1. Foreword

Valid from: 15.08.2025

- Read this document carefully before using the product.
- Follow carefully the warnings and instructions for use to avoid injuries and product damage.
- Medical personnel should instruct the lay user in the proper and safe use of the product.
- Contact the manufacturer if you have any questions about the product (e.g., commissioning, use, maintenance, unexpected operation or incidents). You will find the contact details on the back.
- Keep this document in a safe place.

These instructions for use provide you with important information on the use, adjustment and handling of the System. **Please notice that in addition to these Instructions for use, there are several explanation videos available. See https://macu4.com/en/application-explorer.**

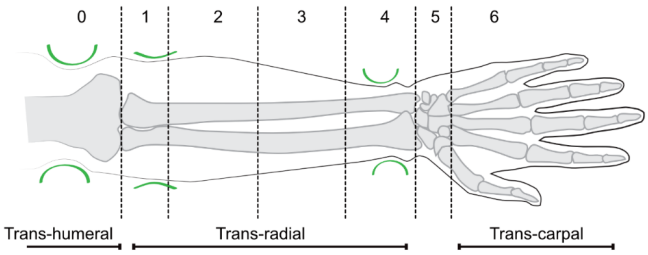
2. Use

Intended Use
The Explorer Modules are intended to be used as passive functional hands that serve as accessories to a custom-made or patient matched socket prosthesis, which is intended for the prosthetic replacement of the forearm.

Product description
The Modules are accessories to the Explorer Socket and are to be configured with a spacer, depending on the indication and the difference in length between the healthy arm and the arm stump.
The Explorer Ring is used to make it easier to position the Explorer Module used in the desired orientation.
The Explorer Ring is used together with any Module from the Explorer System that serves as an accessory of a medical device.

Overview on Modules and additional accessories:
- BALL Module: Support for certain ball sports, e.g., to pick up a ball from the ground, to hold and/or throw a ball.
- BIKE Module: Support for cycling on public paths and roads, e.g., to maintain balance while cycling (for users who can cycle without a prosthesis).
- HOLD & PINCH Module: Support for various activities with flat or cylindrical objects, e.g. playing cards, credit cards, paper, pens, cutlery, etc.
- SWIM Module: Support for specific swimming styles and strokes.
- TWIN Module: Support for various activities with a bar or bars.
- RING EXP: To be used with the Explorer Socket
- RING STD: To be used with a prosthetic socket with flat distal end

Indication
The Explorer Modules can be used for unilateral amputees from amputation height transradially or with dysmelia in forearm fittings (according to ISO 8548-2:2020) as well as for categories 2 to 5, as shown in the diagram below.



The system is suitable for persons 2 years and older. The Pinch module is suitable for persons 4 years and older.

Contraindications

- The Explorer System is not indicated for individuals with bilateral forearm deficits.
- The Explorer System is not indicated for individuals who have musculoskeletal limitations (e.g., stiffness in the shoulder joint).
- The system may only be used by users who are physically and mentally fit to operate the system properly. If you are unsure whether the physical and/or mental fitness is sufficient, we recommend an individual assessment by the specialist (e.g. doctor, therapist, prosthetist).

Combination possibilities

The Explorer Modules have been tested for combination possibilities with the Explorer socket. See chapter 10 for more information on the load-bearing capacity of the Modules.
For other combination possibilities, the specialist must check on his own responsibility whether the combination with the Explorer Modules is possible.

CAUTION

3. Warnings

FAILURE TO HEED THESE WARNINGS OR TO FOLLOW THE INSTRUCTIONS FOR USE COULD RESULT IN MALFUNCTION OF THE DEVICE OR PHYSICAL INJURY. IN THE EVENT OF INJURY, SEEK MEDICAL ATTENTION PROMPLY.

Operating conditions

Please note that the system is intended exclusively as a medical aid. It is not suitable as a tool and must not be used for other purposes.
The system was specifically developed for everyday, sports, and leisure activities involving low to moderate physical stress. The system must not be used for exceptional activities. Such exceptional activities include, for example, sports with excessive coupling and/or impact loads (push-ups, downhill or mountain biking, etc.) or extreme sports (free climbing, paragliding, etc.).
Furthermore, the system should not be used for operating motor vehicles, heavy machinery (e.g., construction equipment), industrial machines, motor-driven work equipment, or devices with an increased risk of injury—including, but not limited to, firearms, chainsaws, or hedge trimmers.
Always avoid direct contact between the product materials and food. Do not put the product in your mouth.

Notes on unpacking the supplied components

Only open the packaging at the indicated locations with care so that the components inside are not damaged.

General Information

Carefully inspect your product components before use to ensure that no component is damaged. Always contact support@macu4.com and do not use the component if you suspect or believe, for example, that:

- a component is damaged,
- a component is not suitable for a specific activity,
- a module cannot be easily connected to the socket,
- a module unintentionally detaches from the socket.

Be sure to watch the instruction video for the component you intend to use. Incorrect use may lead to discomfort, malfunction or injury to person or property. If you do not find your activity in the provided instruction videos, please contact support@macu4.com or the professional who provided you with the system for instructions before starting the activity.

Notes on using the Modules – General

Do not overload the modules. Always clean the modules after each use. Remove visible dirt particles so that modules with flexible modes are not restricted in their function.
Do not use any module for handling objects that are sharp or could cause damage in the event of loss of control (e.g., razors, drills, knives, etc.).
Do not use any module if the diameter of the object is too large (see the specifications for each module). If the diameter of an object is too small, you can increase it slightly by wrapping a soft material around the

area where you want to attach the module to the object, for example, when using the holding module to hold a fork.
Before using a module, check whether it is compatible with the handle (e.g., crutch handle, bicycle handle, etc.) or the object (e.g., fork, glass, etc.), whether the module is firmly attached to the handle or object, and whether you have chosen the correct alignment of the module on the object/handle.

Notes on using the Explorer RING together with a Module
Always use the Explorer RING EXP together with the Explorer Modules when you use the Modules together with the Explorer socket. The function of the Explorer RING is to make it easier for you to bring and secure a Module into the desired orientation.

Notes on Modules with and without a spacer
A Module is delivered to you in assembled condition. Do not disassembled a Module independently! This also applies to Modules that are equipped with a spacer, which is an integral part of the Module. Do not disassemble the spacer. Be sure that you do not alter Modules (e.g., by removing product components).

Notes on coupling a Module to the socket
Be sure that you always couple a Module completely to the socket.

Notes on disconnecting a Module from the socket
Always disconnect a Module completely from the socket.

Notes on the use of the BIKE
BE SURE THAT THE 'BIKE' MODULE MAINTAINS A SECURE GRIP ON THE CONNECTOR (E.G. HANDLEBAR) PRIOR TO USING IT, SO THAT IT DOES NOT DETACH UNINTENTIONALLY DURING NORMAL OPERATION.
ALWAYS MAKE SURE THAT THE CONNECTION IS NOT EXCESSIVELY TIGHT. IF THE CONNECTION IS TOO TIGHT, THE 'BIKE MODULE' MAY NOT RELEASE QUICKLY ENOUGH FROM, FOR EXAMPLE, THE HANDLEBAR IN CASE OF EMERGENCY SITUATIONS, SUCH AS IF THE USER FAILS FROM THE BICYCLE.
THE 'BIKE SLIDER' (SEE CHAPTER 5.2) IS DESIGNED TO SECURE THE ROTATIONAL FUNCTION OF THE 'BIKE MODULE'. PLEASE NOTE THAT THE 'BIKE SLIDER' MAY LOOSEN WHEN RIDING OVER ROUGH OR UNEVEN GROUNDS. WHEN IT COMES LOOSE, IT MAY LEAD TO DISCOMFORT AND UNCONTROLLED MOVEMENTS.

Notes on HOLD Module
Be sure that the lever of the ball joint is tightened and that the Velcro strap is correctly tightened to hold the object sufficiently and not come loose unintentionally. Do not overtighten the eccentric cam, as this may damage the material.

Notes on the use of the PINCH
Be sure that the lever of the ball joint is tightened and that the Module fingers clamp the object well enough and do not come loose unintentionally.

Notes on the use of the TWIN
BE SURE THAT THE TWIN MODULE MAINTAINS A SECURE GRIP ON COMPONENTS (E.G. ROD) PRIOR TO USING IT, SO THAT IT DOES NOT DETACH UNINTENTIONALLY DURING NORMAL OPERATION.
ALWAYS MAKE SURE THAT THE GRIP IS NOT EXCESSIVELY TIGHT. IF THE GRIP IS TOO TIGHT, THE TWIN MAY NOT RELEASE QUICKLY ENOUGH FROM, FOR EXAMPLE, THE HANDLEBAR IN CASE OF EMERGENCY SITUATIONS, SUCH AS IF THE USER NEEDS TO QUICKLY DECONNECT FROM THE ROD.
THE TWIN BUTTON (SEE CHAPTER 5.2) IS DESIGNED TO SECURE THE SLIDING FUNCTION OF THE TWIN. PLEASE NOTE THAT THE LOCKING FUNCTION MAY WEAR FAST WHEN USING EXCESSIVELY. IT MAY LEAD TO UNINTENTIONALLY LOCKING OR UNLOCKING OF THE SLIDING FUNCTION.

Notes on the care of the Modules
Be sure that you always clean the Modules after use. Remove visible dirt particles so that Modules with flexible modes are not restricted in their function.

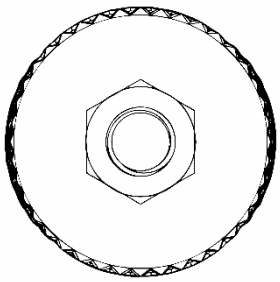
Notes on ambient conditions
Always store or use the products in accordance with the information on temperature, UV radiation and humidity given in the Chapter 12. The material properties of the components may change significantly when used and stored at higher or lower temperatures than recommended, as stated in this document, and lead to discomfort, malfunction, or injury to person or property.

Notes on storage conditions
Always make sure that the components are well protected during transportation and permanent storage. Do not put weight on a component. It could deform or damage a component. In case of deformation or damage, the component can no longer be used.

