

# Instructions for Use

## ASSKEA ped M

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## 1 Important Information

### DELIVERY DAMAGE

Please check the shipment immediately upon delivery for completeness and damage.

Report any defects within 3 days; otherwise, claims may not be accepted.

### CUSTOMER FEEDBACK

The products described in this user manual are subject to continuous development and improvement.

We appreciate any feedback, comments, and suggestions regarding our products and accompanying documents to help enhance the products, service, or documentation.

Feel free to share your opinion with us! You can reach us via:

- E-Mail: [mps@asskea.de](mailto:mps@asskea.de)
- Phone: +49 (0) 36201-5797-0
- User survey on our website. Scan the QR code to access the questionnaire.



### NOTES ON THIS MANUAL

Read this user manual carefully before using the **ASSKEA ped M** for the first time. Follow the safety instructions in this manual to avoid hazardous situations.

Information on electromagnetic compatibility is provided in a separate manual (ID: 14\_EMV\_ped M), available for download at [www.asskea.de/download](http://www.asskea.de/download) or upon request via email at [info@asskea.de](mailto:info@asskea.de).

If you need assistance with set-up, operation, or maintenance, please contact ASSKEA GmbH.

Report any serious incidents to ASSKEA GmbH and the responsible authority.

Keep this user manual easily accessible.

Pass it on when transferring the ASSKEA ped M to a third party.

### REPRESENTATIONS AND SYMBOLS IN THIS USER MANUAL

| Symbol                                                                              | Meaning                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------|
|  | <b>Caution</b> – Indicates risks and how to avoid them. |
|  | <b>Note</b> – Provides useful information and tips.     |
| •                                                                                   | Bulleted list                                           |
| 1.<br>2.                                                                            | Follow the described steps in order.                    |

## 2 Intended purpose

### 2.1 Intended use

The **ASSKEA ped M** is a network-independent mobile medical aspirators for temporary aspiration of aspirate from the trachea. The ASSKEA ped M is especially designed for secretion aspiration in children and can be used in outpatient and inpatient care (professional healthcare facility environment).

### 2.2 Indications

- Tracheostomy patients
- Aspiration if respiratory function is impaired
- Aspiration of blood, secretion and food residues from the oral cavity, the pharyngeal zone and the bronchial system

### 2.3 Contraindications

The ASSKEA ped M is contraindicated for the following applications:

- Liposuction
- Gynecology applications
- Dental applications
- Thoracic drainage
- Continuous drainage
- Applications in wound areas
- Pharyngeal aspiration

### 2.4 Who May Use the Device?

The device may only be used by medical professionals or trained personnel who have been instructed in the handling, operation, reprocessing, and disposal of the device and its accessories in accordance with this manual. Training is provided by ASSKEA GmbH or an authorized distributor.

### 2.5 Restrictions on use

Do not operate the device:

- In medical areas requiring equipotential bonding (e.g., cardiac surgery).
- In explosive environments.
- In MRI environments.
- Outdoors.
- In homecare settings.
- In areas with high humidity or wet conditions (e.g., near humidifiers, water kettles, during bathing or showering).
- In areas with excessive heat (e.g., near heat sources or in direct sunlight).

### 3 Safety Instructions



#### **WARNING – RISK OF INJURY DUE TO MISUSE**

- Always use the device only as intended to ensure safety for yourself and the patient.
- Do not use the device if the housing is visibly damaged.
- Do not open the device unless you are trained and authorized. Service tasks, such as battery replacement, must only be performed by authorized personnel.
- Do not modify the device.



#### **WARNING – RISK OF INJURY DURING USE**

- Adjust the suction settings according to the patient's condition and medical indication to avoid injury.
- Perform suctioning carefully to prevent tissue damage.
- Never use the device to remove solid or inhaled foreign objects, as this may push the object deeper into the airway, causing complete obstruction.
- To ensure continuous patient care, we recommend having a backup suction device available.



#### **WARNING – RISK OF STRANGULATION**

Patients may become entangled in tubing or power cables.

- Ensure that unauthorized or uninvolved persons stay away from the device.
- Remove unused cables and tubing from the patient environment.



#### **WARNING – RISK OF INFECTION**

Infectious and pathogenic germs in suctioned material can cause serious health hazards.

- Always use a sterile, single-use catheter.
- Ensure that the suction tube does not come into direct contact with the suction site.
- Wear disposable gloves to prevent contact with suctioned material.
- Clean and disinfect the device and accessories as described in this manual.



#### **WARNING – USE OF UNAUTHORIZED ACCESSORIES OR SPARE PARTS**

- Only use accessories and spare parts listed in this user manual. Using non-approved parts may compromise device safety and functionality.
- Ensure that all accessories are clean and undamaged before use.

