Disposable multi-channel single-port laparoscopic trocar
Instruction for Use

【Product Name】Disposable multi-channel single-port laparoscopic trocar

【Model No.】

WPGA-A1-5/5/15、WPGA-A1-5/15/15、WPGA-A1-5/15/15/15、WPGA-A1-5/5/15/15、WPGA-A1-5/5/5/15、
WPGA-A2-5/5/15、WPGA-A2-5/15/15、WPGA-A2-5/15/15/15、WPGA-A2-5/5/15/15、WPGA-A2-5/5/5/15、
WPGA-A3-5/5/15、WPGA-A3-5/15/15、WPGA-A3-5/15/15/15、WPGA-A3-5/5/15/15、WPGA-A3-5/5/5/15、
WPGA-A4-5/5/15、WPGA-A4-5/15/15、WPGA-A4-5/15/15/15、WPGA-A4-5/5/15/15、WPGA-A4-5/5/5/15、
WPGA-A5-5/5/15、WPGA-A5-5/15/15、WPGA-A5-5/15/15/15、WPGA-A5-5/5/15/15、WPGA-A5-5/5/5/15、
WPGA-A6-5/5/15、WPGA-A6-5/15/15、WPGA-A6-5/15/15/15、WPGA-A6-5/5/15/15、WPGA-A6-5/5/5/15、
WPGA-A7-5/5/15、WPGA-A7-5/15/15、WPGA-A7-5/15/15/15、WPGA-A7-5/5/15/15、WPGA-A7-5/5/5/15、
WPGA-A8-5/5/15、WPGA-A8-5/15/15、WPGA-A8-5/15/15/15、WPGA-A8-5/5/15/15、WPGA-A8-5/5/5/15、
WPGA-B1-5/5/15、WPGA-B1-5/15/15、WPGA-B1-5/15/15/15、WPGA-B1-5/5/15/15、WPGA-B1-5/5/5/15、
WPGA-B2-5/5/15、WPGA-B2-5/15/15、WPGA-B2-5/15/15/15、WPGA-B2-5/5/15/15、WPGA-B2-5/5/5/15、
WPGA-B3-5/5/15、WPGA-B3-5/15/15、WPGA-B3-5/15/15/15、WPGA-B3-5/5/15/15、WPGA-B3-5/5/5/15、
WPGA-B4-5/5/15、WPGA-B4-5/15/15、WPGA-B4-5/15/15/15、WPGA-B4-5/5/15/15、WPGA-B4-5/5/5/15、
WPGA-C1-5/5/15、WPGA-C1-5/15/15、WPGA-C1-5/15/15/15、WPGA-C1-5/5/15/15、WPGA-C1-5/5/5/15、
WPGA-C2-5/5/15、WPGA-C2-5/15/15、WPGA-C2-5/15/15/15、WPGA-C2-5/5/15/15、WPGA-C2-5/5/5/15、
WPGA-C3-5/5/15、WPGA-C3-5/15/15、WPGA-C3-5/15/15/15、WPGA-C3-5/5/15/15、WPGA-C3-5/5/5/15、
WPGA-C4-5/5/15、WPGA-C4-5/15/15、WPGA-C4-5/15/15/15、WPGA-C4-5/5/15/15、WPGA-C4-5/5/5/15、
WPGA-D1-5/5/15、WPGA-D1-5/15/15、WPGA-D1-5/15/15/15、WPGA-D1-5/5/15/15、WPGA-D1-5/5/5/15、
WPGA-D2-5/5/15、WPGA-D2-5/15/15、WPGA-D2-5/15/15/15、WPGA-D2-5/5/15/15、WPGA-D2-5/5/5/15、
WPGA-D3-5/5/15、WPGA-D3-5/15/15、WPGA-D3-5/15/15/15、WPGA-D3-5/5/15/15、WPGA-D3-5/5/5/15、
WPGA-D4-5/5/15、WPGA-D4-5/15/15、WPGA-D4-5/15/15/15、WPGA-D4-5/5/15/15、WPGA-D4-5/5/5/15、
