

**SURGICAL ASPIRATOR  
FOR THE OPERATING THEATRE  
MEDAP-TWISTA SP 1070**





## SILENT SURGICAL ASPIRATOR FOR MORE PERFORMANCE IN THE OPERATING THEATRE TWISTA SP 1070



**Perfect performance:** Modern surgery poses high demands on personnel and equipment – flexible application, optimized workflow, cost efficiency. This also applies to the TWISTA SP 1070. The particularly silent, powerful surgical aspirator ideally fulfils all the specific

requirements in the operating theatre. With a performance of 58 litres freeflow / minute, a high vacuum range of up to -90 kPa and a flexible overflow protection system, this compact aspirator on trolley is also the product of first choice economically.



*High freeflow, quiet running,  
economical overflow protection  
system: The TWISTA SP 1070  
surgical aspirator provides lastingly  
powerful flow rate in the operating  
theatre.*

## UNOBTRUSIVELY QUIET – STRIKINGLY POWERFUL AND FLEXIBLE TWISTA SP 1070



**Perfect solution for the surgical aspiration:** With a freeflow of 58 litres / minute at a maximum vacuum of -90 kPa, the TWISTA SP 1070 is a surgical aspirator with exceptionally high performance, especially designed for the reliable continuous operation in the operating theatre. This is how the TWISTA SP 1070 enables you to remove large quantities of septic fluid, blood and serous liquids – including the particles therein – fast and over a long period of time from natural and artificial body orifices.

**Silent Power:** The low operational sound levels of the suction unit based on an innovative noise insulation and the compact, space-saving design for a flexible workflow alone show that the TWISTA SP 1070 is the ideal partner for every operating theatre. Other crucial and positive features are the ergonomic modern design for fast and simple operation as well as excellent levels of hygiene attainable.

**Long-term safe investment and cost reduction.** An innovative, modular overflow protection system not only provides the TWISTA SP 1070 with reliable protection against oversuction, but saves costs, too. The same applies to the broad range of possible application-specific accessories and the maintenance-friendly, durable construction.

### **Ideal for every operating theatre:**

- 58 litres freeflow / minute at max. vacuum of -90 kPa
- Low operational sound levels
- Practice-oriented application sets
- Ergonomic design
- Best level of hygiene attainable

### **Ergonomic On / Off switch:**

- Easy to operate
- Hygienic film key pads

### **Functional membrane valve (vacuum controller):**

- Precisely adjustable
- Ideal for any application in the OR area

### **Large vacuum gauge:**

- Easily read
- Optimal work height

### **Anti-static twin castors with four brakes:**

- Smooth running and 360-degree rotation
- Maximum transportation comfort
- Quick positioning
- Full stability even with maximum fitting

### **Pneumatic foot switch:**

- Secures energy-saving stand-by mode
- Comfortable operation

### **Modular overflow protection system:**

- Optional single or double protection against oversuction
- Flexible deployment for any application in the operating theatre

### **Economic drive unit:**

- Exceptionally high powered
- Innovative noise insulation
- Especially suited for continuous operation
- Long-life drive unit
- Maintenance only after 3,000 hours

## GREATEST POSSIBLE FLEXIBILITY MODULAR OVERFLOW PROTECTION SYSTEM

**A new dimension:** For the application-specific use of the TWISTA SP 1070, ATMOS developed a new, modular overflow protection system. This has the advantage that every hospital decides individually which type of overflow protection is the most economical solution for it.

**Law on overflow protection:** Medical suction equipment may only be used with an overflow protection device. If a septic fluid jar with overflow protection device is used, ATMOS urgently recommend to use a second filter – in ideal circumstances it is a hydrophobic bacterial and viral filter. It provides almost 100% protection and thus ensures maximum protection against oversuction.

**Modular overflow protection system:** The modular overflow protection system is innovative, utility-oriented and cost-saving and very effectively protects the TWISTA SP 1070 against oversuction on two levels:

The lower part of the overflow protection system has a mechanical overflow protection to offer an effective first level of protection.

In addition to this, the upper part of the overflow protection system has a chamber for the high-performance hydrophobic bacterial and viral filter. This means even more safety and also enables quick filter replacements even during the OR operation.

All of the components of the overflow protection system are part of an economical re-usable system and can be autoclaved at 134 °C. A precondition of this is, however, that the autoclavable hydrophobic bacterial and viral filter is not heavily soiled.



