Trocar Systems
Complete and efficient
Quality workmanship:

PAJUNK® Trocar systems – for all applications of surgical interventions:

Requirements for a trocar system vary greatly. The type and length of the respective surgical procedure has a substantial influence as does the preference of the surgeon in selecting the best method of surgery. PAJUNK® has therefore developed two trocar systems – TrocaPort and TrocaTec – which can be utilized in all sizes and for all applications of surgical interventions:

- for laparoscopy
  - in general surgery
  - in gynecology
  - in urology
- for the "Hasson-Technique" (open laparoscopy)
- for total extraperitoneal hernioplasty
  (see brochure “Balloon Systems”)

**TrocaPort:**

The simple-to-clean and reusable TrocaPort silicone valve is one of the core elements of the PAJUNK® trocar system. Its most prominent feature is its lightweight and it can be used as a disposable or a reusable valve insert.

Its new patented construction prevents the instruments from getting caught in the silicone valve and damaging it during introduction or extraction. Furthermore, the frictional resistance is extremely low when instruments are passed through.

**Disposable or Reusable?**

Your choice between disposable or reusable may depend on your sterilization facilities among other factors. The reusable valve is easy to dismantle and clean – but it must be autoclaved after cleaning. Many surgeons prefer to use the lightweight disposable valves.

With the quick-lock closure (just 1.5 turns) between valve insert and valve housing, the instrument is immediately ready for use. It is instantly leak-proof especially at high pressure.
TrocaTec:

Both systems have a modular structure, and they can be combined with a wide variety of accessories. The ergonomically designed valve housings are user friendly and they ensure a precise and tireless operation.

The TrocaTec trocar system is available in two versions: when equipped with push-button, the trap door valve insert of this trocar system may be operated in manual and in automatic mode, without the push-button, only automatic operation is possible. The trap door lid is rounded off and polished. It therefore guarantees a minimal contact surface between the instrument and the lid, as well as extremely low frictional resistance.

The easy-to-operate short-stroke push-button of this new development can be activated at a right angle from the instrument axis. The risk of moving position at the puncture site during the intervention is reduced to a minimum. With the quick-lock closure (1.5 turns) between the trap door valve insert and the valve housing the instrument is immediately ready for use. It can be easily and quickly dismantled for cleaning purposes.

TrocaPort with silicone valve insert is available in the inexpensive disposable version and also in the reusable version. TrocaTec is available with a purely automatic trap door valve insert or with a manually and automatically activated trap door valve insert.
The shielded trocar has been designed to avoid injuries in the abdomen due to its automatic self-locking shielding device at the cutting tip. When it is activated the protective shield of the cutting tip will release the trocar tip whilst puncturing the abdominal wall. As soon as the trocar tip has passed the abdominal wall it is immediately covered again safely. The shield of the cutting tip locks itself in place thus avoiding possible injuries. The cutting edges of the trocar are rounded off in the lateral area which gives a dilating effect that guarantees a minimal puncture wound.

Guide tubes

Our trocar sleeves are supplied with a standard guide tube. Alternatively, guide tubes with fixation threads and a disposable ring-anchor balloon system are also available for optimal anchoring of the trocar sleeve in the abdominal wall.
Accessories

Hasson cone
This fixable sliding cone is used in open laparoscopy, and can be slipped onto all reusable modular trocar sleeves with standard guide tubes and locked in position there. It is manufactured of high-grade stainless steel and is also available with a smooth surface or with a fixation thread. It is equipped with two self-clamping suture points and can be easily dismantled.

TrocaStop
TrocaStops are used for the uncomplicated and safe anchoring of the trocar sleeves in the abdominal wall. For this purpose the TrocaStop is slid onto the standard guide tube and locked in position using a knurled thumb screw.

Reduction adapters
The modular trocar system offers a variety of options for simple and efficient diameter reduction. With the aid of these reducing systems, instruments with a smaller diameter than that of the trocar sleeve can be introduced through the trocar sleeve without loss of pressure.

Reducer sleeve, short
When using the short reducer sleeve, instruments with a smaller diameter can be used without loss of pressure. Advantage: The functioning of the valve remains unimpaired.

Reducer sleeve, long
With the long reducer sleeve, the valve is kept open. Also, instruments with a smaller diameter can be utilized without obstruction, or, for example, a folded mesh can be introduced into the abdomen.

The reducing adapter is placed on top of the introductory part of the trocar sleeve where it is inserted into the sealing cap when needed.
Without restrictions:  
The Systems in Summary

**TrocaPort**

TrocaPort – modular trocar sleeve with silicone valve  
The integrated silicone valve and the guide tube can be replaced.  
Ergonomic valve housing and quick-lock. Easy to clean, lightweight, maintenance-free stop cock for gas insufflation.

<table>
<thead>
<tr>
<th>Size</th>
<th>Order no.</th>
<th>Order no.</th>
</tr>
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<tbody>
<tr>
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<tr>
<td>Ø 12,5 mm</td>
<td>1287-21-12</td>
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</table>

Disposable valve top with reducing system for TrocaPort-System  
for modular reusable TrocaPort-trocar sleeves no. 1287-21.xx.  
The system allows gastight introduction of instruments with a smaller shaft diameter simply by applying the reducing adapter. Packed individually, sterile.  
5 pieces per pack

Disposable valve insert for TrocaPort-System.

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<tbody>
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Trocar sleeves without valve top for TrocaPort-System  
With lateral stop cock and replaceable guide tube (smooth surface or fixation thread) for combination with TrocaPort disposable valve top no. 1287-63.xx and 1287-64.xx  
1 piece per pack

Seal assortment for TrocaPort-trocar sleeves with silicone valve, 4-part, 10 pieces per pack

<table>
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**TrocaTec**

TrocaTec – modular trocar sleeve with manual and automatic trap door valve operation  
With short- stroke push-button for manual trap door application, ergonomic valve housing, easy to clean, lightweight, quick-lock, maintenance-free stop cock for gas insufflation.

<table>
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Disposable valve top with reducing system for TrocaTec-System

Seal assortment for TrocaTec-trocar sleeves with trap door valve, 3-part, 10 pieces per pack

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Guide tubes

**Standard guide tube**
Metal guide tube (smooth) for modular trocar sleeves

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**Guide tube**
Metal guide tube with fixation thread for modular trocar sleeves

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**Ring-anchor balloon system**
Sterile disposable set for open laparoscopy with ring-anchor balloon and instrument channel, Ø 11 mm. Usable with all standard and shielded trocars and obturators 5 pieces per pack

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**Standard trocar with pyramidal tip**
Reusable, cutting

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**Standard trocar with conical tip**
Reusable, atraumatic

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**“Hasson” Obturator**
Reusable standard obturator, blunt with ball tip (open laparoscopy)

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**Shielded trocar**
Reusable, cutting, with self-locking shielding of the cutting tip

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**Accessories**

**TrocaStop**
Screw-in limiting stop with fixation thread for modular trocar sleeves

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**Hasson cone**
Fixable sliding cone for open laparoscopy, can be slipped onto all reusable modular trocar sleeves. Made of high-grade stainless steel, able to be dismantled

<table>
<thead>
<tr>
<th>Cone with:</th>
<th>Size</th>
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**Reducing adapter**

<table>
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</table>
PAJUNK® offers a comprehensive balloon system, adapted for utilization in extraperitoneal surgery. Please ask for our brochure “Balloon Systems”.

Eco Balloon Systems
The combined disposable and reusable system for maximum profitability