

**PAJUNK®**

## *Trocar Systems*

*Modular and flexible  
for maximum efficiency*



**Minimally invasive surgery**

MADE IN GERMANY

# Always the ideal execution

## PAJUNK® Trocar Systems

The requirements on trocar systems are very different. A significant influence has type and nature of the particular surgery. But also the preferences of the surgeon are decisive criteria in selecting the operational method. Therefore, PAJUNK® developed two trocar systems – TrocaTec and TrocaPort – that are universally applicable for all size- and method categories:

- Laparoscopy (general surgery, gynaecology, urology)
- Hasson technique (open laparoscopy)
- totally extraperitoneal hernioplasty

Both systems have a modular structure and can be combined with different accessories. The ergonomic valve bodies are designed in a handy shape and ensure a precise and fatigue-free working.

- ➔ Modular system
- ➔ Disposable components delivered sterile and ready for immediate use
- ➔ High efficiency because of the modularity and flexibility
- ➔ Wear parts – for example silicone valves – are easy to replace
- ➔ Manually and automatically operable reusable trap-door valve
- ➔ Suitable sizes also for bariatrics and paediatrics

### TrocaPort – disposable or reusable versions

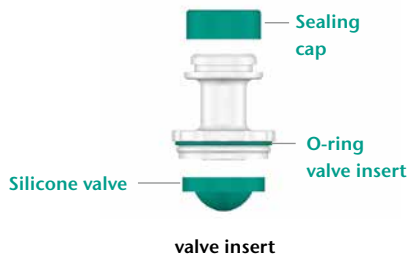
The reusable valve can be quickly disassembled for easy cleaning and therefore it is ideally suited for the autoclaving process. If necessary sterile disposable valves can also be used. A very popular choice because of their little weight.



## Trocar valves

Available working channels: Ø 12.5 mm  Ø 11 mm  Ø 5.5 mm\*  Ø 3 mm\* 

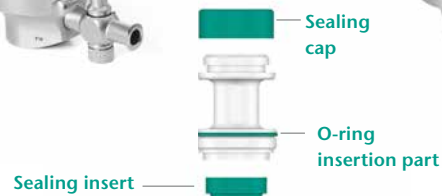
### TrocaPort with exchangeable TrocaPort silicone valve



### TrocaTec MAN with manually or automati- cally actuated trap-door valve



manually and  
automatically



trap-door valve insert

### TrocaTec AUTO with automatic trap-door valve



automatically

\* 3 mm und 5.5 mm valves optionally with or without maintenance-free stop-cock for gas insufflation

## TrocaTec

TrocaTec is available in two reusable versions: with button, the trap-door valve insert is manually and automatically, then again without button only automatically operable. The flap lid is rounded off and polished. Therefore it guarantees a minimal contact area at the instrument as well as an extremely low gliding resistance.

### TrocaTec MAN



Smooth-running shortstroke key  
is operated right-angled to the  
instrument axis.  
➔ Minimum risk of a positional  
change of the patient.

### TrocaTec AUTO



## Modular and versatile

# Everything necessary for laparoscopy

*With its automatic, self-locking cutting-edge protection, the shielded trocar reduces abdomen injuries. If activated, the cutting-edge protection uncovers the trocar tip only when piercing the abdominal wall. As soon as the trocar tip has passed the abdominal wall, it is immediately covered again and at the same time, the cutting-edge protection is locked. The trocar cutting-edges are rounded in the lateral area, which favours a dilating effect and at the same time only results in a minimal puncture lesion.*

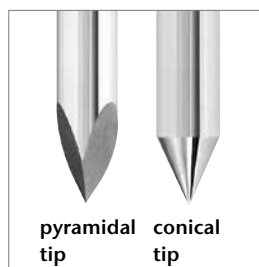
### Trocars and obturators



TrocaPort with shielded trocar



shielded trocar



pyramidal tip  
conical tip

standard trocar



"Hasson" obturator

### Guide tubes

The trocar sleeves are delivered with a guide tube, which is available with smooth surface, or alternatively – for a better anchorage of the trocar sleeve in the abdominal wall – with fixation thread or with a disposable ring-anchor balloon system.



guide tube with smooth surface



guide tube with fixation thread



ring-anchor balloon system for open laparoscopy

## Accessory

### Diameter reduction

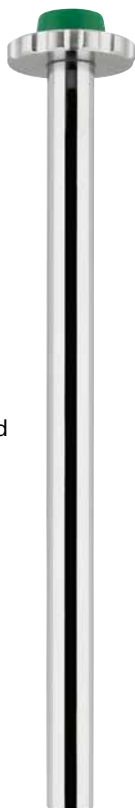
The modular trocar system offers various possibilities for easy and efficient diameter reduction. Via these reduction systems, instruments with a smaller diameter than the trocar sleeve can be used without pressure loss.

