

Neurosurgical Product Catalogue

All products and product specifications identified in the product catalogue are based upon the information available to Biçakcılar at the time of publication. Biçakcılar reserves the right to discontinue any of these products or to change any such specifications without prior notice.



TIBBİ CİHAZLAR SANAYİ VE TİCARET A.Ş.

Operates in manufacturing of disposable medical devices, electro-medical equipment, and distribution of medical devices from leading multinational brands. Manufacturing facilities are in İstanbul Esenyurt, whereas domestic sales and distribution is performed via regional sales branches in İstanbul, Ankara, İzmir, Samsun and Adana. Bıçakçılar Headquarters is in İstanbul.



Desu Medical manufacturing and R&D activities are performed in Class 10.000 and 1.000 clean room facilities within the Hacettepe Technopark establishment.



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Neurosurgical Shunt Systems

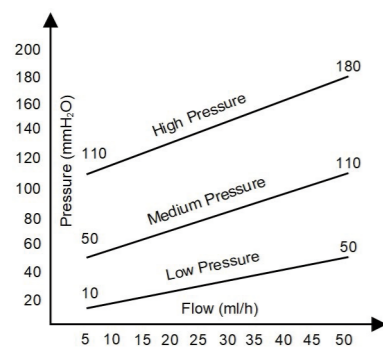
Silicone Shunts

Silicone valves are made of polypropylene and silicone elastomer. The risk of deformation due to adhesion is minimized. Does not contain any metal parts. Suitable for MRI and CT scans. It has a reservoir structure. Antibiotic impregnated body option is available.

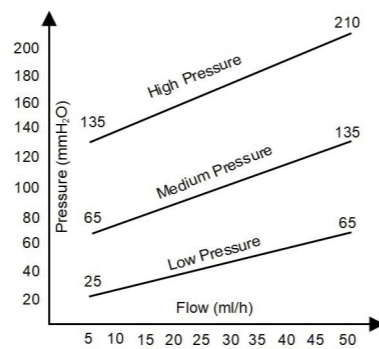
Polysulfone Shunts

The mechanism inside the Polysulfone Shunts is triggered by positive ventricular pressure and the valve opens automatically. The ruby ball and titanium spring parts in the system are the main components of this system, which works with the hydrodynamic leverage method.

Shunt systems are drainage systems designed to reduce the intracranial pressure that occurs with hydrocephalus disease.



Normal kit graph



Antisiphone kit graph

All shunt systems are provided as sterile (Method EO-Ethylene Oxide)

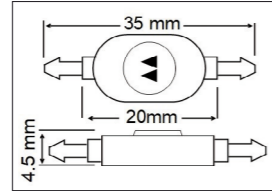


Defit Shunts

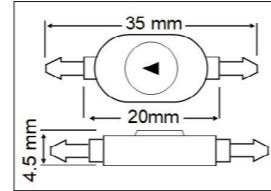
Silicone Flat-Bottom Shunts

Ultra Small, Small and Regular sizes are available as valve and shunt kit.

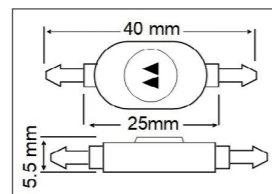
Ultra Small Defit Shunt



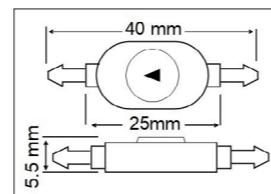
Antibiotic Impregnated Ultra Small Defit Shunt



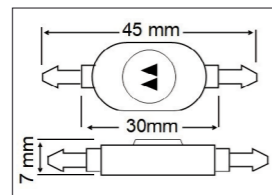
Small Defit Shunt



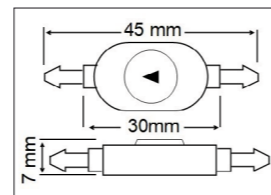
Antibiotic Impregnated Small Defit Shunt



