

TRS

Prosthetic Solutions Range



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Drum Stick Adapter

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### Hands, Prehensors & Paediatric Feet



Infant & Paediatric Hands

### Greek Series

Durable infant hand constructed using soft polymer in a unisex style. They have realistic finger and hand features, and come in three models to reflect the development of a child's hand. The design and shape of the hand means they can be used to hold very light objects, such as plastic toys or dummies, and assist young infants as they become mobile.

Part Number	Model
NALPHA	Alpha
NBETA-	Beta
NGAMMA-	Gamma



= Colour (Tan = T, Medium Brown = MB, Dark Complexion = DK)



#### Features

- Easy to clean
- Elastic, flexible holding capability with no cable required
- $\frac{1}{2}$ " x 20TPI removable threaded stud

#### Application

- All levels of upper limb absence
- Ages 4 months to 3 years old

#### Technical Information

Model	Alpha	Beta	Gamma	
Application	4-12 months	10-24 months	20-36 months	
Length	5cm	6.4cm	7cm	
Width	4cm	4.5cm	4.8cm	
Grasp-Opening	3.8cm	4.3cm	4.6cm	
Base Diameter	3.3cm	3.7cm	3.7cm	
Weight	40g	45g	48g	



### Infant 2 Hand



The Infant 2 is a passive prosthetic hand, suitable for infants beginning to crawl or walk. The unique 'cup' shape of the palmar surface aids in pulling and pushing objects, whilst the flexible, durable polymer material is ideal for bi-lateral applications as it enables a grasping action.



= Side (L = Left, R = Right)

= Colour (Tan = T, Medium Brown = MB, Dark Complexion = DK)

#### Technical Information

Length	6.6cm
Width	5cm
Weight	57g
Wrist Diameter	3.8cm
Wrist Circumference	10cm



#### Features

- No cable required
- Soft material for ambulating infants
- Easy to clean
- Realistic finger and thumb design features
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Infants aged 6-18 months
- All levels of upper limb absence



### L'il E-Z Hand

A functional child's hand with a mechanical thumb component built into the flexible design. The thumb can be opened easily to allow objects to be held, but has a resistance to prevent a loss of grasp. Suitable for infants beginning to crawl, as well as bilateral control and unilateral manipulation.



- = Side (L = Left, R = Right)
- = Colour (Tan = T, Medium Brown = MB, Dark Complexion = DK)

#### **Technical Information**

Length	6.6cm
Width	4.6cm
Weight	85g
Opening	2.5 - 3.8cm
Wrist Diameter	3.3cm
Wrist Circumference	10.4cm



#### Features

- No glove required
- Designed to look like the anatomical hand
- Three colour options available
- ½" x 20TPI removable threaded stud

#### Application

- Infants aged 6-24 months old
- · Transradial and transhumeral applications



Paediatric & Young Teen Hands

Lite Touch Biomechanical Paediatric Hands

A biomechanical hand with a highefficiency voluntary closing action, available in three sizes to accommodate a child's development. The fingers have been anatomically designed to ensure a non-slip grasp, and compliance with objects/surfaces for everyday activities.

Part Number	Model		
NMLT	Micro		
NLTSM	Small		
NLTMD	Medium		
NLTLG	Large		

- = Side (L = Left, R = Right)
- = Colour (T = Tan, MB = Medium Brown, DK = Dark Complexion)



#### Features

- Anatomical design with moulded features
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Children aged 2-9 through to young
- Transradial and transhumeral applications

#### Technical Information

Model	Micro	Small	Medium	Large	
Application	2-3 years	2-5 years	5-9 years	9 years - young teen	
Length	gth 6.6cm		9.2cm	10.8cm	
Width 4.8cm		5.7cm	6cm	6.6cm	
Weight	74g	101g	153g	207g	
Wrist Diameter	Wrist Diameter 3.3cm		4.4cm	4.4cm	
Opening 2.8cm		4cm	4.8cm	5.6cm	
Wrist Circumference	ircumference 10.2cm		14cm	14cm	



### Adept Prehensors



Adept F3

1-3 years

6.8cm

2.5cm

49g

2.7cm

3.2cm

Adept E4

3-5 years

8cm

2.7cm

66g

3cm

4cm

**Technical Information** 

Model

Length Width

Weight

Opening

Wrist Diameter

Application

The Adept Prehensors are a lightweight, voluntary closing terminal device. Suitable for young children up to young teens, the Adepts are capable of gripping objects firmly. This enables children to take part in activities that require a varied grip force - for example riding a bike, climbing, drawing, assembling toys and tying their shoelaces.

Part Number	Model
NADF3	Adept F3
NADE4	Adept E4
NADC2	Adept C2
NADB1	Adept B1

= Colour (T = Tan, MB = Medium Brown, DK = Dark Complexion, BK = Stealth Black\*) \*Stealth Black not available for E3 model

Adept B1

9 years - young teen

10.8cm

3cm

114g

3.8cm

6.3cm

Adept C2

5-9 years

8.9cm

2.7cm

83g

3.3cm

5.1cm

Features

feedback

Adapter (p.29)

• ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

· Constructed using durable, high-

• Four colour options available

strength moulded polyurethane

Active muscle use and sensory

• Accessories include the Adept Cable

· Replaceable thumb sleeve

- Application
- Children aged 1-9 through to young
- Transradial and transhumeral

**Paediatric** Feet

### Little Feet Wood Core & Symes Model

The Little Feet passive prostheses are ideal for crawling and walking infants. The bolt-on SACH-type design provides unique energy dynamics and flexible toes, adding to the enhanced realism and aesthetic appearance. To aid barefoot cosmesis, all models come with removable heel plug.

Part Number	Model
NLITTLE	Wood Core
NLITTLESYMES-	Symes
Cina in any (10, 11, 10, 17,	14 15

- = Size in cm (10, 11, 12, 13, 14 or 15)
- Brown, DK = Dark Complexion)

### = Side (L = Left, R = Right) = Colour (T = Tan, MB = Medium

#### Features

- 8mm diameter mounting hole
- 5/16" x 2" bolt, M8 bolt, steel washer, and T nut mounting hardware on all models, 2 3/4" bolt also included with 12-15cm models
- Fibreglass keel on all Symes models, and sizes 13-15cm on Wood Core model
- Oval-shaped proximally to create a connection point with an anatomical appearance

### **Technical Information**

Model	10cm	11cm	12cm	13cm	14cm	15cm
Length	10cm	11cm	12cm	13cm	14cm	15cm
Width	4.7cm	5.2cm	5.6cm	5.9cm	6.2cm	6.4cm
Height	4.2cm	4.2cm	5cm	5.2cm	5.6cm	5.6cm
Diameter (Major)	4.4cm	4.9cm	5.3cm	5.6cm	5.8cm	5.7cm
Diameter (Minor)	4cm	4.3cm	4.8cm	4.8cm	4.9cm	4.9cm
Wood Core dia.	3.2cm	3.8cm	3.8cm	3.8cm	3.8cm	5.8cm
Weight	96g	117g	167g	199g	238g	264g

#### Application

- Infants aged 6 months, up to children aged 5-6 years old
- · Transtibial and transfemoral

# Lite Touch Biomechanical Adult Hands

Adult's biomechanical hand with highefficiency voluntary closing action, available in three colour options. The fingers have been anatomically designed to ensure a non-slip grasp, and compliance with objects/surfaces for everyday activities.



- = Side (L = Left, R = Right)
- = Colour (T = Tan, MB = Medium Brown, DK = Dark Complexion)

#### **Technical Information**

Length	12cm
Width	7.1cm
Weight	284g
Opening	6.9cm
Wrist Diameter	4.6cm
Wrist Circumference	14.4cm



#### Features

- Anatomical design and moulded features
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Teenagers to adults
- Transradial and transhumeral applications

Please note: The Sure-Lok Cable Lock System is recommended for use with TRS voluntary-opening and voluntary-closing devices - please see page 28 for details.



