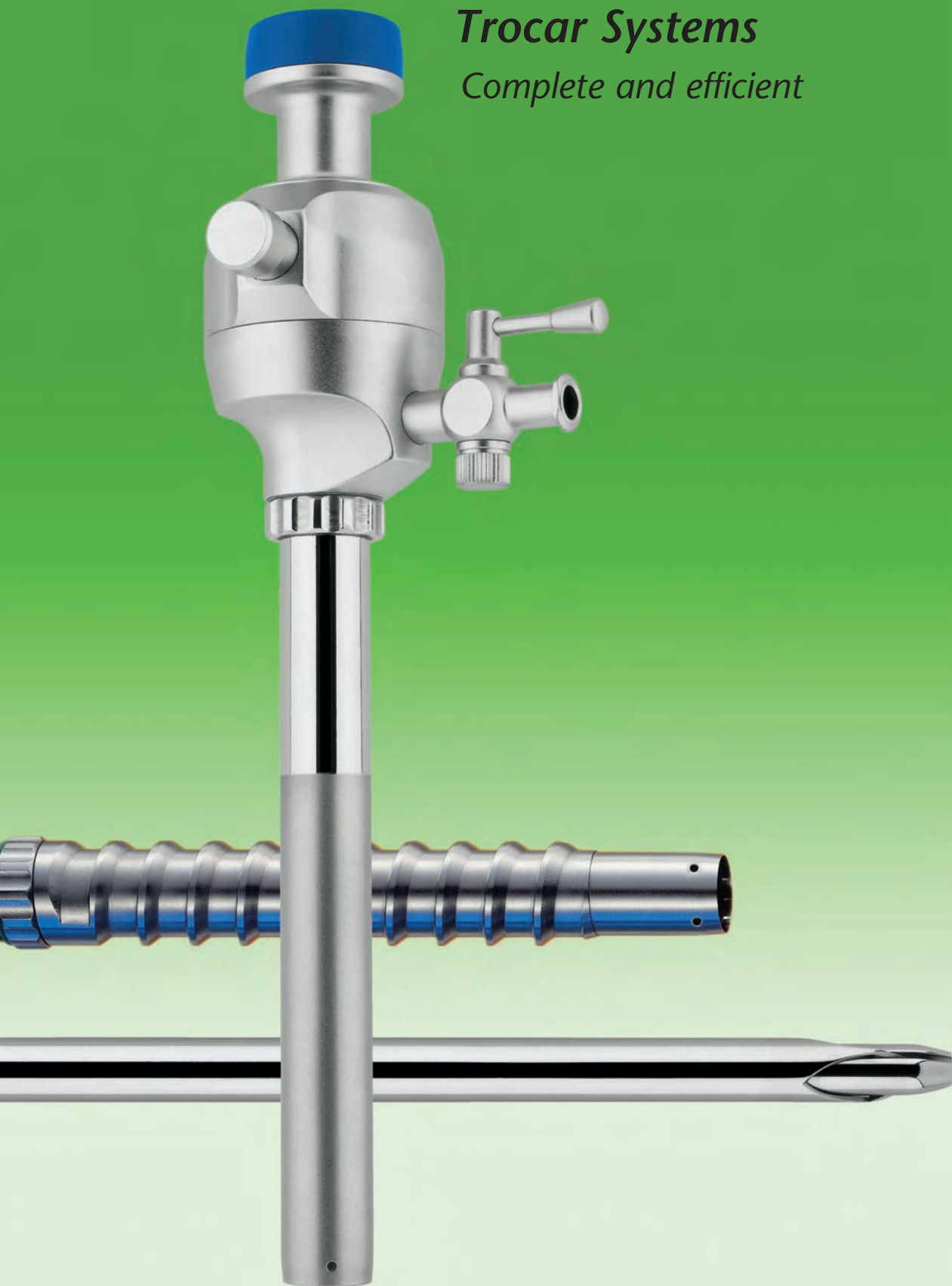


PAJUNK®

Trocar Systems
Complete and efficient



Trocar systems

Quality workmanship:

PAJUNK® Trocar systems –

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 silicone valve

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 light weight 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.

TrocaPort:



Disposable valve insert



Reusable valve insert



Disposable valve insert with reducing system

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.

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.

– for all Applications

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.

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** auto-matically activated trap door valve insert.



TrocaTec:



TrocaTec – modular trocar sleeve with manual and automatic trap door valve operation



TrocaTec – modular trocar sleeve with automatic trap door valve

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.



