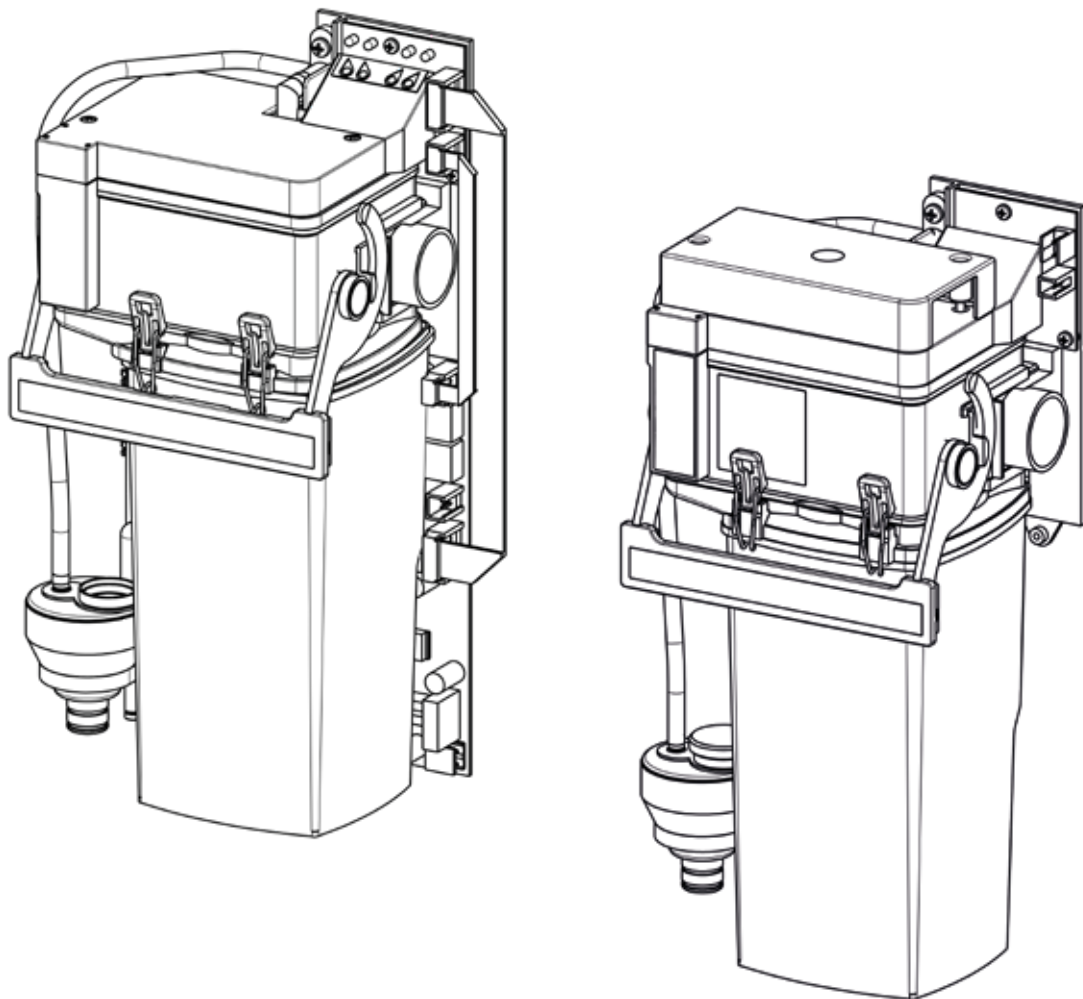


MULTI SYSTEM TYP 1 ECO MULTI SYSTEM TYP 1 ECO Light

Instructions for use

EN | ZK-58.205/01 | 2022-10



eIFU:

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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.

For the simplified illustration, either the figure of the MST 1 ECO or the MST 1 ECO Light is used.

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 shall be happy to make available 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 mouth and nose protection
 Medical device	 Loudspeaker	 Unplug from mains
 Item number	 Sound	 General warning sign
 Serial number	 Inclination / slope	 Warning of electrical voltage
 Manufacturer	 Maximum installation altitude	 Information
 Date of manufacture	 Blower / fan	 Download
 Follow instructions for use	 On Off	 Do not cut
 Follow instructions for use with reference to eIFU eIFU: www.metasys.com/downloads	 Separate collection of electrical/electronic equipment (WEEE)	 Maintenance / service
 Temperature limit	 Protective earthing	 Stop operation
 Caution / attention	 Protection class II	 Protect from heat / Protect from sunlight
 Beware of electric shock	 Applied part type BF	 Protect from moisture / Store in a dry place
 Humidity limit	 Responsible for the translation	 Fragile
 Tank filled	 Observe instructions for use	 Package orientation at the top
	 Use hand protection	 Stacking limit n = (quantity)



Fault on end device



Use eye protection

CH REP

Name and address of the
authorized representative's
registered office in Switzerland

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 ECO / ECO Light is used to separate water and air in the suction flow of dental treatment units. Furthermore, the integrated place selection valve enables the interruption of the suction current.

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 shall 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 correspond to 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

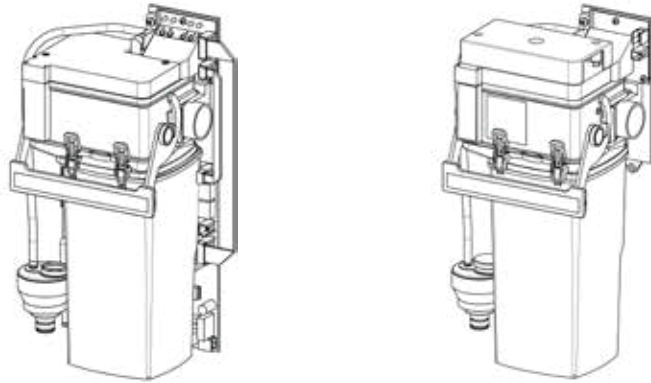
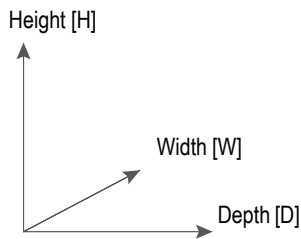
Danger	Warning of a danger that will directly result in serious injury or death
Warning	Warning of a danger that can result in serious injury or death
Caution	Warning of a danger that can result in minor injury
Attention	Warning of a danger that can result in extensive damage to property

4. Product description

4.1. Product description

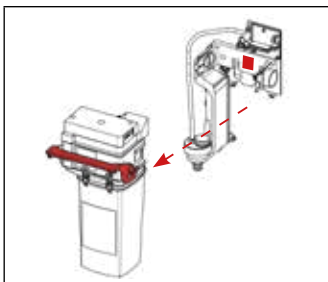
MULTI SYSTEM TYP 1 ECO / ECO Light is a single-place, air/water separator with integrated heavy parts collector and place selection valve. For simplified readability of the texts, the abbreviations MST 1 ECO and MST 1 ECO Light are used below.

