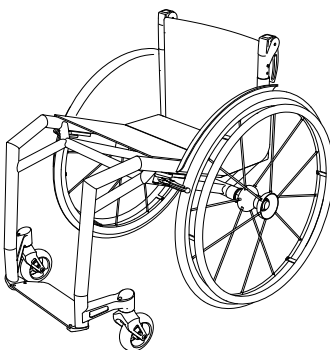




Rigid frame wheelchair

User manual Version 1.2



Record of product identification data

Enter your product’s identification data from the type label in the following lines so that it is available in case of any queries in connection with the product (see chapter 2.3). Identification data or type labels of custom-made devices may deviate.

TYP Model	
REF Article number	
SN Serial number	
 Date of manufacture	
Other information and notes	



Introduction

This product is a medical aid. Read this user manual before using your product. Please keep this user manual as long as you use the product and, if applicable, pass it on along with the product or store it for later reuse of the product. This helps avoid injuries and product damage. It will provide you with information on how to keep your product in safe working order and how to preserve its value.

Please contact your medical retailer for any additional healthcare information.

Please contact DIETZ in writing or by telephone for information or queries concerning product safety and in case of recalls. The current version of the user manual and additional information on your product are available on our website. You can find our contact information at the end of this user manual.



A large-print version of this user manual for visually impaired persons is available in PDF format at **www.shop.dietz-group.de**.



Table of contents

1	Intended use	6
1.1	Intended purpose.....	6
1.2	Target group.....	6
1.3	Environment of use	6
1.4	Storage conditions	6
1.5	Service life	7
1.6	Indications	7
1.7	Contraindications	7
2	Safety	8
2.1	Layout of safety instructions.....	8
2.2	Safety instructions.....	8
2.3	Product labelling.....	10
3	Product description.....	13
3.1	Scope of delivery	13
3.2	Optional accessories.....	13
3.3	Design of the product	14
4	Preparing the product for use	16
4.1	Setup information.....	16
4.2	Folding the backrest up (optional).....	16
4.3	Folding the backrest down (optional).....	17
4.4	Adjusting the backrest upholstery	19
5	Using the product.....	20
5.1	Sitting down, getting up, and lateral transfer.....	20
5.2	Riding and breaking the wheelchair using the push rims	20
5.3	Passing obstacles	21
5.4	Removing and installing the drive wheels	23
5.5	Parking the wheelchair using the parking brake	24
5.6	Loading the wheelchair.....	26
5.7	Removing and attaching seat cushions	26
5.8	Standard or foldable push handles.....	27



5.9	Lateral frame elements	27
5.10	Anti-tip wheel (optional)	28
5.11	Lap belt (optional).....	29
5.12	Transport	30
6	Individual adjustments	31
6.1	Important installation notes	31
6.2	Tools.....	31
6.3	Foldable backrest (optional).....	31
6.4	Adjusting the rear axle (optional)	33
6.5	Adjusting the drive wheel camber angle (optional)	34
6.6	Small or large push rim distance	35
6.7	Drive wheel toe-in correction	36
6.8	Installing the Spex backrest system.....	37
7	Notes on using the product.....	38
7.1	Accessories, add-ons, and conversions by third-party suppliers	38
7.2	Maintenance.....	38
7.3	Maintenance schedule.....	39
7.4	Troubleshooting.....	42
7.5	Cleaning	44
7.6	Disinfection	44
7.7	Disposal	45
8	Technical specifications	46
8.1	How DIETZ measures	46
8.2	Taking measurements	46
8.3	Dimensions and technical information	48
8.4	Other information	49
8.5	Materials.....	50
8.6	Product tests	50
9	Manufacturer's declarations.....	51
9.1	Warranty	51
9.2	Liability.....	51



1 Intended use

1.1 Intended purpose

The product is suitable for persons whose anatomy (body dimensions and weight) allows them to use the product as intended and whose epidermis (skin) is intact. The max. weight capacity can vary depending on the selected product variant and the accessories installed. This information is indicated in the technical specifications and on the type label affixed on the cross brace.

The intended purpose of products made and labelled as custom-made devices can differ. The documentation supplied with the product applies in such cases.

1.2 Target group

The target group comprises teenagers and adults with temporarily or permanently restricted mobility.

The standard configuration of the M-i has a permissible maximum user weight of 125 kg.

The product must not be used by children or persons with a height less than 146 cm and / or a weight of less than 40 kg (BMI less than 17).

1.3 Environment of use

The product can be used on solid ground both indoors and outdoors. It is commonly used in private homes, domestic and public environments, in retirement and nursing homes, and rehabilitation centres.

It is designed as a means of transportation for both short-term and long-term use that compensates the effects of impairments and conditions. Ambient temperature: -10 °C to +50 °C.

1.4 Storage conditions

Observe the following instructions for storing the product:

- Storage temperature: 0 °C to +45 °C
- Relative humidity: 20 % to 75 %
- Store the product in a place that is dry and protected from strong sunlight.
- Do not store the product close to any heat source.
- Do not store any other objects on top of the product.



- Store the product in its original box.
- Do not engage the parking brake during storage. Secure the product against any unintended rolling motion.
- After prolonged periods of storage (longer than 4 months), please check all inspection points on the product as listed in the maintenance schedule before using/reusing the product.

1.5 Service life

The product has an expected service life of 5 years when used daily and in line with the intended use. This requires compliance with the maintenance, cleaning, and safety instructions. The indicated service life does not constitute any additional warranty.

1.6 Indications

This product provides assistance for persons who are unable to walk or who have a severe walking impediment due to:

- Paralysis
- Loss of limbs
- Defects of limbs, deformation of limbs
- Joint contracture, joint damage (not on both arms)
- Muscular and neurological conditions
- Other conditions

1.7 Contraindications

This product must not be used in case of:

- Perception impairments
- Severe balance impairments
- Loss of limbs on both arms
- Joint contracture, joint damage on both arms
- Inability to sit
- Reduced or insufficient vision



2 Safety

2.1 Layout of safety instructions

Any improper use, i.e. any use of the product other than the intended use, can be hazardous. Observe the safety instructions in this user manual. They are identified as follows:

⚠ WARNING

▷ Designates a medium risk of severe injuries.

⚠ CAUTION

▷ Designates a low risk of minor injuries.

NOTICE

▷ Designates a risk of potential property damage.

INFO

Provides tips and suggestions.

2.2 Safety instructions

When using the product, observe the following safety instructions to prevent falls, hazardous situations, and damage to the product.



⚠ WARNING

Risk of injury

- ▷ Observe the safety instructions.
- ▷ Carefully read the user manual before using the product.
- ▷ If your product is a custom-made device (refer to product labelling), the additional documentation provided, including all safety instructions, must be observed in addition to the current user manual.
- ▷ Use the product for its intended purpose only. Do not let the wheelchair collide with obstacles (such as steps or edges) and do not jump down from them.
- ▷ Practice riding on level and open terrain when using the wheelchair for the first time. Extensively familiarise yourself with the braking and acceleration characteristics when going straight ahead and through bends. DIETZ recommends having an accompanying person while using the product for the first time.
- ▷ The product is not suitable for children. Do not give unsupervised children access to the product.
- ▷ Always lock both brakes before sitting down or getting up from the wheelchair.
- ▷ According to the German Road Traffic Act (StVO), the provisions for pedestrians apply to riders of manual wheelchairs.
- ▷ DIETZ recommends wearing bright, noticeable clothing to improve your own visibility.
- ▷ Do not use the wheelchair while under the influence of alcohol or other substances that may have adverse effects on your attentiveness as well as your physical and mental receptiveness.
- ▷ Do not expose the product to direct sunlight, heat sources, or low temperatures for prolonged periods of time as this could cause parts of the product (e.g. Frame, legrests, breaks, and lateral frame elements) to become very hot (more than 41 °C) or cold (less than 0 °C). This may cause injuries to the skin.
- ▷ All removable parts such as legrests, armrests, lateral frame elements, or therapy trays are associated with a risk of injury when dropped.
- ▷ All moving parts (brakes, legrests, etc.) are associated with a risk of crushing fingers or other body parts.
- ▷ Make sure that the wheelchair is not parked in the immediate vicinity of emergency exits or escape routes so as not to block them.
- ▷ Never exceed the maximum load resulting from the combined user weight and the weight of any transported items. This may cause injuries and damage to the wheelchair.



