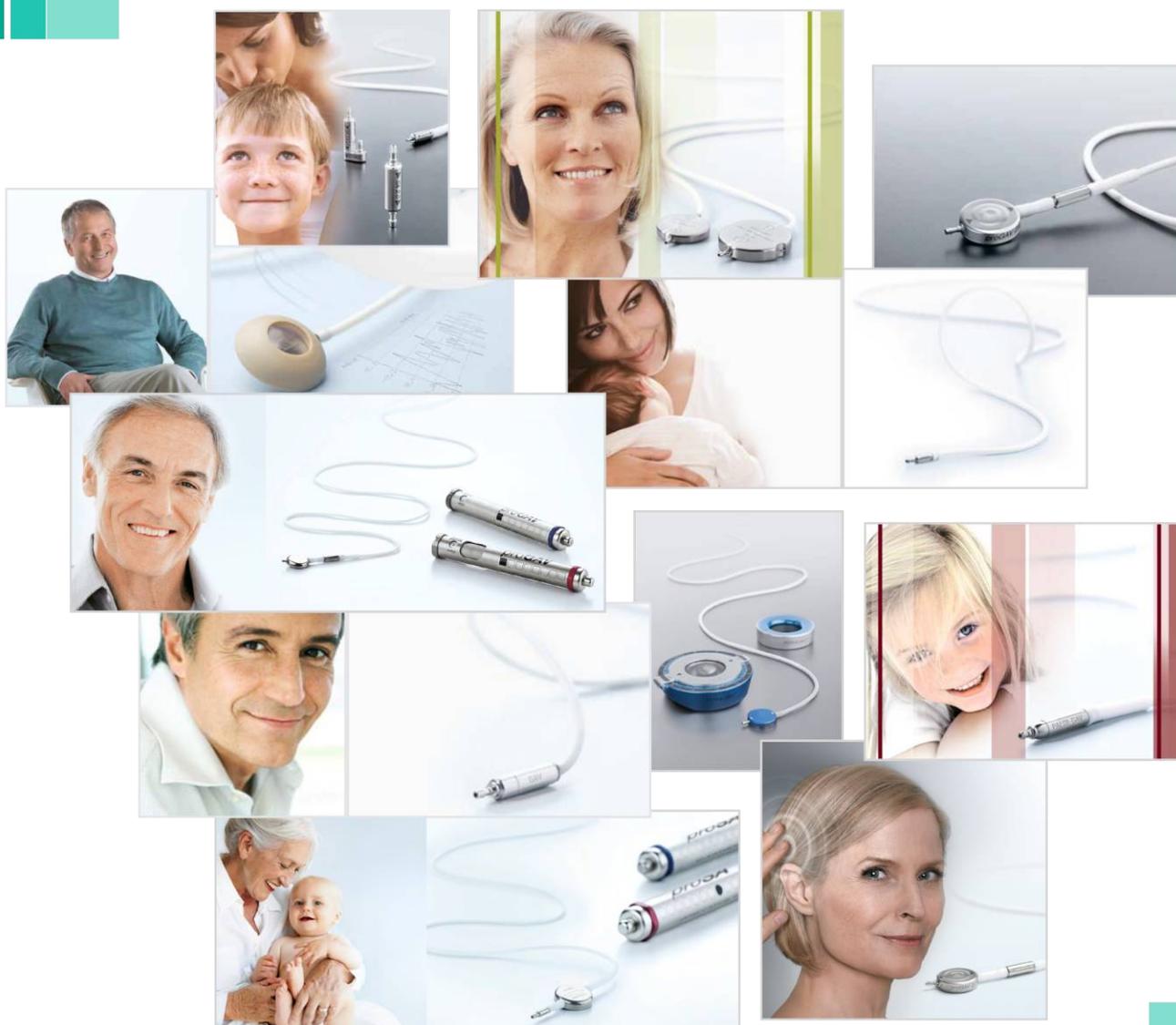
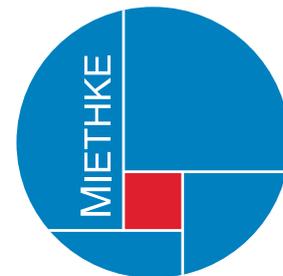