4.2. Technical data / performance data

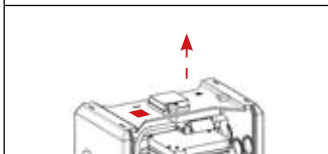


	MULTI SYSTEM TYP 1 ECO	MULTI SYSTEM TYP 1 ECO Light
Power supply	24 V AC	24 V AC
Frequency	50 / 60 Hz	50 / 60 Hz
Max. current consumption	1.5 A	1.5 A
Max. power consumption	15 VA	30 VA
Max. ambient temperature	35 °C	35 °C
Max. liquid flow rate	0.5 l/min via suction side	1.5 l/min via suction side
Negative pressure range	50 mbar - 250 mbar	50 mbar - 250 mbar
Collection container volume	300 cm ³	300 cm ³
Dimensions (H x W x D)	305 x 163 x 104 mm	305 x 163 x 104 mm
Dimensions with cover (H x W x D)	340 x 280 x 185 mm	340 x 280 x 185 mm
Class	MP Class 1	MP Class 1
Possible suction systems	Wet or dry-loaded vacuum generators	Wet or dry-loaded vacuum generators

4.3. Type plate

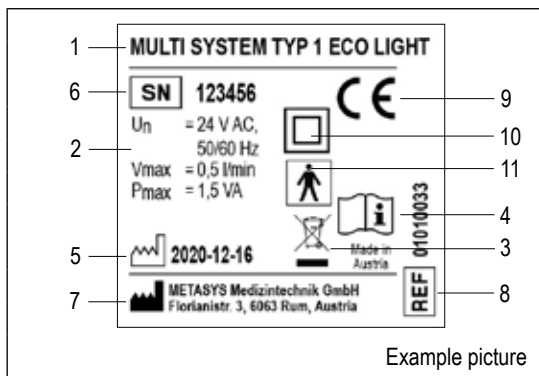


MULTI SYSTEM TYP 1 ECO / ECO Light Built-in version:



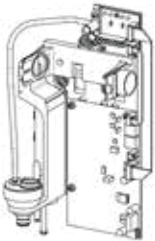


MULTI SYSTEM TYP 1 ECO / ECO Light with cover:

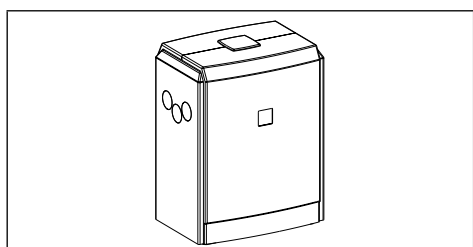
The type plate is located once on the housing (next to the external display - for this purpose, only the cover of the accessory housing must be pushed upwards) and another time on module 1 and is visible when module 2 is removed (see installation version).



- 1 Device description
- 2 Connection data
- 3 Separate collection of electrical/electronic equipment (WEEE)
- 4 Follow instructions for use
- 5 Date of manufacture
- 6 Serial number
- 7 Manufacturer
- 8 Item number
- 9 CE mark
- 10 Protection class II
- 11 Applied part type BF

4.4. Layout

Module 1	Module 2
<p>Central fastening element:</p> <ul style="list-style-type: none"> > Air, water and electricity connections > Wall mount > Main board > Diagnostics board (only MST 1 ECO) <div style="display: flex; justify-content: space-around;">   </div> <p style="display: flex; justify-content: space-around;"> MULTI SYSTEM TYP 1 ECO MULTI SYSTEM TYP 1 ECO Light </p>	<p>Air/water separation:</p> <ul style="list-style-type: none"> > Collection vessel > Separation > Station selection valve 



Cover:
Cover (optional)

4.5. Functional description

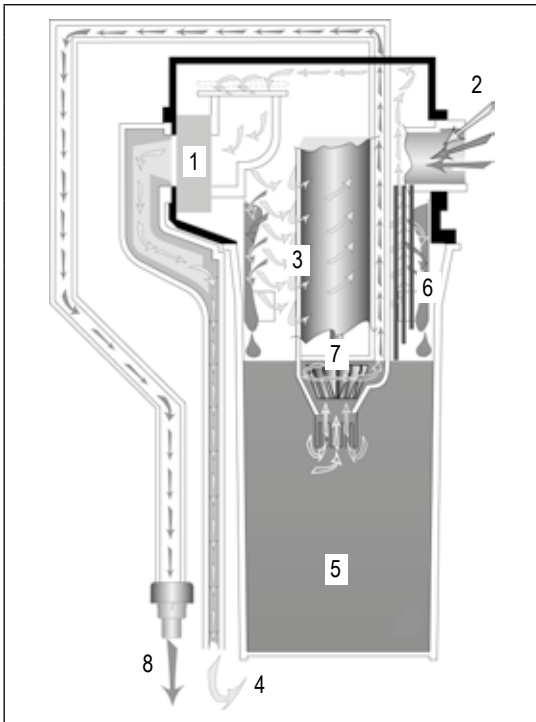
Lifting a suction hose opens the place selection valve. The suction current is fed into module 2, where the air/water separation takes place by means of the cyclone principle.

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 vessel below the separation.

While the particles sediment in the collection vessel, 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 delivers the pre-cleaned liquid to the water outlet.

Waste water coming from the mouth rinsing basin is fed directly into the drain.

When the maximum level is reached, the probe prevents the separation chamber from flooding by closing the place selection valve (emergency stop). This prevents liquid from reaching the suction machine.

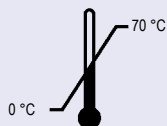


- 1 Station selection valve
- 2 Module 2 (suction current input)
- 3 Air/water separation
- 4 Air outlet (to suction motor)
- 5 Collection vessel
- 6 Conductivity probe
- 7 Pump motor
- 8 Waste water output

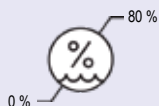
5. Preparation for use

5.1. Transport and storage

The device is shipped in two polystyrene trays 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.

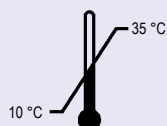


Transport and storage temperature

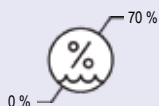


Transport and storage humidity limitation

5.2. Installation requirements



Operating temperature: 10°C to 35 °C



Humidity limit max. 70 %



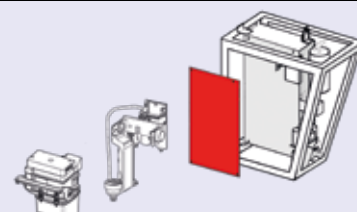
Max. 3,000 m above sea level

- > The following space requirement must be provided for the installation: H x W x T = 350 mm x 215 mm x 120 mm
- > To avoid vibrations, the attachment must only be made through the three holes on module 1 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.).