⚠ WARNING

Risk of burns

- ▷ Keep the product away from ignition sources to avoid fire and damage.

⚠ WARNING

Risk of falling

- ▷ Do not use the wheelchair to transport multiple persons or heavy loads.
- ▷ Shifts in balance caused by body movements or loads can increase the risk of tipping the wheelchair over. Extreme adjustments of the wheelchair increase this risk.
- ▷ Navigating slopes of more than 10 ° is associated with an increased risk of tipping over to the front or back. DIETZ recommends the use of anti-tip wheels.
- ▷ Use anti-tip wheels on wheelchairs with configurations that have a tendency to tip over on slopes with inclinations below 10 °. They must be properly installed.
- ▷ To pass obstacles, please use ramps whenever possible or have an accompanying person help you.
- ▷ Cross ruts, rails, or similar obstacles at right angles (90 °).
- ▷ When installing accessories (such as electric drives), the maximum additional load must not be exceeded.
- ▷ Do not use escalators as this may lead to severe injuries in case of falls.

⚠ CAUTION

Risk of injury

- ▷ In case of any redness or irritation of the skin associated with using the product, seek medical advice immediately.
- ▷ The manufacturer and the competent authority must be informed of any serious events (according to MDR) linked to the product.

2.3 Product labelling

Type and warning labels on the product must remain legible. Illegible or missing labels must be replaced by a medical retailer. The serial number that unambiguously identifies a product is indicated on the type label affixed on the underside of the seat surface. The type label must not be removed.

Products that carry any of the labels below are custom-made devices.



SONDERANFERTIGUNG CUSTOM-MADE DEVICE	Custom-made devices that have been made specifically for a particular user have different type labels and, where required, different intended purposes and warnings. The additional documentation must be observed.
	For reuse on an individual patient.
	Unique patient number (corresponds to the product serial number)

Hereafter, the symbols and information on the type label are explained in detail. The depicted type label serves as an example.

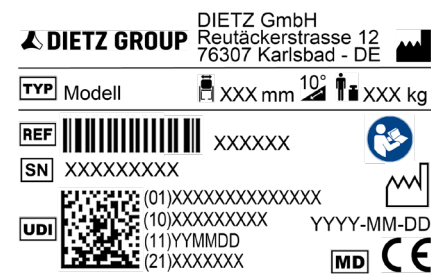


Fig. 1



	Crash-tested according to ISO 7176-19, marks the attachment points for the restraint system.
	Approved for passenger transportation in motor vehicles according to ISO 7176-19.
	TYP = Model
	REF = Article number
	SN = Serial number
	UDI = Unique Device Identifier (01) UDI-DI / GTIN (10) Batch number (11) Date of manufacture (YYMMDD) (21) Serial number
	Manufacturer
	Maximum load capacity incl. additional loads
	Date of manufacture (YYYY-MM-DD)
	Maximum slope that can be safely negotiated with the product.
	Observe the user manual
	Medical device
	The product conforms to Regulation (EU) 2017/745 on medical devices.



3 Product description

3.1 Scope of delivery

⚠ WARNING

Risk of poisoning

- ▷ Do not burn the packaging films.

⚠ WARNING

Risk of suffocation

- ▷ Keep plastic bags out of reach of children.

INFO

The product features described and the scope of delivery may vary in specific countries and markets depending on the individual indication and pathology.

The product is supplied in a fully assembled state and packed in a cardboard box. Keep the packaging as it can be used to store the product later. Check the contents for completeness and proper condition. Inform the supplier in case the contents are incomplete or damaged.

The scope of supply includes the selected configuration of the rigid frame wheelchair and the following items:

- User manual
- Optional accessories (if selected)

3.2 Optional accessories

- Foldable backrest
- Anti-tip wheels
- Tilting aid
- Lap belt
- Adjustable rear axle
- Push handles, foldable
- Push handles, height-adjustable



- Spoke protection
- Drive wheel camber angle (0°, 1°, 3°, 5°)
- Calf strap

3.3 Design of the product

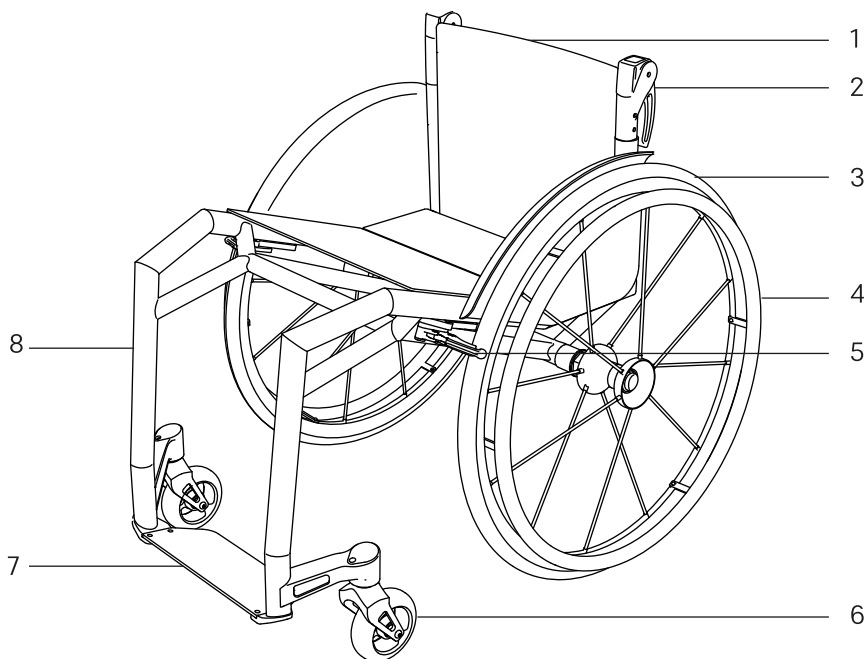
INFO

This user manual may contain depictions and descriptions of components not included in the actual scope of delivery.

3.3.1 Design of M-i

The overview shows the most important components as an example for all M-i variants.

1. Backrest with backrest upholstery
2. Push handles
3. Drive wheels
4. Push rims
5. Brakes
6. Swivelling wheels
7. Footplate
8. Frame





4 Preparing the product for use

4.1 Setup information

INFO

Assembly and functional checks are performed by the medical retailer. Qualified medical retail employees adjust the product to each individual user.

This chapter contains information on how to set up the wheelchair for use.

Users can adjust the wheelchair using no-tool adjustment options such as quick-release mechanisms or levers. The medical retailer will perform any complex adjustment work requiring tools. Any subsequent work may only be performed by medical retail employees.

4.2 Folding the backrest up (optional)

⚠ WARNING

Risk of crushing

▷ Moving parts are associated with a risk of crushing.

The foldable backrest features a folding option for transporting the wheelchair. Folding it minimizes the packing dimensions.

Folding the backrest down

1. Pull up the cord **(1)**.
→ The locking mechanism disengages.
2. Fold the backrest down towards the seat surface **(2)**.
→ The locking mechanism engages automatically.