Prehensors

### Grip Prehensors

Technical Information

Grip Prehensors are a high-performance body-powered device, capable of a wide range of prehension - from delicate manipulations to maximum gripping power. Their voluntary closing design allows users to carry out a variety of everyday tasks and vocations, including peeling and slicing vegetables, using a wrench, or weight lifting. They are a high-strength, durable construction, which requires minimal maintenance.

Part Number	Model
NGP2SSS	Grip 2SS
NGP2S00	Grip 2S
NSTG300R	Grip 3
NGP1000	Grip 1

= Colour (T = Tan, B = Black)

#### Features

- Range of gripping force can exceed 45kg
- 1/2" x 20TPI
- Can be ordered with Special Wrist Adapter for partial hand or with a Flex Wrist. Contact your Steeper Product Manager for more information
- Can be modified with locking pin, see page 7 for more details

#### Application

- 11 years old and up
- Transradial and transhumeral

recrimed inform	nacion			
Model	Grip 2SS	Grip 2S	Grip 3	Grip 1*
Material	Stainless steel	Titanium	Titanium, stainless steel, polyurethane gripping surfaces	Stainless steel with aluminium core
Length	14.1cm	14.1cm	14.5cm	16.5cm
Width	1.6cm	1.6cm	1.6cm	1.3cm
Weight	390g	312g	278g	451g
Wrist Diameter	4.1cm	4.1cm	4.1cm	4.4cm
Opening	7.5cm	7.5cm	7.1cm	6.6cm

\*Specialist cases, for adult use only



### Locking Pin

A simple to install stainless steel pin with ball detent and a 1" diameter finger ring. With more than one locking position possible, they can be used with the Grip Prehensors to carry out a variety of activities where manual locking and unlocking of the terminal device is desired.

#### Features

user.

- Suitable for use with Grip Prehensors (p.6)
- Instructions for modifying Prehensors included (please note modified grips are non-returnable)

configuration options make the Grip 5 Evolution highly cosmetic along with

being a lightweight, functional and

intuitive prosthesis. The Grip 5 is a voluntary closing device with an opening

of 7.8cm, and directly proportional gripping control which is fed-back to the



Part Number

NALPIN3



Prehensors

### Grip 5 Evolution Prehensor



Part Number
NGP5000\*

Improved colour and design

\*Please use the Grip 5 Order Form to specify device colours when ordering - available upon request from Customer Services.

#### Technical Information

Application	11 years - adult
Length	13.2cm
Width	2.5 - 4.3cm
Wrist Diameter	4.3cm
Opening	7.8cm
Weight	255g



#### Features

- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Injection moulded outer shell, index finger and thumb, and self-adhesive inlays can all be customised with the patients colours of choice please see the Grip 5 Evolution Prehensor Order form for more details and colour options (available upon request from Steeper Customer Services)
- Aluminium and stainless steel core construction



Heavy-Duty Prehensor

### Jaws Voluntary Opening Prehensor



Jaws is a heavy-duty terminal device, capable of controlling tools, handles and construction equipment, as well as being functional for work and recreational vehicle control. Features a shift-lever for four different levels of easy gripping force adjustment, and a radial-ulnar, friction-adjustable wrist pivot.

Part Number	
NJAWS-TD	

#### Technical Information

Length	12.7cm	
Width	5.3cm max.	
Height	9.9cm max.	
Weight	440g	
Materials	Aircraft-grade aluminium, stainless steel, polyurethane	
Colour	Aluminium & black	

#### Features

- Cable or manually operated
- Waterproof
- Replaceable polyurethane gripping surface components
- Snap on-off feature to avoid getting locked onto objects
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Compatible with the Omega wrist (page 24)
- Also available with a heavy-duty spring option. Contact Customer Services to enquire referencing the part number NJAWS-XFS

#### **Applications**

- Teenagers and adults capable of handling a high-performance terminal device
- Transradial, transhumeral and bilateral applications



### Sports & Recreation Devices



Terminal Device

### Black Iron Master & Trainer



The Black Iron Master (BIM) is designed for high-performance, heavy duty and professional weight lifting and training. The device will mechanically grasp and lock onto handles and bars to provide unparalleled security and stability for extreme weight lifting. It is also useful for adapting to a wide variety of other exercise equipment available in modern fitness facilities.

The Black Iron Trainer (BIT) is designed for lifting lower weights than the BIM. The BIT offers a lightweight, lighter duty alternative to the BIM yet still capable of handling a wide range of grip and apparatus handle diameters.

The BIM and BIT have no quick release or other break away features, once clamped in place they will stay secure until manually released.

Part Number	Description
NBIM	Black Iron Master
NBIT	Black Iron Trainer





#### Features

- Swinging gate clamps the bar between curved rubber saddles
- Gate is manually secured in place with a large wing nut
- Black Iron Master and Trainer can be used with the following wrist units: Wedgegrip Large Round or Oval, Disconnect Large Round or Oval, FM Disconnect Large Round, TRS Omega Large Oval
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Schiek Weight Lifting Strap included with each device

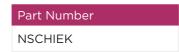
#### **Technical Information**

Model	Master	Trainer	
Application	Heavy-duty, high-performance activity	All-round weight training and lifting	
Material	Forged aluminium, steel hardware, polymer rubber pads	Forged aluminium, steel hardware, thick polymer rubber pads	
Length	9cm	6.6cm	
Width	5cm	5.1cm	
Weight	709g	440g	
Bar Diameter	2.2 - 3.8cm	2.2 - 3.8cm	
Load Rating	567kg	200kg	
Colour	Dark grey-black, hard anodised finish		



Schiek Weight Lifting Strap

The Schiek Weight Lifting Strap is a device which aids control and reduces stress placed on the user's sound side during weight training. The strap features a builtin dowel which helps trap and secure the weight bar in the hand, significantly reducing the need to grip tightly.







### Black Iron Lite

The Black Iron Lite is designed for lightweight aerobic style dumbell exercise and lightweight resistance training with weights below 4.5kg. Moulded from high strength polymers, the Black Iron Lite is equipped with a ratchet-type lock down strap for securely capturing weights and handles.

### Part Number NBIL-

= Colour (Black = Leave blank, Teal = TL, Violet = V)

#### Features

• ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

• Right or left side applications



#### **Technical Information**

Length	8.4cm
Width	5.1cm
Weight	332g
Load Rating	Not recommended for weights in excess of 4.5kg
Bar Diameters	2.2-3.8cm
Material	High strength polyurethane and nylon



Gymnastics & Recreational **Devices** 

### Shroom **Tumblers**







The Shroom Tumblers are a unique mushroom-shaped accessory for gymnastics floor exercise and tumbling. It is designed to progressively cushion impact and allows for easy rollover. The flexible, high-strength, synthetic polymer rubber provides multi-axial flexibility for cartwheels, flips and handstands.

Part Number	Model
NSHROOM-	Shroom Tumbler
NMINI-SHROOM-	Mini Shroom Tumbler

= Colour

Shroom Tumbler (Black = Leave blank, Blue = BLU, Pink = PNK, Purple = PUR, Teal = TL)

Mini Shroom Tumbler (Black = Leave blank. Light Blue = LB. Pink = PNK)





#### Features

- Proportioned to duplicate the surface area of the palm and fingers in children from 7 years old up to adults
- Supports weight of up to 90kg
- Can be used for floor-based exercises such as yoga or pilates
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### **Technical Information**

Model	Shroom Tumbler	Mini Shroom Tumbler
Diameter	8.9cm	6.9cm
Height	5cm	4.1cm
Weight	156g	85g
Mounting	½" x 20TPI diameter, threaded stud	



### Swinger



The Swinger is a versatile gymnastics-grade swing hook, capable of 360-degree performance mounts and dismounts. The device has an aluminium-reinforced core that provides exceptional strength and is encased in moulded, abrasion-resistant polyurethane rubber. Sized for the uneven parallel bars, the Swinger has a design optimised for approach, capture and release of the bar.