Regular Defit Shunt



Antibiotic Impregnated Regular Defit Shunt

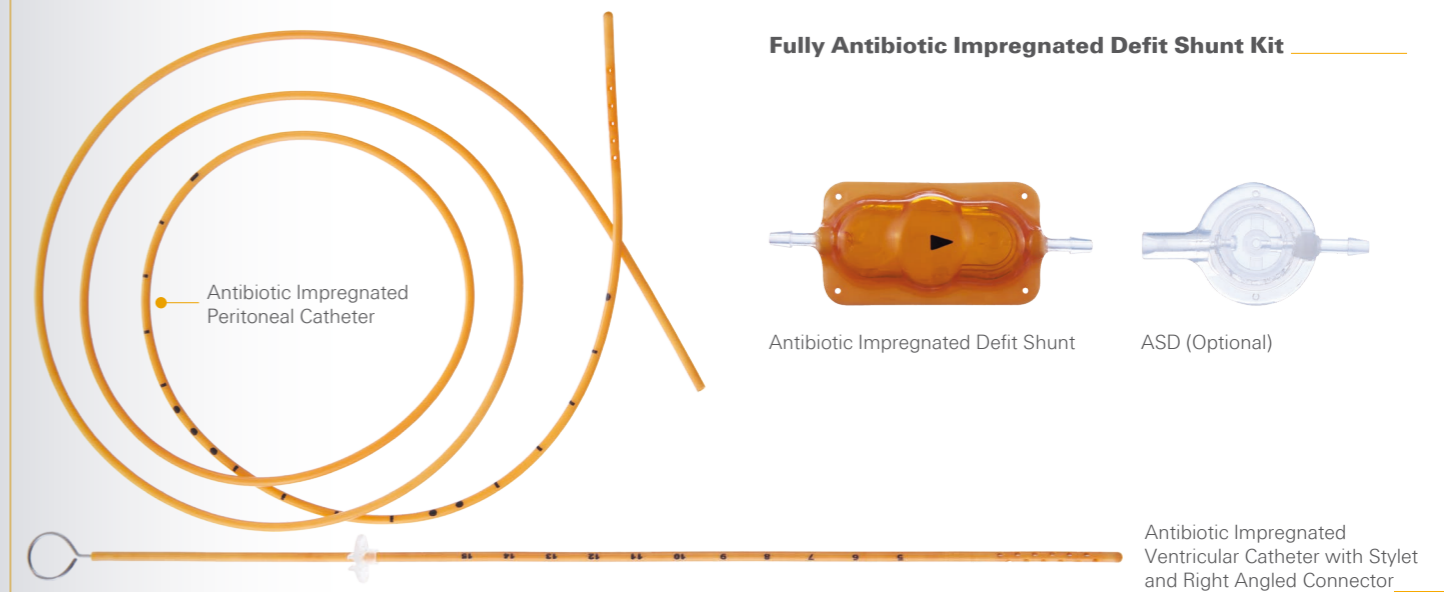
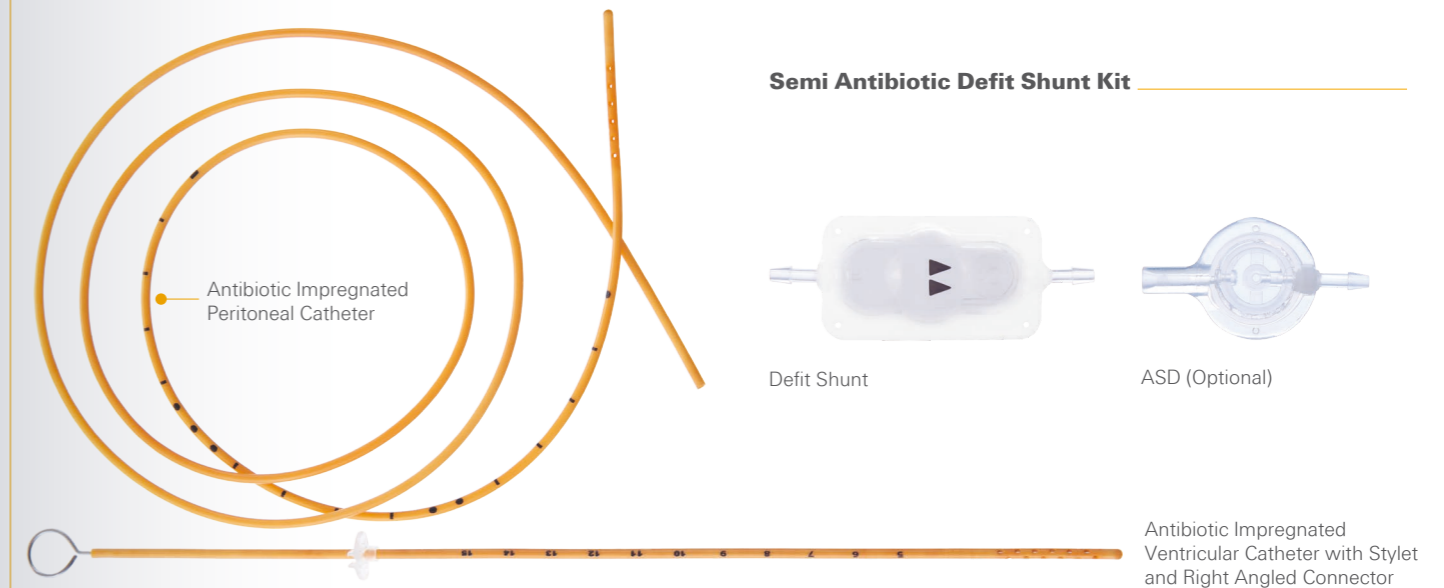
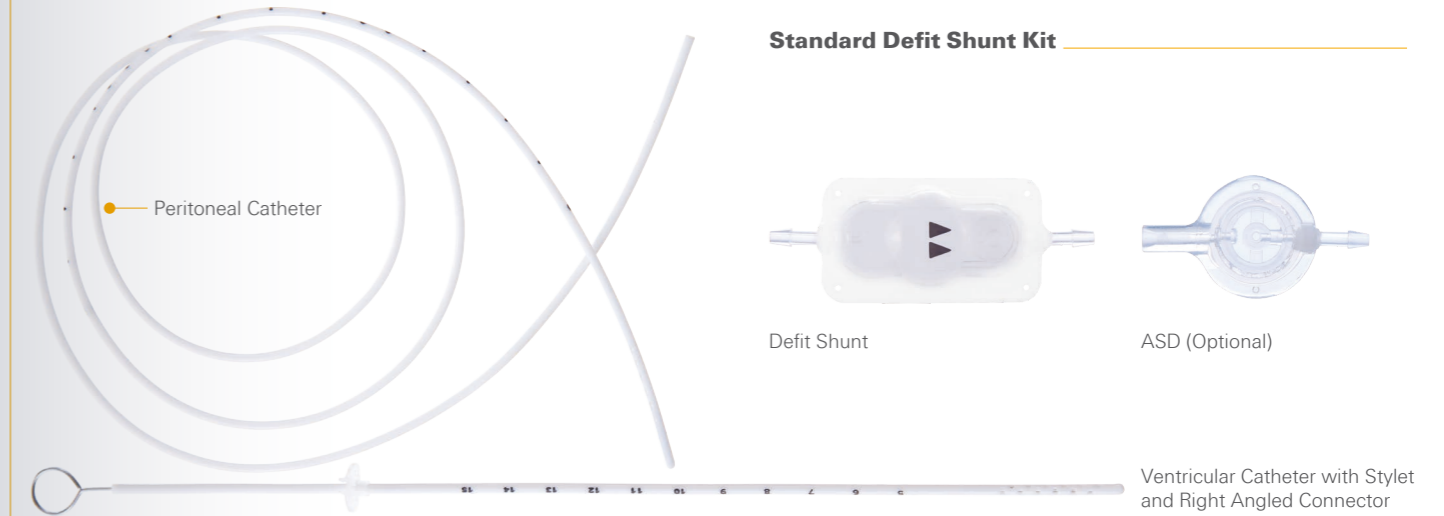


