Electronic Motor 31 ESS (REF 2063/2064/2058)

- We deliver an unsterile electronic motor. Clean, disinfect, and sterilize the electronic motor before the first application and immediately after each use!
- Do not bend motor cable, to prevent of cable brake!
- Any guarantees on our part or other claims against us become void in the case of inappropriate use of the electronic motor or failure to comply with our instructions!

Intended use / indication

The motors are equipped with handpiece carriers according to ISO 5964, which enable the attachment of handpieces and contra angles and ensure secure hold. The electronic motor 31 ESS in conjunction with a drive system and corresponding handpiece is used in the following medical areas:

- Plastic surgery
- Vascular surgery
- General surgery
- Traumatology

The electronic motor 31 ESS may only be operated by qualified and trained personnel. Improper operation can lead to malfunctions. The intended use is clearly described in the operation instruction manual of the corresponding device/instrument and is obvious to the trained user.

Contraindication

Differential or absolute contra indications can arise from the general medical diagnosis, or in special cases by a significantly increased risk to the patient through the use of motor-driven systems. Relevant cases in the literature must be taken into consideration. The electronic motor 31 ESS may only be connected to and operated with Nouvag AG motor systems. The use of handpieces & contra angles by other manufacturers in conjunction with the electronic motor 31 ESS is the responsibility of the user. Switching on the electronic motor 31 ESS without holding it or correctly placing it in the handpiece holder leads to uncontrolled movements of the motor.

Symbols

- Warning, hot surfaces
- Suitable for thermal disinfection
- CE symbol with notified body
- Manufacturer

Technical data, Electronic motor 31 ESS

<table>
<thead>
<tr>
<th>REF</th>
<th>2063</th>
<th>2064</th>
<th>2058</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight, without cable</td>
<td>320 g</td>
<td>320 g</td>
<td>320 g</td>
</tr>
<tr>
<td>Maximum torque</td>
<td>6 Ncm</td>
<td>6 Ncm</td>
<td>6 Ncm</td>
</tr>
<tr>
<td>Maximum output</td>
<td>120 VA</td>
<td>120 VA</td>
<td>120 VA</td>
</tr>
<tr>
<td>Maximum current</td>
<td>6 A</td>
<td>6 A</td>
<td>6 A</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>35 V</td>
<td>35 V</td>
<td>35 V</td>
</tr>
<tr>
<td>Rated speed</td>
<td>40,000 rpm</td>
<td>40,000 rpm</td>
<td>40,000 rpm</td>
</tr>
<tr>
<td>Coupling</td>
<td>acc. to ISO 14930 acc. to ISO 14930 acc. to ISO 14930</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cable length</td>
<td>2.0 m</td>
<td>5.0 m</td>
<td>4.0 m</td>
</tr>
<tr>
<td>Motor cover with plug and cable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Operation

Coupling handpieces with Electronic motor 31 ESS

1. Every electronic motor must be thoroughly cleaned, disinfected and sterilised before initial operation (products straight from the factory) and also immediately following each use. Only a cleaned and disinfected electronic motor permits proper sterilisation!
2. The electronic motor should always be treated with utmost care when being transported, cleaned, serviced, sterilised and stored.
3. We recommend the use of mild alkaline and enzymatic cleansers with as low a content of sialic as possible in order to avoid staining (staining the electronic motor).
4. Only commercial grade DGHM-/VAH-listed agents may be used for cleaning and disinfection. See these agent manufacturers’ specifications for the method of use, action time and suitability of disinfection and cleaning substances.
5. Follow precisely the operating instructions of the devices and chemicals etcetera, used during preparation.
6. Adhere exactly to the chemical dosages, action times and temperature during cleaning and disinfection.
7. The end of the product service life is determined by wear and damage through use. The electric motor is designed for 250 sterilisation cycles.
8. Do not overload dishwashers. Avoid dead zones. Pay attention to secure storage in the machine.
9. In relation to patients with Creutzfeldt Jakob disease or its variant (vCJD) no responsibility can be assumed for re-use of the electronic motor. The Robert Koch Institute recommends removing used products from circulation after use in order to avoid infecting other patients, users and third parties.
10. The electronic motor must never be subjected to ultrasonic cleaning! This will impair the functionality.
11. Adhere exactly to the chemical dosages, action times and suitability of disinfection and cleaning substances.
12. After surgery immediately remove blood, secretion, tissue and bone residue with a disposable cloth/paper towel, do not allow to dry! Dried residues cause corrosion.
13. Contaminated products must be stored and transported to the preparation site in a closed container to avoid damaging the products and contaminating the environment.
14. Cleaning and disinfection, pre-cleaning

1. Wipe down the electronic motor with a damp disposable cloth/paper towel while removing all visible impurities.
2. Unscrew the motor cover and remove the cable including the motor cover.
3. Brush down the plastic parts of the electronic motor under running tap water with a soft brush (manufacturer Insitumed GmbH, REF 20473EN, V05/18).
4. Rinse the outer surface of the electronic motor for 10 seconds with a water pistol (at a pressure of at least 2.0 bar).
5. Then spray the electronic motor with NouClean (see the Section “Inspection and care”).