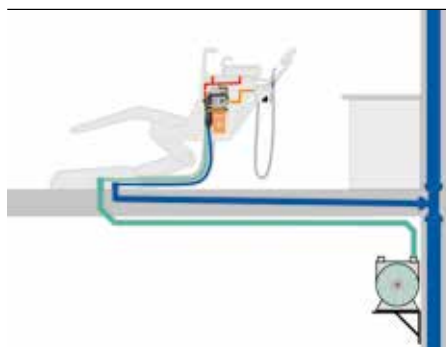


Caution:

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



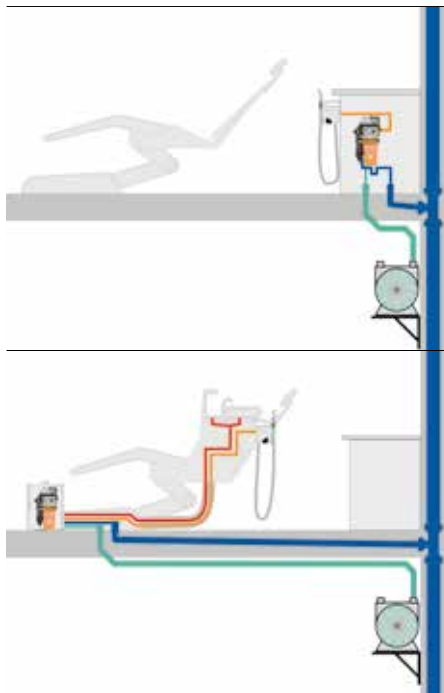
5.2.1. Assembly variants



Installation in the rinsing basin

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

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



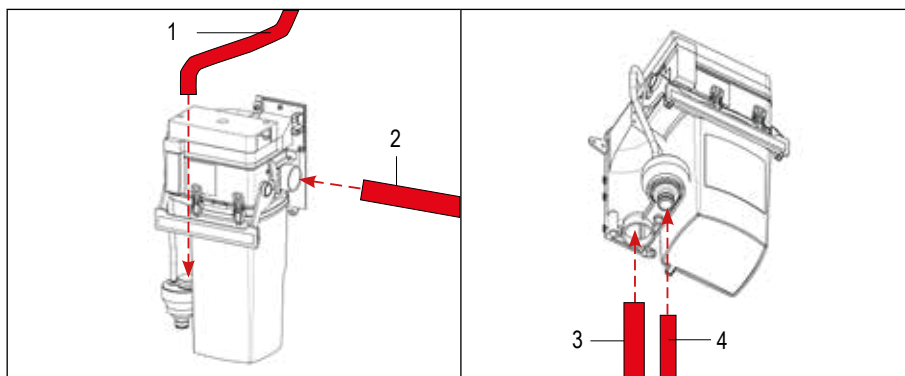
Installation in the back-of-the-head position

If there is no rinsing basin at the treatment site and the suction is mounted in the behind-the-head position, it is a good idea to install the device in a setting. In this case, the connection opening for the rinsing basin drain must be closed with a blind plug.

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



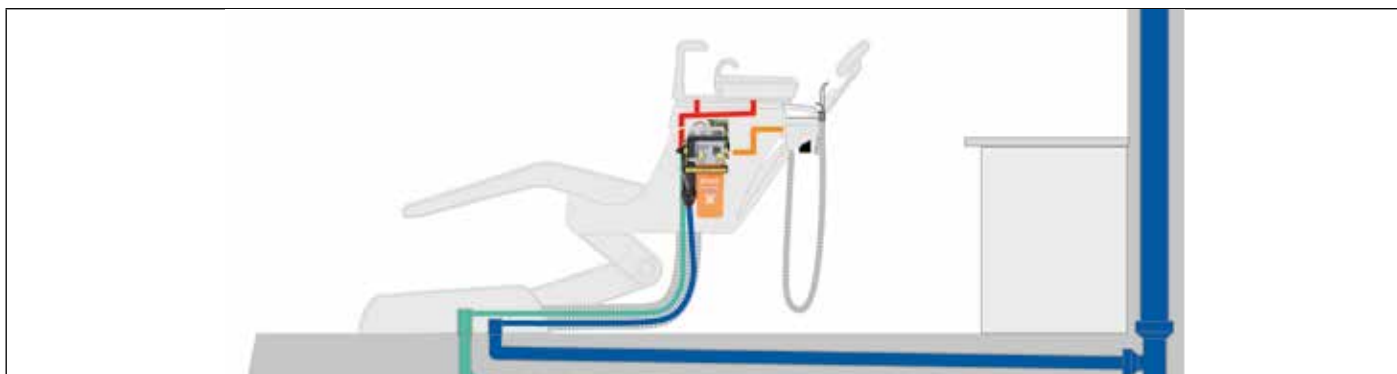
- 1 Connection for rinsing basin drain hose
- 2 Connection for suction hose (for hose storage)
- 3 Connection for vacuum hose (to suction machine)
- 4 Connection for drain hose (clean water outlet)



Attention:

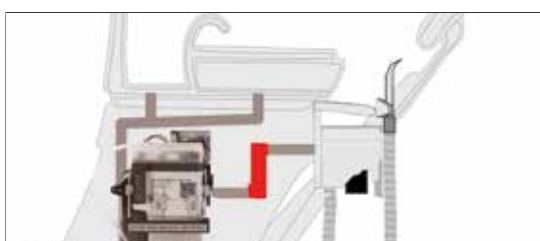
Unused connections must be sealed with blind plugs!

- > 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 company.
- > The device must be connected to the sewage pipe via an odour trap.
- > Water jet operated saliva ejectors are to be shut down due to high water consumption.
- > For matching hose nozzles and adapters see 9.1.1. Accessories, service kits, collection vessels and spare parts.



5.2.3. Pre-filter

If not available in the hose tray, 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.



Pre-filter

5.3. Installation, assembly and commissioning

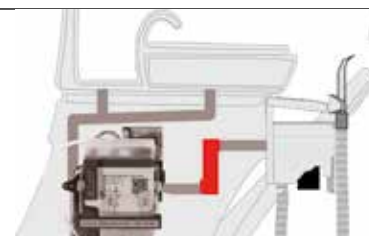
1 Read the instructions carefully before installation and commissioning!



Meet spatial requirements

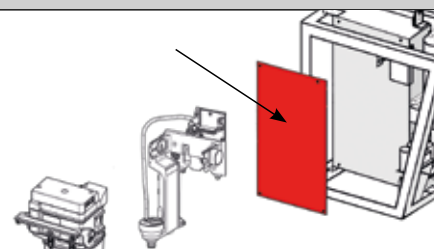
see 5.2. Installation requirements

2 Installing the pre-filter (if not present in the hose rack)

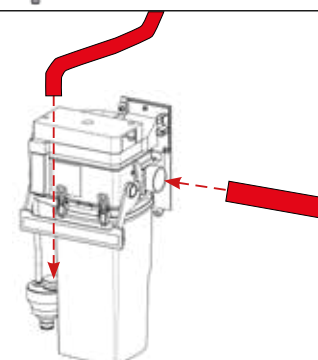


MULTI SYSTEM TYP 1 ECO / ECO Light Built-in version

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



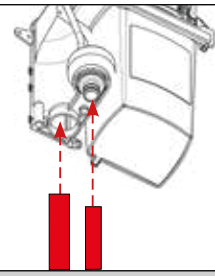
5 Connecting the rinsing basin drain hose