Defit Shunts

Silicone Flat-Bottom Shunt Kits

Ultra Small, Small and Regular sizes are available as valve and shunt kit.

Defit Shunt Kit included with; Defit Valve, Ventricular Catheter, Peritoneal Catheter, Stylet, Right Angled Connector, ASD (Optional)

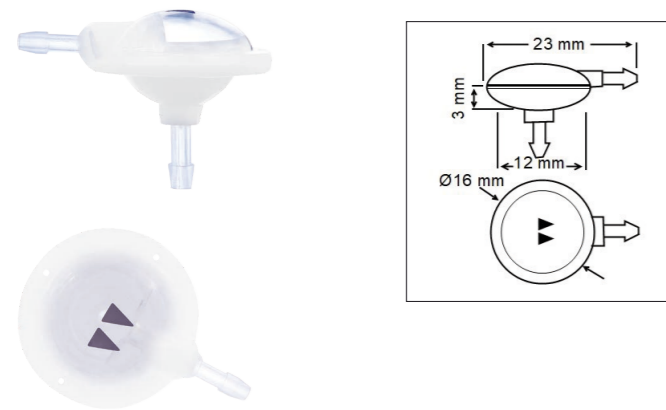


Decurve Shunts

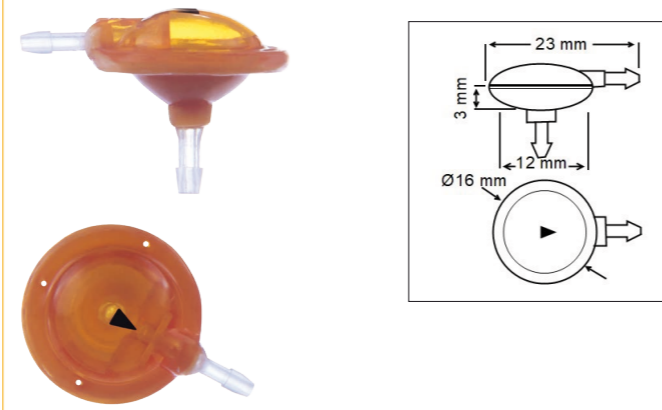
Silicone Burr-Hole Shunts

Pediatric and Adult sizes are available as valve and shunt kit.

