

medifa

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User manual medifa 5000

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CE

Version: 2.1 EN

Made in Germany



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we care.

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1. Important information

1.1 Revision history

Version	Date	Reason or modification of publication
1.0	12/2018	First edition
2.0	06/2021	Revision
2.1	06/2024	Complete revision

1.2 CE label

This product is a Class 1 medical product according to the Ordinance (EU) 2017/745 on medical products and complies with the prevailing version of this ordinance at the time of its introduction on the market.

1.3 Conformity

The manufacturer declares the conformity of this product with the essential safety and performance requirements according to MDR in Annexe I as well as the implementation of the technical documentation according to Annexe II and declares conformity by means of an EU Declaration of Conformity according to Annexe IV.

1.4 Manufacturer and distributor

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1.5 Copyright statement

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We are constantly working on the further development of our products. Please understand that we must reserve the right to change the scope of delivery in shape, equipment, and technology at any time.

Reproduction, duplication, or translation of the original user manual, even in part, is not permitted without written consent from medifa.

All rights according to the copyright law are expressly reserved by medifa. medifa shall only be responsible for the safety-related properties of this device within the framework of the legal regulations if maintenance, servicing, and changes to this device are carried out by medifa itself or a representative in accordance with instructions.

2. Foreword

Medifa would like to thank you for purchasing the medifa 5000 operating table. With medifa 5000, you have acquired an operating table that combines design, functionality and comfort in the highest possible “Made in Germany” quality.

medifa's products are manufactured for a long and trouble-free service life. Development, design, and production at medifa have been certified according to DIN EN ISO 9001 and DIN EN ISO 13485. The products comply with the requirements of the EU Medical Device Regulations (MDR) and bear the CE label.

The operating table consists exclusively of high-quality materials with a long service life. medifa offers a wide range of accessories to meet your requirements. Periodic maintenance by our trained service technicians also ensures that the table is always in perfect condition during the routine operation.

In case of any questions, please do not hesitate to contact us at any time.

3. Understand the user manual

ATTENTION

Read and follow the instructions in the user manual

This user manual must be read and understood in full by the operating personnel before putting the medifa 5000 into operation; this applies in particular to the chapter on safety instructions and user obligations. If necessary, verified mediation by means of in-house training is also possible, taking into account the professional qualifications. The user manual must be strictly observed and must be available at the place of use.

ATTENTION

Using the operating table is safe!

Remaining residual hazards are indicated at the relevant points in the user manual. Please observe these instructions.

3.1 List of abbreviations

Abbreviation	Description
CE	European Community (derived from the French “Communauté Européenne”)
DBAB	Continuous operation with intermittent load
DIN	German Industrial Standard
EN	European Standard
EMC	Electromagnetic compatibility
EEC	European Economic Community
HF	Radio Frequency
IEC	International Electrotechnical Commission
IP	Ingress Protection
ISO	International Organisation for Standardisation
MDR	Medical Device Regulation

3.2 Symbols used

Various information and safety symbols are used in this user manual to highlight particularly relevant information.

Safety Instructions



HAZARD

HAZARD indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.

ATTENTION

Indication of harmful situation with the possible consequences: the device or something in its vicinity could be damaged.

Instructions:



Useful instructions and further information are indicated by this symbol.

3.3 Standard accessories

These instructions for use contain only the basic components of medifa 5000. A complete list of accessories can be found in the chapter Accessory list.

3.4 Options

These instructions for use also contain descriptions of permanently installed options with figures, which do not correspond to your configuration. This could, for example, affect the infrared manual switch, the foot-operated switch or others.

4. Safety instructions and user obligations

Keep the user manual in the vicinity of the product so that information can be read at a later date. The user manual is an integral part of the product and must be handed over in case there is a change in location or personnel.

Furthermore, the user manual must be easily accessible to all users of the product at all times.

4.1 General safety instructions



WARNING

Patient hazard!

Any modification of the medical product is prohibited. The manufacturer shall assume no liability for changes to the product.



WARNING

Patient hazard!

A functional failure of medifa 5000 cannot be completely ruled out according to the current commercial state of the art. In this rare case, the motorised functions are no longer available during the operation.

If the electrical functions fail, it is only possible to change the position of the patient by using suitable aids (e.g. padding placed underneath) or by removing the patient from medifa 5000.

- All work with or on the medifa 5000 (installation, commissioning, operation, maintenance, decommissioning, transport, or disposal) may only be carried out by trained medical or nursing staff.
- The medifa 5000 may only be used with the specified products and for the purposes indicated under Intended use. When operating medifa 5000, the factors specified under Technical Data must be observed.
- For the intended and safe use of additional equipment, the corresponding user manual for this additional equipment must be followed.

Instructions to users and/or patients



All serious incidents relating to the device must be notified to the manufacturer and the competent authority of the Member State in which the user and/or patient is located.

4.2 Measures to be taken prior to each use

All electrical and mechanical functions as well as all parts of the medifa 5000 including accessories must be checked for functionality and integrity before each use.

The use of defective or damaged products is prohibited.

4.3 Infection prevention

- All specifications for cleaning and disinfection must be observed.
- Observe the cleaning and disinfection procedures and agents described in this instruction manual.
- Only cleaned and disinfected devices and equipment may be handed over to a service technician or the manufacturer for maintenance and repair work.
- Replace padding that no longer meets the hygiene and infection prevention requirements.

4.4 High-frequency (HF) surgical devices and defibrillators

The medifa 5000 is suitable for use with HF surgical units, defibrillators and defibrillator monitors. Please adhere to the user manual and safety instructions given by the manufacturers of these devices!



HAZARD

Danger of burns for patients!

When using HF surgical unit, defibrillators and defibrillator monitors, there is a risk of burns for the patient if no safety measures are taken.

Here are the safety measures to be followed:

- Place the patient on medifa 5000 isolated from metal parts (medifa 5000, accessories) and conductive padding or tubes.
- Ensure that the patient does not come into contact with wet cloths or underlays. Use only dry materials!

4.5 Maintenance and repair

To avoid failure faults and to ensure operational safety, annual maintenance must be carried out so that the functioning is fully maintained. It is recommended to hire a medifa-certified service technician for this maintenance procedure.

Repairs

Repairs may only be carried out by medifa's technical customer service department or by personnel authorised, trained, and certified by medifa.

medifa shall not be liable for any damage caused due to deferred inspections, faulty repair or maintenance, or changes made to the product.

For service work, please contact the medifa technical customer service department.

4.6 Electricity

Get the electrical safety of medifa 5000 and the power supply checked by a qualified electrician before initial commissioning and at regular intervals. We recommend an annual general safety check by the technical customer service of medifa.

- Do not crush or drive over the mains cable and potential equalisation cable and do not use damaged cables.
- Disconnect cables before changing location.
- Without earthing, discharges can occur on the patient and/or operator. If there are any concerns about the safety of the mains or potential equalisation cable: Only work with the internal power supply until the cable in question has been replaced.
- Operate medifa 5000 only with a connected potential equalisation cable on an electrically conductive floor.

4.7 Risk of explosion



HAZARD

Risk of explosion!

The operating table is not suitable for operation in potentially explosive atmospheres. The medifa 5000 is not suitable for use in rooms or areas where flammable mixtures of anaesthetics with air or oxygen or N2O (nitrous oxide or laughing gas) are used.

4.8 Service life

The medifa 5000 has a service life of 10 years if the specified inspection is adhered to by the medifa service department. This excludes all wear parts and padding.

5. medifa 5000

5.1 Intended use

The described products are exclusively intended for human medical purposes!

The medifa 5000 operating table is intended for the following uses in combination with other medifa accessories:

- Positioning of patients from induction of anaesthesia through operation till the discharge of anaesthesia.
- Patient transport on the medifa 5000 from a transfer facility to the operating room or from the operating room to the transfer facility (in compliance with the conditions for patient transport).
- Positioning the patient for X-rays.

The patient is positioned on the medifa 5000 according to general practice and doctrine. The medifa 5000 must be covered with sterile material before use.

The transport of objects, devices or materials on the medifa 5000 is prohibited. The operating table may only be used / operated by trained medical and nursing staff in a responsible and controlled manner. The training of operating and nursing personnel shall be carried out by the manufacturer or by other persons authorised by the manufacturer.

This user manual must be followed for the intended use of the medifa 5000. Any other use of medifa 5000 shall be deemed to be not in compliance with the intended purpose. The supplier/manufacturer shall not be liable for personal injury or damage to property as a result of improper operation or use.

Only accessories from the chapter [Accessory list](#) are intended for use with the examination chair. All accessories not listed may not be used for safety reasons.

5.2 Intended users

This manual describes tasks and duties for several user target groups.

We summarise two user groups under healthcare professionals: physicians, such as surgeons, orthopaedic surgeons, and anaesthesiologists, as well as surgical assistants and nurses. The third user group consists of cleaning staff and technicians.





All target groups must be instructed by the operator according to their field of activity, their education and professional experience on the device in order to operate the device as intended. For technicians, only secondary information may be included, as there is a separate instruction that specifically addresses this target group.

5.3 Warning stickers on medifa 5000

Observe the danger points and hazards marked by warning symbols (stickers) on the medifa 5000. All warning symbols on the product must be complete and legible. They must not be moved, altered, removed, or covered by other objects. Damaged or detached warning symbols must be replaced according to the specifications.



Fig. 1: Warning stickers on medifa 5000

Symbol	Description
	Danger of crushing
	Do not sit!
	Risk of injury due to tilting of the medifa 5000 medifa 5000 may only be operated on surfaces with an inclination of max. 5°.
	Read the instructions for use before using (sticker on the mains socket on the recessed socket).

5.4 medifa 5000 and components

medifa 5000 has identical basic features and functions in all possible variants.

medifa 5000 has a two-part table top (without optional head and leg plates) with a rigid coupling point for the head and leg plates.

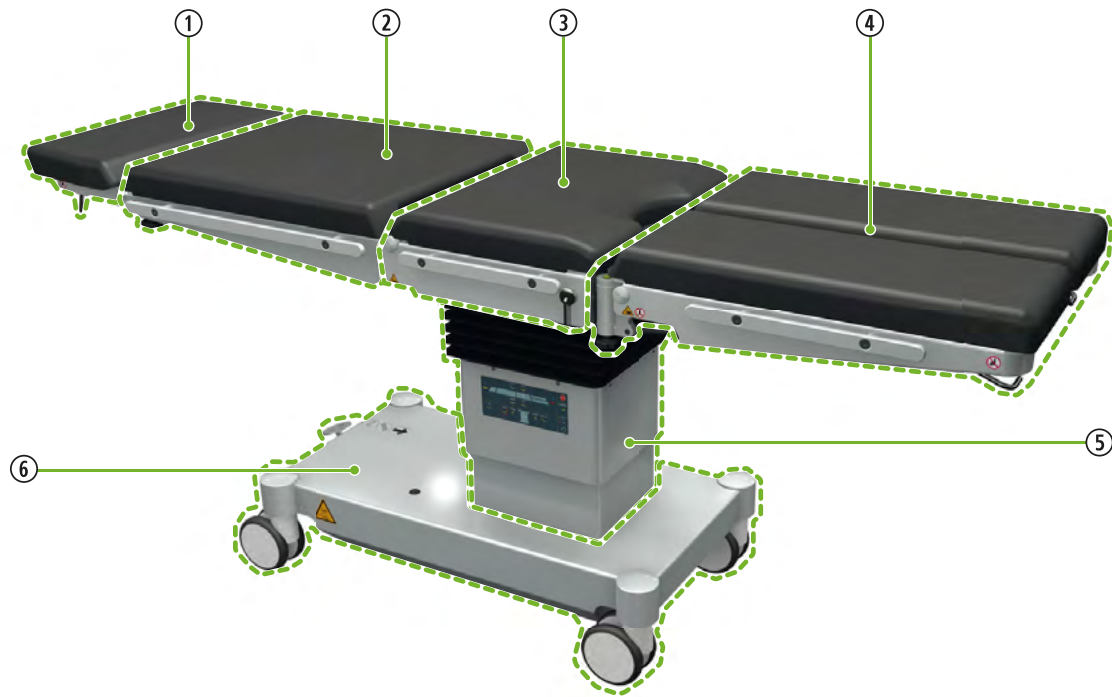


Fig. 2: medifa 5000

- | | |
|---|------------------------------|
| ① Head plate (optional) | ② Back plate |
| ③ Pelvic plate | ④ Split leg plate (optional) |
| ⑤ Lifting column (available in two versions)
505x2x: Standard entry height
504x2x: Low entry height | ⑥ Socket |

Features

- Batteries and battery charger integrated in the table (capacity for approx. 1 week of normal operation use)
- Control unit for electrical functions on the lifting column (column keypad)
- Interfaces for wired manual switch, infrared manual switch and foot-operated switch
- Viscoelastic comfort padding with memory effect, H = 80 mm, and optional PUR padding 60 mm thick
- Padding is electrically conductive
- Saving and calling of up to three random application functions (memory function)
- Maximum permissible load in total: 250 kg (552 lbs)
- Lying surface: 2160 x 540 mm (incl. head and leg plates)
- Option of reverse storage
- Trendelenburg adjustment -30° to +25°
- Lateral adjustment of -20° to +20°
- Electrical/mechanical adjustment of the backrest from -40° to +70/75°
- Manual adjustment of the individual leg plates from -90° to +30°
- Adjustable flex / reflex position on manual switch and column keypad
- Automatic, simultaneous zero position of the lying surface