6 Connecting the suction line from the hose tray (suction hose)

7 Connecting the drain hose

8 Connecting the suction line to the suction machine (vacuum hose)



MULTI SYSTEM TYP 1 ECO / ECO Light with cover

Placement of the MST 1 ECO / ECO Light with cover:

Rinsing basin drain above I (red), amalgam separator drain below O (yellow), min. 700 mm free height (green) for hose deposit

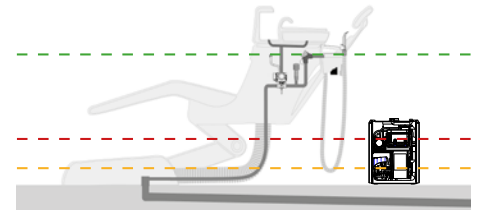
9

I

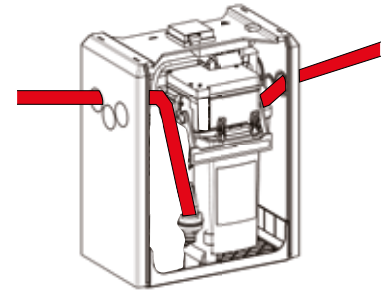
O

Free height

Example picture

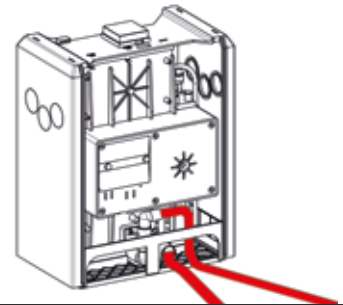


10 Connecting the rinsing basin drain hose



11 Connecting the suction line from the hose tray (suction hose)

12 Connecting the suction line to the suction machine (vacuum hose)

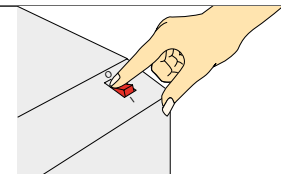


13 Connecting the drain hose

14 Connecting electrical connections

see 5.4. Electronics

15 Switch on the device via the device or practice main switch.



16 MST 1 ECO only:
When signal 1 lights up on the display, the device is ready for operation (see 6.2. Internal display).



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

17

Complete the installation report and device document and return them to METASYS (installation@metasys.com)



18 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)! For further information and assistance in carrying out repairs, retrofitting, fault analyses, etc., the METASYS technical customer service is also available!

5.3.2. Connections with other devices

Connecting the METASYS device to other devices or systems can be dangerous. Therefore, it must 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



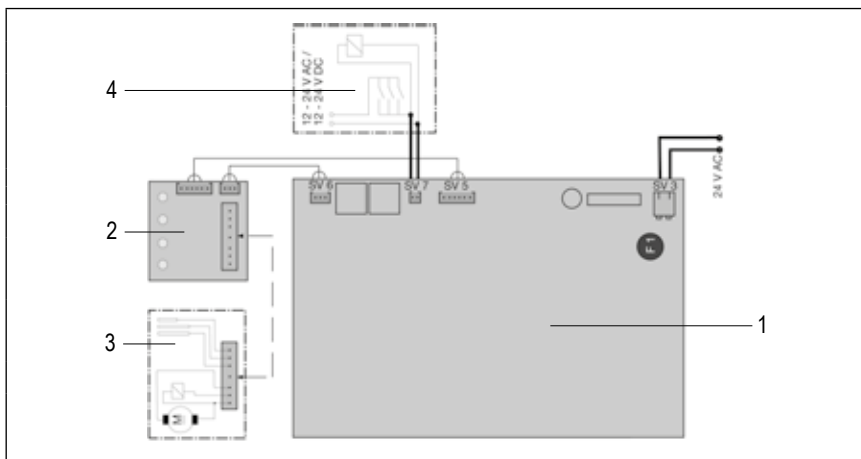
Danger:

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:

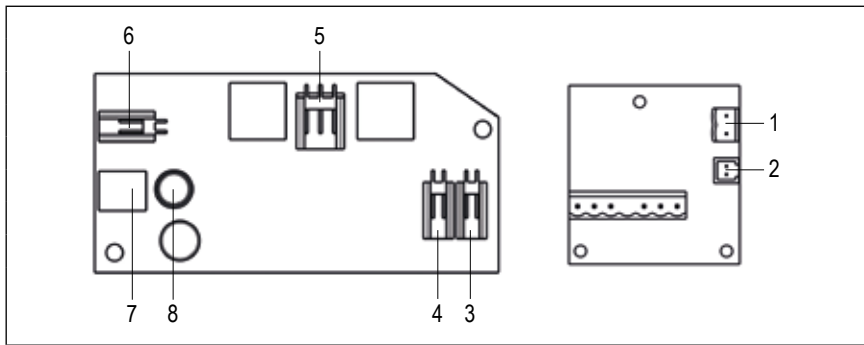
Fuses may only be replaced by the same type!

5.4.1.1. MULTI SYSTEM TYP 1 ECO



- 1 Main board
 - 2 Diagnostic board
 - 3 Module 2
 - 4 Stackable switch and suction machine isolating relay
-
- SV3 Connector for power supply (24 V AC)
 - SV5 Connection to the diagnostic board (power supply for motor and solenoid valve in module 2)
 - SV6 Connection to the diagnostic board (probes in module 2)
 - SV7 Connector for stacking signal (12 - 24 V AC or DC)
 - F1 Main fuse T3, 15 A/UN 250 V/ ICN 35 A

5.4.1.2. MULTI SYSTEM TYP 1 ECO Light

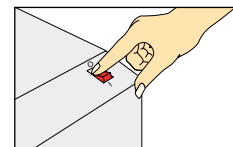


- 1 X1: Power supply 24 V AC
- 2 X2: Connector for stacking signal
- 3 X1: Solenoid valve
- 4 X2: Pump
- 5 SV1: Connection for probes
- 6 Stacking signal
- 7 24 V DC
- 8 Main fuse T3, 15 A/UN 250 V/ ICN 35 A

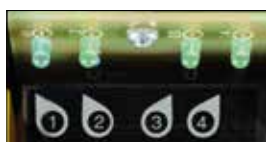
6. Use

6.1. Normal operation

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



6.2. Internal display (MST 1 ECO only)



1	Signal 1	Stacking signal	Suction hose lifted off (12-24 V AC or DC at connector SV7)
2	Signal 2	Solenoid valve in module 2	The solenoid valve in module 2 is actuated ("Emergency stop" probe not addressed)
3	Signal 3	Pump module 2	The pump in module 2 is actuated
4	Signal 4	No function	No function

6.3. Error messages



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!