**CAUTION – DEVICE DAMAGE DUE TO LIQUID INGRESS**

- Protect the device from moisture and clean it only as instructed in this manual.

If liquids or solids enter the device interior, it must be inspected by ASSKEA GmbH or an authorized service partner.

**CAUTION – DEVICE DAMAGE DUE TO INCORRECT POWER SUPPLY**

To avoid damage:

- Use only the supplied Power Supply Unit (ATM024T-W120V).
- When connecting the Power Supply Unit, first plug the device connector into the suction unit, then connect the adapter to the power source.
- Disconnect in the reverse order.

**CAUTION – DEVICE DAMAGE DUE TO IMPROPER HANDLING**

- Never suction flammable, corrosive, or explosive liquids or gases.
- Do not drop the device.
- Ensure the device is stable and cannot tip over or fall.

**CAUTION – DEVICE DAMAGE DUE TO HEAT ACCUMULATION**

- Do not cover the Power Supply Unit.
- Keep the suction device, power cable, and adapter away from heat sources.

**CAUTION – ELECTROMAGNETIC INTERFERENCE**

- Other devices, tests, or treatments may be affected by electromagnetic emissions. Monitor other equipment for possible interference.

The device complies with EN 60601-1-2 standards and does not exceed emission limits. It is not affected by other devices meeting the same standard.

Further details on electromagnetic compatibility can be requested from ASSKEA GmbH via email ([info@asskea.de](mailto:info@asskea.de)) or downloaded from [www.asskea.de/download](http://www.asskea.de/download).

## 4 Warranty and Product liability

### WARRANTY

The ASSKEA ped M has a **2-year warranty**, which is not extended or renewed by warranty repairs. The battery has a **6-month warranty**. Wear parts are excluded from the warranty. Warranty claims are void if:

- The device is opened by unauthorized persons.
- The security seal is removed or damaged.
- Repairs are performed by unauthorized persons.
- Modifications are made to the device.

The warranty does not cover damage caused by improper use or unauthorized accessories. ASSKEA GmbH guarantees service support for at least **5 years** after product launch.

### PRODUCT LIABILITY

The operator assumes liability if:

- The device is used outside its intended purpose.
- The device is used contrary to the instructions in this manual.
- The device is opened by unauthorized persons.
- The security seal is removed or damaged.
- Unauthorized modifications, maintenance, or repairs are performed.
- Unauthorized accessories or spare parts are used.

## 5 Symbols and Terms

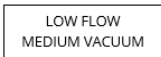
### 5.1 Symbols on Device, Packaging, and Accessories

Observe the symbols on the device, packaging, and accessories.

#### SYMBOLS IDENTIFYING THE MEDICAL DEVICE AND ACCESSORIES:

| Symbol                                                                            | Meaning                            | Symbol                                                                            | Meaning                                   |
|-----------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------|
|  | Manufacturer                       |  | Manufacturing date with country of origin |
|  | Distributor                        |  | Importer                                  |
|  | This product is a medical device.  |  | Catalog number                            |
|  | Serial number                      |  | Batch number                              |
|  | Unique Device Identification (UDI) |                                                                                   |                                           |

#### INSTRUCTIONS FOR HANDLING THE MEDICAL DEVICE AND ACCESSORIES:

| Symbol                                                                              | Meaning                                                                         | Symbol                                                                              | Meaning                                                                                                                                                         |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Follow the instructions in this manual.                                         |  | Performance range of the suction device: Low flow rate (< 20 l/min), Medium vacuum (20 kPa - 60 kPa)                                                            |
|  | Read the instruction manual.                                                    |                                                                                     |                                                                                                                                                                 |
|  | This product is for single use only.                                            |                                                                                     |                                                                                                                                                                 |
|  | Do not use if packaging is damaged!                                             |  | <b>IP33</b> protection:<br>The device is protected against solid objects ≥ 2.5 mm and water spray from any direction, even when tilted up to 60° from vertical. |
|  | This device must not be disposed of with household waste.                       |                                                                                     |                                                                                                                                                                 |
|  | This product is intended for reuse by a single patient.                         |                                                                                     |                                                                                                                                                                 |
|  | The applied part of the device is classified as <b>Type BF</b> (Body Floating). |  | This is a Class II electrical device. It has no connection to the protective earth.                                                                             |
|  | Power Supply Unit                                                               |                                                                                     |                                                                                                                                                                 |