Modular and versatile:

Everything Needed for Laparoscopy

Trocars and Obturators

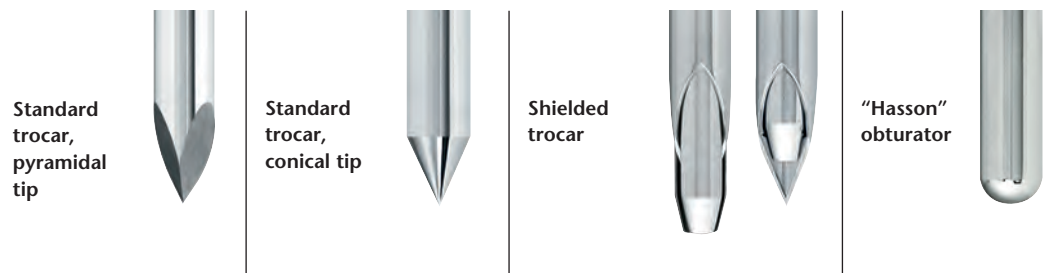


Shielded trocar

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



Standard guide tube



Guide tube with fixation thread



Ring-anchor balloon system for open laparoscopy

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.



Cone with smooth surface



Cone with fixation thread



TrocaStop

TrocaStop

TrocaStops are used for the uncomplicated and safe anchoring of the trocar sleeves in the abdominal wall.

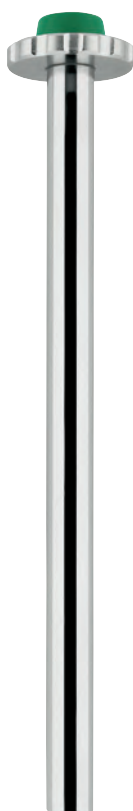
For this purpose the TrocaStop is slid onto the standard guide tube and locked in position using a knurled thumb screw.

Reducing 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, light-weight, maintenance-free stop cock for gas insufflation.

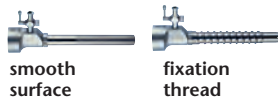


with stop cock without stop cock

Size	Order no.	Order no.
Ø 3 mm	1287-21-03	1287-21-03N
Ø 5,5 mm	1287-21-55	1287-21-55N
Ø 11 mm	1287-21-11	
Ø 12,5 mm	1287-21-12	

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



smooth surface fixation thread

Size	Order no.	Order no.
Ø 5,5 mm	1287-19-55	1287-19-55T
Ø 11 mm	1287-19-11	1287-19-11T

Disposable valve insert for TrocaPort-System.



Size	Order no.
Ø 5,5 mm	1287-63-55
Ø 11 mm	1287-63-11



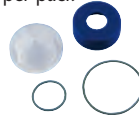
Size	Order no.
Ø 11/5,5 mm	1287-64-11

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

Seal assortment

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



Size	Order no.
Ø 3 mm	1287-28-03
Ø 5,5 mm	1287-28-55
Ø 11 mm	1287-28-11

Silicone valve insert

for TrocaPort-trocar sleeves
10 pieces per pack



Size	Order no.
Ø 3-5,5 mm	1287-27-55
Ø 10-12,5 mm	1287-27-11

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.



with stop cock without stop cock

Size	Order no.	Order no.
Ø 3 mm	1287-13-03	1287-13-03N
Ø 5,5 mm	1287-13-55	1287-13-55N
Ø 11 mm	1287-13-11	
Ø 12,5 mm	1287-13-12	

Sealing insert

for TrocaTec-trocar sleeves with trap door valve
10 pieces per pack



Size	Order no.
Ø 3 mm	1287-24-03
Ø 5,5 mm	1287-24-55
Ø 11 mm	1287-24-11
Ø 12,5 mm	1287-24-12

Silicone sealing caps

for all modular trocar sleeves, also for TrocaTec and TrocaPort
10 pieces per pack



Size	Order no.	Color
Ø 3 mm	1287-29-03	white
Ø 5,5 mm	1287-29-55	green
Ø 11 mm	1287-29-11	blue
Ø 12,5 mm	1287-29-12	red

TrocaTec – modular trocar sleeve with automatic trap door valve

Ergonomic valve housing, easy to clean, lightweight, quick-lock, maintenance-free stop cock for gas insufflation



with stop cock without stop cock

Size	Order no.	Order no.
Ø 3 mm	1287-26-03	1287-26-03N
Ø 5,5 mm	1287-26-55	1287-26-55N
Ø 11 mm	1287-26-11	
Ø 12,5 mm	1287-26-12	

Seal assortment

for TrocaTec-trocar sleeves with trap door valve; 5-part., 10 pieces per pack



Size	Order no.
Ø 3 mm	1287-20-03
Ø 5,5 mm	1287-20-55
Ø 11 mm	1287-20-11
Ø 12,5 mm	1287-20-12

Guide tubes

Standard guide tube

Metal guide tube (smooth) for modular trocar sleeves



Size	Order no.
Ø 3 mm	1287-16-03
Ø 5,5 mm	1287-16-55
Ø 11 mm	1287-16-11
Ø 12,5 mm	1287-16-12