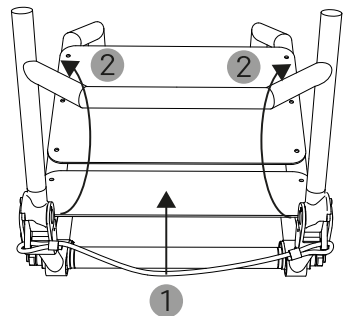


Fig. 2



Folding the backrest up

1. Pull up the cord **(3)**.
→ The locking mechanism disengages.
2. To fold the backrest up, push it upward **(4)** until the locking mechanism audibly engages.

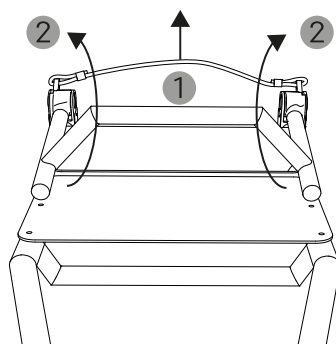


Fig. 3

The backrest should be flat on the seat surface when folded down. You can adjust the distance between the backrest and the seat surface if required, e.g. when using a seat cushion of a different thickness.

Adjusting the distance between backrest and seat surface

1. Loosen the screw **(5)**.
2. Make the desired adjustment to increase or decrease the distance.
3. Tighten the screw **(5)**.

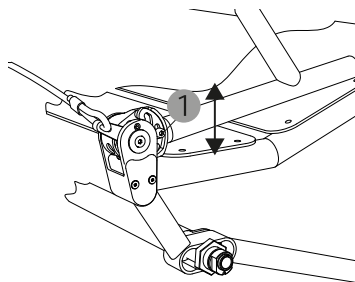


Fig. 4

4.3 Folding the backrest down (optional)

▲ WARNING

Risk of crushing

- ▷ Moving parts are associated with a risk of crushing.



The foldable backrest features a folding option for transporting the wheelchair. Folding it minimizes the packing dimensions.

Folding the backrest down

1. Pull up the cord **(1)**.
→ The locking mechanism disengages.
2. Fold the backrest down towards the seat surface **(2)**.
→ The locking mechanism engages automatically.

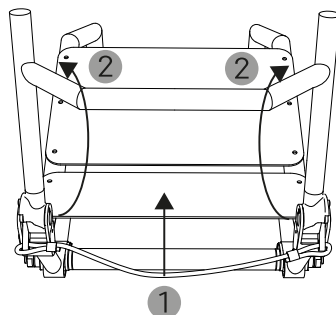


Fig. 5

Folding the backrest up

1. Pull up the cord **(3)**.
→ The locking mechanism disengages.
2. To fold the backrest up, push it upward **(4)** until the locking mechanism audibly engages.

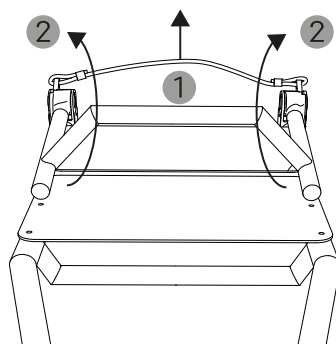


Fig. 6

The backrest should be flat on the seat surface when folded down. You can adjust the distance between the backrest and the seat surface if required, e.g. when using a seat cushion of a different thickness.



Adjusting the distance between backrest and seat surface

1. Loosen the screw **(5)**.
2. Make the desired adjustment to increase or decrease the distance.
3. Tighten the screw **(5)**.

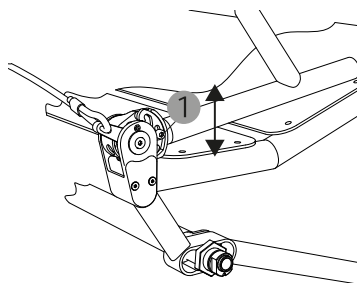


Fig. 7

4.4 Adjusting the backrest upholstery

INFO

Ensure proper backrest upholstery adjustment.

The backrest cover is attached with a hook and loop fastener.

1. Remove the seat cushion and the cushioned backrest cover.
→ The hook and loop fastener straps on the rear of the backrest are easily accessible for adjustment purposes.
2. Loosen the hook and loop fastener straps **(1)** and adjust their length **(2)** to achieve the desired sitting position.
3. Place the cover over the backrest upholstery and press the hook and loop fasteners into place.
4. Position the seat cushion.

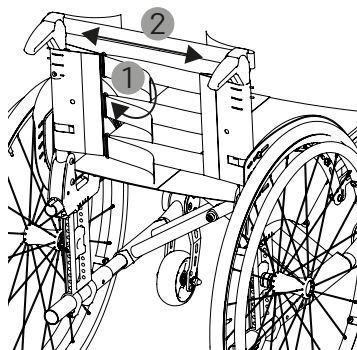


Fig. 8



5 Using the product

5.1 Sitting down, getting up, and lateral transfer

⚠ WARNING

Risk of falling

- ▷ First engage the parking brake.

⚠ WARNING

Risk of tipping

- ▷ Do not stand on the footplates. They are not designed to carry the full weight of a person.
- ▷ To increase the stability, swivel the swivelling wheels to the front.

Various pathologies or impairments are associated with reduced mobility or manoeuvring ability. Therefore, procedures for sitting down, getting up, and lateral transfer vary for each user.

DIETZ recommends asking therapeutic personnel or a medical retail employee to show you the best way to sit down, stand up, and perform a lateral transfer.

You can use the seat surface and the lateral frame elements for support as you get into the wheelchair.

If you need help sitting down, getting up performing a lateral transfer, ask an accompanying person to help you.

5.2 Riding and breaking the wheelchair using the push rims

⚠ WARNING

Risk of crushing

- ▷ When riding the wheelchair, do not reach between the spokes or between the drive wheels and the parking brake.
- ▷ Make sure not to touch the tyre with your thumb as you propel the wheelchair.

⚠ WARNING

Risk of burns

- ▷ The push rims can heat up significantly during extended braking manoeuvres. Wear suitable gloves.



⚠ WARNING

Risk of falling

- ▷ Do not use the parking brake while the wheelchair is in motion.

INFO

Practice riding on level and open terrain when using the wheelchair for the first time. Extensively familiarise yourself with the braking and acceleration characteristics when going straight ahead and through bends. Take the help of an accompanying person as you do so.

You can move the wheelchair forward, backward, to the right, and to the left using the two push rims on the drive wheels.

1. Place your hand on the push rim with your thumb pointing in the direction of travel. Grip the push rim with your other fingers so that your hand forms a fist.
2. To propel the wheelchair forward or backward, push the push rim forward or backward with your hands.
3. To brake, grip the push rims more firmly with both hands at the same time until the wheelchair comes to a standstill.
4. To steer in one direction, propel the wheelchair using the push rim on the opposite side of where you want to go.
5. To turn on the spot, push one hand forward and the other hand backward simultaneously.

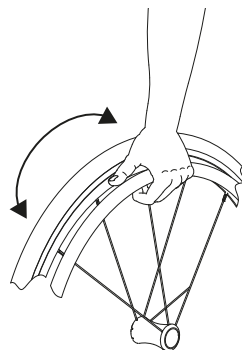


Fig. 9

5.3 Passing obstacles

⚠ WARNING

Risk of tipping

- ▷ Ride down slopes, steps, and curbs at reduced speed only and make sure to brake.
- ▷ Do not ride up or down slopes diagonally.



⚠ WARNING

Risk of accidents

- ▷ You must take the help of an accompanying person to go up or down stairs. Use access ramps or lifts where available. If there is no accessible option for passing obstacles, take the help of accompanying persons.

⚠ WARNING

Risk of accidents

- ▷ Lift the wheelchair by firmly installed components (frame) only, and not by any bolted or removable components.