## INSTRUCTIONS ON ENVIRONMENTAL, STORAGE, AND TRANSPORT CONDITIONS:

| Symbol                                                                            | Meaning                                                            | Symbol                                                                            | Meaning                                                           |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------|
|  | Protect from moisture.                                             |  | Observe temperature limits for operation, storage, and transport. |
|  | Observe air pressure limits for operation, storage, and transport. |  | Observe humidity limits for operation, storage, and transport.    |

## 5.2 Glossary

### A

|          |                                                                                                                                                                            |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aspirate | A general term for secretions, bodily fluids, and irrigation fluids typically suctioned from the upper airways. These can be easily suctioned using the described devices. |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                      |                                                                                                                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applied Part Type BF | Applied parts are classified according to their application. BF-type parts must be electrically isolated from the earth and are not suitable for direct application to the heart. |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### C

|               |                                                                                                                         |
|---------------|-------------------------------------------------------------------------------------------------------------------------|
| Contamination | Contamination means that bacteria and viruses from the aspirate have come into contact with the interior of the device. |
|---------------|-------------------------------------------------------------------------------------------------------------------------|

### M

|           |                                                                                                                                                                               |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ME-System | Abbreviation for "medical electrical system"                                                                                                                                  |
| MRI       | Abbreviation for "Magnetic Resonance Imaging". This technique uses a strong magnetic field to create cross-sectional images of the human body, allowing for organ assessment. |

### O

|              |                                                                               |
|--------------|-------------------------------------------------------------------------------|
| Over-Suction | Over-suction means that aspirated material is drawn into the device interior. |
|--------------|-------------------------------------------------------------------------------|

## 6 Product Description

### 6.1 Product and Accessories Overview

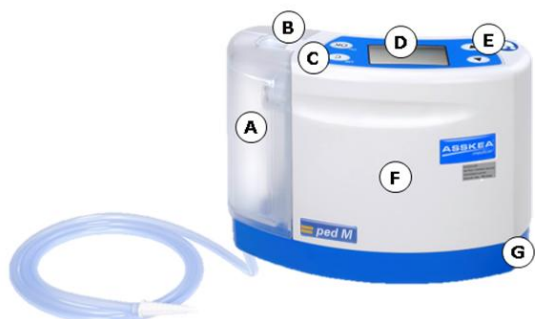


Fig. 1



Fig. 2

- A Disposable secretion canister with integrated suction tube
- B Canister locking mechanism
- C Buttons  (On) and  (Off)
- D Display
- E Arrow buttons  (Up) and  (Down)
- F Device **ASSKEA ped M**
- G Connector for Power Supply Unit

### 6.2 Scope of Delivery

- **ASSKEA ped M**
- User manual
- 2x disposable secretion canister with integrated bacterial filter, carbon filter, gelling agent, and suction tube .....(Item no. 100789)
- Power Supply Unit including power cable and country adapters  
.....(ATM024T-W120V)
- Test protocol according to IEC 62353
- Possibly additional components (depending on order, see Chapter 15)

To operate the device as intended, an additional sterile suction catheter is required. Sterile catheters of all sizes can be connected to the hose system.



Choose the applied part based on the patient, medical indication, and secretion viscosity.

When using this suction device in a home setting, the attending physician should determine the appropriate catheter size. Please consult your doctor to ensure that the catheter used is correctly matched to your individual needs.

The schematic diagram below shows the connection of the ASSKEA ped M to the patient and accessories.