WPGA-D5-5/5/15、WPGA-D5-5/15/15、WPGA-D5-5/15/15/15、WPGA-D5-5/5/15/15、WPGA-D5-5/5/5/15、
WPGA-D6-5/5/15、WPGA-D6-5/15/15、WPGA-D6-5/15/15/15、WPGA-D6-5/5/15/15、WPGA-D6-5/5/5/15、
WPGA-E1-5/5/15、WPGA-E1-5/15/15、WPGA-E1-5/15/15/15、WPGA-E1-5/5/15/15、WPGA-E1-5/5/5/15、
WPGA-E2-5/5/15、WPGA-E2-5/15/15、WPGA-E2-5/15/15/15、WPGA-E2-5/5/15/15、WPGA-E2-5/5/5/15、
WPGA-E3-5/5/15、WPGA-E3-5/15/15、WPGA-E3-5/15/15/15、WPGA-E3-5/5/15/15、WPGA-E3-5/5/5/15、
WPGA-E4-5/5/15、WPGA-E4-5/15/15、WPGA-E4-5/15/15/15、WPGA-E4-5/5/15/15、WPGA-E4-5/5/5/15、
WPGA-E5-5/5/15、WPGA-E5-5/15/15、WPGA-E5-5/15/15/15、WPGA-E5-5/5/15/15、WPGA-E5-5/5/5/15、
WPGA-E6-5/5/15、WPGA-E6-5/15/15、WPGA-E6-5/15/15/15、WPGA-E6-5/5/15/15、WPGA-E6-5/5/5/15、
WPGA-E7-5/5/15、WPGA-E7-5/15/15、WPGA-E7-5/15/15/15、WPGA-E7-5/5/15/15、WPGA-E7-5/5/5/15、
WPGA-E8-5/5/15、WPGA-E8-5/15/15、WPGA-E8-5/15/15/15、WPGA-E8-5/5/15/15、WPGA-E8-5/5/5/15、
WPGA-F1-5/5/12、WPGA-F1-5/12/12、WPGA-F1-5/12/12/12、WPGA-F1-5/5/12/12、WPGA-F1-5/5/5/12、
WPGA-F2-5/5/12、WPGA-F2-5/12/12、WPGA-F2-5/12/12/12、WPGA-F2-5/5/12/12、WPGA-F2-5/5/5/12、
WPGA-G1-5/5/12、WPGA-G1-5/12/12、WPGA-G1-5/12/12/12、WPGA-G1-5/5/12/12、WPGA-G1-5/5/5/12、
WPGA-G2-5/5/12、WPGA-G2-5/12/12、WPGA-G2-5/12/12/12、WPGA-G2-5/5/12/12、WPGA-G2-5/5/5/12、
WPGA-H1-5/5/12、WPGA-H1-5/12/12、WPGA-H1-5/12/12/12、WPGA-H1-5/5/12/12、WPGA-H1-5/5/5/12、
WPGA-H2-5/5/12、WPGA-H2-5/12/12、WPGA-H2-5/12/12/12、WPGA-H2-5/5/12/12、WPGA-H2-5/5/5/12、
WPGA-H3-5/5/12、WPGA-H3-5/12/12、WPGA-H3-5/12/12/12、WPGA-H3-5/5/12/12、WPGA-H3-5/5/5/12、
WPGA-I1-5/5/12、WPGA-I1-5/12/12、WPGA-I1-5/12/12/12、WPGA-I1-5/5/12/12、WPGA-I1-5/5/5/12、
WPGA-I2-5/5/12、WPGA-I2-5/12/12、WPGA-I2-5/12/12/12、WPGA-I2-5/5/12/12、WPGA-I2-5/5/5/12、
WPGA-I3-5/5/12、WPGA-I3-5/12/12、WPGA-I3-5/12/12/12、WPGA-I3-5/5/12/12、WPGA-I3-5/5/5/12、
WPGA-I4-5/5/12、WPGA-I4-5/12/12、WPGA-I4-5/12/12/12、WPGA-I4-5/5/12/12、WPGA-I4-5/5/5/12

