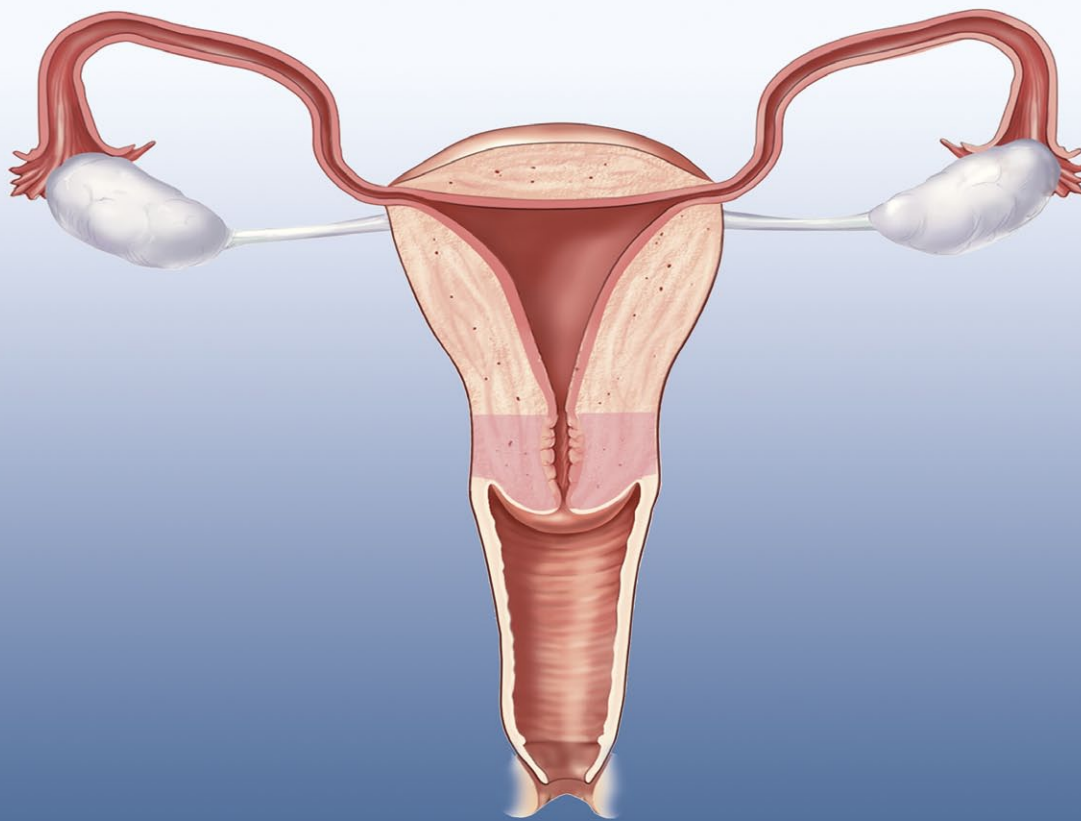




Laparoscopic Hysterectomy

Morcellator



Laparoscopic Hysterectomy

Nowadays newly developed medical devices make hysterectomy possible by a laparoscopic intervention. The advantage for the patient of the laparoscopic method is less pain and a much faster recovery. Patients appreciate much the minimal invasive character of this operation because it leaves almost no scars on the patient's skin, reduces the healing of the wounds and saves money and time for all involved parties.