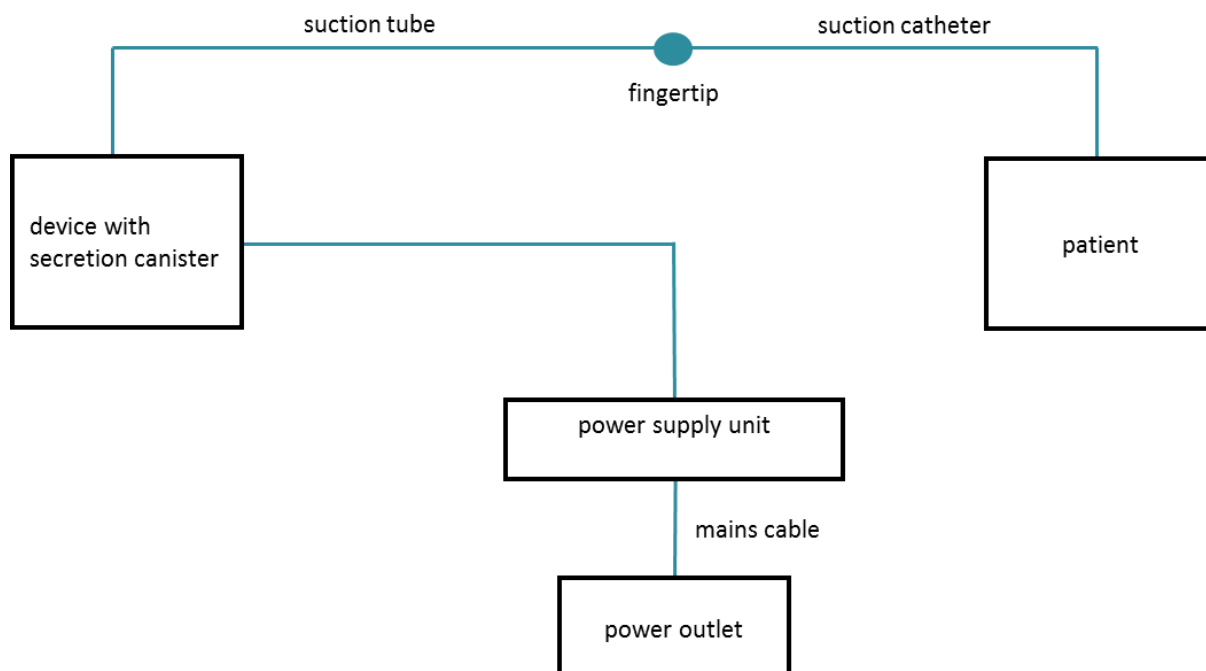


Fig. 3

### 6.3 Battery Information

The ASSKEA ped M contains an internal battery that enables mobile use. The device can be charged and operated using the supplied Power Supply Unit.



The internal battery is not automatically maintained in an operational state. Charge the device when the battery icon on the display indicates a weak or empty battery.

Before first use, it is strongly recommended to fully charge the battery and repeat this after the initial uses.

The ASSKEA ped M is equipped with a lithium-ion battery.

Avoid frequent short charging cycles. Never store the device in a discharged state.

The typical service life of the battery is approximately 300 charging cycles, after which over 80% of the original capacity remains.

The battery is protected against deep discharge. However, the above charging instructions must be followed. The battery is also protected against overheating during charging. If the battery temperature exceeds the permitted range due to improper environmental conditions, charging will be temporarily interrupted for cooling. This measure ensures safety and prolongs battery life.

---

## 6.4 Disposable Secretion Canister Information

---

The disposable secretion canister consists of a canister with an attached suction tube. It includes an integrated bacterial filter, carbon filter, and gelling agent.

### **BACTERIAL FILTER AND OVERFLOW PROTECTION**

The integrated hydrophobic bacterial filter prevents bacteria and viruses from passing through. In case of misuse or a full canister, this filter prevents over-suction. If liquid reaches the filter, suction is no longer possible, and the display will show the error message: "System closed – canister full." Suction operation is interrupted, and the disposable secretion canister must be replaced. The activated carbon filter in the disposable canister reduces odor spread.

Additionally, an internal filter is located inside the device. This self-sealing bacterial filter works together with the canister's filter to prevent bacterial and viral contamination.

### **GELLING AGENT:**

Filled disposable secretion canister can be safely transported and disposed of with the help of the gelling agent and a closed hose clamp.

Regardless of suction intervals, the suctioned liquid solidifies after an average gelling time of 2-5 minutes, depending on the nature of the aspirated material.



**Observe the replacement intervals mentioned in Chapter 11.**

---

## 6.5 Carbon Filter Information

---

In the exhaust compartment of the ASSKEA ped M, an additional filter is installed to neutralize unwanted odor particles from the device's exhaust air. This filter consists of a thin fleece coated with activated carbon, which binds odor particles and neutralizes them, effectively reducing odor spread.



**Observe the replacement intervals mentioned in Chapter 11.**

## 7 Start-up

### 7.1 Start-up ASSKEA ped M



Check the power supply unit, including the power cable and all accessories, for any damage. If any damage is found, replace the damaged component immediately.

1. Remove the device and accessories from the packaging.
2. Allow the device to acclimatize at room temperature (approximately 20°C) for about 2 hours before switching it on to avoid device damage.
3. Place the device upright or in a horizontal position on a firm, level surface without inclination.

The device can also be placed next to the patient's bed. Variable holders for pipe and rail systems are available for this purpose.



Position the ASSKEA ped M below the patient for optimal suction.

Ensure that the suction tube does not form a dip and is at least at patient height.

4. Connect the device plug of the power supply unit to the suction device and then connect the power supply unit to the mains power.
5. Fully charge the battery before first use.
6. Perform a function test (Chapter 7.2).
7. Connect the disposable secretion canister to the device (Chapter 7.3).