5.5 Lifting column

The lifting column contains:

- Column keypad
- Infrared receiver of the infrared manual switch (optional)
- Connection for manual switch



Fig. 3: Infrared receiver on the lifting column



Fig. 4: Connection for the manual switch

5.6 Socket

The socket contains:

- Brake pedal
- Manual trolley
- Connection sockets for power cable, potential equalisation and foot-operated switch
- Main switch



Fig. 5: Main switch and connections on the socket

5.7 Connections and symbols

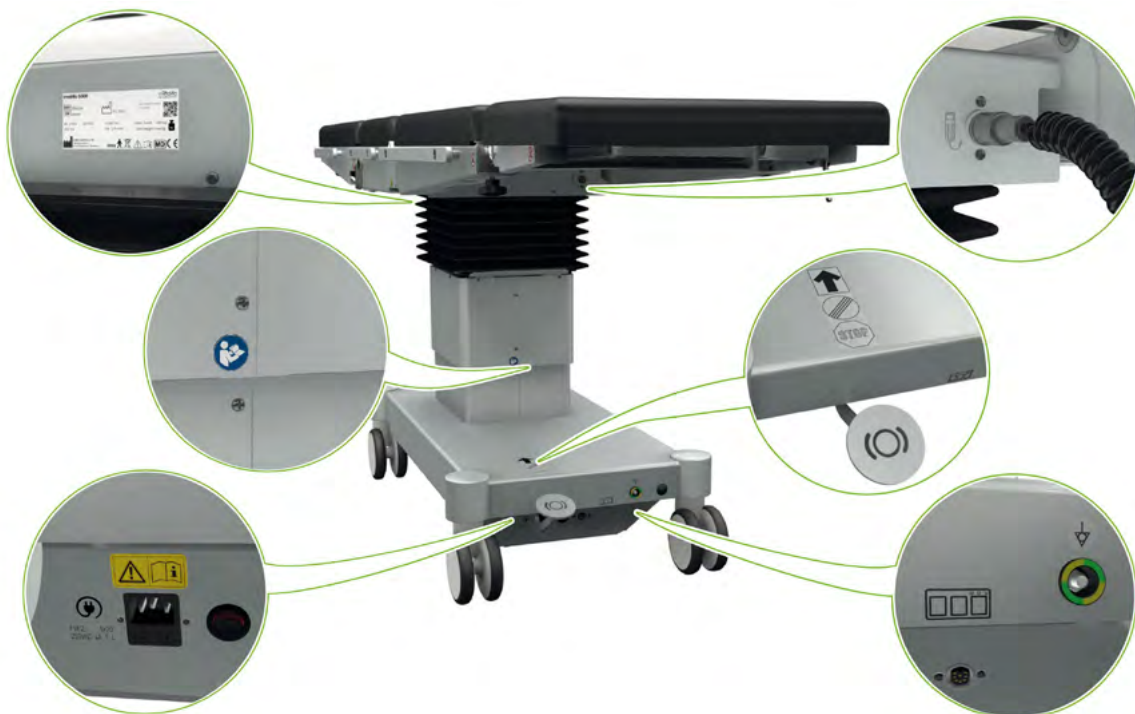

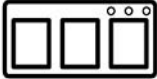





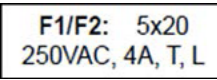

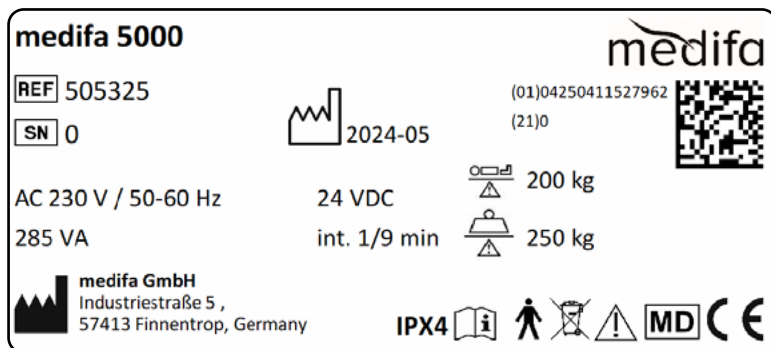


Fig. 6: Symbols on medifa 5000

Symbol	Place	Description
	Lifting column	Connection for the manual switch
	Socket	Connection for the foot-operated switch
  	Socket	<ul style="list-style-type: none"> • Upper position: operating table is directionally stable because the foot-side castors are directed straight ahead. • Middle position: operating table can be moved in all directions as all castors are freely movable. • Lower position: brake is put on the operating table.
	Socket	Connection for potential equalisation
	Socket	Connection for the mains cable
	Socket	Information on mains fuse
	Lifting column	Adhere to the user manual.





5.8 Type label



The type label is located at the foot of the articulated support under the medifa 5000 pelvic plate.



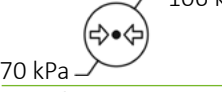











Fig. 7: Type label

Element / symbol	Description
	Manufacturer details and contact information
	Production period
	Article number
	Serial number
	Data matrix code (UDI carrier)
(01)	UDI-DI
(21)	Serial number
	Information on maximum patient weight
	Information on safe working load
	Degree of protection against electric shock: applied part type B
	Observe the safety instructions in the accompanying documents
	Medical product

Element / symbol	Description
	Read the user manual
	Observe instructions for disposal
	The device is declared compliant according to 2017/745 ordinance
	Observe the safety instructions in the accompanying documents
IPX4	Protection against splash water
int. 1/9 min	Continuous operation with intermittent load (DBAB) 1 min ON, 9 min OFF
AC 230 V	Input voltage
24 VDC	Battery voltage
285 VA	Power consumption
50-60 Hz	Frequency of input voltage

5.9 Symbols on the transport packaging

On the transport packaging, there are various symbols related to handling.

Element / symbol	Description
	Temperature range for storage and transport -20 °C to 50 °C.
	Relative humidity for storage and transport 10% to 95%.
	Air pressure for storage and transport 70 kPa to 106 kPa.
	Protect transport packaging from moisture.
	Read the user manual.
	Protect against sunlight.
	Manufacturer information
	Observe instructions for disposal.
	Data matrix code (UDI carrier)
	Medical product
	Production period
	Article number
	Serial number
	The device is declared compliant according to 2017/745 ordinance

5.10 Padding

The padding is made of 60 mm thick PUR padding or 80 mm thick SFC padding. They are fastened to medifa 5000 by means of stud-mounting holes. The padding is disinfectable and washable as well as radiotransparent. Furthermore, the padding is latex-free and breathable.

The padding prevents pressure necrosis of the patient. Medically trained personnel must eliminate the residual risk through active decubitus prophylaxis when positioning the patient. The padding is antistatic and, when fastened properly, complies with the normative regulations.

ATTENTION

Do not use if the padding surface is damaged.

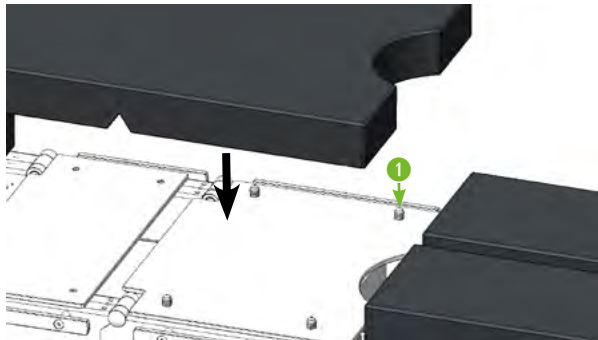
Operating the medifa 5000 with non-approved padding is prohibited and will result in loss of CE conformity.

ATTENTION

Safety Instructions

- Only use the original medifa padding!
- Do not place the patient on the medifa 5000 without a padding.
- When the table components are attached according to instructions, the padding edges of medifa 5000 are aligned.
- Do not insert any sharp-edged objects into the padding or place them on the padding.
- Do not attach adhesive foils.

5.10.1 Attaching the padding

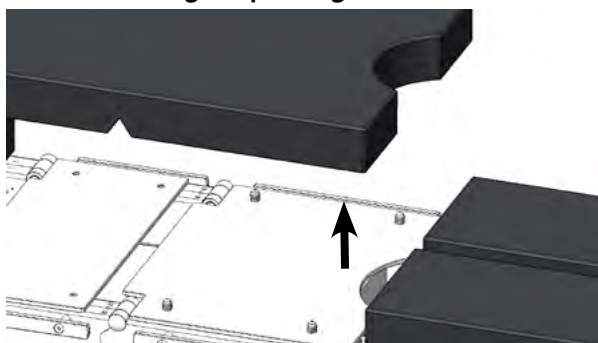


1. Place the padding on the padded plate, press the bushings in the padding onto the stud-mounting holes [1] on the padded plate.



2. Check if the padding is securely held on the operating table. The padding must be fixed exactly on the padded plate.

5.10.2 Removing the padding



1. Reach under an edge on the side of the padding and pull the padding upwards.

5.11 Square receptacles for table segments

The table top segments have square bolts on both sides, which are pushed into the opening on the operating table and secured with a star grip or locking lever.

Thus, additional table top elements such as leg or head plates can be attached quickly, easily and securely without tools.



Fig. 8: Square receptacles for table segments (example)

5.12 Standard rails

The standard rails on the right and left of the table top are used to attach accessories.



WARNING

Risk of personal injury due to tilting of the medifa 5000!

Irrespective of the permissible load of the individual standard rails, a total unilateral torque of 70 Nm over the longitudinal axis and 100 Nm over the transverse axis of the medifa 5000 must not be exceeded during intended use!

5.12.1 Maximum permissible torque

The maximum permissible torque on a standard rail of medifa 5000 is 70 Nm over the longitudinal axis and 100 Nm over the transverse axis. The torque is applied as soon as an accessory is coupled to the standard rails. The dead weight of an accessory used can be found in the appendix to these instructions for use!

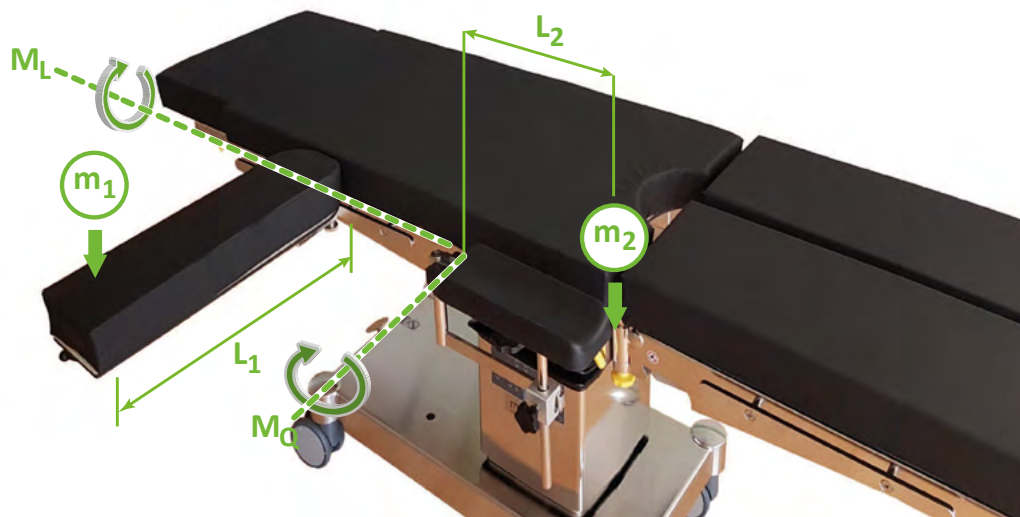


Fig. 9: Torque on standard rail

$[L_1]$ = Length 1

$[m_2]$ = Mass 2

$[L_2]$ = Length 2

$[M_L]$ = Longitudinal moment

$[m_1]$ = Mass 1

$[M_Q]$ = Transverse moment

The torque acting on the standard rails can be approximately calculated using the following rule of thumb.

$$M \text{ (L or Q)} = m \times L \times 10$$

$$\text{Torque [Nm]} = \text{Mass [kg]} \times \text{Length [m]} \times 10[\text{m/s}^2]$$

For the mass (m), specify the weight of the patient body part to be placed on the accessory.

5.13 Radiological capability

The table top is completely radiolucent between the spars. The column area is not radiolucent. For low-artifact fluoroscopy, avoid wrinkling the padding and other overlying materials (cloths, underlays).

5.14 Internal and external power supply

medifa 5000 has electronics, which monitor both the charging mode (external power supply) and the state of charge of the lead-gel batteries (internal power supply).

