

MULTI SYSTEM TYP 1

Instructions for use

EN | ZK-58.203/00 | 2021-09



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| | Order number | ZK-58.203/00 |

If you would like to request a printed copy of the instructions for use, please contact us at ifu@metasys.com or use the order form at www.metasys.com/downloads. A hardcopy of the instructions for use will be made available to you free of charge and within seven calendar days of receipt of the request.

Translations

Translation of the original instructions for use



Tetras GmbH
Sirius Business Park, Rupert-Mayer-Str. 44, 81379 Munich, Germany

Images

The images contained in these instructions for use are for reference and may differ from the actual appearance of the product.

1. Notes










































1.1. General instructions

METASYS can only guarantee the safety, reliability and performance of the dental device if the following instructions are adhered to:

- > The product is only to be used in accordance with the instructions for use.
- > During maintenance and service work (inspection, service, repair, replacement), only use original replacement parts.
- > All manufacturer specifications for the treatment units to which the device is connected must be observed.
- > After commissioning, complete the proof of installation and send this to METASYS in order to define the warranty period.
- > All maintenance and service work must be entered into the device logbook.
- > On request by an authorised technician, METASYS will provide all documentation that may be of use to technically qualified personnel during maintenance and service works
- > METASYS accepts no responsibility for damage that may arise due to external influences (defective installation), using incorrect information, improper use of the dental device, or maintenance and service works being carried out improperly.
- > The user must familiarise himself/herself with how to operate the dental device and ensure that the dental device is in good condition each time before operating it.

Important: Read the accompanying documents of the device carefully before installation, commissioning and use and keep them for the entire service life of the product!

1.2. Explanation of the symbols

| | | |
|---|--|--|
|  CE mark |  End device ready for operation |  Use eye protection |
|  Medical device |  Loudspeaker |  Use mouth and nose protection |
|  REF/order number |  Sound |  Unplug from mains |
|  Serial number |  Inclination / slope |  General warning sign |
|  Manufacturer |  Maximum installation altitude |  Warning of electrical voltage |
|  Date of manufacture |  Blower / fan |  Information |
|  Follow instructions for use |  On Off |  Download |
|  Follow instructions for use with reference to eIFU eIFU: www.metasys.com/downloads |  Separate collection of electrical/electronic equipment (WEEE) |  Do not cut |
|  Temperature limit |  Protective earthing |  Maintenance / service |
|  Caution / attention |  Protection class II |  Stop operation |
|  Beware of electric shock |  Applied part type BF |  Protect from heat / Protect from sunlight |
|  Humidity limit |  Mark of conformity per para. 22 section 4 Lower Saxony Building Regs |  Protect from moisture / Store in a dry place |
|  Tank filled |  Responsible for the translation |  Fragile |
| |  Observe instructions for use |  Package orientation at the top |



Fault on end device



Use hand protection



Stacking limit n = (quantity)

1.3. Copyright notice

All names and contents are protected by copyright. Distribution, duplication or alternative use of this document is only permitted with the written consent of METASYS Medizintechnik.

2. Intended use

The MULTI SYSTEM TYP 1 is a two-stage, single unit amalgam separator with integrated air/water separation and place selection valve for separating amalgam from waste water from dental treatment units.

2.1. Indication

Not applicable.

2.2. Contraindication

Not applicable.

2.3. Target group

The device shall be used by trained and qualified personnel exclusively.

3. Safety-related information

3.1. General safety-related information

All serious incidents related to the device must be reported to the manufacturer and the competent authority of the Member State where the user and/or the patient is resident.

3.2. Safety instructions

Assembly, modifications or repairs may only be carried out by authorised qualified personnel who guarantee compliance with the EN 60601-1 standard (international standard on Medical Electrical Equipment and Systems, in particular part 1: General requirements for basic safety).

The electrical installation must comply with the regulations of the IEC (International Electrotechnical Commission).

Medical devices should be handled with care with regard to electromagnetic compatibility. Special safety measures must therefore be taken.

The device is not suitable for operation in explosive areas or in flammable atmospheres.

3.3. Warnings

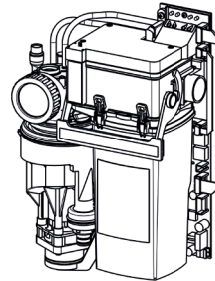
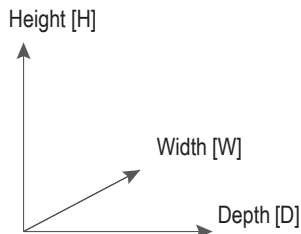
| | |
|------------------|--|
| Danger | Warning of a danger that will directly result in serious injury or death |
| Warning | Warning of a danger that can result in serious injury or death |
| Caution | Warning of a danger that can result in minor injury |
| Attention | Warning of a danger that can result in extensive damage to property |

4. Product description

4.1. Product description

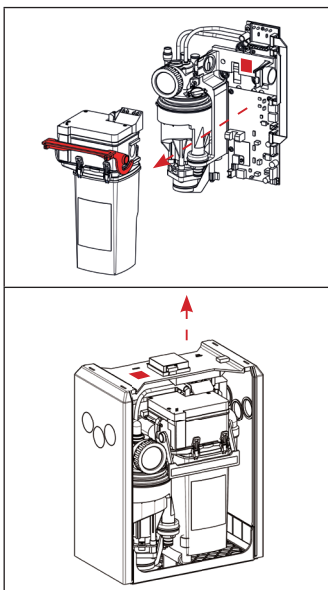
MULTI SYSTEM TYP 1 is a two-stage, single unit amalgam separator with integrated, static air/water separation and place selection valve.

4.2. Technical data / performance data



| | MULTI SYSTEM TYP 1 |
|-----------------------------------|--|
| Power supply | 24 V AC |
| Frequency | 50 / 60 Hz |
| Max. current consumption | 2 A |
| Max. power consumption | 46 VA |
| Max. ambient temperature | 40 °C |
| Max. liquid flow rate | 3.0 l/min via the spittoon; 1.5 l/min via the suction side |
| Negative pressure range | 80 mbar - 250 mbar |
| Separation rate | 98.60 % |
| Collection container volume | 300 cm ³ |
| Dimensions (H x W x D) | 305 x 210 x 104 mm |
| Dimensions with cover (H x W x D) | 340 x 280 x 185 mm |
| Class | MD class 1 |
| DIBT approval number | Z-64.1-4 |
| Possible suction systems | Wet or dry suction systems |

4.3. Type plate

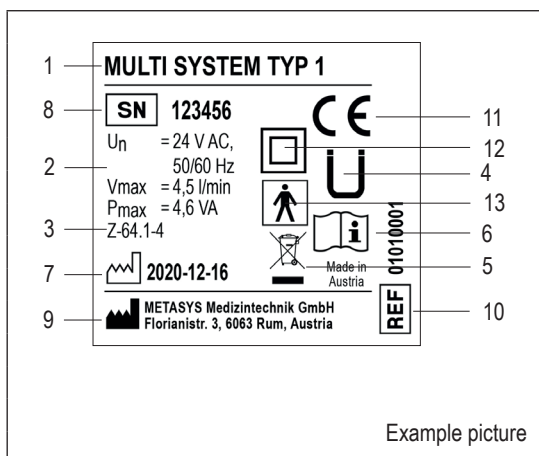


MULTI SYSTEM TYP 1 Built-in version:

The type plate is located on module 1 and is visible when module 2 is removed (to do this, tilt the locking bracket on module 2 upwards and remove module 2).

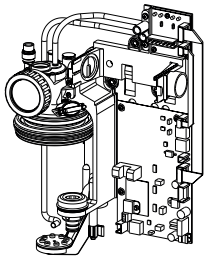
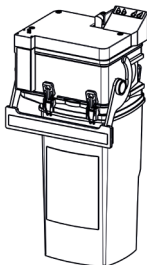
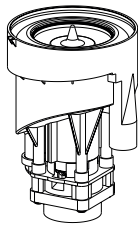
MULTI SYSTEM TYP 1 with cover:

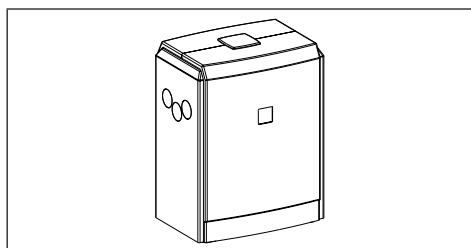
The type plate is located on the cover next to the external display (push the lid of the cover upwards) as well as on module 1 and is visible when module 2 is removed (see built-in version).



- 1 Device description
- 2 Connection data
- 3 Registration number Deutsches Institut für Bautechnik (DIBT) (German Institute of Construction Technology)
- 4 Mark of conformity per para. 22 section 4 Lower Saxony Building Regs
- 5 Separate collection of electrical/electronic equipment (WEEE)
- 6 Follow instructions for use
- 7 Date of manufacture
- 8 Serial number
- 9 Manufacturer
- 10 REF/order number
- 11 CE mark
- 12 Protection class II
- 13 Applied part type BF

4.4. Construction

| Module 1 | Module 2 | Module 3 |
|--|---|---|
| Central fastening element: Air, water and electrical connections Wall mount Main board Diagnostic board Filter unit | Air/water separation: Collection container Separation unit Place selection valve | Centrifuge: Dynamic amalgam separation |
|  |  |  |



Cover
Cover (optional)

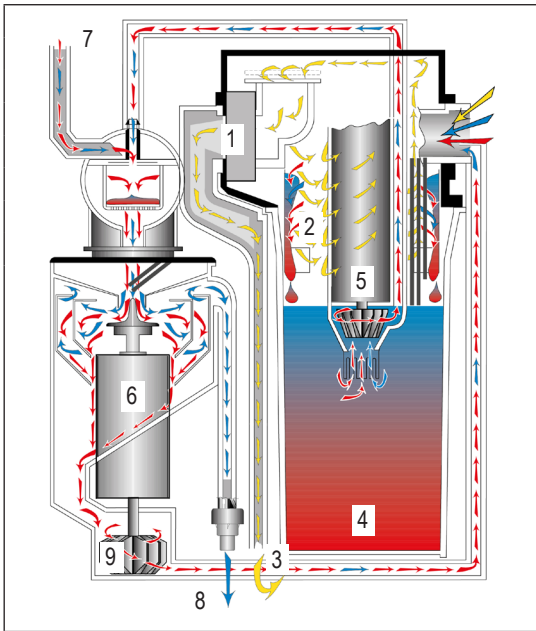
4.5. Functional description

Lifting a suction hose opens the place selection valve. The suction current is fed into module 2, where the air/water separation takes place by means of the cyclone principle.

The dry air leaves the system via the place selection valve to the suction motor. The liquid and solid components of the suction current enter the collection container below the separation, which is also the first stage of amalgam separation.

While the coarser particles sediment in the collection container, the liquid level rises depending on the suction volume. As soon as a certain level is reached, the pump motor is started for a certain period of time via a conductivity probe. The pump conveys the pre-cleaned liquid into the centrifuge, the second stage of amalgam separation, which is also started via a probe. Waste water coming from the spittoon is fed directly into the centrifuge. The heavy parts are held in the run against the walls of the double-chamber centrifuge, while the clean water exits via the upper edge of the outer centrifuge into the drain. As soon as the probe no longer makes contact, the centrifuge stops abruptly after a short run-on time.

The continuing rotation of the water column flushes the heavy particles into the pump located below the centrifuge. The motor starts again after a short waiting time and thus pumps the heavy parts with the residual water quantity into the collection container.

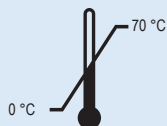


- 1 Place selection valve
- 2 Module 2 (air/water separation)
- 3 Exhaust air to suction motor
- 4 Collection container
- 5 Pump motor
- 6 Centrifuge
- 7 Spittoon waste water input
- 8 Waste water output
- 9 Pump

5. Preparation for use

5.1. Transport and storage

The device is shipped in two polystyrene shells fixed together. This original packaging must be used for any onward and return transport. The device must always be transported and stored in an upright position. The device must be transported to the installation site in a completely packed state. After unpacking the device, check for completeness and possible transport damage.

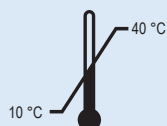


Transport and storage temperature



Transport and storage humidity limitation

5.2. Installation requirements



Operating temperature: 10°C to 40 °C



Humidity limit max. 70 %



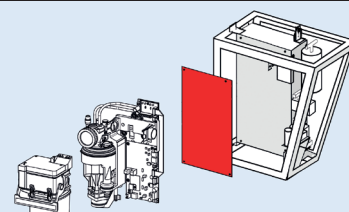
Max. 3,000 m above sea level

- > The following space requirement must be provided for the installation: H x W x D = 350 mm x 215 mm x 120 mm
- > To avoid vibrations, use only the three holes on module 1 to attach to load-bearing parts of the treatment unit! (Do not remove vibration inserts!)
- > The device must be able to swing freely and must not have any contact with other parts of the treatment unit (cables, hoses, covers, etc.).

