

# Aesculap 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



Art. no.	Peritoneal catheter
FV070P	600 mm length
FV071P	900 mm length
FV072P	1200 mm length

### ■ Peritoneal catheter with integrated barium strip



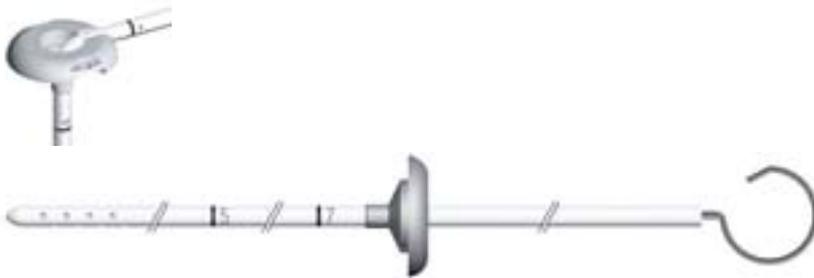
Art. no.	Peritoneal catheter
FV092P	600 mm length
FV091P	900 mm length
FV090P	1200 mm length

### ■ Ventricular catheter with stylet

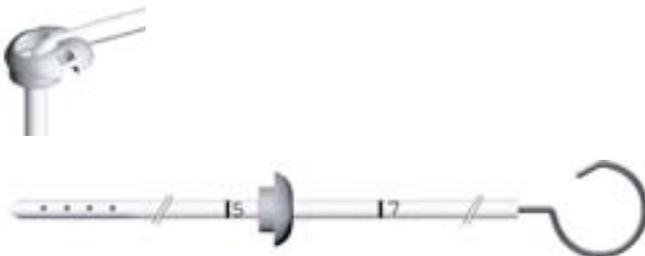


Art. no.	Ventricular catheter with stylet
FV074P	180 mm, graduated
FV077P	250 mm, graduated

■ Ventricular catheter with deflector



Art. no.	Set
FV075P	- Ventricular catheter, 180 mm, with stylet, graduated - Deflector, large
FV078P	- Ventricular catheter, 250 mm, with stylet, graduated - Deflector, large



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

■ All catheters are made of radiopaque silicone

■  $d_i = 1.2 \text{ mm}$   
■  $d_o = 2.5 \text{ mm}$

**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



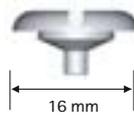
# Accessories

## 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.

Deflector

FV010T

Large, 16 mm

*FV011T:*



Art. no.

Deflector for pediatric application

FV011T

Small, 10 mm

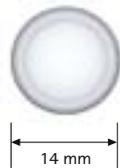
all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$

■ Burrhole port

FV030T:



FV040T:



- 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

Art. no.	Burrhole port
FV030T	Large, 20 mm
FV040T	Small, 14 mm, for pediatric application

■ Burrhole port set



Art. no.	Set, for pediatric application
FV042T	<ul style="list-style-type: none"> <li>- Burrhole port, small, 14 mm</li> <li>- Ventricular catheter, 180 mm, with stylet, graduated</li> </ul>

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



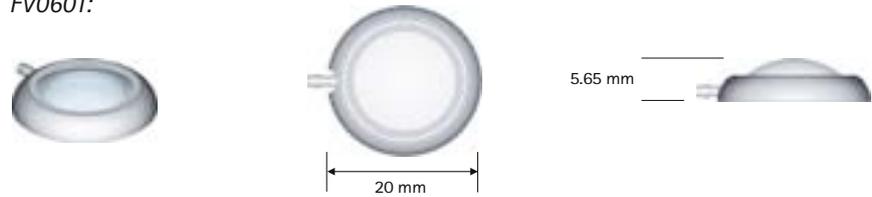
# Accessories

## PORT

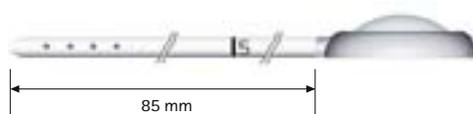
- Made of titanium
- Radiopaque
- Low overall height for easy and safe positioning and fixation of the ventricular catheter
- Allows CSF extraction and drug injection by inserting a syringe through the silicone dome
- Solid titanium base preventing penetration with a syringe needle

