Aesclap Neurosurgery
Hydrocephalus Shunt Accessories

Accessories for MIETHKE shunt systems
Accessories

CATHETERS

- All catheters are made of radiopaque silicone
- \( d_i = 1.2 \text{ mm} \)
- \( d_o = 2.5 \text{ mm} \)

**Peritoneal catheters, barium-impregnated**

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Peritoneal catheter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV070P</td>
<td></td>
<td>600 mm</td>
</tr>
<tr>
<td>FV071P</td>
<td></td>
<td>900 mm</td>
</tr>
<tr>
<td>FV072P</td>
<td></td>
<td>1200 mm</td>
</tr>
</tbody>
</table>

**Peritoneal catheter with integrated barium strip**

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Peritoneal catheter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV092P</td>
<td></td>
<td>600 mm</td>
</tr>
<tr>
<td>FV091P</td>
<td></td>
<td>900 mm</td>
</tr>
<tr>
<td>FV090P</td>
<td></td>
<td>1200 mm</td>
</tr>
</tbody>
</table>

**Ventricular catheter with stylet**

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Ventricular catheter with stylet</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV074P</td>
<td>180 mm, graduated</td>
</tr>
<tr>
<td>FV077P</td>
<td>250 mm, graduated</td>
</tr>
</tbody>
</table>
**CATHETERS**

- Ventricular catheter with deflector

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV075P</td>
<td>- Ventricular catheter, 180 mm, with stylet, graduated</td>
</tr>
<tr>
<td></td>
<td>- Deflector, large</td>
</tr>
<tr>
<td>FV078P</td>
<td>- Ventricular catheter, 250 mm, with stylet, graduated</td>
</tr>
<tr>
<td></td>
<td>- Deflector, large</td>
</tr>
</tbody>
</table>

- All catheters are made of radiopaque silicone
- $d_i = 1.2\ mm$
- $d_o = 2.5\ mm$

**Deflector:**
- With suture fixation hole
- Made of titanium
- Radiopaque
- Allows 90° deflection of the ventricular catheter in the burrhole without kinking the catheter
- Adjustable on catheter
- Allows precise setting of the penetration depth of the ventricular catheter prior to implantation

Art. no.  | Set                                                                 |
----------|----------------------------------------------------------------------|
FV076P    | - Ventricular catheter, 180 mm, with stylet, graduated               |
|          | - Deflector, small, for pediatric application                        |
Accessories

Burrhole deflectors

- With suture fixation hole
- Made of titanium
- Radiopaque
- Allows 90° deflection of the ventricular catheter in the burrhole without kinking the catheter
- Adjustable on catheter

### Deflectors

**FV010T:**
- Art. no. FV010T
- Deflector Large, 16 mm

**FV011T:**
- Art. no. FV011T
- Deflector for pediatric application Small, 10 mm

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all catheters: \( d_i = 1.2 \text{ mm}, d_o = 2.5 \text{ mm} \)
PORT

- Made of titanium
- Radiopaque
- Low overall height for easy and safe positioning and fixation of the ventricular catheter
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Solid titanium base preventing penetration with a syringe needle

Burrhole port

- **FV030T:**
  - Large, 20 mm

- **FV040T:**
  - Small, 14 mm, for pediatric application

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Burrhole port</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV030T</td>
<td>Large, 20 mm</td>
</tr>
<tr>
<td>FV040T</td>
<td>Small, 14 mm, for pediatric application</td>
</tr>
</tbody>
</table>

Burrhole port set

- **FV042T:**
  - Burrhole port, small, 14 mm
  - Ventricular catheter, 180 mm, with stylet, graduated

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Set, for pediatric application</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV042T</td>
<td></td>
</tr>
</tbody>
</table>

All catheters: $d_1 = 1.2$ mm, $d_2 = 2.5$ mm
Accessories

PORT

- Made of titanium
- Radiopaque
- Low overall height for easy and safe positioning and fixation of the ventricular catheter
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Solid titanium base preventing penetration with a syringe needle