5.14.1 External power supply

The external power supply of medifa 5000 is provided via the power supply of a room (not the operating room). medifa 5000 requires approx. 9 hours to fully charge. The charging current is reduced to a trickle charging current once the charging process is complete. The trickle charging current is harmless to the lead-gel batteries.



Fig. 10: Mains connection socket

5.14.2 Lead-gel batteries

The internal power supply is provided by two lead-gel batteries. See technical data for details.

Instructions:

- Make sure that the lead-gel batteries are undamaged and functioning properly.
- Only use original lead-gel batteries.
- Avoid mechanical damage to the lead-gel batteries. If the batteries are defective, please contact medifa customer service directly.

5.15 Standard accessories

Information on frequently used accessories can be found in the relevant accompanying documentation, which is included with every accessory.

These instructions for use also contain instructions on the use of the standard accessories listed below:

6. Controls



CAUTION

Risk of injury!

Please familiarise yourself with the keyboard symbols and their functions thoroughly to avoid misinterpretation of the function or incorrect patient positioning.

The medifa 5000 can be operated using the following controls:

- Column keypad
- Manual switch (wired)
- Optional infrared manual switch
- Optional foot-operated switch

6.1 Stop the ongoing adjustment movement of medifa 5000

In case of malfunction:



1. Press STOP on the manual switch or on the column keypad. The current electrical adjustment of medifa 5000 is stopped immediately.

6.2 Manual switch

As on the column keypad, medifa 5000 is graphically simplified on the manual switches. The upper section of the graphical display shows the functions of the lifting column as well as the Trendelenburg, lateral and height adjustment functions.

Below this are the functions of the table top segments (viewed from the head end). The buttons for the adjustment functions are marked with arrows and assigned to the corresponding table top segments.

The direction of movement of the individual functions refers to the figure shown. All functions of medifa 5000 can be fully operated via the manual switch (wired or infrared) and are shown simultaneously by a visual display on the manual switch display.

6.2.1 Notes on the infrared manual switch (optional)



WARNING

Explosion/fire hazard and hazard of pollutant release!

- Only use the original battery charger, which generally ensures that the battery is not damaged during charging.
- The battery may only be replaced by personnel trained by medifa.

The following instructions must be observed to ensure that the infrared manual switch functions safely and continuously:

6.2.2 Operation and function of the buttons

Hold button	Function on
Release button	Function stops and interrupts the process immediately



WARNING

Risk of injury!

If a function does not stop and moves on its own, the STOP button must be pressed immediately. This causes the malfunction to stop immediately.

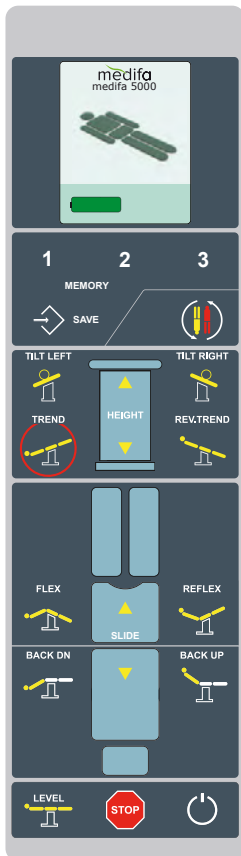


















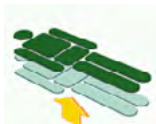

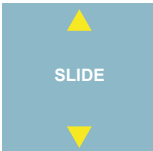
















Fig. 13: Manual switch

Symbol of manual switch	Symbol of display	Name	Function and operation
		Battery status empty - red	Display indicator. < 20% capacity! Charge the battery immediately. Remove medifa 5000 from the operating theatre and charge it.
		Battery status normal - yellow	Display indicator. 79 – 20% capacity – Working mode. Batteries are ready to use.
		Battery status full - green	Display indicator. 100 – 80% capacity – batteries are full. medifa 5000 can be disconnected from the mains and put into the operating theatre.
		On/off switch Manual switch	Switching the manual switch on and off. All functions can be selected after switching on. Mode of medifa 5000 after switch-on is standby.
		STOP / Emergency Stop	When? Function does not stop or medifa 5000 moves unintentionally and on its own. Action: Press STOP. Stops the malfunction immediately.
		MEMORY 1 2 3	Select saved table position.
		SAVE	Save the current table position permanently.
		Normal position	Normal position on head side. The patient's head is at the head end of the table top. No symbol for the normal position is shown on the display.
		Reverse position	medifa 5000 is aligned in reverse position. The patient's head is at the foot end of the table top.

Symbol of manual switch	Symbol of display	Name	Function and operation
		LEVEL Zero position	All electrically driven table segments move into the horizontal position.
		TREND Trendelenburg	Tilt the table top over the transverse axis in the head-down position.
		REV.TREND Anti-Trendelenburg	Tilt the table top over the transverse axis in the foot-down position.
		HEIGHT Height adjustment upwards	Raises the entire table top.
		HEIGHT Height adjustment downwards	Lowers the entire table top. Position for getting the patient in and out and for moving medifa 5000.
		SLIDE ▲	Longitudinal shift of the table top towards the foot. Function is not assigned for models 504220, 504320, 505220 and 505320.
		SLIDE ▼	Longitudinal shift of the table top towards the head. Function is not assigned for models 504220, 504320, 505220 and 505320.
		TILT LEFT Lateral to the left	Tilt the table top over the longitudinal axis to the left.
		TILT RIGHT Lateral to the right	Tilt the table top over the longitudinal axis to the right.

Symbol of manual switch	Symbol of display	Name	Function and operation
		REFLEX Position	Table top moves to the REFLEX position. Function is not assigned for models 504220 and 505220.
		FLEX Position	Table top moves to the FLEX position. Function is not assigned for models 504220 and 505220.
		BACK UP Back upwards	Back plate with any attached head plate accessories is tilted upwards. Function is not assigned for models 504220 and 505220.
		BACK DN Back downwards	Back plate with any attached head plate accessories is tilted downwards. Function is not assigned for models 504220 and 505220.

6.2.3 Saving table positions (SAVE)

A target position of medifa 5000 can be saved using the SAVE button on the manual switch. All functions and their combinations are possible, e.g. lateral and height adjustment, Trendelenburg and longitudinal shift (optional).

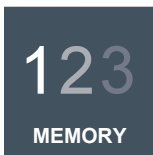
1. Setting the desired target position.
2. Press and hold the SAVE button.
3. Press the desired MEMORY 1, 2 or 3 button, which is used to call up the table position later. A beep sounds once the table position has been successfully saved.



6.2.4 Select saved table position (MEMORY)

The MEMORY 123 button on the manual switch can be used to select and automatically execute a table position previously saved using SAVE. Up to three positions can be saved.

1. Press the corresponding button.
The corresponding function image appears automatically on the display and medifa 5000 moves to the position saved under the assignment.



6.3 Column keypad

The column keypad of medifa 5000 is a permanently integrated control unit on the metal casing of the lifting column. The column keypad is backlit. On the column keypad, medifa 5000 is graphically simplified. The top section shows the functions of the table top and the functions of the lifting column below.

6.3.1 Operation and function of the buttons

Hold button	Function on
Release button	Function stops and interrupts the process immediately

 **WARNING**

Risk of injury!

If a function does not stop and moves on its own, the STOP button must be pressed immediately. This causes the malfunction to stop immediately.

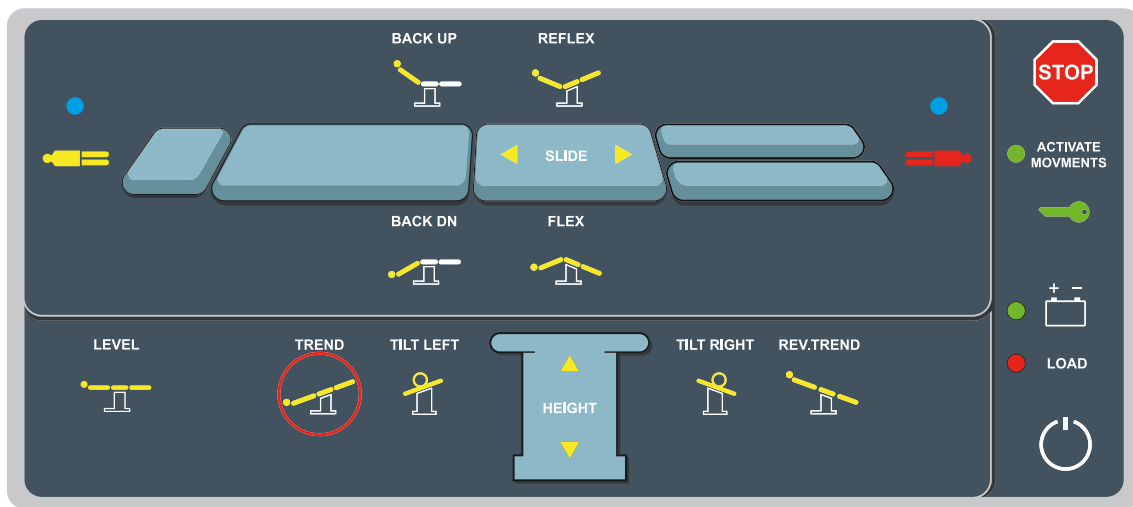


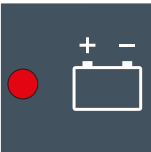
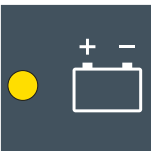
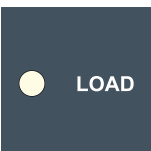


Fig. 14: Column keypad

Symbol	Name	Function and operation
	STOP / Emergency Stop	When? Function does not stop or medifa 5000 moves unintentionally and on its own. Action: Press STOP. Stops the malfunction immediately.
	Button lock on LED off	The control panel of the column keypad is always locked. This prevents unintentional function activation. STOP is active even when the column keypad is locked!
	Button lock off LED green	The buttons are enabled. The keypad locks automatically 10 seconds after the last key is pressed via the column keypad.
	Battery status empty Battery is empty LED red	< 20% capacity! Charge battery immediately. Remove medifa 5000 from the operating theatre and charge it.
	Normal position	79 – 20% capacity – Working mode. Batteries are ready to use.
	Battery status full Battery full LED green	100 – 80% capacity – batteries are full. medifa 5000 can be disconnected from the mains and put into the operating theatre.
	LOAD Battery operation active LED off	Power cable not connected. Energy is supplied by the lead-gel batteries.
	LOAD Battery is charging LED red	Power cable connected. medifa 5000 is charging. medifa 5000 must not be used in the operating theatre.

Symbol	Name	Function and operation
	On/off switch Column keypad	Switching the column keypad on and off.
	Normal position inactive LED off	The normal position is not active. LED is off. Reverse position is selected.
	Normal position active LED blue	Normal position on head side. The patient's head is at the head end of the table top.
	Reverse position inactive LED off	The reverse position is not active. LED is off. Normal position is selected.
	Reverse position active LED blue	Foot-side position. The patient's head is at the foot end of the table top.
	HEIGHT Height adjustment upwards	Raises the entire table top.
	HEIGHT Height adjustment downwards	Lowers the entire table top.
	LEVEL Zero position	All electrically driven table segments move into the horizontal position.
	TREND Trendelenburg	Tilt the table top over the transverse axis in the head-down position.

Symbol	Name	Function and operation
	REV.TREND Anti-Trendelenburg	Tilt the table top over the transverse axis in the foot-down position.
	TILT LEFT Lateral to the left	Tilt the table top over the longitudinal axis to the left.
	TILT RIGHT Lateral to the right	Tilt the table top over the longitudinal axis to the right.
	REFLEX Position	Table top moves to the REFLEX position. Function is not assigned for models 504220 and 505220.
	FLEX Position	Table top moves to the FLEX position. Function is not assigned for models 504220 and 505220.
	BACK UP Back upwards	Back plate with any attached head plate accessories is tilted upwards. Function is not assigned for models 504220 and 505220.
	BACK DN Back downwards	Back plate with any attached head plate accessories is tilted downwards. Function is not assigned for models 504220 and 505220.
	SLIDE ►	Longitudinal shift of the table top towards the foot. Function is not assigned for models 504220, 504320, 505220 and 505320.
	SLIDE ◀	Longitudinal shift of the table top towards the head. Function is not assigned for models 504220, 504320, 505220 and 505320.

6.4 Foot-operated switch (optional)

The three basic functions Trendelenburg, height adjustment and lateral position can be selected quickly using the optional foot-operated switch.



Fig. 15: Foot-operated switch with 3 pedals



CAUTION

Risk of tripping

The foot-operated switch should be positioned so as to avoid tripping over the foot-operated switch or its cabling.

6.4.1 Operation and function of the pedals

Pedal	Symbol	Function
Right side		The right pedal is used to select and connect through the basic functions from left to right. Each time the pedal is pressed, one function is switched further. The respective LED lights up blue.
		Height adjustment
		Trendelenburg
		Lateral adjustment
Left side		 Height adjustment upwards medifa 5000 is started up when the function LED lights up.
		 Anti-Trendelenburg When the function LED lights up, medifa 5000 is moved to the anti-Trendelenburg position.
		 Lateral to the left When the function LED lights up, medifa 5000 is tilted laterally to the left.
Centre		 Height adjustment downwards When the function LED lights up, medifa 5000 is lowered.
		 Trendelenburg When the function LED lights up, medifa 5000 is moved to the Trendelenburg position.
		 Lateral to the right When the function LED lights up, medifa 5000 is tilted laterally to the right.