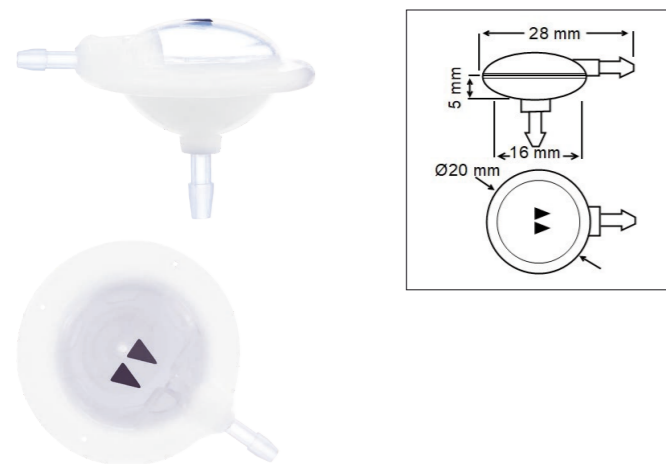
Pediatric Decurve Shunt



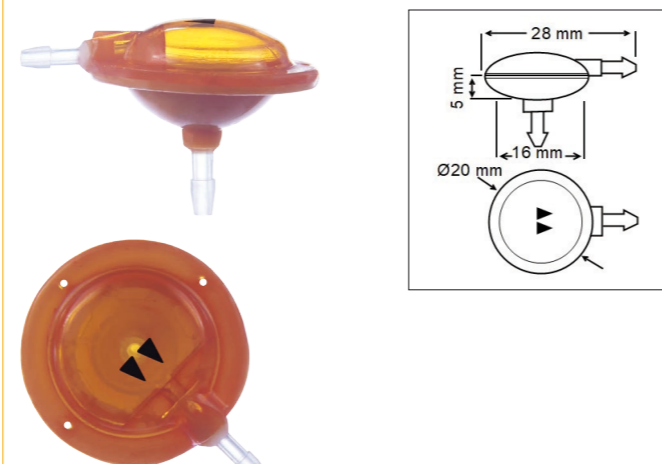
Antibiotic Impregnated Pediatric Decurve Shunt



