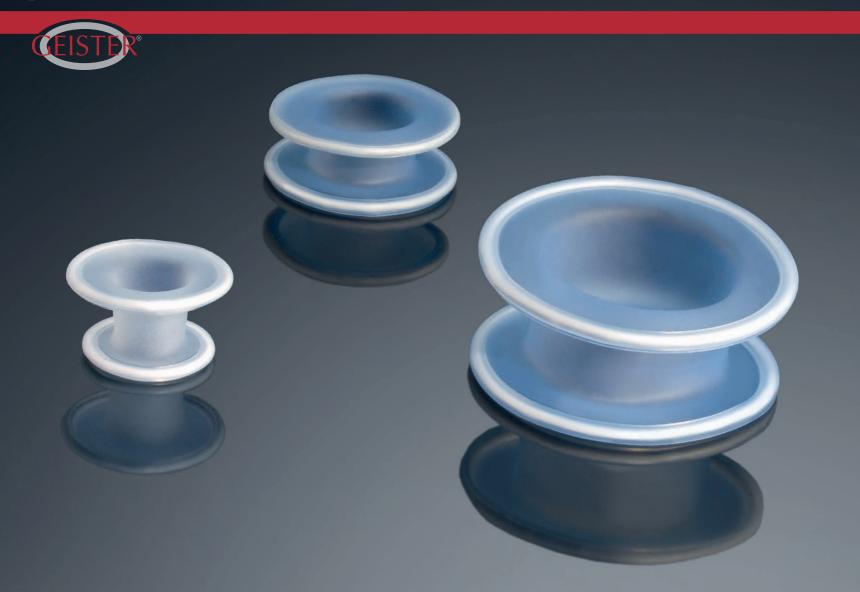


# Get more access for LESS

Access Systems - for minimal invasive surgery.





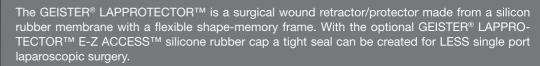
## LapProtector™











As the GEISTER® LAPPROTECTOR™ E-Z ACCESS™ device has no fixed channel, surgeons can select the best trocar placement to maintain maximum trocar separation for each surgery.

A typical placement for the rotatable devices would be for example through a single 25 mm umbilical incision with the scope trocar being introduced at the caudal side of the device center and two other trocars for working instruments inserted through both sides of the device while another straight grasper could be directly inserted into the peritoneal cavity through the device for cephalad retraction of the gallbladder.

Instrument changes or trocar exchanges can be performed during the surgery easily and frequently without air leakage and affecting the seal. The removable cap also allows for a safe and quick retrieval of the gallbladder with pneumoperitoneum easily restorable by recapping the device.





## LapProtector<sup>™</sup> and E-Z Access<sup>™</sup>







LapProtector™ Access Device, sterile, single use, latex-free, pack of 2 pcs.
Art.No.

OD 150 x 150 mm, ID 80 mm, 20 mm depth 37-0002 37-0004 OD 120 x 100 mm, ID 60 mm, 20 mm depth 37-0004.L OD 120 x 100 mm, ID 60 mm, 40 mm depth 37-0008 OD 120 x 120 mm, ID 60 mm, 20 mm depth 37-0008.L OD 120 x 120 mm, ID 60 mm, 40 mm depth OD 120 x 120 mm, ID 60 mm, 70 mm depth 37-0008.LL 37-0010 OD 100 x 100 mm, ID 60 mm, 40 mm depth 37-0014 OD 70 x 70 mm, ID 35 mm, 20 mm depth OD 70 x 70 mm, ID 35 mm, 40 mm depth 37-0014.L 37-0016 OD 50 x 40 mm, ID 25 mm, 20 mm depth 37-0016.15 OD 50 x 40 mm, ID 15 mm, 20 mm depth 37-0020 ovale, ID 45 x 30 mm, 20 mm depth ovale, ID 45 x 30 mm, 40 mm depth 37-0020.L

LapProtector™ E-Z Access™ Cap, sterile, single use, latex-free, pack of 2 pcs.
Art.No.