INFO

The stability on slopes depends on the wheelchair's configuration, the user's skills, and the driving style. A maximum safe gradient angle cannot be determined as the skills of different users and their riding styles vary. To prevent tipping over, the maximum angle is to be determined by the user with the help of an accompanying person. For inexperienced users, DIETZ recommends installing anti-tip wheels.

Before riding up or down slopes, steps, or curbs in your wheelchair on your own, practise with an accompanying person. There is an increased risk of tipping in such riding situations. DIETZ recommends using anti-tip wheels.

5.3.1 Passing obstacles without the help of an accompanying person

- The brake force in such situations is significantly lower than on level ground. Potholes, wet conditions, snow, grit, and dirt can also cause the wheelchair to tip over.
- Shift the weight of your upper body **far forward (1, 2)** when riding up **slopes**, steps, or curbs.
- Shift the weight of your upper body **far far backward (3, 4)** when riding down **slopes**, steps, or curbs.

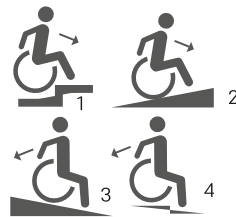


Fig. 10

5.3.2 Passing obstacles with the help of an accompanying person

To tilt the wheelchair in order to pass smaller obstacles, firmly grip the push handles and ride over the obstacle using the tilting aid.



2 accompanying persons are required in case the wheelchair needs to be carried while the user is seated in it:

1. First fold in the anti-tip wheel.
2. Carry the wheelchair by the side frame and the rear wheel adapter.
3. Unfold the anti-tip wheel again.

5.4 Removing and installing the drive wheels

⚠ WARNING

Risk of accidents

- ▷ Check the wheels for correct adjustment after each reinstallation. The quick-release axles must be firmly locked in the wheel suspension.

⚠ WARNING

Risk of tipping

- ▷ Users must not be seated in the wheelchair during installation.

⚠ WARNING

Risk of crushing

- ▷ Moving parts are associated with a risk of crushing.

⚠ CAUTION

Risk of tipping

- ▷ Position the wheelchair on a level, firm surface and secure it against any unintended rolling motion and tipping over.

INFO

Press and hold the locking button while installing the wheels. This facilitates the quick-release axle insertion.



1. To remove, press the locking button in the centre of the wheel hub.
→ The drive wheel **(1)** locking mechanism disengages.
2. Pull off the drive wheel in and outward motion **(2)**.
3. For reinstallation, push the quick-release axle into the quick-release axle support while pressing the locking button **(2)**.

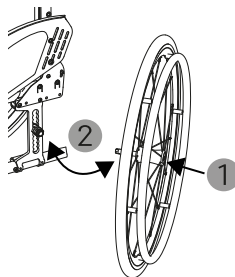


Fig. 11

5.5 Parking the wheelchair using the parking brake

⚠ WARNING

Risk of falling

- ▷ Brake the wheelchair with your hands on the push rims and **not** with the parking brake whenever you ride it.
- ▷ For parking, make sure to always engage the brakes on both sides.

⚠ WARNING

Risk of accidents

- ▷ When using pneumatic tyres (optional), make sure that the tyres are properly inflated. Insufficient tyre pressure reduces the parking brakes' effectiveness.

⚠ WARNING

Risk of crushing

- ▷ Moving parts are associated with a risk of crushing.

Engage the parking brakes to secure the wheelchair against any unintended rolling motion (example illustrations):



Push-to-lock brake

1. Push the lever down to activate the parking brake **(1)**.
→ The brake engages in this position.
2. Pull the lever up to release the brake **(2)**.

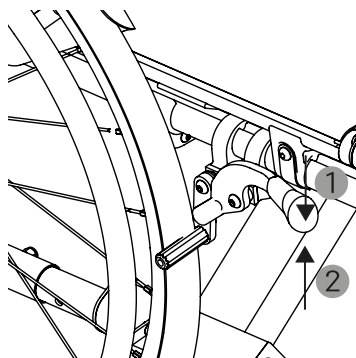


Fig. 12

Pull-to-lock brake

1. Pull the lever up to activate the parking brake **(3)**.
→ The brake engages in this position.
2. Push the lever down to release the brake **(4)**.

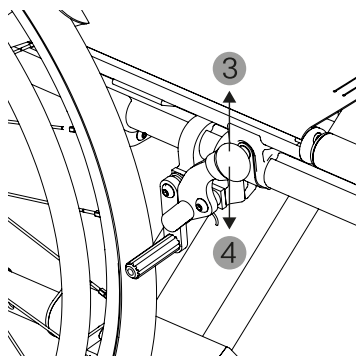


Fig. 13



Scissor brake

1. Push the lever towards the drive wheel **(1)**.
2. Push the lever further towards the drive wheel to lock the scissor brake.
→ The brake engages in this position.
3. Pull the lever away from the drive wheel **(2)** to release the scissor brake.

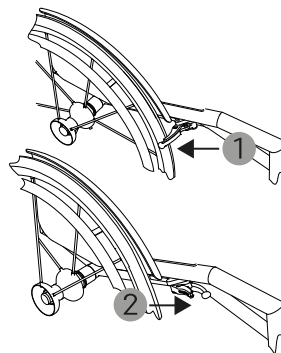


Fig. 14

5.6 Loading the wheelchair

⚠ WARNING

Risk of accidents

- ▷ Suspending loads increases the risk of tipping. DIETZ recommends the use of anti-tip wheels.
- ▷ The max. load capacity must not be exceeded.

5.7 Removing and attaching seat cushions

⚠ WARNING

Risk of burns

- ▷ The seat cushion is flame-retardant. Keep the wheelchair away from ignition sources to avoid fire and damage.

INFO

Ensure proper seat cushion adjustment.

The seat cushion is firmly held in place by a hook and loop fastener. It can be removed if necessary.

1. To remove the seat cushion, open its hook and loop fastener.
2. To secure the seat cushion, position it and press it onto the hook and loop fastener.



5.8 Standard or foldable push handles

⚠ WARNING

Risk of accidents

- ▷ The wheelchair must not be carried by the push handles when the user is seated. The push handles are not designed for this. To pass obstacles with the help of an accompanying person, see (see chapter 5.3.2).

⚠ WARNING

Risk of crushing

- ▷ Do not press the release button of the foldable push handle while pushing the wheelchair.

The push handles of the standard variant cannot be moved. Optional foldable push handles are available.

1. To fold those handles, press the raised button on the top of the handle **(1)**.
→ The push handle will fold down **(2)**.
2. To fold it up again, push the push handle up **(3)** until it audibly clicks into place.

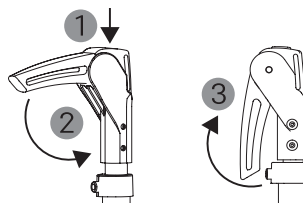


Fig. 15

5.9 Lateral frame elements

⚠ WARNING

Risk of accidents

- ▷ The wheelchair must not be carried by the lateral frame elements. The lateral frame elements are not designed for this.

The purpose of the lateral frame elements is to protect the user's clothes from soiling. Different variants of lateral frame elements are available. In the standard variant, the clothing protection is installed permanently.



5.10 Anti-tip wheel (optional)

⚠ WARNING

Risk of accidents

- ▷ Do not operate the wheelchair outside the intended operating environment and adhere to the specified adjustments. Ride the wheelchair as appropriate in any given situation. Only then will the anti-tip wheel provide sufficient protection against tipping over.
- ▷ Ensure that the anti-tip wheel is activated before passing any obstacles.
- ▷ DIETZ recommends using an anti-tip wheel to inexperienced users and transfemoral amputees.

⚠ WARNING

Risk of crushing

- ▷ Moving parts are associated with a risk of crushing.