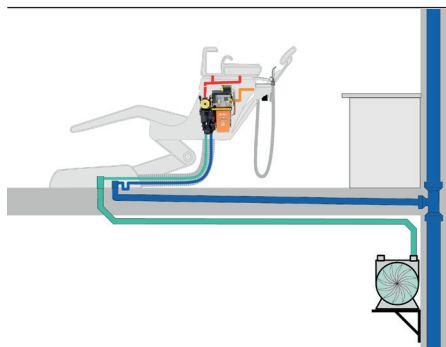


Caution:

A contact protection plate must be fitted behind module 1 if the subsurface is electrically conductive!



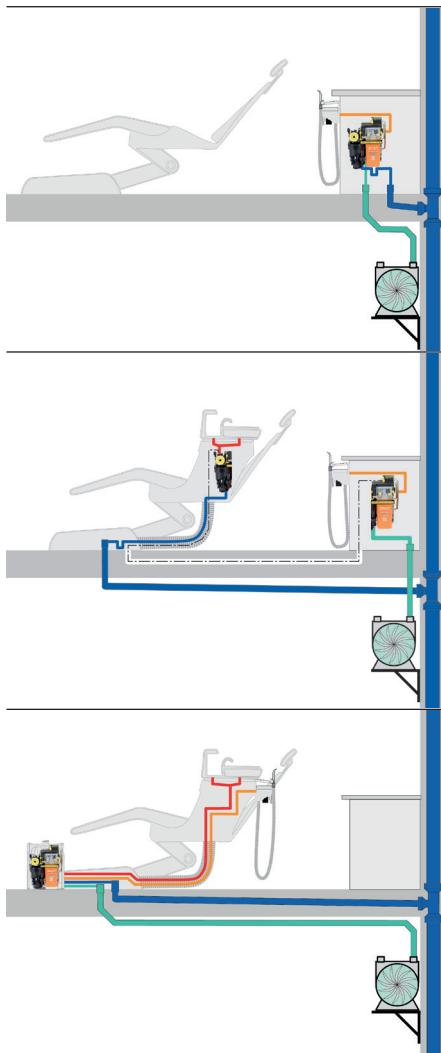
5.2.1. Assembly variants



Installation in the spittoon

Direct integration of the device into the spittoon should be used as the preferred solution, as the tubing routes to the device can be kept as short as possible.

In the spittoon, ensure vibration-free suspension of the device from supporting parts of the treatment unit.



Installation in the behind the patient' head

If there is no spittoon at the treatment chair and the suction system is located behind the head of the patient, the device can be installed inside a cabinet.

In this case, the connection opening for the spittoon drain must be closed with a blind plug.

Split version

For work places which have suction behind the patients' head as well as a spittoon, the amalgam separator can be split into two parts.

Module 1 and module 2 are mounted in the rear head cabinet near the hose storage.

Module 3, the centrifuge, is fitted into the spittoon or next to the dental unit's connection box with a special bracket.

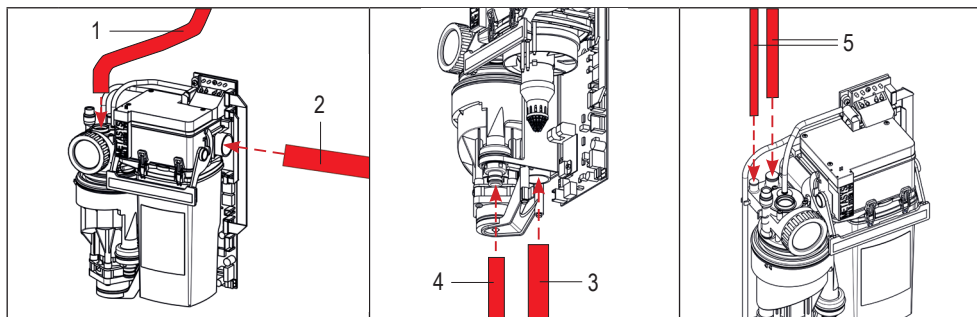
Both parts of the unit are connected to each other via cables in the ground. For this purpose, there must be an empty conduit of at least \varnothing 20 mm between the connection box and the back-of-the-head cabinet. The cable length must not exceed 3.5 m!

Set-up with cover

If it is not possible to install the device directly in the treatment unit, the set-up can also be carried out in the optionally available cover.

The cover should be mounted on the connection box of the treatment unit. The external display and a transformer are already integrated in the cover.

5.2.2. Pipe and hose connections



- 1 Connection for spittoon drain hose
- 2 Connection for suction hose (for hose storage)
- 3 Connection for suction hose (to suction machine)
- 4 Connection for drain hose (clean water outlet)
- 5 Connection for overflow hoses (e.g. tumbler filler)



Attention:

Unused connections must be sealed with blind plugs!

The hose routes leading to the device must be kept as short as possible to prevent pre-sedimentation.

Dirty dental hoses must be replaced during installation and disposed of by an approved disposal company.

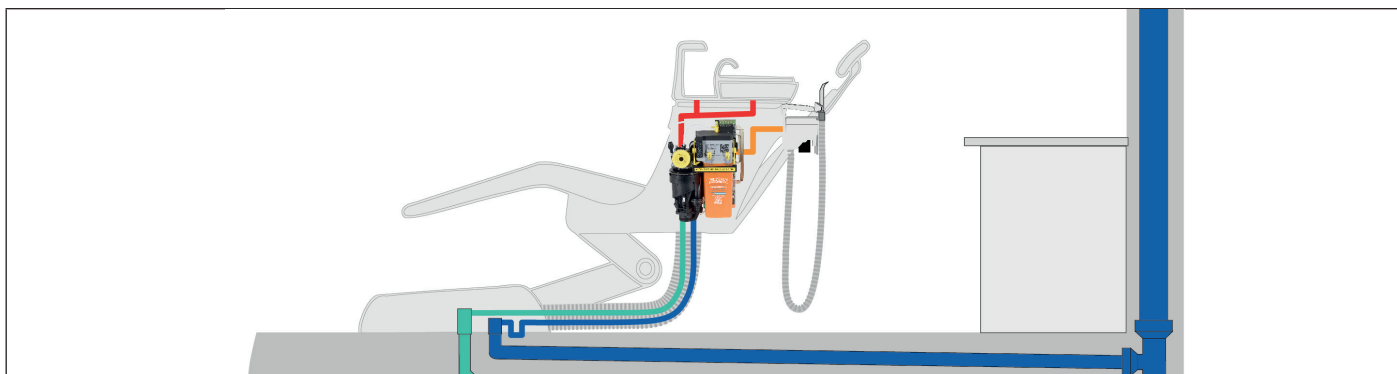
The device must be connected to the sewage pipe via an odour trap.

The waste water must be able to flow freely, as the separation efficiency is not guaranteed in the event of a backwater.

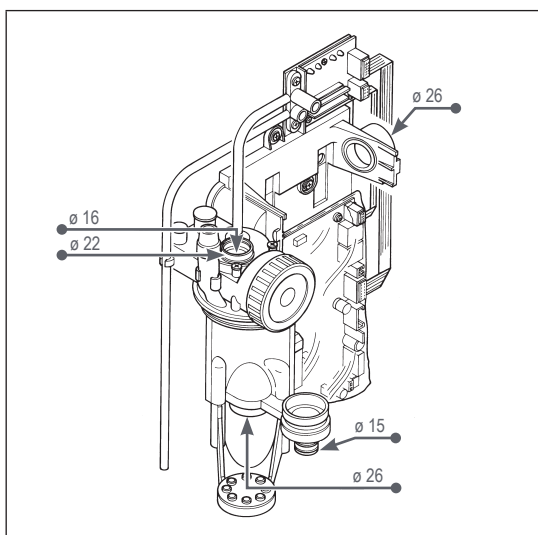
Water jet operated saliva ejectors must be shut down due to high water consumption.

The flushing of the spittoon must be limited by means of a timer or button to max. 30 seconds at a max. water flow of 3 l/min to enable the centrifuge to stop.

For matching hose nozzles and adapters see 9.1.1. Accessories, service kits, collection containers and spare parts.



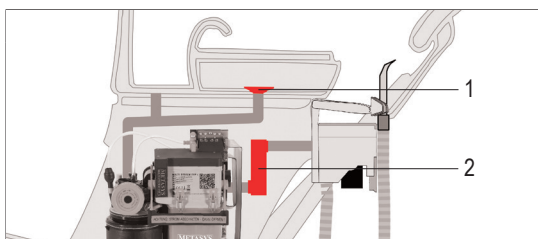
5.2.3. Connection dimensions



5.2.4. Filter

If not present in the hose storage, a pre-filter with a mesh size of max. 1 mm must be installed on the suction side of the amalgam separator. The pre-filter must be easily accessible for the practice staff.

There must be a coarse sieve in the drain of the spittoon. This must have a mesh size of max. 3 mm and must not be removed while the amalgam separator is in operation.



- 1 Coarse sieve (spittoon)
- 2 Pre-filter

5.3. Installation, assembly and commissioning

1 Read the instructions carefully before installation and commissioning!

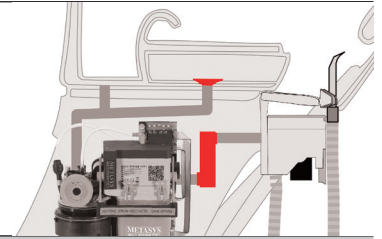


Meet spatial requirements

see 5.2. Installation requirements

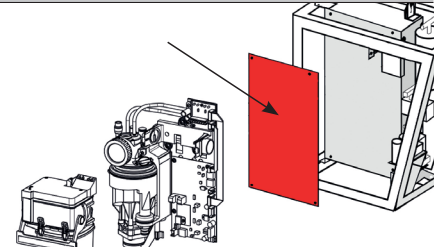
2 Check the coarse sieve in the spittoon

3 Install the pre-filter (if not present in the hose storage)



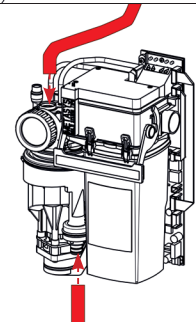
MULTI SYSTEM TYP 1 Built-in version

4 Fit a contact protection plate behind module 1 (if the subsurface is electrically conductive)

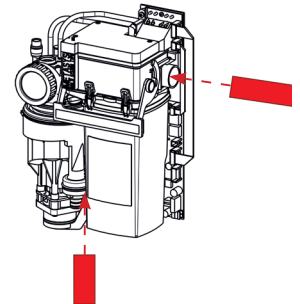


5 Connect the spittoon drain hose

6 Connect the drain hose



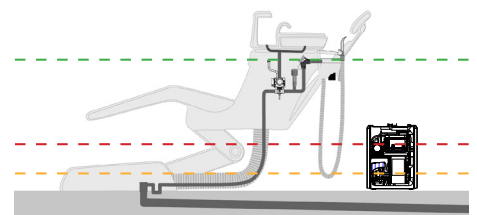
7 Connect the suction line from the hose storage (suction hose) and to the suction machine (suction hose)



MULTI SYSTEM TYP 1 with cover

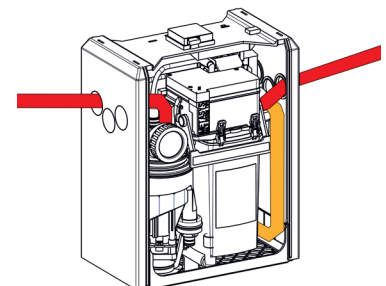
Placement of the MULTI SYSTEM TYP 1 with cover:
 Spittoon drain above I (red), amalgam separator drain below O (yellow), min. 700 mm free height (green) for hose storage

8
 I
 O
 Free height



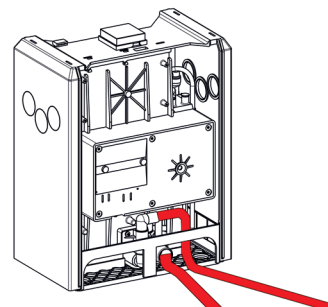
9 Connect the spittoon drain hose

10 Connect the suction line from the hose storage (suction hose)

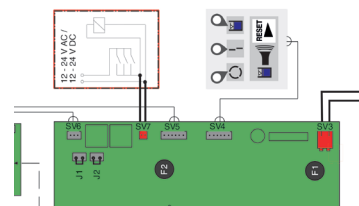


11 Connect the suction line to the suction machine (suction hose)

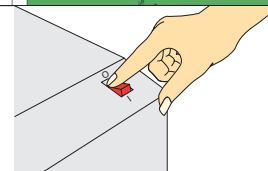
12 Connect the drain hose



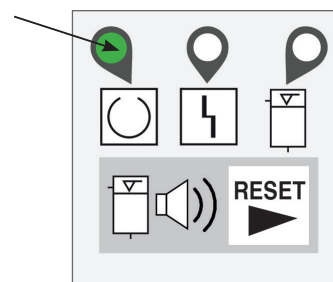
13 Connect electrical connections (see 5.4. Electronics)



14 Switch on the device via the device or practice main switch.
The centrifuge of the MULTI SYSTEM TYP 1 starts up twice briefly and stops abruptly (self-test).