【Structure】

The disposable multi-channel single-hole laparoscopic trocar is composed of a single-hole multi-channel puncture cannula and an incision protective sleeve; the A-type single-hole multi-channel puncture cannula is a whole, B, C, D, E, F, G, H, I type single-hole multi-channel puncture cannula is composed of channel, gas injection valve, porous cover/porous cover fixing piece, protective sleeve fixing ring; according to different product forms, the products are

divided into A, B, C, D, E , F, G, H, I, a total of nine specifications; the product is provided in a sterile state, sterilized by ethylene oxide, and can be used for one-time use.

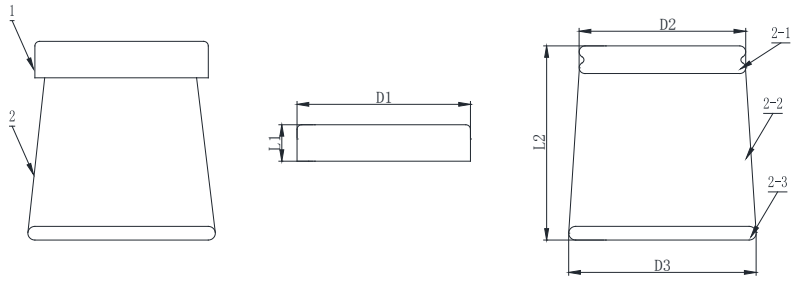


Figure 1 Disposable multi-channel single-port laparoscopic trocar (Type A)

1. Single-hole multi-channel puncture cannula 2. Incision protective sleeve (2-1 outer ring, 2-2 channel, 2-3 placement ring)

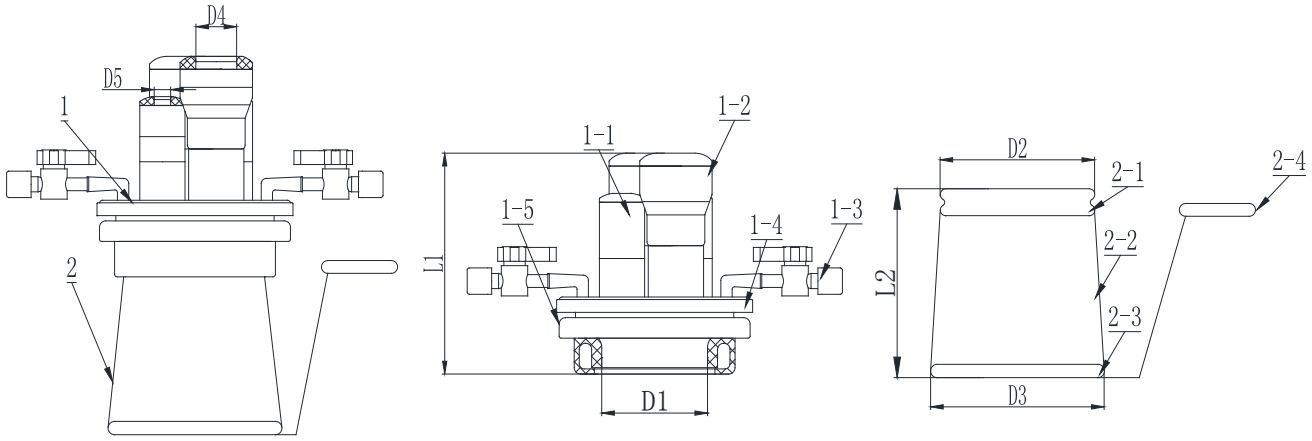


Figure 2 Disposable multi-channel single-hole laparoscopic trocar (Type B, the picture shows the pull ring)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2 channel (large), 1-3 gas injection valve, 1-4 porous cover, 1-5 protective sleeve fixing ring) 2. Incision Protective sleeve (2-1 outer ring, 2-2 channel, 2-3 insertion ring, 2-4 pull ring)