Part Number
NSWINGER-

= Colour (Black = Leave blank, BLU = Blue, TL = Teal, V = Violet)

#### **Technical Information**

Length	9.6cm
Width	8.4cm
Thickness	3.5cm
Opening	4.6cm
Weight	227g



#### Features

- Unique offset swing hook centre and pivot design
- Stance saddle provides above-bar forearm stability and support
- Optimised 'Grasp Aperture' enabling users to capture and release gym bars
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Has multiple uses see crossover table on p.32

#### Application

 Primarily designed for children and young adults up to 136kg



Handle Device

### Ishi Archery & Fishing





The strong polyurethane yoke design of the Ishi device conforms to all types of bow handles and fishing rods.

For archery, the Ishi is particularly suitable as the bow nests in the non-marring cradle of the device. The adjustable ratchet strap and buckle system retains the bow without inducing torque

For fishing, the Ishi's compliant ratchetsystem design adjusts to fishing rod handles. Allows for right or left hand reeling, and the strong polyurethane material allows for ulnar deviation to mimic anatomical wrist movement.

Part Number	Model
NISHI	Ishi
NISHI-HD	Ishi Heavy Duty (HD)

#### Technical Information

Model	Ishi	Ishi HD
Max. load	Bows up to 18kg max.	Bows from 18-31kg+.
Length	9cm	9cm
Width	7.9cm	7.9cm
Thickness	3.1cm	3.1cm
Weight	170g	170g



#### **Features**

- Has multiple uses see crossover table on p.32
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Operates as a right or left hand
- Ishi for archery: suitable for children aged 5-10 years old
- Ishi for fishing: For all ages, and suitable for use with lighter fresh water fishing gear
- Ishi HD for archery: Suitable for youths and adults
- Ishi HD for fishing: For youths and adults, suitable for medium to heavier fresh water fishing gear and all salt water fishing



### Free Flex

The Free Flex terminal devices are strong and designed with an anatomically-shaped dorsum and smooth scooped palmar surface. These will extend, flex and absorb shock under external force, and then using stored energy rebound back to its original shape. They can be used for a variety of recreational activities, particularly court sports such as basketball and netball.

Part Number	Model
NFF4	Free Flex 4
NFF3	Free Flex 3
NFF2	Free Flex 2
NFF1	Free Flex 1

- = Side (L = Left, R = Right)
- = Colour (T = Tan, MB = Medium Black, DK = Dark Complexion)

#### Features

- Constructed using flexible and durable polyurethane elastomers
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Three colour options available

#### Application

- Children aged 2 years up to adults
- Transradial and some mid-to-long transhumeral limb applications

#### Technical Information

Free Flex 4	Free Flex 3	Free Flex 2	Free Flex 1
2-6 years	6-13 years	13 years - Adult	Adult
8cm	10.7cm	12cm	14cm
5.3cm	6.6cm	7cm	8.4cm
80g	139g	195g	266g
3.8cm	3.8cm	4.3cm	4.3cm
12cm	12cm	13.5cm	13.5cm
	2-6 years 8cm 5.3cm 80g 3.8cm	2-6 years 6-13 years 8cm 10.7cm 5.3cm 6.6cm 80g 139g 3.8cm 3.8cm	2-6 years       6-13 years       13 years - Adult         8cm       10.7cm       12cm         5.3cm       6.6cm       7cm         80g       139g       195g         3.8cm       3.8cm       4.3cm



Athletic & Recreational Devices

### Super Sports

A passive terminal device, anatomically designed to resemble a 'cupped' hand. Super Sports are designed to enable two-handed performance in all types of athletic activities, particularly contact sports such as basketball, football, netball or martial arts. They are also a suitable option for parents who are handling infants or playing with children.

Part Number	Model
NSS4 0	Super Sports 4
NSS3 0	Super Sports 3
NSS2 0	Super Sports 2
NSS1 0	Super Sports 1

= Colour (T = Tan, MB = Medium Black, DK = Dark Complexion)

				,
Model	Super Sports 4	Super Sports 3	Super Sports 2	Super Sports 1
Application	2-6 years	6-13 years	13 years - Adult	Adult
Length	8.5cm	10.8cm	12cm	14cm
Width	4.8cm	5.6cm	6.5cm	7.7cm
Weight	89g	139g	190g	332g
Wrist Diameter	3cm	3.8cm	4.3cm	4.6cm



#### Features

- Constructed using durable polyurethane elastomers, and with a stainless steel and aluminum support core
- Polymer flexes and extends when subject to external pressures, and absorbs shock
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Children aged 2 years up to adults
- Transradial and long transhumeral limbs



### **HP** Hoopster



The HP Hoopster is a terminal device designed for court sports primarily, as its stiff yet flexible dual surface 'hoop' is optimised for catching a basketball. Its dorsal and palmar surfaces allow for ball control, dribbling on court surfaces, and flipping the ball for shots; whilst the volar 'heel' enables users to catch and stabilise the ball quickly and with greater accuracy.

Part Number
NHP-HOOPSTER

#### **Technical Information**

recnnical information applications		
Length	22.2cm	
Diameter	19.4cm	
Thickness	Hoop: 1.9cm, Wrist: 4.4cm	
Weight	170g	
Material	High performance polyurethane polymer	

## Recreational & Athletic Devices

### Rebound Pro Basketball Hand

The Rebound Pro Basketball Hand is a unique device made with compliant yet resilient polymer materials for playing basketball. Its flexibility enables excellent ball handling capability as it mimics the anatomical hand, wrist and finger movements required in court sports.

Part Number	
NREBOUND	

#### Technical Information

Length	19cm
Width	17cm
Wrist Diameter	4.1cm
Wrist Circumference	13cm
Weight	184g
Colour	Tan



#### **Features**

Features

capability

Application

High performance polymer

mounting hardware

• Teenagers and adults

construction, with standard, stainless

• Pre-positionable, lockable, wrist angle

device's wrist "extension" angle, to suit

the user's specific needs and functional

mechanism optimises the terminal

• 1/2" x 20TPI (M12 available, order

· Transradial and transhumeral

conversion part number: NCUSTM)

- Friction discs moulded onto the palmer surface provide additional traction for ball control
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Safe to use in contact court sports

#### Application

• 10 years old to adults



### Barrage Volley Ball

Part Number
NBARRAGE-
= Colour (Black = Leave blank, TL = Teal)

A uniquely shaped terminal device designed to mimic the anatomical curve of the hand and extended fingers to aid with playing volleyball. The surface is durable yet flexible, and capable of performing actions such as setting, bumping, digging and blocking manoeuvres.

#### Technical Information

Length	12.9cm
Width	13.4cm
Thickness	1.3cm
Weight	241g
Material	Proprietary, high performance, flexible polyurethane



#### Features

• ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



## Eagle & Eagle Flex



Both the Eagle and Eagle Flex are devices made of flexible polymer, designed to slot onto a golf club shaft and then be pulled up to the grip to secure it in place.

The Eagle is a solid, moulded one-piece device designed to capture and store external energy for recreational golfers.

The Eagle Flex is for more advanced golfers, who require a durable device, as it is reinforced with steel braiding and a flexible coupling.

Part Number	Model
NEAGLE	Eagle Golf
NEAGLE-FLEX	Eagle Golf Flex

**Technical Information** 



#### Features

- Flexible channel design adapts to a wide variety of club sizes and grip styles
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Replaces the upper hand on a club grip
- The Eagle requires minimal assistance to engage it on the club grip

#### Application

• Right or left unilateral absence

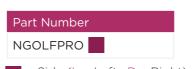
Model	Eagle	Eagle Flex
Overall Length	15.9cm	18cm
Grip Channel Length	12cm	11cm
Width	3.8cm	3.8cm
Height	8.9cm	6.4cm
Weight	170g	227g
Colour	Stealth	n Black
Materials	Polyurethane ar	nd stainless steel

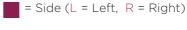


Golfing Devices

### Golf Pro System

The Golf Pro is a golfing device which fits over the club shaft and then can be slid onto the grip to secure it in place. It allows for a fluid backswing and downswing, enabling the user to have excellent control.