7. Switch on and switch off medifa 5000

7.1 Safety Instructions

- Do not crush or drive over the mains cable and potential equalisation cable and do not use damaged cables.
- Disconnect cables before changing location. If there are any concerns about the safety of the mains or potential equalisation cable, only work with the internal power supply until the cable in question has been replaced.
- Operate medifa 5000 only with a connected potential equalisation cable on an electrically conductive floor.
- The connection point for the potential equalisation cable on medifa 5000 complies with IEC 60601-1.

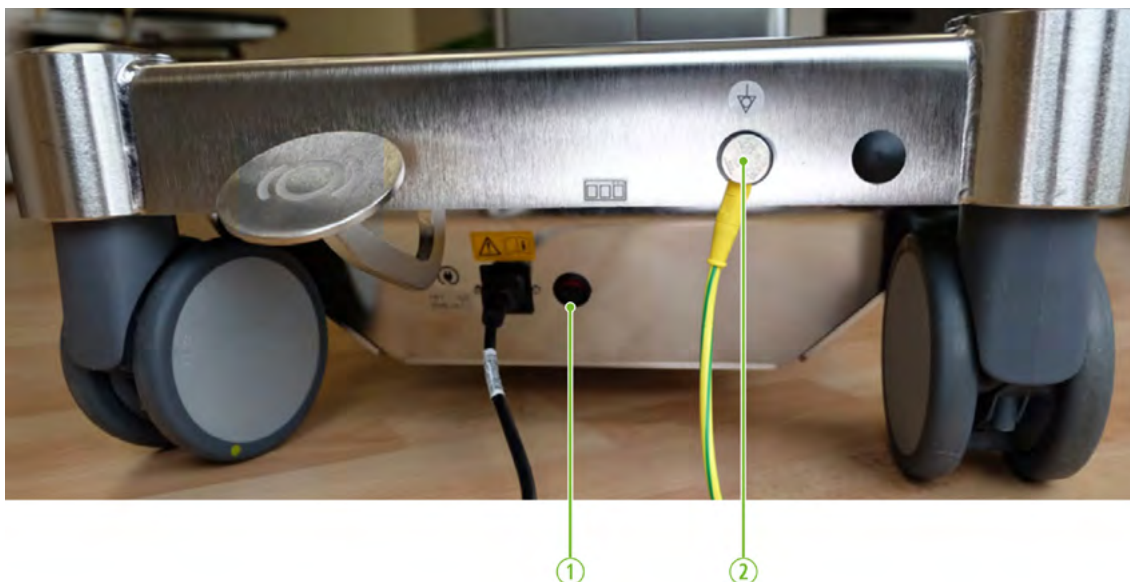


Fig. 16: Main switch and connection for potential equalisation

① Main switch equal

② Potential equalisation connection

7.2 Establish potential equalisation



CAUTION

Risk of personal injury from electric shock!

The risk of a possible patient leakage current is reduced and potential equalisation to all connected medical devices is ensured if medifa 5000 is connected to the potential equalisation in the room.



1. Connect the potential equalisation cable to the potential connection (pin) on the base of medifa 5000.
2. Connect to the potential equalisation in the room.

7.3 Switch on medifa 5000



1. Switch on the main switch on the base.



2. Press the on/off switch on the manual switch or on the column keypad.

Battery and charging indicators on the manual switch and on the column keypad show that medifa 5000 is charging when the power cable is connected or the current state of charge of the lead-gel batteries.

7.4 Switch off medifa 5000



1. Press the on/off switch on the manual switch or on the column keypad. The light on the manual control unit and the column keypad goes out.



2. Switch off the main switch on the base.

Situations in which the main switch of medifa 5000 must be switched off:

- when not in use
- before each cleaning and disinfection

8. Charge medifa 5000

8.1 Charging



HAZARD

Mortal danger due to electric shock!

- Set up medifa 5000 such that disconnectable plugs or devices are easy to reach.
- medifa 5000 must only be connected to a supply network with a protective earth conductor. This prevents the risk of electric shock. Cables with crush points and insulation damage may no longer be used. Replace such cables immediately.
- The cable should also be replaced if there are concerns about its perfect condition. Only work with the internal power supply until the cable in question has been replaced.



HAZARD

Risk of explosion!

The use of cleaning agents, alcohol-based disinfectants or flammable anaesthetic mixtures, which are mixed with air, an oxygen-enriched environment or nitrous oxide, can cause an explosion.



CAUTION

Risk of personal injury due to tripping hazard!

Do not roll over or crush the power cable! If possible, lay the cable in such a way that nobody can trip or fall over it!

ATTENTION

Note the mains voltage!

- Only connect medifa 5000 to the voltage specified on the type label!
- Do not extend the mains cable and do not use an extension cable! The permissible value of the patient leakage current is exceeded by the extension! Only use the power cable supplied!
- Charge medifa 5000 immediately after the operating theatre so that it is always ready for use.

medifa 5000 must be fully charged before it is used for the first time.



WARNING

Danger of personal injury.

Do not make any electromotive adjustments to medifa 5000 while it is disconnected from the power supply!

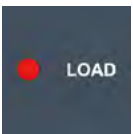


1. Insert the power cable into the connection for the power cable.



2. Insert the mains plug of the power cable into a socket.

3. Switch on the main switch on the base of medifa 5000 and check whether medifa 5000 is being charged by looking at the column keypad.



The red LOAD LED on the column keypad must light up.



Approximately 9 seconds later, the LED next to the battery symbol on the column keypad lights up green. After 2 hours charging time approx. 30%, after 5 hours 80% and after 9 hours 100% of the charging capacity is reached.

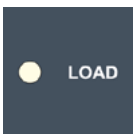


During the entire charging process, the manual switch displays the green charging symbol. A charging progress indicator is not available.



4. Switch off the main switch on the base of medifa 5000.

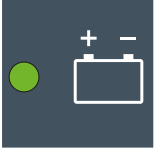



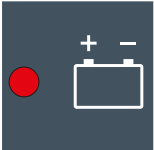

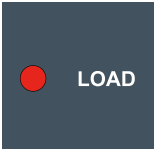
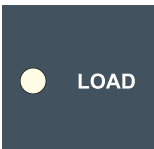
5. Disconnect medifa 5000 from the power supply by pulling the plug of the power cable out of the socket of the room.



6. If the display on the column keypad switches to battery operation, the LED next to LOAD goes out.

7. Now unplug the power cable from the connection socket on the base.

8.2 Recognising the battery charging mode and state of charge

Symbol of column keypad	Symbol of manual switch	Description
		80 – 100 % charging capacity With a fully charged battery, the electrical functions can be used for around 8 hours.
		20 – 79 % charging capacity
		0 – 20 % charging capacity Charge medifa 5000 immediately!
		medifa 5000 is connected to a power supply. The batteries are charged.
		medifa 5000 is not connected to a power supply. The batteries are not charged.

8.3 Possible faults and causes

Problem / Fault	Cause	Remedy
medifa 5000 cannot be switched on.	Lead-gel batteries of medifa 5000 are fully discharged.	Connect medifa 5000 to the power supply.
medifa 5000 cannot be charged, the battery status display remains red.	Control electronics, power cable or input fuses (2x 4 AT) defective.	Notify technical customer service.
medifa 5000 cannot be charged, charging mode indicator is not lit.	Power input on medifa 5000 defective.	Notify technical customer service.

9. Patient transport



CAUTION

Risk of personal injuries due to tilting of the medifa 5000

- The operating table can tip over when driving over the thresholds.
- The medifa 5000 must always be moved at the lowest possible height and with two people!



CAUTION

Risk of personal injury due to crushing!

- Do not jam your feet in the trolley section when turning or moving the medifa 5000.



CAUTION

Danger of collision!

Take special care when transporting with the medifa 5000. Exclude collisions with persons in the area or the furniture and impact effects!

- Familiarise yourself with the driving behaviour before transporting a patient for the first time.

9.1 Notes on patient transport

The following conditions must be implemented before using medifa 5000:



1. Move the lateral and/or longitudinal shift of the plate to zero position.

2. Position the spreadable leg plates parallel to the longitudinal direction of medifa 5000 by hand.

3. Fold the accessories on the medifa 5000 or remove them from the medifa 5000.



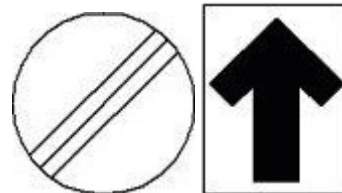
4. Always move the table top to the lowest position.

ATTENTION

Damage to the cables!

- Before moving medifa 5000, disconnect the mains and potential equalisation cables from medifa 5000. Do not roll over or crush the connection cable / potential equalisation cable when moving medifa 5000!

9.2 Patient transport



1. Release the brake.

2. Select moving mode.

Middle position: operating table can be moved in all directions. All castors are freely movable.

Upper position: operating table is directionally stable. The foot-side castors are directed straight ahead.

3. Move the table manually. Avoid jerky movements of the table. When turning, observe turning circle and surroundings.

4. Hold the table while driving.

5. Stop the table by manual stop.

6. Locking the table with the brake pedal.

10. Brake medifa 5000/Release brake



CAUTION

Patient hazard!

Braking the medifa 5000 while it is running is prohibited! First stop the medifa 5000.



1. Stop medifa 5000.
 2. Press the brake pedal fully down. medifa 5000 is now braked.
-
1. Release brake: Move the brake pedal to one of the two moving positions. The brake is now released.

11. Positioning of patient

11.1 Notes on positioning of patient



WARNING

Patient hazard due to functional failure!

The electrical functions must not be carried out continuously. One minute of electrical operation must be followed by 9 minutes without electrical operation. Otherwise there can be an overload and functions may fail. Strictly adhere to the limits of capacity utilisation.



WARNING

Patient hazard!

A functional failure of medifa 5000 cannot be completely ruled out according to the current commercial state of the art. In this rare case, the motorised functions are no longer available during the operation. If the electrical functions fail, it is only possible to change the position of the patient by using suitable aids (e.g. padding placed underneath) or by recovering the patient from medifa 5000.



CAUTION

Danger of crushing!

Risk of crushing due to moving parts. Familiarise yourself with the operation before use. Risk of injury from protruding parts.



CAUTION

Patient hazard - monitor patient position!

To avoid injuries, the position of the patient on the medifa 5000 must be monitored permanently.

11.2 Preparing medifa 5000 for patient positioning

1. medifa 5000 is disconnected from the external power supply. The lead-gel batteries are fully charged.



2. Switch on medifa 5000 at the main switch on the base.



3. Switch on the manual switch and the column keypad.

4. Applying brakes to the medifa 5000, if not already applied.



5. Quick check on the manual switch that the charge status indicator is green.

6. Cover medifa 5000 with sterile tissues

7. Prepare medifa 5000 (with accessories and controls). 4 Configuring medifa 5000 before the OP, page 68



8. When operating via the column keypad, the keypad lock must first be released by pressing the ACTIVATE MOVEMENTS button. The keypad being enabled can be seen when the diode above the locking key lights up green. Then carry out the desired adjustments immediately, as the time window for automatic locking is 10 seconds.



WARNING

Danger to the patient due to improper fastening!

- Check that the plate segments and accessories are securely attached to medifa 5000 before each use! Detached elements may move independently or slip out of place.
- Loosen the controls only for adjustment, then tighten them again immediately!
- Check fastening elements for secure fit!

11.3 Positioning the patients



CAUTION


Patient hazard!

Danger of personal injury. Extremities must not overhang in the longitudinal direction!
Incorrect loading can cause plate segments to break off the medifa 5000 or the medifa 5000 can tip over. The ascending or descending may only be carried out in the area of the lifting column via the seat plate!
Do not step over the back plate or coupled plate segments when on or off the medifa 5000.

Sequence for setting a desired patient position:

1. Please decide whether the patient should assume the normal position or the reverse position.
When setting the patient position, the MEMORY button offers you the convenient option of saving up to 3 positions in advance and calling them up automatically by simply pressing the function button.
2. You can access unsaved positions as follows: To set medifa 5000, press the function button on the keypad until the desired position is reached. The function stops when the button is released. The touch time is < 1 min.
3. Set the desired working height first by using the height adjustment.
4. Choose the desired patient position.
5. Lift the patient into the desired support position on medifa 5000; do not move over the padding. After each change of position, lift the corresponding body parts of the patient. Any folds or shear forces must be eliminated.
6. Secure the patient before adjustment and actively support the patient during the adjustment.

11.4 Normal position

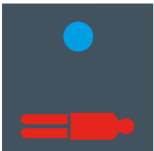

Symbol of column keypad	Symbol of manual switch	Description
		Normal position Normal position on head side. The patient's head is at the head end of the table top. The head position of the patient must always match the display on the manual switch and column keypad!