Adult Decurve Shunt



Antibiotic Impregnated Adult Decurve Shunt

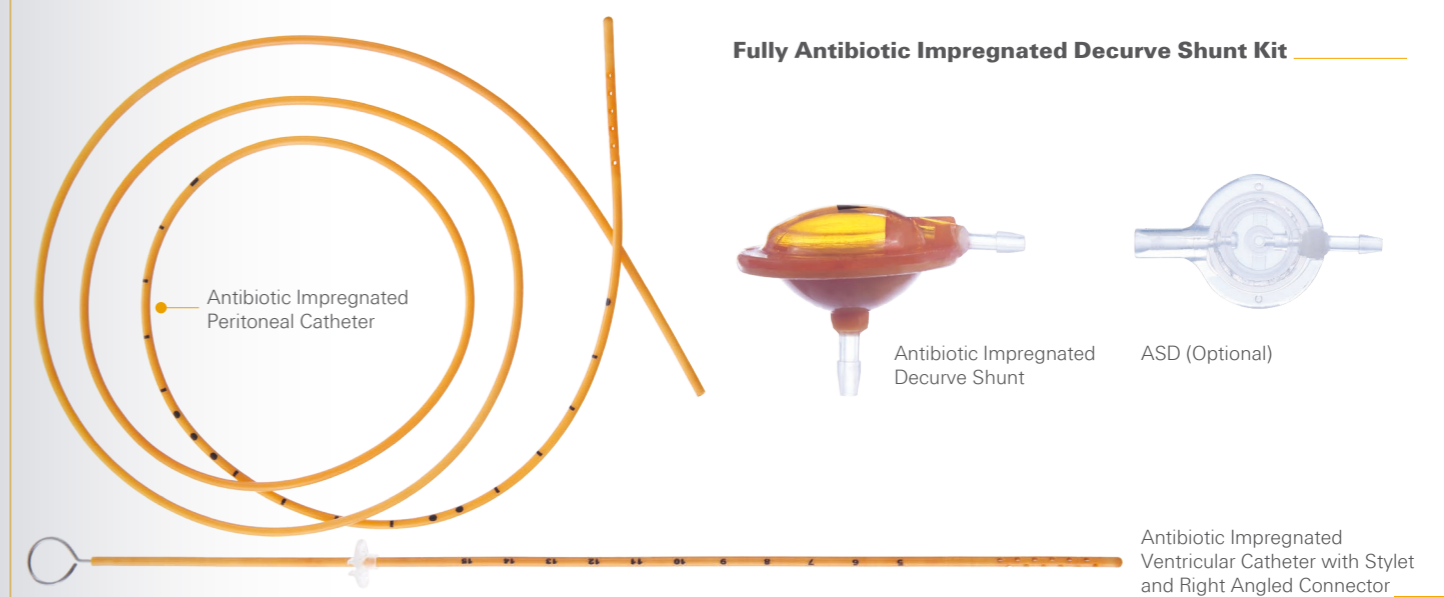
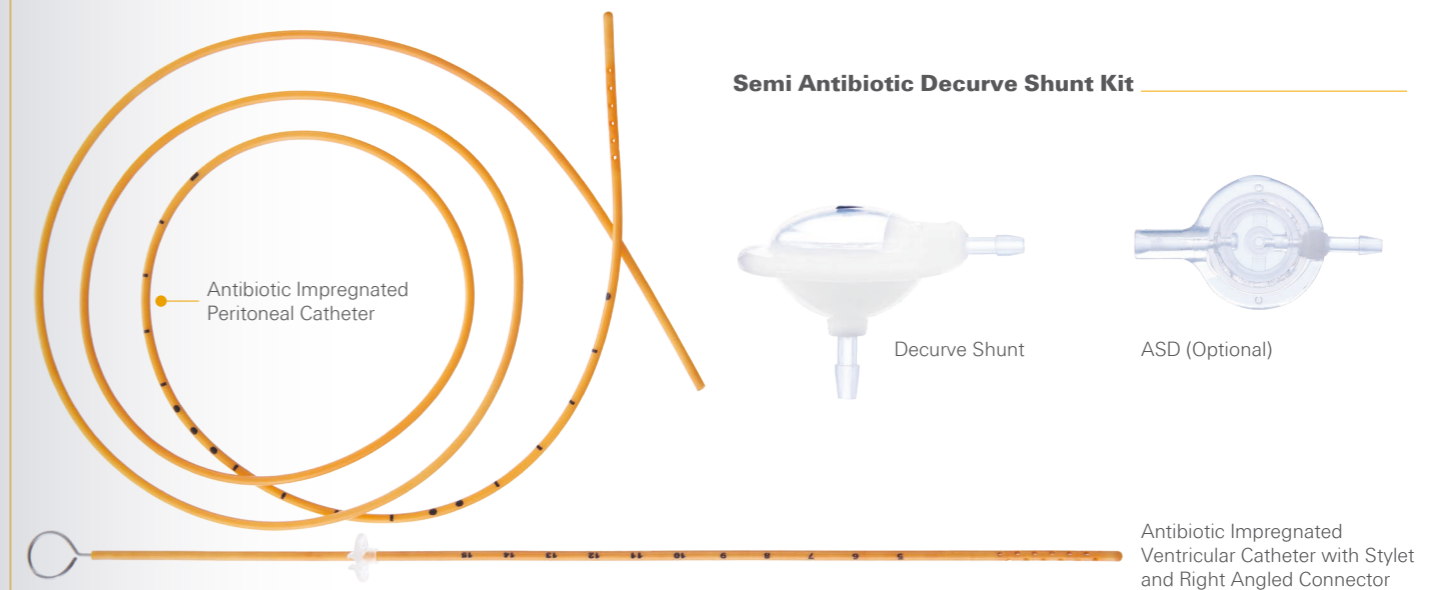
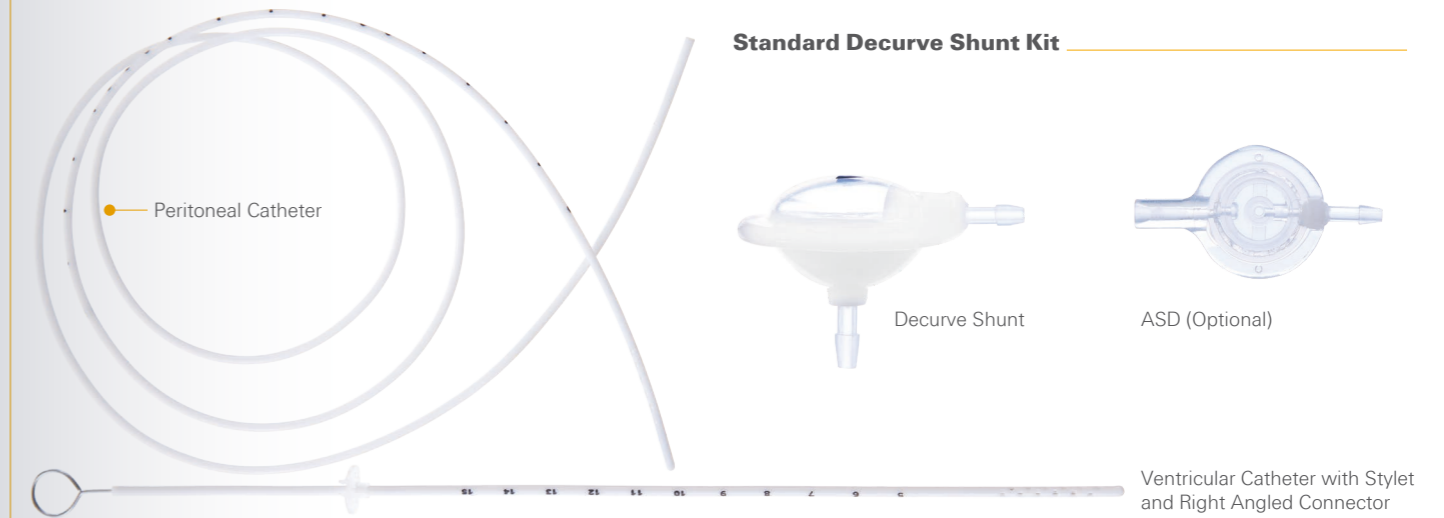


Decurve Shunts

Silicone Burr-Hole Shunt Kits

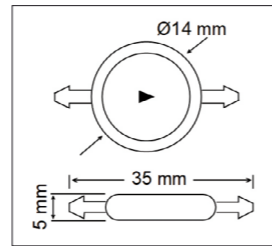
Pediatric and Adult sizes are available as valve and shunt kit.