15 When LED 1 lights up green, the amalgam separator is ready for operation (for a description of the external display, see 6.2.1. External display).



Inform the dentist about product function, operation, care and warranty conditions.

16

Fill in the installation proof and device logbook and return them to METASYS (installation@metasys.com)



17 Carry out a normal operation test

see 7.2.3. Normal operation test

5.3.1. Installation and assembly of optional accessories, retrofit parts and spare parts



Assembly, modifications and repairs may only be carried out exclusively by authorised specialist personnel (see 3.2. Safety instructions)! The METASYS technical customer service is also available for further information and assistance in carrying out repairs, retrofitting, fault analyses, etc.

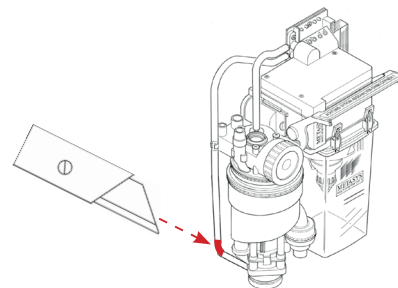
5.3.1.1. Retrofitting the non-return valve for centrifuge pump

Suction noises at the spittoon can be caused by excessive negative pressure in the suction machine, or by straight and short connecting lines between the spittoon and the amalgam separator.

If suction noises occur in connection with the MULTI SYSTEM TYP 1, the negative pressure (max. 250 mbar) and the air intake valve should be checked first. If the noises persist despite correct negative pressure, they can be avoided by means of the external non-return valve.

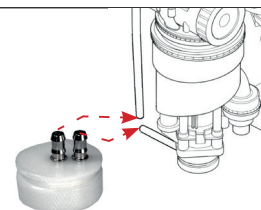
1 Preparation:

Cut the connecting line from the centrifuge pump to module 2 approx. 5 cm from the centrifuge.



Assembly:

2 Connect the central connection of the non-return valve to the elbow - module 2.
Connect the second connection to the centrifuge pump.



Function test:



The following points must be checked as part of a correct function test. If errors occur at any of these points, follow the instructions in step 4.

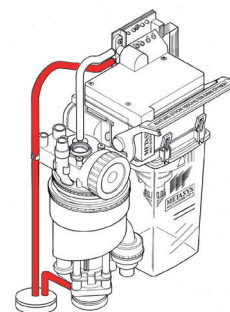
No water may be drawn from the centrifuge pump into module 2 during suction operation.

3 _____

There must be no noise at the external non-return valve during suction.

When the centrifuge is pumping back, there must be a normal water flow.

When the centrifuge is pumping back, no water must escape from the non-return valve.



Adjustment:

4 The lower part must not be connected too tightly! This can be corrected by rotating the lower part slightly (maximum 1/4 turn to the left or right). Then carry out the function test (step 3) again.



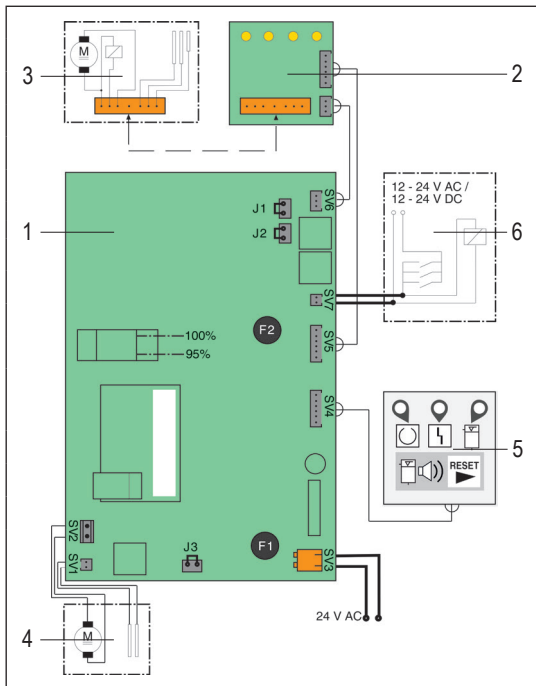
5.3.2. Connecting to other devices

When connecting the METASYS device to other devices or systems, hazards can arise. It must therefore be ensured that no hazards arise for the user or the patient and that the environment is not affected. The specifications of the manufacturer of the device or system to be connected must be observed.

5.4. Electronics

The mains connection may only be carried out by a qualified electrician. The electrical installation must be carried out in accordance with the applicable local regulations. Before connecting to the mains, compare the rated voltage on the device type plate with the mains voltage.

5.4.1. Electrical connections



- 1 Main board
- 2 Diagnostic board
- 3 Module 2
- 4 Module 3
- 5 External display
- 6 Hose storage switch and suction system isolating relay

- SV1 Connector for centrifuge inlet probe
- SV2 Connector for centrifuge motor
- SV3 Connector for power supply (24 V AC)
- SV4 Connector for external display
- SV5 Connection to the diagnostic board (power supply for motor and magnetic valve in module 2)
- SV6 Connection to the diagnostic board (probes in module 2)
- SV7 Connector for suction signal (12 - 24 V AC or DC)
- F1 Main fuse MULTI SYSTEM TYP250/T 3, 15 A/UN 250 V/ ICN 35 A
- F2 Fuse MST250/T 1.6 A/UN 250 V/ ICN 35 A for pump motor in module 2



Removing the jumpers on J1, J2 and J3 causes a better response of the probes at low water conductivity.



Danger:

The supply voltage must be taken from a safety transformer that complies with the requirements of IEC 601-1 / VDE 0750 Part 1 / DIN EN 60601-1 and IEC 60742 + A1 / DIN EN 60742.

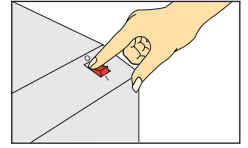
Danger:

Fuses may only be replaced by the same type!

6. Use

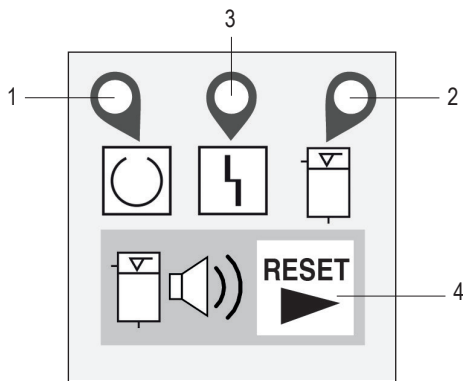
6.1. Normal operation

Ensure that the device is switched off at least 1 x per working day for level measurement. The 24 V AC power supply must be connected after the device's or practice's main switch.



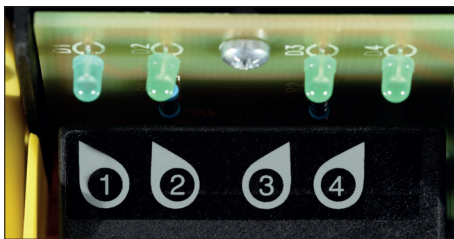
6.2. External and internal displays

6.2.1. External display



| | | | |
|---|-------|---|---|
| 1 | LED 1 | Lights up green | Ready for operation |
| 2 | LED 2 | Flashing red | Centrifuge malfunction |
| 3 | LED 3 | Lights up yellow + buzzer tone switchable via RESET | Level indicator: Container 95% full |
| | | Lights up yellow + buzzer tone that cannot be switched off via RESET | Level indicator: Container 100% full |
| 4 | RESET | No colour | RESET button When the container is 95% full, the buzzer tone can be switched off by pressing the RESET button. |

6.2.2. Internal display



| | | | |
|---|----------|----------------------------|--|
| 1 | Signal 1 | Suction signal | Suction hose lifted off (12-24 V AC or DC at connector SV7) |
| 2 | Signal 2 | Magnetic valve in module 2 | The magnetic valve in module 2 is actuated ("Emergency stop" probe not activated) |
| 3 | Signal 3 | Pump module 2 | The pump in module 2 is actuated |
| 4 | Signal 4 | Centrifuge inlet probe | The centrifuge inlet probe has contact |

6.3. Error messages



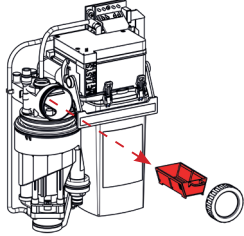
Assembly, modifications and repairs may only be carried out exclusively by authorised specialist personnel (see 3.2. Safety instructions)! The METASYS technical customer service is also available for further information and assistance in carrying out repairs, retrofitting, fault analyses, etc.

| Error message | Possible cause | Countermeasures |
|---|---|---|
| LED 2 flashing red, centrifuge malfunction | Centrifuge defective | Switch the main switch off several times and switch it on again after a short pause. If the control lamp lights up again after a short time, notify your service technician. |
| LED 3 lights up yellow + buzzer tone can be switched off via RESET | Collection container 95% full | Collection container replacement recommended, continued operation up to 100% possible. The buzzer tone can be switched off by pressing the RESET button. LED 3 remains lit up as a reminder. The buzzer sounds again each time the main switch is switched on. (see 7.2.1. Replacement of the collection container and 7.2.2. Disposal of the collection container) |
| LED 3 lights up yellow + buzzer tone cannot be switched off via RESET | Collection container 100% full | Collection container must be replaced. Further work is not possible due to the blocking of the place selection valve. (see 7.2.1. Replacement of the collection container and 7.2.2. Disposal of the collection container) |
| Centrifuge does not switch off automatically and is continuously in operation | Short circuit of the centrifuge inlet probe | Cleaning or replacement of the centrifuge inlet probe (see 7.1.2. Cleaning the centrifuge inlet probe) |
| No visualisation on external display | | |
| Centrifuge does not start | Centrifuge probe dirty or defective | Clean centrifuge probe, check connections on circuit board and contacts |
| Suction current is not released | Magnetic valve (module 2) defective | Clean or replace the magnetic valve (see 7.2.8. Replacement of the magnetic valve) |
| Bubble formation in the container when pump (module 2) is in operation | Sieve for pump or water brake missing or detached | Refit or replace sieve or water brake |
| Pumping capacity not sufficient | Sieve for pump missing or detached | Reassemble or replace the sieve |
| Pump (module 2) does not start | Pump defective, probes dirty or defective | Replace module 2 completely (see 7.2.6. Replacement of module 2) or clean probes (see 7.1.2. Cleaning the centrifuge inlet probe, steps 3-6) |

7. Care and maintenance

7.1. Regular cleaning measures

For trouble-free operation, briefly flush the spittoon after each treatment, and flush each suction hose with cold water to remove residues from the lines. The following cleaning measures must be carried out regularly:

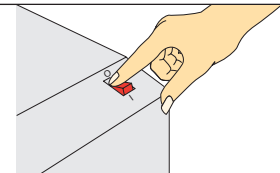
| Measure | Interval | |
|---|--|--|
| Cleaning and disinfection of the suction system | 2 x daily | see 7.1.1. Daily cleaning with GREEN&CLEAN M2 |
| Empty and clean the filter drawer | At least 1 x per week, depending on workload, emptying may also be necessary daily | Remove, empty and clean the filter drawer. Collect the residues containing amalgam from the filter drawer in a suitable container.  |
| Cleaning the centrifuge inlet probe | If required & in case of malfunction | see 7.1.2. Cleaning the centrifuge inlet probe |
| Container replacement | If required / at least 1 x per year | See 7.2.1. Replacement of the collection container and 7.2.2. Disposal of the collection container |

7.1.1. Daily cleaning with GREEN&CLEAN M2

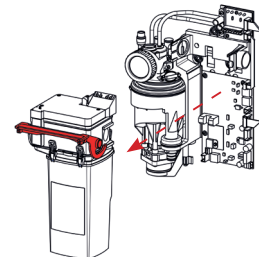
2 x daily (noon/evening) and after surgical interventions, disinfection must be carried out with the prescribed disinfectant and cleaning agent GREEN&CLEAN M2. Ideally, GREEN&CLEAN M2 should be used prior to the treatment unit remaining at a standstill for extended periods (lunchtime, end of the day or holidays). For information on use and safety instructions, see the GREEN&CLEAN M2 instructions for use.