### 7.2 Function Test

Perform a function test without a connected canister before using the device for therapy. Follow these steps:

1. Press the button  for 1-2 seconds to switch on the device. The following start screen appears:

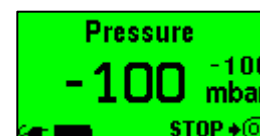


2. After 5 seconds, the following image appears on the display.



3. Then block the tube nozzle with a finger and start the pump.

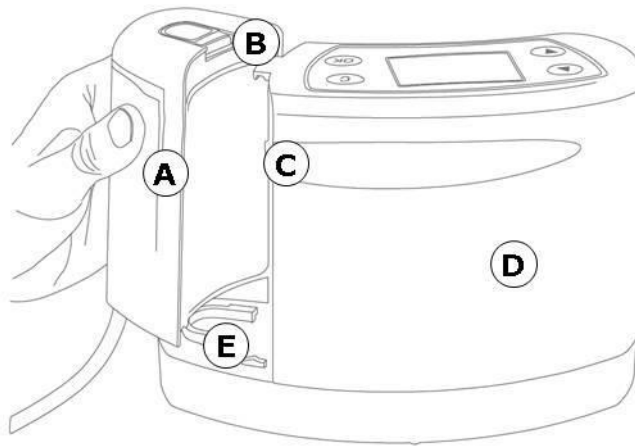
**The vacuum should adjust to the target value.**



### 7.3 Connecting the Disposable Secretion Canister



Always keep an additional disposable secretion canister ready, as it is essential for safe operation!



- Disposable secretion canister with integrated suction tube
- A Canister locking mechanism
- B Canister locking mechanism
- C Aspiration port
- D **ASSKEA ped M**
- E Guide rail for canister

*Fig. 4*

1. Remove the disposable secretion canister with integrated suction tube (A), from the packaging
2. Slide the canister onto the guide rail (E) of the **ASSKEA ped M** until the disposable secretion canister audibly locks into place at the locking mechanism (B).

## 8 Operation

### 8.1 Control and Display Elements

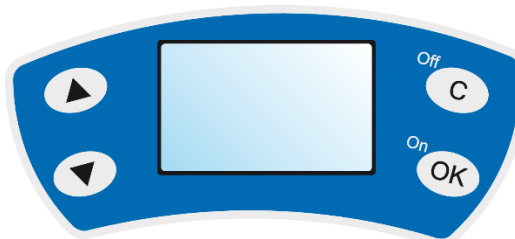


Fig. 5

| Control Element | Function               | Symbol | Meaning                               |
|-----------------|------------------------|--------|---------------------------------------|
|                 | Up / Increase value    |        | Battery full                          |
|                 | Down / Decrease value  |        | Battery low                           |
|                 | ON / Confirm selection |        | Battery empty                         |
|                 | OFF / Cancel selection |        | Power Supply Unit connected           |
|                 |                        |        | Internal filter replacement required! |

### 8.2 Operation and Function

The **ASSKEA ped M** reaches a maximum flow rate of 8 l/min.

After switching on, the vacuum pump generates a vacuum, which is used to suction fluids via a sterile suction catheter.

The fluids are collected in the secretion canister, leading away from the patient.

Once switched on, the pressure settings can be individually adjusted by medical personnel.

Pressure settings range between -60 mbar and -350 mbar (in 5 mbar increments).

### 8.3 Language Selection

The default language is German. To change the language:

1. Press the button  for 1-2 seconds to switch on the device. The start screen appears for 5 seconds.
2. During the start screen, press the arrow keys   simultaneously.  
The language setting menu appears.
3. Use the arrow keys   to select the desired language.
4. Confirm your selection with OK.

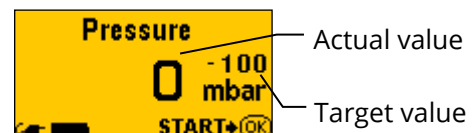


### 8.4 Performing Suction



Position the **ASSKEA ped M** below the patient for optimal suction. Ensure that the suction hose does not form a dip and is at least at patient height.

1. Press the button  for 1-2 seconds to switch on the device. The following start screen appears:
2. After 5 seconds, the display will show two values  
(default setpoint: -100 mbar).
3. Adjust the prescribed pressure setting (setpoint) using the arrow keys  .



Always use the lowest possible pressure setting.