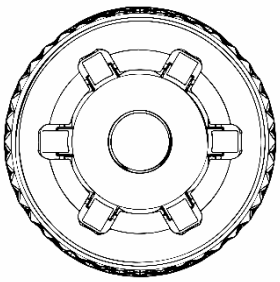
NOTES ON MAGNETS IN THE COMPONENTS
THE EXPLORER RING CONTAINS MAGNETS (SEE CHAPTER 12), KEEP THE COMPONENT AT LEAST 15 CM / 6 IN AWAY FROM E.G. PACEMAKERS OR DEFIBRILLATORS.

4. Use of the Ring

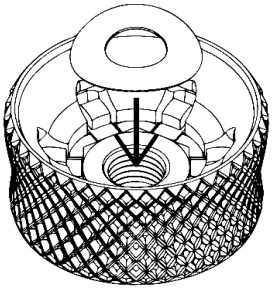
Before using the Explorer Ring (EXP / STD) for the first time, familiarise yourself with the instructions for use. The chapter "Use of the Modules" explains how to use the RING together with the Explorer Modules.



RING – Top View. This side of the RING faces towards the Module (distal side).



RING – Bottom View. This side of the RING faces towards the Socket (proximal side).



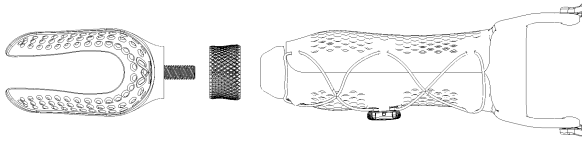
Metal washer.
It is connected to the RING via magnets. If the washer gets lost, use the replacement part.

5. Use of the Modules

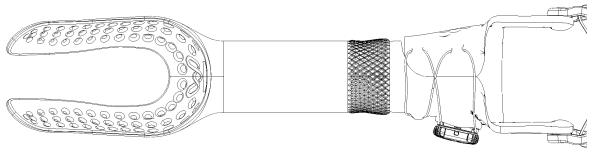
Before using the Explorer Modules for the first time, familiarise yourself with the instructions for use. The following chapters explain how to use the Modules together with the Explorer socket.

5.1. BALL Module

Explorer BALL Module and socket

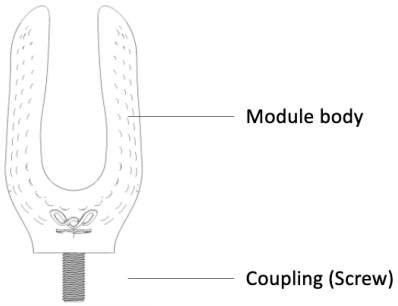


Module without spacer

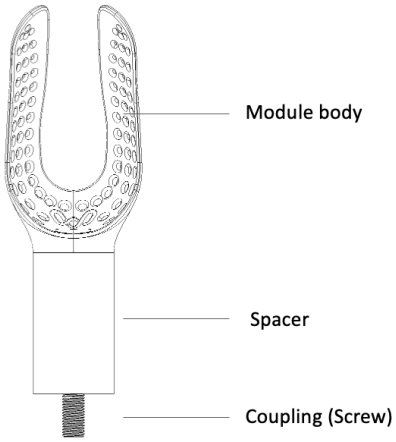


Module with spacer (here with medium spacer length)

Module design

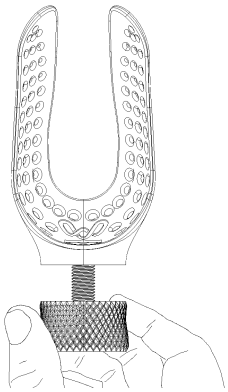


Module design without spacer

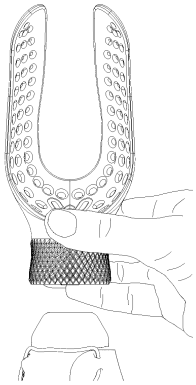


Module design with spacer

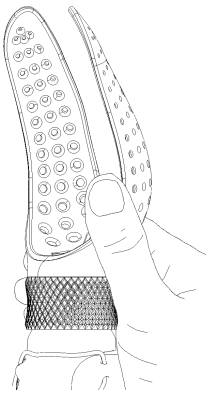
Couple the Module to the socket



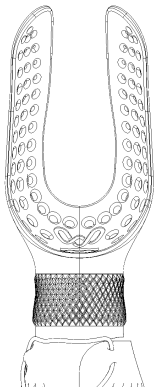
Screw the socket ring onto the Module as far as possible, but do not tighten it.



Insert the screw end of the Module into the socket.

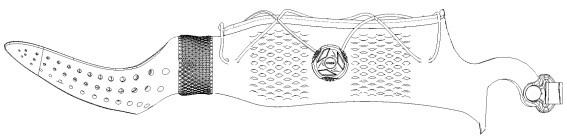


Screw the Module tight with the socket ring until you have achieved the desired alignment.



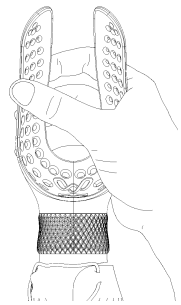
Tighten the ring to secure the position.

Move the Module to the desired orientation



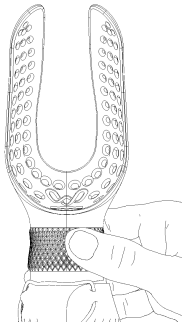
The socket ring system offers the possibility to freely select the orientation of the BALL Module. The standard alignment can be seen in the illustration.
For different activities, the alignment of the Module with the socket can be adjusted, deviating from the standard alignment.

Final control

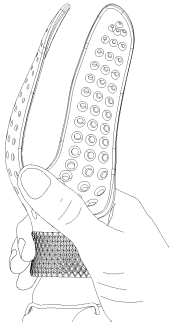


- Check the Module before you start any activity.
- Be sure it is well positioned and secured by trying to move the Module gently.
- Note that the Module should remain firmly in position.
- If the Module is not tight and can be moved, please tighten the socket ring again.
- Be careful not to unlock the system during the check.

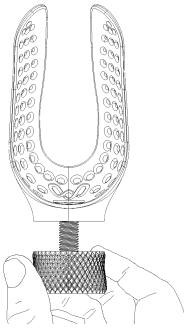
Disconnect the Module from the socket



Loosen the socket ring by turning it clockwise as seen from the socket.



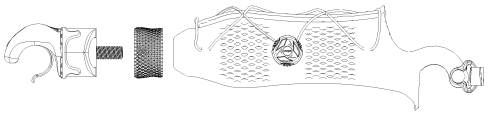
Unscrew the Module with the socket ring from the socket.



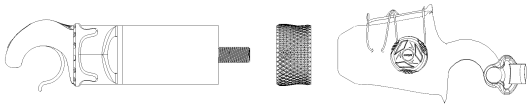
Finally, unscrew the socket ring from the Module by turning it to the left.

5.2. BIKE Module

Explorer BIKE Module and socket

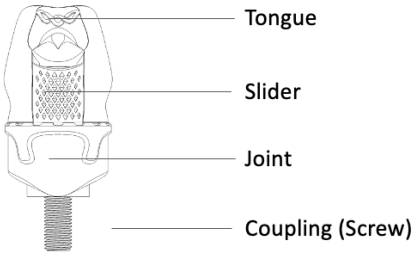


Module without spacer

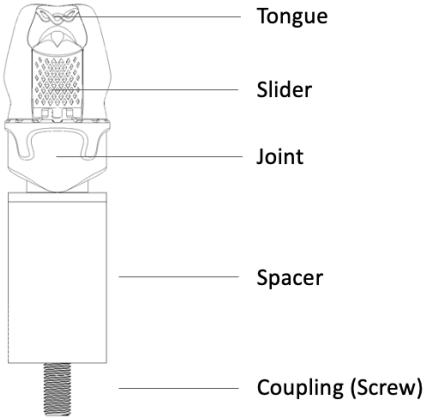


Module with spacer (here with medium spacer length)

Module design

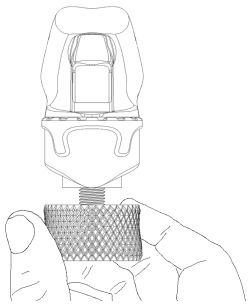


Module design without spacer

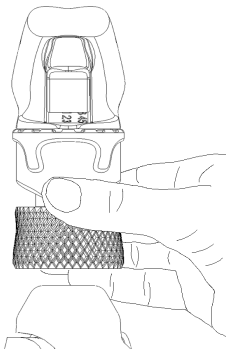


Module design with spacer

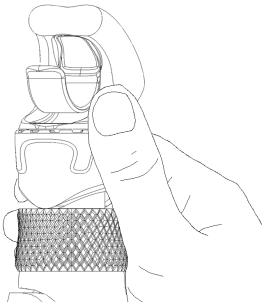
Couple the Module to the socket



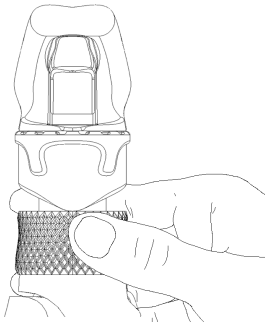
Screw the socket ring onto the Module as far as possible, but do not tighten it.



Insert the screw end of the Module into the socket.

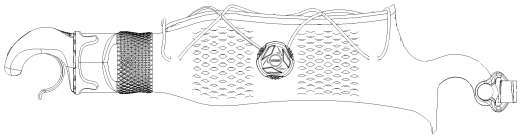


Screw the Module tight with the socket ring until you have achieved the desired alignment.



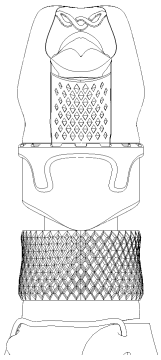
Tighten the ring to secure the position.

Move the Module to the desired orientation

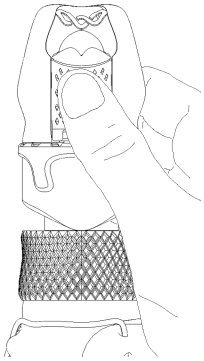


The socket ring system offers the option of freely selecting the orientation of the BIKE Module. The standard alignment can be seen in the illustration. For different activities, the alignment of the Module with the socket can be adjusted, deviating from the standard alignment.