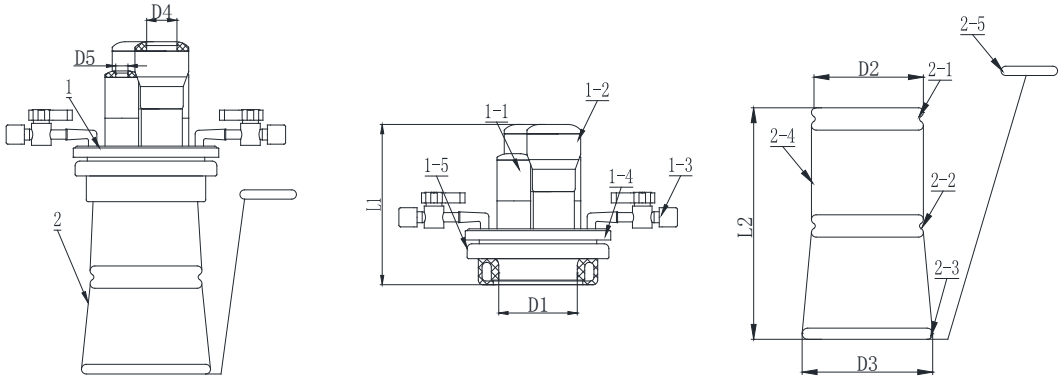


Figure 3 Disposable multi-channel single-hole laparoscopic trocar (Type C, the picture shows the pull ring)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2 channel (large), 1-3 gas injection valve, 1-4. porous cover, 1-5 protective sleeve fixing ring) 2. Incision protective sleeve (2-1 outer ring, 2-2 middle ring, 2-3 insertion ring, 2-4 channel, 2-5 pull ring)

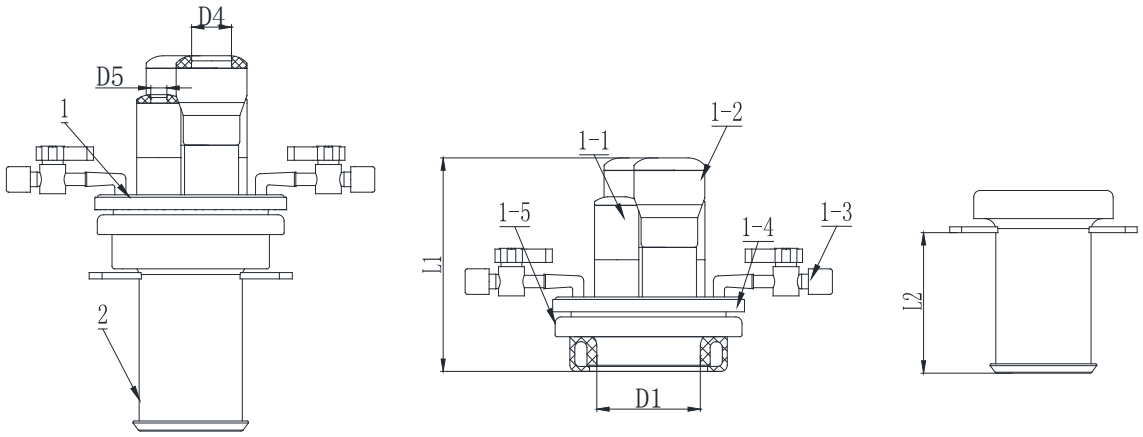


Figure 4 Disposable multi-channel single-hole laparoscopic trocar (type D)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2 channel (large), 1-3 gas injection valve, 1-4 porous cover, 1-5 protective sleeve fixing ring) 2. Incision protective case