4. Start the pump by pressing the button .
5. Press the button again to stop the pump.

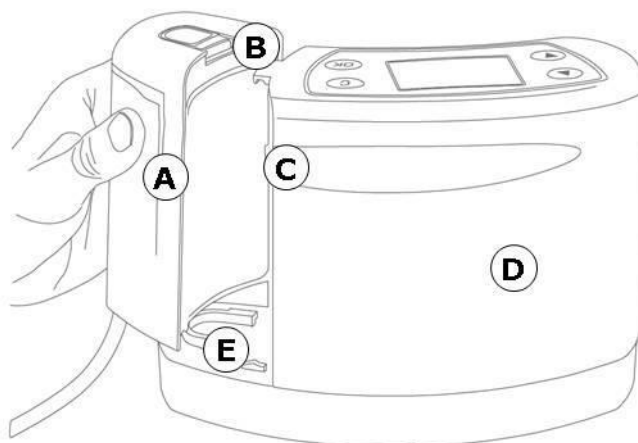




## 9 Canister Replacement



Observe health hazard warnings regarding infectious or pathogenic germs in Chapter 10



- Disposable secretion
- A canister with integrated suction tube
- B Canister locking mechanism
- C Aspiration port
- D **ASSKEA ped M**
- E Guide rail for canister

Fig. 6

1. Switch off the device by pressing the button  for 3 seconds.
2. Close the tubing clamp on the suction tube.
3. Remove the suction catheter from the suction tube.
4. Press and hold the lock on the canister (B), then pull the disposable secretion canister horizontally away from the device.
5. Dispose of the disposable secretion canister with integrated suction tube.



The disposable secretion canister with integrated suction tube is a single-use item.

6. Attach a new disposable secretion canister as described in Chapter 7.3. Ensure a secure fit.

## 10 Cleaning and Disinfection

### 10.1 Warnings



#### **WARNING: HEALTH RISKS DUE TO HANDLING OF INFECTIOUS OR PATHOGENIC GERMS**

Infectious and pathogenic germs in suctioned fluids can cause health damage.

- Wear suitable disposable gloves to avoid contact with suctioned fluids. Additional protective measures may be required depending on the patient's condition.
- Carefully follow all listed steps to achieve the required germ reduction.



#### **WARNING: POSSIBLE BODILY INJURY DUE TO ELECTRIC SHOCK**

- Switch off the device before cleaning.
- Disconnect the Power Supply Unit from the power supply and then disconnect it from the device.



#### **CAUTION: HEALTH RISKS DUE TO HANDLING OF DISINFECTANTS**

- Follow the manufacturer's instructions for disinfectants.



#### **NOTICE: DAMAGE OF THE DEVICE DUE TO IMPROPER CLEANING AGENTS**

Cleaning agents and disinfectants can damage the surface of the device.

- Do not use aldehydes or acetone for cleaning and disinfecting.
- Frequent cleaning and disinfection procedures may result in minor discolorations of the plastic components of the housing. However, these do not affect the function of the device.

### 10.2 Cleaning and Disinfection of the Device Surface

Regularly clean and disinfect the surfaces of the device, at least once a week and when changing patients.



The disposable secretion canister with integrated suction tube is a single-use items. Dispose of the disposable secretion canister with integrated suction tube after use.

|                                            |                                                                                                                                                                                  |                         |                            |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------|
| <b>LIMITATIONS ON PROCESSING</b>           | Do not continue using the device if visible damage is present or if suctioned material has entered the device. There are no further restrictions.                                |                         |                            |
| <b>PREPARATION BEFORE CLEANING</b>         | Follow the instructions in the chapter 9. You should now have the device disconnected from the power supply in front of you.                                                     |                         |                            |
| <b>CLEANING</b>                            | Remove visible contaminants with a damp, lint-free cloth. Moisten the cloth with clear water (< 40°C / 104 °F). Wipe the entire surface of the device with light pressure.       |                         |                            |
| <b>DISINFECTION</b>                        | Now disinfect the previously cleaned surfaces. Follow the manufacturer's instructions for the disinfectant. Spray the entire surface of the instrument. Wipe the entire surface. |                         |                            |
|                                            | The device can be disinfected with the disinfectant group "Alcohol."                                                                                                             |                         |                            |
|                                            | ASSKEA GmbH recommends the following disinfectants:                                                                                                                              |                         |                            |
|                                            | <b>Surface Disinfectant</b>                                                                                                                                                      | <b>Active Substance</b> | <b>Type of Application</b> |
|                                            | Incidin® Liquid (Ecolab)                                                                                                                                                         | Alcohol                 | Ready-to-use solution      |
|                                            | Bacillol® AF (Bode Chemie)                                                                                                                                                       | Alcohol                 | Ready-to-use solution      |
| <b>DRYING</b>                              | Allow the disinfected surface to dry completely.                                                                                                                                 |                         |                            |
| <b>MAINTENANCE, INSPECTION AND TESTING</b> | The device should now be free of visible contamination. You can prepare the device for the next application as described in chapter 7.                                           |                         |                            |
| <b>STORAGE</b>                             | If the device is not used for a long period, store it as described in Chapter 13.                                                                                                |                         |                            |

## 11 Maintenance



Do not open the device unless you are trained and authorized to do so. Have service activities such as battery or filter replacement performed only by authorized service personnel.