Decurve Shunt Kit included with; Decurve Valve, Ventricular Catheter, Peritoneal Catheter, Stylet, Right Angled Connector, ASD (Optional)

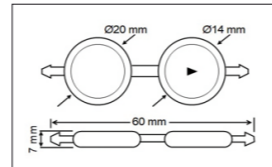
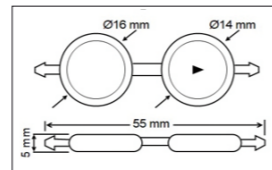


Depus Shunts

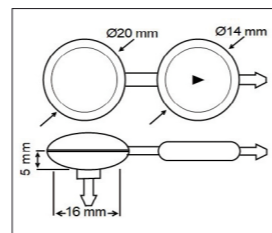
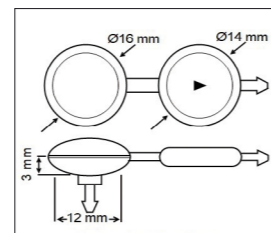
The mechanism inside the shunt is triggered by positive ventricular pressure and the valve opens automatically. The ruby ball and titanium spring parts in the system, which works with the hydrodynamic leverage method.



Depus Shunt with Flat-Bottom Reservoir



Depus Shunt with Burr-Hole Reservoir



Depus Shunts

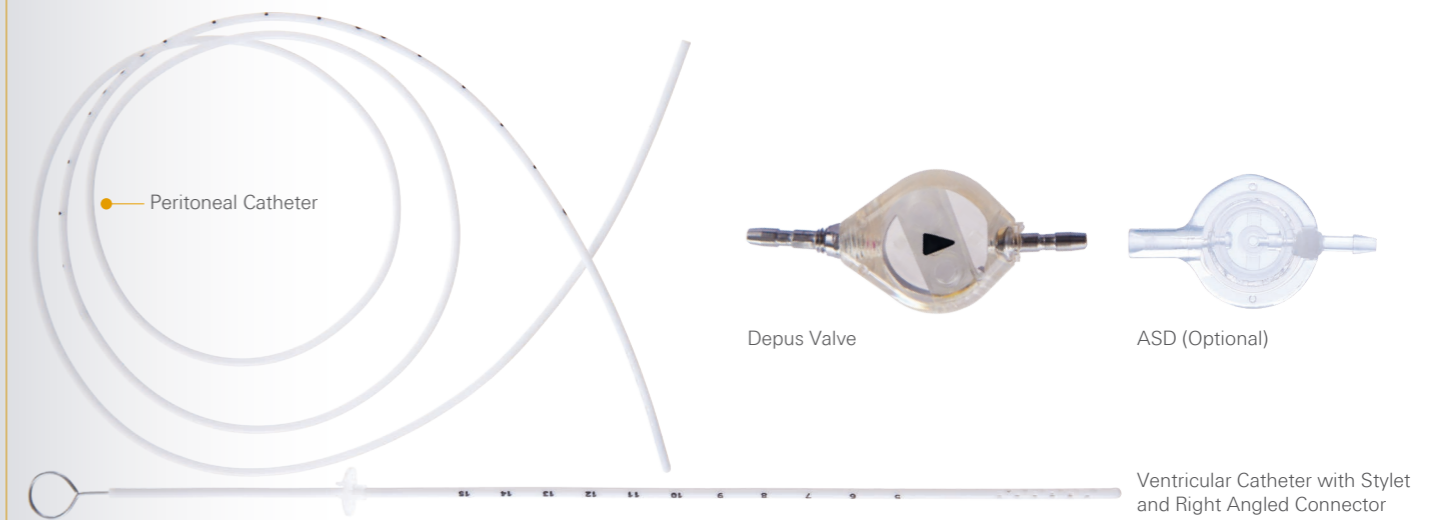
Ventriculoperitoneal Shunt Kits

Valve size is suitable for pediatric and adult patients. Valve and shunt kit options are available.

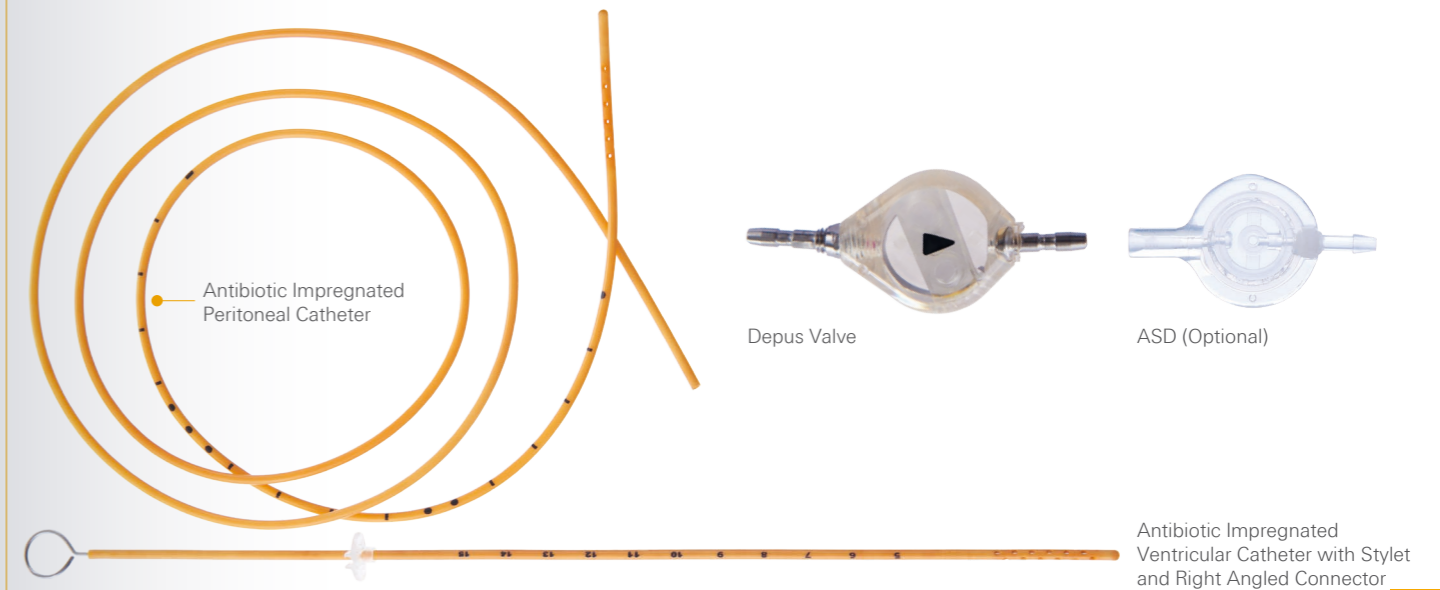
Depus Shunt Kit included with; Depus Valve, Ventricular Catheter, Peritoneal Catheter, Stylet, Right Angled Connector, ASD (Optional), Reservoir (Optional).