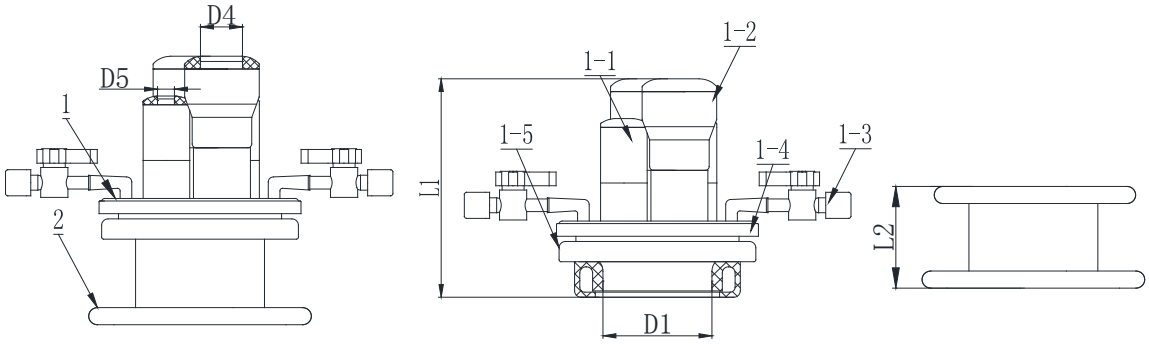


Figure 5 Disposable multi-channel single-hole laparoscopic trocar (type E)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2 channel (large), 1-3 gas injection valve, 1-4. porous cover, 1-5 protective sleeve fixing ring) 2. Incision Protector

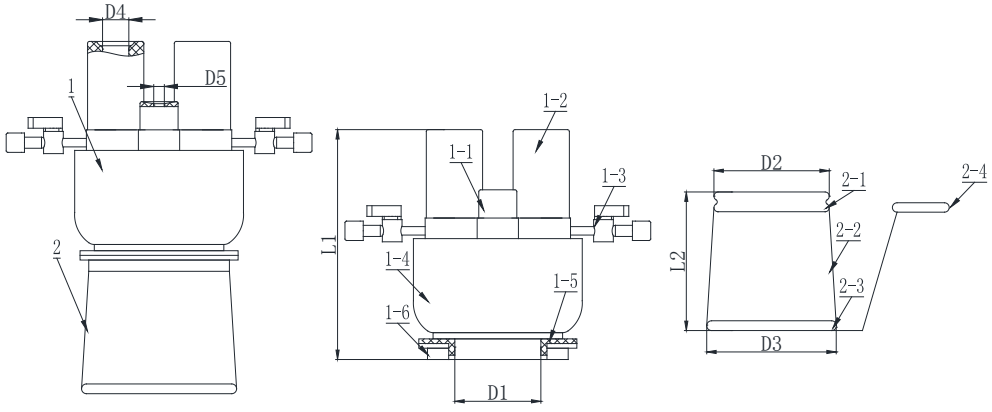


Figure 6 Disposable multi-channel single-hole laparoscopic trocar (Type F, the picture shows the pull ring)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2. channel (large), 1-3 gas injection valve, 1-4 porous cover, 1-5 porous cover fixing parts, 1- 6 Protective sleeve fixing ring) 2. Incision protective sleeve (2-1 outer ring 2-2 channel 2-3 insert ring 2-4 pull ring)

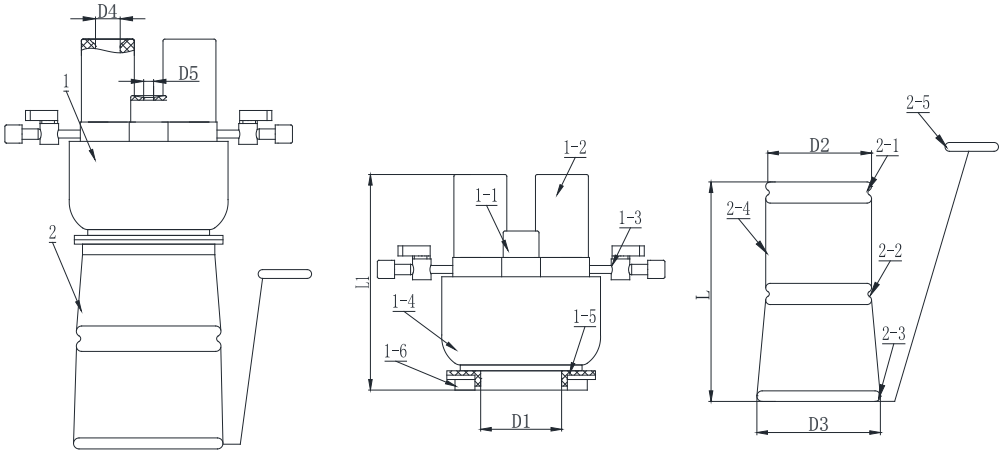


Figure 7 Disposable multi-channel single-hole laparoscopic trocar (Type G, the picture shows the pull ring)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2. channel (large), 1-3 gas injection valve, 1-4 porous cover, 1-5 porous cover fixing parts, 1- 6 Protective sleeve fixing ring) 2. Incision protective sleeve (2-1 outer ring, 2-2 middle ring, 2-3 insertion ring, 2-4 channel, 2-5 pull ring)