The anti-tip wheel prevents the wheelchair from tipping over backwards when negotiating obstacles and slopes. It is installed with a ground clearance of 30 to 50 mm.

The anti-tip wheel can be activated and deactivated by the user while seated.

The anti-tip wheel remains activated when going up a high curb or step. The anti-tip wheel then makes contact with the floor. To go down a high curb or step, the anti-tip wheel must be deactivated to prevent it from sustaining damage. Once the obstacle has been passed, the anti-tip wheel must be activated again.

Deactivating the anti-tip wheel:

1. Push the lever of the anti-tip wheel down **(1)**.
2. Swivel the anti-tip wheel inward **(2)** until it audibly clicks into place.

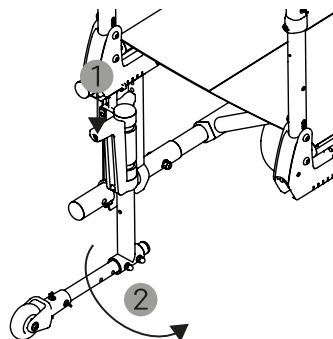


Fig. 16



Activating the anti-tip wheel:

1. To activate the anti-tip wheel, push the lever of the anti-tip wheel down **(3)**.
2. Swivel the anti-tip wheel back **(4)** until it audibly clicks into place.

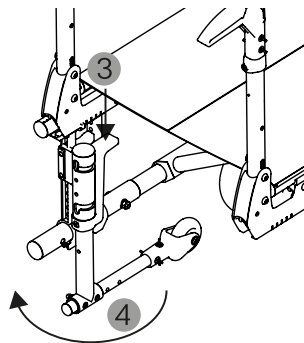


Fig. 17

5.11 Lap belt (optional)

⚠ CAUTION

Distorted posture or discomfort

▷ The lap belt is adjusted by a trained medical retail employee. Retain this adjustment.

The lap belt secures the user and serves as a positioning aid. The lap belt is not a replacement for the seat belts to be used during transport in a motor vehicle.

The lap belt is properly adjusted when two fingers fit between belt and thigh.

Have the lap belt adjusted in case of any changes, e.g. progression of the user's condition or changes in the user's weight.

The lap belt should be at an angle of approx. 60° to the seat. The belt strap should be positioned across the thigh in front of the pelvic bones.



1. To fasten the lap belt, open the belt latch.
2. Assume an upright sitting position and rest your back against the backrest cushion (if possible).
3. Close the belt latch.

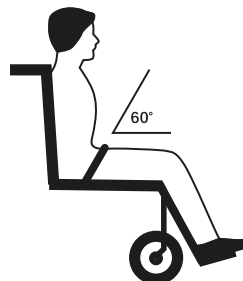


Fig. 18

5.12 Transport

NOTICE

Property damage

- ▷ Do not place any heavy objects on the folded product or its cardboard box.

Before travelling, check with the airline or railway company whether packing dimensions comply with their terms of transport. Refer to the technical specifications for the dimensions and the overall width of your product.

The wheelchairs are generally in line with the basic technical requirements imposed on transportable wheelchairs by railway companies. However, please note that your wheelchair may exceed the recommended overall dimension of 700 mm depending on its configuration.

5.12.1 Transporting the wheelchair without a user

1. If necessary, remove components that can be easily detached from the wheelchair before transport (e.g. cushions, drive wheels, etc.).
2. Lift the wheelchair by the side frame and the push handles.
3. You may transport the wheelchair in an upright position or on its side.
4. When transporting the wheelchair with its drive wheels in an upright position, engage the parking brakes.
5. Secure the wheelchair against any unintended movement during transport.



6 Individual adjustments

6.1 Important installation notes

⚠ WARNING

Risk of crushing

▷ Moving parts are associated with a risk of crushing.

Some of the adjustments described below require accessories. Only use original spare parts supplied by DIETZ. The use of unsuitable parts can be detrimental to the product quality and may result in considerable costs. DIETZ cannot be held responsible for damage to the product when unsuitable accessories and spare parts have been used. Spare parts are available in the DIETZ Online Shop.

The requirements for medical retail employees are defined as follows.

Medical retail employees:

- are able to perform the required tasks based on their technical training, expertise, and experience,
- are familiar with any applicable standards and regulations,
- can recognize potential risks associated with the overall process and avoid hazards.

6.2 Tools

The following tools are required to make the adjustments:

1. Torque wrench (2.5 – 25 Nm)
2. Hexagon socket key (3, 4, 5, 6 mm)
3. Spanner (8, 10, 13, 19, 30 mm)
4. Phillips screwdriver

6.3 Foldable backrest (optional)

⚠ WARNING

Risk of crushing

▷ Moving parts are associated with a risk of crushing.

The foldable backrest features a folding option for transporting the wheelchair. Folding it minimizes the packing dimensions.



Folding the backrest down

1. Pull up the cord **(1)**.
→ The locking mechanism disengages.
2. Fold the backrest down towards the seat surface **(2)**.
→ The locking mechanism engages automatically.

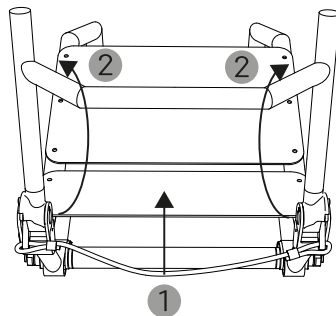


Fig. 19

Folding the backrest up

1. Pull up the cord **(3)**.
→ The locking mechanism disengages.
2. To fold the backrest up, push it upward **(4)** until the locking mechanism audibly engages.

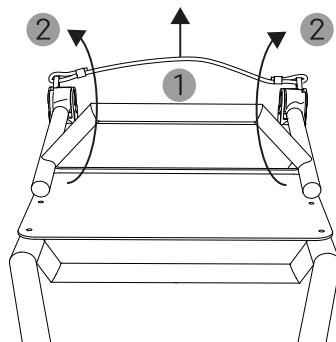


Fig. 20

The backrest should be flat on the seat surface when folded down. You can adjust the distance between the backrest and the seat surface if required, e.g. when using a seat cushion of a different thickness.



Adjusting the distance between backrest and seat surface

1. Loosen the screw **(5)**.
2. Make the desired adjustment to increase or decrease the distance.
3. Tighten the screw **(5)**.

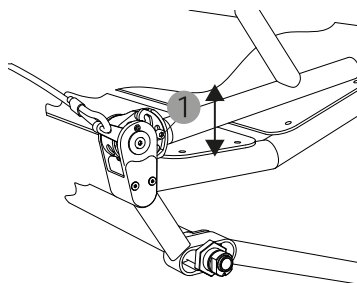


Fig. 21

6.4 Adjusting the rear axle (optional)

The position of the rear axle can optionally be adjusted to one of five positions, each spaced 10 mm apart. The M-i is delivered with the rear axle adjusted to the centre position by default.

1. Remove the drive wheel (see chapter 5.4).
2. Loosen the nut **(1)** and the screw **(2)**.
3. Remove the rotation lock **(3)** and the quick-release axle bushing **(4)**.
4. Select one of the 5 available rear axle positions **(5)**.