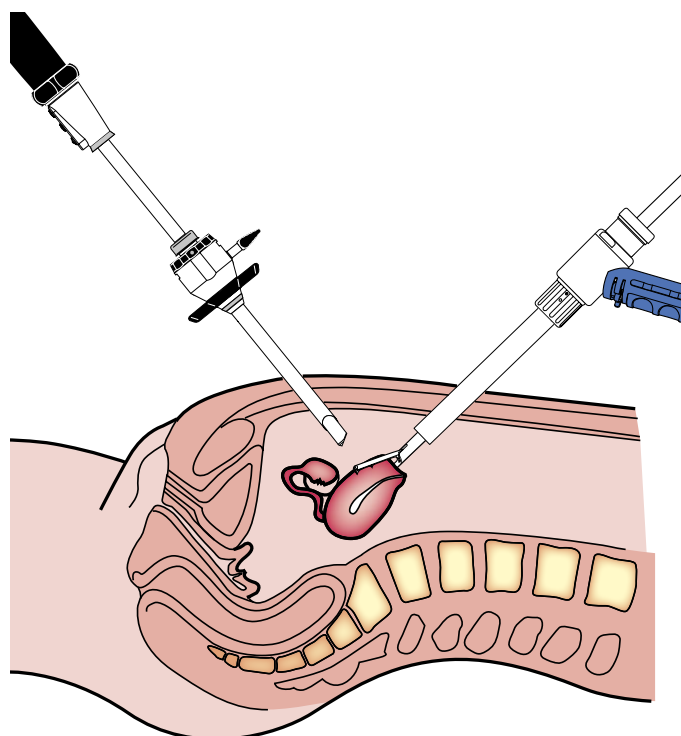
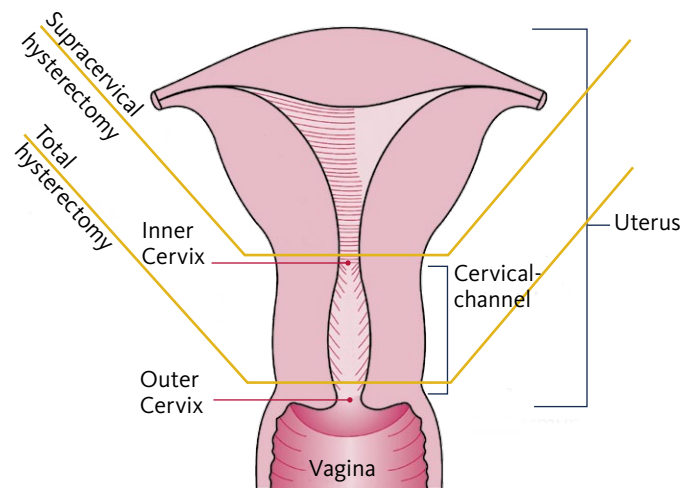
Laparoscopic access

A manipulator (guide instrument) is inserted into the uterus via the vagina to enable it to be moved during the operation. A ceramic cap over the cervix later allows it to be safely withdrawn from the vagina. The abdominal cavity is filled with gas (CO₂) through a thin cannula in order to elevate the abdominal wall and provide an unobstructed view of the abdominal organs. The camera optics is inserted in the umbilical area through a percutaneous access route. The required surgical instruments (e.g. electric scissors, morcellator, haemostatic clamps, etc.) are inserted in the lower abdomen through small (5 – 10 mm) incisions. The camera passes the image to a large monitor. The modern optics and instruments provide an unobstructed view and so ensure safe surgery.

Incision

If the uterus requires complete removal (up to the outer cervix), the incision is made at the ceramic cap and then it is sutured. The severed uterus is excised from the abdominal cavity piece by piece with the morcellator and aspirated. In the case of a supracervical hysterectomy the uterus is severed above the inner cervix. Depending upon the diagnostic findings the physician opts either to remove the uterus through the vagina or by laparoscopic means. In the event of a higher risk, for example, due to an enlarged uterus and

thus reduced visibility and constricted space, the surgery can be concluded by means of an abdominal incision. The uterus can, however, invariably be removed using morcellation in all the variants on a hysterectomy.



Morcellation with Protection Sleeve

At the Hysterectomy in laparoscopic surgery the Morcellator is inserted into the abdominal cavity with the Obturator inserted in the Protection Sleeve. After removing the Obturator, the Cutting Tube can be inserted. To expose the Cutting Tube to the tissue that has to be removed, the Protection Sleeve has to be unlocked from the Non-cut-position by holding the Transmission Unit with one hand and performing a counter movement of the Protection Sleeve with the other hand.