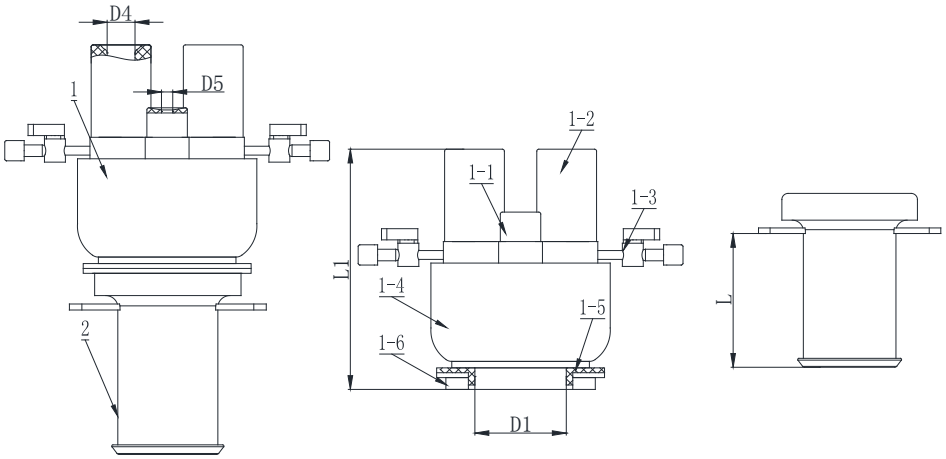


Figure 8 Disposable multi-channel single-hole laparoscopic trocar (H type)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2. channel (large), 1-3 gas injection valve, 1-4 porous cover, 1-5 porous cover fixing parts, 1- 6. Protective sleeve fixing ring) 2. Incision protective sleeve

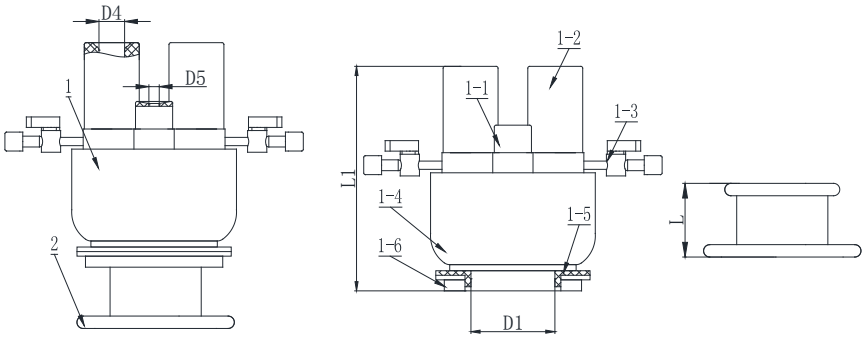


Figure 9 Disposable multi-channel single-port laparoscopic trocar (type I)

1. Single-hole multi-channel puncture cannula (1-1 channel (small), 1-2. channel (large), 1-3 gas injection valve, 1-4 porous cover, 1-5 porous cover fixing parts, 1- 6. Protective sleeve fixing ring) 2. Incision protective sleeve