7.1.2. Cleaning the centrifuge inlet probe

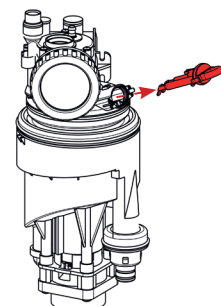
- 1 Switch off the main switch.



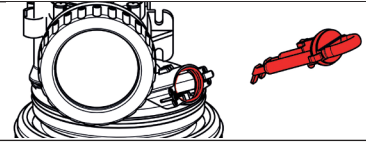
- 2 Tilt the locking bracket on module 2 upwards and take out module 2.



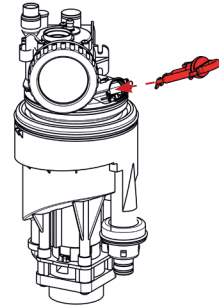
- 3 Pull the probe out of the filter housing.



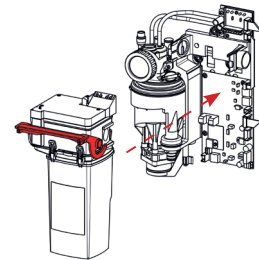
4 Clean the probe and probe opening in the filter housing.



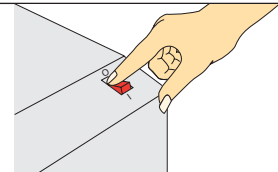
5 Grease the sealing ring of the probe with multi-silicone grease.



6 Insert the probe into the filter housing until you hear it click into place.



7 Carefully push module 2 back into the holder and close the locking bracket.



8 Switch on the main switch.

7.2. Maintenance and service



Assembly, modifications and repairs may only be carried out exclusively by authorised specialist personnel (see 3.2. Safety instructions)! For further information and assistance in carrying out repairs, retrofitting, fault analyses, etc., the METASYS technical customer service is also available!



Warning:
Switch off the main switch of the treatment unit!



Warning:
Avoid contact with the contents of the amalgam separator!



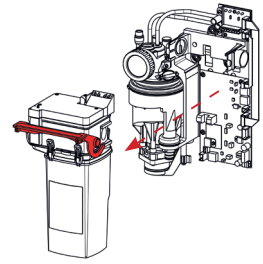
Warning:
Risk of contamination: To avoid infection, wear personal protective equipment (hand, eye, mouth-nose protection) and disinfect and clean the device!

7.2.1. Replacement of the collection container

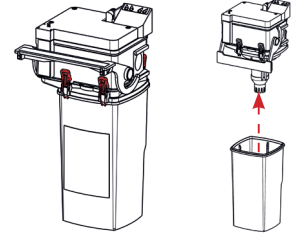
1 Prepare a new collection container and remove the disinfectant bag inside.



- 2** Tilt the locking bracket on module 2 upwards, remove it and place it on a flat, non-slip surface.



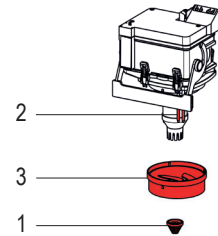
- 3** Open the 4 yellow clip fasteners on module 2, hold the collection container and lift off the upper part.



If the pump sieve (1) is dirty, pull it off, clean it over a collection receptacle and put it back on the suction housing of the pump.

- 4** Wipe the probes in module 2 (3) with a paper towel. For easier cleaning of module 2, the air brake (2) can also be removed.

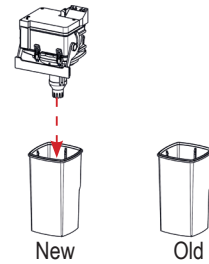
When assembling, pay attention to the position markings (arrow on the air brake, notch on module 2)!



Place the cleaned and properly assembled module 2 on the new collection container.

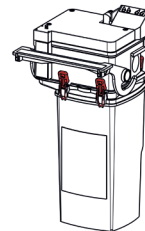
Pay attention to the FRONT marking on the collection container!

- 5** Close and dispose of the full collection container according to instructions (see 7.2.2. Disposal of the full collection container)

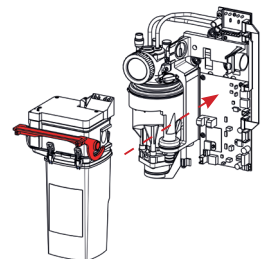


Close the 4 yellow clip fasteners on module 2.

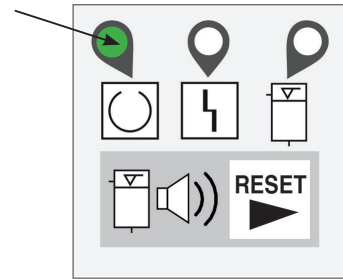
- 6** Clean the sealing rings on the left and right in the supporting element with a damp paper towel and grease them with multi-silicone grease (or Vaseline).



- 7** Carefully push module 2 back into the holder and close the locking bracket.



- 8 Switch on the main switch of the treatment unit.
The device starts up 2 x briefly and LED 1 on the external display lights up green ("Ready for operation").



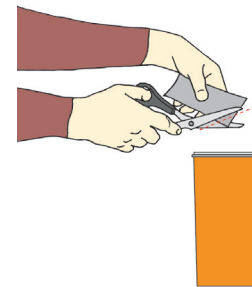
7.2.2. Disposal of the collection container

The full collection container can be returned to the company's own disposal organisation, DENTAL ECO SERVICE GmbH.

Retain the confirmation of disposal in accordance with state law.

When the complete device is disassembled at the end of its service life, it can be returned to the manufacturer for correct disposal (see 8.2. Recycling and disposal).

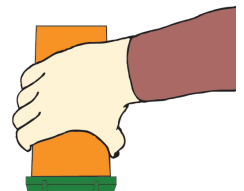
- 1 Cut open the disinfectant bag for final disinfection (enclosed with the new container) and pour the contents into the full collection container.



- 2 Close the full collection container with the green cover by applying firm pressure.

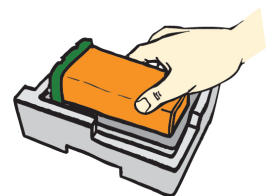


- 3 Make sure that the 8 safety lugs of the cover are engaged on the container.

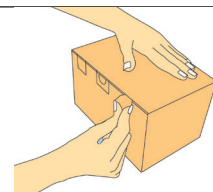


- 4 Carry out a leak test by placing the closed collection container upside down over a collection receptacle. If necessary, close the cover tightly again.

- 5 Place the properly sealed collection container in the 2 polystyrene half cups and then place it in the transport box.



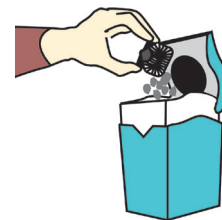
- 6 Close the transport box as per the enclosed instructions.



- 7 Dispose of the full collection container via an appropriate disposal company.
For disposal using DENTAL ECO SERVICE:
Visit www.metasys.com/collection_centers for more information on disposal in your country!



- 8 Stopping residues, sieve residues or other waste containing amalgam must be collected in a suitable container and can be disposed of by a disposal company (e.g. DENTAL ECO SERVICE).

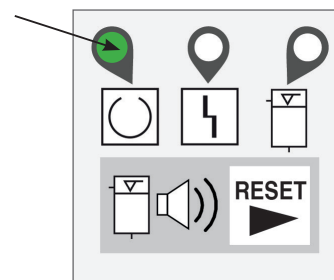


7.2.3. Normal operation test



The normal operation test checks the operating functions of the device. This test should be carried out after installation as well as after every repair!

- Switching on the main switch:
- 1 LED 1 on the external display lights up green.
Centrifuge starts up twice briefly and stops abruptly.



- 2 Lifting off the suction hose:
Signal 1 and signal 2 light up on the internal display, suction current is released.

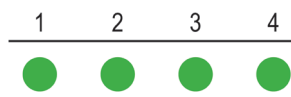


- 3 Sucking in water quickly until the suction current is interrupted:
More water enters the collection container than the pump can deliver (min. 1.5 l/min) and the emergency stop probe responds.

- 4 Signal 1, signal 3 and signal 4 light up on the internal display. Signal 2 does not light up because the magnetic valve has closed and thus interrupted the suction current.
After 2-3 seconds, the suction current is released again.



- 5 All signals light up on the internal display (hose storage signal, magnetic valve triggered, pump in module 2 in operation, centrifuge in operation).
After approx. 15 seconds, the centrifuge and pump switch off.



- 6 Only signals 1 and 2 light up on the internal display. After a short settling phase, the centrifuge starts again and pumps the separated material with a residual water quantity into the collection container for approx. 5 seconds.



- 7 Put back the suction hose:
No signal lights up on the internal display.



- 8 Switch on the flushing of the spittoon:
Only signal 4 lights up on the internal display. The centrifuge runs as long as the rinsing of the spittoon is in operation, then stops abruptly and briefly starts the return pump cycle again.



- No signal lights up on the internal display.



7.2.4. 1-year service kit

i

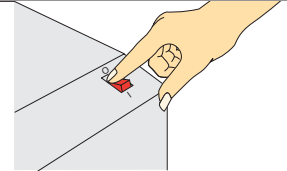
According to the Deutsches Institut für Bautechnik (German Institute for Construction Technology), the display units of amalgam separators must be checked for function at least once a year by an expert!

METASYS makes it mandatory to carry out the 1-year inspection.

The 1-year inspection must be entered in the device document!

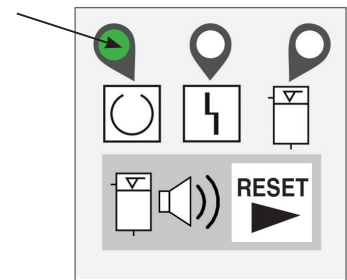
Check LED 1 (“Ready for operation”)

Switch the main switch off and on again



1

LED 1 lights up green:
Centrifuge starts up twice briefly and stops abruptly.



Check LED 2 (“Centrifuge malfunction”)

Switch off the main switch

Take out module 2

Unplug centrifuge connector SV2 on the main board (1)

On the main board, short-circuit slot SV2 (2)

With slot SV2 short-circuited, switch on main switch

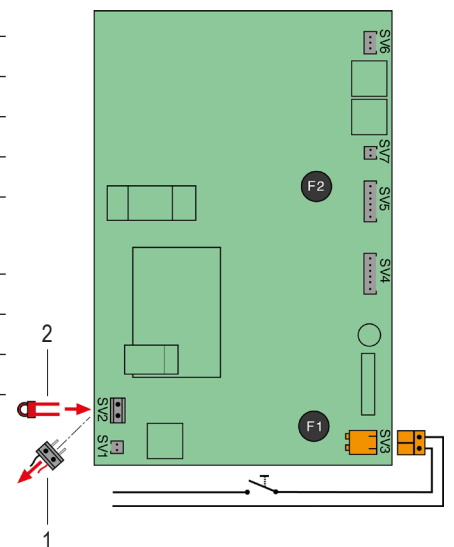
LED 2 flashes red:

2 With module 2 inserted, suction is now not possible

Switch off the main switch

Plug in centrifuge connector SV2 on the main board

Reinsert module 2



Check LED 3 (“Level indicator”)

- Switch off the main switch
- Take out module 2
- Unplug centrifuge connector SV2 on the main board (1)
- On the main board, cover the lower diode of the light barrier (2)

Switch on the main switch (3)

LED 3 lights up yellow:
Buzzer sounds (switchable via RESET)

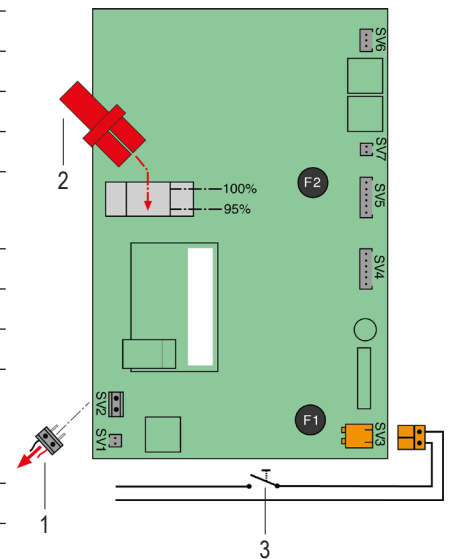
- 3**
- Switch off the main switch
 - On the main board, cover both diodes of the light barrier (2)

Switch on the main switch (3)

LED 3 lights up yellow:
Buzzer sounds (cannot be switched off)
With module 2 inserted, suction is now not possible

- Switch off the main switch
- Reinsert centrifuge connector SV2

Reinsert module 2



4 Carry out a normal operation test

see 7.2.3. Normal operation test

7.2.5. 5-year service kit



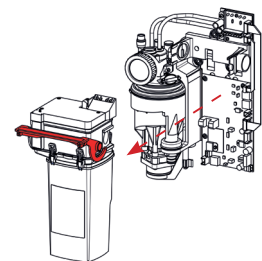
According to the German Waste Water Ordinance, Annex 50, amalgam separators must be inspected for proper condition at intervals of no longer than 5 years in accordance with state law!