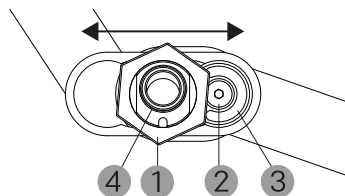


Fig. 22

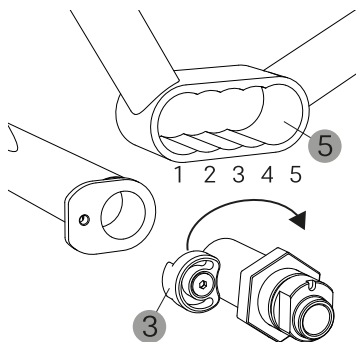


Fig. 23

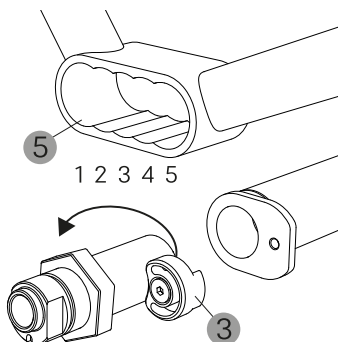


Fig. 24

5. The rotation lock **(3)** may have to be reversed in case one of the 2 opposing outer positions is selected.
6. Attach the rotation lock **(3)** using the screw **(2)**.
→ The rotation lock **(3)** keeps the rear axle in place.
7. Insert the quick-release axle bushing **(4)** and tighten the nut **(1)**.
8. Attach the drive wheel (see chapter 5.4).

After adjusting the rear axle, check the toe-in (see chapter 6.7).

6.5 Adjusting the drive wheel camber angle (optional)

INFO

The drive wheels are available with a camber angle of 0°, 1°, 3° and 5°. Changing the angle requires ordering a new camber angle.

Fixed rear axle position

1. Remove the drive wheel (see chapter 5.4).
2. Loosen the nut **(2)**.
3. Remove the quick-release axle bushing **(3)** from the rear axle **(1)**.
4. Replace the removed quick-release axle bushing with a new quick-release axle bushing that has the desired angle.

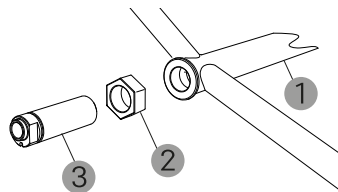


Fig. 25



5. The length of the quick-release axle must match the quick-release axle bushing.
6. Insert the quick-release axle bushing **(3)** and tighten the nut **(2)**.
7. Attach the drive wheel (see chapter 5.4).

Adjustable rear axle position

1. Remove the drive wheel (see chapter 5.4).
2. Loosen the nut **(2)** and the screw **(3)**.
3. Remove the rotation lock **(4)** and the quick-release axle bushing **(5)** from the rear axle **(1)**.
4. Replace the removed quick-release axle bushing with a new quick-release axle bushing that has the desired angle.
5. The length of the quick-release axle must match the quick-release axle bushing.
6. Attach the rotation lock **(4)** on the rear axle **(1)** using the screw **(3)** and the nut **(2)**.
→ The rotation lock **(4)** keeps the rear axle in place.
7. Insert the quick-release axle bushing **(5)**.
8. Attach the drive wheel (see chapter 5.4).

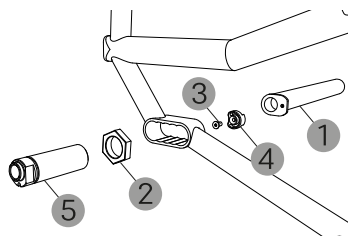


Fig. 26

After adjusting the camber angle, check the toe-in (see chapter 6.7).

6.6 Small or large push rim distance

⚠ WARNING

Risk of crushing

- ▷ Moving parts are associated with a risk of crushing.

⚠ WARNING

Risk of tipping

- ▷ The position of the drive wheels has a significant effect on the tipping stability. DIETZ recommends using an anti-tip wheel in case active drive wheel positions are used.

You can adjust the push rim distance from the drive wheels to 10 mm (default) or 20 mm:



1. Loosen the 6 retaining screws **(1)** on the push rims.
2. Select the position **(2)** with the smaller or larger distance in the hole pattern.
3. Tighten the 6 retaining screws **(1)** by hand.

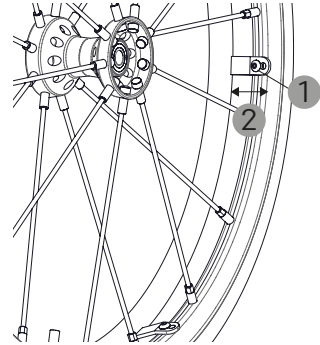


Fig. 27

6.7 Drive wheel toe-in correction

Required tools:

- Spanner (24 mm)

Following a camber angle adjustment of the drive wheels (see chapter 6.5), check the toe-in. To do so, measure the distance **(2)** between the drive wheels **(1)** at half the drive wheel height. The drive wheels must have the same distance in the front and back. The figure shows a top view of the wheelchair.

In case the distance between the drive wheels deviates between the front and back, adjust it:

1. Remove the drive wheel (see chapter 5.4).
2. Loosen the lock nut **(3)**.
3. Bring the quick-release axle **(4)** into the desired position using a spanner (24 mm).
4. The groove **(5)** must face down to ensure correct adjustment.
5. Firmly tighten the lock nut **(3)**.
6. Install the drive wheel (see chapter 5.4) and check the distance between the drive wheels by measuring the distance **(2)** between the drive wheels **(1)** at half the drive wheel height.

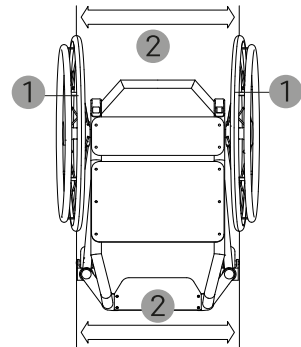


Fig. 28

Fixed rear axle position

Adjustable rear axle position

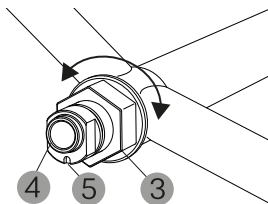


Fig. 29

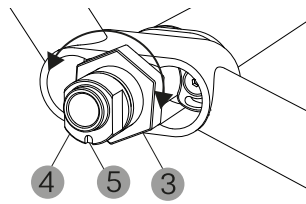


Fig. 30

EN

6.8 Installing the Spex backrest system

INFO

The supplier documentation provided with the product contains detailed installation instructions.



7 Notes on using the product

7.1 Accessories, add-ons, and conversions by third-party suppliers

⚠ WARNING

Risk of injury

- ▷ In case accessories or add-ons are fitted to the product, the safety instructions in the user manual for such accessories or add-ons must be observed.

⚠ WARNING

Risk of injury

- ▷ The safety of the product cannot be guaranteed in case add-ons or accessories are used without prior approval by DIETZ.

Any combination of a DIETZ product with accessories not supplied by us constitutes a change to the product. If third-party products are installed on a DIETZ product, the responsibility for the safety of the product passes on to the person installing the accessory or add-on. We recommend the exclusive use of original accessories by DIETZ GmbH and the exclusive use of combinations that have been tested for efficacy and safety based on a combination agreement in line with Annex I, No. 14.1 of the EU Regulation 2017 / 745 (MDR). Our Service will be happy to provide you with more detailed information on approved accessories and combination agreements.

7.2 Maintenance

⚠ WARNING

Risk of injury

- ▷ To maintain the operational safety of the product, have repairs performed by a medical retailer.

⚠ WARNING

Risk of crushing

- ▷ Mind your fingers when folding and setting up the product, and only handle the parts required to do so.

Unless otherwise stated, the inspections and measures stipulated in the maintenance schedule are performed by the users or their care assistants.

To ensure safe use of the product, perform the inspections listed in the maintenance schedule at regular intervals. Improper product care and maintenance will result in



limited liability. The maintenance schedule is a guideline and must be adapted to the actual operating conditions of the product.

If you notice a fault described in the maintenance schedule, or any other defects or functional impairments, please contact a medical retailer.

INFO

for medical retailers

If users report any product abnormalities, please check all the inspection points listed in the maintenance schedule. The same checks must also be performed before reusing the product and following prolonged periods of storage (in excess of 4 months).