#### Reducer sleeve short and long

Enables the use of a smaller instrument diameter. The short version leaves the function of the valve unimpaired. The long version keeps the valve open, therefore i.e. a folded mesh can be introduced into the abdomen.



short version

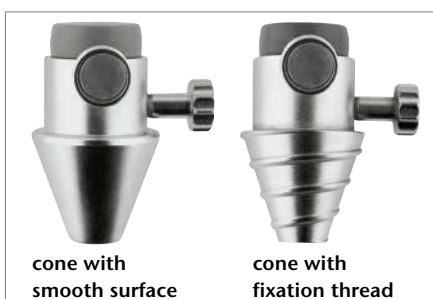


long version



#### Reducing adapter

Is put on the insertion part of the trocar sleeve, and – if needed – plugged in the sealing cap.



cone with  
smooth surface

cone with  
fixation thread

### Hasson cone

The fixable sliding cone is used in the open laparoscopy. It can be slid over all reusable, modular trocar sleeves with standard guide tube and be fixed at any position. The Hasson cone is made of stainless steel, demountable, has two self-locking string holder and is available with smooth surface or alternatively with fixation thread.



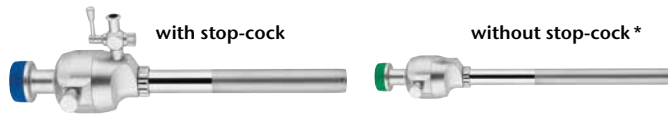
### TrocaStop

For anchoring the trocar sleeve in the abdominal wall, screw-in stops are used. For this purpose, the TrocaStop is slid on the standard guide tube and fixed with a clamp screw.

# Trocar systems



## All at a glance

### TrocaTec

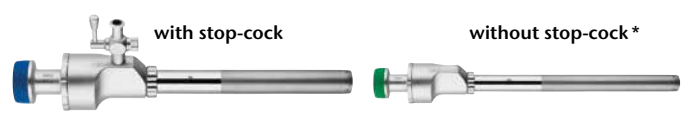


Working length:  
B=Bariatric (150 mm), S=Standard (100 mm), P=Paediatric (80 mm)

### TrocaTec MAN

						
	smooth surface	fixation thread		150 mm	100 mm	80 mm
Size	Item no.	Item no.	PU	B	S	P
Ø 3 mm	1287-13-03		1		•	
	1287-13-03N*		1		•	
Ø 5.5 mm	1287-13-55	1287-13-55T	1		•	
	1287-13-55N*		1		•	
		1287-13-55NT*	1		•	
	1287-13-55S		1			•
Ø 11 mm	1287-13-55B	1287-13-55TB	1	•		
	1287-13-11	1287-13-11T	1		•	
		1287-13-11TB	1	•		
			1		•	
Ø 12.5 mm	1287-13-12	1287-13-12T	1		•	
	1287-13-12B	1287-13-12TB	1	•		



### TrocaPort



Working length:  
B=Bariatric (150 mm), S=Standard (100 mm), P=Paediatric (80 mm)



### TrocaPort

Modular trocar sleeve with silicone valve

						
	smooth surface	fixation thread		150 mm	100 mm	80 mm
Size	Item no.	Item no.	PU	B	S	P
Ø 3 mm	1287-21-03		1		•	
	1287-21-03N*		1		•	
Ø 5.5 mm		1287-21-03S	1			•
	1287-21-55	1287-21-55T	1		•	
	1287-21-55N*	1287-21-55NT*	1		•	
	1287-21-55S		1			•
Ø 11 mm	1287-21-55B	1287-21-55TB	1	•		
	1287-21-11	1287-21-11T	1		•	
		1287-21-11TB	1	•		
			1		•	
Ø 12.5 mm	1287-21-12	1287-21-12T	1		•	
	1287-21-12B	1287-21-12TB	1	•		