*Overflow protection system with mechanical overflow protection in the lower part and chamber for hydrophobic bacterial and viral filter in the upper part of the overflow protection system*



*Overflow protection system with hydrophobic bacterial and viral filter*



*TWISTA SP 1070 with double overflow protection: Mechanical overflow protection and hydrophobic bacterial and viral filter*



*TWISTA SP 1070 with mechanical overflow protection system*



*TWISTA SP 1070 basic version: Disposable suction liner with integrated hydrophobic filter for overflow protection*

### **Three overflow protection versions for more**

**flexibility:** With a total of three overflow protection versions, the modular overflow protection system provides the flexibility necessary to meet the wide range of individual requirements in the operating theatre.

#### **Overflow protection version 1 – for hospitals using septic fluid jars without overflow protection device:**

- TWISTA SP 1070 basic version
- Overflow protection system with mechanical overflow protection and chamber for hydrophobic bacterial and viral filter
- Hydrophobic bacterial and viral filter for overflow protection

#### **Overflow protection version 2 – for hospitals using septic fluid jars with mechanical overflow protection:**

- TWISTA SP 1070 basic version
- Overflow protection system with mechanical overflow protection
- For additional security the hydrophobic bacterial and viral filter can be inserted into the chamber in the upper part of the overflow protection system

#### **Overflow protection version 3 – for hospitals using septic fluid jars with hydrophobic overflow protection:**

- TWISTA SP 1070 basic version
- This configuration does not require an additional overflow protection system

#### **The TWISTA SP 1070 consists of:**

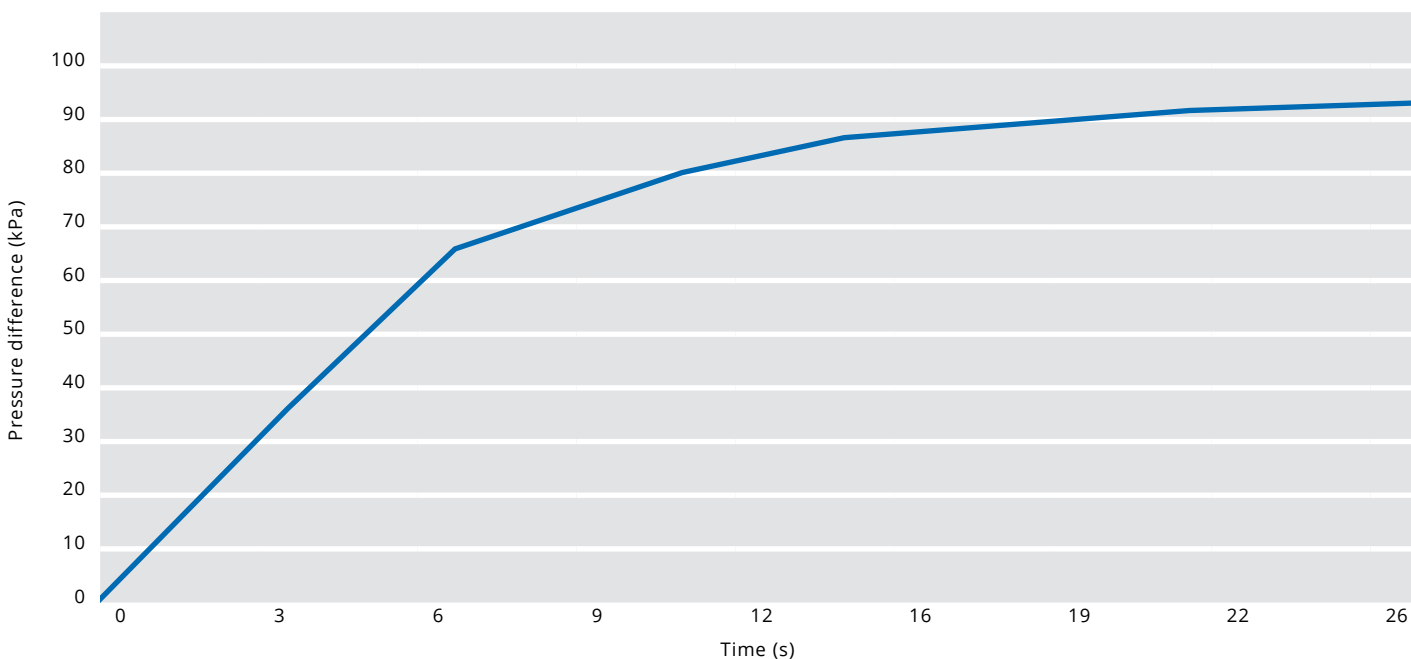
- TWISTA SP 1070 basic version without overflow protection device – with vacuum gauge, vacuum controller and bacterial filter. Here, the tube silicone is directly connected to the tube adapter
- Optional overflow protection system
- Application sets surgical aspiration