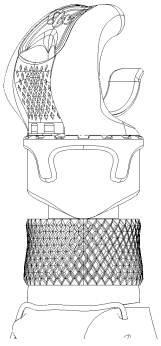
Use of the slider



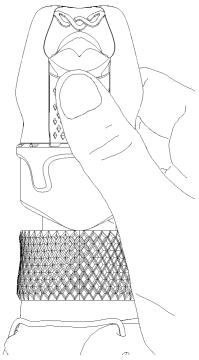
Use the slider to attach the Module to vertically aligned handlebars



Unlock the Module by sliding the slider towards the tongue.

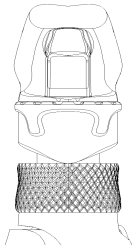


Turn the Module to the right (on the right arm) or to the left (on the left arm) until the desired alignment is reached.



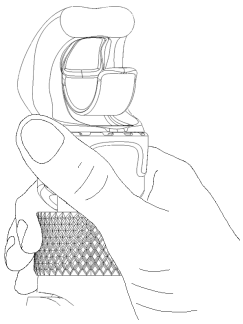
Block the Module by pushing the slider towards the socket.

Final control

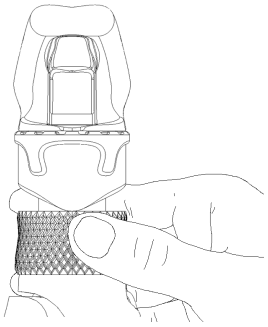


- Check the Module before you start any activity.
- Be sure it is well positioned and secured by trying to move the Module gently.
- Note that the Module should remain firmly in position.
- If the Module is not tight and can be moved, please tighten the socket ring again.
- Be careful not to unlock the system during the check.

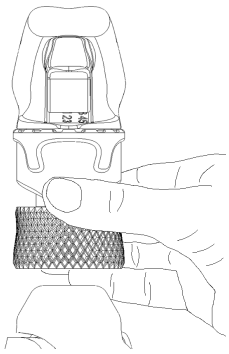
Disconnect the Module from the socket



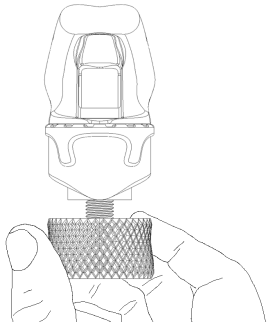
Be sure that the slider blocks the Module.



Loosen the stem ring by turning it clockwise as seen from the stem.

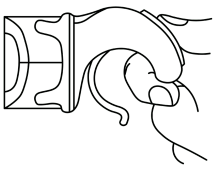


Unscrew the Module with the socket ring from the socket.

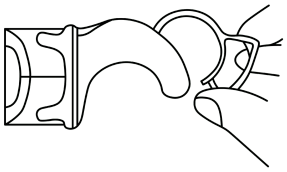


Finally, unscrew the socket ring from the Module by turning it to the left.

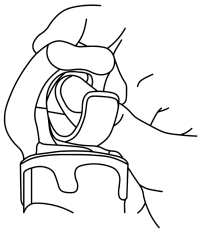
Replacement of Module Tongue



Release the Module tongue from the inside by applying pressure.



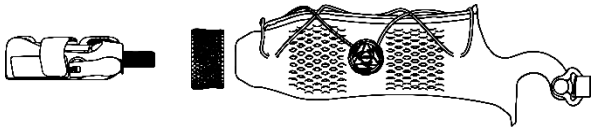
Remove the Module tongue from its anchorage.

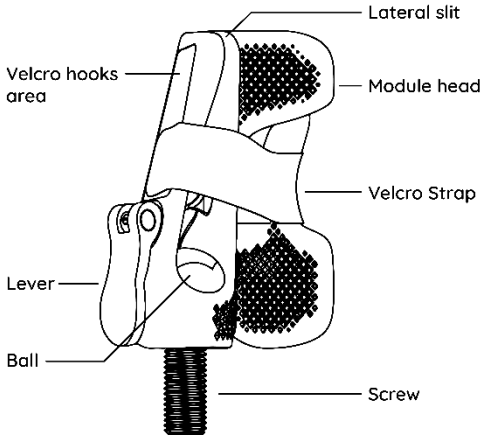


Insert the other Module tongue and click it into place by applying slight pressure. The tongues STD and LRG are always supplied.

5.3. HOLD Module

Explorer HOLD Module and socket

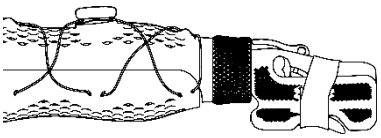




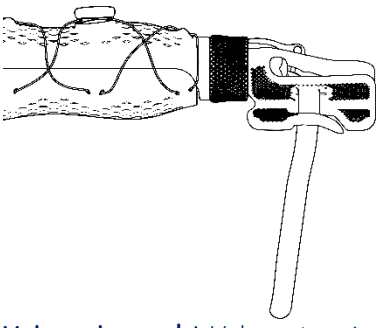
(Module without spacer)

Coupling the Module to the socket:
See chapter 5.4

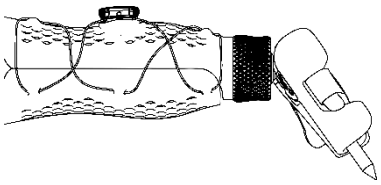
Desired orientation
See chapter 5.4. The Hold Module is provided as one single component with a removable module head element.



Flexible module head | The module head is a clamp-like element and is made from a flexible material to better adapt to objects.



Velcro closure | A Velcro strap is attached to the module head through a slot in the head. The strap can be wrapped around the module head and fixed in place.

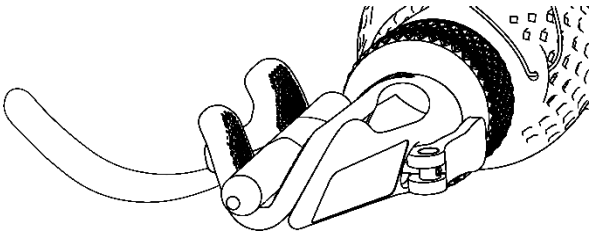


Adaptable orientation | You can turn the module head in various directions to find the desired orientation for your activity.

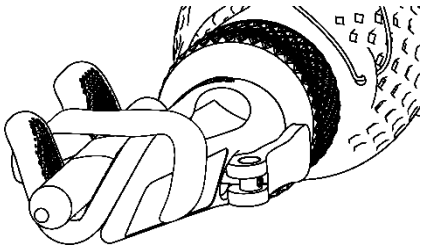
Fixation of objects in the module head

Always ensure that objects or handles are properly positioned and secured by lifting them and shaking them gently. Please consult the macu4 website, where you will find specific explanation videos under the section 'Application'.

Kitchen accessories and cylindrical object | Insert the Kitchen Aid object into the Hold Module head and tighten the Velcro strap to secure its position.

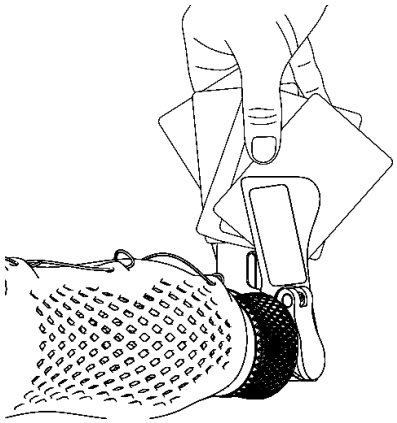


Place the object between the module head and the Velcro strap.



Tighten the Velcro strap and reach the Velcro hooks area to secure it.

Flat objects | Insert the flat object into the lateral slit that you find on the Hold Module head.



You can insert the objects as illustrated.

Note that if you only use small objects, you may want to shorten the Velcro strap to increase usability. You can simply shorten it with scissors, but make the length sufficient for your needs before proceeding. Some activities may not be any more doable with a shortened strap.

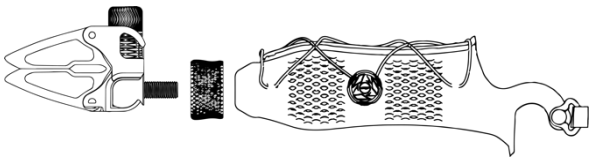
Correct the alignment of the Module
To bring the Module into the desired position, loosen the lever of the ball joint of the Module. Rotate the Module with your hand to reach the desired orientation. When the desired orientation is reached, tighten the lever (see chapter 5.4).

Adjusting the rigidity of the ball joint
By opening the lever and turning it anticlockwise, you can reduce the rigidity of the ball joint. By opening the lever and turning it clockwise, you can increase the rigidity of the ball joint. If the alignment changes unintentionally even though the ball joint is locked, increase the rigidity of the ball joint. If closing the lever is too difficult, reduce the rigidity of the ball joint by rotating the lever anticlockwise (see chapter 5.4).

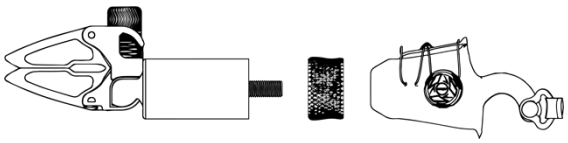
Disconnect the Module from the socket
See chapter 5.4.