37-0011	100 mm
37-0015	70 mm
37-0015	70 mm
37-0017	50 mm
37-0017	50 mm
37-0021	ovale
37-0021	ovale



#### E-Z Trocar™







Trocar Ø 5,8 mm, sterile, single use suitable for 5 mm forceps, pack of 5 pcs. Art.No.

**37-0030.L** working length 95 mm, with 2-way-stopcock working length 70 mm, with 2-way-stopcock

**37-0035.L** working lenght 95 mm **37-0035.S** working lenght 70 mm

Twin Trocar  $\,$  Ø 5,8 mm, sterile, single use suitable for 5 mm forceps, pack of 5 pcs.

Art.No.

**37-0040.L** working lenght 95 mm, with 2 outer cylinders **37-0040.S** working lenght 70 mm, with 2 outer cylinders

## **Introducer Sleeves**

Art.No.

 34-0952
 Metall shaft, smooth
 Ø 5,5 mm, 103 mm

 34-0952.PL
 Plastic shaft, smooth
 Ø 5,5 mm, 92 mm

 34-0952.WC
 White seal
 for Ø 3,5 - 8 mm

 34-0952.W
 Silicone valve, Pack of 5 pieces
 for Ø 3,5 - 8 mm

Trocar for Indroducer Sleeves, metal, smooth

Art.No.

 34-0956
 pyramidal point
 Ø 5,5 mm, 160 mm

 34-0957
 conical point
 Ø 5,5 mm, 160 mm

<sup>\*</sup> Smart discs included 1 piece each package.

By 37-0040.S and 37-0040.L 2 pieces each package.



## 1. Trocar placement for pneumoperitoneum

Insert a trocar into the inside of "boundary line of trocar insertion"(Picture1). To avoid damaging organs by trocar tip, measure the depth from upper ring of the LAPPROTECTOR™ to the organs before inserting.

#### !!Caution!!

Only use plastic-blade type trocars (otherwise, broken pieces may drop off to damage the patient.)

## 2. Fixing

Take out the inner needle from the outer cylinder. Make sure that the inserted trocar tip does not touch the LAPPROTECTOR™ and organs. Attach this product to the upper ring of the LAPPROTECTOR™ which is already set to the abdominal wall, to fit the inner groove (picture 2 and 3).

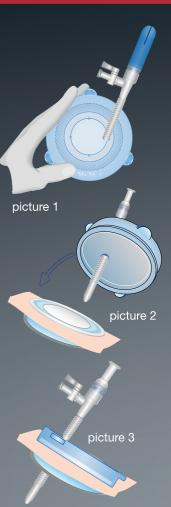
When using the LAPPROTECTOR™, select the proper size to fit the depth of the abdominal wall; please read the attached IFU before use.

#### !!Caution!!

When attaching this product to the LAPPROTECTOR™, make sure that it fully covers the LAPPROTECTOR™ to fit the inner groove (to avoid pneumoperitoneum gas leakage and also to avoid the product from falling off.)

## 3. Pneumoperitoneum

Start pneumoperitoneum from the inserted trocar and check for any gas leakage. If any gas leakage, detach and fix again to certain that there is no leakage.



## E-Z Access™ – How to use





picture 4



picture 5



## **INFORMATION**

This is a disposable product. Its specifications and appearance are subject to change for improvement without notice.

## 4. Additional placement of 5mm trocars

When adding trocars, make sure that the trocar tips do not scratch and damage the LAPPROTECTOR $^{TM}$ . Deepen the insertion to reach into the abdominal cavity for operation (picture 4 and 5).

## **!!Caution!!**

To insert 10 mm/12 mm trocars, eject the abdominal air pressure, and then carefully remove this product from the LAPPROTECTOR™; avoid the trocar tip from touching the LAPPROTECTOR™ or organs when removing. Pull out the 5 mm trocar and place 10 mm/12 mm trocars.

## **INFORMATION**

E-Z Access™ is a special device to attach to LAPPROTECTOR™ used for single-port endoscopic surgery. (LAPPROTECTOR™ does not come with this product, please select the proper size of LAPPROTECTOR™.)





# **GEISTER Medizintechnik GmbH**