Only use original spare parts supplied by DIETZ. The use of unsuitable spare parts can be detrimental to the product quality and may result in considerable costs. DIETZ cannot be held responsible for damage to the product when unsuitable spare parts have been used. Spare parts are available in our DIETZ Online Shop.

7.3 Maintenance schedule

7.3.1 Maintenance prior to use

▲ WARNING

Falling

- ▷ The parking brakes must be re-adjusted after replacing the drive wheels or changing their position. This must be done by a medical retailer.

▲ WARNING

Risk of accidents

- ▷ The wheelchair must not be used if air is escaping from the tyres. A safe ride cannot be ensured in this case.

INFO

Once the adjustment is complete, apply medium-strength thread locker to all screws not fitted with self-locking nuts or spring washers.

Prior to use

What to check	Description
Parking brakes: function	• The wheels must not turn when the parking brakes are locked.



What to check	Description
Seat and backrest cushion: soiling and damage	● If the seat surface and cushions are dirty, clean them in line with the cleaning instructions. ● Have damaged seat surfaces or cushions replaced.
Moving parts: function and wear	● Check all moving parts (legrests, backrest incl. lateral frame elements) for ease of movement and low-noise operation.
Bolted joints: tight	● All bolted joints must be tight.
Wheels: function and damage	● The wheels must run in a straight line and must swivel easily. ● Have damaged and heavily worn wheels and swivelling rollers replaced. ● The spokes should not be loose, bent, or broken. ● The drive wheel must not come loose when subjected to a lateral pulling force.
Pneumatic tyres (optional): function and damage	● Check the tyre pressure. ● Inflate the tyres to the specified pressure (refer to print on the side of the tyre). ● Replace damaged or heavily worn tyres.
Cleaning: dirt	● Clean and disinfect the seat surface.

7.3.2 Monthly maintenance

⚠ WARNING

Risk of falling

- Self-locking nuts and bolts become ineffective after multiple loosening and tightening cycles. Therefore, any loose self-locking nuts and bolts must be replaced by a medical retailer.

**⚠ WARNING****Risk of injury**

- ▷ Surface damage on the push rims must be rectified immediately.

⚠ WARNING**Risk of injury**

- ▷ In case any damage due to loose or damaged parts is detected, the product must no longer be used as its safe use is no longer ensured.

Monthly

What to check	Description
Moving parts: function and wear	● Prior to use, ensure that the hook and loop connections for adjusting the seat surface and backrest are correctly adjusted and firmly established. ● It must be easily possible to lock and swivel back the lateral frame elements. ● It must be easily possible to remove, install, and lock the legrests. ● In case of damage impairing the functionality, the components must be replaced by a medical retailer.
Bolted joints: tight	● All retaining screws must be firmly tightened.
Wheels: function and damage	● Remove dirt and deposits from the swivelling rollers, quick-release axles, and wheel hubs. ● Check the wheels for correct adjustment after each reinstallation. The quick-release axles must be firmly locked in the wheel suspension.
Tyres (PUR): function and damage	● Replace damaged or heavily worn tyres.



What to check	Description
Push handles: function and wear	• The push handles must be properly fixed. • The push handles must be at the same height and must not be visibly damaged or bent. • The locking screw must lock properly (in case of height-adjustable push handles).
Lateral frame element, complete: function and damage	• It must be easily possible to remove, install, swivel, and lock the lateral frame element. • Fix any damage impairing the functionality.
Footplates: function and damage	• Fix any damage impairing the functionality.
Push rims: damage and wear	• The push rims must be securely screwed to the wheel.
Frame, complete: function and damage	• Frame components and hinges must not be damaged or cracked. • Functional damage or severe surface damage must be rectified.
Visual inspection: loose parts, cracks, corrosion	• Perform a visual inspection for loose parts, cracks, corrosion, and other damage.
Entire product: check for soiling	• The entire product must be cleaned based on how dirty it is, however, it must be cleaned at least once a month.

7.4 Troubleshooting

Fault	Possible causes	Measures
The drive wheels do not run in a straight line.	• The spokes are loose, warped, or broken.	Consult medical retailer.
The product does not move in a straight line.	• The swivelling rollers are worn or damaged. • The swivelling rollers do not turn easily. • The drive wheels are damaged.	Consult medical retailer.



Fault	Possible causes	Measures
The product does not move in a straight line.	● The wheels have different tyre pressures (if optional pneumatic tyres are installed).	Correct tyre pressure.
The product is hard to push.	● Dirt has accumulated on the swivelling roller axles. ● Dirt has accumulated on the drive wheels.	Remove dirt.
The product is hard to push.	● The fork of the swivelling rollers is damaged or the swivelling roller suspension is no longer correctly fixed in place. ● The drive wheels are damaged.	Consult medical retailer.
The product is hard to push.	● The tyre pressure is insufficient (if optional pneumatic tyres are installed).	Correct tyre pressure.
The product is hard to push.	● The brakes are incorrectly adjusted.	Consult medical retailer.
The brake function is insufficient or not uniform.	● The tyre pressure is insufficient (if optional pneumatic tyres are installed).	Correct tyre pressure.
The swivelling wheels do not turn easily or are blocked.	● The bearings have dirt accumulations or are defective.	Consult medical retailer.
The brake function is insufficient or not uniform.	● The brakes are incorrectly adjusted.	Consult medical retailer.
Squeaking or friction noise	● Various causes.	Consult medical retailer.



7.5 Cleaning

NOTICE

Property damage

- ▷ Do not use high-pressure cleaners, strong, corrosive chemicals, or abrasive additives for cleaning purposes.

NOTICE

Property damage

- ▷ In order to prevent corrosion, ensure that all materials are completely dry after cleaning.

NOTICE

Property damage

- ▷ Sand and sea water (or gritting salt) can damage moving parts and the wheel bearings. Thoroughly clean the product after it has been exposed to such conditions.

The product and its non-textile components can be regularly wiped down with a moist cloth. In case of heavy soiling, lukewarm water with added mild detergent is used. After cleaning, the product is wiped down with clear water and dried with a cloth.

The wheels can be cleaned with a moist brush with soft plastic bristles. Do not use a wire brush!

The textiles are hand-washable with a mild detergent at up to 40 °C. Machine-washable textiles are labelled accordingly.

7.6 Disinfection

⚠ WARNING

Risk of infection

- ▷ To avoid cross-contamination, disinfect the product each time before giving it to any other person.
- ▷ Safe disinfection cannot be ensured in textiles with seams. DIETZ recommends having such textiles replaced.



NOTICE

Property damage

- ▷ When disinfecting, observe any instructions provided by the manufacturer of the cleaning or disinfection agents used.

NOTICE

Property damage

- ▷ Observe the washing instructions for any removable textiles where available.

All components are thoroughly sprayed with a commercially available surface disinfectant or a cloth is wetted with disinfectant used it to wipe all components. Particular care is required to thoroughly disinfect surfaces that come into frequent contact with skin, e.g. seat surface, handles.

Please refer to the most recent list published by the Robert Koch Institute (www.rki.de/en) to select a disinfectant compatible with the materials to be disinfected.

The following disinfectants are compatible with the materials used:

- aldehyde-free, alcohol-based disinfectants (max. 70 % propyl alcohol content)
- water-based disinfectants (alcohol-free, aldehyde-free, solvent-free, and perfume-free)

7.7 Disposal

Contact a medical retailer when the product is no longer needed. The medical retailer will collect the product for proper disposal or processing in order to pass it on and reuse it.

The entire product must be disposed of in line with the applicable country-specific regulations. It is made of aluminium and plastics. These materials and the packaging material (cardboard) can be recycled.