# SHUNT

## PRODUCTS CATALOG



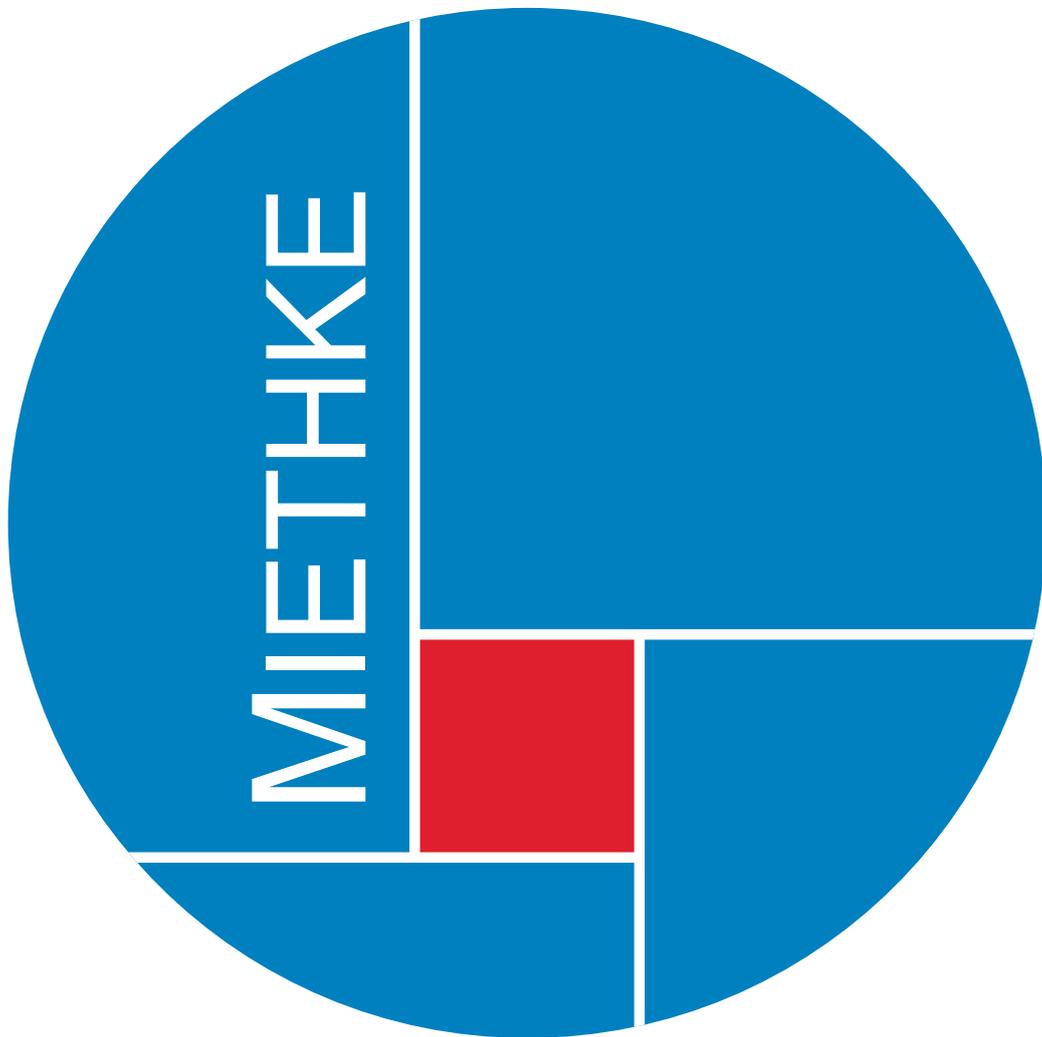
**Iran Behdasht**  
*Healthy Lifestyle , Healthy Heart*