11.5 Reverse position

For certain positions it is possible to reverse the table top, i.e. the patient lies the other way around on the table top, but the display on the column keypad no longer corresponds to the head position of the patient.

Some table functions such as Trendelenburg or Lateral are then reversed. In this case, the head position of the patient must be manually set to the appropriate head position using the REVERSE button. The table movements are now carried out correctly. After switching medifa 5000 off and on again, the normal patient position is always active and is displayed on the column keypad.

For the reverse position, some conversion measures must be carried out, which depend on the functional scope of medifa 5000.

Symbol of column keypad	Symbol of manual switch	Description
		Reverse position Foot-side position. The patient's head is at the foot end of the table top.

11.6 Height (HEIGHT)

The complete table top is moved up or down with the height adjustment.

With various functions such as Trendelenburg and Lateral, height adjustment is always the first function used to set the desired table top height.

For each patient ascent and descent, medifa 5000 is moved to the lowest position and then moved to the working height with the patient lying on it.



CAUTION

Patient hazard!

The ascending or descending may only be carried out in the area of the lifting column via the seat plate!
Do not step over the plate segments when on or off the medifa 5000!



CAUTION

Patient hazard!

When the table top is lowered, it may collide with the trolley, the floor or other objects which are located under the table top and which are possibly covered by cloths or underlays.

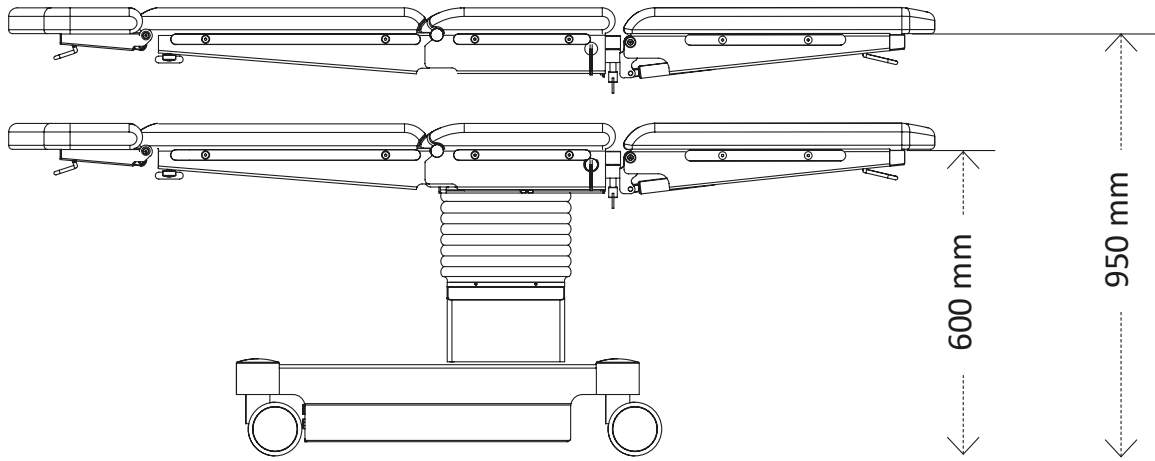


Abb. 17: Höhenverstellung für Modelle 505220 505320, 505325.

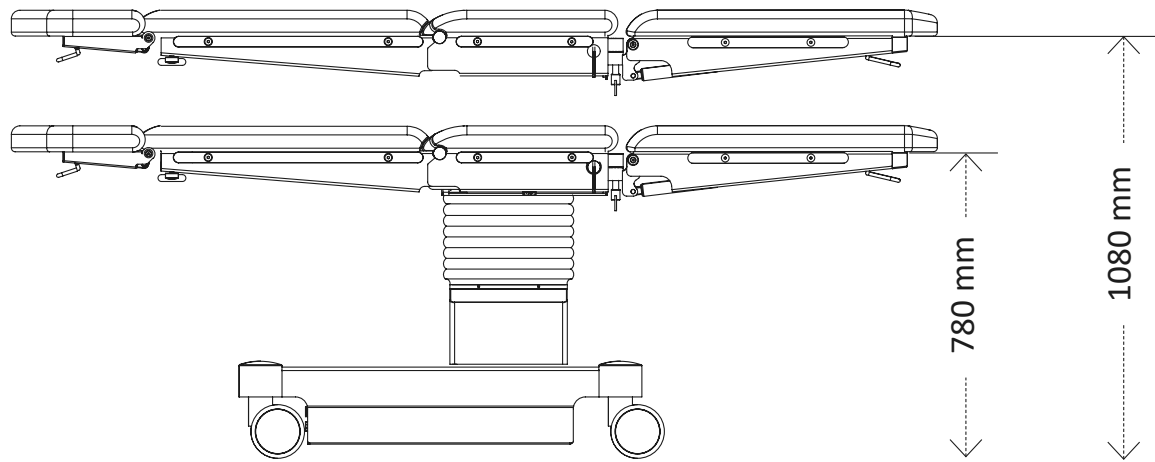
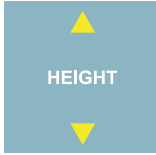
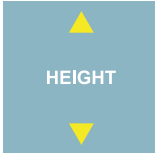

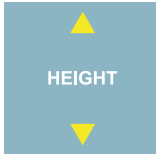
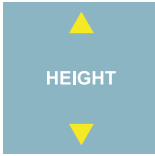



Fig. 18: Height adjustment for models 504220, 504320, 504325

Column keypad	Manual switch	Foot-operated switch	Description
			Height adjustment to.
			Height adjustment from

11.7 Trendelenburg/ Anti-Trendelenburg

In this position, the table top is tilted by -30° to $+25^{\circ}$ over the transverse axis.



When the Trendelenburg and anti-Trendelenburg functions are selected, medifa 5000 can perform a combined movement of longitudinal shift and Trendelenburg function so that the surgical intervention site on the patient (abdomen or torso area) is as central as possible above the lifting column



CAUTION

Patient hazard due to danger of collision!

When the table top is tilted (Trendelenburg/Anti-Trendelenburg), it may collide with the lifting column, the floor or other objects which are located under the table top and which are possibly covered by cloths or documents.

To avoid the risk of all movements, monitor the table top continuously. Clear the area under the table top, move the table top to a higher position or move the corresponding plate segments (leg/back plate joints) further upwards. Then move to the desired Trendelenburg/Anti-Trendelenburg position.

This function carries a risk of clamping and injury if the Trendelenburg function is approached at the lowest table height. Then the spars of the plate segments of the upper backrest collide with the base of the medifa 5000.

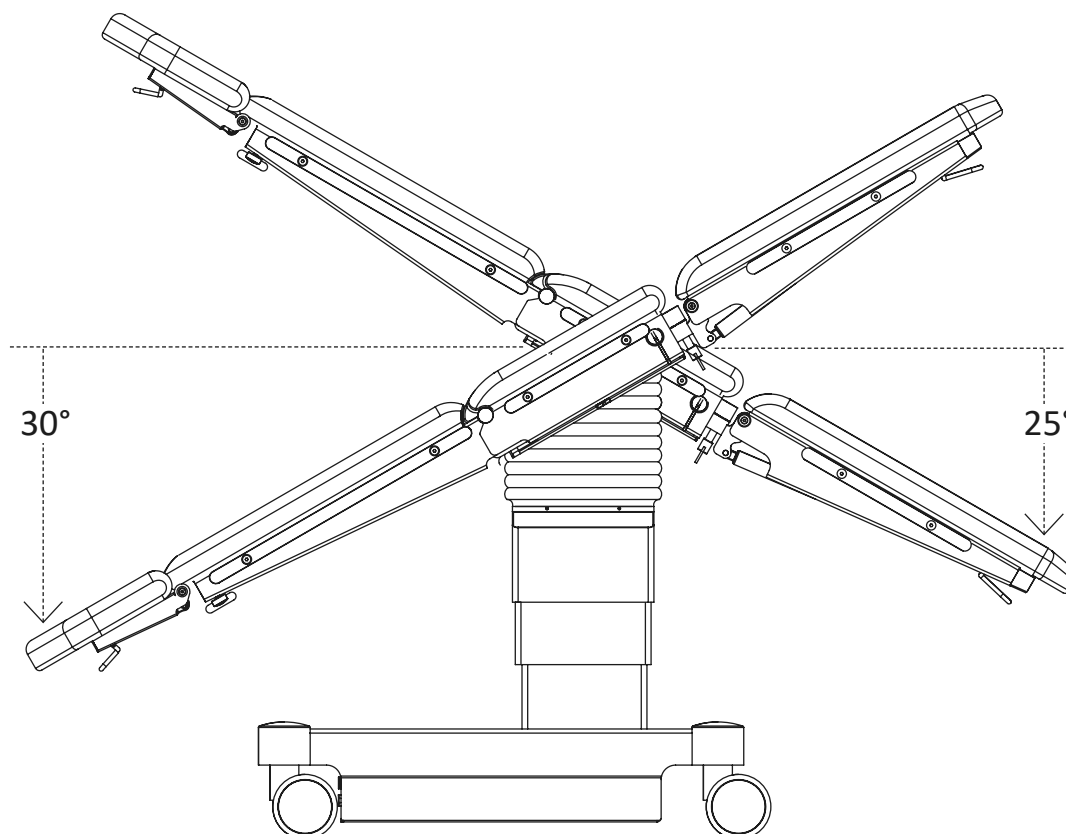


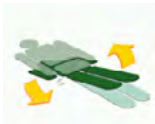
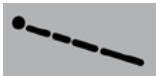








Fig. 19: Trendelenburg- / Anti-Trendelenburg position

Column keypad	Manual switch	Foot-operated switch	Description
	 	 	<p>Trendelenburg Tilting of the table top over the transverse axis in the head-down position.</p>
	 	 	<p>Anti-Trendelenburg Tilting of the table top over the transverse axis in the foot-down position.</p>

11.8 Lateral position (EDGING)

In the lateral function, the table top is tilted to the left or right around its longitudinal axis. The setting range is up to +/- 20°.

Lateral adjustment is not permitted in moving mode!



WARNING

Risk of personal injury due to tilting of the medifa 5000!

No lateral adjustment may be made at maximum table load!

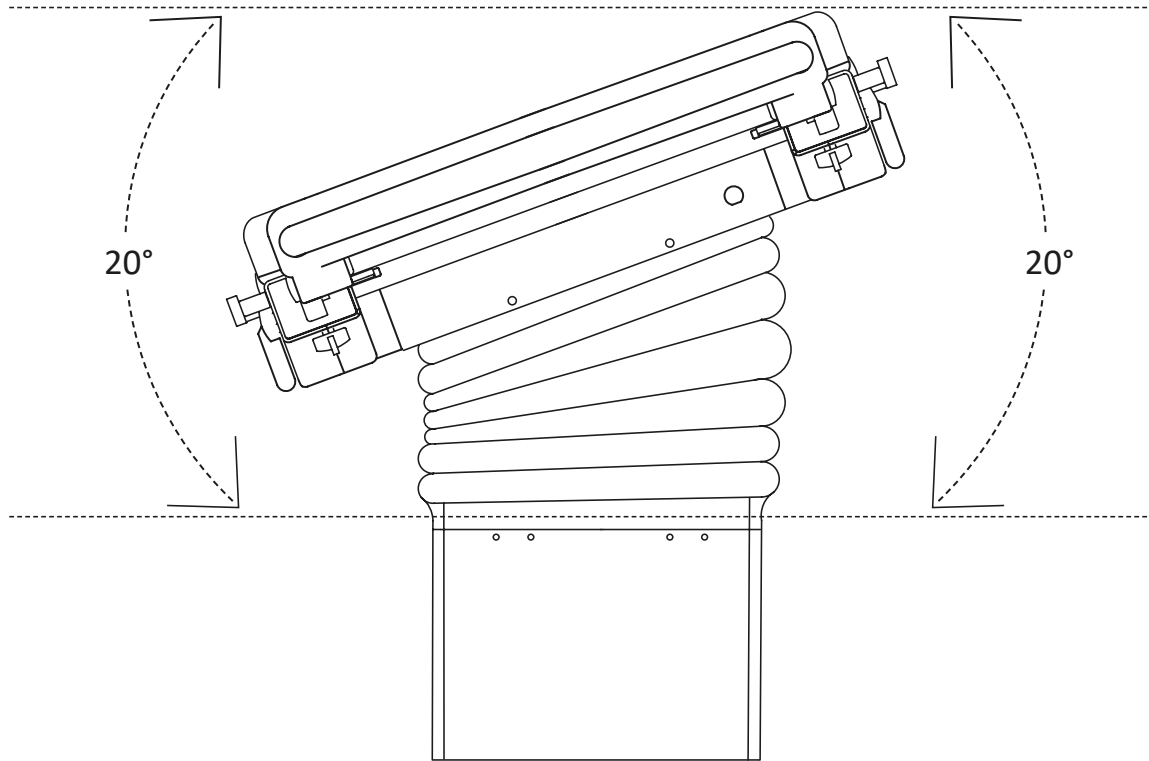


Fig. 20: Lateral adjustment

Column keypad	Manual switch	Foot-operated switch	Description
<p>TILT LEFT</p>	<p>TILT LEFT</p>		Lateral to the left
<p>TILT RIGHT</p>	<p>TILT RIGHT</p>		Lateral to the right

11.9 Backrest adjustment

11.9.1 Backrest adjustment for models 505320, 505325, 504320 and 504325

The back plate is firmly connected to the pelvic plate. The back plate joints can only be adjusted synchronously. With the back plate function, the back plate is tilted upwards or downwards with the plate segment that may be coupled to the head end. The setting range is -40° / $+70^{\circ}$.