5.4. PINCH Module

Explorer PINCH Module and socket

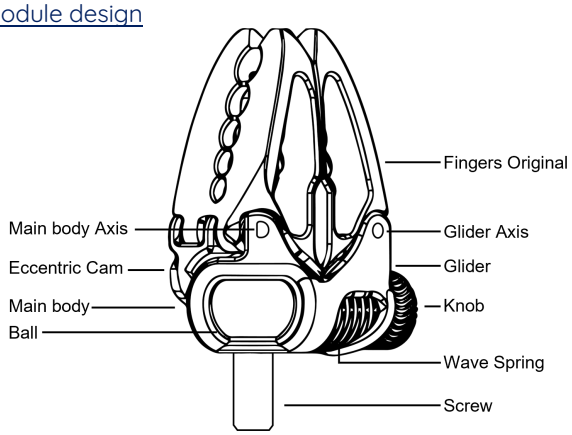


Module without spacer

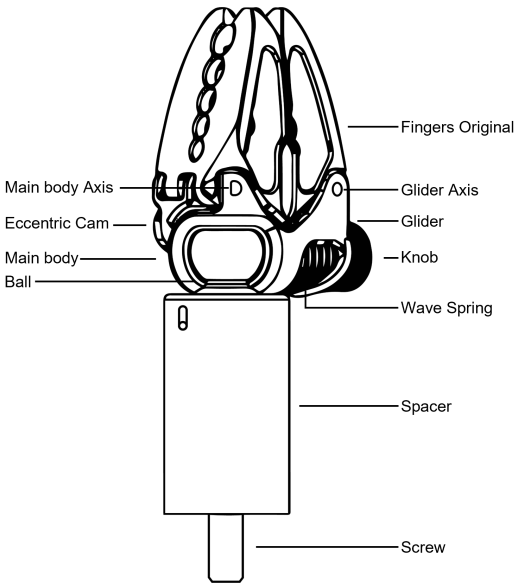


Module with spacer
(here with medium spacer length)

Module design

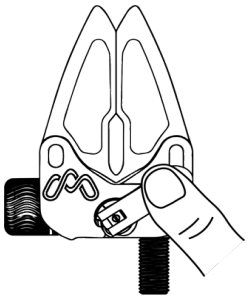


Module structure without spacer

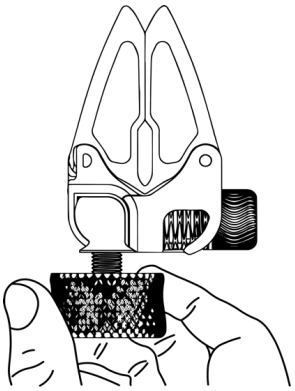


Module structure with spacer

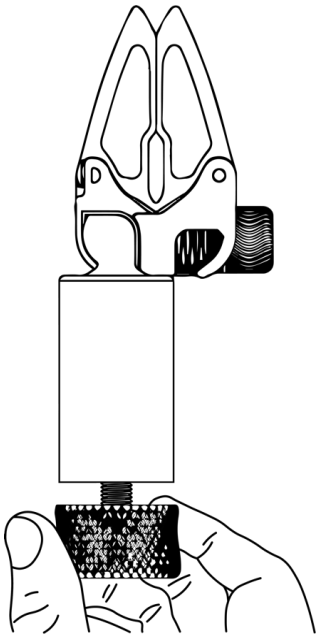
Coupling the Module to the socket



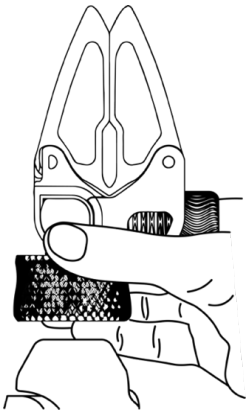
Note: Before coupling the Module to the socket, be sure that the ball joint is locked with the lever.



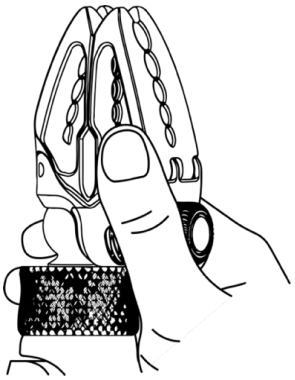
Without spacer: Screw the socket ring onto the Module as far as possible, but do not tighten it.



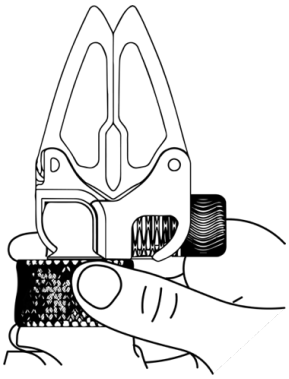
With spacer: Screw the socket ring onto the Module as far as possible, but do not tighten it.



Insert the screw end of the Module into the socket.



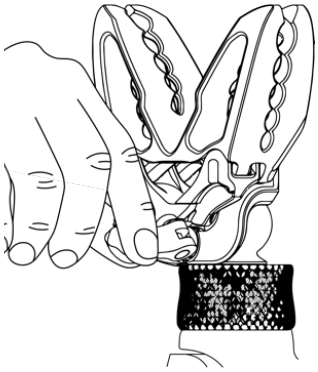
Screw the Module together with the socket ring into the socket as far as it will go.



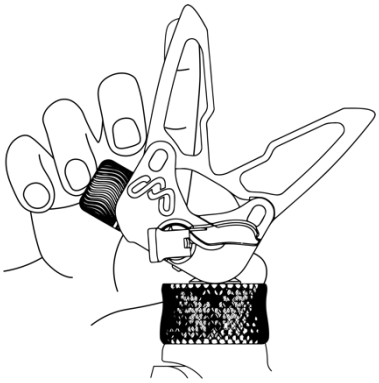
Tighten the socket ring to secure the position.

Desired orientation

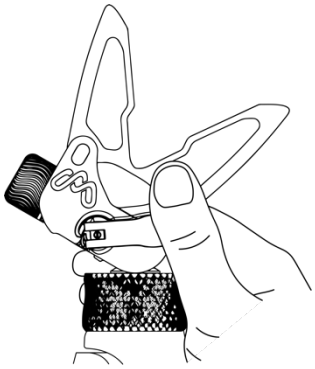
When the socket ring is tightened, and the ball joint of the Module is locked, it creates a rigid connection with the socket. You can adjust the module orientation whether the fingers are open or closed.



To bring the Module into the desired position, loosen the lever of the ball joint of the Module.

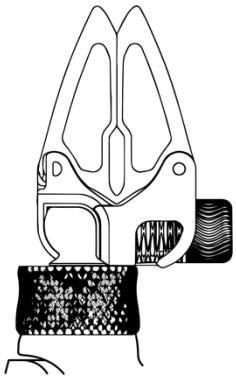


Rotate the Module with your hand to reach the desired orientation.



When the desired orientation is reached, tighten the lever.

Final control

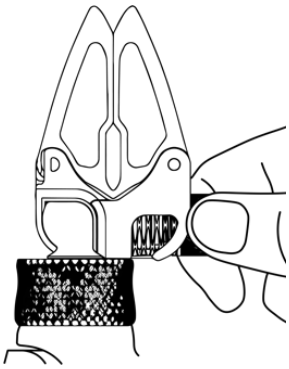


- Check the Module before starting any activity.
- Be sure it is well positioned and secured by trying to move the Module gently.
- Note that the Module should remain firmly in position.
- If the Module is not tight and can be moved, please retighten the socket ring and the lever (see "Adjusting the rigidity of the ball joint" on the next pages).
- Be careful not to unlock the system during the check.

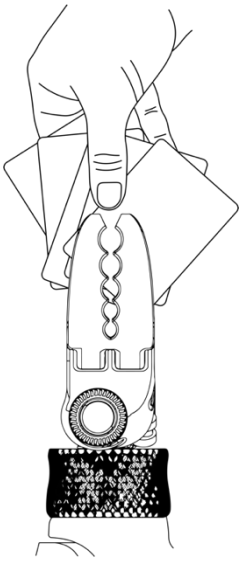
Fixation of objects in the Module body

- To open the Module, move the two tips of the Module fingers apart with your hand.
- Place a flat object (e.g. playing cards) or a medium-sized cylindrical object between the Module fingers and close the Module fingers with your hand.
- Depending on the geometry of the object, it can also be pushed between the closed Module fingers.
- To remove the item, you can either pull it until it is free or you can open the Module fingers by hand.
- Small-sized cylindrical object objects with different circumferences can also be pressed down into the slot with the round holes from above until they engage.

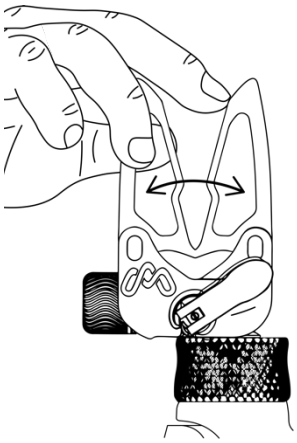
Use Module with a flat or medium-sized cylindrical object



Close the Module fingers and adjust the gripping force with the knob.



Carefully slide the cards between the Module fingers.

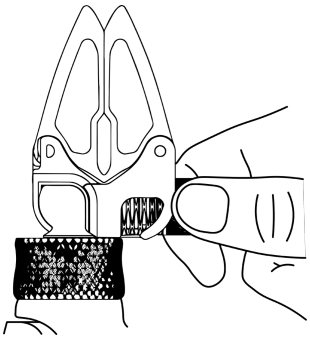


Alternatively, you can open the Module fingers first by moving the tips of the Module fingers apart.

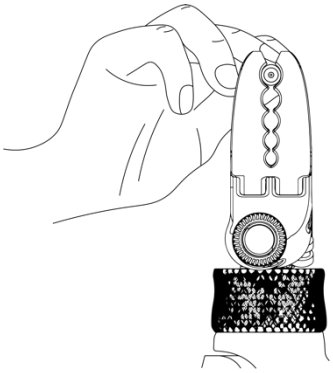
Then position the cards between the Module fingers and close them by squeezing them with your hand.

Note: If the Module fingers cannot be closed (pressed against each other), adjust the gripping force of the Module fingers with the knob until it is satisfying.

Use Module with a small-sized cylindrical object



Close the Module fingers and adjust the gripping force with the knob.
In this case, no firm grip is required.

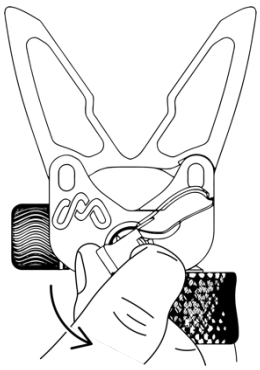


Using your hand, press the pen down from above between the holes on the side of the Module fingers until the pen clicks into place.

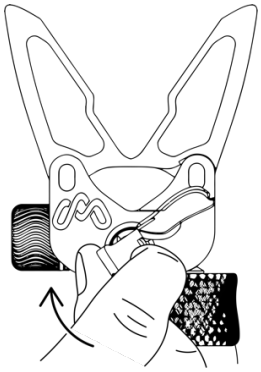
Note: Do not push the cylindrical object too far. It could cause irreversible damage to the Module fingers. The maximum diameter accepted, as small-sized, with this approach is provided in the" Technical data". You can also hold larger cylindrical objects by following the same steps as for flat objects. The best approach varies from object to object and is left to your own judgement.