## About us

Since the foundation in 1992 Christoph Miethke GmbH & Co. KG has acquired the reputation as an innovative enterprise by neurosurgical experts around the world for implantable discharge-systems commonly used in the treatment of hydrocephalus. To this day our company has grown to over 200 employees and this is us: We are deeply dedicated to long-term, positive outcomes for hydrocephalus patients. We are passionate about advocacy, clinical partnerships and unique solutions to improve patient care. We embrace the unknown, challenge the status quo and encourage a multi-disciplinary approach to improve products, programs and partnerships. We believe that our expectations, experience and deep dedication to the field of Hydrocephalus will continue to support new solutions for patients worldwide. We are pleased to announce a new partnership between IranBehdasht and Christoph Miethke Company. Together we aim to provide the Iranian patients with a wide range of high quality products for the treatment of hydrocephalus. Our principal goal is to satisfy the customer by providing our best services. This partnership will surely help us enhance and enrich our business and also provide newer services.

# SHUNT PRODUCTS





# GAV<sup>®</sup>

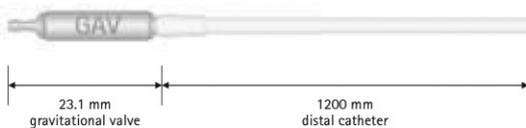
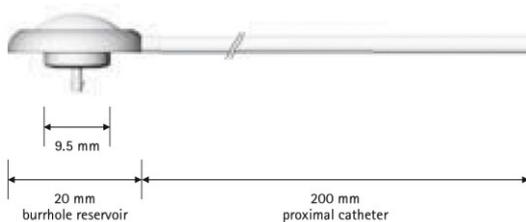
Gravity Assisted Valve for the Treatment of Adult Hydrocephalus

The strengths of the GAV<sup>®</sup> valve lie precisely here. By means of the gravitational mechanism, the GAV<sup>®</sup> actively varies its opening pressure as soon as this becomes necessary due to alterations in the patient's body position. As a result, CSF drainage is as physiological as possible.

This also makes the valve particularly well suited for the treatment of NPH patients, as well as for extreme forms of hydrocephalus, such as LOVA (longstanding overt ventriculomegaly in adults).

The GAV<sup>®</sup> valve is made from titanium, a material that stands for outstanding precision, reliability and biocompatibility. It is MRI compatible and offers effective protection against subcutaneous pressure.

The very slim, streamlined valve design facilitates extremely easy implantation in the retroauricular area.



Valve pressure level (cmH<sub>2</sub>O\*)

Cat. no.		Valve pressure level (cmH <sub>2</sub> O*)	
			
FV334T**	up to 160 cm	5	30
FV335T**	160 - 180 cm	5	35
FV336T**	over 180 cm	5	40
■ Special pressure levels			
FV337T		10	30
FV338T		10	40
FV339T		10	50



# GAV 2.0<sup>®</sup>

## GAV 2.0<sup>®</sup> LP

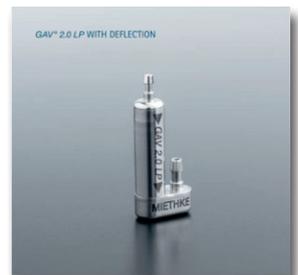
### TWO ADDITIONAL LP-VARIANTS

GAV<sup>®</sup> 2.0 is also suitable for lumbar drainage due to two special variants