#### Features

- · Uniform club grips are recommended
- Internal plastic sizing rings can be enlarged for custom fit to the user's clubs
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)





#### Technical Information

Model	Golf Pro Left	Golf Pro Right
Application	Replaces lower hand on club grip	Replaces upper hand on club grip
Length	17cm	13cm
Width	227g	213g

### Hammerhead



The Hammerhead duplicates the bio-mechanical wrist action required for performance kayaking. The Hammerhead safely secures the paddle handle, releasing manually and quickly when required. Designed with a nonmarring friction surface to provide high torque paddle control, it can be used in a variety of water sport applications with some simple handle modifications.

Part Number	
NKAYAK	

#### Technical Information

Length	11cm
Width	7cm
Weight	340g
Colour	Black



#### **Features**

- Strong and reliable synthetic polymer construction
- · Mounts on any standard prosthesis
- Energy storing wrap around with flexible strap coupling
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



### Multi-Duty



The Multi-Duty is a terminal device with a quick-release ratchet and buckle system for gripping objects during vocational activities. The excellent rocker action allows for increased control through a wide range of angles. The high-strength, flexible design mimics natural wrist and forearm bio-mechanics making it particularly suitable for a variety of applications and activities.

Number Model	
Multi-D 1/2" x 20TPI Thread	
JLTI-DM12X1.5 Multi-D M12 Thread	1
	eac

### Features

- Suitable for a wide range of activities including kayaking, rowing, long handle tool control, gardening and DIY
- Has multiple uses see crossover table on p.32



#### **Technical Information**

Length	9.7cm
Width	5.1cm
Weight	272g
Adjustable Diameters	2.86 - 4.5cm+
Colour	Black



Skiing Devices

### Downhill Racer Ski



A skiing device for snapping-on to ski poles, which features a pre-flexed angle for snow clearance and optimised control. It is constructed using flexible, high-performance polyurethane for durability, and comes in multiple flexibilities to meet the user's needs.



= Side (LEFT or RIGHT) = Colour (Black = leave blank, TL = Teal, BLU = Blue, V = Violet)

\*Please specify age, weight and performance criteria when ordering as these devices are built to individual reauirements.

#### Features

- Comes with a press-on rubber pole cap for protection
- Designed to fit ~1.6cm diameter ski poles, and can also be used on hiking poles
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### **Applications**

- · Youth and adult
- Suitable for downhill and cross-country skiina

#### Technical Information

Length	8.4cm
Width	6.4cm
Thickness	3.3cm
Weight	114g



Recreational & Vocational Device

### Helix



The Helix offers incredible flexible strength and external energy captureand-return action. The Helix's coil design can be used on a variety of vocational objects, and mimics the motion of an anatomical hand and forearm. The weave-in and snap-out connection system enables it to be used for a wide range of practical applications, including: gardening, hockey and cricket.



= Side (L = Left, R = Right)

#### Features

- Flexible strength, and an external, energy capture and return action
- Has multiple uses see crossover table on p.32
- 1/2" x 20TPI (M12 available, order conversion part number: NCUSTM)



#### **Technical Information**

Length	11cm
Width (Flexible OD)	5.6cm
Shaft (Flexible ID)	3cm
Base Unit Diameter	3.6cm
Weight	142g
Colour	Stealth Black



Skiing Devices

### Ski 2



The Ski 2 is a terminal device which can be used with or without a cable for quick and precise pole plants, and utilises a quick disconnect pole system. It has been designed to assist with balance and body posture when skiing to ensure users are safe.

Part Number
NSKI2TD**

#### Technical Information

Length	8.4cm
Width	3.8cm
Weight	298g
Materials	Aluminium, stainless steel, rubber, plastic

#### Features

- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Includes a shock absorbing flexion
- Accepts 0.5cm and 0.7cm diameter cable ball fittings
- · Can be used with poles with a diameter from 1.5 - 1.9cm

#### Application

- Cross-country (nordic) and downhill (alpine) skiers, from novice to advanced
- For youth and adults
- \*\*Please specify whether user is a novice or advanced skier when ordering as two types of shock absorbing mounts are available.



Baseball & Cricket Devices

Cobra Baseball. Cricket & Softball Throwing

The Cobra terminal device are optimised for control, trajectory and speed when throwing, and have been manufactured with polymer technology for energy capture and release. They are fully adjustable for ball release and throwing angles.

Part Number	Model
NCOBRA	Cobra (Baseball)
NCOBRASB11	Cobra Sb11
NCOBRASB12	Cobra Sb12

#### Features

• 1/2" x 20TPI (M12 available, order conversion part number: NCUSTM)



#### **Technical Information**

Model	Cobra	Cobra Sb11	Cobra Sb12
Length	18cm	19cm	20.3cm
Width	9cm	10.2cm	11cm
Weight	227g	270g	298g

TRS Prosthetic Solutions Range



### Pinch Hitter Bat Adapters



The Pinch Hitter is a terminal device for holding a bat, and comes in three models. They are constructed with high-performance, flexible synthetic rubber, which can be snapped on and off aluminium bat handles safely.

They transfer body power and energy, which the device stores and then releases to help improve swing speed and hitting power.

Part Number	Model
NPINCHITTER	Pinch Hitter
NPINCHITTER-HD	Pinch Hitter HD
NPINCHITTER-FLEX	Pinch Hitter Flex

#### Technical Information

Model	Pinch Hitter	Pinch Hitter HD	Pinch Hitter Flex
Length	11cm	13cm	16.5cm
Width	3.8cm	3.8cm	3.8cm
Weight	114g	142g	227g
Materials	Proprietary flexible polymer rubber		

#### Features

- Can be screwed into standard prosthetic wrists or disconnect-style wrist adapters
- Needs to be 'over-gripped' with the second hand when swinging a bat
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Can be used either right or left handed, but performs best on leading arm
- Pinch Hitter For children or users with small hand proportions, who wish to swing a bat utilising the power and function of both hands.
- Pinch Hitter Heavy Duty For young adults, older children or adults who require a device with more performance
- Pinch Hitter Flex For adults who play a lot of baseball/softball, and require a flexible, replaceable coupling and may need a longer adapter



### Mountain Master Mountain Bike



The Mountain Master Mountain Bike terminal device provides the user with excellent stability and secure control on their handlebars. It features a stainless steel ball-pedestal mount with machined aluminium mounting hub, and a flexible, strong polyurethane body with a shockabsorbing design. The quick connect and release system means the terminal device is not locked to handlebars providing improved control for the rider.

Part Number	
NMTNMASTER-	
= Colour (Black = leave bl G = Green)	anl

#### **Technical Information**

Length	10.7cm
Width	6.1cm
Height	8.4cm
Weight	270g



#### Features

- Passive contoured features provide bike frame carrying capability
- Fits all standard %" (2.2cm) diameter bars
- Snap-on and lift-off function
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



Cycling Devices

### Criterium Bicycle Handlebar Adapters



Both adult models, the Criterium and Criterium Pivot, provide an offset centreline duplicating the normal palm grasping position for improved biomechanics when cycling.

The Criterium is the original version, which has softer, more flexible properties providing easier application.

The Pivot version is made up of two pieces, allowing for much greater angulation and arm torque. The adjustable friction pivot mechanism results in higher performance, yet is more difficult to release from the bars.

The Criterium Pivot Short is for children and has a wedge design. It features integral radial, and an ulnar pivoting action that provides greater versatility, control and safety for the rider.





ersatility,	Criterium Pivot Short	
	Criterium Pivot Snort	

## Cycling Devices

### Ener-Joint

Compact and self-contained, the Ener-Joint is designed to be mounted to mimick the centre of the anatomical elbow. The rapid and reliable bicycle hub-style locking lever provides a quick release mechanism, providing enhanced control for the user. Elastomeric energy storing and release allows this elbow to provide progressive resistance throughout flexion/extension, whilst the energy absorbing isolation module provides constant shock absorption.

