Spacer sleeve for strap buckle (article no. 21Y199).



#### Socket screw with Allen head

Article no. 503F3

Socket screw (contents: 2 pieces) with Allen head. With M4 thread (length 7 mm). The head diameter is 8 mm.



#### Elastic harness strap

Article no. 623G23

Elastic harness strap in white with tunnel-shaped cable guide. Order by the metre

#### Harness strap

Article no. 623H23

White harness strap. Order by the metre

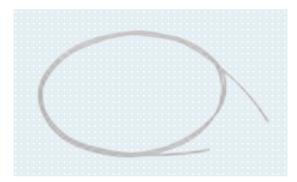


#### Perlon cable

Article no. 21A18

Perlon cable with a diameter of 2 mm.

Article no.	Length	Order by
21A18=2X1	1 m	linear metres
21A18=2X5	5 m	linear metres
21A18=2X10	10 m	linear metres
21A18=2X25	25 m	linear metres



### Setting nut

Article no. 29C5=MX4X9

Setting nut (knurled), stainless steel.

Article no.	Thread	Length	Head diameter	Stud diameter
29C5=M4X9	M4	3.6 mm	9 mm	5.5 mm



# Cable clamp Article no. 10Y3





Clamp sleeve, short Article no. 10Y25

The short clamp sleeve is for clamping to the steel cable (article no. 651D4=2).



Clamp sleeve, long

Article no. 10Y26

The clamp sleeve is for clamping to the steel cable (article no. 651D4=2).



Eyelet cable anchor, large

Article no. 21A5



Spiral nut Article no. 21A6

#### Coupling piece

Article no. 21A7

Coupling piece for perlon cable.



### Threaded fitting, long

Article no. 21A11

The long threaded sleeve is screwed onto the perlon cable article no. 21A18=2 (contents: 2 pieces).



#### Threaded sleeve

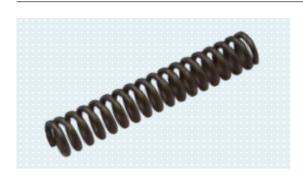
Article no. 21A12

The short threaded sleeve is screwed onto the perlon cable article no. 21A18=2(contents: 2 pieces).



# Eyelet cable anchor, small Article no. 21A24





Spring

Article no. 21A25

Spring for coupling piece.



Cable strap buckle

Article no. 21Y37

Cable strap buckle with a clearance width of 25 mm.



#### Elastic double strap

Article no. 623G4

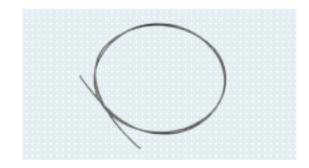
Elastic double strap for clip closure (article no. 29R127). In grey with white stripes. Washable up to 40 °C.

Article no.	Length	Width
623G4=1	1 m	30 mm
623G4=5	5 m	30 mm

#### Steel cable

Article no. 651D4=2

Steel cable with plastic cover.



#### Countersunk head screw

Article no. 501S28=M3.5X5

Nickel-plated countersunk head screw for article no. 16H1 and 16H2.



### "D" ring

Article no. 21A16

"D" ring with a clearance width of 13 mm for flexion cable.



### Clamp buckle

Article no. 514K3=27





#### Lamination disc, serrated

Article no. 507S15

Serrated lamination disc with bore (diameter: 3 mm). Exterior diameter 13.8 mm (contents: 2 pieces).



# Threaded support fastener Article no. 516S3

Threaded support fastener with M4 thread and a thread length of 5.5 mm.



#### Loop

Article no. 514Z3=25

Loop with a clearance width of 25 mm.



Hollow rivet

Article no. 504H3=11-100

Hollow rivet with open lower part. Head diameter: 11 mm.

#### Screw coupling

Article no. 10Y19=2

The screw coupling serves as a connection piece between a steel cable and perlon cable or spectra cable as well as between a perlon cable and perlon cable or spectra cable. Consisting of coupling sleeve and coupling screw, to be screwed to the perlon cable (article no. 21A18=\*) or through which a spectra cable is to be threaded and then knotted.



#### Clamping tool

Article no. 736Y6

Clamping tool for crimping the coupling screw and clamp sleeve as well as the ball shaft fitting (article no. 10Y31=2) and coupler (article no. 10Y32=2) onto the steel cable (article no. 651D4=2).