Error message	Possible cause	Countermeasures
Suction current is not released	Solenoid valve (module 2) defective	Nettoyer ou remplacer l'électrovanne (voir 7.2.6. Remplacement de l'électrovanne)
Bubble formation in the vessel when pump (module 2) is in operation	Sieve for pump or water brake missing or dismantled	Remonter ou remplacer le tamis ou le frein à eau
Pumping capacity not sufficient	Sieve for pump missing or dismantled	Remonter ou remplacer le tamis
Pump (module 2) does not start	Pump defective, probes dirty or defective	Remplacer entièrement le module 2 ou nettoyer les sondes (voir 7.2.5. Remplacement du module 2)

7. Care and maintenance

7.1. Regular cleaning measures





For trouble-free operation, briefly operate the rinsing basin flush 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 extraction system	2 x daily	see 7.1.1. Daily cleaning with GREEN&CLEAN M2
Vessel change	If required	See 7.3.1. Replacement of the collection vessel and 7.3.2. Disposal of the collection vessel


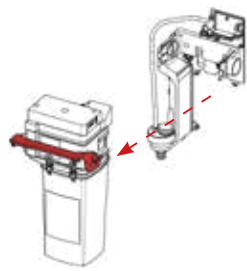
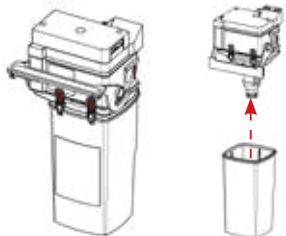
7.1.1. Daily cleaning with GREEN&CLEAN M2

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 holiday). For information on use and safety instructions, see the GREEN&CLEAN M2 instructions for use.

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!

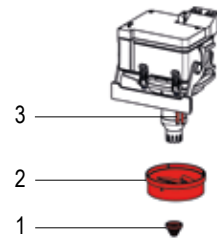
7.2.1. Replacement of the collection vessel

- 1 Provide a new collection vessel 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 vessel 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.

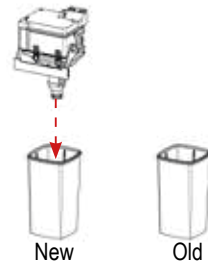
- 4 Wipe the probes in module 2 (2) with a paper towel. For easier cleaning of module 2, the air brake (3) can also be removed.

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 vessel.

- 5 Pay attention to the FRONT marking on the collection vessel!

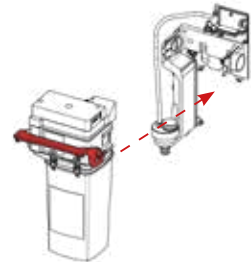


Close the 4 yellow clip fasteners on module 2.

- 6 Clean the sealing rings on the left and right in the retaining 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 clip.



- 8 Switch on the main switch of the treatment unit.
Signal 1 on the internal display lights up (only on MST 1 ECO)



7.2.2. Disposal of the collection vessel

The full collection vessel can be submitted to the company's own disposal organisation, METASYS logistics & collection GmbH.

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).

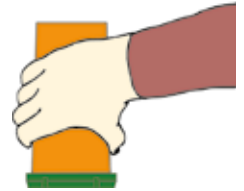
- 1 Cut open the disinfectant bag for final disinfection (enclosed with the new vessel) and pour the contents into the full collection vessel.



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



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

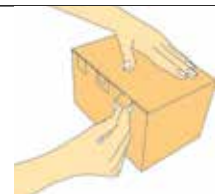


4 Carry out a leak test by placing the closed collection vessel upside down over a collection receptacle. If necessary, close the cover tightly again.

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



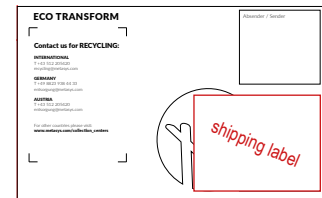
6 Close the transport box as per the enclosed instructions.



Dispose of the full collection vessel via an appropriate disposal company.

7 **For disposal using METASYS logistics & collection GmbH:**

Visit www.metasys.com/collection_centers for more information on disposal in your country!

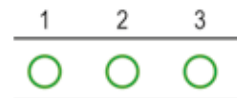


7.2.3. Normal operation test (only for MST 1 ECO)

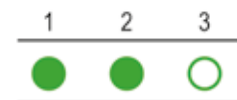


The normal operation test tests the operating functions of the device. This test should be carried out after installation as well as after every repair!

1 Switch on the main switch.



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



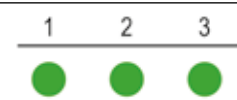
3 Sucking in water quickly until the suction current is interrupted:
More water enters the collection vessel than the pump can deliver (min. 1.5 l/min) and the emergency stop probe responds.



4 Signal 1 and signal 3 light up on the internal display. Signal 2 does not light up because the solenoid 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 (stacking signal, solenoid valve triggered, pump in module 2 in operation).
After approx. 15 seconds, the pump switches off.



7.2.4. MST 1 ECO / ECO Light service kit

1	Check the correct installation and connection of the amalgam separator automatic separator in accordance with the installation requirements	see 5.2. Installation requirements
2	Carry out disinfection and cleaning of the suction hoses and mouth rinsing basins	see 7.1.1. Daily cleaning with GREEN&CLEAN M2
3	Carry out a normal operation test (only on MST 1 ECO)	see 7.2.3. Normal operation test

7.2.5. Replacement of module 2

1	Provide new module 2 (without collection vessel).
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 vessel and lift off the upper part.
5	Place a new module 2 (without collection vessel) on the collection vessel. Pay attention to the FRONT marking on the collection vessel!
6	Close the 4 yellow clip fasteners on module 2. Clean the sealing rings on the left and right in the retaining 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 clip.

7.2.6. Replacement of the solenoid 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 solenoid valve
5	Pull out the solenoid valve
6	Remove the connection cable from the connector strip
7	Insert new solenoid valve and connect connection cable to connector strip
8	Fasten solenoid 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 clip
11	Carry out a normal operation test (see 7.2.3. Normal operation test)

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.

Uncontaminated 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. Order numbers and scope of delivery

Designation	Designation	Scope of delivery
01010033	MST 1 ECO Light	Automatic separator with standard accessories and instructions for use
01010035	MST 1 ECO - OMS Module 1, 2	Automatic separator with OMS accessories and instructions for use
01010037	MST 1 ECO Light, with pre-filter	Automatic separator with standard accessories, pre-filter and instructions for use
01010038	MST 1 ECO Light, with cover	Automatic separator with cover, standard accessories and instructions for use
01010039	MST 1 ECO - Select Module 1, 2	Automatic separator with standard accessories and instructions for use
01010040	MST 1 ECO Light - a-dec 300	Automatic separator with a-dec 300 accessories and instructions for use
01010041	MST 1 ECO Light - a-dec 400/500	Automatic separator with a-dec 400/500 accessories and instructions for use
01010045	MST 1 ECO Light - a-dec 200	Automatic separator with a-dec 200 accessories and instructions for use
01010046	MST 1 ECO Light - Tecnomed	Automatic separator with Tecnomed accessories and instructions for use
01010047	MST 1 ECO Light - Planmeca Compact-i	Automatic separator with Planmeca Compact-i accessories and instructions for use
01010048	MST 1 ECO Light - Tekmil	Automatic separator with Tekmil accessories and instructions for use