Morcellation with Trocar Sleeve

When morcellating with a Trocar Sleeve the abdominal wall is kept in safe distance from the operation area by inflating the abdominal cavity. This gives also safe clearance for the surgical operation. The Trocar Sleeve stays flexible while operating, means it can be rotated against the organ or tissue to be protected. Only than the Obturator is removed and the Cutting Tube can be inserted. The configuration of instruments needed for this procedure are shown on the System chart under option 2. Under option 1 the configuration with the Cutting Tube is shown.

TCM 3000 BL - Morcellator

The compact control unit TCM 3000 BL - Morcellator with its simple and intuitive operation panel controls the speeds of the attached instruments. For the morcellation of tissue speeds of up to 1000 rpm are appropriate.

TCM3000BL MORCELLATOR



- Compact and practical unit
- Variable speed in Vario mode, continuously controllable by pedal
- Choose between 3 Vario programs with specific speed ranges, alternatively to free callable speed ranges
- Simple, intuitive operation
- Valuable, sturdy architecture
- Pedal with precise control

Technical data

Type:	TCM 3000 BL – MORCELLATOR
Mains voltage:	100/115/230 Volt at 50 – 60 Hz
Power consumption:	60 VA
Max. torque:	80 Ncm
Motor cable length:	3 m
Speed range, Morcellator:	up to 1000 rpm
Dimensions, control unit (Width/depth/height):	120/180/107 mm
Weight, control unit:	1.8 kg
Controls:	Vario pedal

Cutting Tubes, Protection Sleeves, Obturators

To suit the needs of every procedure the model range of the Morcellator consist of instruments with three different diameters. They are available in 12, 15 and 20 mm versions. By carefully composed and aligned instruments and accessories the system as a whole delivers excellent results at morcellation and guarantees for maximum safety at operation.



Ref. 5139
Protection Sleeve, Ø 20 mm



Ref. 5138
Protection Sleeve, Ø 15 mm



Ref. 5137
Protection Sleeve, Ø 12 mm



Tissue Positioner

To prevent tissue pieces from rotating at morcellation, the Protection Sleeves are equipped with a so called Tissue Positioner. The Tissue Positioner acts also as a guiding element at morcellation.



Ref. 5153
Obturator, Ø 20 mm



Ref. 5152
Obturator, Ø 15 mm



Ref. 5151
Obturator, Ø 12 mm



Ref. 5156
Cutting tube Ø 20 mm



Ref. 5155
Cutting tube Ø 15 mm



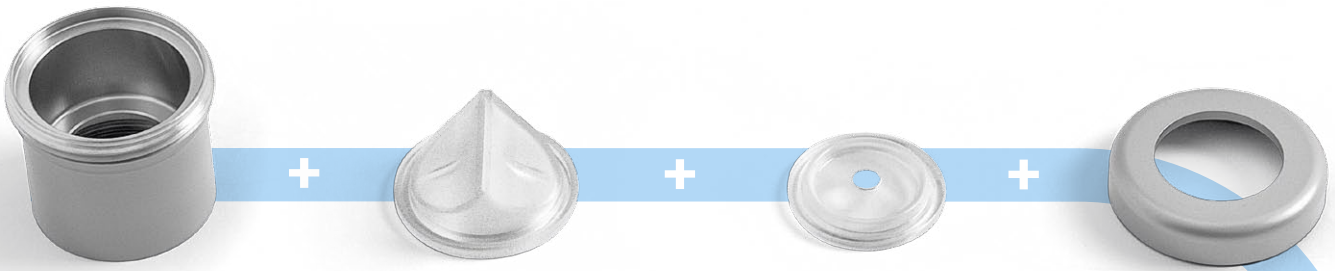
Ref. 5154
Cutting tube Ø 12 mm





Cutting tube (Blade)

The high-tech cutting tube manufactured by Nouvag AG, fulfills all requirements of Laparoscopic Hysterectomy as well as Myomenukleation. A high class refinement of the blade of the cutting tube enables multiple use with consistent cutting effect, without having to resharpen the blade.



