3B Scientific Catheterization simulator
Introduction
You have acquired a catheterization simulator with basic features (Basic) or advanced features (PRO). It can be used to simulate the steps to correctly carry out catheterization in men or women. Standards as part of professional training for nurses and everyday clinical practice can be taught and thereby improved.

**Basic version (m/f)**

**PRO version (m/w)**
CATHETERIZATION SIMULATOR

Delivery contents

**Basic (m) 1020232**

**Basic (f) 1020231**

**Basic (s) 1020842**

**PRO (m) 1020230**

**PRO (f) 1020229**

**PRO (s) 1020843**
CATHETERIZATION SIMULATOR

P93B-S 1020842
- Genital insert, male
- Genital insert, female
- Base, basic version
- Replacement sponges and sphincter silicone
- Reservoir bottle
- Ventilation tube with locking clip
- Talcum powder
- Bleed tube
- Vaseline

P93P-S 1020843
- Abdomen PRO
- Abdominal wall with suprapubic catheter
- Replacement sponges and sphincter silicone
- Reservoir bottle
- Ventilation tube with locking clip
- Talcum powder
- Genital insert, female
- Genital insert, male
- Bleed tube with Y-connector
- Support rod PRO
- Vaseline
Functions
The basic version provides a simplified and general presentation and demonstration of catheterization. The realistic simulation of the Pro version, with its supplementary elements, makes it suitable for realistic, practical exercises. This includes, for example, care of a suprapubic catheter and a realistic overall view, including detachable abdominal wall to ensure optimum control during training.

Both gender inserts provide a very realistic experience in inserting catheters, since the relevant structural features with regard to the length and the route of the urethra have been taken into account. The male genital insert also offers 3-levels of urethral constriction.

The soft outer genital parts – labia for the female insert and foreskin for the male insert – are flexible and offer realistic handling. Students can practice preparing the models in sterile conditions, and are given support while introducing the catheter (e.g. the labia are kept spread apart) and teaching features are highlighted.

The transparent bladder can be filled via a 500-ml reservoir bottle and checked visually to ensure the catheter has been correctly placed. If the catheter is correctly inserted, fluid starts to flow out automatically. The outflow can be controlled manually using a locking clip.

<table>
<thead>
<tr>
<th>Basicversion</th>
<th>PROversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of application</td>
<td>Simplified presentation and demonstration</td>
</tr>
<tr>
<td>Basic body</td>
<td>Schematic metal base</td>
</tr>
<tr>
<td>Suprapubic catheter</td>
<td>Not possible</td>
</tr>
<tr>
<td>Genital inserts</td>
<td>Male or female; the set also includes flexible labia or foreskin</td>
</tr>
</tbody>
</table>
ASSEMBLY

Putting in the genital inserts
• The genital inserts can be put in by way of a magnetic connector, both into the main body in the PRO version and into the metal base of the basic version.
• First, pass the connection tube of the bladder through the opening of the metal base or of the basic body.
• Then put the upper edge of the genital insert into the recess (PRO version) or onto the beveled surface (basic version).
• The entire genital insert should click into place.
• Please ensure that the genital inserts are placed centrally and are fully engaged. In the PRO version, this can be seen when the insert is totally flush with the basic body.

Filling the bladder
Preparation for the PRO version:
• Screw the stand supplied into the body (in the basic version, the stand is already integrated).
• To do this, loosen the nut and the crinkle washer from the stand thread
• Now insert the stand rod from the top into the hole provided.
• Slide the rod into the opening until it can go no further, and make sure that the rod comes through the opposite opening on the underside of the basic body.
• Now place the corrugated washer over the threads of the support rod.
• Put the nut on the thread, fix it with the fingers and screw the stand rod into the nut. Screw in the rod until it is sufficiently tight, then stop. It should be possible to turn the stand rod further.

Filling of the bladder (Basic and Pro)
• First check that all the individual parts of the genital insert are fitting correctly. The transparent bladder must be screwed firmly to the base plate of the genital insert.
• Fill the reservoir bottle with a sufficient quantity of liquid (fill volume 500 ml).
Make sure that the locking clip to the ventilation tube of the bottle is fastened.

- Connect the right (top view) tube connector of the bladder to the reservoir bottle.
- In the Basic version, connect the left tube connector to the bleed tube. The open end of the bleed tube is inserted through the hole on the metal stand. In the Pro version, the bleed tube is connected using a Y-connector to the reservoir bottle.
- Now, block the reservoir bottle from the top in the retaining clip by pushing the blue sealing cap of the bottle sideways into the retaining clip of the stand.
- After checking that all the connections are correctly in place, open the locking clip on the ventilation tube.
- The system will then automatically fill up to the correct fluid level (completely full bladder).
- Close or open the locking clip on the ventilation tube to fill up to a different level.
- If the locking clip on the ventilation tube is open, fluid will continue to flow through a catheter until the reservoir bottle is empty. The maximum volume of liquid is 500 ml.