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

MST 1 ECO / ECO Light = Abbreviation for MULTI SYSTEM TYP 1 ECO / ECO Light

Accessories

Order number	Designation
40400002	Inspection kit MST 1, with control slide and test plug
40400008	META Connect, fitting box
40500001	Transformer, for MST 1

Service kits

Order number	Designation	Scope of delivery
50020119	Inspection kit, MST 1 ECO / ECO Light	Water deflector, air brake, suction housing for K-pump, diaphragm, inlet main body with built-in check valve, O-ring
50020112	Service kit, MST 1 ECO Light	50020119 Inspection set MST 1 ECO / ECO Light, 60010305 GREEN&CLEAN CL N 2 x 1000 ml, 40200023 Mixing vessel for GREEN&CLEAN CL N, 60020005 GREEN&CLEAN MB Start, 180 ml

Collection container / exchange container

Order number	Designation
55020030	Exchange container MST 1 ECO / ECO Light, international

Disinfectant

Order number	Designation	Order number	Designation
60010201	GREEN&CLEAN M2 - intro kit, 2 x bottle 500 ml + dispenser	60010204	GREEN&CLEAN M2 red, 25 x bottle 500 ml
60010202	GREEN&CLEAN M2 - Refill kit 1, 4 x bottle 500 ml	60010205	GREEN&CLEAN M2 green, 25 x bottle 500 ml
60010203	GREEN&CLEAN M2 - Refill kit 2, 2 x bottle 500 ml	40200001-BL	GREEN&CLEAN M2 Dispenser

General spare parts

Order number	Designation	Order number	Designation
50020201	Module 1, MST 1 ECO Light	50020042	Silicone display for cover, 5 pcs.

Order number	Designation
50020202	Module 2, MST 1 ECO Light
50020203	Main circuit board, MST 1 ECO Light
50020204	Connection elbow, MST 1 ECO Light
50020205	Transition board, MST 1 ECO Light
50020004	External display for MST 1 and COMPACT Dynamic
50020015	Membrane, MST 1, 5 pcs.
50020016	Locking bracket, Module 2, MST 1
50020022	Air deflector, MST 1
50020023	Sensor unit extended, MST 1
50020027	Water displacement ring, MST 1
50020028	Screw cap, filter casing, MST 1
50020030	Clean water outlet, for MST 1-ECO
50020034	Inlet frame, MST 1
50020040	Plug, for angle piece, MST 1, 10 pcs.
50020041	Intake housing, container pump, modul 2, MST 1

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.
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.

Order number	Designation
50020045	Socket board, power supply (BL2 orange), 5 pcs.
50020047	Locking bracket, small, MST 1 collecion container, 12 pcs.
50020102	Socket board BL7, orange, 5 pcs.
50120003	Fuse T 1,6 A / 250 V, MST 1, external pump, 5 pcs.
50120004	Magnetic valve, MST 1
50110005	O-ring, 100 x 1,5 mm, 10 pcs.
50110004	O-ring, 27,3 x 2,5 mm, 10 pcs.
50110003	O-ring, 25 x 2 mm, 10 pcs.
50110013	Seal, screw cap, 5 pcs.
55010005	Sieve, pump/housing, MST 1, 10 pcs.
40050049	Prefilter, inlet, outlet, 26 mm, filter case
40010091	Plug, inlet frame
40050026	Cable, suction tube switch, MST 1
40050030	Plug, for filter case, small, large, 5 pcs. each

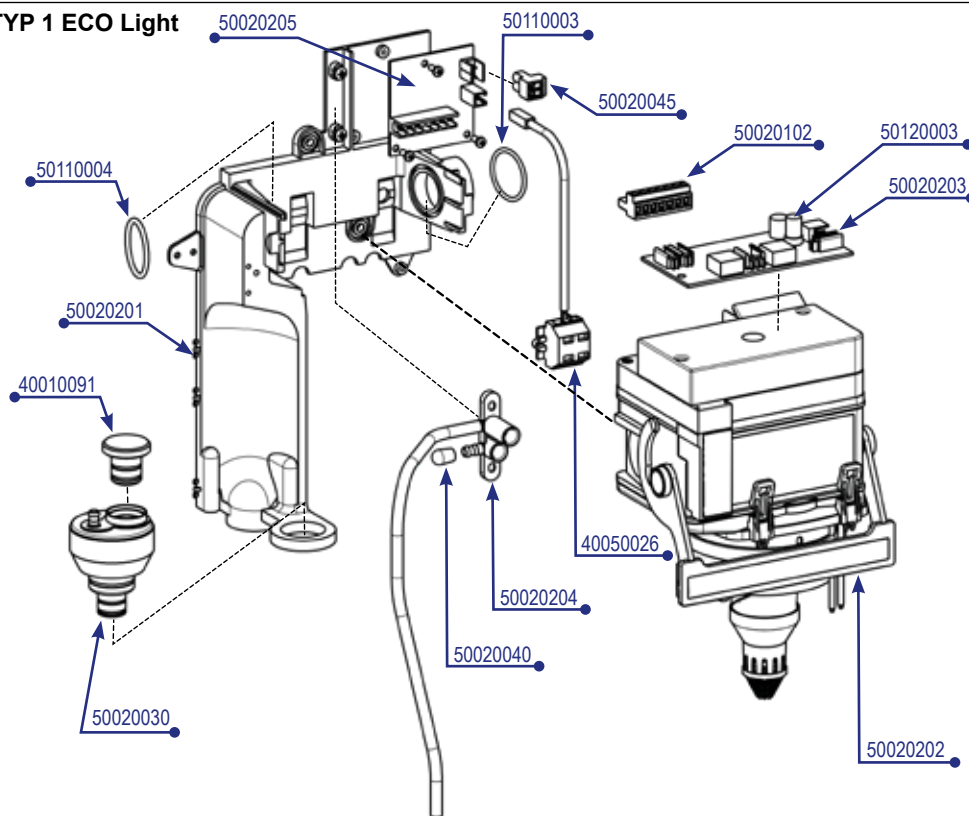
Order number	Designation
40010090	Adapter inlet frame, 19-20 mm, 5 pcs.
40010091	Plug, inlet frame
40010092	Y-adapter, 26 x 26 x 26 mm
40010093	Adapter, 31-32 mm, 1 pc.
40010096	Adapter, 16-17 mm, 5 pcs.
40010097	Adapter, inlet frame, 20-21 mm, 5 pcs.
40010098	Adapter, inlet frame, 24-25 mm, 5 pcs.
40010099	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
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"

Order number	Designation
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.