**№** 647H13

#### Axillary protector for body harnesses

Article no. 21A29

Article no.	Width
21A29=18	18 mm
21A29=25	25 mm



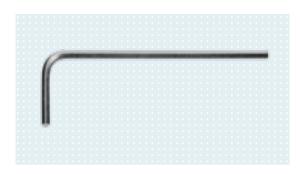




# Workshop equipment

On the following pages you will find

- Special tools
- Auxiliary materials



#### Allen wrench

Article no. 709S10=2

The Allen wrench is compatible with the article no. 503F3 socket screw.



### Mounting wrench

Article no. 711M18

The mounting wrench is used to accurately tighten the quick-disconnect mechanism (article no. 11S2) and to loosen disengaged ball bearings.



### Vacuum forming tool

Article no. 711M53

Vacuum forming tool for arm prostheses with an exterior diameter of 260 mm.

Only one vacuum forming tool is included in the scope of delivery!



### Conical drill bit (HSS)

Article no. 726W9

Conical drill bit (HSS) suitable for processing plastic.

Article no.	Diameter
726W9=14	14 mm
726W9=20	20 mm
726W9=30	30 mm



#### Alignment tool for children's component

Article no. 743A19

Alignment tool for children's component with an M8 thread (diameter: 12 mm, length: 169 mm). For 10S16 lamination rings.

#### **Consisting of**

- Alignment rod (article no. 743Y167)
- Lamination dummy for sizes 5 and 5  $\frac{1}{2}$  (article no. 743Y42=34)
- Lamination dummy for sizes 6 and 6 ½ (article no. 743Y42=38)



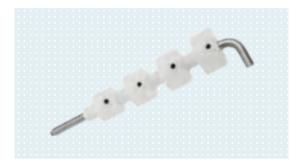
### Alignment tool for adult component

Article no. 743A18

Alignment tool for adult component with an M8 thread (diameter: 12 mm, length: 280 mm).

#### **Consisting of**

- Alignment rod (article no. 743Y41)
- Lamination dummy, 40 mm diameter (article no. 743Y42=40)
- Lamination dummy, 45 mm diameter (article no. 743Y42=45)
- Lamination dummy, 50 mm diameter (article no. 743Y42=50)
- Lamination dummy, 54 mm diameter (article no. 743Y42=54)



• When ordering spare parts, please specify the diameter (corresponds to the exterior diameter of the lamination ring, article no. 10S1).

#### Socket attachment piece

Article no. 11S12

Socket attachment piece for fastening the alignment rod (article no. 743Y41) and for alignment of an Upper Limb prosthesis.





Work mat Article no. 640Z6



Universal pliers, small Article no. 706R4

The small universal pliers are 115 mm long.



Side-cutting pliers

Article no. 706Z2

Side-cutting pliers with oval head (head width: 10 mm). Length: 120 mm.



Flat nose pliers Article no. 706F1=125



#### **Tweezers**

Article no. 799P1

Tweezers with a length of 120 mm.



#### **Tweezers**

Article no. 799P2

Tweezers with a length of 155 mm.



#### **Pliers**

Article no. 706Z10

Pliers for screwing the system electric hands (article no. 8E39) to the corresponding lamination ring. May also be used to loosen disengaged ball bearings in the quick-disconnect wrist unit.



#### Precision screwdriver set

Article no. 710H3

Precision screwdriver set with 1/1.5/1.8/2.3/2.9 and 3.6 mm blade widths.





#### Screwdriver

Article no. 710H4

Screwdriver available in various blade widths.

Article no.	Blade width
710H4=3	3.0 mm
710H4=4.5	4.5 mm
710H4=6	6.0 mm



### Mounting plate

Article no. 711M2

Mounting plate for screwing the mounting tool (article no. 711M1) the workbench.



### Mounting tool

Article no. 711M1

Mounting tool to hold the system electric hand. One side with M12x1.5 exterior thread (for prosthetic hands) and the other side with M12x1.5 interior thread (for Ottobock system electric hands and the Michelangelo Hand).



#### Mounting tool

Article no. 711M3

Mounting tool to hold the system electric hand with quick-disconnect wrist unit.

#### **Consisting of**

- Coupling piece (article no. 10S4)
- Lock ring (article no. 11S4)
- Allen head screw (article no. 501Z2=M6X25)

### Mounting adapter for Michelangelo

Article no. 711M64

The mounting adapter is essential for the correct application of the AxonSkin glove in order to protect the mechanism of the Michelangelo Hand and for easier handling by the technician.