### TrocaTec AUTO

Modular trocar sleeve with automatic trap-door valve

						
	smooth surface	fixation thread		150 mm	100 mm	80 mm
Size	Item no.	Item no.	PU	B	S	P
Ø 3 mm	1287-26-03		1		•	
	1287-26-03N*		1		•	
Ø 5.5 mm	1287-26-55	1287-26-55T	1		•	
	1287-26-55N*	1287-26-55NT*	1		•	
	1287-26-55S		1			•
	1287-26-55B	1287-26-55TB	1	•		
Ø 11 mm	1287-26-11	1287-26-11T	1		•	
		1287-26-11TB	1	•		
			1		•	
			1		•	
Ø 12.5 mm	1287-26-12	1287-26-12T	1		•	
	1287-26-12B	1287-26-12TB	1	•		

### TrocaPort SLEEVE

Modular trocar sleeve without valve insert for combination with TrocaPort disposable valve inserts (item no. 1287-63-xx/1287-64-xx)

						
	smooth surface	fixation thread		150 mm	100 mm	80 mm
Size	Item no.	Item no.	PU	B	S	P
Ø 5.5 mm	1287-19-55	1287-19-55T	1		•	
Ø 11 mm	1287-19-11	1287-19-11T	1		•	

## Trocars and obturators

Working length:  
B=Bariatric (150 mm),  
S=Standard (100 mm),  
P=Paediatric (80 mm)

150 mm  
100 mm  
80 mm

Product	Size	Item no.	PU	B	S	P
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### TrocaObt PYRAMID

Pyramidal tip, cutting, reusable



Ø 3 mm	1287-92-03	1			•	
	1287-92-03S	1				•
Ø 5.5 mm	1287-92-55	1			•	
	1287-92-55S	1				•
	1287-92-55B	1	•			
Ø 11 mm	1287-92-11	1			•	
	1287-92-11B	1	•			
Ø 12.5 mm	1287-92-12	1			•	
	1287-92-12B	1	•			

### TrocaObt CONE

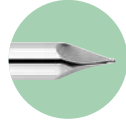
Conical tip, atraumatic, reusable



Ø 3 mm	1287-93-03	1			•	
	1287-93-03S	1				•
Ø 5.5 mm	1287-93-55	1			•	
	1287-93-55S	1				•
	1287-93-55B	1	•			
Ø 11 mm	1287-93-11	1			•	
	1287-93-11B	1	•			
Ø 12.5 mm	1287-93-12	1			•	
	1287-93-12B	1	•			

### TrocaObt PROTECT

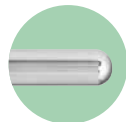
Dilating, atraumatic, reusable



Ø 5.5 mm	1287-96-55	1			•	
	1287-96-55S	1				•
	1287-96-55B	1	•			
Ø 11 mm	1287-96-11	1			•	
	1287-96-11B	1	•			
Ø 12.5 mm	1287-96-12	1			•	
	1287-96-12B	1	•			

### TrocaObt HASSON

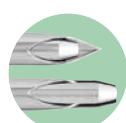
Blunt with sphere tip (open laparoscopy), reusable



Ø 5.5 mm	1287-94-55	1			•	
Ø 11 mm	1287-94-11	1			•	
Ø 12.5 mm	1287-94-12	1			•	

### TrocaObt SHIELD

Shielded trocar, self-locking, sharp, reusable



Ø 3 mm	1287-90-03	1			•	
Ø 5.5 mm	1287-90-55	1			•	
Ø 11 mm	1287-90-11	1			•	
Ø 12.5 mm	1287-90-12	1			•	

## Guide tubes

Working length:

B=Bariatric (150 mm), S=Standard (100 mm), P=Paediatric (80 mm)