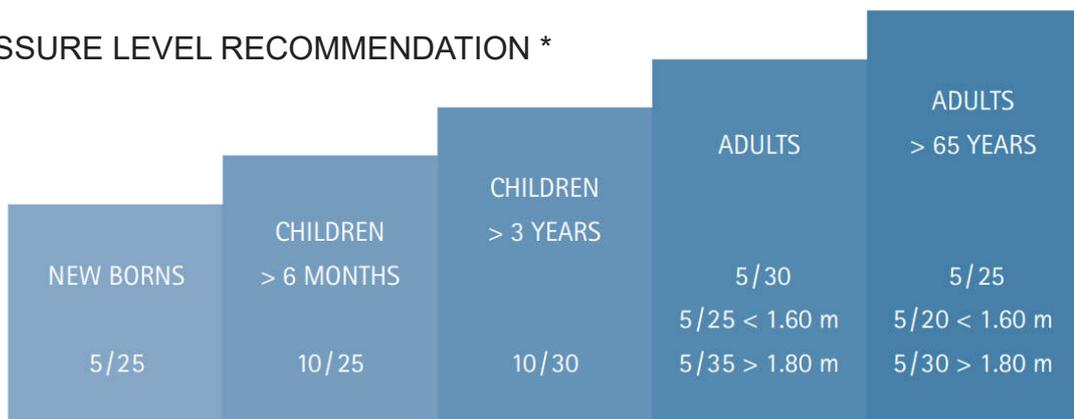


### TITANIUM

The valve material titanium assures high precision, durable reliability and biocompatibility. It prevents effectively external and subcutaneous pressure influences and is MRI compatible



### PRESSURE LEVEL RECOMMENDATION \*





# proGAV<sup>®</sup>

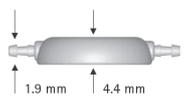
Adjustable MIETHKE Shunt Systems  
Your Simple Choice for Precise Patient Care

## Enhanced Treatment Options

- Wide range of pressure settings between 0 and 20 cmH<sub>2</sub>O
- Integrated gravitational unit for effective protection against overdrainage
- “Active-lock” mechanism to reduce inadvertent pressure level readjustments caused by external magnetic fields
- 3-Tesla MR safe
- X-ray-free verification of the pressure level setting
- Patented instruments for easy and quick adjustment of the pressure level
- Titanium shell allowing reliable operation independent of external or subcutaneous pressures

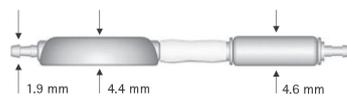


Without gravitational unit:



18 mm  
adjustable differential  
pressure unit

With gravitational unit:



18 mm  
adjustable differential  
pressure unit

15.1 mm  
gravitational unit



14 mm  
prechamber

18 mm  
adjustable differential  
pressure unit

15.1 mm  
gravitational unit

1200 mm  
distal catheter

Cat. no.	Gravitational unit (not adjustable / cmH <sub>2</sub> O*)
Children up to 5 years and adults over 60 years: FV413T **	20
Children over 5 years and adults up to 60 years: FV414T **	25

### Special pressure levels

FV410T	-
FV411T	10
FV412T	15
FV415T	30
FV416T	35

Cat. no.	Gravitational unit (not adjustable / cmH <sub>2</sub> O*)
Children up to 5 years and adults over 60 years: FV480T**	20

# Neurosurgery

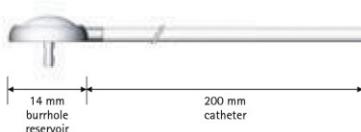
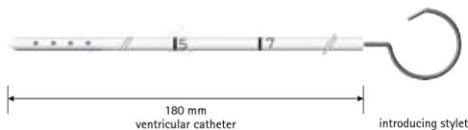
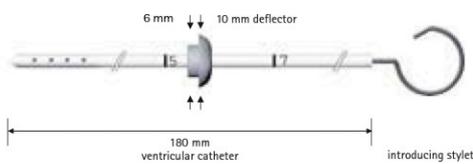
## paediGAV<sup>®</sup>

Gravitational valve for the treatment of paediatric hydrocephalus

Another advantage of the paediGAV<sup>®</sup> valve is its very slim, streamlined design.

This facilitates extremely easy and quick implantation in the retroauricular area, decreasing the risk of infection. The valve is made from titanium, a material that guarantees outstanding precision, reliability and biocompatibility. It is MRI compatible and offers effective protection against subcutaneous pressure.