Standard Depus Shunt Kit



Semi Antibiotic Depus Shunt Kit

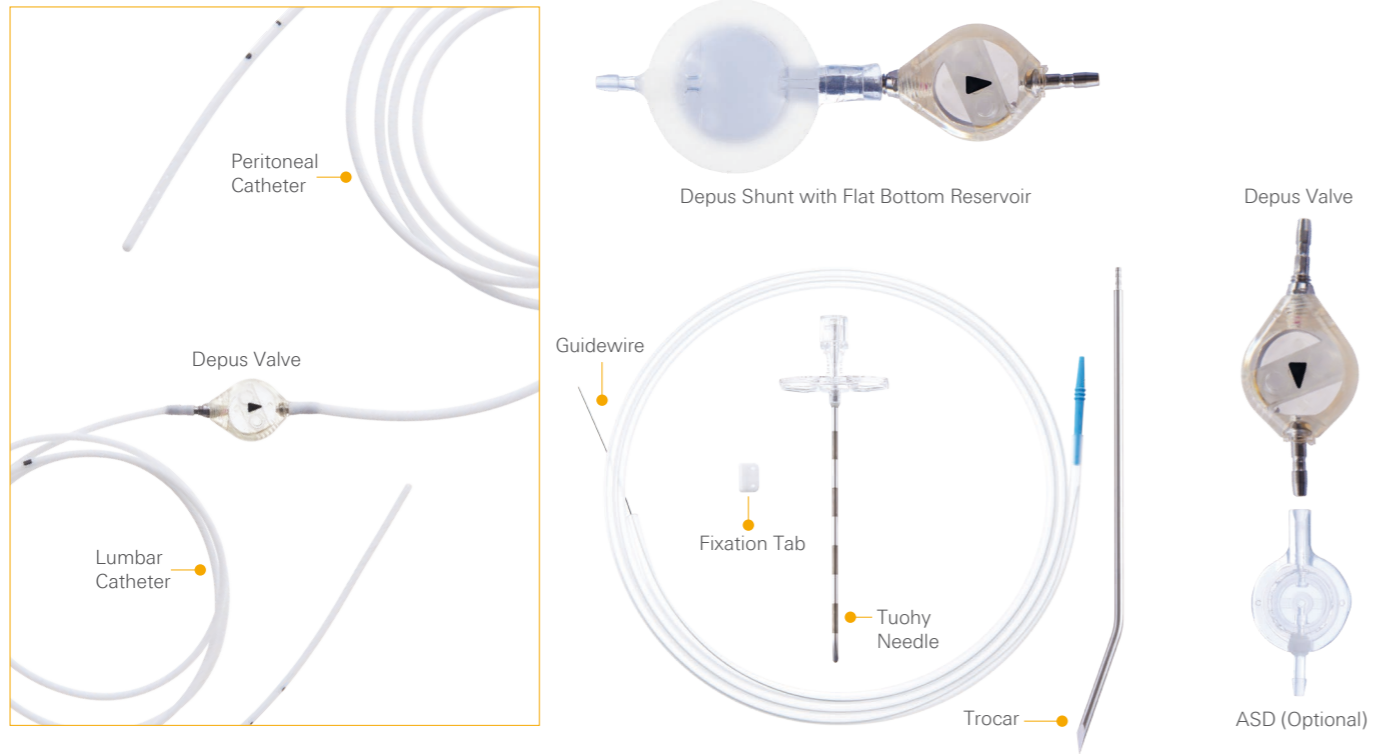


Depus Shunts

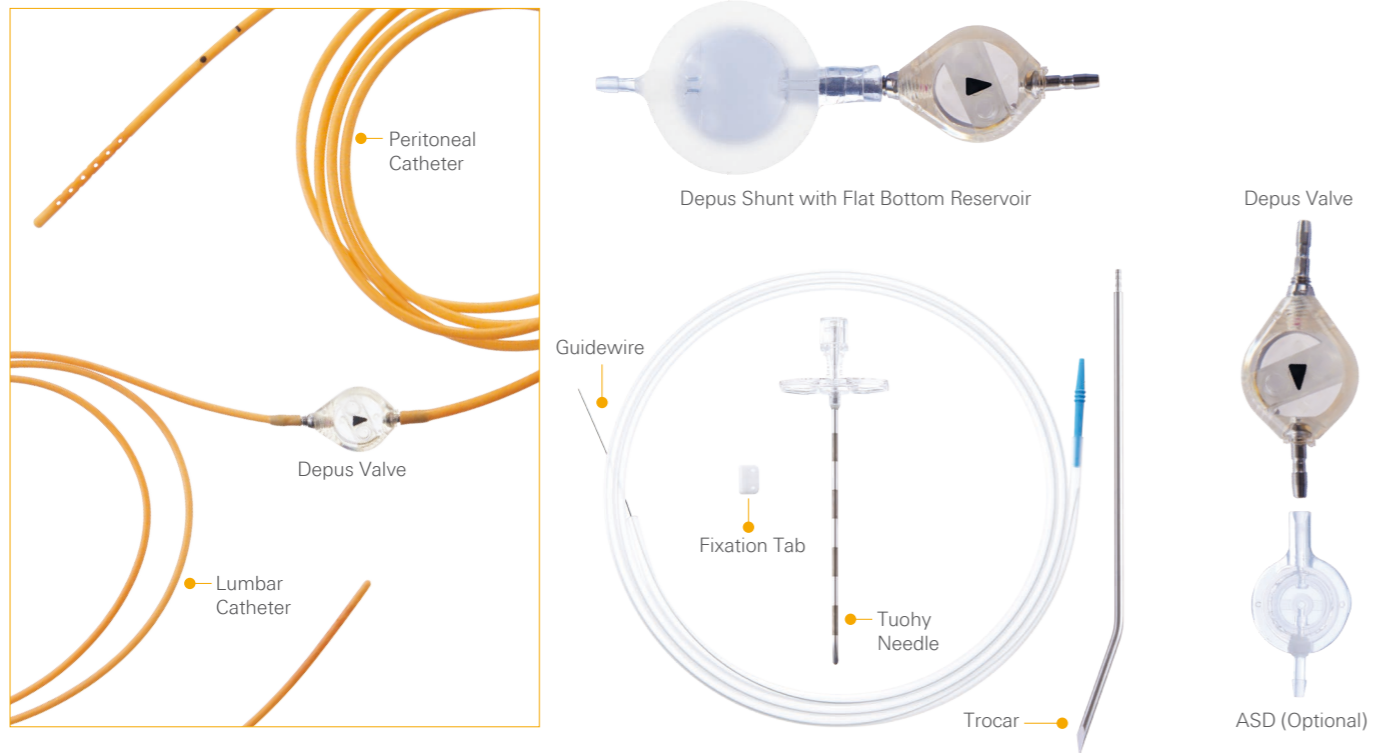
Lumboperitoneal Shunt Kits

The valve size is suitable to use in both pediatric and adult patients.