Designed for adult-grade rugged activities, the Ener-Joint is particularly suitable for the following activities: mountain biking, ATV riding, off-road motorcycle riding, rowing, and kayaking.

#### Part Number

**NENER-JOINT\*** 

#### Technical Information

Cylinder Diameter	7.6cm
Cylinder Width	3.8cm
Module Overall Length	9.7cm
Module Overall Width	9.9cm
Weight	540g
Colour	Stainless steel & black aluminium

\*Please contact customer services or visit www.steepergroup.com to download and complete a separate Ener-Joint Order Form

#### Features

- ½" x 20TPI for proximal and distal connection (M12 available, order conversion part number: NCUSTM)
- Endoskeletal design
- Custom attachment couplings are available
- Polyurethane core isolates external shock forces under both flexion and extension
- Variety of pre-positionable, lockable angular orientations

#### Application

 For adults undertaking rugged activities and loads, but can be used by active young adults

### Part Number Model NCRITERIUM-70 Criterium

Criterium Pivot Short (Soft)

NCRITERIUM-70	Criterium
NPIVOT-85	Criterium Pivot 85 (Firm)

NPIVOT-SHORT-85 Criterium Pivot Short (Firm)

#### **Technical Information**

NPIVOT-SHORT-70

Model	Criterium	Criterium Pivot	Criterium Pivot Short
Length	8.6cm	10.2cm	7.4cm
Width	6.4cm	6.4cm	6.1cm
Weight	184g	213g	170g
Colour	Black	Black/Satin	Black/Satin

#### Features

- Handlebars can be taped with material to change friction and force required to engage/disengage the Criteriums
- All models snap/pull on and off 1" (2.54cm) diameter bicycle handlebars and fit right or left
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Has multiple uses see crossover table on p.32

#### Application

- 70 durometer is recommended for children and less aggressive riders. Load required to directly release is approx. half that of the 85 durometer
- 85 durometer is recommended for more aggressive riders
- The Criterium Pivot Short model is for children aged three years and older, and it is recommended that older children use the Firm version

### Kahuna

The Kahuna is a terminal device for swimming and ocean surfing. It is manufactured using extremely durable polymer, and is shaped to resemble a concave palm to allow for effective paddling and rail control. The device's surface has a texture which enhances grip on surfboards, and a unique 'heel' design at the base to enable push off on the board.

Features a ½" x 20 TPI stainless steel thread (M12 available, order conversion part number: NCUSTM)

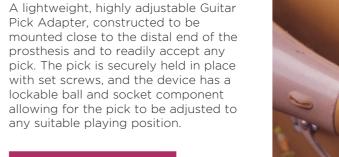
Part Number
NKAHUNA-
= Colour (Black = leave blank.

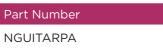
SB = Sea Blue/Green)



#### Technical Information

Length	15.9cm
Width	12.1cm
Depth	6.4cm
Weight	230g





#### **Technical Information**

Weight	85g
Colour	Black & aluminium



#### Features

- Passive (no cable required)
- To order a guitar pick for direct attachment to a locking liner, use: NGUITARPA-CUSTOM, and specify thread required
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



Swimming Devices

## Freestyle Swim Device



The Freestyle Swimming Device is a recreational accessory designed to be used with a custom swimming prosthesis for high performance or competitive swimming.

The design mimics a folding wing which reduces resistance during stroke recovery but flares open to provide maximum resistance during the power stroke. The device can be rotated to optimise various swimming strokes and styles and the wings can be fixed in a flared position for treading water and water aerobic exercise.

Part Number	
NFSTSD2	

#### Features

- Passive (no cable required)
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### Application

- Comes in an adult size but can be easily modified down to conform to a smaller hand
- Best used with a custom-shortened swimming prosthesis and a silicone suspension sleeve

#### Technical Information

Length	15cm
Width	14cm
Thickness	1.6cm
Weight	96g
Colour	White
Materials	Polypropylene, aluminium & stainless steel hardware



Musical Instrument Devices

Musical Instrument

Devices

Guitar Pick

Adapter

### Violin Bow Adapter 2

The Violin Bow Adapter 2 is a sophisticated terminal device that pivots, mimicking natural wrist action and control. It uses a lockable ball and socket component modified to readily screw into any standard prosthesis. The adapter can be adjusted to any angle to help ensure optimal playing position and technique, and the bow is held firmly in place with set screws.

Part Number	
NVIOLIN2	

#### Technical Information

Weight	128g
Colour	Black



#### Features

- Lightweight design for ease of use when playing
- Passive (no cable required)
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



Swimming Devices

### Swim Fin Kit

Provides the same movement as the Freestyle Swim Device, but without the need for a prosthesis. The kit comes with fabrication layouts and instructions for attaching the device to the residual limb.

#### Application

- Transradial
- Youth to adult

Part Number	
NSFK100	



#### Technical Information

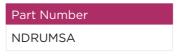
Length/ Width	Varies dependent on patient fabrication
Thickness	1.8cm
Colour	White
Materials	Polyethylene, foam sheet, latex tubing, stainless steel



Musical Instrument Devices

### Drum Stick Adapter

The Drumstick Adapter has a unique design which allows the stick to not only pivot, but does so under an adjustable tension load. This feature enables the drummer to create spontaneous "drum rolls" and other drumming techniques. The drumstick is securely held into place using a set screw.



#### Technical Information

Weight	Approx. 142g
Colour	White plastic & black aluminium



#### Features

- Passive (no cable required)
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)
- Drumstick and adapter require simple modification meaning the product is non-returnable



### Dragon

The Dragon terminal device is specifically designed for contact sports and floor exercise activities including: martial arts, wrestling and sparring. Duplicating a fist-like anatomy, the Dragon's uniquely shaped surface provides a high traction along with exceptional punching power and cushioned protection for the arm.

#### Part Number

NDRAGON60

#### Features

- Shock absorbing cylindrical cavity with flexible polymer construction
- Multi-functional design in black
- Has multiple uses see crossover table on p.32
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



#### **Technical Information**

Length	9.4cm
Width	7.4cm
Height	11cm
Weight	298g
Colour	Stealth Black
Materials	Polyurethane & stainless steel threaded mounting stud



Sports & Recreational Devices

### Hustler



The Hustler is a lightweight and versatile terminal device used for playing pool, billiards, snooker and similar table games. Its design allows for easy adjustment and a friction-free swivel ring to achieve different shot angles, and the rigid, rubber-tipped mono-pod creates a non-slip bridge.

Part	Nι	ım	her	

NHUSTLR

#### Features

• ½" x 20TPI (M12 available, order conversion part number: NCUSTM)

#### **Applications**

Youth to adult

#### Technical Information

Length	13cm
Weight	128g
Colour	Aluminium, black & white
Materials	Nylon, neoprene,



Amp-U-Pod

The Amp-U-Pod is a lockable tripod mount for cameras with a standard ¼" -20 hot shoe hole. It is designed to support the camera whilst facilitating a variety of camera angles. Can also be used with film cameras, negating the need to have to remove the camera from the prosthesis when changing film.

Part Number
NDPAUPO

#### **Technical Information**

Length	15cm
Weight	71g
Colour	Non-glare black & aluminium



#### Features

• ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



### Eldorado Z-Axis Climbing Foot



A revolutionary climbing device, the Eldorado Z-Axis Climbing Foot provides superior control, loading, leverage and proprioception. The foot comes complete with a custom Evolv® TRAX-XT5 rubber climbing shoe.

It features a high-strength keel for stability and control, and a compliant polymer foot matrix to provide 'feel' when under load.