#### Mounting aid

Article no. 711M7

Mounting aid for attaching the system electric hands (article no. 8E39) to the mounting tool (article no. 711M1). Makes putting on and removing the inner hand and prosthetic glove easier.



### Mounting tool

Article no. 711M16

Mounting tool for inserting the electric rotator (article no. 10S17) or coupling piece (article no. 10S4) into the lamination ring (article no. 10S1).

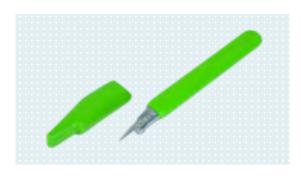


#### Soldering jig

Article no. 711M12

Soldering jig for soldering the cable connector (9E167) to the coaxial bushing or the hand cable and for soldering the bushing plug to the motor.

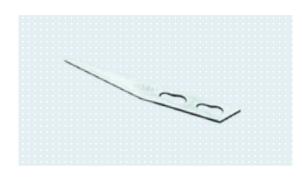




#### Deburring knife

Article no. 718H5

Deburring knife with replaceable blade. Plastic-coated with a length of 160 mm. For processing plastic, with protective cap and handle (weight: 0.05 kg).



### Replacement blade

Article no. 718Y1

Replacement blade for deburring knife, article no. 718H5 (weight: 1 g).



### Pinch gauge

Article no. 743F1

Pinch gauge for checking the gripping force of system electric hands.

#### Silicone grease 400, medium

Article no. 633F11

Silicone grease for the planetary gear set of the drive unit as well as for all cable plug connections and other places that need to be protected to prevent penetration of perspiration. Can be used for plaster isolation (net contents: 100 g).

#### **Example of usage**

- Apply a pea-sized amount of silicone grease (article no. 633F11) to the wood spatula (article no. 699Y3).
- Prior to laminating, apply silicone grease to the objects that are to be isolated (e. g. thread of a screw, lamination dummy, adapter, orthosis joints).
   Attention: do not isolate those areas that are to create a bond with the lamination resin.
- Before laminating, carefully clean the bonded objects with isopropyl alcohol (art. no 634A58).



#### Special lubricant

Article no. 633F14=\*

White special lubricant, Molycote-Paste DX suitable for all accessible gear wheels and axles in system electric hands and system electric Greifers.

Article no.	Delivery	Net contents
633F14=0.050	Tube	50 g
633F14=1	Can	1 kg



#### **Procomfort Gel**

Article no. 633S2

The gel acts as a lubricant, making the liner or prosthetic glove easier to put on over the inner hand (net contents: 250 ml).





#### Isopropyl alcohol

Article no. 634A58

Isopropyl alcohol (transparent) for cleaning sensitive plastics such as PVC, PS, ABS, acrylic, PC (net contents: 1 l).



### UHU-plus endfest 300

Article no. 636W23

UHU-plus endfest 300, the two-component adhesive for strong adhesions.



#### Tip

- The higher the curing temperature (up to approximately +180 °C (+356 °F)), the higher the strength of the adhesion.
- Using a measuring cup (article no. 642B2) has proven useful for mixing.
- Can be applied with the 699Y3 wood spatula.

#### Loctite 243

Article no. 636W60

Loctite 243 is used as thread lock for the electric hand, also hardens on brass, up to M36 thread (net contents: 50 ml). Can be activated and loosened by applying heat.



### Cyamet quick-drying adhesive

Article no. 636K11

Cyamet quick-drying adhesive (transparent superglue) for adhering silicone rubber to acrylic resin laminates (net contents: 20 g).



☐ 646F297



#### Loctite 241

Article no. 636K13

Can be activated and loosened by applying heat (net contents: 50 ml).



#### Loctite 601

Article no. 636K14

Loctite 601 for locking the stud (net contents: 50 ml). Can be activated and loosened by applying heat.





#### Special cleaner

Article no. 640F12

In case of heavy soiling, the special cleaner for prosthetic gloves should be applied immediately (net contents: 460 g).





#### Pump sprayer

Article no. 640F13

The user should always keep a pump sprayer filled with special cleaner for Ottobock prosthetic gloves handy in order to be able to use the cleaner immediately in case of soiling (net contents: 90 g).

This container is empty on delivery!