Reprocessing instructions

- General handling
- Attention!
- Preparation preliminaries at the point of use
- Safe keeping and transport
- Cleaning and disinfection, pre-cleaning

After surgery immediately remove blood, secretion, tissue and bone residue with a disposable cloth/paper towel, do not allow to dry! Dried residues cause corrosion.
Cleaning
1. Mechanical cleaning
   - Place the electronic motor in the strainer basket after pre-cleaning.
   - Mechanical cleaning is only successful if the pre-cleaning described above is adhered to.
2. Cleaning is done using the Vario TD programme in the cleaning and disinfection unit (CDU). For the cleaning process it is advisable to use DI water (fully desalinated water).
3. After completing the cleaning programme (including thermal disinfection) check the electronic motor and the motor cover with cable for visible contamination in the grooves and gaps. Repeat the cleaning if necessary.

Automatic cleaning process (Vario TD programme)
1. Pre-clean for 4 minutes with cold water.
2. Empty
3. Clean for 5 minutes at 55°C with 0.5% alkaline or at 40°C with 0.5% enzymatic cleaner.
4. Empty
5. Neutralise with cold water for 5 minutes.
6. Empty
7. Intervise for 5 minutes with cold water.
8. Empty

Disinfection
Mechanical disinfection
The cleaning/disinfection unit has a thermal disinfection programme which follows the cleaning. When performing mechanical thermal disinfection, give due consideration to the national requirements relating to the A0 value (see DIN EN ISO 15883-1). We recommend an A0 value of 5,000 for the electronic motor. Disinfection must be carried out with DI water.

Disposing of the electronic motor:
When inadequately rinsed or exposed to the disinfectant or detergent for too long, the electronic motor can corrode. Please see the corresponding detergent and disinfectant's package insert for dwell times.

Drying
Mechanical drying
Dry the electronic motor using the cleaning/disinfection unit’s (CDU) drying cycle. If required, manual drying can also be achieved by using a lint-free cloth. When drying manually, take particular care with the grooves and gaps of the electronic motor.

Manual drying
Set the electronic motor up in an upright position without motor cover and cable.
Dry the electronic motor for at least 30 minutes. Then spray with NouClean spray. Afterwards the motor cover with cable back onto the electronic motor (see fig. 5).

Inspection and care
1. First unscrew the motor cover and remove the cable including the motor cover.
2. Perform a visual check for damage, corrosion and wear.
3. In the next step spray the electronic motor for cleaning and care. NouVag AG recommends using NouClean spray for this purpose. Spray the electronic motor from the front with the spray adapter (REF 1942) in place for about 3 seconds (fig. 4) until only clear liquid runs out of the electronic motor.
4. Then wipe down with a moist cloth (Follow the product's instructions for use).
5. After spraying the electronic motor screw the motor cover with the cable back onto the electronic motor (see the Chapter „Inspection and care“).

Spare parts
<table>
<thead>
<tr>
<th>REF</th>
<th>Description</th>
<th>Units</th>
<th>REF</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>Maintenance and care spray NouClean</td>
<td>1</td>
<td>76061</td>
<td>Motor cable pre-assembled for motor 2065 (MD 10)</td>
<td>1</td>
</tr>
<tr>
<td>1985</td>
<td>Spray nozzle for NouClean spray</td>
<td>1</td>
<td>76063</td>
<td>Motor cable pre-assembled for motor 2058 (Vacuson 60 LP)</td>
<td>1</td>
</tr>
<tr>
<td>1986</td>
<td>Cleaning Mechanical cleaning</td>
<td>1</td>
<td>76062</td>
<td>Motor cable pre-assembled for motor 2064 (MD 20)</td>
<td>1</td>
</tr>
</tbody>
</table>

Information for validating the preparation
The above preparation process has been verified by a validated procedure. The following materials and machines were used:
1. Alkaline cleaner: Noisafe® Mediclean; Chemische Fabrik Dr. Weigert GmbH & Co. KG
2. Enzymatic cleaner: Neodisher® MediZyme; Chemische Fabrik Dr. Weigert GmbH & Co. KG
3. Cleaning/disinfection unit: Miele G 3965 CD
4. Rack trolley: Miele 6297
5. Screen basket/rinse strip: 3mach (NOUVAG REF 51401)
6. Alkaline cleaner: Neodisher® Mediclean; Chemische Fabrik Dr. Weigert GmbH & Co. KG
7. Screen basket/rinse strip: 3mach (NOUVAG REF 51401)
8. Motor cable pre-assembled for motor 2064 (MD 20)
9. Motor cable pre-assembled for motor 2065 (MD 10)
10. Motor cable pre-assembled for motor 2058 (Vacuson 60 LP)

Storing the sterile packaging
The sterilised product must be stored away from dust, humidity and contamination. During storage ensure that there is no direct exposure to sunlight. After the expiry date has passed, do not use the product any longer.

Handling the sterile packaging
Before taking out the product, check that the sterile packing is intact. When taking out the product, follow the respective aseptic procedures.

Note
There is no experience available from conducting other sterilisation procedures such as plasma sterilisation, low temperature sterilisation procedures.

Troubleshooting
<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor is not running</td>
<td>Plug is not inserted properly</td>
<td>Insert plug and check fitting properly</td>
</tr>
<tr>
<td>Motor stops when cable is moved</td>
<td>Defective cable</td>
<td>Replace cable</td>
</tr>
<tr>
<td>Handpiece is not properly connected to the motor</td>
<td>Press handpiece firmly to the motor until it clicks in place</td>
<td></td>
</tr>
</tbody>
</table>

Disposal
Conform strictly to local laws and regulations at the disposal of devices, device parts and accessories.

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A complete list of Nouvag certified service centers are found on the Nouvag website:
www.nouvag.com/en/service/service-provider