### ■ CSF port

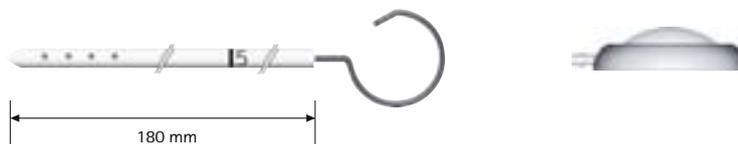
*FV060T:*



*FV061T:*



*FV062T:*

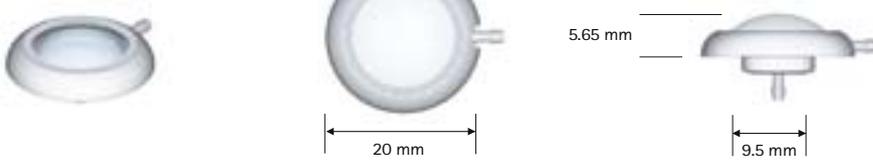


Art. no.	CSF port
FV060T	20 mm
FV061T	With integrated ventricular catheter, 85 mm
FV062T	Set incl. ventricular catheter, 180 mm, with stylet, graduated

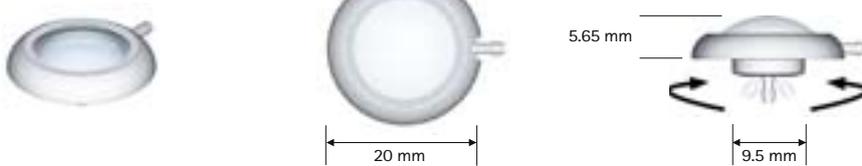
all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$

■ Burrhole reservoir

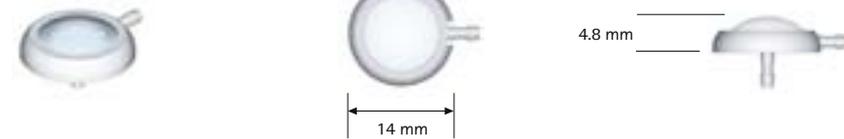
FV028T:



FV029T:



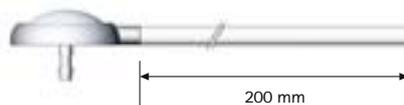
FV039T:



FV027T:



FV054T:



- 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

Art. no.	Burrhole reservoir
FV028T	Large, 20 mm
FV029T	ETOU, large, 20 mm, with adjustable connector
FV039T	Small, 14 mm, for pediatric application
FV027T	Large, 20mm, with integrated catheter, 600 mm
FV054T	Small, 14mm, with integrated catheter, 200 mm

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



# 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

FV032T:



FV031T:



Art. no.	Set
FV032T	<ul style="list-style-type: none"> <li>- Burrhole reservoir, large, 20 mm</li> <li>- Ventricular catheter, 180 mm, with stylet, graduated</li> </ul>
FV031T	<ul style="list-style-type: none"> <li>- Burrhole reservoir, large, 20 mm, with catheter, 600 mm</li> <li>- Ventricular catheter, 180 mm, with stylet, graduated</li> </ul>

FV041T:



FV055T:

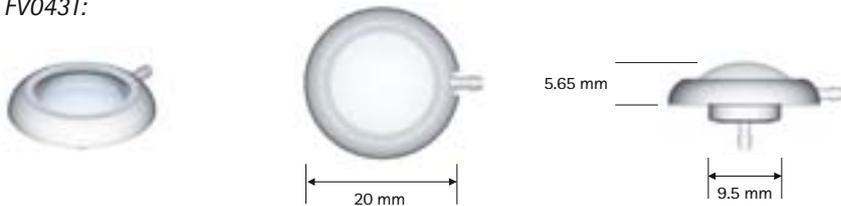


Art. no.	Set, for pediatric application
FV041T	<ul style="list-style-type: none"> <li>- Burrhole reservoir, small, 14mm</li> <li>- Ventricular catheter, 180 mm, with stylet, graduated</li> </ul>
FV055T	<ul style="list-style-type: none"> <li>- Burrhole reservoir, small, 14 mm, with catheter, 200 mm</li> <li>- Ventricular catheter, 180 mm, with stylet, graduated</li> </ul>

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$

■ Sprung reservoir

FV043T:



FV044T:



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

- 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

Mechanism:



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

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



# 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:



FV046T:



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

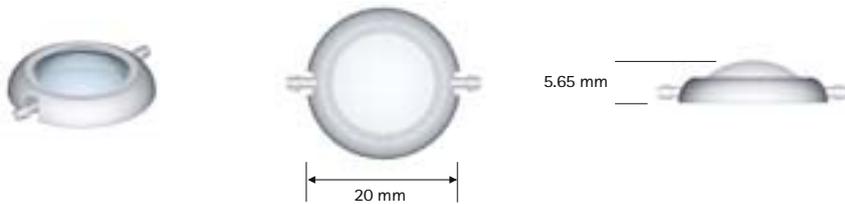
all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



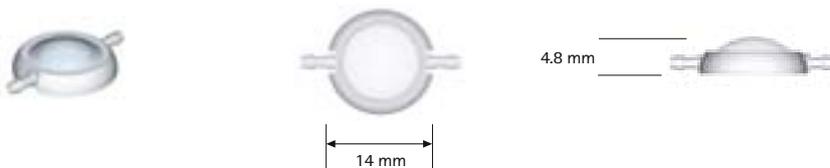
## FLUSHING RESERVOIR

### ■ Flushing reservoir

FV033T:



FV035T:



FV034T:



FV081T:



- 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.	Flushing reservoir
FV033T	Large, 20 mm
FV035T	Small, 14mm, for pediatric application
FV034T	Large, 20 mm, with integrated catheter, 600 mm
FV081T	Small, 14 mm, with integrated catheter, 600 mm

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



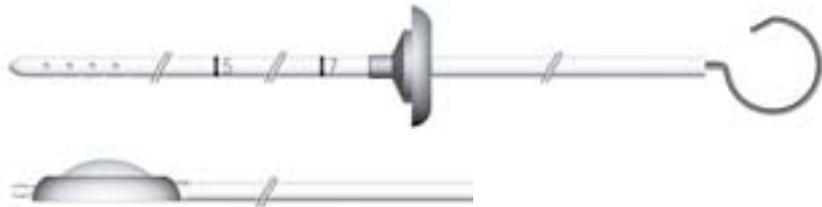
# Accessories

## 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

### ■ Flushing reservoir set

FV036T:



FV037T:



FV079T:



Art. no.	Set
FV036T	<ul style="list-style-type: none"> <li>- Ventricular catheter, 180 mm, with stylet, graduated</li> <li>- Flushing reservoir, large, 20 mm, with integrated catheter, 600 mm</li> <li>- Deflector, large, 16 mm</li> </ul>
FV037T	<ul style="list-style-type: none"> <li>- Ventricular catheter, 85 mm, graduated, with stylet and integrated flushing reservoir, large, 20 mm</li> <li>- Deflector, large, 16 mm</li> </ul>
FV079T	<ul style="list-style-type: none"> <li>- Ventricular catheter, 85 mm, graduated, with stylet and integrated flushing reservoir, small, 14 mm, and distal catheter</li> <li>- Deflector, large, 16 mm</li> </ul>

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



## FLUSHING RESERVOIR

### ■ Flushing reservoir set

*FV038T:*



Art. no.	Set, for pediatric application
FV038T	<ul style="list-style-type: none"><li>- Ventricular catheter, 85 mm, graduated, with integrated flushing reservoir, small, 14 mm, with distal catheter and stylet</li><li>- Deflector, small, 10 mm</li></ul>
FV080T	<ul style="list-style-type: none"><li>- Ventricular catheter, 100 mm, graduated, with integrated flushing reservoir, small, 14 mm, with distal catheter and stylet</li><li>- Deflector, small, 10 mm</li></ul>

- 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

all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



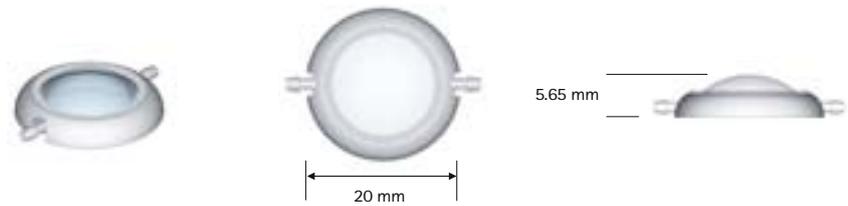
# Accessories

## 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

### ■ Control reservoir

FV047T:

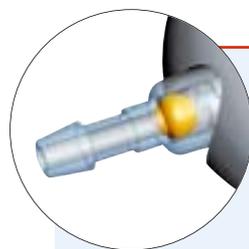


FV048T:



Art. no.	Control reservoir
FV047T	20 mm
FV048T	20mm, with integrated catheter, 600 mm

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



Mechanism:



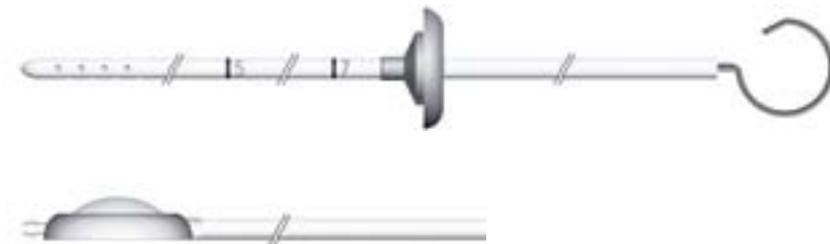
all catheters:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$



## FLUSHING RESERVOIR

### ■ Control reservoir set

FV049T:



Best.-Nr.	Set
FV049T	<ul style="list-style-type: none"><li>- Control Reservoir, 20 mm, with integrated catheter, 600 mm</li><li>- Ventricular catheter, 180 mm, with stylet, graduated</li><li>- Deflector, large, 16 mm</li></ul>

- 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:  $d_i = 1.2 \text{ mm}$ ,  $d_o = 2.5 \text{ mm}$

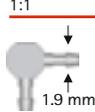
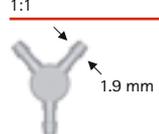
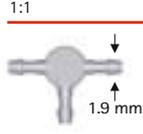
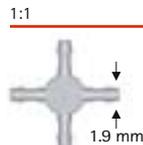


# Accessories

## 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

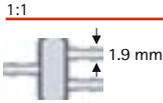
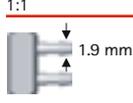
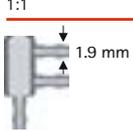
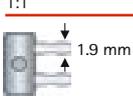
### ■ Titanium connectors

		<b>Art. no.</b>	<b>straight</b>
		FV012T	1 pc.
		FV013T	5 pcs.
		FV014T	10 pcs.
		<b>Art. no.</b>	<b>L-shape</b>
		FV051T	1 pc.
		<b>Art. no.</b>	<b>Y-shape</b>
		FV015T	1 pc.
		FV016T	5 pcs.
		FV017T	10 pcs.
		<b>Art. no.</b>	<b>T-shape</b>
		FV018T	1 pc.
		FV019T	5 pcs.
		FV020T	10 pcs.
		<b>Art. no.</b>	<b>X-Form</b>
		FV021T	1 pc.
		FV022T	5 pcs.
		FV023T	10 pcs.

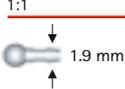


## TITANIUM CONNECTORS

### ■ Magram connectors

		Art. no.	Y-shape
		FV056T	1 pc.
		Art. no.	U-shape
		FV057T	1 pc.
		Art. no.	F-shape
		FV058T	1 pc.
		Art. no.	L-shape
		FV059T	1 pc.

### ■ Sealing plug

		Art. no.	Sealing plug
		FV024T	1 pc.
		FV025T	5 pcs.
		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

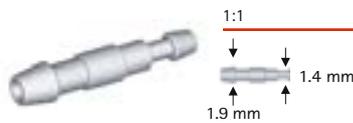
■ Step-down connectors are designed for connecting standard catheters to lumbar catheters

■ 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



Art. no.

straight

FV050T

1 pc.



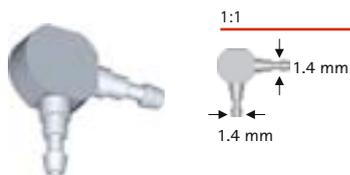
Art. no.

L-shape

FV052T

1 pc.

### ■ Titanium connector, L-P drainage



Art. no.

L-shape

FV053T

1 pc.



## TUNNELING INSTRUMENT

### ■ Tunneling instrument, reusable



Art. no.	Tunneling instrument, reusable
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FV001R	curved
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### ■ Single-use tunneling instrument



Art. no.	Single-use tunneling instrument, pack of ten instruments, each in individual sterile packaging
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FV002R	300 mm, flexible
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FV003R	450 mm, flexible
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FV004R	600 mm, flexible
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■ For percutaneous tunneling and inserting of catheters



# AESCULAP®

Manufacturer acc. MDD 93/42/EEC

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