The 5-year inspection must be entered in the device document!

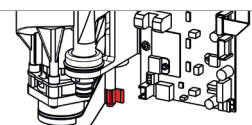
- | | | |
|----------|---|---|
| 1 | Carry out a 1-year inspection | see 7.2.4. 1-year service kit |
| 2 | Check the correct installation and connection of the amalgam separator in accordance with the installation requirements | see 5.2. Installation requirements |
| 3 | Carry out disinfection and cleaning of the suction hoses and spittoon | see 7.1.1. Daily cleaning with GREEN&CLEAN M2 |
| 4 | Carry out a visual inspection of the centrifuge chamber | see 7.2.5.1. Visual check of the centrifuge |
| 5 | Carry out a normal operation test | see 7.2.3. Normal operation test |

7.2.5.1. Visual check of the centrifuge

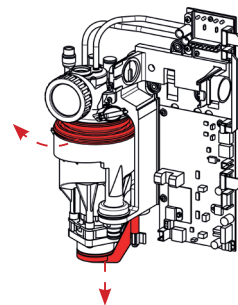
- 1** Tilt the locking bracket on module 2 upwards and take out module 2.



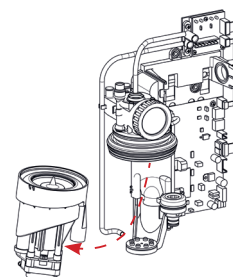
- 2** Remove locking clip on centrifuge support.



- 3 Pull down the centrifuge support and detach the centrifuge cover from the centrifuge (do not remove the centrifuge inlet seal!)



- 4 Swing out the centrifuge.



Pull off the centrifuge flange cap (1).

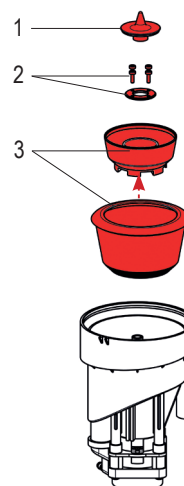
Loosen the 4 fastening screws on the centrifuge flange (2) and remove the flange.

Remove both centrifuge inner parts (3) upwards.

Separate the inner and outer centrifuge chambers.

- 5 Hold each centrifuge chamber individually against a light source and visually check for contamination; especially make sure that the transfer openings at the bottom of the chambers are free. Centrifuge chambers that exhibit heavy soiling, deposits or accumulations of solids must be replaced!

If necessary, the complete centrifuge must be replaced.



- 6 Reassemble the centrifuge in reverse order (note the alignment pin and hole of the centrifuge chambers!)

- 7 Carry out a normal operation test

see 7.2.3. Normal operation test

7.2.6. Replacement of module 2

- 1 Prepare new module 2 (without collection container).
- 2 Tilt the locking bracket on module 2 upwards, remove it and place it on a flat, non-slip surface.
- 3 Open the 4 yellow clip fasteners on module 2.
- 4 Hold the collection container and lift off the upper part.
- 5 Place a new module 2 (without collection container) on the collection container. Pay attention to the FRONT marking on the collection container!
- 6 Close the 4 yellow clip fasteners on module 2.
- 7 Clean the sealing rings on the left and right in the supporting element with a damp paper towel and grease them with multi-silicone grease (or Vaseline).
- 7 Carefully push module 2 back into the holder and close the locking bracket.

7.2.7. Replacement of module 3

See 7.2.5.1. Visual check of the centrifuge.

7.2.8. Replacement of the magnetic valve

- 1 Tilt the locking bracket on module 2 upwards, remove it and place it on a flat, non-slip surface.

- 2 Loosen the screws (3 pieces) on the cover
- 3 Remove the cover
- 4 Loosen the hand nut on the magnetic valve
- 5 Pull out the magnetic valve
- 6 Remove the connection cable from the connector strip
- 7 Insert new magnetic valve and connect connection cable to connector strip
- 8 Fasten magnetic valve with hand nut
- 9 Put on cover and fasten with screws (3 pieces)
- 10 Carefully push module 2 back into the holder and close the locking bracket
- 11 Carry out a normal operation test - see 7.2.3. Normal operation test

7.2.9. Replacement of inlet main body

- 1 Loosen the screws (3 pieces) on the filter housing (module 1)
- 2 Pull out the inlet main body
- 3 Remove the transparent hose and dispose of the inlet body properly
- 4 Connect transparent hose to new inlet body
- 5 Install the inlet body for the pre-filter
- 6 Fix the inlet base body to the filter housing (module 1) with screws (3 pcs.)

8. Decommissioning

8.1. Disassembly



Warning:

Remove from power source before disassembly!



Warning:

Risk of contamination: To avoid infection, wear personal protective equipment (hand, eye, nose and mouth protection) and disinfect and clean the device!

If it is necessary to return the device to the depot or to METASYS, the original METASYS packaging must be used. Before packing the METASYS device to be transported, clean and disinfect it. Possible openings where residual fluids could escape must be closed.

8.2. Recycling and disposal



The device may be contaminated! Advise the disposal company of this so that appropriate precautions can be taken. Parts that are contaminated with amalgam, such as sieves, filters, hoses, etc., must also be disposed of in accordance with the national regulations.

Untampered plastic parts of the device can be recycled as normal plastics. The integrated electronic components (including circuit board) are to be disposed of as electronic waste. Metal parts are to be disposed of as scrap metal.

Alternatively, the device can be returned to the manufacturer for proper disposal. Before packing the METASYS device to be transported, clean and disinfect it. Possible openings where residual fluids could escape must be closed. The original METASYS packaging must be used for shipping.

The proof of installation and the device logbook must be kept for 5 years after the device has been disposed of.

9. Annex

9.1. REF numbers and scope of delivery

| REF | Designation | Scope of delivery |
|----------|-----------------------------------|--|
| 01010001 | MULTI SYSTEM TYP 1 | Amalgam separator with standard accessories and instructions for use |
| 01010003 | MULTI SYSTEM TYP 1 - KaVo | Amalgam separator with KaVo accessories and instructions for use |
| 01010005 | MULTI SYSTEM TYP 1 - Ultradent | Amalgam separator with Ultradent accessories and instructions for use |
| 01010007 | MULTI SYSTEM TYP 1 - Finndent | Amalgam separator with Finndent accessories and instructions for use |
| 01010011 | MULTI SYSTEM TYP 1 - Planmeca | Amalgam separator with PlanMeca accessories and instructions for use |
| 01010012 | MULTI SYSTEM TYP 1 - Castellini | Amalgam separator with Castellini accessories and instructions for use |
| 01010020 | MULTI SYSTEM TYP 1 with cover | Amalgam separator with cover, standard accessories and instructions for use |
| 01010036 | MULTI SYSTEM TYP 1 - OMS | Amalgam separator with OMS accessories and instructions for use |
| 01010042 | MULTI SYSTEM TYP 1 - EurMED | Amalgam separator with EurMED accessories and instructions for use |
| 01010050 | MULTI SYSTEM TYP 1 | Amalgam separator without accessories, with instructions for use |
| 01010501 | MULTI SYSTEM TYP 1, FR | Amalgam separator with standard accessories and instructions for use (only available in France) |
| 01010520 | MULTI SYSTEM TYP 1 with cover, FR | Amalgam separator with cover, standard accessories and instructions for use (only available in France) |

9.1.1. Accessories, service kits, collection containers and spare parts

MST 1 = Abbreviation for MULTI SYSTEM TYP 1

9.1.2. Accessories

| Order number | Designation | Order number | Designation |
|--------------|--|--------------|---------------------------------------|
| 40400002 | Inspection kit MST 1, with control slide and test plug | 50020057 | Adjustment switch |
| 40400008 | META Connect, fitting box | 50020065 | Non-return valve, for centrifuge pump |
| 40500001 | Transformer, for MST 1 | | |

Service kits

| Order number | Designation | Scope of delivery |
|--------------|----------------------------------|--|
| 50020109 | Annual inspection kit, MST 1 | housing with integrated non-return valve, membrane for place selection valve, pump filter, exchange container |
| 50020109-DE | Annual inspection kit, MST 1, DE | housing with integrated non-return valve, membrane for place selection valve, pump filter, exchange container (only for Germany) |
| 50020110 | 5 year inspection kit, MST 1 | housing with integrated non-return valve, filter drawer, pump filter, centrifuge cap, water displacement ring, air deflector, membrane, centrifuge chamber, centrifuge pump lid, exchange container |
| 50020110-DE | 5 year inspection kit, MST 1, DE | housing with integrated non-return valve, filter drawer, pump filter, centrifuge cap, water displacement ring, air deflector, membrane, centrifuge chamber, centrifuge pump lid, exchange container (only for Germany) |
| 50020111 | Servicekit, MST 1 | 50020109 annual inspection kit MST 1, 60010201 GREEN&CLEAN M2 intro kit, 2 x 500 ml & dispenser, 60020005 GREEN&CLEAN MB Start, 180 ml |
| 50020111-DE | Servicekit, MST 1, DE | 50020109 annual inspection kit MST 1, 60010201 GREEN&CLEAN M2 intro kit, 2 x 500 ml & dispenser, 60020005 GREEN&CLEAN MB Start, 180 ml (only for Germany) |

Collection container / exchange container

| Order number | Designation | Order number | Designation |
|--------------|---|--------------|-------------------------------------|
| 55020001 | Exchange container MST 1, international | 55020001-FR | Exchange container MST 1 FR, France |

| Order number | Designation |
|--------------|--|
| 55020001-AT | Exchange container MST 1, AT, Austria, with postage |
| 55020001-AU | Exchange container MST 1 AU, Australia |
| 55020001-CH | Exchange container MST 1 CH, Switzerland, with postage |
| 55020001-CZ | Exchange container MST 1 CZ, Czech Republic |
| 55020001-DE | Exchange container MST 1 DE, Germany |
| 55020001-FI | Exchange container MST 1 FI, Finland |

Disinfectant

| Order number | Designation |
|--------------|---|
| 60010201 | GREEN&CLEAN M2 - intro kit, 2 x bottle 500 ml + dispenser |
| 60010202 | GREEN&CLEAN M2 - refill kit 1, 4 x bottle 500 ml |
| 60010203 | GREEN&CLEAN M2 - refill kit 2, 2 x bottle 500 ml |

Spare parts module 1

| Order number | Designation |
|--------------|--|
| 40050030 | Plug, for filter case, small, large, 5 pcs. each |
| 50020001 | Module 1, main frame, MST 1 |
| 50020006 | Main circuit board, MST 1 |
| 50020007 | Diagnostic circuit, MST 1 |
| 50020014 | Clean water outlet, MST 1 |
| 50020018 | Connecting cable kit |
| 50020019 | Centrifuge rubber seal with spring washer, MST 1 |
| 50020024 | Centrifuge sensor, MST 1 |
| 50020028 | Screw cap, filter casing, MST 1 |
| 50020029 | Filter case, complete |
| 50020031 | Filter case, MST1 |
| 50020032 | Water transmitter, MST 1 |
| 50020034 | Inlet frame, MST 1, MST 1 ECO / ECO Light |