Correct the alignment of the Module
Follow the steps mentioned under "Move the Module to the desired orientation".

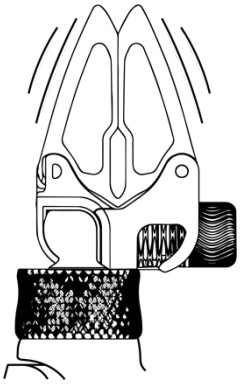
Adjusting the rigidity of the ball joint



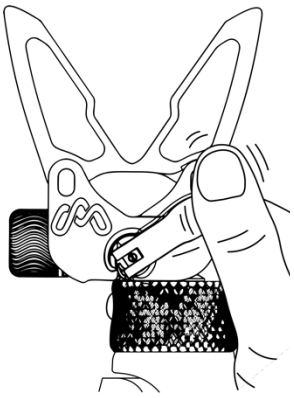
By opening the lever and turning it anticlockwise, you can reduce the rigidity of the ball joint.



By opening the lever and turning it clockwise, you can increase the rigidity of the ball joint.

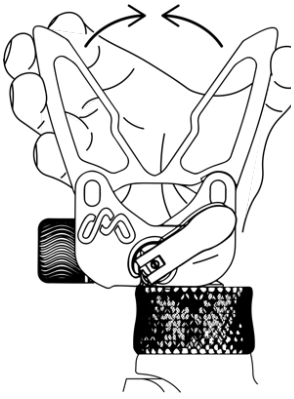


If the alignment changes unintentionally, even though the ball joint is locked, increase the rigidity of the ball joint.

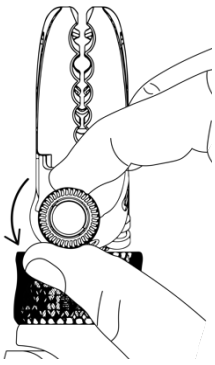


If closing the lever is too difficult, reduce the rigidity of the ball joint by rotating the lever anticlockwise.

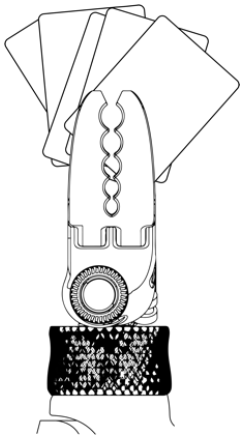
Adjustment of the gripping force



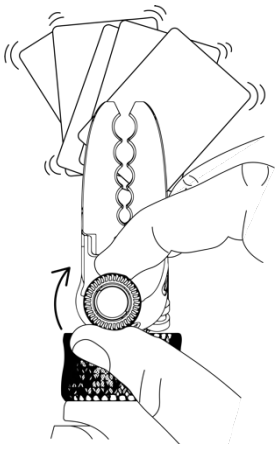
Close the Module fingers with your hand.



If closing is too difficult, release the tension in the Module fingers by turning the knob anticlockwise.

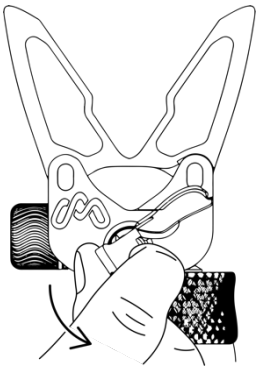


Try to grasp a flat object (e.g. playing cards) with the fingers.



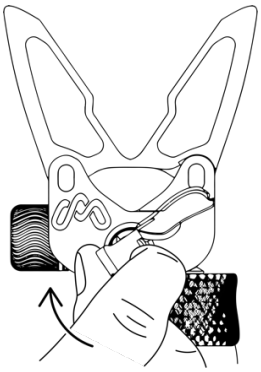
If the gripping force is not sufficient, apply more tension to the Module fingers by turning the knob clockwise.

Use the Main Body of the PINCH Module with the Pinch Ball Spacer* accessory



Open the lever and turn it anticlockwise to reduce the rigidity of the Ball Joint. Open the Module Fingers.

Now you can disconnect the Main Body from the Pinch Ball which serves as “ball joint”.

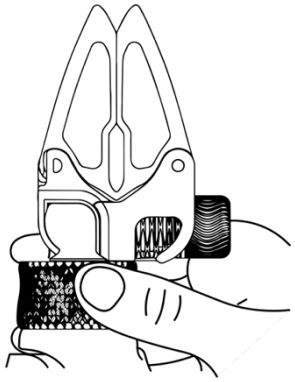


Attach the Main Body to the Pinch Ball Spacer to use the Module with a Spacer.

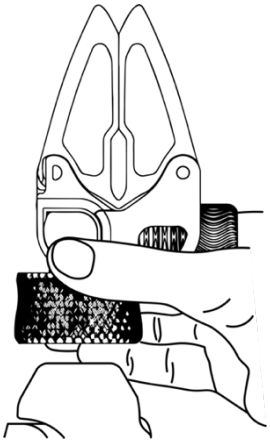
Turn the lever clockwise to increase the rigidity of the ball joint.

* Can be purchased as a separate accessory to the pinch module. The PINCH Module is always supplied without length compensation (spacer) and mounted on a Pinch Ball.

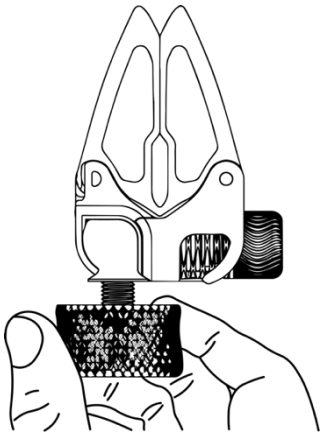
Disconnect the Module from the socket



Loosen the socket ring by turning it clockwise as seen from the socket.



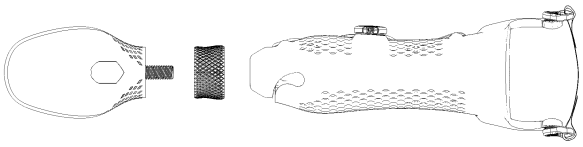
Unscrew the Module with the socket ring from the socket.



Finally, unscrew the socket ring from the Module by turning it to the left.

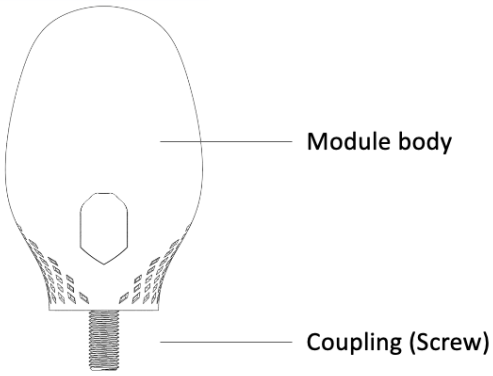
5.5. SWIM Module

Explorer SWIM Module and socket



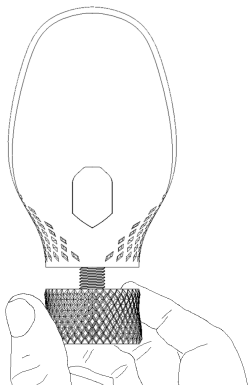
Module without spacer

Module design

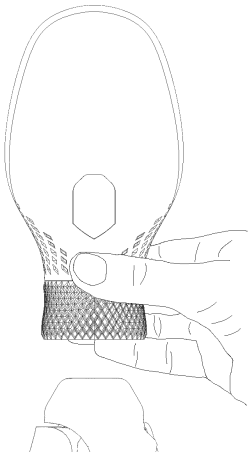


Module design without spacer

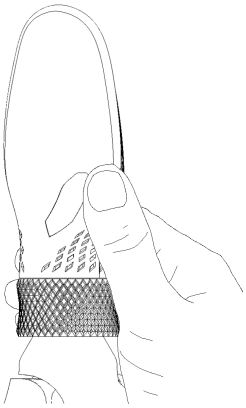
Couple the Module to the socket



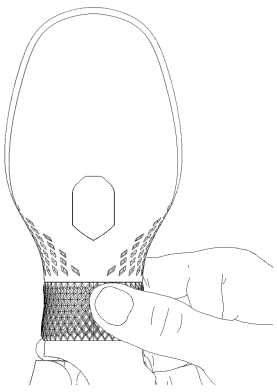
Screw the socket ring onto the Module as far as possible, but do not tighten it.



Insert the screw end of the Module into the socket.

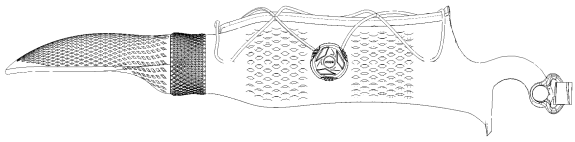


Screw the Module tight with the socket ring until you have achieved the desired alignment.



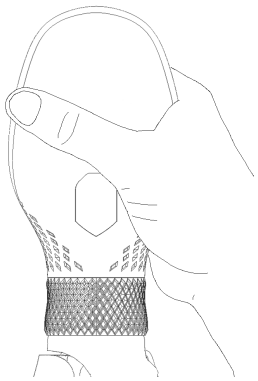
Tighten the ring to secure the position.

Move the Module to the desired orientation



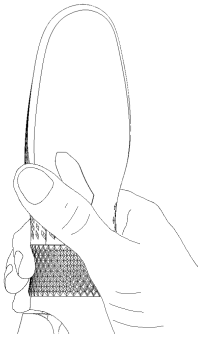
The socket ring system offers the possibility to freely select the orientation of the SWIM Module. The standard alignment can be seen in the illustration.
For different activities, the alignment of the Module with the socket can be adjusted, deviating from the standard alignment.

Final control

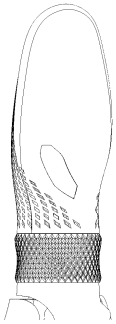


- Check the Module before you start any activity.
- Be sure it is well positioned and secured by trying to move the Module gently.
- Note that the Module should remain firmly in position.
- If the Module is not tight and can be moved, please tighten the socket ring again.
- Be careful not to unlock the system during the check.