**“The paediGAV<sup>®</sup> prevents overdrainage very effectively. Despite the small outer dimensions, CSF pathway within the device are comparatively large, what is reflected by the absence of shunt failure due to valve occlusion.”\***



Cat. no.	Valve pressure level (cmH <sub>2</sub> O*)	
		
FV302T	4	14
FV303T	4	19
FV304T	4	24
FV305T	9	19
FV306T	9	24
FV307T	9	29

\*\*Standard pressure levels recommended levels only, may vary according to patient and medical history

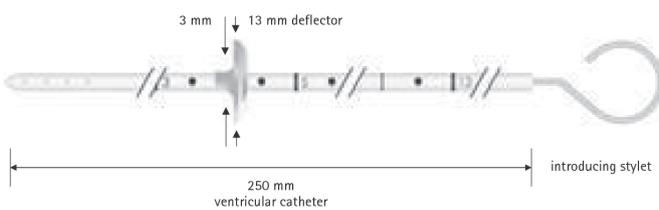
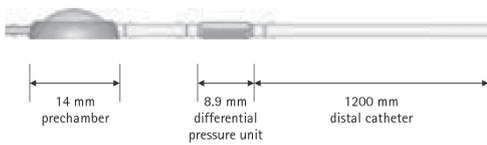
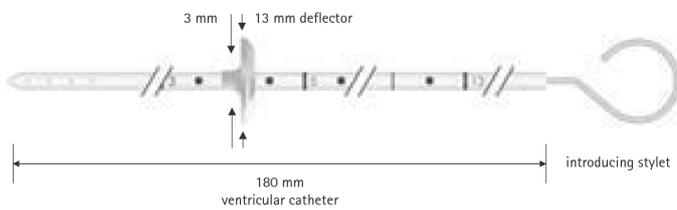
\* 1 cmH<sub>2</sub>O = 0,74 mmHg

Cat. no.	Valve pressure level (cmH <sub>2</sub> O*)	
		
FV296T	4	14
FV297T	4	19
FV298T	4	24
FV299T	9	19
FV300T	9	24
FV301T	9	29



# miniNAV<sup>®</sup>

The MIETHKE Differential Pressure Valve

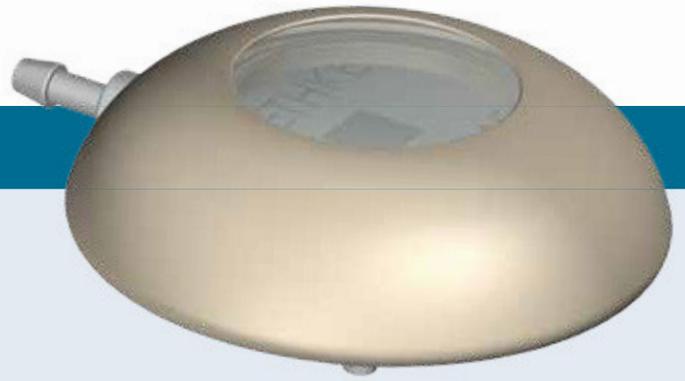


Art. no.	Differential pressure unit (cmH <sub>2</sub> O*)
FV668T**	10
■ Special pressure levels	
FV666T	0***
FV667T	5
FV669T	15

Art. no.	Differential pressure unit (cmH <sub>2</sub> O*)
FV680T**	10
■ Special pressure levels	
FV678T	0***
FV679T	5
FV681T	15