### Screw cap

Article no. 9E161

Screw cap for retaining the transmission in the gear housing.



#### (i) 646F297





#### Rubber adhesive

Article no. 636W34

Beige rubber adhesive (net contents: 60 g).

#### Plaster shirt

Article no. 641T10=M

The plaster shirt is used when taking a plaster cast as part of the prosthetic arm fitting process. It is suitable for above-elbow residual limbs and shoulder disarticulation.



#### Plaster sock

Article no. 641T9=M

The plaster sock is used when taking a plaster cast as part of the prosthetic arm fitting process. It can be used for forearm fittings.



# Index

4in1 Controller LS	17	Clamp plate	151	ErgoArm Electronic plus		78
7in1 Controller		Clamp sleeve, long		ErgoArm Hybrid plus		
71111 Controller	20			ErgoArm plus		
Λ.		Clamp sleeve, short				
A	045 040 047	Clamp stopple set		Extension cable		
Adapter 143, 155, 180,		Coaxial bushing		Eyelet cable anchor, large		
Adapter for Australia		Coaxial plug		Eyelet cable anchor, small		231
Adapter for Great Britain		Coding plug set	17			
Adapter for Robo-Wrist	142	Colour determination		F		
Adapter with flexion	180	Conical drill bit (HSS)	238	Finger and thumb cover	127,	, 175
Alignment aid for DynamicArm.	75, 155	Connecting bracket		Finger cover2	8. 134.	. 138
Alignment aid for ErgoArm		Connection cable		Finger filler		
Alignment rod		Connection cable with on/off		Fingertip blank set		
Alignment tool for adult compo		Connection disc with groove		Fingertip (pair)		
	16111209	Connection piece for	211			
Alignment tool for	04 000		100	Fingertip set		
children's component		cable-activated hook		Flange button head socket screw		
Allen wrench	,	Connection piece for hook		Flat nose pliers		
All-purpose hook	141	Connection piece screw		Flexion cable retainer		
All-purpose ring		Control element	94	Flex-wrist (three-stage joint)		36
AnalogAdapter	38	Countersunk head screw	154, 166, 233	Foam modular kit		
Attachment plate with short stu		Coupler	163, 226	Forearm		151
Attachment plate with stud		Coupling piece		Friction ring		
Axilla pad set		Cyamet quick-drying adhesive		Friction ring with inner gear teeth		
Axillary protector for body harne		Cylindrical lamination ring		Thetion mig with inner gear teem		102
AxonArm Ergo		Cymrunical lamination mig	144	н		
S .		D				
AxonArm Hybrid		D		Harness pull switch		
AxonCharge Integral		Deburring knife		Harness strap		
AxonEnergy Integral		Derma Clean		Hexagon nut		
AxonHook	107	Derma Prevent	223	Hole covering		152
AxonMaster	116	Derma Protection ArmComfor	t29, 61	Hollow rivet	167,	, 234
AxonRotation	111	Derma Repair	222			
AxonRotation Adapter		Digital Twin system electric G		I		
AxonSkin Natural		Digital Twin system electric ha		IntoLiner Acclimate	158.	220
AxonSkin Silicone		Distributor		Isopropyl alcohol		
AxonSkin Visual/AxonSkin Blad		DMC plus system electric han		ізоргоруї шеопоі		240
AxonSoft				1		
AxonSon	111	DMC VariPlus system electric		_		04.5
D		Donning sphere		Joint ball		
В		Donning spray14, 66		Joint clamp		
Ball cap		Donning tool		Joint piece with cable lock		
Ball ratchet wrist joint		Double spring	138	Joint piece without lock		219
Ball ratchet wrist joint, short	145	"D" ring	166, 233			
Ball-shaft adapter	162, 226	Dummy set	160, 224	K		
Battery cell	38	DynamicArm	74	Knurled plate		180
Battery charger	38	DynamicArm Plus	75			
Battery connection cable		,		L		
Battery cover		E		Lamination disc, serrated	166	234
Battery receptacle		EasyFit Arm donning sheath	29 61	Lamination dummy		
Battery receptacle set		Eccentric		Lamination dummy set		
bebionic hand				,		
		Elastic double strap		Lamination dummy set for AxonMa	aster	110
Below-elbow harness		Elastic harness strap		Lamination plate		/ 1
Belt flap		Elbow components for childre		Lamination protection cover		153
BionicLink		Elbow component with cable	ock156	Lamination ring 24, 39, 7	70, 71,	111,
Bowden cable	162, 226	Elbow component with passiv	e lock157	128, 143, 148, 152, 157, 17	4, 213,	, 214
Bracket cover	153	Elbow joint	151	Lamination ring, complete		15
		Elbow joint bars	218	Lamination ring for children's fore	arm	24
C		Elbow joint bar with cable lock	218	Lamination ring for Physolino bab		
Cable-activated hook for adoles	scents 133	Elbow joint bar without cable		Lamination ring set	-	
Cable-activated hook for adults		ElbowSoft		Light metal piping		
Cable-activated hook for children	,	Electric Hand 2000		Li-ion charger		
Cable clamp		Electric rotator		Locking lever		08
Cable connector		Electrode		Lock ring	60,	, 120
Cable pull switch		Electrode accessories		Lock ring, wide		
Cable seal	60	Electrode accessory set	27, 83	Lock set		
Cable strap buckle		Electrode cable with straight		Lock with release pin		
Cap screw	215	plug and plug connector	28, 84, 116	Loctite 241		
Car charging cable	114	Electrode mounting bracket se	et27, 83	Loctite 243		
Car charging cable, 12 volt		Endoskeletal adapter	·	Loctite 601		
Chassis		EnergyPack		Loop		
Clamp buckle		EQD wrist (quick-disconnect)		<b>-</b>	,	
Clamping tool		ErgoArm				
Ciamping tool	100, 200	- i g∪/\\ i i i i				