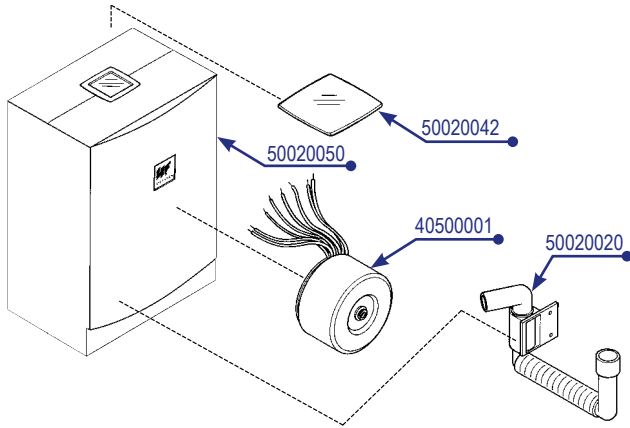
Order number	Designation
40010120	Adapter, META Connect, 26 mm, mini-nozzle
40010121	Adapter, META Connect, inlet frame, 5 pcs.
40010122	Safety clips, Dürr Connect small, 20 mm, 5 pcs.
40010123	Y-adapter, 26 x 26 x 26 mm, male
40010124	Adapter, META Connect, Dürr Connect large, 36 mm
40010125	Adapter, 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