## INNOVATIVE TECHNOLOGY GUARANTEES HIGHEST QUALITY ECONOMICAL DOWN TO THE SMALLEST DETAIL



**Quality reduces operating costs:** Like all ATMOS products, the TWISTA SP 1070 is distinguished by excellent workmanship, the use of high-quality materials and individual components, and a long life. The almost maintenance-free unit requires an initial, brief inspection after 3,000 hours of operation only. Maintenance work takes no more than one hour. This means: The TWISTA SP 1070 guarantees maximum performance – e.g. the vacuum is generated within a very short time – and minimum follow-up costs.

*Maintenance-friendly,  
smooth running drive unit*



*Vacuum generation: TWISTA SP 1070 with 3.0 l septic fluid jar  
and mechanical overflow protection*



**Simple cleaning and disinfection of the unit:** All of the accessories which come into contact with septic fluid can be autoclaved at 134 °C. The form and surface finish of the TWISTA SP 1070 support rapid and thorough disinfection of the outer casing with all common disinfection agents.

**Focus on electrical safety:** In order to ensure that electrical energy only flows where it is supposed to, the TWISTA SP 1070 has a connection for equipotential bonding – to protect the patients against overvoltage. This is an important criterion, for example, for use in heart surgery. Further accessories such as plastic cap plugs enhance protection against electrical leaks.



*The side view shows the handle which is accessible from all sides, the ergonomic vacuum controller and the equipment rail with cable holder.*

**Integration made easy:** As the TWISTA SP 1070 is equipped with standardized DIN equipment rails at the front, reusable septic fluid jars and disposable systems of various manufacturers with different capacities and shapes can quickly and safely be attached or replaced – in no time at all.



*DIN equipment rail for attaching septic fluid jars*

**Double protection against contamination:** In addition to the hydrophobic bacterial and viral filter for overflow protection, which is located at the entry of the surgical aspirator, the TWISTA SP 1070 is equipped with a high-performance bacterial filter at the air outlet and thus with double highly efficient protection against contamination. The innovative combination of the two filter systems avoids that bacteria and viruses enter OR air, particularly in critical situations. This guarantees the highest level of safety for patient and OR staff.



*Bacterial filter at the air outlet*

## TWISTA SP 1070 APPLICATION SETS SURGICAL ASPIRATION

**Application-specific suction solutions:** The TWISTA SP 1070 can only be used as a surgical aspirator when combined with the corresponding application set. Alongside the application sets listed here, other combinations are also possible as required. These are made up of the individual accessories (see table).

### AS Surgical aspiration 2 x 4 l PSU – reusable

(Art.-No. 5752 5664):

- 2 x Septic fluid jar 4 l PSU with equipment mount
- 2 x Septic fluid jar cap 1,75 / 4 l PSU with integrated overflow protection
- 2 x Rail clamp for equipment mount / plastic
- Tube silicone 6 x 12 mm, length 1 m



AS Surgical aspiration: 2 x 4 l PSU / reusable (Art.-No. 5752 5664)

### AS Surgical aspiration 2 x 3 litres – reusable

(Art.-No. 5752 2068):

- 2 x Septic fluid jar cap for equipment rails, without overflow protection
- 2 x Septic fluid jar 3 l PSU
- Cap plug surgery 9/12 plastic
- Tube silicone 6 x 12 mm, length 1 m



AS Surgical aspiration: 2 x 3 l / reusable (Art.-No. 5752 2068)

### AS Surgical aspiration 2 x 3 litres – disposable Serres

(Art.-No. 5752 4940):

- 2 x Serres outer container 3 l
- Vacuum silicone tube 175 mm to be connected in series with T-adaptor, autoclavable
- Tube 287 mm to be connected in series with blue joint
- 2 x Rail clamp for equipment mount / metal
- Tube silicone 6 x 12 mm, length 1 m



AS Surgical aspiration: 2 x 3 l / disposable / Serres (Art.-No. 5752 4940)