Part Number	Description
NELDO-Z	Eldorado Z-Axis Climbing Foot Unilateral
NELDOZ01	Eldorado Shoe Only

#### Technical Information

Length	18.4cm
Width	7.1cm
Height (w/o pyramid adapter)	9.5cm
Height (w/pyramid adapter)	11.4cm
Weight	709g
Foot Colour	TRS Tan
Shoe Style	Evolv® TRAX-XT5 (Laced). High- traction toe, sole & heel



#### Features

- Titanium pyramid adapter and hardware included, to enable simple attachment to a lower extremity endoskeletal prosthesis designed to receive a standard pyramid adapter
- Foot constructed using high-strength polymers and with a lightweight core
- Shoe constructed using tough, highstrength abrasion resistant materials, typical of high-performance rock climbing footwear

#### Application

- Left or right application
- Unilateral and bilateral transtibial, and certain transfemoral climbers
- Suggested maximum weight of climber 136kg



Rock Climbing Devices

### Raptor Sky Hook



Designed for rock and gym climbing, the Raptor Sky Hook is a slim yet strong terminal device with an optimised shape. The friction-adjustable 'rocking' action hook design adapts to various approach angles as the user climbs.

Part Number	Description
NRAPTOR	Raptor Sky Hook
NRAP004*	Individual Tip - Aluminium & polyurethane
NRAP005	Individual Tip - Brass
NRAP009	Replacement 'O' Ring

<sup>\*</sup>Please specify whether 85 or 95 durometer is required

#### Features

- Solid titanium plate body for support, and stainless steel wrist adapter system
- Three replaceable 'tips' included 2 x polyurethane (85 & 95) and one 'shapeable' brass
- Cloaked with an easily replaceable, high-traction 'O' ring sheathing
- Has multiple uses see crossover table on p.32

#### Application

• Left or right application

#### **Technical Information**

Length	8.6cm
Width	9.4cm
Thickness	1.6cm
Height (w/pyramid adapter)	11.4cm
Weight	170g

Wrist Technology

### Nylon Child's Wrist

Wrist

/Disconnect

Wrist

Technology

Omega Friction

The lightweight Nylon Wrist is available in two sizes and features an adjustable collar which provides constant friction.

Part Number	Description
NINFANTWRIST	Infant's Wrist
NTRSCHILDWRIST	Child's Wrist

#### **Technical Information**

Model	Infant's Wrist	Child's Wrist
Style	Round	Round
Diameter	3.2cm	3.8cm

The Omega Friction/Disconnect

Wrist series provides adjustable,

rotational friction control with twelve locking positions. It uses reliable Omega disconnect and insert capture

technology, to ensure a precise and solid

fit. Disconnect features include lock-in, lock-out and lock-open features.

surgical stainless steel and aluminium,

and features a standard laminating ring

Model

NOMEGA-L Omega Oval Large

This device is manufactured using

for fabrication.

Part Number

NOMEGA-R

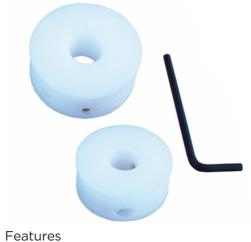
NOMEGA-M

NOM003

NOM005



- ½" x 20TPI thread
- Friction can easily be adjusted to users requirements with the supplied Allen key













#### NPTA005 Omega 'O' Ring

with ½" x 20TPI

internal thread

Omega Round Large

Omega Oval Medium

Omega Wrist Insert

Omega Hook Adapter

= Colour (Aluminium = Leave blank, B = Black)

#### Features

• Hook adapter for use on hooks and other narrow-based terminal devices to provide the broader platform necessary for the insert frictional adjustment function

#### Technical Information

Omega Split

Hook Adapter

Model	Omega Round Large	Omega Oval Large	Omega Oval Medium
Major Diameter	5.18cm	6cm	5cm
Minor Diameter	N/A	4.5cm	3.8cm
Total Height with Laminating Ring	2.62cm	2.5cm	2.5cm
Height (Face Plate Only)	0.8cm	0.8cm	0.8cm
Weight	103.1g	111.2g	89.4g



### Accessories



### Arm Skinz

Arm Skinz are a waterproof arm cosmeses, designed to provide an improved cosmetic covering for body-powered and passive systems. Manufactured using a stain-resistant, tan coloured silicone material, they have optimal elasticity, can be easily cleaned, and are similar to donning a regular cosmetic glove.

Please note: these are not designed for manual labour or activities which may cause abrasion.

Part Number	Description
NARMSKINZ-AD	Arm Skinz Adult
NARMSKINZ-PD	Arm Skinz Paediatric

#### **Technical Information**

Model	Paediatric	Adult
Circumference	10.2 - 22cm	10.2 - 35.6cm
Length	43cm	
Thickness	Approx. 0.15cm	



Cuff

### Pro Cuff Prosthosis



Complete and ready to use, the Pro Cuff allows almost all TRS terminal devices to be positioned in an anatomically correct location within minutes, adding little to no additional length to the arm. It utilises a built-in BOA® cable lacing system for tension and closure, to allow for easy adjustability and quick donning/ doffing.

Ideal for activities such as golfing, kayaking, swimming and ball/bat sports.

Part Number	
NPRO-CUFF-	
$\blacksquare$ = Side (I = Left R = Right	-)

#### Technical Information

Length	12.7cm
Weight (with stainless bracket)	187g
Weight (without bracket)	102g
Distal End Internal Circumference (adjustable)	~14.6 - ~20.3cm
Proximal End Internal Circumference (adjustable)	~20.3 - ~25.4cm



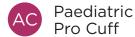
#### Features

- Stainless steel terminal device disconnect bracket with multiple mounting options
- Thermomouldable cuff
- ½" x 20TPI internal thread on adapter
- Order extra Adapter Inserts for quick and easy interchange of terminal devices (see page 25 for details)

#### **Applications**

- · Easily modified and adjustable, the universal size will fit most users
- Suitable for those with a temporary or permanent hand injury, paralysis, partial hand absence or wrist disarticulation
- Used to restore gripping dexterity when using the Pro Cuff with an appropriate terminal device

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### Paediatric Pro Cuff Prosthosis



The Paediatric Pro Cuff Prosthosis is a ready-to-use cuff for children, which uses the BOA® cable closure system for adjustability to accommodate a wide range of forearm circumferences. It can be used with most TRS terminal devices with minimal bracket or device modification.

Part Number	
NPRO-CUFF-PEDI-	

= Side (L = Left, R = Right)

#### Technical Information

Length	10.4cm
Weight (with aluminium bracket)	99g
Weight (without bracket)	57g
Distal End Internal Circumference (adjustable)	~13.3 - ~18.4cm
Proximal End Internal Circumference (adjustable)	~16.8 - ~21.6cm



#### Features

- Constructed using reformable low temperature plastic foam laminates
- Features an aircraft aluminium 'disconnect' bracket with stainless steel disconnect adapter
- ½" x 20TPI internal thread on adapter insert

#### **Applications**

- Infants and children up to smallerframed adults
- Ideal for activity specific activities with the appropriate terminal device



### Prosthosis Adapter



Small Adapter

A high-strength aluminium prosthosis adapter, with a stainless steel insert included. This is a rapid disconnect system which uses dual set screws to retain insert and adjust frictional rotation with the Pro Cuff Systems (p.23-24). Comes with a magnetically-stored Allen key for convenience.

Part Number	Model
NPDTA1000	Prosthosis Adapter Large
NPDTA2000	Prosthosis Adapter Small
NPDTA101	Large Adapter Insert (½" x 20TPI internal thread)
NPDTA201	Small Adapter Insert (½" x 20TPI internal thread)



#### Technical Information

Model	Prosthosis Adapter Large	Prosthosis Adapter Small
Length	3.8cm	3.6cm
Width	4.8cm	4cm
Arm Diameter	~7.6cm	~5cm

### AC [

Pro Cuff Distal Mount

### Pro Cuff DM



The Pro Cuff Distal Mount is a distal 'inline' terminal device mounting system for improved device control and balance. It is a ready to finish and fit system, which has an excess of two inches of length positioning adjustment to suit individual requirements.

The design is based around limb capture and retention, and easy donning and doffing. This is provided by the AFO 'lift-off' tongue, dual hook-and-loop closure systems, and the built-in BOA® cable closure and tension technology.