MULTI SYSTEM TYP 1 ECO - see General spare parts

MULTI SYSTEM TYP 1 ECO Light

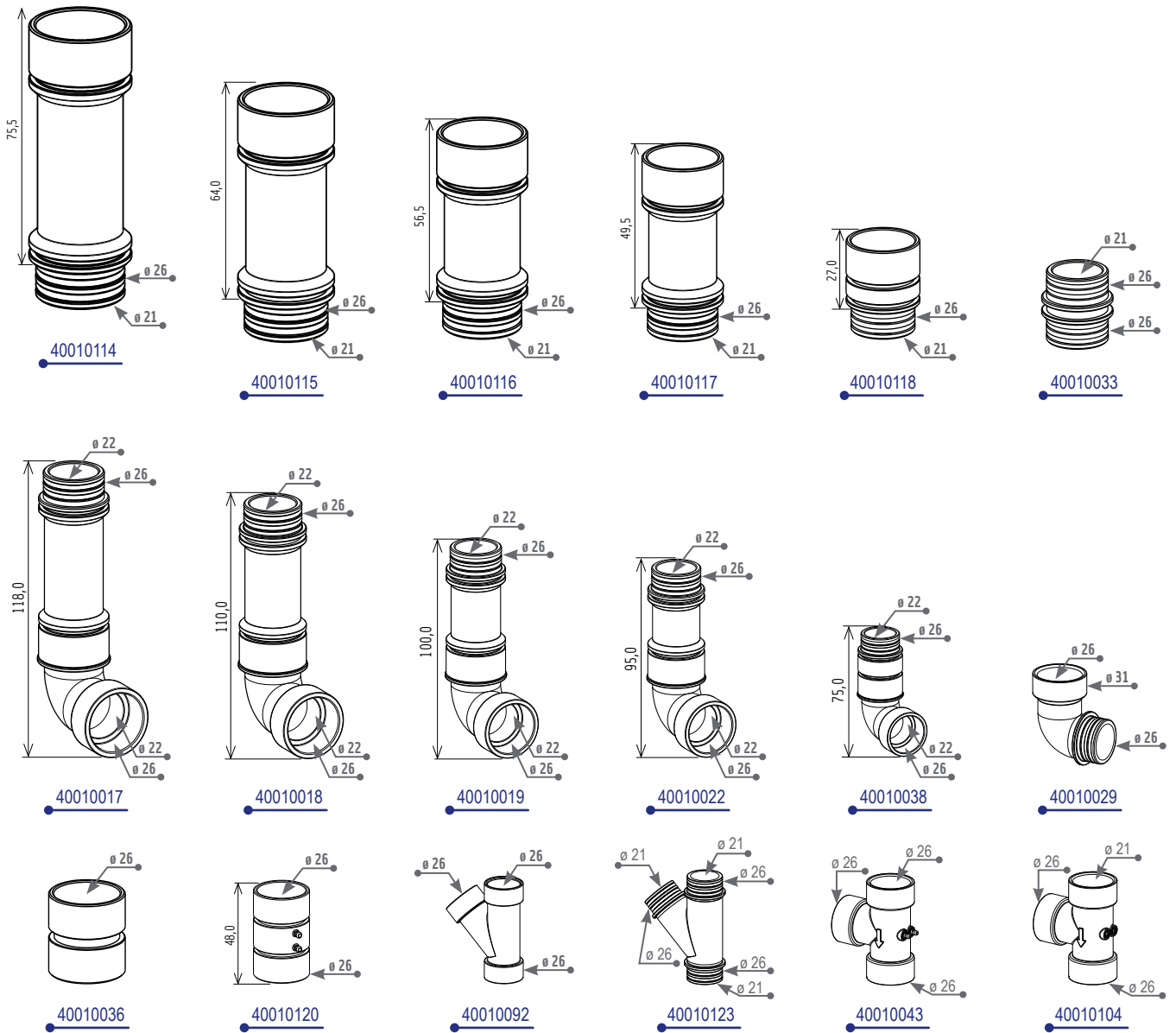


Cover



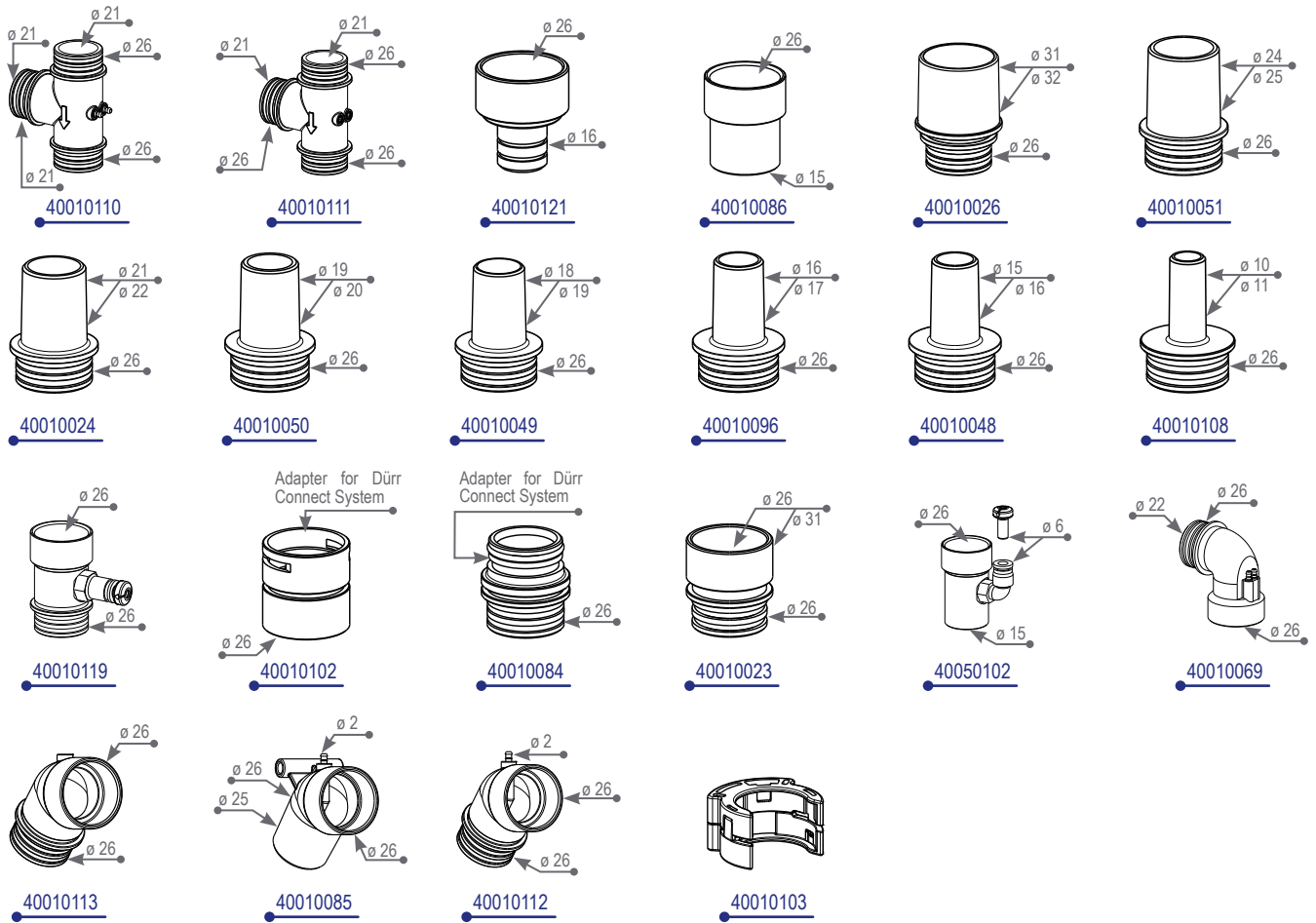
Hose nozzles and adapters

META Connect



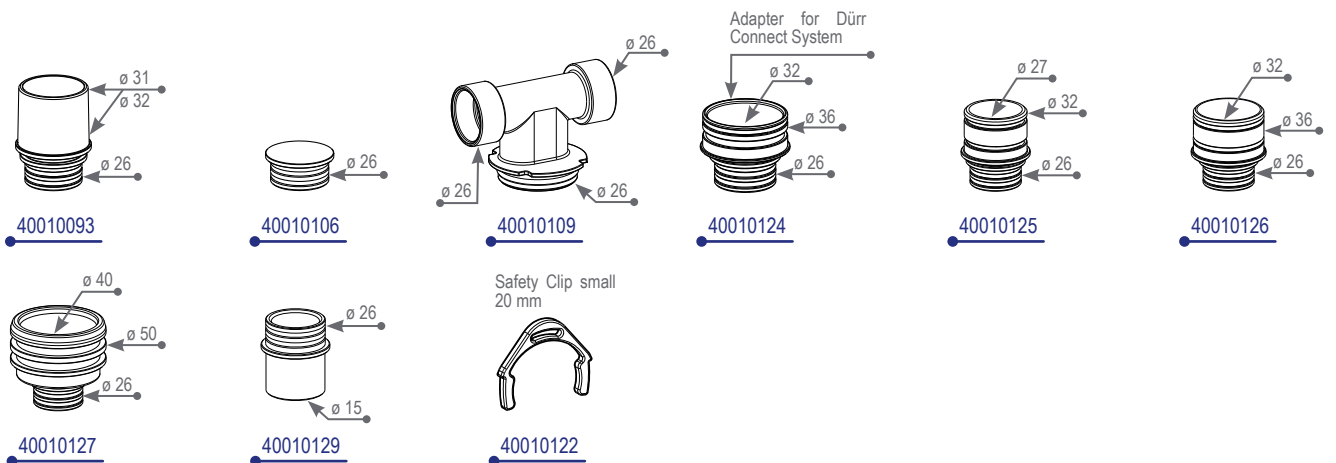
Hose nozzles and adapters

META Connect



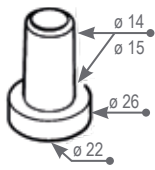
Hose nozzles and adapters

Can be combined with META Connect

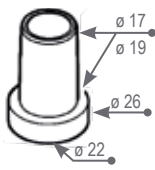


Hose nozzles and adapters

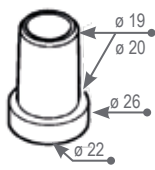
Cannot be combined with META Connect



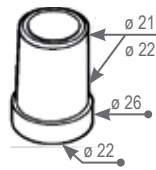
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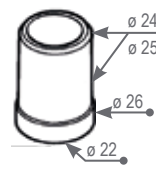
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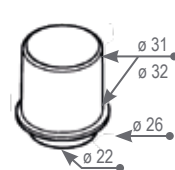
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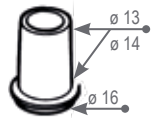
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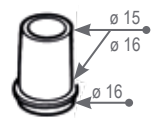
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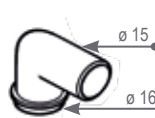
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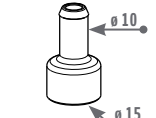
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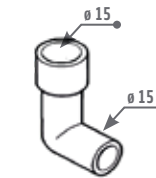
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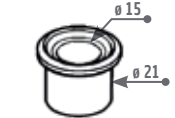
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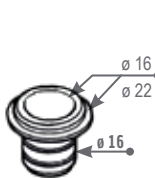
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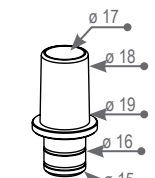
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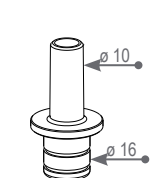
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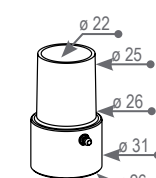
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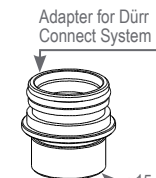
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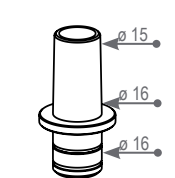
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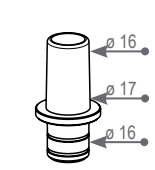
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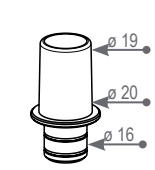
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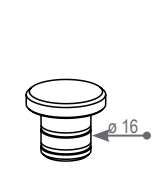
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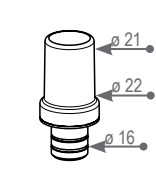
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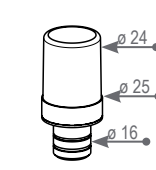
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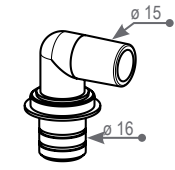
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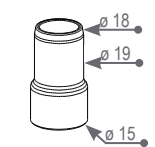
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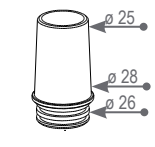
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9.2. Warranty conditions

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-58.205/00	18.05.2021	Newly created.
ZK-58.205/01	18.10.2022	Correction: Chapter 1.2 „REF number“ changed to „item number“. Item numbers and CH-REP added.



protect what you need



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