# Index

M	
Magnetic centring aid	
Michelangelo Hand	
Michelangelo Hand dummy	
Michelangelo Hand Transcarpal	107
Michelangelo socket attachment blo	ck110
Modular adapter for ArmLiners	181
Modular elbow joint	
Mounting adapter	30
Mounting adapter for Michelangelo.  Mounting aid	.118, 243
Mounting ald Mounting plate	110 040
Mounting plate	
Mounting tool	
Mounting wrench	
MovoHook 2Grip	
MovolinoArm Friction	
MovoShoulder Swing	
MovoWrist Flex	143
Multi-flex wrist	36
MyoBoy	
MyoBoy communication cable	
MyoCharge Integral	
MyoEnergy Integral	22, 84
MyoHand VariPlus Speed	11, 42, 43
MyolinoLink	
MyolinoSkin Natural	
MyolinoSoft	
MyolinoWrist 2000 MyoRotronic	
MyoSelect	
MyoSkin Natural	
MyoWrist 2Act	
MyoWrist Transcarpal	
,	03
N Notched plate with inner gear teeth.	101
N Notched plate with inner gear teeth.  O O-ring	101
N Notched plate with inner gear teeth.  O O-ring O-ring set.	101 154 213
N Notched plate with inner gear teeth. O O-ring O-ring set. Ottobock ball shoulder joint	101 154 213 212
N Notched plate with inner gear teeth.  O O-ring O-ring set.	101 154 213 212 212
N Notched plate with inner gear teeth. O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint. Oval countersunk head screw, slotte	
N Notched plate with inner gear teeth.  O O-ring O-ring set. Ottobock ball shoulder joint. Ottobock shoulder joint Ottobock wrist joint.	
N Notched plate with inner gear teeth.  O O-ring O-ring set	
N Notched plate with inner gear teeth.  O O-ring O-ring set	101  154 213 212 212 2144, 149 ed 146 v) 144
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw	101  154 213 212 212 2144, 149 ed 146 v) 144
N Notched plate with inner gear teeth.  O O-ring O-ring set	101  154 213 212 212 2144, 149 ed 146 v) 144  101 123, 173
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw P Padded band Passive system hand PAULA	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw  P Padded band Passive system hand PAULA Perlon cable 25, 148, 156,	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock wrist joint Oval countersunk head screw, slott Oval head screw (sheet metal screv  P Padded band Passive system hand PAULA Perlon cable Physolino baby hand Pin	
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand Pin Pinch gauge	101  154 213 212 212 144, 149 ed 146 ed 140 101 123, 173 97 165, 229 186 159, 224 61, 244 249
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock wrist joint. Oval countersunk head screw, slott Oval head screw (sheet metal screv  P Padded band Passive system hand PAULA Perlon cable Pin Pinch gauge Plaster shirt	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 249
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw  P Padded band Passive system hand PAULA Perlon cable Physolino baby hand Pin Pinch gauge Plaster shirt Plaster sock Pliers Plug	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 249 241 89
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw  P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand Pin Pinch gauge Plaster shirt Plaster sock Pliers Plug Precision screwdriver set	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 249 241 89 241
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw  P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand Pin Pinch gauge Plaster shirt Plaster sock Pliers Plug Precision screwdriver set Pressure piece	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 241 89 241 89
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock wrist joint Oval countersunk head screw, slotte Oval head screw (sheet metal screw  P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand Pin Pinch gauge Plaster shirt Plaster sock Pliers Plug Precision screwdriver set Pressure piece Pressure switch	101  154 213 212 212 144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 249 241 89 241 89 241 154 95
N Notched plate with inner gear teeth.  O O-ring O-ring set. Ottobock ball shoulder joint Ottobock wrist joint. Oval countersunk head screw, slotto Oval head screw (sheet metal screv  P Padded band. Passive system hand. PAULA. Perlon cable 25, 148, 156, Physolino baby hand. Pin. Pinch gauge. Plaster shirt. Plaster sock. Pliers. Plug. Precision screwdriver set. Pressure piece. Pressure switch. Procomfort Gel.	101  154 213 212 212 2144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 249 241 89 241 154 95 245
N Notched plate with inner gear teeth.  O O-ring O-ring set Ottobock ball shoulder joint Ottobock wrist joint. Oval countersunk head screw, slotte Oval head screw (sheet metal screw P Padded band Passive system hand PAULA Perlon cable 25, 148, 156, Physolino baby hand Pin Pinch gauge Plaster shirt Plaster sock Pliers Plug Precision screwdriver set Pressure piece Pressure switch Procomfort Gel Prosthetic glove for adolescents	101  154 213 212 212 2144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 249 241 89 241 154 95 245
N Notched plate with inner gear teeth.  O O-ring O-ring set. Ottobock ball shoulder joint Ottobock wrist joint. Oval countersunk head screw, slotto Oval head screw (sheet metal screv  P Padded band. Passive system hand. PAULA. Perlon cable 25, 148, 156, Physolino baby hand. Pin. Pinch gauge. Plaster shirt. Plaster sock. Pliers. Plug. Precision screwdriver set. Pressure piece. Pressure switch. Procomfort Gel.	101  154 213 212 212 2144, 149 ed 146 v) 144  101 123, 173 97 165, 229 186 159, 224 61, 244 249 241 89 241 89 241 154 95 245 130, 177