### COMPLETE LIST OF ALL AVAILABLE AS SURGICAL ASPIRATION REUSABLE / DISPOSABLE

	Size of septic fluid jar	Material / Manufacturer	Art.-No.
Disposable	2 x 3 l	Serres	5752 4940
Reusable	2 x 3 l	PSU	5752 2068
	2 x 4 l	PSU	5752 5664
	2 x 4 l	PC	5752 5665
	2 x 5 l	Glass	5752 2067



Vacuum shift (for shifting vacuum between two septic fluid jars) (Art.-No. 5752 2049)

## MODULAR SYSTEM ENSURES ECONOMIC EFFICIENCY

### TECHNICAL SPECIFICATIONS AND ACCESSORIES

#### TECHNICAL SPECIFICATIONS

	TWISTA SP 1070 Art.-No. 5752 1554	TWISTA SP 1070 Art.-No. 5752 1559
Flow rate	58 +/- 6 l / min at 50 Hz 68 +/- 7 l / min at 60 Hz	68 +/- 7 l / min at 60 Hz
Vacuum	-90 kPa at sea level	-90 kPa at sea level
Voltage	230 V AC	127 V AC
Frequency	50-60 Hz	60 Hz
Input current	1.1 A	1.6 A
Operating mode	continuous operation	continuous operation
Fuses	T 1.6 AH / 250 V	T 2.5 AH / 250 V
Dimensions L x W x H in mm	560 x 500 x 1,000	560 x 500 x 1,000
Weight	approx. 26 kg	approx. 26 kg

Product versions	Art.-No.
TWISTA SP 1070 Basic equipment, 230 V / 50-60 Hz	5752 1554
TWISTA SP 1070 Basic equipment, 127 V / 60 Hz	5752 1559
TWISTA SP 1070 Complete unit / 2 x 3 l / PSU / 230 V / 50-60 Hz	5752 4855
TWISTA SP 1070 Complete unit / 2 x 4 l / PSU / 230 V / 50-60 Hz	5752 4671
TWISTA SP 1070 Complete unit / 2 x 4 l / PC / 230 V / 50-60 Hz	5752 4672

Recommended accessories	Art.-No.
Mechanical overflow protection device with chamber for hydrophobic bacterial and viral filter	5752 1775
Hydrophobic bacterial and viral filter for overflow protection device	5752 1783
Equipotential bonding cable	5750 3474

Consumption material	Art.-No.
Hydrophobic bacterial filter paper (100 pieces)	5750 5045
Tube silicone 6 x 12 mm, length 1 m	5750 5467
Tube silicone 8 x 14 mm, length 1 m	5750 5483

Application sets for TWISTA SP 1070	Art.-No.
AS Surgical aspiration 2 x 3 l / PSU	5752 2068
AS Surgical aspiration 2 x 4 l / PSU	5752 2664
AS Surgical aspiration 2 x 4 l / PC	5752 5665
AS Surgical aspiration 2 x 5 l / Glass	5752 2067
AS Surgical aspiration 2 x 3 l / Serres	5752 4940

Further accessories	Art.-No.
Septic fluid glass jar 5 l	5750 5228
Septic fluid glass jar 2.5 l	5750 5227
Septic fluid jar 4 l PSU with equipment mount	5752 5656
Septic fluid jar 4 l PC with equipment mount	5752 5658
Septic fluid jar 3 l PSU	5750 5297
Septic fluid jar cap (for equipment rails, without overflow protection device)	5750 0390
Septic fluid jar cap (with integrated overflow protection device)	5750 5296
Septic fluid jar cap 1,75 / 4 l PSU (with integrated overflow protection device)	5752 5655
Septic fluid jar cap 1,75 / 4 l PC (with integrated overflow protection device)	5752 5657
Cap plug surgery 9/12 plastic	5752 0184
Cap plug surgery 9/12 (chrome-plated)	5750 0396
Serres outer container 3 l	5752 2045
Serres outer container 2 l	5752 2044
Serres disposable suction liner 3 l (24 pieces)	5752 4935
Serres disposable suction liner 2 l (24 pieces)	5752 4936
Tube 287 mm to be connected in series with blue joint	5752 2085
Vacuum silicone tube 175 mm to be connected in series with T-adaptor, autoclavable	5752 2084
Vacuum shift	5752 2049
Rail clamp for equipment mount / metal	5752 2048
Rail clamp for equipment mount / plastic	5752 2540



■ **Manufacturer:**

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