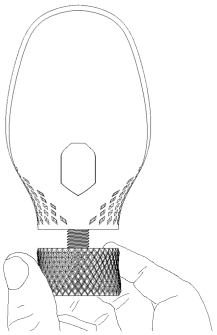
Disconnect the Module from the socket



Loosen the socket ring by turning it clockwise as seen from the socket.



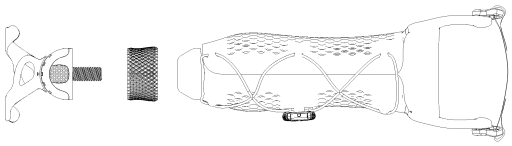
Unscrew the Module with the socket ring from the socket.



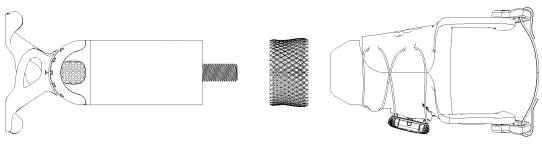
Finally, unscrew the socket ring from the Module by turning it to the left.

5.6. TWIN Module

Explorer TWIN Module and socket

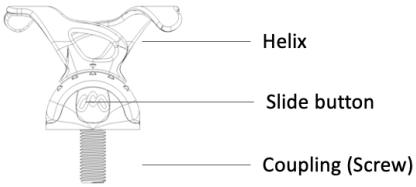


Module without spacer

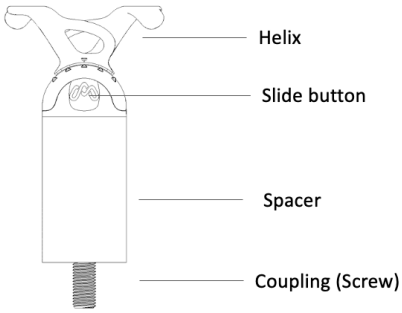


Module with spacer (here with medium spacer length)

Module design

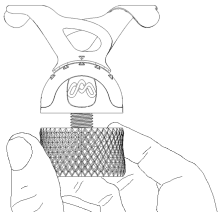


Module design without spacer

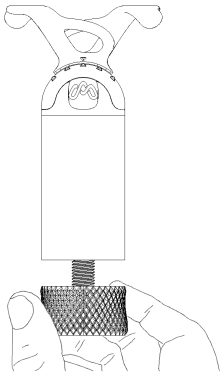


Module design with spacer

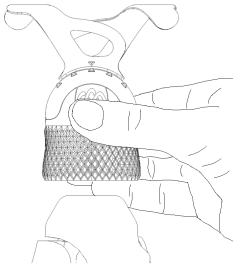
Couple the Module to the socket



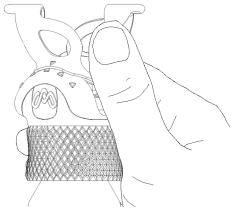
Without spacer: Screw the socket ring onto the Module as far as possible, but do not tighten it.



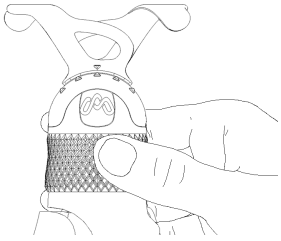
With spacer: Screw the socket ring onto the Module as far as possible, but do not tighten it.



Insert the screw end of the Module into the socket.

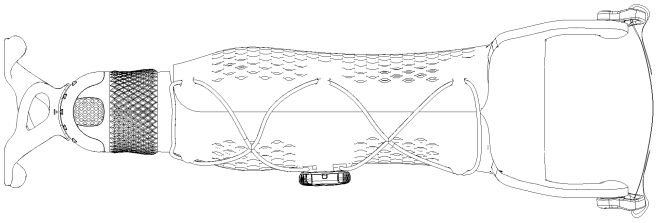


Screw the Module tight with the socket ring until you have achieved the desired alignment.



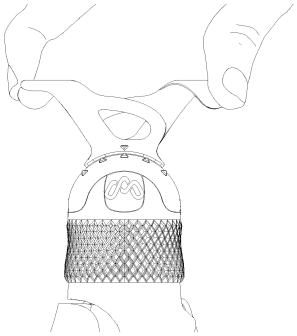
Tighten the ring to secure the position.

Move the Module to the desired orientation



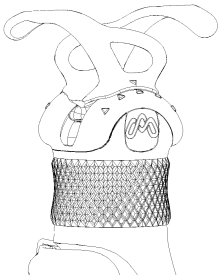
The socket ring system offers the possibility of freely selecting the orientation of the TWIN Module.
The standard alignment can be seen in the illustration.
For different activities, the alignment of the Module with the socket can be adjusted, deviating from the standard alignment.

Final control

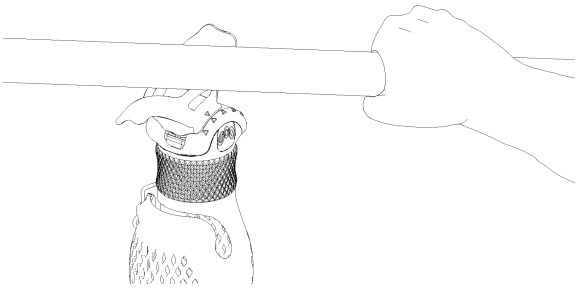


- Check the Module before you start any activity.
- Be sure it is well positioned and secured by trying to move the Module gently.
- Note that the Module should remain firmly in position.
- If the Module is not tight and can be moved, please tighten the socket ring again.
- Be careful not to unlock the system during the check.

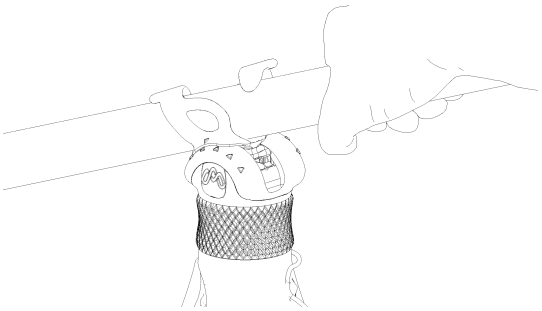
Click Module to a rod



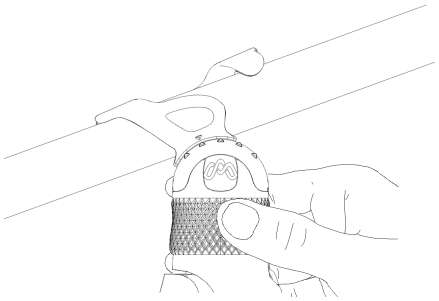
Block the Module using the sliding knob.



Position the rod across the Module.



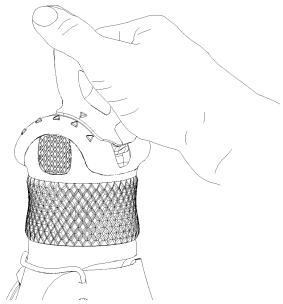
Press the Module onto the rod with the help of your hand so that the helix grippers enclose the rod.



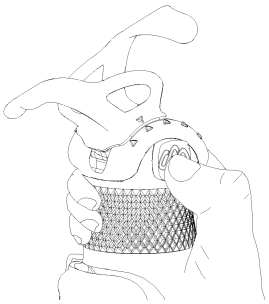
If necessary, correct the alignment of the Module using the socket ring.

Use of the Module joint

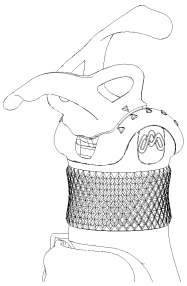
Press the slide button to unlock the Module.



Set the desired orientation of the Module.

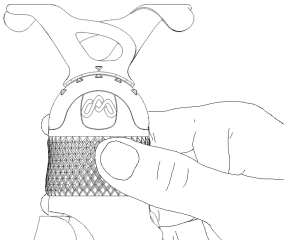


Lock the system by pushing the sliding knob back to its original position.



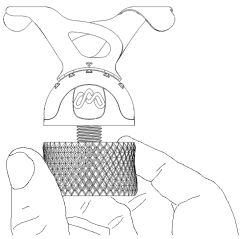
End position Note: for some activities, the Module can also remain unlocked.

Disconnect the Module from the socket



Loosen the socket ring by turning it clockwise as seen from the socket.

Unscrew the Module with the socket ring from the socket.



Finally, unscrew the socket ring from the Module by turning it to the left.

6. Storage of the Products

To ensure user safety and maintain the functionality of the product, please observe the following instructions:

- Store the product after use in a clean, dry, and secure place - out of the reach of children, unless used under direct supervision.
- Keep the product away from areas where it could be mixed with other objects or handled improperly.
- Protect the product from dust, dirt, and mechanical impacts.
- Avoid storing the product in places with strong temperature fluctuations or high humidity.

7. Care of the Products

- Removing dirt particles: Use a soft-bristled brush to remove dirt from the spaces between the product components. Do not use water for this step.
- Clean surfaces: Wipe the product surfaces with a damp, non-scratching cloth. Use only cold or lukewarm water.
- Disinfection (if necessary): If disinfection is required, use a material specifically suitable for medical devices (risk class I, plastic materials).
- Important: Never place the macu4 medical device in a cleaning machine or any other appliance (washing machine, dishwasher, microwave, steamer, or similar).

8. Adverse event reporting

Any serious incident related to the device should be reported to the manufacturer and the competent authority of the member state where the user and/or patient is established. Please use the form Please use the Product Experience Report (PER) https://25462115.fs1.hubspotusercontent-eu1.net/hubfs/25462115/macu4_GmbH_Explorer/Product_Experience_Report_EN.pdf and send it to by email to support@macu4.com.

9. Legal notice

Limitation or exclusion of liability
Failure to follow these instructions for use, care, maintenance, handling, storage, etc., of this product, or the use of this product in any component combination other than those approved by macu4 GmbH (hereinafter referred to as "Macu") constitutes misuse of the product and invalidates any and all warranties, express or implied, in their entirety as to any consequences of such misuse. In the event of such misuse, Macu disclaims liability for any adverse consequences to the maximum extent allowed by law. Any opening, disassembly, or repair of the products may only be carried out by Macu or with Macu's written permission.