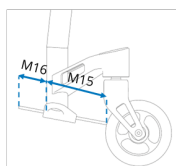
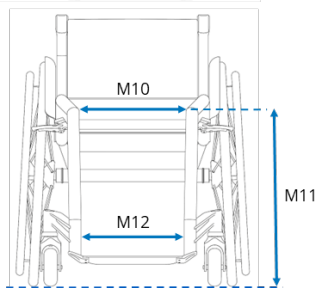
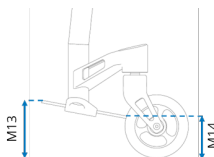
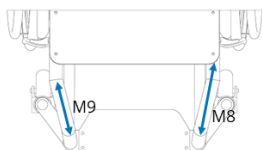
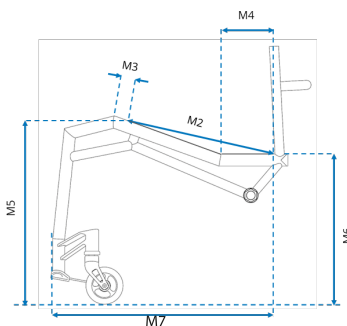
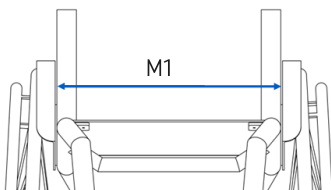


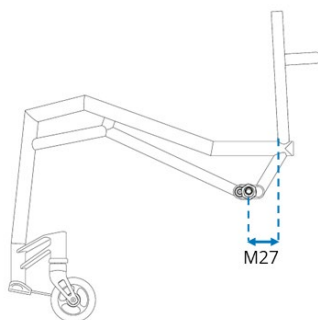
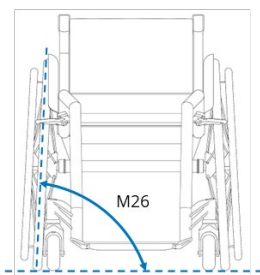
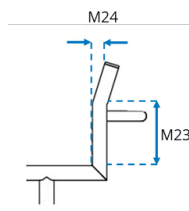
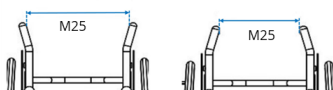
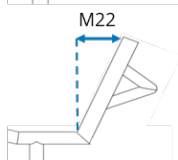
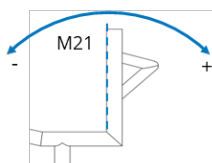
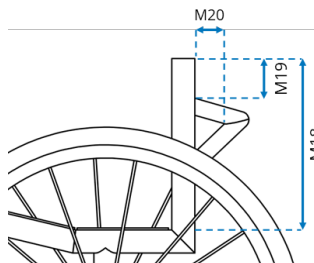
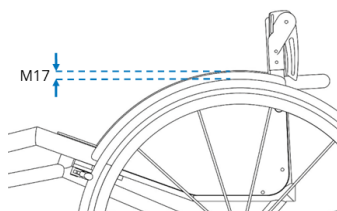
8 Technical specifications

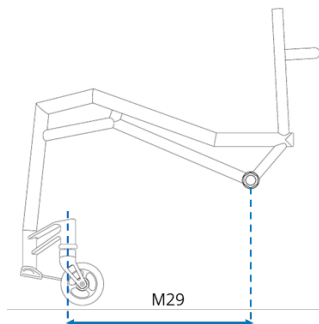
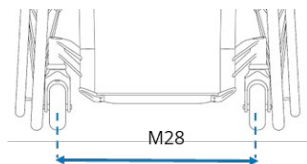
8.1 How DIETZ measures

8.2 Taking measurements

The M-i is custom-made to your body dimensions and individual requirements. Measurements are taken by a medical retailer.







8.3 Dimensions and technical information

	Dimension		M-i
M1	Seat width	mm	to measure
M2	Seat depth	mm	to measure
M3	Frame depth extension	mm	to measure, min. 15
M4	Ergo seat depth	mm	to measure
M5	Front seat height ¹	mm	to measure
M6	Rear seat height ²	mm	to measure
M7	Frame length	mm	to measure
M8	Weld seam distance	mm	to measure
M9	Transverse pipe length	mm	to measure
M10	Upper front frame width	mm	to measure
M11	Weld seam height	mm	to measure
M12	Lower front frame width	mm	to measure
M13	Front footplate height	mm	to measure
M14	Rear footplate height	mm	to measure
M15	Footplate depth	mm	to measure
M16	Footplate protrusion	mm	to measure

¹ Measured relative to the seat surface.

² Measured relative to the seat surface.



	Dimension		M-i
M17	Vertical side guard to wheel distance	mm	to measure
M18	Backrest height	mm	to measure
M19	Stabilisation bar height	mm	to measure
M20	Stabilisation bar depth	mm	to measure
M21	Backrest angle	°	to measure
M22	Horizontal distance to zero position	mm	to measure
M23	Ergo back height	mm	to measure
M24	Backrest curvature	mm	to measure
M25	Ergo back flare	mm	to measure
M26	Camber	°	to measure
M27	Axle position	mm	to measure
M28	Castor width	mm	to measure
M29	Castor length	mm	to measure
	Maximum load capacity ¹	kg	125

8.4 Other information

Other information	M-i
Colours	Matte black, glossy black, black with fine texture, glossy cream white, matte anthracite grey, matte violet blue, matte gentian blue, matte sulphur yellow, matte traffic red, matte reseda green, glossy deep orange, pastel violet with coarse texture, glossy telemagenta, matte beige brown, glossy light green, glossy lemon yellow, matte apple green, custom colour (RAL)
Seat width, mm	to measure
Drive wheels (diameter), "	22 / 24 / 26
Drive wheel camber, °	0 / 1 / 3 / 5
Swivelling wheels (diameter), mm / "	4 / 5

¹ Maximum load capacity including additional loads. The weight of any additional loads reduces the maximum load capacity accordingly.



8.5 Materials

Component	Material
Frame, backrest pipes	aluminium
Seat belts	-
Back support belts	-
Backrest cushion	-
Seatplate	aluminium / carbon
Lateral frame elements	aluminium / carbon
Drive wheel tyres	polyurethane
Swivelling wheel tyres	polyurethane
Calf strap	polypropylene
Footplate	aluminium / carbon
Standard / foldable handle	polyamide
Bent handle	thermoplastic rubber
Parking brake lever (push-to-lock and pull-to-lock brake)	polyurethane

8.6 Product tests

Standard	tested
EN 1021-2	Ignition resistance of upholstery materials and plastic components
ISO 10993-5	Toxicity of materials



9 Manufacturer's declarations

9.1 Warranty

Warranties cover all defects of the product, which are verifiably attributable to flaws in the material or manufacturing processes. The warranty period is 24 months from receipt of the dispatch note, or, if not received, from the date of delivery. Any damage that has occurred as a result of wear and tear, deliberate damage, or negligent or improper operation, use, or cleaning is not covered under statutory warranty obligations. This also applies to the use of unsuitable care products and lubricating oil or grease.

9.2 Liability

DIETZ GmbH can only be held liable if the products are used under the specified conditions and for the specified purposes. DIETZ recommends proper handling and care of the products as per the instructions. DIETZ GmbH cannot be held liable for any damage caused by components and spare parts that have not been approved by DIETZ GmbH. Repairs must be carried out exclusively by medical retailers or the manufacturer.



User manual Version 1.2 EN

Dated 2026-03 (KHa)

REF EN BDA: 911501

DIETZ GmbH

Reutäckerstraße 12

76307 Karlsbad

Germany

Tel.: +49 7248.9186-0

Fax: +49 7248.9186-86

info@dietz-group.de

www.dietz-group-de

Subject to change in case of print errors, mistakes, or price and product changes.

© DIETZ GmbH, Karlsbad, Germany

Any reproduction in full or part requires prior written approval by DIETZ GmbH, Karlsbad, Germany.