### TrocaTube



smooth surface      fixation thread

150 mm  
100 mm  
80 mm

Size	Item no.	Item no.	PU	B	S	P
Ø 3 mm	1287-16-03		1		•	
	1287-16-03S		1			•
Ø 5.5 mm	1287-16-55	1287-15-55	1		•	
	1287-16-55S		1			•
	1287-16-55B	1287-15-55B	1	•		
Ø 11 mm	1287-16-11	1287-15-11	1		•	
	1287-16-11B	1287-15-11B	1	•		
Ø 12.5 mm	1287-16-12	1287-15-12	1		•	
	1287-16-12B	1287-15-12B	1	•		

### EcoBalloon RA-S<sup>1</sup>

Sterile disposable kit with short ring-anchor balloon and instrument channel



Working length: 80 mm

Size	Item no.	PU
Ø 11 mm	1285-40-11S	5

### EcoBalloon URO-S<sup>1</sup>

Sterile disposable kit with short, flat ring-anchor balloon and instrument channel





Working length: 80 mm

Size	Item no.	PU
Ø 11 mm	1285-75-11S	5

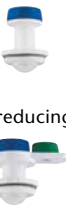


<sup>1</sup> usable with trocars and obturators in standard length (100 mm)

## Accessory







### Accessory TrocaTec

Product	Size	Item no.	PU
<b>TrocaTec SEALSET</b>			
Seal range for trocar sleeves with trap-door valve, 5 pieces	Ø 3 mm	1287-20-03	10
	Ø 5.5 mm	1287-20-55	10
	Ø 11 mm	1287-20-11	10
	Ø 12.5 mm	1287-20-12	10
			
<b>TrocaTec SEAL</b>			
Sealing insert for trocar sleeves and trap-door valve	Ø 3 mm	1287-24-03	10
	Ø 5.5 mm	1287-24-55	10
	Ø 11 mm	1287-24-11	10
	Ø 12.5 mm	1287-24-12	10
			

### Accessory TrocaPort

Product	Size	Item no.	PU
<b>TrocaPort TOP</b>			
Disposable valve insert	Ø 5.5 mm	1287-63-55	5
	Ø 11 mm	1287-63-11	5
			
with reducing system	Ø 11 mm	1287-64-11	5
<b>TrocaPort SEALSET</b>			
Seal range with silicone valve, 4 pieces	Ø 3 mm	1287-28-03	10
	Ø 5.5 mm	1287-28-55	10
	Ø 11 mm	1287-28-11	10
	Ø 12.5 mm	1287-28-12	10
			
<b>TrocaPort SEAL</b>			
Silikone valve insert	Ø 3–5.5 mm	1287-27-55	10
	Ø 10–12.5 mm	1287-27-11	10
			

### Accessory TrocaTec and TrocaPort

Product	Size	Item no.	PU
<b>TrocaCap</b>			
Silicone sealing caps	Ø 3 mm	1287-29-03	10
	Ø 5.5 mm	1287-29-55	10
	Ø 11 mm	1287-29-11	10
	Ø 12.5 mm	1287-29-12	10
			
<b>TrocaStop</b>			
Screw-in stop with fixation thread for modular trocar sleeves	Ø 5.5 mm	1287-82-55	1
	Ø 11 mm	1287-82-11	1
	Ø 12.5 mm	1287-82-12	1
			
<b>TrocaCone</b>			
Hasson cone, fixable sliding cone for open laparoscopy, stainless steel, demountable	Ø 11 mm/smooth	1287-43-11	1
	Ø 11 mm/fixng th.	1287-43-11T	1
	Ø 12.5 mm/smooth	1287-43-12	1
	Ø 12.5 mm/fixng th.	1287-43-12T	1
			
<b>TrocaReducer</b>			
Reducer sleeves	Ø 11/5.5 mm	1287-81-11	1
	Ø 12.5/5.5 mm	1287-81-12	1
			
<b>TrocaReducer L</b>			
Reducing bush long	Ø 11/5.5 mm	1287-85-11	1
	Ø 12.5/5.5 mm	1287-85-12	1
	Ø 12.5/10 mm	1287-85-22	1
	Ø 12.5/11 mm	1287-85-23	1
			
<b>TrocaReducer S</b>			
Reducing bush short	Ø 11/5.5 mm	1287-85-11S	1
	Ø 12.5/5.5 mm	1287-85-12S	1
	Ø 12.5/11 mm	1287-85-23S	1
			



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