CSF port

FV060T:

FV061T:

FV062T:

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>CSF port</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV060T</td>
<td>20 mm</td>
</tr>
<tr>
<td>FV061T</td>
<td>With integrated ventricular catheter, 85 mm</td>
</tr>
<tr>
<td>FV062T</td>
<td>Set incl. ventricular catheter, 180 mm, with stylet, graduated</td>
</tr>
</tbody>
</table>

Art. no.: di = 1.2 mm, do = 2.5 mm
**Burrhole reservoir**

- Made of titanium
- Radiopaque
- Low overall height for easy and safe positioning and fixation of the ventricular catheter
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Solid titanium base preventing penetration with a syringe needle

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Burrhole reservoir</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV028T</td>
<td>Large, 20 mm</td>
</tr>
<tr>
<td>FV029T</td>
<td>ETOU, large, 20 mm, with adjustable connector</td>
</tr>
<tr>
<td>FV039T</td>
<td>Small, 14 mm, for pediatric application</td>
</tr>
<tr>
<td>FV027T</td>
<td>Large, 20 mm, with integrated catheter, 600 mm</td>
</tr>
<tr>
<td>FV054T</td>
<td>Small, 14 mm, with integrated catheter, 200 mm</td>
</tr>
</tbody>
</table>

*all catheters: \( d_1 = 1.2 \text{ mm}, d_2 = 2.5 \text{ mm} \)
## Accessories

**Burrhole reservoir**

- Made of titanium
- Radiopaque
- Low overall height for easy and safe positioning and fixation of the ventricular catheter
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Solid titanium base preventing penetration with a syringe needle

### Burrhole reservoir set

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Set</th>
</tr>
</thead>
</table>
| FV032T   | - Burrhole reservoir, large, 20 mm  
- Ventricular catheter, 180 mm, with stylet, graduated |
| FV031T   | - Burrhole reservoir, large, 20 mm, with catheter, 600 mm  
- Ventricular catheter, 180 mm, with stylet, graduated |
| FV041T   |    |
| FV055T   |    |

### Set, for pediatric application

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Set</th>
</tr>
</thead>
</table>
| FV041T   | - Burrhole reservoir, small, 14 mm  
- Ventricular catheter, 180 mm, with stylet, graduated |
| FV055T   | - Burrhole reservoir, small, 14 mm, with catheter, 200 mm  
- Ventricular catheter, 180 mm, with stylet, graduated |

---

*all catheters: \( d_1 = 1.2 \text{ mm}, d_2 = 2.5 \text{ mm} \)
BURRHOLE RESERVOIR

- Sprung reservoir

**FV043T:**

- Made of titanium
- Radiopaque
- Allows checking the patency of both the ventricular catheter and the distal catheter
- Solid titanium base preventing penetration with a syringe needle
- Design acc. to Dr. Sprung

**FV044T:**

- Art. no.
  - FV043T: 20 mm
  - FV044T: 20 mm, with integrated catheter, 600 mm

**Mechanism:**

- Integrated valve mechanism shutting off the proximal connection to the ventricular catheter during pumping

Art. no. | Sprung reservoir
---------|-------------------
FV043T   | 20 mm
FV044T   | 20 mm, with integrated catheter, 600 mm

all catheters: $d_1 = 1.2 \text{ mm}, d_2 = 2.5 \text{ mm}$
Accessories

BURRHOLE RESERVOIR

- Made of titanium
- Radiopaque
- Allows checking the patency of both the ventricular catheter and the distal catheter
- Solid titanium base preventing penetration with a syringe needle
- Integrated valve mechanism shutting off the proximal connection to the ventricular catheter during pumping
- Design acc. to Dr. Sprung

Sprung reservoir set

- **FV045T:**
  - Sprung reservoir, 20 mm
  - Ventricular catheter, 180 mm, with stylet, graduated

- **FV046T:**
  - Sprung reservoir, 20 mm, with catheter, 600 mm
  - Ventricular catheter, 180 mm, with stylet, graduated