Guide tube

Metal guide tube with fixation thread for modular trocar sleeves



Size	Order no.
Ø 5,5 mm	1287-15-55
Ø 11 mm	1287-15-11
Ø 12,5 mm	1287-15-12

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



Size	Order no.
Ø 11 mm	1285-40-11S

Standard trocar with pyramidal tip

reusable, cutting



Size	Order no.
Ø 3 mm	1287-92-03
Ø 5,5 mm	1287-92-55
Ø 11 mm	1287-92-11
Ø 12,5 mm	1287-92-12

Standard trocar with conical tip

reusable, atraumatic



Size	Order no.
Ø 3 mm	1287-93-03
Ø 5,5 mm	1287-93-55
Ø 11 mm	1287-93-11
Ø 12,5 mm	1287-93-12

"Hasson" Obturator

reusable standard obturator, blunt with ball tip (open lapa-roscopy)



Size	Order no.
Ø 5,5 mm	1287-94-55
Ø 11 mm	1287-94-11
Ø 12,5 mm	1287-94-12

Shielded trocar

reusable, cutting, with self-locking shielding of the cutting tip



Size	Order no.
Ø 3 mm	1287-90-03
Ø 5,5 mm	1287-90-55
Ø 11 mm	1287-90-11
Ø 12,5 mm	1287-90-12

Accessories

TrocaStop

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



Size	Order no.
Ø 5,5 mm	1287-82-55
Ø 11 mm	1287-82-11
Ø 12,5 mm	1287-82-12

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

Cone with:

smooth surface



fixation thread



Size	Order no.	Order no.
Ø 11 mm	1287-43-11	1287-43-11T
Ø 12,5 mm	1287-43-12	1287-43-12T



Reducing adapter

Size	Order no.
Ø 11/5,5 mm	1287-81-11
Ø 12,5/5,5 mm	1287-81-12



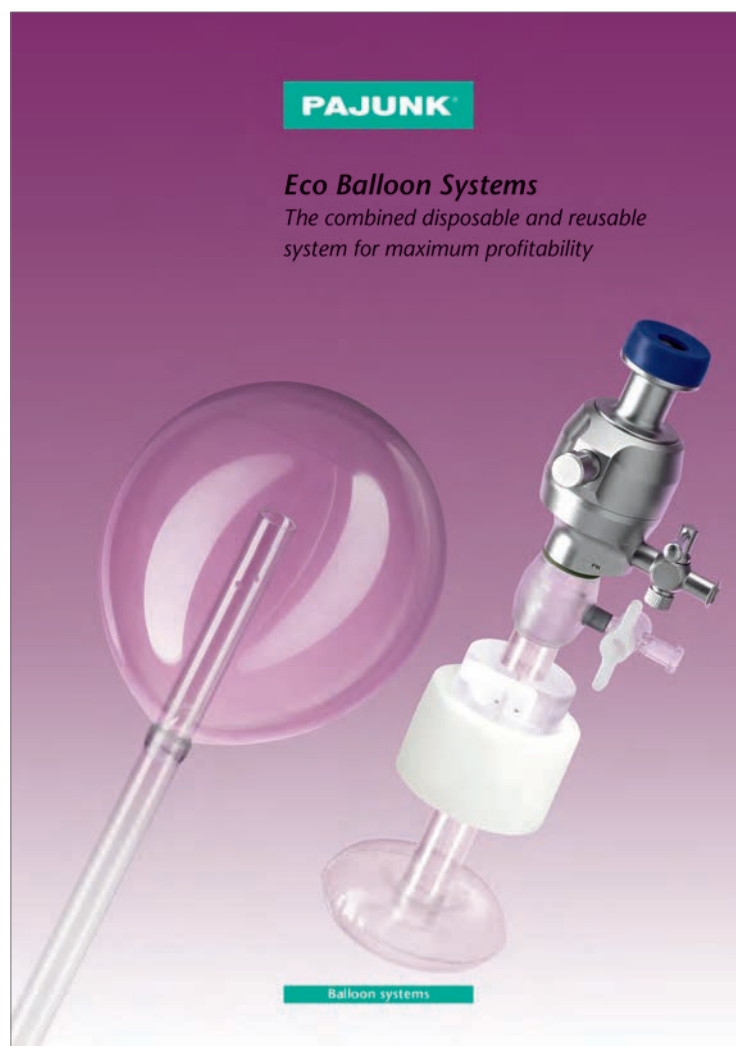
Reducer sleeve, long



Reducer sleeve, short

Size	Order no.	Order no.
Ø 11/5,5 mm	1287-85-11	1287-85-11S
Ø 12,5/5,5 mm	1287-85-12	1287-85-12S
Ø 12,5/10 mm	1287-85-22	1287-85-22S
Ø 12,5/11 mm	1287-85-23	1287-85-23S

PAJUNK® offers a comprehensive balloon system, adapted for utilization in extraperitoneal surgery. Please ask for our brochure "Balloon Systems".



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