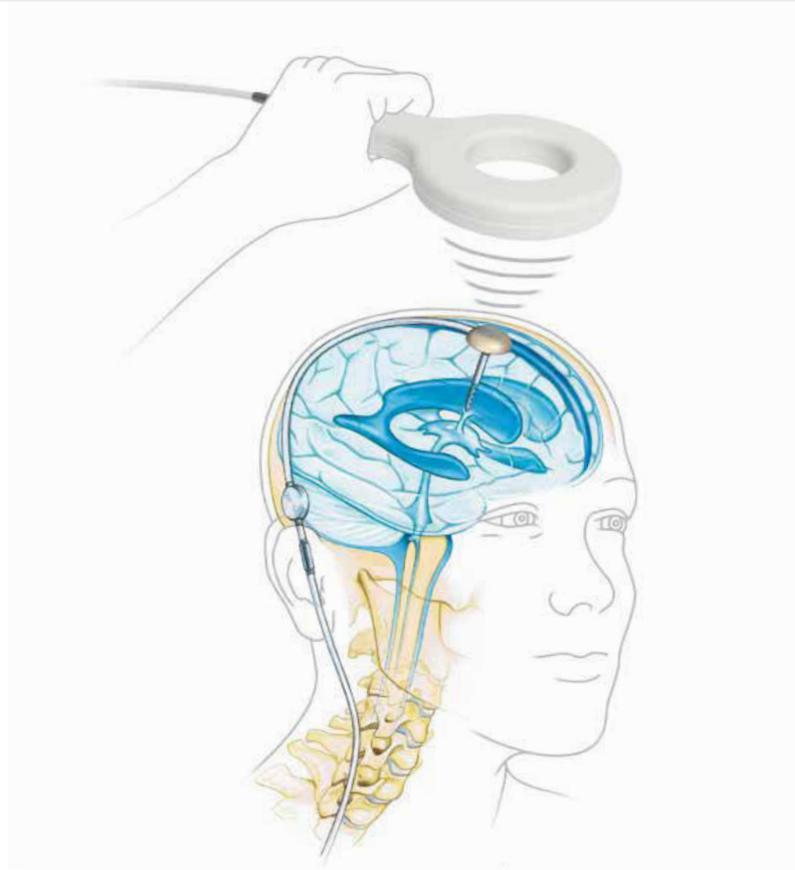


## ***SENSOR RESERVOIR SENSOR PRECHAMBER***



The Miethke SENSOR RESERVOIR / SENSOR PRECHAMBER is the first long-term implantable measuring cell for the measurement of pressures within a shunt system. It is integrated into a reservoir for a ventricular drainage system and transmits pressure values using telemetric methods, thus non-invasively, via a reader unit.

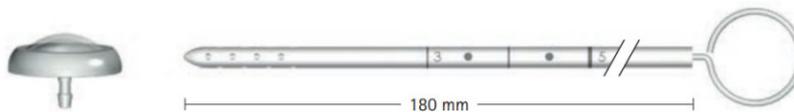
The SENSOR RESERVOIR / SENSOR PRECHAMBER allows, for the first time, the pressure in a shunt system to be measured and evaluated, and integrated into treatment options.





# ACCESSORIES FOR MIETHKE SHUNT SYSTEMS

## PORT SET



Art. no.	Set
FV042T	<ul style="list-style-type: none"> <li>▪ Port, small, 14 mm</li> <li>▪ Ventricular catheter, 180 mm, with stilet, graduated</li> </ul>

## TITANIUM CONNECTORS

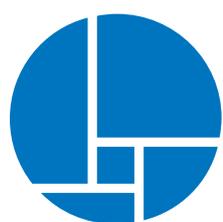
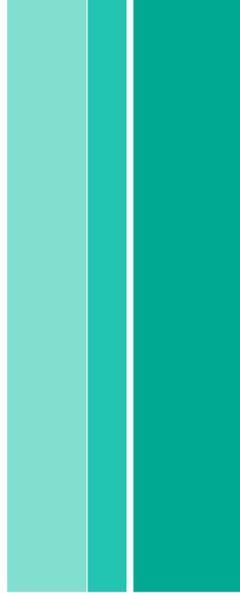
	X-shape	Art. no.	Sales unit
		FV021T	1 pc.

	Y-shape	Art. no.	Sales unit
		FV015T	1 pc.
		FV016T	5 pcs.
		FV017T	10 pcs.

SINGLE USE TUNNELING INSTRUMENT, FLEXIBLE  
SALES UNIT: PAK= PACKAGE OF 10 PIECES,  
EACH IN INDIVIDUAL STERILE PACKAGING



Art. no.	Length
FV002R	300 mm, 11 3/4"
FV003R	450 mm, 17 3/4"
FV004R	600 mm, 23 5/8"



**MIETHKE**



Manufacturer:

■ CHRISTOPH MIETHKE GMBH & CO. KG

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