Drive train and seals



Seal holder  

Ref.: 5167
 Roof shaped seal for all cutting
 tube diameters.
 10 piece per packaging unit



Ref.: 5166
 Membrane seal for all cutting
 tube diameters.
 10 piece per packaging unit

Membrane screw  

Ref. 5163

Gear unit with seal unit incl.
 seals and locking wrench. The
 motor speed is transmitted
 through the gear unit to the
 cutting tube at the appropriate
 ratio.





  Seal unit

Ref. 5183

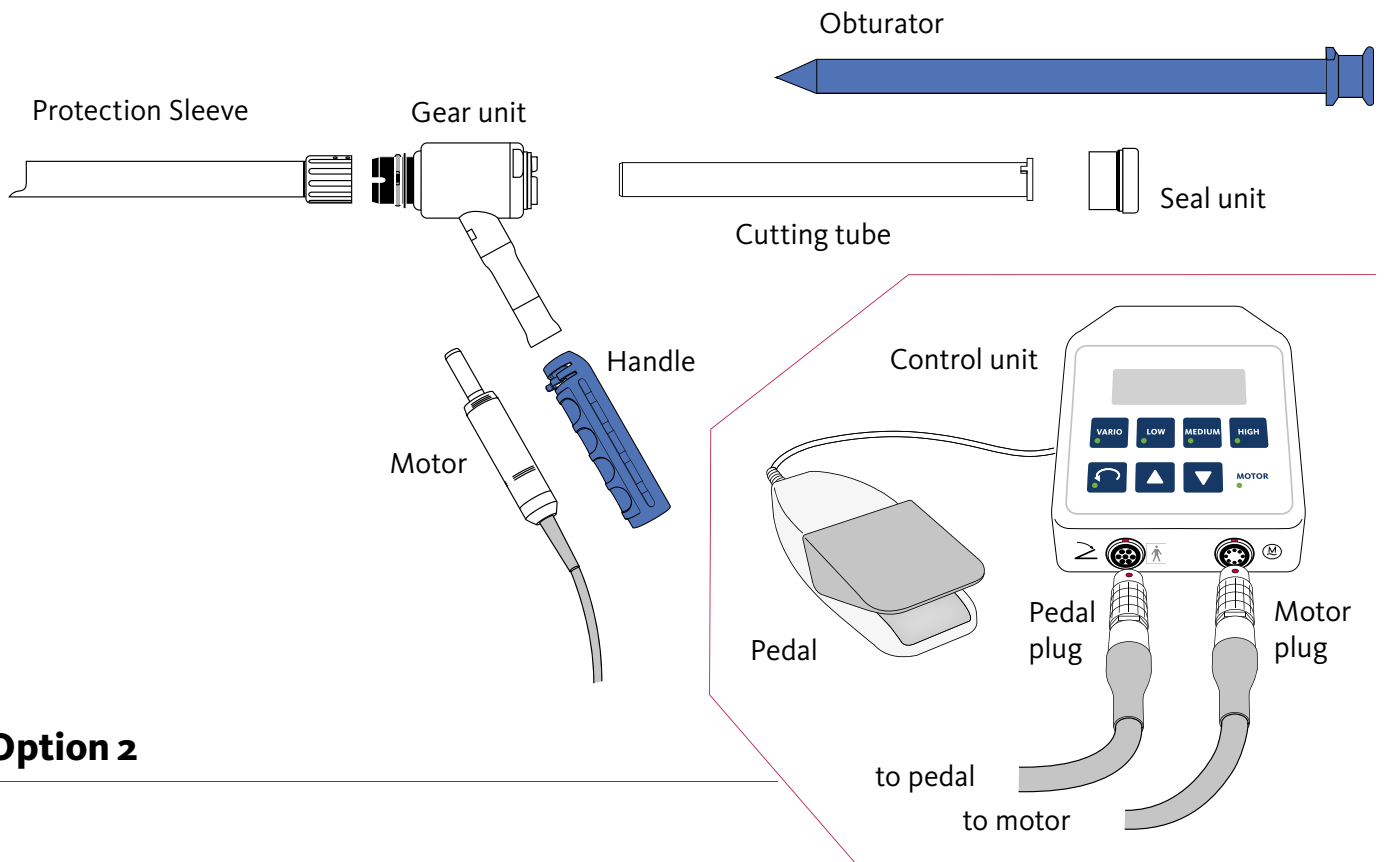
The ergonomic handle that is
 slipped onto the gear unit pro-
 tects the operator from excess
 heat of the motor and the gear
 unit.