10. Conformity

The product components of the system with the Basic UDI-DI marking

Explorer RING	426242965P01RING7J
Explorer BIKE	426242965P01BIKE3M
Explorer BALL	426242965P01BALL2W
Explorer SWIM	426242965P01SWIM9U
Explorer TWIN	426242965P01TWINA5
Explorer PINCH	426242965P01PINCHFA
Explorer HOLD	426242965P01HOLD5W

meet the general safety and performance requirements according to Regulation (EU)2017/745 for medical devices and the Medical Devices Ordinance (MDR).

Legal manufacturer
macu4 GmbH, Bücklestrasse 3, 78467 Constance, Germany

CE Marking Details
Macu declares that they comply with the relevant European standards for the design, manufacture and supply of orthopedic products. The products of the System meet the requirements of the European Regulation (EU)2017/745 Annex I for medical devices. Based on the classification criteria according to Annex VIII of this regulation, the product has been classified as Class I "Accessories". The declaration of conformity has, therefore, been drawn up by the manufacturer under his sole responsibility in accordance with Annex IV of the Regulation. All products of the system are marked accordingly.

Trademark
All designations mentioned in this document are subject without restriction to the provisions of the applicable trademark law and the rights of the respective owners. All trademarks, trade names, or company names mentioned herein may be registered trademarks and are subject to the rights of their respective owners. The absence of explicit identification of the trademarks used in this document does not imply that a designation is free of third-party rights.

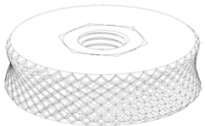
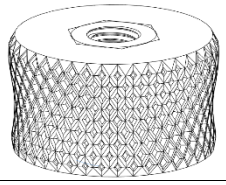
11. Symbols

The table below shows all symbols (according to ISO 15223-1:2021) used on the product and on the label.

CE Mark	
CE	This mark indicates that a manufacturer declares that the product meets all the legal requirements for CE marking and can be sold throughout the EEA.
Instructions for use	
	This symbol indicates that the user must consult the instructions for use.
Manufacturer	
	This symbol indicates the manufacturer of the medical device.
Temperature limit	
	This symbol indicates the temperature limits to which the medical device can be safely exposed.
Date of manufacture	
	This mark indicates when the medical device was manufactured.
Batch designation	
LOT	This mark indicates the manufacturer's batch code so that the batch or lot can be identified.
Catalog number	
REF	This mark indicates the manufacturer's catalogue number so that the item can be identified.
Medical device	
MD	Indicates that the item is a medical device.
Clear device identification	
UDI	Identifies a carrier that contains information for unique device identification.
MR Unsafe	
MR	This symbol indicates a medical device or other item which is known to pose hazards in all magnetic resonance (MR) environments and should not be brought into the MRI scanner room.

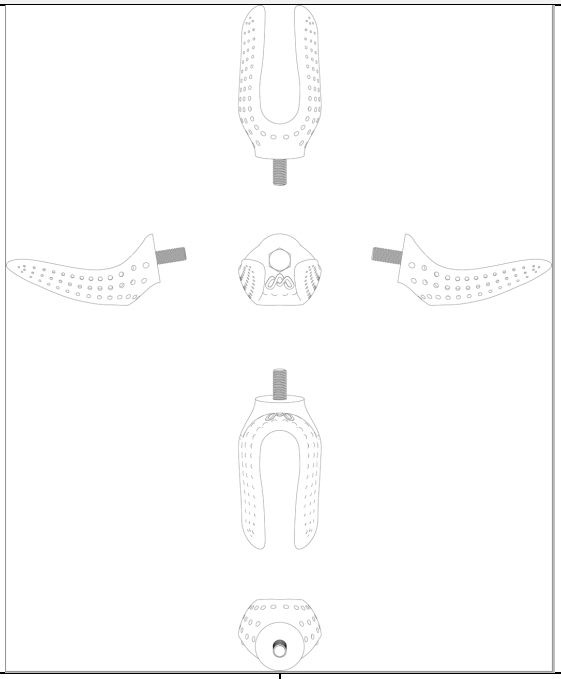
12. Technical data

12.1. RING

General	RING STD	RING EXP
Drawing		
Dimensions	L: 47 mm / 1.85 in B: 46 mm / 1.81 in H: 13 mm / 0.51 in	L: 47 mm / 1.85 in B: 46 mm / 1.81 in H: 26 mm / 1.02 in
Height of the nut	Metric (M12 × 1.5): 10 mm / 0.39 in (fine thread) Inch (1/2"-20): 10 mm / 0.39 in (fine thread)	
Weight	36 g / 1.27 oz	43 g / 1.52 oz
Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Nut: Stainless steel	

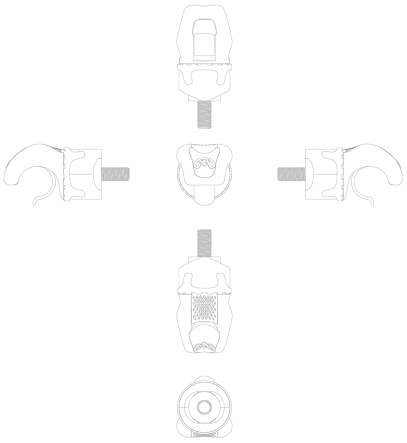
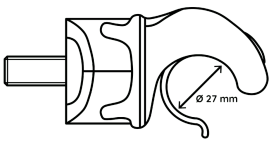
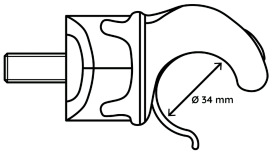
	Magnets: Neodymium–iron–boron (NdFeB), grade 42, Nickel–copper–nickel coating. Dimensions: 5 mm × 5 mm × 5 mm (0.20 in × 0.20 in × 0.20 in), tolerance ±0.1 mm (± 0.004 in)
Lifetime of the Ring	2 years at an average of 120 minutes per day with daily use
Maximum load forces on screw interface	
Power	approx. 250 N / 56.2 lbf when used together with an Explorer module and socket

12.2. BALL Module

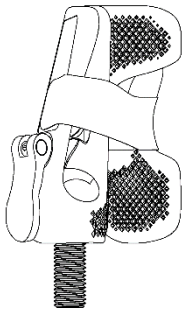
General	
Drawing	
Dimensions size 'Standard'	L: 161 mm / 6.34 in (with screw) L: 134 mm / 5.28 in (without screw) B: 75 mm / 2.95 in T: 60 mm / 2.36 in
Dimensions size 'Small'	L: 131 mm / 5.16 in (with screw) L: 107 mm / 4.21 in (without screw) B: 74 mm / 2.91 in T: 60 mm / 2.36 in
Length of screw (from lower surface of Module)	Screw, Metric (M12 × 1.5): 24 mm / 0.94 in (fine thread) Screw, inch (1/2"-20): 25.75 mm / 1.01 in (fine thread)
Weight	Size 'Standard': 87 g / 3.07 oz Size 'Small': 85 g / 3.00 oz
Alignment of the Module	Module inner side points anteriorly

Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Screw: Stainless steel
Lifetime of the Module	2 years at an average of 120 minutes per day with daily use
Maximum load forces in the palm of the hand	
Weight of objects (e.g. a ball)	0.2 kg / 0.44 lb
Force "throw up" (e.g. tennis ball)	Approximately 15 N / 3.37 lbf
Force "catching" (e.g. tennis ball)	Approximately 15 N / 3.37 lbf
Maximum load forces in the "coupling" of macu4	
Axial tensile force	Approximately 50 N / 11.24 lbf

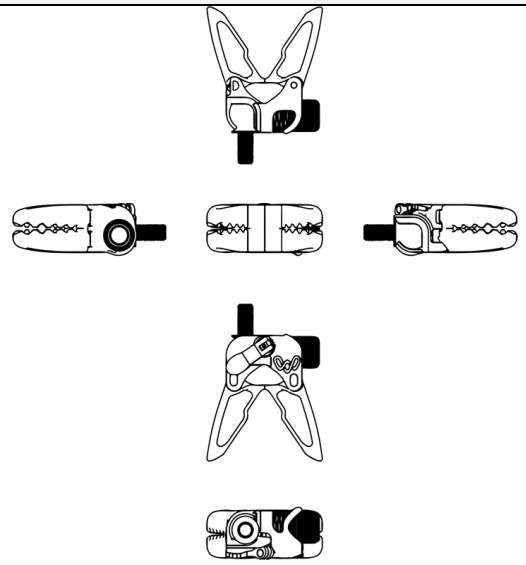
12.3. BIKE Module

General		
Drawing		
Dimensions	L: 108 mm / 4.25 in (with screw) L: 84 mm / 3.31 in (without screw) B: 48 mm / 1.89 in T: 54 mm / 2.13 in	
Supported handlebar circumferences	 Tongue Standard: from 78 mm to 100 mm / 3.07 in to 3.94 in	 Tongue Large: from 100 mm to 113 mm / 3.94 in to 4.45 in
Length of screw (from lower edge of Module)	Screw, Metric (M12 × 1.5): 24 mm / 0.94 in (fine thread) Screw, inch (1/2"-20): 25.75mm / 1.01 in (fine thread)	
Weight (without spacer)	109 g / 3.84 oz	
Abduction of the wrist	25°	
Wrist adduction	25°	
Alignment of the Module	The inside of the Module faces the handlebar grip	
Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Screw: Stainless steel	
Lifetime of the Module	2 years at an average of 120 minutes per day / daily use	
Maximum load forces in the palm of the hand		
Force normal to socket axis (e.g. support on handlebars)	Approximately 55 N / 12.36 lbf	
Maximum load forces in the "coupling" of macu4		
Axial tensile force (e.g. driving uphill)	Approximately 250 N / 56.20 lbf	