Prosthetic glove for children		
and adolescents		65
Prosthetic glove for men	. 131,	178
Prosthetic glove for women64	, 132,	179
Prosthetic gloves and inner		
hands for children		183
Prosthetic gloves and inner hands		
for men		184
Prosthetic gloves and inner hands		
for women		
Pull cable	. 156,	219
Pulse charger		
Pump sprayer 14, 66		
PVC connection tube	30	), 96
0		
Quick-disconnect wrist unit with standard connector		4 40
with standard connector		.140
R		
**		10
Replaceable batteryReplacement blade		10
Retainer ring	106	175
Ring	162	227
Robo-Wrist		
Rocker switch		
Rubber adhesive		านย
Rubber band		12/
Rubber friction ring		
Rubber gripping pad set		100
Rubber gripping pad set		. 100
S		
Screw cap		248
Screw coupling		
Screwdriver		
SensorHand Speed		
Set screw 128	. 174.	215
Setting nut	. 165,	229
Short wrist		
Shoulder bracket set		213
Shoulder disarticulation modular kit		
Side-cutting pliers		
Silicone ArmLiner		
Silicone glove		
Silicone grease 400, medium		
Skeo Up		
Sleeve protection pad		226
Sleeve protection pad Socket attachment piece		226 239
Sleeve protection pad Socket attachment piece Socket screw with Allen head	164,	226 239 228
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig	164,	226 239 228 243
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve	164,	226 239 228 243 228
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner 14, 66	164, 164, , 111,	226 239 228 243 228 248
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner 14, 66 Special key	164, 164, , 111,	226 239 228 243 228 248 248
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner 14, 66 Special key Special lubricant	164, 164, , 111,	226 239 228 243 228 248 24 245
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner	164, 164, , 111,	226 239 228 243 228 248 24 245 60
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut	164, 164, 111,	226 239 228 243 228 248 245 60 230
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring	164, 164, 111,	226 239 228 243 228 248 245 60 230 232
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring telescope	164, 164, 111,	226 239 228 243 248 24 245 60 230 232 153
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle	164, 164, 111, 138,	226 239 228 243 228 248 245 60 230 232 153 227
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner 14, 66 Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle Standard connector	164, 164, , 111, 138,	226 239 228 243 228 248 245 60 230 232 153 227
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner 14, 66 Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle Standard connector Steel cable	164, 164, , 111, 138,	226 239 228 243 228 248 245 60 230 232 153 227 145 233
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring Spring telescope Stainless steel buckle Standard connector Steel cable Strap buckle	164, 164, 111, 138, 163,	226 239 228 243 228 248 245 60 230 232 153 227 145 233 228
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle Standard connector Steel cable Strap buckle Suction socket electrode	164, , 111, 138, 163,	226 239 228 243 228 248 245 
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle Standard connector Steel cable Strap buckle Suction socket electrode 2 Suspension rosette	164, 138, 163, 164, 6, 82, 126,	226 239 228 243 228 248 245 230 232 153 227 145 233 228 115
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle Standard connector Steel cable Strap buckle Suction socket electrode Switch cable	164,111,138,163,164, 6, 82,126,	226 239 228 248 248 245 60 230 232 153 227 145 233 228 1140 153
Sleeve protection pad Socket attachment piece Socket screw with Allen head Soldering jig Spacer sleeve Special cleaner Special key Special lubricant Special thread Spiral nut Spring Spring telescope Stainless steel buckle Standard connector Steel cable Strap buckle Suction socket electrode 2 Suspension rosette	164,111,138,163,164, 6, 82,126,	226 239 228 248 248 245 60 230 232 153 227 145 233 228 1140 153