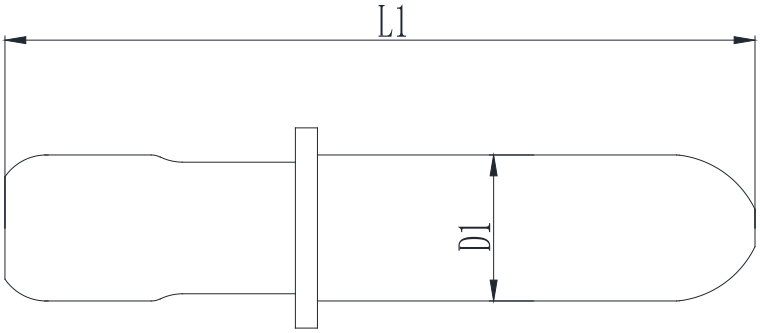


Figure 10 Dilator

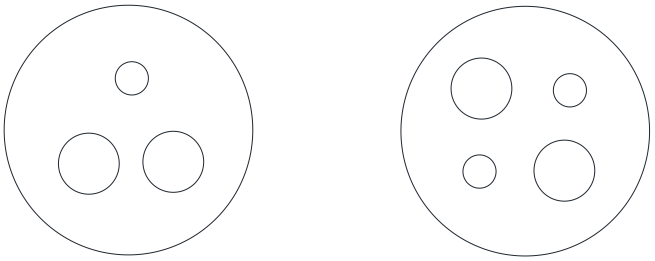


Figure 11 Top view of type A single-hole multi-channel puncture cannula (3 holes, 4 holes)

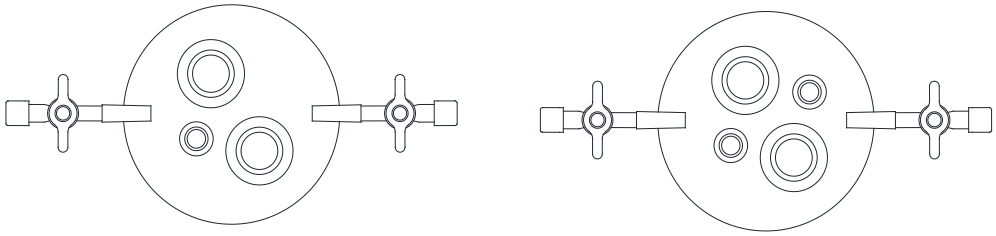


Figure 12 Top view of the main body of the B, C, D, E type single-hole multi-channel puncture cannula (3 holes, 4 holes)

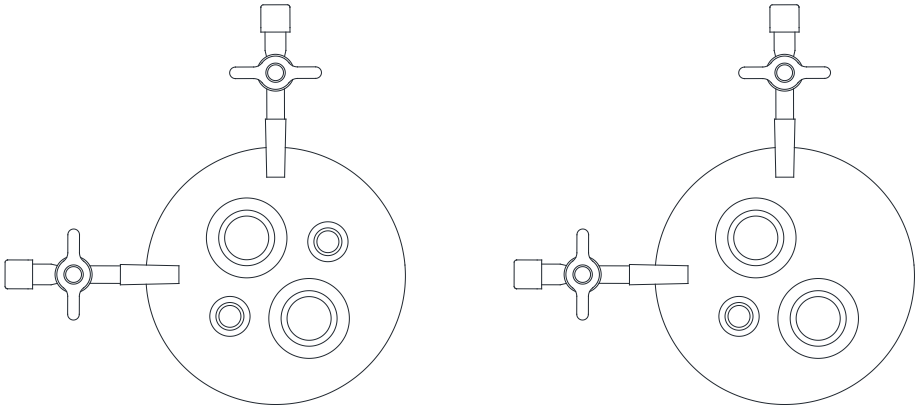


Figure 13 Top view of F, G, H, I type single-hole multi-channel trocars (3 holes, 4 holes)

【main Material】

Porous cover, protective sleeve retaining ring, B-type incision protective sleeve, A-type puncture cannula: silicone, Outer ring, insertion ring, pull ring, middle ring, pull belt, channel: TPU

Protective sleeve fixing ring, porous cover fixing parts: ABS,

Expander: PC

【Application】

It is suitable for minimally invasive single-port laparoscopic surgery, and is used as a channel for surgical endoscopic, forceps, scissors and other instruments to enter and exit the incision and surgical operation.