12.4. HOLD Module

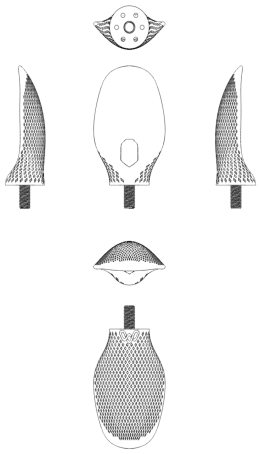
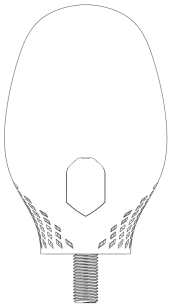
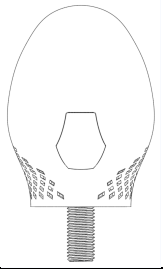
General	
Drawing	
Dimensions	68 × 33 × 115 mm / 2.68 × 1.30 × 4.53 in * *Dimensions may vary depending on the orientation of the Module
Allowed diameters for cylindrical objects	From 10mm to 85 mm / 0.39 in to 3.35 in * *Dimensions may vary depending on the shape and material of the object.
Allowed thickness of flat objects	From 0.3mm to 12mm / 0.01 in to 0.47 in * *Dimensions may vary depending on the shape and material of the object.
Length of screw (from lower edge of Module)	Screw, Metric (M12 × 1.5): 24 mm / 0.94 in (fine thread) Screw, inch (1/2"-20): 24.5 mm / 0.96 in (fine thread)
Weight	86 g / 3.03 oz
Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Module head: Ultrasint TPU01 Screw: Stainless steel
Lifetime of the Module	2 years at an average of 120 minutes per day / daily use
Maximum conditions the Module can withstand	
Maximum object weight	3 kg / 6.61 lb
Maximum pushing force	30 N / 6.74 lbf
Maximum pulling force	30 N / 6.74 lbf

12.5. PINCH Module

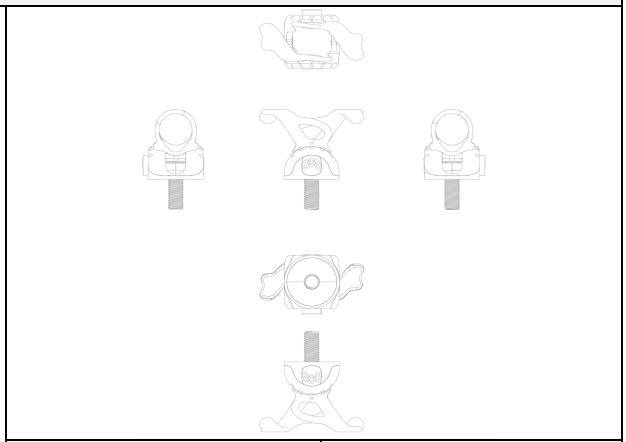
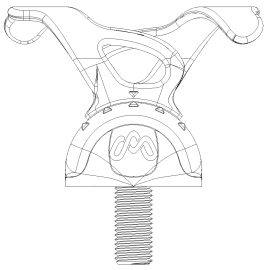
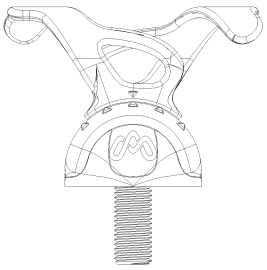
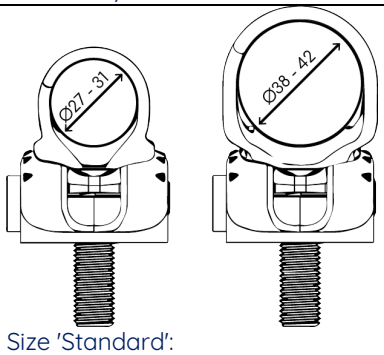
General	
Drawing	
Dimensions	Standard size, open Fingers: L: 124 mm / 4.88 in (with screw) L: 99.5 mm / 3.92 in (without screw) B: 100 mm / 3.94 in T: 41 mm / 1.61 in Standard size, closed Fingers: L: 125 mm / 4.92 in (with screw) L: 100.5 mm / 3.96 in (without screw) B: 75 mm / 2.95 in T: 41 mm / 1.61 in
Maximum diameter for small-sized cylindrical objects	Ø: 12 mm / 0.47 in
Maximum diameter for medium- sized cylindrical objects	Ø: 25 mm / 0.98 in
Maximum thickness for flat objects	Thickness: 20 mm / 0.79 in
Length of screw (from lower edge of Module)	Screw, Metric (M12 × 1.5): 24 mm / 0.94 in (fine thread) Screw, inch (1/2"-20): 24.5 mm / 0.96 in (fine thread)
Weight (without spacer)	164 g / 5.78 oz
Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Module head: Ultrasint TPU01 Screw: Stainless steel
Lifetime of the Module	2 years at an average of 120 minutes per day with daily use
Maximum load forces between the Module fingers	
Maximum mass that can be held by the fingers (e.g. holding a book)	Approximately 1 kg / 2.20 lb * *may vary based on the geometry and material of the objects
Maximum load forces in the "coupling" of macu4	
Axial tensile force	Approximately 50 N / 11.24 lbf

Note on storage: Always open the lever and the Module fingers before putting the Module away so that the tension is taken off the fingers.

12.6. SWIM Module

General	
Drawing	
	Standard size:  Small size: 
Dimensions	Standard size: L: 147 mm / 5.79 in (with screw) L: 123 mm / 4.84 in (without screw) B: 80 mm / 3.15 in T: 45 mm / 1.77 in Small size: L: 112 mm / 4.41 in (with screw) L: 88 mm / 3.46 in (without screw) B: 65 mm / 2.56 in T: 44 mm / 1.73 in
Length of screw (from lower edge of Module)	Screw, Metric (M12 × 1.5): 24 mm / 0.94 in (fine thread) Screw, inch (1/2"-20): 25.75mm / 1.01 in (fine thread)
Weight	SWIM Standard: 90 g / 3.17 oz SWIM Small: 75 g / 2.65 oz
Alignment of the Module	Module inner side points anteriorly
Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Screw: Stainless steel
Lifetime of the Module	2 years at an average of 120 minutes per day with daily use
Maximum load forces in the palm of the hand	
Force to socket axis (e.g. pulling Module through water)	Approximately 35 N / 7.87 lbf
Maximum load forces in the "coupling" of macu4	
Axial tensile force	Approximately 50 N / 11.24 lbf

12.7. TWIN Module

General	
Drawing	
	Standard size:  Big size: 
Dimensions size ‘Standard’	L: 83 mm / 3.27 in (with screw) L: 58 mm / 2.28 in (without screw) B: 83 mm / 3.27 in T: 49 mm / 1.93 in
Dimensions size ‘Large’	L: 95 mm / 3.74 in (with screw) L: 70 mm / 2.76 in (without screw) B: 120 mm / 4.72 in T: 49 mm / 1.93 in
Supported diameters of rods	 Size 'Standard': Ø: from 27 mm to 31 mm / 1.06 in to 1.22 in 28 mm / 1.10 in is optimal for rubberised bars 31 mm / 1.22 in is optimal for smooth bars Size 'Large Ø: from 38 mm to 42 mm / 1.50 in to 1.65 in 39 mm / 1.54 in is optimal for rubberised rods 42 mm / 1.65 in is optimal for smooth rods
Length of screw (from lower edge of Module)	Screw, Metric (M12x1.5): 24 mm / 0.94 in (fine thread) Screw, inch (1/2"-20): 25.75mm / 1.01 in (fine thread)
Weight (without spacer)	Size ‘Standard’: 86 g / 3.03 oz

	Size 'Large': 96 g / 3.39 oz
Number of positions to be adjusted	5
Alignment of the Module	Depending on the activity
Material	Module body: PA2200, coloured with DM standard colour (DyeMansion) Screw: Stainless steel
Lifetime of the Module	2 years at an average of 120 minutes per day with daily use
Maximum load forces in the palm of the hand	
Weight of objects (e.g. rod)	10 kg / 22 lb (without jerky movements)
Force "tensile" (e.g. a kayak paddle in the water)	Approximately 110 N / 24.73 lbf
Maximum load forces in the "coupling" of macu4	
Axial tensile force	Approximately 110 N / 24.73 lbf

12.8. Environmental conditions

Conditions	
During transport	• Protect from direct sunlight (UV radiation) • Temperature shall be 0 °C to +35 °C / 32 °F to 95 °F
During operation	• Temperature shall be 0 °C to +35 °C / 32 °F to 95 °F
When not in use (e.g. long-term storage)	• Protect from direct sunlight • Max. 70 % relative humidity

13. Allergic reactions

THIS PRODUCT IS FORMULATED FOR GENERAL SKIN COMPATIBILITY. HOWEVER, ALLERGIC REACTIONS MAY OCCUR IN SOME INDIVIDUALS, PARTICULARLY THOSE WITH A HISTORY OF SKIN ALLERGIES OR SENSITIVITY. DO NOT USE IF YOU HAVE A KNOWN ALLERGY OR HAVE PREVIOUSLY EXPERIENCED A REACTION TO ANY OF THE MATERIALS USED IN THIS PRODUCT. DISCONTINUE USE IMMEDIATELY AND SEEK MEDICAL ADVICE IF REDNESS, ITCHING, RASH, SWELLING, OR IRRITATION OCCURS. INDIVIDUALS WITH SENSITIVE SKIN SHOULD REVIEW THE FULL LIST OF MATERIALS AND, IF NECESSARY, PERFORM A PATCH TEST BEFORE FIRST USE. FOR DETAILED INFORMATION ON THE MATERIALS USED IN SPECIFIC PRODUCTS, PLEASE CONTACT MACU. THE TECHNICAL DATA SECTION PROVIDES GENERAL INFORMATION ON MATERIAL USAGE ONLY.

14. Returns

If you suspect or believe there is a problem with your Explorer Module, please first read this manual carefully before contacting support@macu4.com or your prosthesis manufacturer (unless you purchased the product directly from Macu). Please use the Product Experience Report (PER):
https://25462115.fs1.hubspotusercontent-eu1.net/hubfs/25462115/macu4_GmbH_Explorer/Product_Experience_Report_EN.pdf
Information on the UDI-DI and UDI-PI of your product. These can be found on the product.
If you return your product to us or your prosthetist, please pack it appropriately; the original packaging in which you received your product is perfectly suitable for this purpose.