Art. no. | Set
--- | ---
FV045T | - Sprung reservoir, 20 mm
        | - Ventricular catheter, 180 mm, with stylet, graduated
FV046T | - Sprung reservoir, 20 mm, with catheter, 600 mm
        | - Ventricular catheter, 180 mm, with stylet, graduated

all catheters: \( d_1 = 1.2 \text{ mm}, \ d_2 = 2.5 \text{ mm} \)
FLUSHING RESERVOIR

- **Flushed reservoir**
  - FV033T:
    - Made of titanium
    - Radiopaque
    - Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
    - Solid titanium base preventing penetration with a syringe needle
    - Art. no. FV033T:
      - Large, 20 mm
    - Art. no. FV035T:
      - Small, 14 mm, for pediatric application
    - Art. no. FV034T:
      - Large, 20 mm, with integrated catheter, 600 mm
    - Art. no. FV081T:
      - Small, 14 mm, with integrated catheter, 600 mm

Art. no. | Flushing reservoir
---|---
FV033T | Large, 20 mm
FV035T | Small, 14 mm, for pediatric application
FV034T | Large, 20 mm, with integrated catheter, 600 mm
FV081T | Small, 14 mm, with integrated catheter, 600 mm

**Note:**
- All catheters: \( d_1 = 1.2 \text{ mm}, d_2 = 2.5 \text{ mm} \)
## Accessories

### FLUSHING RESERVOIR

- Made of titanium
- Radiopaque
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Solid titanium base preventing penetration with a syringe needle

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### Flushing reservoir set

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Set</th>
</tr>
</thead>
</table>
| FV036T  | - Ventricular catheter, 180 mm, with stylet, graduated  
           - Flushing reservoir, large, 20 mm, with integrated catheter, 600 mm  
           - Deflector, large, 16 mm |
| FV037T  | - Ventricular catheter, 85 mm, graduated, with stylet and integrated flushing reservoir, large, 20 mm  
           - Deflector, large, 16 mm |
| FV079T  | - Ventricular catheter, 85 mm, graduated, with stylet and integrated flushing reservoir, small, 14 mm, and distal catheter  
           - Deflector, large, 16 mm |

---

all catheters: \( d_i = 1.2 \text{ mm, } d_o = 2.5 \text{ mm} \)
### FLUSHING RESERVOIR

- **Flushing reservoir set**

  **FV038T:**

  - Made of titanium
  - Radiopaque
  - Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
  - Solid titanium base preventing penetration with a syringe needle

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Set, for pediatric application</th>
</tr>
</thead>
</table>
| FV038T   | - Ventricular catheter, 85 mm, graduated, with integrated flushing reservoir, small, 14 mm, with distal catheter and stylet  
  - Deflector, small, 10 mm |
| FV080T   | - Ventricular catheter, 100 mm, graduated, with integrated flushing reservoir, small, 14 mm, with distal catheter and stylet  
  - Deflector, small, 10 mm |

*all catheters: \( d_1 = 1.2 \text{ mm}, d_2 = 2.5 \text{ mm} *
Accessories

**FLUSHING RESERVOIR**

- Made of titanium
- Radiopaque
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Allows checking the patency of both the ventricular catheter and the distal catheter
- Solid titanium base preventing penetration with a syringe needle

- Integrated valve mechanism shutting off the proximal connection to the ventricular catheter during pumping

**Control reservoir**

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Control reservoir</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV047T</td>
<td>20 mm</td>
</tr>
<tr>
<td>FV048T</td>
<td>20 mm, with integrated catheter, 600 mm</td>
</tr>
</tbody>
</table>

**Mechanism:**

all catheters: \( d_1 = 1.2 \text{ mm}, d_2 = 2.5 \text{ mm} \)
Control reservoir set

FV049T:

<table>
<thead>
<tr>
<th>Best.-Nr.</th>
<th>Set</th>
</tr>
</thead>
</table>
| FV049T    | - Control Reservoir, 20 mm, with integrated catheter, 600 mm
|           | - Ventricular catheter, 180 mm, with stylet, graduated               |
|           | - Deflector, large, 16 mm                                            |