Spare parts module 2

| Order number | Designation |
|--------------|--|
| 50020002 | Module 2, separator, MST 1, without collection container |
| 50020005 | Container pump for module 2, MST 1 |
| 50020015 | Membrane, MST 1, 5 pcs. |
| 50020016 | Locking bracket for Module 2, MST 1 |
| 50020022 | Air deflector, MST 1 |
| 50020023 | Sensor unit extended, MST 1 |
| 50020025 | Angle-piece with tubing, module 2, MST 1 |
| 50020027 | Water displacement ring, MST 1 |
| 50020041 | Intake housing, container pump, modul 2, MST 1 |

| Order number | Designation |
|--------------|---------------------------------------|
| 55020001-HU | Exchange container MST 1 HU, Hungary |
| 55020001-IT | Exchange container MST 1 IT, Italy |
| 55020001-NO | Exchange container MST 1 NO, Norway |
| 55020001-PL | Exchange container MST 1 PL, Poland |
| 55020001-SK | Exchange container MST 1 SK, Slovakia |
| 55020001-SL | Exchange container MST 1 SL, Slovenia |

| Order number | Designation |
|--------------|--|
| 60010204 | GREEN&CLEAN M2 red, 25 x bottle 500 ml |
| 60010205 | GREEN&CLEAN M2 green, 25 x bottle 500 ml |
| 40200001-BL | GREEN&CLEAN M2 dispenser |

| Order number | Designation |
|--------------|---|
| 50020046 | Centrifuge holder, vibration reducer, clip |
| 50020048 | Cover, for main board, MST 1, 10 pcs. |
| 50020051 | Air tube, for filter housing, with non-return valve |
| 50020061 | Water outlet seal |
| 50020062 | Lock part, for centrifuge holder, MST 1, 5 pcs. |
| 50110003 | O-ring, 25 x 2 mm, 10 pcs. |
| 50110004 | O-ring, 27,3 x 2,5 mm, 10 pcs. |
| 50110012 | O-ring, 16 x 1,5 mm, 10 pcs. |
| 50110013 | Seal, screw cap, 5 pcs. |
| 50120002 | Fuse T 3,15 A / 250 V, MST 1, 5 pcs. |
| 50120003 | Fuse T 1,6 A / 250 V, MST 1, external pump, 5 pcs. |
| 55010002 | Filter drawers, spittoon valve, 10 pcs. |

| Order number | Designation |
|--------------|-------------------------------------|
| 50020103 | Empty housing for module 2, MST 1 |
| 50020106 | Cover module 2, MST 1 |
| 50020107 | Membrane cover module 2, MST 1 |
| 50110001 | O-ring, 6 x 1 mm, 10 pcs. |
| 50110005 | O-ring, 100 x 1,5 mm, 10 pcs. |
| 50120004 | Magnetic valve, for MST 1 |
| 50990011 | Container pump motor sleeve, MST 1 |
| 50990012 | Container pump shaft housing, MST 1 |
| 50990017 | Container pump motor |

| Order number | Designation |
|--------------|---|
| 50020047 | Locking bracket, small, for MST 1 collection container, 12 pcs. |

Spare parts module 3

| Order number | Designation |
|--------------|---|
| 50020003 | Module 3, centrifuge, MST 1 |
| 50020017 | Centrifuge chambers, MST 1 |
| 50020026 | Centrifuge pump cover, MST 1, 5 pcs. |
| 50020033 | Seal kit centrifuge inlet, MST 1 |
| 50020035 | Centrifuge cap, 5 pcs. |
| 50020043 | Centrifuge cover with O-Ring, MST 1 |
| 50110010 | O-ring, 82 x 2,2 mm, 10 pcs. |
| 50110011 | O-ring, 40 x 2 mm, 10 pcs. |
| 50990001 | Spring washers, larger 1, MST 1, 5 pcs. |

General spare parts

| Order number | Designation |
|--------------|--|
| 50020004 | External display for MST 1 and COMPACT Dynamic |
| 50020020 | Siphon with tube connectors, 15 mm |
| 50020040 | Plug, for angle piece, MST 1, 10 pcs. |
| 50020042 | Silicone display for cover, 5 pcs. |
| 50020044 | Connection cable to external display, L = 500 mm |
| 50020045 | Socket board for power supply (BL2 orange), 5 pcs. |
| 50020050 | Cover for floor models |

Hose nozzles and adapters

| Order number | Designation |
|--------------|---------------------------------|
| 40010001 | Tube nozzle 15-16 mm, 5 pcs. |
| 40010002 | Tube nozzle, 18-19 mm, 5 pcs. |
| 40010003 | Tube nozzle, 19-20 mm, 5 pcs. |
| 40010004 | Tube nozzle, 21-22 mm, 5 pcs. |
| 40010005 | Tube nozzle, 24-25 mm, 5 pcs. |
| 40010006 | Tube nozzle, 31-32 mm, 5 pcs. |
| 40010007 | Tube nozzle, 13 mm, 5 pcs. |
| 40010008 | Tube nozzle, 15 mm, 5 pcs. |
| 40010009 | Tube nozzle, 15 mm, 90°, 5 pcs. |
| 40010012 | Angle-piece water outlet, 15 mm |
| 40010015 | Double nozzle, 22-25 mm |
| 40010017 | Extension air duct, 72.5 mm |
| 40010018 | Extension air duct, 64.5 mm |
| 40010019 | Extension air duct, 56.5 mm |
| 40010022 | Extension air duct, 49.5 mm |
| 40010023 | Adapter, 26 mm |
| 40010024 | Adapter, 21- 22 mm, 5 pcs. |
| 40010026 | Adapter, 31-32 mm, 5 pcs. |

| Order number | Designation |
|--------------|--|
| 55010005 | Sieve, pump/housing, MST 1, MST 1 ECO / Light, 10 pcs. |

| Order number | Designation |
|--------------|---|
| 50990002 | Spring washers, larger 2, MST 1, 5 pcs. |
| 50990003 | Centrifuge housing with insert, 5 pcs. |
| 50990004 | Centrifuge pump housing, 5 pcs. |
| 50990005 | Centrifuge pump adapter, 5 pcs. |
| 50990006 | Centrifuge motor with flange and cable |
| 50990007 | Centrifuge flange, pre-assembled, 10 pcs. |
| 50990008 | Washers for seal, 10 pcs. |
| 50990009 | Sliding ring and C-ring, 10 pcs. |
| 50990010 | Centrifuge pump blades, 10 pcs. |

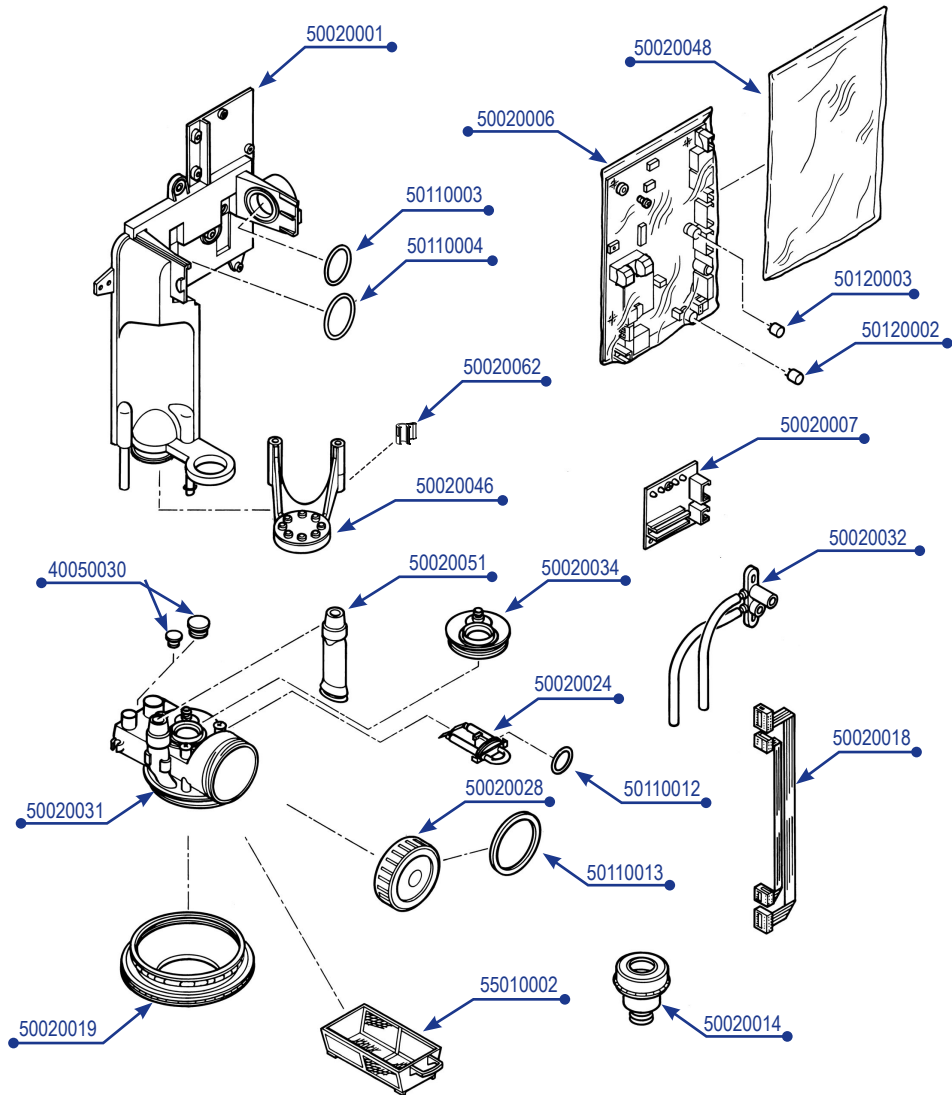
| Order number | Designation |
|--------------|---|
| 50020102 | Socket board BL7, orange, 5 pcs. |
| 50990013 | Plunger with O-ring, 5 pcs. |
| 50990014 | Container pump adapter, 5 pcs. |
| 50990015 | Container pump blades and press-on sleeve, 5 pcs. |
| 50990016 | V-Seal, 10 pcs. |
| 50990018 | Seal for plunger, 5 pcs. |

| Order number | Designation |
|--------------|--|
| 40010090 | Adapter inlet frame, 19-20 mm, 5 pcs. |
| 40010091 | Plug inlet frame |
| 40010092 | Y-adapter, 26 x 26 x 26 mm |
| 40010093 | Adapter, 31-32 mm, 1 pc. |
| 40010096 | Adapter, 16-17 mm, 5 pcs. |
| 40010097 | Adapter, inlet frame, 20-21 mm, 5 pcs. |
| 40010098 | Adapter, inlet frame, 24-25 mm, 5 pcs. |
| 40010099 | Adapter, 90°, 15 mm, 5 pcs. |
| 40010100 | Adapter, 15/18 mm, O-ring, 2 pcs. |
| 40010102 | Adapter, for METASYS, female |
| 40010103 | Lock clip, adapter |
| 40010104 | T-adapter |
| 40010105 | Adapter, 25-28 mm, double sealing face, 5 pcs. |
| 40010106 | Transport plug, ø26 mm, O-ring, 2 pcs. |
| 40010108 | Adapter, 10-11 mm, double sealing face, 5 pcs. |
| 40010109 | T-Fitting adapter, for 2 suction hoses |
| 40010110 | T-adapter, mini-nozzle, male |
| 40010111 | T-adapter, male |