Emptying the bladder

- Once the simulation has been completed, the residual liquid should be drained out as far as possible.
- To do this, open the locking clip on the ventilation tube and drain the fluid from the open end of the bleed tube (place the end of the tube significantly lower than the bladder).
- Disconnect the fully emptied reservoir bottle from the bladder.
- Disconnect the bleed tube from the bladder.
- Remove the genital insert from the basic body or from the metal base. Make sure that the open ends of both tubes are always above the level of the bladder.
- Hold the genital insert so that the genitals are facing upwards (Fig.).
- Unscrew the genital part of the transparent bladder so that you can lock it securely and straight with one hand.
CATHETERIZATION SIMULATOR

- Empty the bladder by pouring out the liquid.

**Adjusting the constriction of the urethra**
- The male genital insert has 3 urethra constriction settings in the pars membranosa: "Open", "partly constricted" and "totally constricted".
- On the right side of the bladder stem (top view) there is a metal pin and an adjustment slide.
- Pull the metal pin out slightly, thereby releasing the pressure from the adjustment slide. Pull firmly on the metal pin; it is held in place firmly by spring tension.
- Now push the adjustment slide to the desired position.
- From the "open" position, the adjustment slide can be pushed to the next lowest position without pressing the metal rod. A clear "click" sound confirms that the next position has been locked into place.
- To go to the next highest position (e.g. from "Full constriction" to "Part constriction") the metal pin must, however, always be pulled.

3 levels of urethral constriction
"Open" - "Partial constriction" - "Full constriction"

Metal pin and adjustment slide
## Catheterization Simulator

<table>
<thead>
<tr>
<th>Urethra constriction</th>
<th>Catheter size (balloon catheter)</th>
<th>Catheter size</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Open”</td>
<td>14 CH</td>
<td>16 CH</td>
</tr>
<tr>
<td>“Partial constriction”</td>
<td>12 CH</td>
<td>14 CH</td>
</tr>
<tr>
<td>“Full constriction”</td>
<td>--</td>
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</tr>
</tbody>
</table>

**NOTE:**
For catheterization, we recommend using catheters with only one or two drainage eyes opposite each other. Both silicone and PVC catheters can be used. When using balloon catheters, we recommend the size, CH 14, or otherwise, catheter size 16. Catheters with a curved tip should not be used!

**ADVICE:**
According to the guidelines for correct catheterization, even during the simulation, lubricating gel (not included) should be placed into the urethra to ensure that the catheter can be inserted smoothly. Alternatively, some lubricating gel can be placed on the tip of the catheter.
Disassembly of the genital inserts

- To ensure that the areas that come into contact with liquid during the simulation can be cleaned and dried without leaving residue, the genital inserts can be taken apart.
- To do this, pull both the skin of the male and female inserts forwards.
- Remove the small sponge insert below the genitals. If it has absorbed a lot of liquid, it can be wrung out.
- Now screw off the bladder in an anti-clockwise direction.
- Remove the black ring seal.
- Remove the gray sphincter silicone insert. Attention: Do not use sharp objects and take care if you have long fingernails; there is a risk of tearing!
- Remove the white plastic insert (it is preferable to reach into the circular openings with 2 fingers, or lift the model so that the genital insert falls out).
- Remove the skin-colored pelvic floor insert.
- Remove as much moisture residue as possible with a dry cloth.
- Place all the individual parts to dry in a well-ventilated place away from direct sunlight.
- Once dry, all parts can be put back together in reverse order.
Cleaning and care
The surface of the simulator can be cleaned with a damp cloth, or rinsed under running water. All soft elastic parts may also be cleaned in the case of severe soiling with a solution of mild soap and water. Please ensure that all parts are completely dry before storing. A little talcum powder should be sprinkled on the dry soft elastic parts before storage (sprinkle on and distribute evenly by rubbing). To prepare the model for a sterile preparation during the simulation, we recommend the use of clear liquids (e.g. water for simulation purposes). If colored disinfectants are applied, remove them as soon as possible after the simulation to avoid permanent stains. The tissue of the transparent bladder body should be coated with Vaseline after cleaning to ensure the bladder remains watertight.

ADVICE:
According to the guidelines for correct catheterization, even during the simulation, lubricating gel (not included) should be placed into the urethra to ensure that the catheter can be inserted smoothly. Alternatively, some lubricating gel can be placed on the tip of the catheter.

Technical data
Dimensions:
Simulator Basic (H x W x D) 36 x 11 x 26.5 cm
Simulator PRO (H x W x D) 50 x 42 x 30 cm
Weight Basic: approx. 2.3 kg
Weight PRO: approx. 3.5 kg
Operating conditions
Operating temperature 10°C to +60°C
Storage temperature -20°C to +60°C