T	
Test adapter	
Threaded fitting, long	
Threaded sleeve	
Threaded support fastener	
Thread segment	
Thrust washer Titanium adapter for Robo-Wrist	
Transcarpal Hand Digital Twin	
Transcarpal Hand DMC plus	
Transhumeral modular kit	
Transhumeral soft harness	
Triple-control above-elbow harness	
Truss head screw	
Tube dummies	30, 96
Tube valve for elevated vacuum soc	
Tweezers	61, 241
U	
	0.40
UHU-plus endfest 300	
Universal pliers, smallUniversal power supply	
Universal power supply	90
V	
Vacuum forming tool	238
Voluntary closing system hand	125
Voluntary opening system hand	124
W	
Washer	
Wood hand adapter	. 149, 187
Work glove, black	37
Work mat Wrist joint lamination ring	
vviist joint lailillation fing	25, 148
X	
X-ChangePack	86

.65

# • Article number index

1		12K27	156	15K10	210
10A11	136	12K41	150	15Y1	226
10A12		12K42	150	16X12	218
10A12		12K44			218
10A15			151		218
		12K49			156, 219
10A3		12K5			219
10A30					
10A31=½-20		12K50		16131	219
10A32=½-20	142		112		
10A37	133	12K501	112	2	
10A4		12R6	210	21A10	140
10A40		12R7	210	21A11	231
10A43		12S4			231
		12S6			139
10A56			,		166, 233
10A60	136		212		
10A71	135	12V10			25, 148, 156, 165, 229
10A81	135		213	21A207	155
10R1	180	13D2	213	21A24	231
10R2		13E100	38	21A25	232
10R2=M12X1.5		13E129			235
		13E129=G*			161, 225
10R3			•		
10R4		13E132			162, 225
10R5	215	13E135	,		162, 226
10S1	39. 70	13E153	27, 83		164, 227
10S16		13E184	17	21A44	139
10S17		13E188	91	21A47	161, 225
10S18=40		13E190	92		166, 230
			92		230
10S4	,				
10S500		13E200			231
10V15	145	13E201			126, 140
10V18	144	13E202	26, 82, 115	21A9	140
10V18=34	149	13E205	72	21Y194	163, 227
10V30		13E206	27. 83		163, 227
			92		163, 227
10V36		13E500			164, 228
10V36=34					•
10V38	69		91		164, 228
10V39	143	13E97			232
10V40	69	13E99=1200	93	21Y79	219
10V41	149	13G21	24, 148	29C5	165
10V51		13G68	151	29C5=MX4X9	229
		13G8=54			
10V8		13G8=67	•	4	
10Y1			,	-	00.01
10Y12		13R1			29, 61
10Y13	134	13R11			160, 222
10Y19=2	168, 235	13R3	214		223
10Y2	138	13R4	217	453H14	222
10Y25		13R6	217	4X500	114
		13R9	211		19, 90
10Y26			216		•
10Y3		13X4		5	
10Y31	162, 226				
10Y32	163, 226	13X5			154
10Y8	134	13Y1			146
11D1	143	13Z16=43	213	501S28=M3.5X5	166, 233
11D12=34		13Z47	152		214
11D12=3411D20	,		152		144
					154
11D21		13Z50			
11D27			152		129, 176
11D31		13Z52			129, 176
11D61	16	13Z53	153		215
11S12		13Z55	153	502S97=M5	60
11S27		13Z56	153	503F3	164, 228
		13Z57			167, 234
11S30		13Z58			215
11S33					
11S6		13Z68			128, 174
11S7	102	14A1	,		166, 234
12A13	151	14A107	159, 224	514K3=27	167, 233
12K100N		14A110	160, 224	514Z3=25	167, 234
12K100N		14A111			167, 234
		14Y1	·		21
12K12					117
12K19=40		14Y3		000000	117
401/00	157	14Y5	159, 221		