Part Number

NPRO-CUFF-DM

#### eatures

- Includes adjustable position-length Prosthosis Distal Disconnect Wrist System (see below)
- Constructed using re-formable, low temperature plastic foam laminates
- Four Chicago-style threaded rivets included for securing bracket onto prosthosis in desired position

#### **Applications**

 Wrist disarticulation and specific partial hand absences

#### **Technical Information**

Length	12.7cm
Bracket Length Adjustability	~5cm
Overall Weight	213g

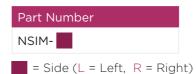


Accessories

### Simulator Kits



The lightweight prosthetic Simulator Kits enable users to trial terminal devices, giving them a realistic understanding and expectation of their chosen terminal device. The BOA® cable closure technology adjusts to a wide variety of users and helps position the terminal device in its optimal alignment.





#### Features

- Sure-Lok cable locking and control technology
- Easily adjustable control harness and cable system
- Voluntary opening split hook and TRS Grip 3 Prehensor included (see page 6)
- Constructed of low temperature, thermoformable EXOS® laminates
- ½" x 20TPI (M12 available, order conversion part number: NCUSTM)



Accessories

Pro Cuff



The Distal Disconnect Wrist System is a high-strength frame which allows for more proximal terminal device mounting. It is an integral, compact disconnect wrist system which creates an 'in-line' mounting design for more natural control of activity specific accessories.

Constructed using stainless steel and anodised aluminium, it is ready to drill and mount into a prosthosis. Order extra Adapter Inserts for quick and easy interchange of terminal devices (see p.25 for details).

#### Part Number NPDD1000

#### **Technical Information**

ength	14.1cm
Width (Tapered lesign)	Distal End = ~6.4cm, Proximal End = ~7.6cm
Circumference	Distal End = ~20cm, Proximal End = ~24cm
Wrist Diameter	2.9cm



### Suspension & Control Systems



Suspension & Control Systems

### Cutaneous Anchor Technology



This innovative anchor system uses specialist tape and reusable mounting plate anchors to control a bodypowered cable and a terminal device. This eliminates the need for a contralateral harness which can interfere with user clothing and affect comfort.

Can also be used to anchor linear transducers, or powered and body-powered devices simultaneously.

Part Number	Model
NT-HANCHOR	Transhumeral
NT-RANCHOR	Transradial



#### Features

Transradial

- Available as a transradial or transhumeral kit
- Can be used for multiple days at a time
- Ipsi-lateral cable and terminal device control
- Adhesive used is high-traction and designed to not irritant the skin
- Kit comes with instructions for setting up the system



Suspension & Control Systems

### Anchor Companion Strap

#### Features

- 1" wide Dacron webbing, approximately 20" long
- Comes with a TRS Rapid Adjust Buckle (black - see opposite page)
- Interfaces with the Cutaneous Anchor using the Fillauer nylon suspension clip
- Available with white or black webbing (only comes with a black buckle)

Part Number	Model
NTC-STRAPB	Black Strap
NTC-STRAPW	White Strap



Suspension & Control Systems

### Pro-Polyweb Harness Material

The Pro-Poly Web Harness material is a soft and smooth in texture, ensuring it is comfortable for the user to wear. As it is slightly thicker than conventional Dacron web, it functions well with TRS Rapid Adjust Buckles (see opposite page).

Part Number	Pro-Polyweb Description
NAWEB1BR	1" Tape, Blue, 50ft roll
NAWEB1KR	1" Tape, Black, 50ft roll
NAWEB1RR	1" Tape, Red, 50ft roll
NAWEB1TR	1" Tape, Tan, 50ft roll
NAWEB1WR	1" Tape, White, 50ft roll
NAWEB3KR	3/4" Tape, Black, 50ft roll
NAWEB3WR	3/4" Tape, White, 50ft roll



#### Features

- Easily incorporated into standard harness fabrication
- Can be laundered regularly without damage



### Rapid Adjust Buckles

The low-profile, strong Rapid Adjust Buckles are used to replace any three or four bar buckles and most 'belt'/'latch' buckles used on orthotic braces.

Optimised for use on upper extremity prosthetic harnesses to enable quick adjustment of cable excursion.

Part Number	Size
NARAB1K	1"
NARAB34K	3/4"





#### Features

- Buckles use a 'clamp' action for positive locking anywhere on the web
- One-handed operation



Suspension & Control Systems

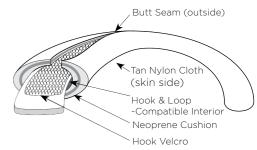
### Neo-Axilla Loop Padding

The Neo-Axilla Loop Padding has a hook-and-loop compatible inner, to wrap around web in the axilla area of a harnessing system. Constructed using soft nylon on the exterior to prevent chafing and discolouring.

Part Number	
NAXL150	

#### **Technical Information**

Width	⅓-5/16" wide
Length	12ft roll



#### Features

- · Lightweight design
- Washable
- · Soft tan colour
- To wrap around 1" wide harness webbing



Suspension & Control Systems

### BAHA

The BAHA is a bio-mechanically aligned harness anchor, designed to optimise a harness's axilla angle by providing a more efficient cable-control pathway.

Intended to replace figure-8 harness rings, these are lightweight, durable and flexible devices to conform to the patient's spine.

Part Number	Model
NBAHA-	Adult
NBAHA-PEDI	Paediatric

= Colour (Tan = Leave blank, Black = BLACK)

#### **Technical Information**

Model	Adult	Paediatric
Length	9.9cm	7.4cm
Width	6.9cm	5cm
Thickness	0.3cm	0.3cm
Weight	14g	9.5g



#### Features

- Can be modified to accommodate most axilla harness angles
- Requires a standard fabrication technique

#### **Applications**

- Left or right application
- Can be applied to any figure-8 harness configuration

### **ELF Straps**



The ELF Cross Bar and Cable Control Strap eliminates the need to fabricate cross bar straps. They are designed to enhance cable excursion control around the elbow by providing a platform and cable housing 'tunnel'. Also enables elbow flexion during glenohumeral flexion and bi-lateral scapular abduction movements, to help generate the cable forces needed to operate terminal devices such as Grip Prehensors and Split Hooks.

Part Number	Description
NELF-STRAP-BLACK	Black ELF Strap
NELF-STRAP-TAN	Tan ELF Strap
NHD50367	Heavy Duty Cross Bar
NHD50373	Heavy Duty Cross Bar Housing

#### **Technical Information**

Length	16.5cm
Width	1.9cm
Max. Width	2.4cm
Thickness	0.32cm
Weight	14g



#### Features

- Waterproof polyurethane materials provides strength and flexibility
- Provided at an extra-long length to fit prosthesis with lower trim lines
- · Can be used with heavy duty and standard size cable housing
- Special tubing provided to increase outer diameter of standard-size cross bars so they can be used with the ELF
- Easily modified for optimal length and mounting options



### Adept Cable Adapters

Designed exclusively for use with the Adept Prehensors (p.5) and Lite Touch Hands (p.4), these are one-piece stainless steel components for in-line cable fittings.



#### **Technical Information**

Ball Diameter	<sup>3</sup> / <sub>16</sub> "
Accepts Cable Size	1/16" diameter





Suspension & **Control Systems** 

### In-Line Hook to Grip Adapter

A stainless steel adapter which connects 9/32" diameter ball triple swivels to Grip Prehensors (p.6-7) easily and reliably. Supplied with a grommet.





Length	2.5cm
Material	Stainless Steel





### Sure-Lok Cable Lock Control Systems



Eliminating the need to maintain continuous cable tension for control and grasping, the Sure-Lok replaces the standard cable, the cable housing system and the related hardware. Recommended for us with voluntaryopening and voluntary-closing terminal devices to improve function and versatility. It features a reliable manual lever actuation controlling on/off operation, and a high-performance TRS Python standard cable.