Keep the **ASSKEA ped M** in a generally clean condition.

The internal bacterial filter in the device must be replaced if it comes into contact with suctioned material (indicated by "System closed - Canister full" on the display), after the filter service life has expired (⚠ symbol on the display), or during maintenance/repair.

The carbon filter in the device must be replaced during maintenance/repair, when replacing the internal bacterial filter, or at least every two years.

## 12 Troubleshooting and Service

### CONTACT WITH LIQUIDS AND SOLIDS INSIDE THE DEVICE



If the device interior comes into direct contact with liquids or solids, the device must be inspected by ASSKEA GmbH or an authorized service partner.

### TROUBLESHOOTING

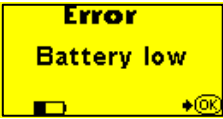
| Error                                        | Possible Cause                         | Solution                                                                                                                                                                                                    |
|----------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Device cannot be switched on.                | Battery is empty.                      | Connect the power supply unit.                                                                                                                                                                              |
|                                              | Display foil is defective.             | Please contact a service partner!                                                                                                                                                                           |
| No aspiration possible / no flow of aspirate | Suction hose blocked/kinked            | <ul style="list-style-type: none"> <li>Adjust device position</li> <li>Verify proper connection of the tubing.</li> <li>Rinse the suction tube</li> <li>use a new disposable secretion canister.</li> </ul> |
|                                              | Tubing clamp is closed.                | Open the tubing clamp                                                                                                                                                                                       |
|                                              | Disposable secretion canister is full. | Replace the disposable secretion canister.                                                                                                                                                                  |
|                                              | Internal filter is blocked.            | Please contact a service partner!                                                                                                                                                                           |



Contact ASSKEA GmbH or your service partner if the malfunction cannot be corrected by the described measures.

### ERROR MESSAGES

| Error Message                                                                       | Status                                                   | Possible Cause                                                                                             | Solution                                  |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|  | Pump off. Discontinuation of the current operating mode. | Disposable secretion canister is full.                                                                     | Replace the disposable secretion canister |
|                                                                                     |                                                          | Flow of aspirate is disrupted (tube kinked or stenosis in the tube).                                       | Check the tubes for kinks.                |
|                                                                                     |                                                          | If the alarm is displayed even if the canister is not connected, the internal bacterial filter is blocked. | Contact your service partner!             |

| Error Message                                                                       | Status                                                                                   | Possible Cause                      | Solution                                                                                                                                                       |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Pump off.<br>Discontinuation<br>of the current<br>operating<br>mode.                     | Very low battery level.             | Connect the power<br>supply unit.                                                                                                                              |
|    | Pump off.<br>Discontinuation<br>of the current<br>operating<br>mode.                     | Internal error.                     | - Briefly plug in the<br>power supply unit and<br>unplug again.<br>- If the error reoccurs<br>60 seconds after<br>restarting, contact<br>your service partner! |
|    | Current<br>operating<br>mode<br>continues to<br>run in the<br>background.                | Low battery charge<br>level.        | Connect the power<br>supply unit.                                                                                                                              |
|  | (Alarm after 15<br>minutes)<br>Back-up mode<br>continues to<br>run in the<br>background. | The therapy was not<br>started.     | Start the therapy.                                                                                                                                             |
|                                                                                     |                                                                                          | The device was not<br>switched off. | Switch off the device.                                                                                                                                         |



- The alarms are solely system-triggered alarms, since these are identified by the monitoring of device-specific variables.
- All alarm messages (excepting "Internal error") must be acknowledged by pressing the OK button.
- Alarm messages of high priority are shown on the display with a red flashing background and the beeper sounds (3x, pause, 2x, 3x, pause, 2x) every 3 seconds.
- Alarm messages of low priority are shown on the display with a static yellow background and the beeper sounds periodically (2x) every 16 seconds.

## 13 Storage and Disposal

### DECOMMISSIONING

Turn off the device after suctioning.

1. Disconnect the Power Supply Unit from the power supply and then unplug the device connector from the suction device.
2. Remove accessories as described in Chapter 9.
3. Clean the device surface as described in Chapter 10.
4. Store the device in its shipping carton until the next use.