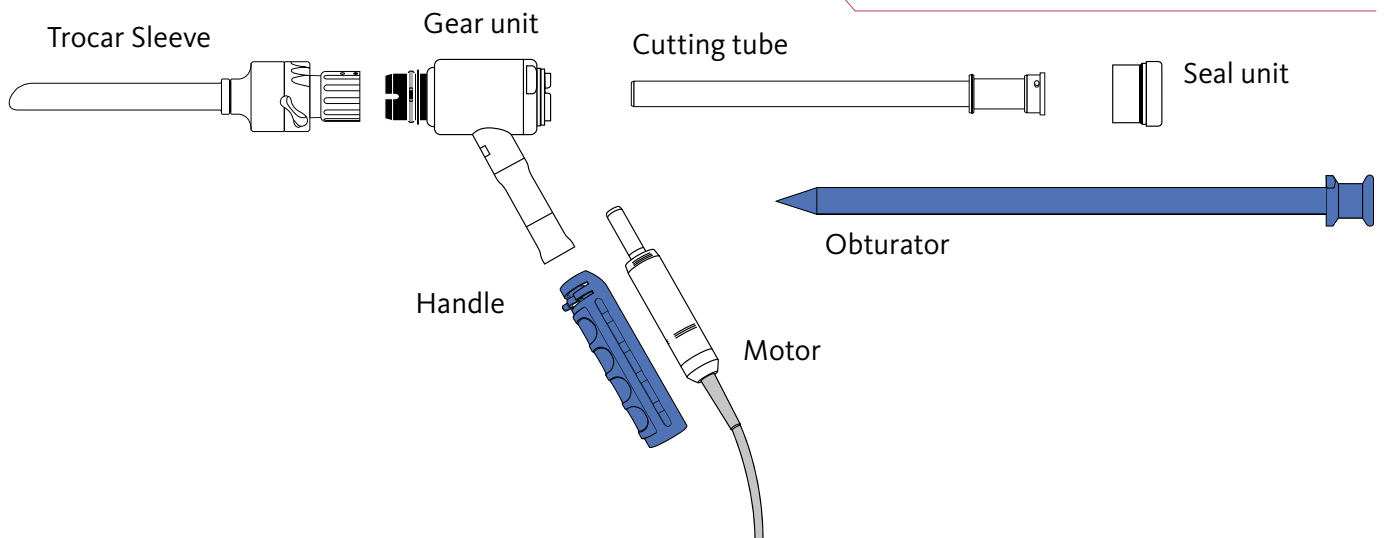
Ref. 2090
 Electronic motor 21  
 Autoclavable brushless elec-
 tronic motor with a 3 meter
 cord delivers adequate torque,
 while running smooth and
 consistent.