Part Number	Model
NVADA-	Surface Mount
NVSL2000	Vertical mount

= Side (L = Left, R = Right) = Colour (Black = B, Silver = S)

#### **Technical Information**

Model	Surface Mount	Vertical Mount	
Length 3.6cm		3.048cm	
Width 2.4cm		1.12cm	
Height	0.9 - 1.3cm	1.27cm	
Colour	Tan and Black covers inc. Black or Silver cover		
Cover Plate Length N/A		5.8cm	
Cover Plate Width	N/A	2cm	
Mounting Depth	N/A	1.17cm	



#### Surface Mount Features

- · High strength polymer covers and switch levers
- Supplied with 18" of heavy duty cable housing, liner and TRS Python standard cable (p.31)
- Four TRS cable housing ferrules (p.31)
- Stainless steel base system designed to fit various arm sizes
- For application on long residual limbs

#### Vertical Mount Features

- Supplied with 18" of heavy duty cable housing, liner and TRS python standard cable (p.31)
- Comes with cover plate designed to fit various arm radii
- Four TRS cable housing ferrules (p.31)
- Vertical mount to be mounted up to ½" below prosthesis surface - suitable for short and mid-length limb absence



Spectra® Cable

The Spectra Cable is a strong, highperformance, braided polyethylene cable, which provides an alternative to fibre or stainless steel cables.

Part Number NSPECTRA-400-ULTRA

#### **Technical Information**

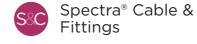
Tensile Strength	Approx 181kg
Colour	Black

#### **Features**

- Coated cable provides 30% more friction resistance
- · Must be installed with a Teflon or copolymer plastic cable housing liner
- Comes in a 15m (50ft) roll

#### Applications

- Children to adults
- Transradial and transhumeral

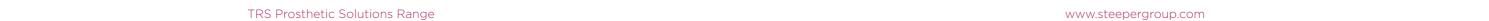


Spectra® Ball Cable Fitting 1" long, stainless steel 'tie-on' Ball Adapter for the Spectra Cable range.

I	Part Number	Ball Diameter
ı	NASPCB1	<sup>3</sup> / <sub>16</sub> " ball
ı	NASPCB2	%32" ball







### Spectra® Cable Hanger

Part Number	For Web Width
NASPCH1	³⁄4 or 1"
NASPCH2	1/2"

#### **Technical Information**

Model	NASPCH1	NASPCH2	
Width	1 1/8"	3/4"	
Thickness	0.06" stainless steel		





PCH1	NASP



### Python Cable

Standard

Heavy-Duty

#### Features

- · High performance, stainless steel aircraft cable
- Low coefficient of friction for reduced risk of fraying and breakage
- Fits all standard harnessing hardware
- Supplied in 7.5 metre (25 ft) long coils

· Heavy duty stainless steel cable

· Accepts TRS Python Heavy-Duty

 Constructed to be used with any manufacturer's standard heavy duty fittings; cable housing retainers, cross

cable (1/16" diameter)

Cable (3/32" diameter) or equivalent

• Accepts standard diameter prosthetic

• Supplied in 7.5 metre (25 ft) long coils

NPYTHON-HD-S	Heavy-Duty Python Cable
NPYTHON-STD	Standard Python Cable

Model

#### **Technical Information**

Part Number

Model	Standard	Heavy-Duty
Diameter	½6" (rotary swaged)	³⁄₃₂" (rotary swaged)



### Binary Swivels

The Binary Swivels are stainless steel devices with an extra long ferrule designed to receive prosthetic cables, allowing for a 'double swage' capability for optimised durability and longevity. These durable components are recommended for use with the TRS Python Standard and Python Heavy Duty cables (p.31).

Part Number	Model
NBINARY316-STD	³¼6" Standard
NBINARY316-HD	¾6" Heavy Duty
NBINARY932-STD	%32" Standard
NBINARY932-HD	%32" Heavy Duty



Suspension & Control Systems

Suspension &

Heavy-Duty

Cable Housing

Control Systems

## Heavy-Duty Cable Housing

#### Features

bars, etc.

Features

- Provides low friction, highly efficient lining for standard diameter stainless steel prosthetic cable.
- Sized to fit perfectly into Heavy Duty Cable Housing
- · Special material composition eases and enhances flaring the ends of the liner
- Supplied in 7.5 metre (25 ft) long coils

Part Number	
NACCHT25	



# Liner

NACCHLC

Part Number



Suspension & **Control Systems** 

### Cable Housing Ferrule

#### Features

- Press-fitted into heavy-duty housing which traps the Teflon liner inside the housing, and eliminates need to "flare" liner
- Manufactured from lubricant impregnated plastic for friction-free, quiet operation



### Placing an order

To place an order or for more information on the Fillauer TRS Prosthetic Solutions Range, please contact our Prosthetics Customer Service Team quoting the desired part number. Email: customerservices@steepergroup.com Phone: +44 (0) 870 240 4133

### Suspension & **Control Systems**

### Binary Cable Hanger System

two-piece system capable of receiving double swage fittings and for use on both standard and heavy duty cables. Designed to be versatile, economical and strong.

The Binary Cable Hanger is a unique

Part Number	Model
NBCH1000	Binary Cable Hanger System
NBCH2000	Binary Cable Hanger System, Heavy Duty
NBCH01	Binary Hanger
NBCH02	Binary Cable Connector, Standard
NBCH03	Binary Cable Connector, Heavy Duty

#### **Technical Information**

Model	System	Binary Hanger	Cable Connector
Length	4.6cm	2.2cm	3cm
Width	3.6cm	3.6cm	0.48cm
Thickness (max.)	0.56cm	0.56cm	0.48cm
Weight	9.4g	7.7g	1.7g

### Crossover Devices

These terminal devices have been identified as having other purposes alongside their intended use.

Device	Action	Primary Use	Crossover Use/Action
Criterium Series	<ul> <li>Grasps handles with a small to medium diameter</li> <li>Pivot allows steering and improved control</li> </ul>	Biking (Road and flat terrain)	<ul><li>Pushing/pulling</li><li>Sweeping/raking</li><li>Steering</li></ul>
Dragon	<ul> <li>Can securely manage pole-style handles through the 'doughnut' hole</li> <li>Loosely interfaces with objects</li> <li>Allows freedom of movement</li> </ul>	Martial arts	<ul><li> Home management</li><li> Property management</li><li> Climbing</li><li> Steering</li></ul>
Helix	<ul> <li>Moulded, high performance polyurethane</li> <li>'DNA' helical shape replicates holding action of the hand in the control of short or long cylindrical handles grips</li> <li>Unique strength and flexibility feels like the hand and forearm, with reflexive energy capture, storage and release action</li> </ul>	handles or 'sticks', raking, shovelling,	pecific tasks that use long such as lacrosse, hockey, garden tools arden tools, water hose control
Ishi	<ul><li>Adjustable grasp</li><li>Secure and stable with a strap</li></ul>	<ul><li>Archery</li><li>Fishing</li></ul>	<ul><li> Grooming/self-care</li><li> Holding handled objects</li></ul>
Multi-D	<ul><li>Adjustable grasp</li><li>Secure, stable with strap</li><li>Larger</li><li>More robust</li></ul>	Multi-purpose	<ul><li> Home management</li><li> Gardening</li><li> Holding larger handled objects</li><li> Fishing (salt water)</li></ul>
Swinger	<ul><li>Loosely interfaces with objects</li><li>Allows freedom of movement</li></ul>	Gymnastics	<ul><li>Carrying</li><li>Climbing</li><li>Steering</li><li>Fishing</li></ul>
Raptor Sky Hook	<ul> <li>High-strength, titanium lifting and supporting terminal device</li> <li>Replaceable, protective tip for cushion and non-marring applications</li> <li>Greater friction control</li> <li>Pivot action increases versatility in lifting, supporting, climbing</li> </ul>	Indoor and outdoor rock and gym climbing	<ul> <li>Heavy-duty lifting and loading tasks</li> <li>Handling heavy goods e.g. timber panels</li> </ul>

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