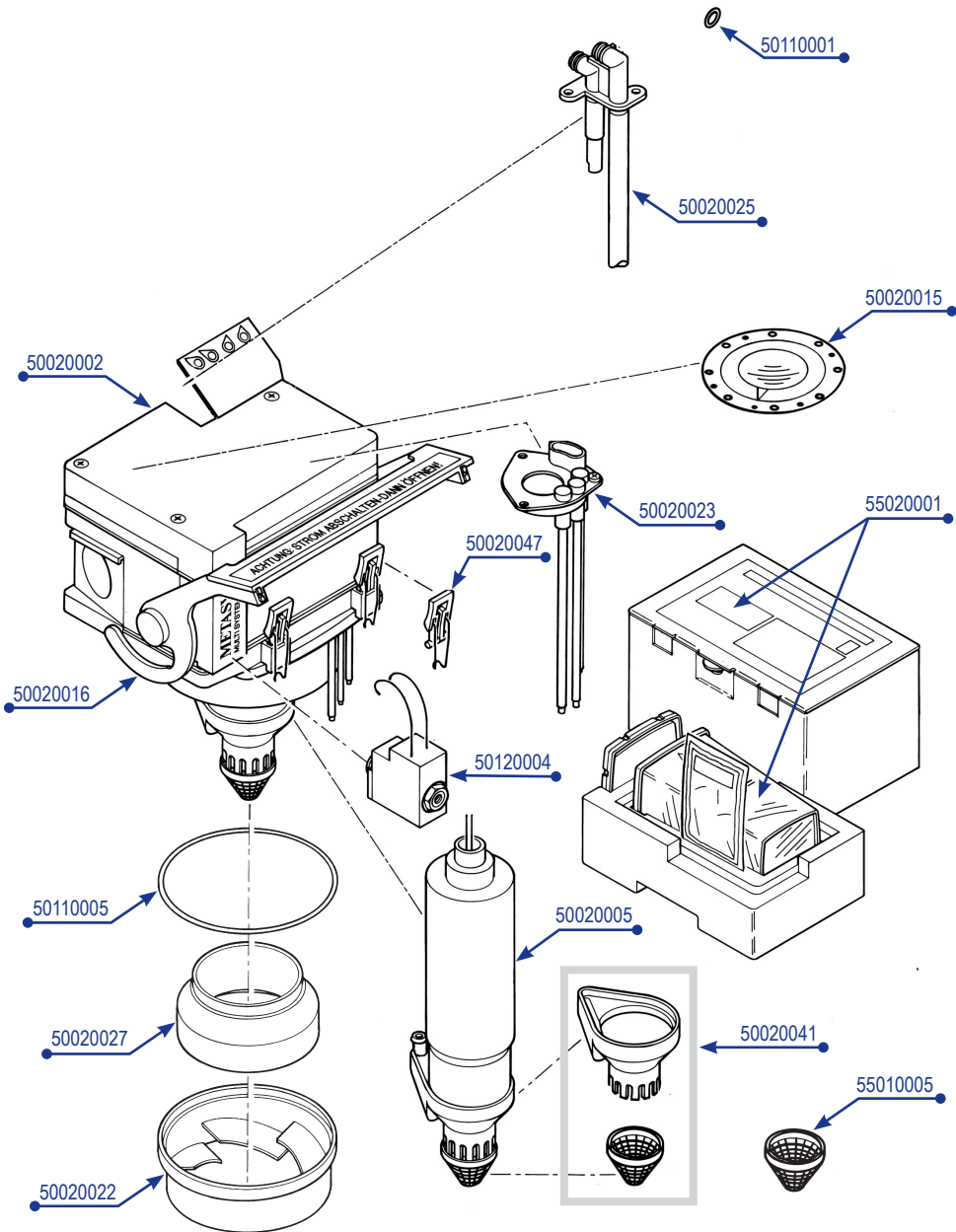
| Order number | Designation |
|--------------|--|
| 40010029 | Angle piece, 26 mm |
| 40010031 | Reducer, 21-15 mm, Siemens, 5 pcs. |
| 40010033 | Spacer, 26 mm |
| 40010034 | Adapter for inlet frame |
| 40010036 | Adapter tube adaptors, 5 pcs. |
| 40010038 | Extension air duct, 31.5 mm |
| 40010043 | T-adapter mit mini-nozzle |
| 40010048 | Adapter, 15-16 mm, 5 pcs. |
| 40010049 | Adapter, 17-19 mm, 5 pcs. |
| 40010050 | Adapter, 19-20 mm, 5 pcs. |
| 40010051 | Adapter, 24-25 mm, 5 pcs. |
| 40010056 | Adapter, inlet frame, 18-19 mm, 5 pcs. |
| 40010069 | Angle-piece, 26 mm with mini-nozzles |
| 40010079 | Adapter, 25 mm, mini-nozzles |
| 40010084 | Adapter, für METASYS, male |
| 40010085 | Adapter, 45°, with air duct |
| 40010086 | Adapter, 15/26 mm |
| 40010087 | Adapter, 15/Dürr Connect |
| 40010088 | Adapter inlet frame, 15-16 mm, 5 pcs. |
| 40010089 | Adapter inlet frame, 16-17 mm, 5 pcs. |

| Order number | Designation |
|--------------|--|
| 40010112 | Adapter, 45°, air duct, O-ring |
| 40010113 | Adapter, 45°, O-ring |
| 40010114 | Extension, 72.5 mm |
| 40010115 | Extension, 64.5 mm |
| 40010116 | Extension, 56.5 mm |
| 40010117 | Extension, 49.5 mm |
| 40010118 | Extension, 27.0 mm |
| 40010119 | Adapter, 26 mm, connection 1/8" |
| 40010120 | Adapter, META Connect, 26 mm, mini-nozzle |
| 40010121 | Adapter, META Connect, inlet frame, 5 pcs. |
| 40010122 | Safety clips, Dürr Connect small, 20 mm, 5 pcs. |
| 40010123 | Y-adapter, 26 x 26 x 26 mm, male |
| 40010124 | Adapter, META Connect, Dürr Connect large, 36 mm |
| 40010125 | Adapter, META Connect, 32 mm |
| 40010126 | Adapter, META Connect, 36 mm |
| 40010127 | Adapter, META Connect, 50/40 mm |
| 40010128 | Adapter, inlet frame, 10-11 mm, 5 pcs. |
| 40010129 | Adapter, 15/26 mm, o-ring, male |
| 40010130 | Adapter, 15/10 mm, o-ring |
| 40010131 | T-adapter, mini-nozzles |

