

INSTRUCTIONS FOR USE

IFU CODE: 48



HD1
Mechanical
Hand
- Voluntary Opening



HD2
Inner Hand
(Hand Covers for
Mechanical Hand)



HD3
Wrist
Connector

INFORMATION

Last Update: 25.06.2026



- Please read this document carefully before using the product.
- Instruct the user in the appropriate and safe use of the product.
- Follow the safety instructions to abstain injuries and damage to the product.
- Please keep this document in a safe place.

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1. HD1

Mechanical Hand – Voluntary Opening

The HD1 Mechanical Hand is a functional prosthetic component featuring a reliable outer pull cable mechanism for controlled grasping tasks. Designed for durability and ease of use, it utilizes a standard M12 x 1.5 connector thread for secure attachment to prosthetic forearms. A significant technical feature of this series is that Size L is compatible with both M and L size inner hands, providing greater flexibility during the fitting process.

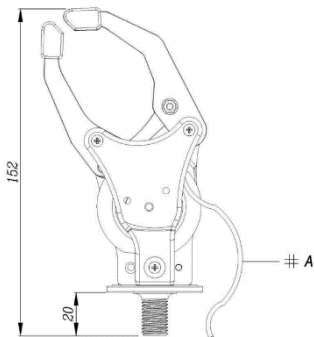
1.1. Features

Product Name	HD1
Mechanism	Outer Pull Cable
Connector	M12 x 1.5 Thread
Standard	Robust Mechanical Build
Available Sizes	Small (S) & Large (L)
Product Weight	190 gr. / 200 gr.

1.2. Assembly & Technical Specifications

Please screw the HD-1 prosthetic hand (Thread: M12x1.5) into the compatible wrist component of the forearm. Ensure that all screws and nuts on each individual component are tightened properly.

⚠ WARNING: This prosthetic hand mechanism is NOT designed for heavy lifting or carrying heavy items



Technical Specifications Table

CODE	SIZE	SIDE	CONNECTOR
HD1-SL	S Size	Left	M12 x1.5
HD1-SR	S Size	Right	M12 x1.5
HD1-LL	L Size	Left	M12 x1.5
HD1-LR	L Size	Right	M12 x1.5

1.3 Hand Operation

The user can voluntarily open the hand by pulling the connected control cable. Releasing the cable automatically engages the internal mechanism, closing the hand.

2. HD2

Inner Hand (Hand Covers for Mechanical Hand)

The HD2 Hand Covers for Mechanical Hand are manufactured from durable PVC material to provide a protective and aesthetic outer layer for mechanical prosthetic hands. With an average weight of 145 gr, these covers offer a lightweight solution that does not compromise the functional performance of the prosthesis. They are specifically engineered to be suitable for the outer pull cable exit option, ensuring seamless integration with active mechanical hand systems.

2.1. Features

Product Name	HD2
Material	High-Quality PVC
Weight	Average 145 gr.
Exit Option	Outer Pull Cable Ready
Variety	Three Anatomical Sizes

2.2. Technical Specifications

CODE	SIZE	DIMENSION	SIDE
HD2-SL	S Size	7 ¼ inch	Left
HD2-SR	S Size	7 ¼ inch	Right
HD2-ML	M Size	7 ¾ inch	Left
HD2-MR	M Size	7 ¾ inch	Right
HD2-LL	L Size	8 inch	Left
HD2-LR	L Size	8 inch	Right

3. HD1–HD2 Hand Assembly Instructions

Picture	Instruction
	Lock the thread of HD1-SR into the clamping tool and turn in the lock screw (**Stop when hit the thread of HD1-SR.) Tools Used: Clamping tool Allen wrench 4mm
	Setting the clamping tool on the vise and tight it. Tools Used: Vice



Insert the HD2-SR into the front end of the HD1-SR.



Pull the cable of HD1-SR to keep thumb and index finger apart slightly, and then insert HD2-SR into the half of HD1-SR.



Pull the cable of HD1-SR to keep thumb and index finger apart completely, and the HD2-SR was fully integrated with the HD1-SR.

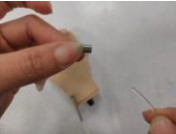


Remove the clamping tool from the vise and then loosen the lock screws of clamping tool.

Tools Used: Allen wrench 4mm



Remove the HD1-SR from the clamping tool.

	Aim cable guide tube at the hole of the HD2-SR Tools Used: Cable guide tube
	Let the cable guide tube goes through between HD2-SR and HD1-SR. Insert 7~10cm cable into the cable guide tube. And pull them out from HD2-SR and HD1-SR.
	Remove the cable guide tube and pull the cable out completely.
	Put 1/3 length of cable tubing into the hole of HD2-SR
	Put the cable into the cable clamp.