- Made of titanium
- Radiopaque
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Allows checking the patency of both the ventricular catheter and the distal catheter
- Solid titanium base preventing penetration with a syringe needle
- Integrated valve mechanism shutting off the proximal connection to the ventricular catheter during pumping

all catheters: $d_1 = 1.2\text{ mm}$, $d_2 = 2.5\text{ mm}$
**Accessories**

**TITANIUM CONNECTORS**

- Preferably for use with catheters of internal diameter \(d_i\): 1.2 mm, external diameter \(d_o\): 2.5 mm
- Connector diameter: 1.9 mm

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV012T</td>
<td>straight</td>
<td>1 pc.</td>
</tr>
<tr>
<td>FV013T</td>
<td>L-shape</td>
<td>1 pc.</td>
</tr>
<tr>
<td>FV015T</td>
<td>Y-shape</td>
<td>1 pc.</td>
</tr>
<tr>
<td>FV018T</td>
<td>T-shape</td>
<td>1 pc.</td>
</tr>
<tr>
<td>FV021T</td>
<td>X-Form</td>
<td>1 pc.</td>
</tr>
<tr>
<td>FV014T</td>
<td></td>
<td>5 pcs.</td>
</tr>
<tr>
<td>FV016T</td>
<td></td>
<td>5 pcs.</td>
</tr>
<tr>
<td>FV017T</td>
<td></td>
<td>10 pcs.</td>
</tr>
<tr>
<td>FV019T</td>
<td></td>
<td>10 pcs.</td>
</tr>
<tr>
<td>FV020T</td>
<td></td>
<td>10 pcs.</td>
</tr>
<tr>
<td>FV022T</td>
<td></td>
<td>5 pcs.</td>
</tr>
<tr>
<td>FV023T</td>
<td></td>
<td>10 pcs.</td>
</tr>
</tbody>
</table>
**TITANIUM CONNECTORS**

- **Magram connectors**
  - Art. no. FV056T | Y-shape | 1 pc.
  - Art. no. FV057T | U-shape | 1 pc.
  - Art. no. FV058T | F-shape | 1 pc.
  - Art. no. FV059T | L-shape | 1 pc.

- **Sealing plug**
  - Art. no. FV024T | Sealing plug | 1 pc.
  - Art. no. FV025T | 5 pcs.
  - Art. no. FV026T | 10 pcs.

- Preferably for use with catheters of internal diameter \((d_i)\): 1.2 mm, external diameter \((d_o)\): 2.5 mm
- Connector diameter: 1.9 mm
- Design acc. to Dr. Magram
Accessories

**TITANIUM CONNECTORS**

- Step-down connectors are designed for connecting standard catheters to lumbar catheters.
- Step-down connector diameters: 1.9 mm to 1.4 mm

- L-P connectors are designed for connecting two lumbar catheters to each other.
- Connector diameters for L-P drainage: 1.4 mm to 1.4 mm

**Titanium connector, step-down**

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV050T</td>
<td>1.9 mm to 1.4 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV052T</td>
<td>1.9 mm to 1.4 mm</td>
</tr>
</tbody>
</table>

**Titanium connector, L-P drainage**

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV053T</td>
<td>1.4 mm to 1.4 mm</td>
</tr>
</tbody>
</table>
## TUNNELING INSTRUMENT

### Tunneling instrument, reusable

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV001R</td>
<td>curved</td>
</tr>
</tbody>
</table>

### Single-use tunneling instrument

<table>
<thead>
<tr>
<th>Art. no.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV002R</td>
<td>300 mm, flexible</td>
</tr>
<tr>
<td>FV003R</td>
<td>450 mm, flexible</td>
</tr>
<tr>
<td>FV004R</td>
<td>600 mm, flexible</td>
</tr>
</tbody>
</table>

For percutaneous tunneling and inserting of catheters