### LAGERUNG

Store the **ASSKEA ped M** within the permitted storage conditions:

|                      |                           |
|----------------------|---------------------------|
| Ambient temperature: | -25 °C to +60 °C          |
| Relative humidity:   | Up to 93%, non-condensing |
| Air pressure:        | 700 hPa to 1060 hPa       |

Charge the battery before storing the device. If unused for about 10 months, recharge the battery.

### DISPOSAL

**Packaging:** Recycle the device packaging if no longer needed.

**Accessories:** Single-use products must not be reprocessed or reused.  
Dispose of single-use products properly.

**Device** Do not dispose of the device with household waste. Clean and disinfect the device. Dispose of it at a recycling center or return it to ASSKEA GmbH or an authorized service partner.



## 14 Technical Data

### 14.1 ASSKEA ped M

| Product identification and specification                                                                                              |                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Name                                                                                                                            | <b>ASSKEA ped M</b>                                                                                                                                                                |
| REF                                                                                                                                   | 100567-3                                                                                                                                                                           |
| Flow rate*<br>(measuring point at<br>suction tube nozzle)                                                                             | max. 8 l/min (low flow)                                                                                                                                                            |
| * The information provided may differ depending on the altitude above sea level, the prevailing air pressure and the air temperature. |                                                                                                                                                                                    |
| Vacuum                                                                                                                                | -60 mbar to -350 mbar (medium vacuum)<br>Conversion factor: 1 kPa ~ 7.5 mmHg; 1 kPa ~ 10 mbar                                                                                      |
| Pressure display<br>accuracy                                                                                                          | Target pressure > -120 mbar    max. Δ 5 %<br>Target pressure ≤ -120 mbar    max. Δ 10 %                                                                                            |
| Operating time                                                                                                                        | Continuous operation                                                                                                                                                               |
| Sound emission                                                                                                                        | Operation:                      35 dB (A)<br>High priority alarm:        53 dB (A)<br>Low priority alarm:        52 dB (A)                                                         |
| Weight                                                                                                                                | 1,2 kg                                                                                                                                                                             |
| Dimensions device<br>(H x W x D)                                                                                                      | 165 mm x 220 mm x 90 mm                                                                                                                                                            |
| Protection against<br>electric shock                                                                                                  | Class II ME Equipment                                                                                                                                                              |
| IP degree of<br>protection                                                                                                            | IP33                                                                                                                                                                               |
| Ambient conditions                                                                                                                    | <i>Transport / Storage</i><br>ambient temperature:    -25 °C to +60 °C<br>relative humidity:        up to 93 %, non-condensing<br>air pressure:                700 hPa to 1060 hPa |
|                                                                                                                                       | <i>Operation:</i><br>ambient temperature:    +5 °C to +40 °C<br>relative humidity:        15% to 93%, non-condensing<br>air pressure:                825 hPa to 1060 hPa           |



| <b>Electrical Requirements</b>    |                                                                         |
|-----------------------------------|-------------------------------------------------------------------------|
| Power Supply Unit Model           | ATM024T-W120V                                                           |
| Power Supply Unit Ratings         | In: AC 100 – 240 V~ / 50 – 60 Hz / 580 – 320 mA<br>Out: DC 12 V / 2,0 A |
| Permitted Input Voltage           | 12 V                                                                    |
| Maximum Load Current              | 2,0 A                                                                   |
| Power Consumption at 12 V         | 15 W                                                                    |
| <b>Battery Specification</b>      |                                                                         |
| Battery, rechargeable             | min. 7.2 V; lithium-ion battery                                         |
| Charging time if battery is empty | 6 – 7 h                                                                 |
| Energy of battery pack            | <80 Wh                                                                  |
| Runtime in battery operation      | approx. 18 h, depending on the strain of the motor                      |

## 14.2 Accessories

| <b>Accessory Specification</b> |                                                                                                                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Canister                       | Identification: disposable secretion canister (250 ml) with step connector (Art.-Nr. 100789)<br>Capacity: 250 ml<br>Suction tube: PVCnoDEHP - suction tube with step connector, Ø 4 mm (internal), length: 150 cm |
| Applied part                   | sterile suction catheter, Applied Part Type BF                                                                                                                                                                    |

## 15 Order information

| Item number | Description                                                | PU |
|-------------|------------------------------------------------------------|----|
| 100790      | disposable secretion canister (250 ml) with step connector | 35 |
| 100705-2    | Variable holder prowound M, procuff M, ped M)              | 1  |
| 100571      | Bag prowound M, procuff M, ped M                           | 1  |

## 16 Publishing information

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