Let the cable goes through in between the ring finger and the little finger. Insert into the cable clamp and pull out the cable to the other side in case the cable loop falls off.



Insert the ring into the ditch at the bottom of the HD2-SR.



Place the steel stick or wrench between the HD2-SR and ring. and draw a circle till the ring is inserted into the ditch of HD2-SR completely. (Notice: While set the ring, make sure the HD1-SR is set correctly in the HD2-SR. So, the ring could firmly fix these two parts.)



HD2-SR+HD1-SR is assembled completely.

4. HD3

Prosthetic Wrist Connector

The HD3 Mechanical Wrist is a high-strength prosthetic wrist connector featuring a lightweight aluminum body paired with an integrated rubber ring for optimized performance. Designed specifically to be compatible with mechanical hands, it serves as a critical interface that balances structural rigidity with essential movement control. Utilizing a standard M12 x 1.5 connector thread, it ensures a secure and stable connection between the hand and the prosthetic forearm.

4.1. Features

Product Name	HD3
Body Material	High-Grade Aluminum
Connector	M12 x 1.5 Thread
Ring	Integrated Rubber Ring
Compatibility	Mechanical Hands

4.2. Technical Specifications

CODE	MATERIAL	OUTER DIMENSION	WEIGHT
HD3-42	Aluminum	42 mm	45 gr
HD3-50	Aluminum	50 mm	50 gr

5. Environmental Conditions

Acceptable Environmental Conditions
Temperature use range: -5 °C to +45°C
Humidity: Allowable relative humidity 20% to 90% RH, non-condensing

Unsuitable Environmental Conditions
Fresh water, salt water, sweat, urine, acids e.g.
Sand, dust, highly hygroscopic particles (e.g., talcum)
Mechanical vibrations, impacts
Cleaning agents containing solvents

6. Service Life

The service life of the product is about 4 years. This duration depends on the daily activity of the user.

7. General Safety Instructions

CAUTION!
 To avoid the risk of injury and product damage, do not use for longer than the service life of the product.
The suitability of the device to the patient and the prosthesis should be evaluated by a healthcare professional. The device must be fitted and adjusted by a healthcare professional.
There is a danger of pinching and injuring your finger or skin. Do not insert your hand into the joint mechanism!

Avoid using this product in unsuitable environmental conditions. If the product has been exposed to unsuitable environmental conditions, check for damage.

Do not use the product that is damaged, has limited functionality or is in doubtful condition. Ensuring that appropriate measures are taken (e.g. control, cleaning, repair, replacement by the authorized workshop or manufacturer).

To prevent mechanical damage, be careful and caution when working the product.

Use the product for a single patient to avoid injuries and product damage.

Products should be used in appropriate combinations. Using the product with unsuitable combinations may result in possible injury.

In case of feeling any space or sound, apply the rehabilitation center who installed the prosthesis.

8. Patient Training and Rehabilitation

- 1.** Following the final fabrication and fitting of the prosthesis, a qualified clinical specialist must guide the patient and demonstrate the correct donning and doffing procedures.
- 2.** The prosthetic service facility must feature a dedicated rehabilitation area equipped with parallel bars/handrails and certified clinical trainers to conduct a structured prosthetic adaptation and functional training program.
- 3.** The duration of the training and rehabilitation period varies for each individual, ranging from one week to several months, depending on the amputation level, patient age, and residual muscle strength.

9. Patient Care and Daily Precautions

- 1.** Strictly adhere to the donning and operating instructions provided by your clinical specialist. Do not alter or modify these instructions under any circumstances.
- 2.** Prosthetic socks or liners must be changed and cleaned daily. (Recommendation: Hand wash and air dry only).
- 3.** The prosthetic socket must be thoroughly wiped down every two days using water or diluted medicinal alcohol.
- 4.** To allow the residual limb to rest, it is highly recommended to doff the prosthesis, liner, and sock for 10 minutes every 4 hours of continuous use.
- 5.** Always carry extra prosthetic socks to manage and adapt to residual limb volume fluctuations during daily activities, work, or travel. Additionally, replace the sock immediately if it becomes damp or wet.
- 6.** If you plan to travel for more than two days, consult your prosthetic service provider beforehand to schedule safety inspections, routine maintenance, and any necessary adjustments.

10. Maintenance

- 1.** After the first 30 days of use, the prosthesis parts should be visually inspected and function checked.
- 2.** Inspect the entire prosthesis for wear during normal consultations.
- 3.** This prosthesis and its components should be checked for function by a prosthetist at regular intervals every six months. If the recommendations are followed properly, there is no risk.



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