In case of foot-side removal (longitudinal shift) of the table top, adjustment into the negative range is not possible.

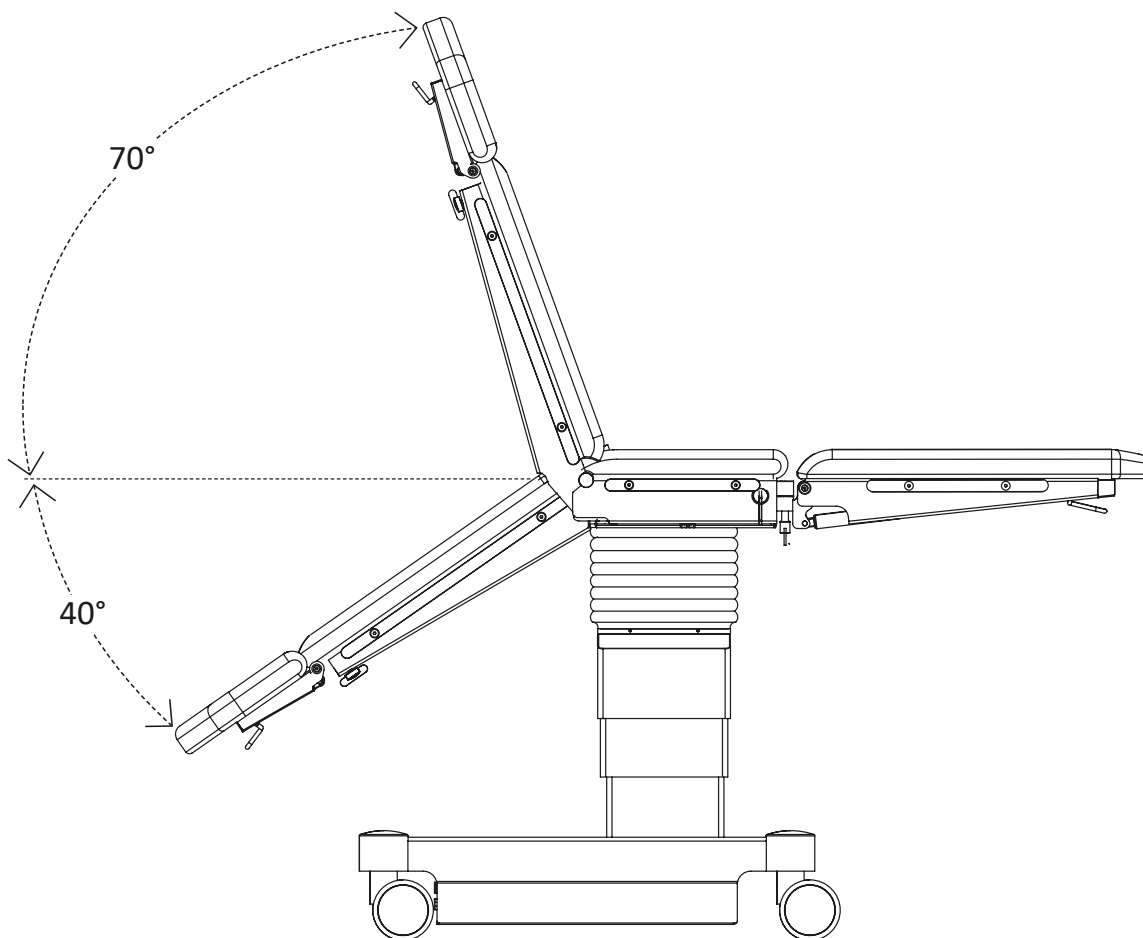


Fig. 21: Backrest adjustment for models 505325, 505320, 504320, 504325

Symbol of column keypad	Symbol of manual switch	Description
		<p>Back plate upwards Back plate with any head plate accessories is tilted upwards. Setting range is -40° to $+70^{\circ}$</p>
		<p>Back plate downwards Back plate with any head plate accessories is tilted downwards. Setting range is -40° to $+70^{\circ}$</p>

11.9.2 Backrest adjustment for models 505220 and 504220



CAUTION

Risk of injury!

Two-hand operation is absolutely necessary for safety reasons, since the operator must exert his/her own body strength for adjustment, depending on the patient's body weight!

The back plate is firmly connected to the pelvic plate. The back plate joints can only be adjusted synchronously by hand. With the back plate function, the back plate is tilted upwards or downwards with the plate segment that may be coupled to the head end. Setting range is -40° to $+75^{\circ}$.



1. Tighten the lever on the back plate and bring the back plate into the desired position.



2. Release the lever. The back plate is locked in position.

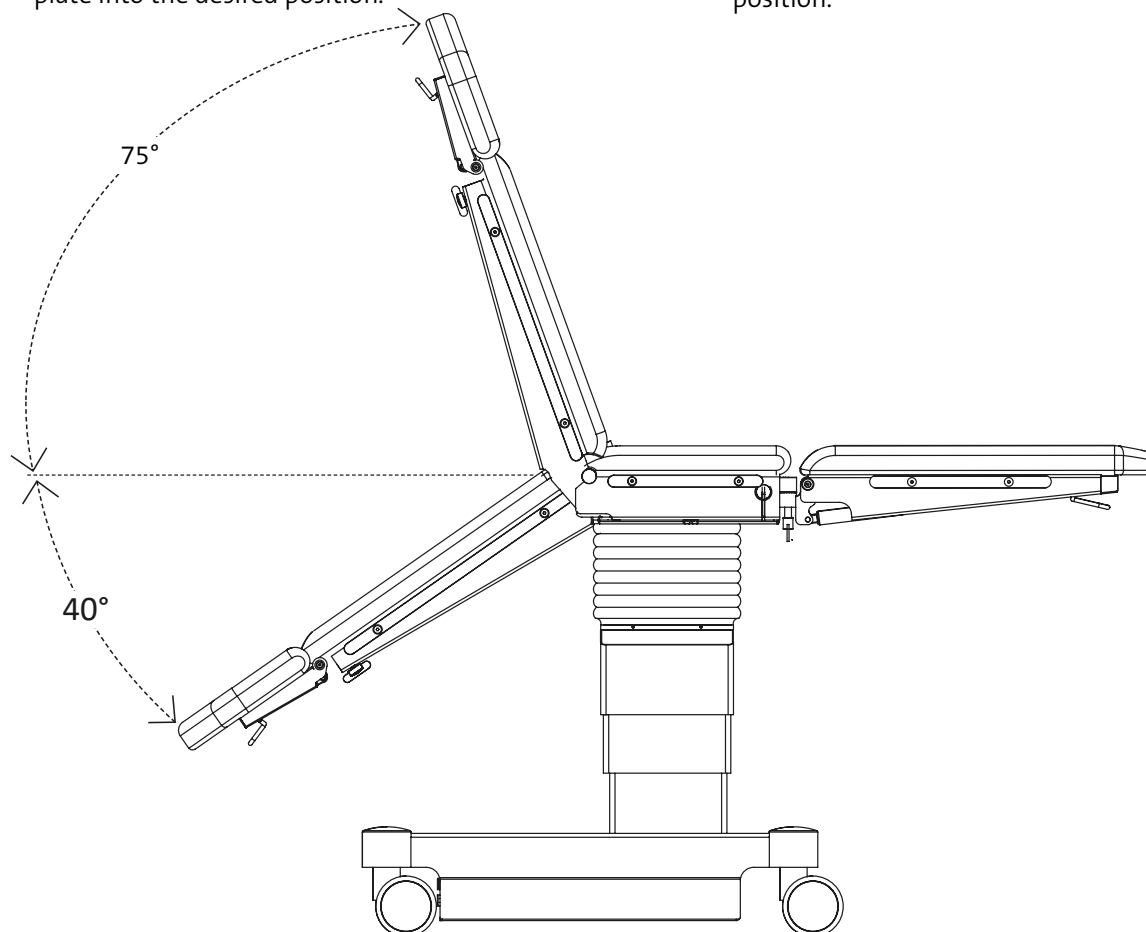





Abb. 22: Rückenteilverstellung Modelle 505220, 504220

11.10 Zero position (LEVEL)

Zero position means that medifa 5000 moves independently to a horizontal position. The movement takes place in a fixed sequence:

1. Combined movement in which the motorised joints of the table top, the anti-Trendelenburg or Trendelenburg position, the lateral position and the backrest adjustment are set horizontally. Ensure that the spreadable leg plates are not on top of each other before the zero position. Collisions with accessories, which may occur during the zero position, must be prevented by appropriate positioning.
2. In the 50x325 and 50x325 models, the longitudinal shift of the table top returns to the home position.


Symbol of column keypad	Symbol of manual switch	Description
	 	All electrically driven table segments move into the horizontal position.

11.11 Longitudinal shift (SLIDE)

Models 504325 and 505325 have an electric longitudinal shift.

In case of longitudinal shift, the table top is moved towards the foot or head end. In combination with other positions, the longitudinal shift increases the variability of medifa 5000.

The movement combination can be saved on the manual switch with SAVE and called up with the MEMORY 1, 2, 3 button. The longitudinal shift in the normal patient position is 285 mm.

 If the back plate is folded down, the longitudinal shift is blocked, otherwise the back plate will collide with the lifting column.



WARNING

Danger due to failure of electrical components!

If the load exceeds 200 kg, longitudinal shift towards the head is NOT permitted in normal positioning.

If the load exceeds 200 kg, longitudinal shift towards the foot is NOT permitted in reverse positioning.



WARNING

Risk of instability due to accessories and alignment of the castors

The 61125 and 63000_1 accessories may only be used if the operating table is not shifted in a longitudinal manner.

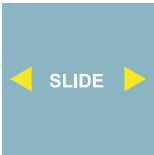
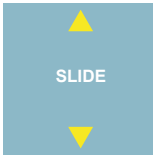


The twin castors on the foot side must be directed forward before the operating table is locked to ensure safe working.



CAUTION

Hazard due to collision!

In case of longitudinal shift, ensure that there is sufficient distance from walls or other boundaries to avoid a collision.

Symbol of column keypad	Symbol of manual switch	Description
		<p>Longitudinal shift of the table top towards the head or foot. Pressing the corresponding arrow button determines the direction.</p>
		<p>Function is not assigned for models 504220, 504320, 505220 and 505320.</p>
		

11.12 FLEX and REFLEX

In case of the FLEX and REFLEX functions, a kink is formed between the pelvic plate and back plate of the table top by executing two functions. Function is not assigned for models 504220 and 505220.