Morcellator system chart

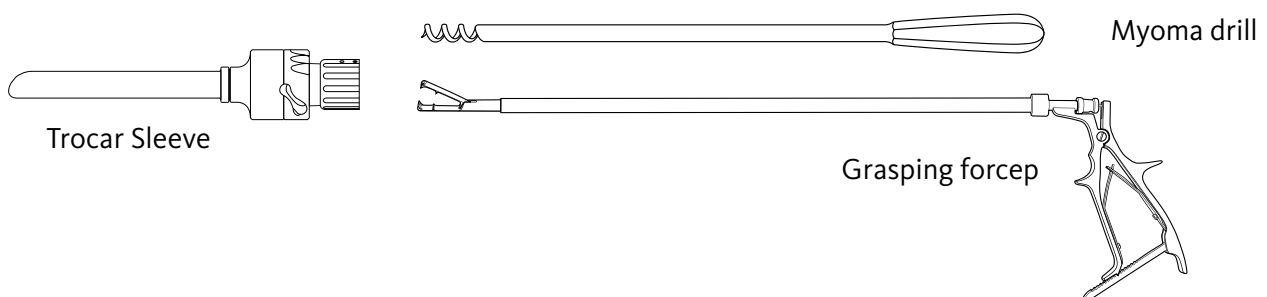
Option 1



Option 2



Option 3



Extensions

Trocars

Ref. 5142
Trocar Sleeve Ø 15 mm



Ref. 5141
Trocar Sleeve Ø 12 mm

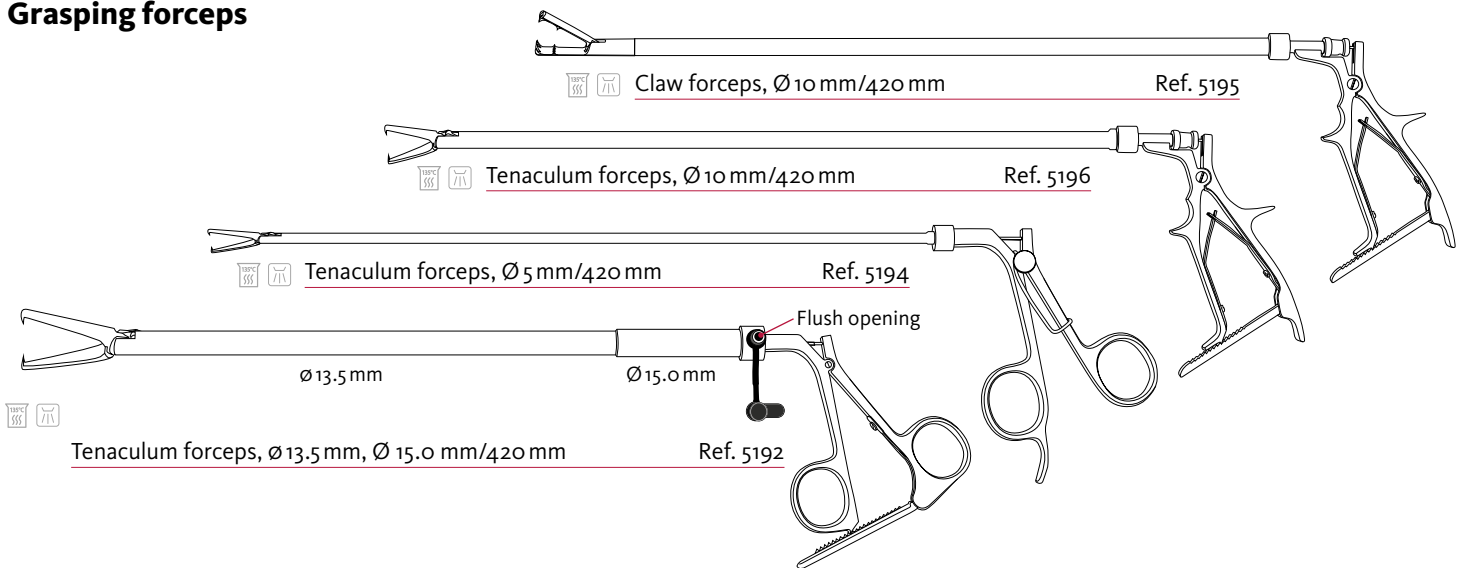


Myoma removals

Ref. 5193
Myoma drill Ø 10 mm



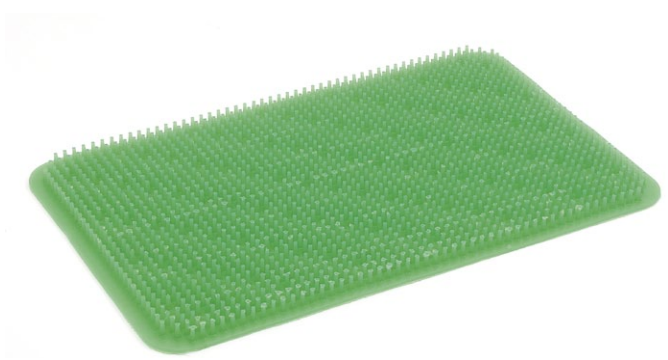
Grasping forceps



Sterilization tray

Stericase, 465 x 280 x 100 mm Ref. 4113
For the sterilization and the storage of sterilizable instruments and accessories.

Silicone mat, 450 x 270 mm Ref. 4126
Nonslip nubby mat to prevent sterilizable items from rolling around.



Scope of delivery, extensions and spare parts

TCM 3000 BL Morcellator set, Ref. 3287

Ref.	Description	PU *
3281	TCM 3000 BL MORCELLATOR control unit, power cord (Cord is supplied country specific)	1
1507	Vario pedal, IPX8, 3 m of connecting cable	1
2090	Electronic motor 21, motor cable 3 m	1
5163	Transmission unit	1
5183	Handle	1
31946	Operation manual on CD-ROM	1
1974	Spray nozzle for NouClean Spray for maintenance and care of electronic motor 21	1
1928	Spray nozzle for NouClean Spray for maintenance and care of Transmission Unit	1

* PU: Packaging unit

Extensions

Ref.	Description	PU *
5137	Protection Sleeve, Ø 12 mm	1
5138	Protection Sleeve, Ø 15 mm	1