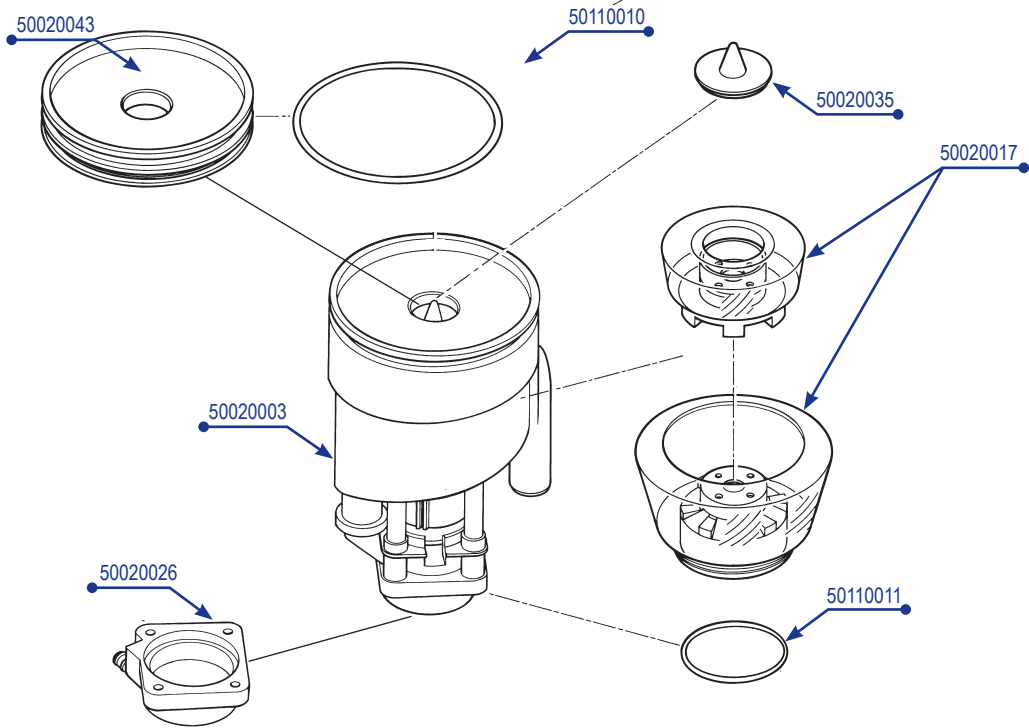
Module 1



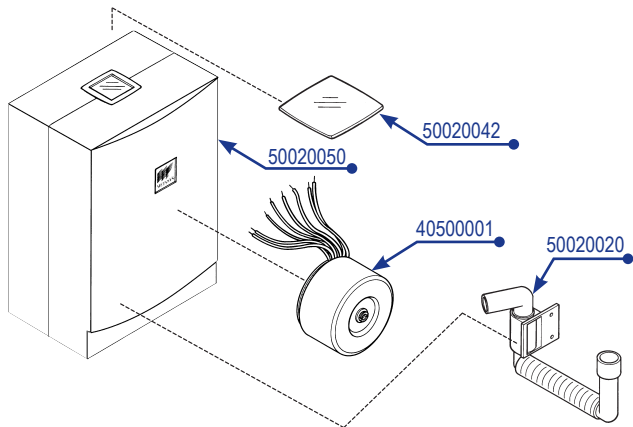
Module 2



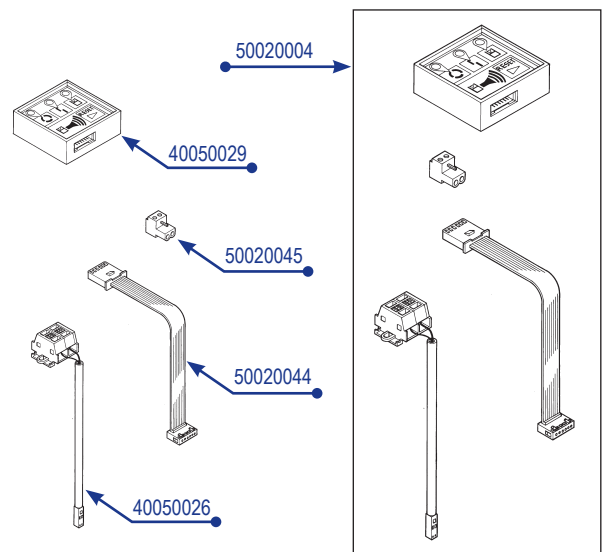
Module 3



Cover

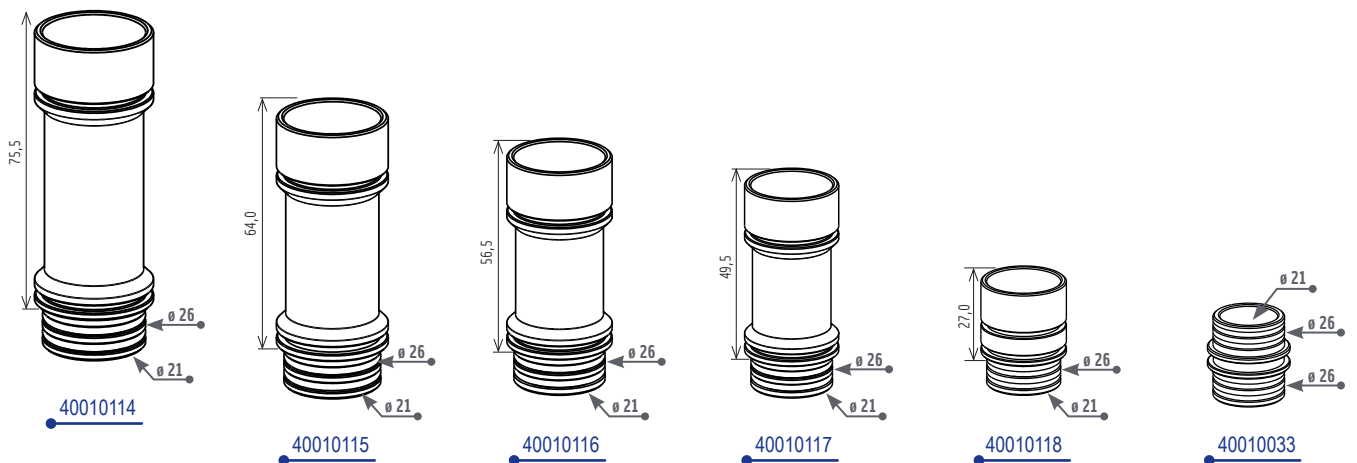


External display

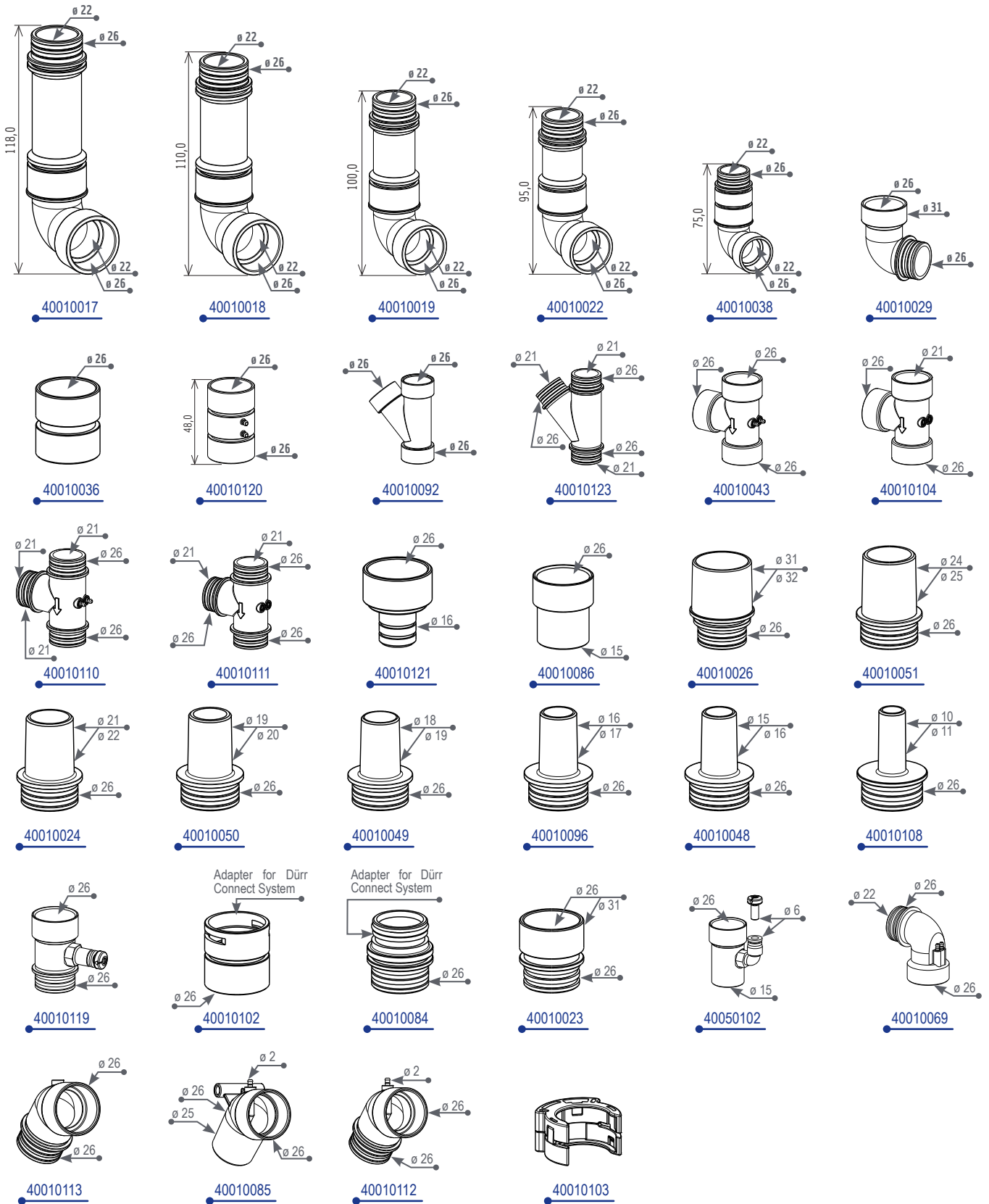


Hose nozzles and adapters

META Connect

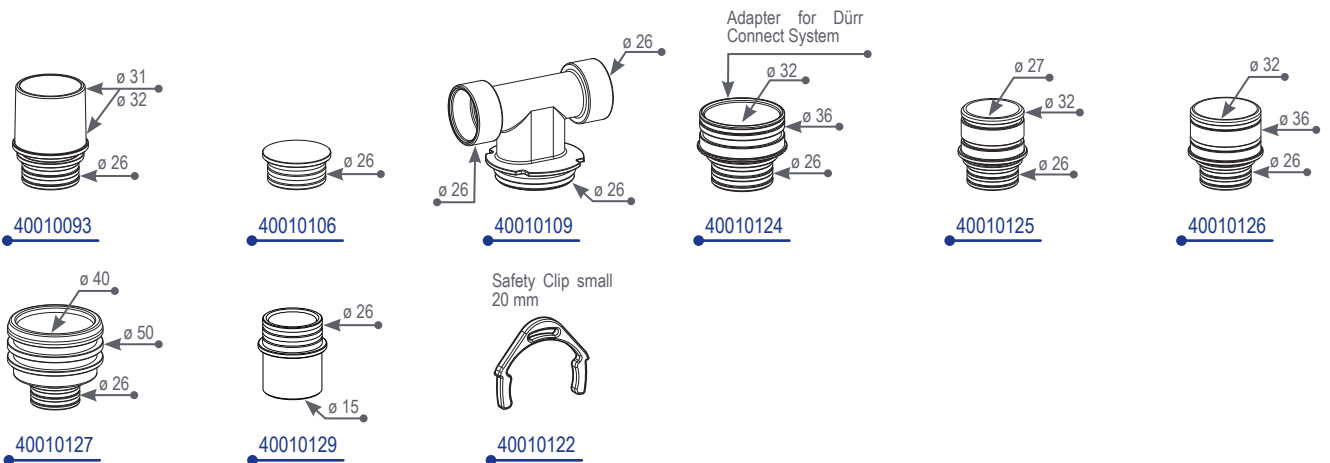


Hose nozzles and adapters
META Connect



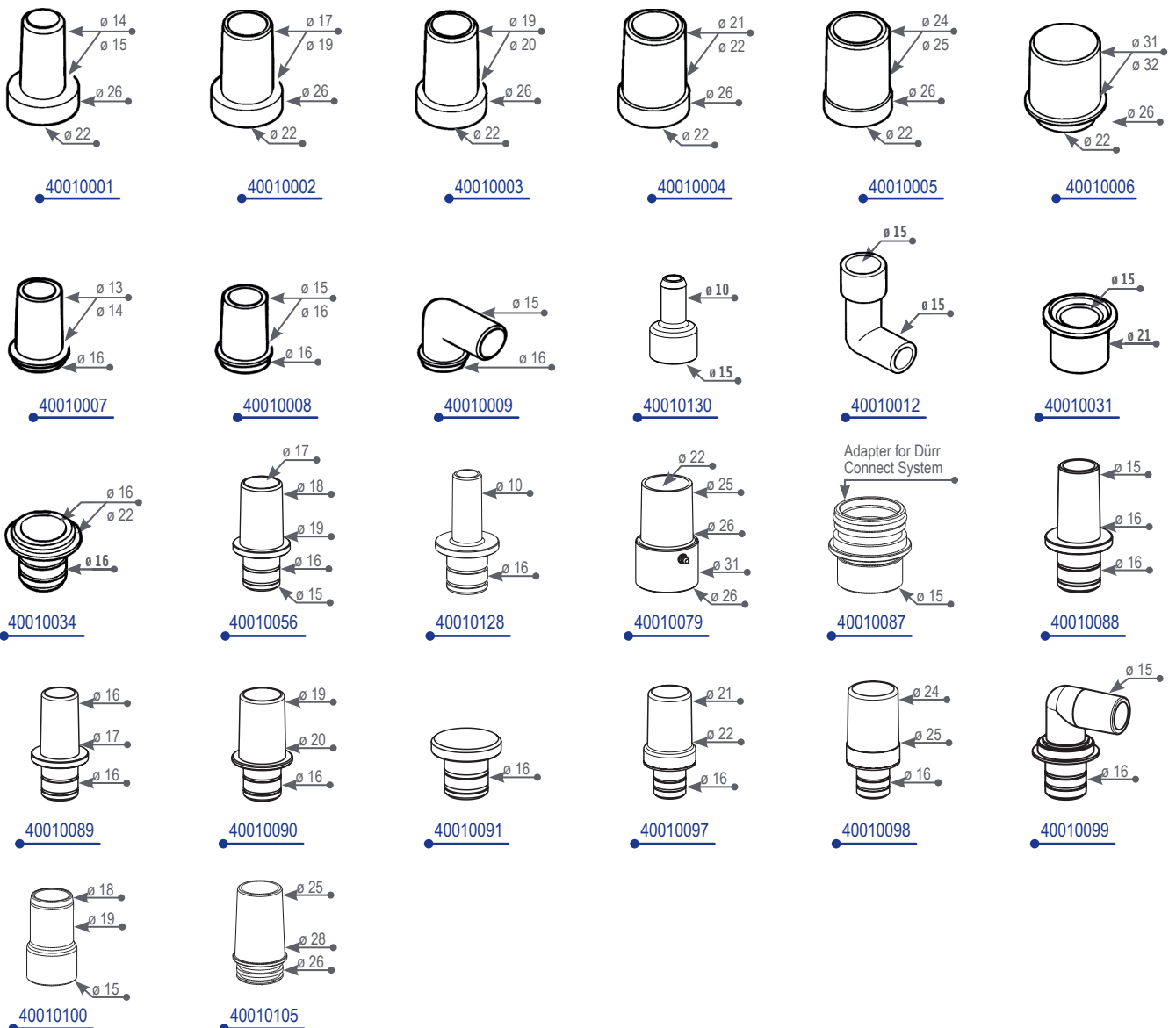
Hose nozzles and adapters

Can be combined with META Connect



Hose nozzles and adapters

Cannot be combined with META Connect



9.2. Warranty conditions

METASYS grants a guarantee of 12-36 months for specific products (duration of guarantee depends on the product according to the information in the current

price list).

The guarantee covers all material faults that more than negligibly affect the function of the device. The guarantee does not cover damages caused by incorrect or improper handling as well as normal wear. Furthermore, the guarantee does not apply to the replacement of the amalgam collection container or to fragile parts such as glass, plastic, hoses, filters, condensate filters or membranes. Any incurred working and travel times are excluded from the warranty.

In order to determine the validity of the guarantee, the installation proof accompanying the device must be returned to METASYS immediately after proper assembly has taken place. In this case the warranty period begins with commissioning. In the event of installation without returning the installation proof to METASYS, any warranty claim is forfeited. Installation and return of installation proof must be completed within 24 months from the date of sale from METASYS.

Furthermore, any warranty claims of the customer expire if only one of the following circumstances arises, regardless of whether the circumstances arise for the customer of METASYS or a later owner or operator:

- > Improper installation, operation, maintenance or transport of the device. If METASYS parts have to be returned, the original METASYS packaging must be used for shipping. Prior to packaging and shipping, the METASYS device must be cleaned and disinfected. Any openings where residual fluids could leak must be closed.
- > Installation and return of installation proof have not been completed in the aforementioned 24 months.
- > Failure to send the Installation Proof to METASYS.
- > Installation and use of non-original METASYS parts.
- > Installation of the device by personnel who are neither trained nor authorized by METASYS.
- > Occurrence of damages through improper handling and operation or use of unapproved cleaning and/or disinfecting material, as well as non-compliance with the instructions for use.
- > Execution of repairs by unauthorised repair shops or unauthorised personnel.
- > Failure to comply with the prescribed maintenance intervals. Maintenance must be carried out 11-12 / 23-24 / 35-36 months after installation of the respective METASYS item.
- > Missing entries in the Equipment Logbook regarding the installation as well as prescribed servicing by technicians trained by METASYS.
- > Failure to take reasonable immediate measures to avoid further damages in the event of a malfunction.
- > Shipping of devices or components to METASYS without proper accompanying paperwork, in particular without error description or invoice for the purchase of the device.
- > Failure to provide visual images (photos, video clips ...) of the METASYS item complained about, as well as of its installation situation and ambient conditions.

METASYS reserves the right to demand the documentation supplied with the device to check the maintenance intervals for the assertion of warranty claims. The processing of warranty claims takes place exclusively according to the following method:

In the event of malfunctions, the device must be opened by an authorized technician, the relevant component taken out and sent to METASYS unopened and cleaned. The customer sends the device or component in question to METASYS at his own expense. METASYS checks whether there is a warranty claim. METASYS will repair the device or component if it is cost-effective. The customer is charged for the costs incurred for the repair, but not the replacement parts covered by the guarantee. The consignment of the device or component to METASYS always represents a repair order for METASYS. For cost estimates for the repair of returned devices, a processing fee* is charged if the warranty period has expired or no warranty case exists. For products inspections only without any cost estimates a processing fee* can be charged. When sending the device or component to METASYS, an error description with all importation information about the device must always be included. The customer of METASYS may only provide payment in advance after consultation with METASYS. Only the affected component is to be sent in (smallest possible unit). If contaminated, intact parts are sent to METASYS without technical necessity, METASYS is entitled to destroy them without separate payment. The new part corresponding to the part to be destroyed is only delivered after a separate order and invoice. In any case, METASYS has the right to handle the guarantee through credit note or the return of new parts without conducting repairs. Guarantee services do not result in an extension of the warranty period nor do they initiate a new warranty period. The warranty period for installed replacement parts ends with that for the originally delivered device. The METASYS customer is obligated to make his customer aware of the conditions regarding the warranty processing. The statutory warranty rights of the customer remain unaffected.

* The current warranty conditions and fees can be found in the current METASYS price list.

9.3. Change history

| Revision | Date | Description |
|--------------|------------|----------------|
| ZK-58.203/00 | 19.05.2021 | Newly created. |



protect what you need



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Subject to printing and setting errors!