【Population】

All persons

【Steps of use】

Type A, B, C, F, G

1. First, select the appropriate specification and model according to the size of the incision at the surgical site, and select a specification with a channel diameter slightly larger than the incision diameter.
2. Flatten the insertion ring into a long and narrow oval shape by hand, and send it into the incision. Inside the incision, the insertion ring relies on its own elasticity to return to its circular shape.
3. Correct the position of the outer ring, correct the distortion of the channel, turn the outer ring of the incision protective sleeve inward by both hands according to the thickness of the incision tissue, and put the protective sleeve on the single-hole multi-channel puncture cannula after it is turned to a suitable height.
4. Type A product can directly operate the instrument through the surface hole of the single-hole multi-channel puncture cannula. Types B, C, F, and G connect the air inlet pipe to the insufflation valve, close the insufflation valve on the other side, and establish pneumoperitoneum.
5. When the disposable incision protective cover is taken out after the operation, pick up the main body of the product and drive the protective cover upwards. Insert your fingers into the channel of the incision protective cover and buckle the edge of the insertion ring to pull the insertion ring outward along the channel, and then the disposable incision protective cover can be smoothly taken out together with the channel. With the pull-tab version, you can pull the pull-tab to pull the insert ring to the incision and take it out.

Type D, E, H,

1. First, select the appropriate specification and model according to the size of the incision at the surgical site, and select a specification with a channel diameter slightly larger than the diameter of the surgical site.
2. Flatten one end of the protective sleeve into the channel by hand. For D and H types, a dilator can be used to assist in inserting the protective sleeve into the surgical site.
3. Put the protective sleeve on the single-hole multi-channel puncture cannula. Connect the air inlet pipe to the insufflation valve, close the air insufflation valve on the other side, and establish pneumoperitoneum. The surgical instrument enters the abdominal cavity through the instrument channel, and then the surgical operation is performed. If the procedure does not require the establishment of a pneumoperitoneum, there is no need to establish a pneumoperitoneum.
4. After the operation is completed, the single-hole multi-channel puncture cannula together with the incision protective sleeve can be put together.Take out.

【Contraindication】

1. Severe cardiovascular disease, cardiac dysfunction, and low lung function;

2. Coagulation disorders, blood diseases, massive ascites, internal bleeding;

3. Severe flatulence, obesity, history of multiple laparotomy.

【Cautions】

1. The product has been sterilized with ethylene oxide. Please do not use it if the package is damaged.

2.The product shall be used for one time, shall not be reused, and forbidden to be reused after reserialization.

3.The products are provided to professional doctors with certain basis knowledge and doctors after professional technical training.

4.Please read this instruction for uses carefully before using the product. Please destroy the product after use.

5.When using this product, the sterile operation specification shall be strictly implemented and the product is only for one-time use, destruction after use.

6. Do not use if the package is broken or expired before use.

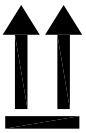
7. Please check the wafer indicator on the sterilization package of this product. "red" means that this product is not sterilized by ethylene oxide and cannot be directly used.

"Green" indicates that the product has been sterilized with ethylene oxide and is ready for clinical use.

8. To avoid adverse consequences, please read the instructions carefully before use.

9. Please check whether the product is in the valid period before use. The sterilization period is three years. The product beyond the valid period is strictly prohibited to be used and sterilized again.

【Explanation of marks, sighs and abbreviations】

 KEEP DRY	 FRAGILE, HANDLE WITH CARE	 UPWARDS	 CAUTION
 USE-BY DATE	 MANUFACTURER	 DATE OF MANUFACTURE	 BATCH CODE

 DO NOT RE-USE	 DO NOT USE IF PACKAGE IS DAMAGED	 STERILIZED USING ETHYLENE OXIDE	 STERILE

【Storage】

The product should be stored in a dry room with excellent ventilation and without caustic gases. The relative humidity of the room must be less than 80%.

【Transportation】

During transport, the product should avoid squeezing and rain. Handel with care and do not invert.

【Sterilization method】 Ethylene oxide sterilization is used for the product.

【Sterilization period of validity】 The sterilization period of validity is 3 years.

【Manufacturer】

Changzhou Weipu Medical Devices Co., Ltd

Add: NO.1-5, Chuangxin Avenue, Xinbei District, Changzhou, Jiangsu,China Tel:

0519-69882737

【Authorized Representative】

Shanghai International Holding Corp. GmbH (Europe) Add:

Eiffestrasse 80, 20537 Hamburg，Germany

Tel: +49-40-2513175 Fax: +49-40-255726

Dimdi No. : DE/0000040627 E-mail: shholding@hotmail.com