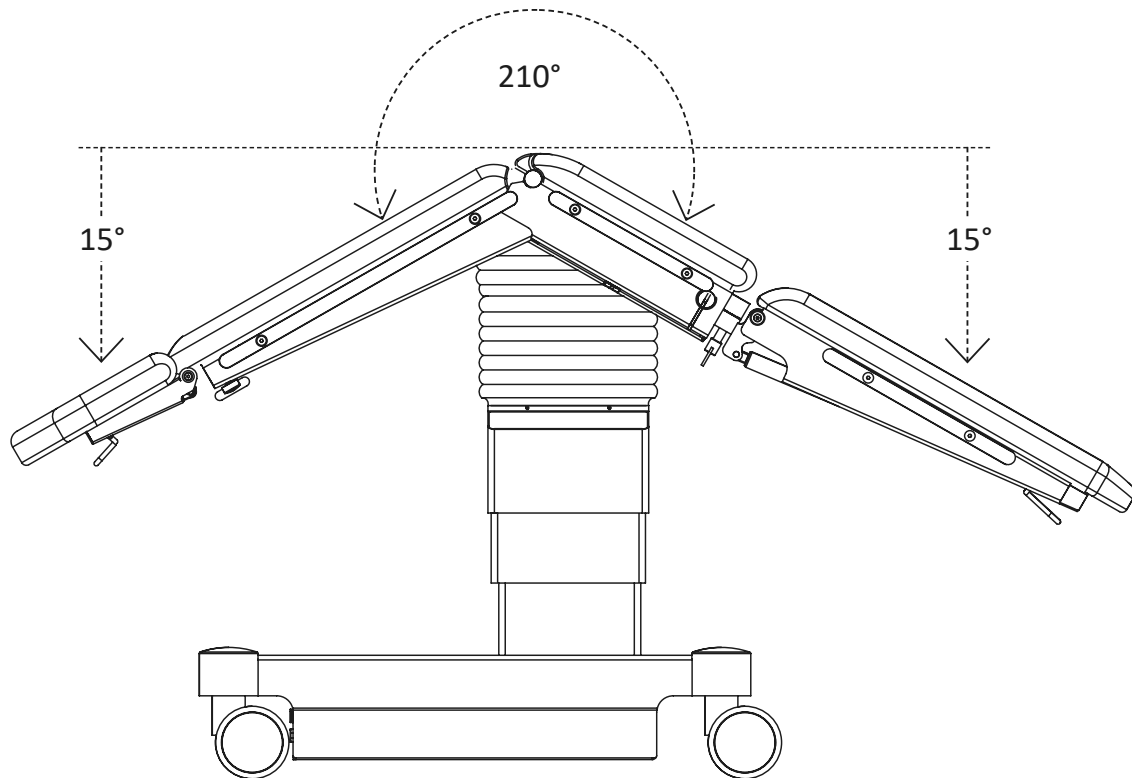


Fig. 23: Flex position: Anti-Trendelenburg and back plate down

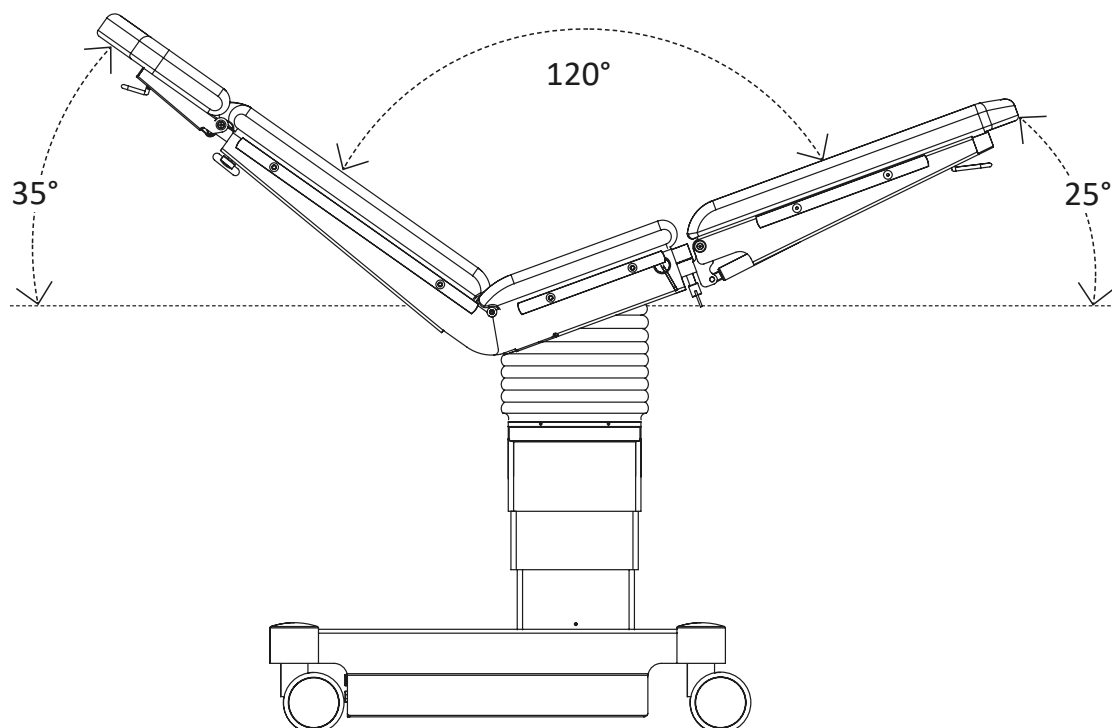

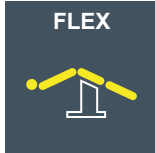






Fig. 24: Reflex position: Trendelenburg and back plate up.

Symbol of column keypad	Symbol of manual switch	Description
	 	<p>FLEX</p> <p>Anti-Trendelenburg and back plate down function</p> <p>Function is not assigned for models 504220 and 505220.</p>
	 	<p>REFLEX</p> <p>Trendelenburg and back plate up function</p> <p>Function is not assigned for models 504220 and 505220.</p>

11.13 Leg plates and head plate



CAUTION

Hazard to patients due to risk of getting trapped and danger of collision!

Watch the movements! When the leg plates are lowered, there is a danger of collision with the lifting column or the trolley, especially with Trendelenburg/Anti-Trendelenburg and lateral adjustments!

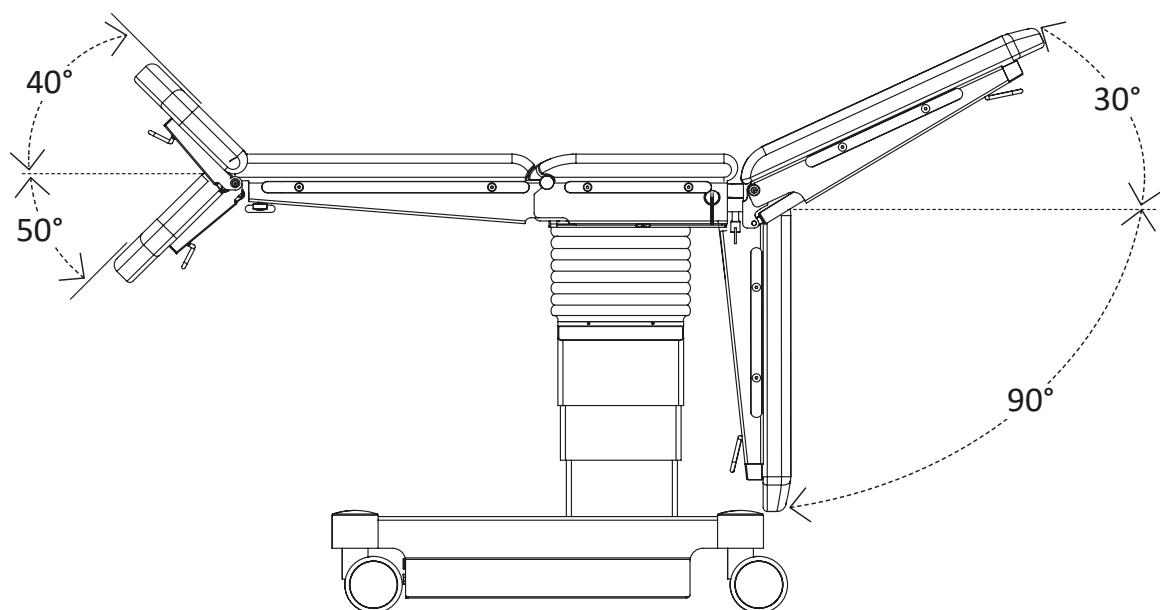


Fig. 25: Leg plates and head plate, maximum freedom of movement

12. Configuring medifa 5000 before the OP

12.1 Load instructions

The load limits are calculated using the following formula:
Total weight (safe working load) = patient weight + accessory weight

Weights of accessories can be found in the Accessories chapter.



Load limits, which lead to functional restrictions, are listed with the respective patient positioning.

12.2 Attaching and removing accessories



CAUTION

Risk of injury when attaching heavy accessories!

- There is a risk of injury if the occupational health and safety rules for personnel are not observed.
- Due to the high weight when lifting and carrying the plate segments and accessories as well as when making manual changes to medifa 5000, with and without the patient lying on it, care must be taken to ensure back-friendly behaviour.
- Involve another person if necessary. Never connect or disconnect several plate segments or heavy, bulky accessories at the same time. Hold the piece of equipment securely and do not drop it.



CAUTION

Patient hazard!

The coupling points must be checked for correct fit before positioning the patient!
Pay attention to the safety and release levers here.

12.3 Attaching and adjusting the head and leg plates



CAUTION

Patient hazard!

The square couplings must be checked for correct fit before the patient is lifted!
Pay attention to the safety lever here.

12.3.1 Attaching and adjusting the head and leg plates



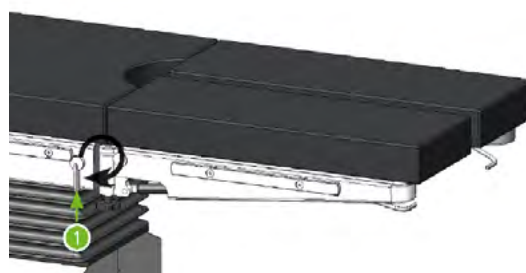
CAUTION

Patient hazard!

The square couplings must be checked for correct fit before the patient is lifted!
Pay attention to the safety lever here.



1. Insert the two square bolts of the leg plate into the square openings on the table, while loosening the locking lever [1] upwards.



2. Hold the leg plate and tighten the release lever [1] on the table downward to secure the leg plate to the table.



3. Hold the leg plate and pull the release lever [2] upwards under the foot end of the leg plate.



12.3.2 Swivelling the split leg plates



1. Loosen the black star knob screw [1] on the hinge of the leg plate.

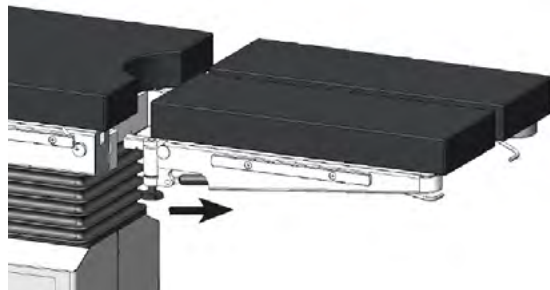


2. Swivel the leg plate to the desired position.
3. Tighten the black star knob screw [1] on the hinge of the leg plate.

12.3.3 Removing split leg plates



1. Hold the leg plate and tighten the release lever [1] on the table upwards.



2. Pull the leg plate out of the square openings on the table.

12.3.4 Attaching and adjusting the head plate



CAUTION

Risk of injury!

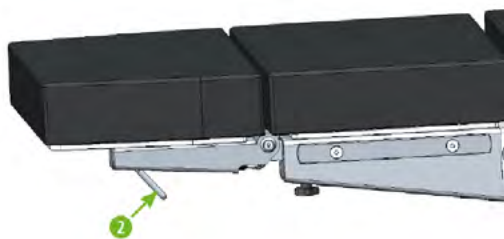
Operation with both hands is absolutely necessary for safety reasons, since the operator must exert his/her own body strength for adjustment, depending on the patient's body weight!



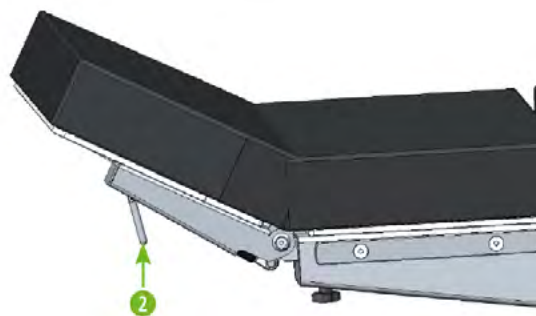
1. Insert the two square bolts of the head plate into the square openings on the table.



2. Hold the head plate and tighten the black star knob screws [1] on both spars of the table.



3. Hold the head plate and pull the release lever [2] at the head end upwards.



4. Hold the head plate and pull the release lever [2] at the head end upwards.
5. Release the release lever [2]. The head plate is locked in the end position.

12.3.5 Removing the head plate



1. Hold the head plate and loosen the black star knob screws [1] on both spars of the table.



1. Pull the head plate out of the square opening on the table.

13. Preparing medifa 5000 after use

1. Remove any accessories that have been fitted.
2. Clean and disinfect accessories accordingly. Please follow the instructions for use of the accessories.
3. Clean and disinfect medifa 5000.
4. Charge the lead-gel batteries.

13.1 Care instructions



CAUTION

Danger of personal injuries!

- Only hand over cleaned and disinfected devices / equipment to a service technician for maintenance and repair work.
- Replace padding that no longer meets the hygiene and infection prevention requirements.

ATTENTION

Risk of damage to property due to incorrect care.

The product is not suitable for a mechanical cleaning process.

Do not use a high-pressure cleaner! Due to the high pressure of the water jet, liquid could penetrate into the interior through gaps or joints and damage the product (corrosion).

Incorrect care products damage the surface.

For taking the care of the product, do not use abrasive cleaning and disinfecting agents containing halide and peracetic acid.

For plastic parts and padding, do not use any alcoholic and solvent-based (flammable) cleaning and disinfecting agents.

The care products for cleaning and disinfection must comply with the nationally valid regulations for the medical sector and/or be included in the list of the German Society for Hygiene and Microbiology / Verbund für Angewandte Hygiene e.V. (Association for Applied Hygiene).

Clean contaminated products immediately. Cleaning / disinfection is limited to regular wiping (not immersing) with suitable agents.

13.1.1 Protective equipment for cleaning specialists

Wear your personal protective equipment for all activities and work on the product.

Personal protective equipment protects you from injuries and health impairments.

Wear the personal protective equipment:

- closed-toe shoes
- Protective gloves / protective clothing
- Eye protection / face protection

13.1.2 Cleaning und disinfecting



HAZARD

Risk of explosion!

Do not use any alcohol-based agents when using HF surgical devices.