# • Article number index

G		757L20.	85	8520N	12
6	04 00 447	757L35			130, 177
	21, 98, 117	757L500	· ·		131, 178
	20	757M11=X-Change			132, 179
	165, 228	757P23			102, 179
	232	757P39			108
	165, 229	757P41			109
	60	757S1=AUS			177
	154	757S1=GB			130
633F11					126, 175
	245	757T13			
	245	757Z103=1			59
	246	757Z103=2			59
	247	757Z149		811	61
636K13	247	757Z184=1			
636K14	247	757Z184=2		9	
	246	757Z185=1			30, 96
636W34	248	757Z185=2			30, 96
636W60	247	757Z186	89	9E161	248
	14, 66, 111, 248	757Z190=1	88	9E167	70
640F13	14, 66, 68, 110, 248	757Z190=2	88	9E169	39, 71
	14, 66, 110, 160, 222	757Z191=1	88	9E185	93
	240	757Z191=2	88	9E342	28
	249	757Z195	89	9E347	28
	249	757Z202	89		17
	98	757Z501			60
		757Z502			70
	97	757Z503			20
651D4=2	233	757Z504			128. 174
7		757Z505			120, 174
7		757Z508			71
	240	799P1			100
	240				
	241	799P2	241		100
706Z2	240	0			101
	31, 238	8			100
709S42	31	8E33=7-1			126, 175
709Z9	24	8E33=9-1			60, 126, 175
710H3	241	8E34=7-1			100
710H4	242	8E34=9-1			71
711M1	118, 242	8E38=6	51		70
711M114	118	8E38=7	55	9S278=PAA	101
711M116	118	8E38=8	46	9S312	101
711M12	243	8E38=9	41	9S501	111
	243	8E39=6	52	9S503	111
	238	8E39=7	56	9S6	127, 175
	118, 242	8E39=8	47	9S65	176
	30	8E39=9	42	9S67	176
	242	8E41=6	53	9S96/9S184	128, 174
	30	8E41=7			94
	238	8E41=8			95
		8E41=9	43		73
	118, 243	8E44=6			95
	243	8E44=7			95
	96	8E500			94
	244	8E51			94
	244	8E550		9802/9803	94
	238			В	
	168, 235	8E600			38
	239	8K5			
743A19	31, 239	8K18/8K19			37
743A23	155	8K22			37
	75, 155	8K23			35
743F1	61, 244	8K26			36
743Y42=24	187	8K27			36
757B13	18	8R1			35
	86	8S11		BBI-2200S	38
	85	8S11=210X78	131, 178		
	22, 84	8S11N	62	0	
	113	8S12	64	OC1560	29, 61
	113	8S12N	63		•
	19	8S13	65		
	86	8S13N			
	90	8S20			
101L10-2	90				

U	Notes			
<u></u>				
<u></u>				

0	Notes
<u></u>	
<del></del>	
•	
<del></del>	
<u></u>	
<u></u>	
•••••	
<u></u>	