5139	Protection Sleeve, Ø 20 mm	1
5151	Obturator, Ø 12 mm	1
5152	Obturator, Ø 15 mm	1
5153	Obturator, Ø 20 mm	1
5154	Cutting Tube, Ø 12 mm	1
5155	Cutting Tube, Ø 15 mm	1
5156	Cutting Tube, Ø 20 mm	1
5141	Trocar Sleeve for instruments Ø 12 mm	1
5142	Trocar Sleeve for instruments Ø 15 mm	1
5193	Myoma Drill Ø 10 mm	1
5192	Grasping forceps, Tenaculum forceps, ø 13.5 mm/Ø 15.0 mm, length 420 mm	1
5194	Grasping forceps, Tenaculum forceps, Ø 5 mm, length 420 mm	1
5195	Grasping forceps, Claw forceps, Ø 10 mm, length 420 mm	1
5196	Grasping forceps, Tenaculum forceps, Ø 10 mm, length 420 mm	1
4113	Stericase, Aluminium, 465 x 280 x 100 mm	1
4126	Non slip silicone mat with nubs for Stericase, 450 x 270 mm	1
1984	<i>In line with regulations pertaining to hazardous materials, NouClean Spray may not be delivered together with the control unit and must be ordered separately. It can be ordered in every Service Center worldwide.</i>	1

* PU: Packaging unit

Spare parts

Ref.	Description	PU *
5136	Spare Seal Unit	1
5167	Roof shaped seal for all diameters of Cutting Tubes	10
5166	Membrane Seal for all diameters of Cutting Tubes	10
5177	Gaskets for Trocar Sleeve for instruments Ø 12 mm and 15 mm	10
5180	O-Ring for Trocar Sleeves Ø 12 mm and 15 mm	10

* PU: Packaging unit