Cleaning

- For cleaning stainless steel and plastic parts, use a pH-neutral or slightly alkaline all-purpose cleaner with surfactants as active cleaning components.
 - In case of heavy contamination, use the cleaner in concentrated form and subsequently wipe it off with clear water.
1. Clean the surface of the device with an all-purpose cleaner.
 2. To clean the underside of the padding and the padded plates, the padding must also be removed.

Disinfection



CAUTION

Material damage!

Exceeding the exposure time of the disinfectant can damage the surfaces.
Observe the defined exposure time of the disinfectant manufacturer.

- For disinfection, follow the application instructions of the disinfectant manufacturer.
 - To disinfect, we recommend using surface disinfectants based on the following combination of active ingredients:
 - Aldehydes
 - Quaternary ammonium compounds
 - Peroxide compounds
1. Disinfect the surfaces of the device by wiping. Disinfecting with all-purpose cleaners or non-listed disinfectants increases the risk of contamination with pathogens.
 2. Allow the disinfectant to act according to the germ or bacteria infestation. Follow the application instructions of the disinfectant manufacturer.

medifa recommends the following or similar VAH(DGKH)-listed disinfectants:

Disinfectant	Active ingredient base	Manufacturer
Optisept	• Aldehyde base	Dr. Schumacher GmbH
Biguanide Surface N	• Quaternary ammonium compound	Dr. Schumacher GmbH
Kohrsolin FF	• Aldehyde base • Quaternary ammonium compound	Bode Chemie GmbH
Meliseptol rapid	• Alcohol base • Quaternary ammonium compound	B. Braun Medical AG
Incidin OxyWipe S	• Peroxide connection	Ecolab Deutschland GmbH



Observe the specifications of the Robert Koch Institute and national hygiene specifications for medical environments.

13.1.3 Drying

After cleaning and disinfecting, remove any excess moisture build-up, for example drops on the bottom edge of the standard rail of the table top, with a dry cloth.

13.1.4 Disposal

Dispose of all cleaning and disinfectant residues or remnants in a harmless and environmentally friendly manner.

14. Technical data

14.1 Environmental conditions for operation, storage, and transport

Temperature	- 20°C to + 50°C (storage / transport)
	+ 10°C to + 40°C (operation)
Relative humidity	10 % to 95 % (storage / transport)
	20 % to 80 % (operation)
Air pressure	70 kPa to 106 kPa (storage / transport)
	80 kPa to 106 kPa (operation)

14.2 Dimensions, weights, and load limits

Measurement of table top	Length (with leg and head plate): 2080 mm
	Width (with standard rails): 600 mm
Height	Models 504220, 504320, 504325: 780 mm to 1080 mm
	Models 505220, 505320, 505325: 600 mm to 950 mm
Padding height	PUR: 60 mm, SFC: 80 mm
Weight	Model 504220 / 505220: 160 kg
	Model 504320 / 505320: 165 kg
	Model 504325 / 505325: 170 kg
Maximum table load	250 kg
Maximum permissible patient weight	200 kg
Standard rail load	Longitudinal axis: 70 Nm each
	Transverse axis: 100 Nm each

14.3 Electrical connection details

medifa 5000

Internal power supply	2 batteries (lead-gel) 12 V / 15 Ah
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External power supply	100 V or 230 V / 50 Hz - 60 Hz
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Power consumption	max. 300 VA
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Power plug	Country-specific, connection cable 3m
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Mains fuse	2 x 4 AT
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Battery fuse type	FKS-30 A
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Battery for the infrared manual switch

Capacity	1200 mAh
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Nominal voltage	3.7 V
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Max. charging voltage	4.2 V
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Battery charger for the optional infrared manual switch

Power	6.3 W
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Input voltage	100-240 V
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Frequency	50-60 Hz
-----------	----------

DC voltage	4.2V DC
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Charging current	1.5 A
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14.4 Adjustment ranges

Height	Models 504220, 504320, 504325: 780 mm to 1080 mm
	Models 505220, 505320, 505325: 600 mm to 950 mm
Longitudinal shift	Models 504325, 505325: 285 mm
Trendelenburg	-30° to +25°
Lateral	-20° to +20°
Leg plate joints	-90° to +30°
Backrest adjustment	Models: 504320, 504325, 505320, 505325: -40° to +70°
	Models: 504220, 505220: -40° to +75°

14.5 Classification

Medical product class	I
Protection class	I
Degree of protection against electric shock	Type B according to IEC 60601-1
Degree of protection against the ingress of water and foreign bodies	IP X4 (splash water protection)
Operating mode	Continuous operation with intermittent load (DBAB) 1-minute functional execution followed by 9 minutes break without functions.

14.6 EMC notes

Intended usage environment

- Professional healthcare facilities

Note: The characteristics of this device determined by emissions allow its use in industrial areas and hospitals. When used in a residential environment, this device may not provide adequate protection from radio services. The user may need to take remedial actions such as moving or repositioning the device.

Essential performance features of medifa 5000:

- medifa 5000 may not carry out any accidental movements when there are disturbances.



WARNING

Interference from electromagnetic radiation.

- The medical device must not be used directly next to other devices. If necessary, the device should be observed to verify its proper operation in this arrangement used.
- The use of accessories, converters, and cables other than those specified by medifa for this device may result in increased electromagnetic interference emissions or reduced electromagnetic immunity of the device and lead to incorrect operation.
- Portable HF communication devices (radios) (including their accessories such as antenna cables and external antennas) should not be used at a distance less than 30 cm (or 12 inches) from the medifa 5000.

15. Delivery, unpacking and installation

15.1 Delivery

The medifa 5000 is delivered on a pallet in a carton. Ordered parts/accessories are individually packaged on the pallet or are attached to medifa 5000.

Dimensions of the packaging

Length	1200 mm
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Width	800 mm
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Height	1050 mm
--------	---------

Weight	Model 504220 / 505220: 160 kg
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	Model 504320 / 505320: 165 kg
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	Model 504325 / 505325: 170 kg
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Packaging	30 kg
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Plus, weight of the additional equipment and accessories.

ATTENTION

Danger of damage to property

The packaging is not weatherproof. Please observe the storage instructions.

15.2 Unpacking and installation



CAUTION

Risk of personal injury due to tilting of the medifa 5000!

- Do not move the medifa 5000 over the edge of the pallet!
- Carefully move medifa 5000 from the pallet onto an even location together with at least 2 persons!

ATTENTION

Danger of property damage to the electronics due to condensation!

There is a risk of condensation forming during transport, which can potentially damage electronic components. After medifa 5000 is delivered and before it is switched on or connected to an external power source, it is necessary to wait a certain amount of time (at least 12 hours is recommended). Place medifa 5000 in an environment, which has the same ambient temperature and relative humidity as the room in which it is used.

For unpacking and installation, the following order must be adhered to:

1. Unpack medifa 5000 in a room with an even floor and sufficient open space for unrolling from the pallet.
2. Place the pallet such that an area of approx. 1.5 x 4 m is available.
3. Open carton at the top.
4. Loosen the cardboard fastening at the bottom of the pallet.
5. Pull the cardboard upwards.
6. Take out the box contents.
7. Remove the tensioning straps and securing members.
8. Leave medifa 5000 switched off and unconnected to the power supply for at least 12 hours, so that any condensation that may have formed during transport can evaporate completely.
9. Switch on medifa 5000 at the main switch.
10. Then switch on the column keypad or the manual switch.
11. Release the brake of medifa 5000.
12. Push medifa 5000 off the transport pallet.
13. Brake medifa 5000.
14. Dispose of the pallet and packaging material in an environmentally friendly manner!
15. Fully charge the batteries of medifa 5000.
16. Switch off medifa 5000 at the main switch.

16. Accessory list

Product name	Article number	Mass (kg)	Permissible load (kg)
Head plate	61144	4.2	16
Head plate	61146	5.2	16
No head plate	61143	3.2	16
Body elevator	61655	-	-
Three-part back panel	61385	10.6	80
Pelvic girdle extension	61125	10	80
Single leg plate	61625	16	80
Split leg plates	61615	20	40 per leg plate
Double split leg plate	61660	20	40 per leg plate
Carbon bearing plate	61690	8	50
Transfer leg plate	61635	2.5	20
Paediatric surgery plate	61633	12	80
Distribution segments	61355	2.5	10
Foot-operated switch	604060	2.4	-
Infrared manual switch	604070	0.5	-
Cassette slider	61640	3	-
Rinsing set	61120	0.3	-
Padding support	5000SF	0.3	-
Extension device with supporting bars	63000_1	60	250
Extension device (free-floating)	63000_1	60	136
Fastening collar	61511	0.8	-
Fastening collar	61512	1	-
Fastening collar	61551	0.2	-
Fastening collar	61552	0.2	-
Fastening collar	61553	0.2	-
Fastening collar	61554	1	-
Arm cuff	61755	0.2	10
Anaesthesia strap	61750	2.6	10
Flexible anaesthesia screen	61751	2	-
Hose holder	61752	0.3	-
Infusion pole	61800	1.8	1.5 kg per hook
Pivotable infusion pole	61805	2	1.5 kg per hook
Instrument table	61410	3	10
Guiding profile extension	61560	1	-
Manual push handles	61571	1.6	-
Side holder	61341	2.6	-
Shoulder rest	61351	3.5	-
Double side support	61362	2.4	-
Holder	61361	2.6	-
Body support	61361_1	0.3	-

Product name	Article number	Mass (kg)	Permissible load (kg)
Body support	61361_2	0.5	-
Body support	61361_3	0.5	-
Body support	61361_4	1.5	-
Articulated arm	61365	2.5	-
Articulated arm	61367	4	-
Instrument storage tray	91611	3.8	-
Instrument storage tray	91612	3.5	-
Tray with drain and hose	91613	4	-
Universal adapter	61100	3	-
Horseshoe headrest	61114_1	3.6	10
Horseshoe headrest	61114_2	3.6	10
Horseshoe headrest	61114_3	3.6	10
Head rest	61395	3.4	10
Articulated arm	61117	2.6	10
Head rest	61117_2	0.5	10
Horseshoe headrest	61117_3	0.5	10
Horseshoe headrest	61117_5	1.5	10
Armrest	61211	3.4	15
Intra-operative armrest	61216	3.6	10
Armrest	61217	3.7	10
Armrest	61222	4.8	15
Armrest	61223	4	15
Armrest	61220	5.2	20
Armrest	61225	5	8
Armrest	61212	7	8
Armrest splint	71345	2	10
Beach-Chair armrest	61227	4	8
Side support / Armrest	61092	3	15
Padding support	56031	-	-
Hand support	61400	0.2	-
Leg holders according to Goepel	61700	5.8	15 per leg holder
Leg holders according to Goepel Comfort	81705	8.2	15 per leg holder
Elbow braces	61780	4.6	10 per leg holder
Lower leg clamp	61760	1.6	-
Thigh clamp	61770	1.6	-
Rectal positioning unit	61632	17	150
Colonoscopy thread	61315	6.3	-
Knee footrest	61630	6.8	80
Foot plates	61636	7	20
Extension shoes for adults	61010	0.8	-

Product name	Article number	Mass (kg)	Permissible load (kg)
Extension shoes for children	61020	0.2	-
Countertraction post for femur	63025_1	1.8	-
Countertraction post for tibia and fibula	63045	4.8	-
Pelvis plaster cast unit	63030	4	-
“Kirschner” wire holder	63060	0.8	-
Leg supports	63026	3	15
Transfer leg rest	63070_2	6	20 per leg plate
Arm extension device	62050	2	10
Weinberger hand support	62055	0.4	-
Body strap and leg strap	61405	0.2	-
Leg support	61406	0.2	-
Leg straps	61407	1.5	-
Upper arm support	61226	2	15
Arm and hand surgery table	61231	7.5	15
Arm and hand surgery table	61232	9	20
Meniscus roller	61330	1.5	-
Arthroscopy leg holder system	61328	4	30
Knee support unit	61327	16	30
Intervertebral discs surgical cushions	61900	-	-

17. If not used for a longer period

When not in use, switch off medifa 5000 at the main switch.

If medifa 5000 is not used for a longer period of time, the batteries may no longer be fully charged. To prevent a defect or failure of the batteries, the batteries must be charged every month, even if medifa 5000 is not used for a longer period of time.

Clean and disinfect medifa 5000 before longer periods of non-use.

Cover the padding or wrap medifa 5000 in a film, which, however, must be permeable to air. medifa 5000 must be kept in a dry place.

18. Disposal

medifa 5000, accessories and packaging must be recycled in an environmentally friendly manner.

The disposal, even of individual parts, must always be carried out in an environmentally friendly manner, i.e., in accordance with the valid legal regulations.

For proper disposal of old devices, please contact medifa's technical customer service department, your local dealer, or the appropriate national authority.

The medifa company takes back old devices, defective or no longer used products. For detailed information, please contact medifa's technical customer service department.

When medifa 5000 is decommissioned, the lead-gel batteries must be removed from medifa 5000 by a medifa service technician or a person authorised by medifa.

Send removed and unusable batteries in suitable packaging to medifa technical customer service.

medifa

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