 Depus Shunt Kit included with; Depus Valve, Lumbar Catheter, Peritoneal Catheter, 14 G Tuohy Needle, 0,018" Guidewire, ASD (Optional), Reservoir (Optional).

Standard Depus Shunt Kit



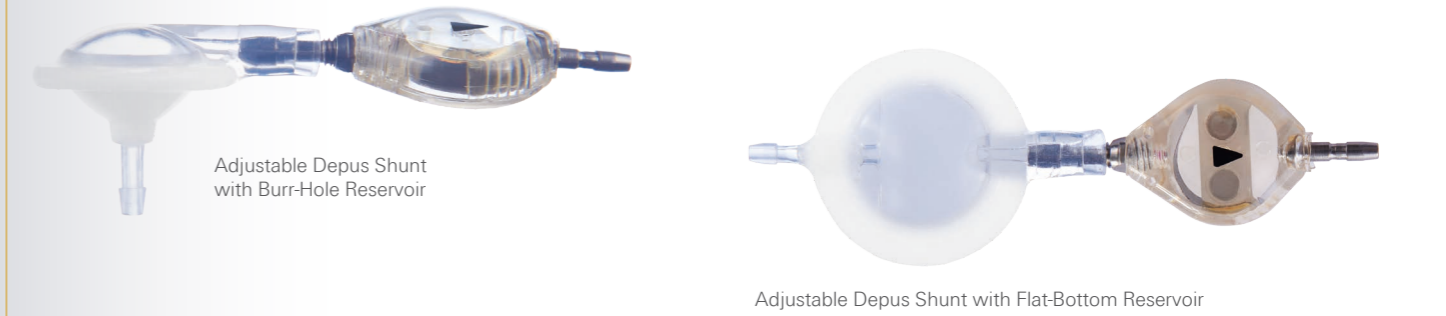
Semi Antibiotic Depus Shunt Kit



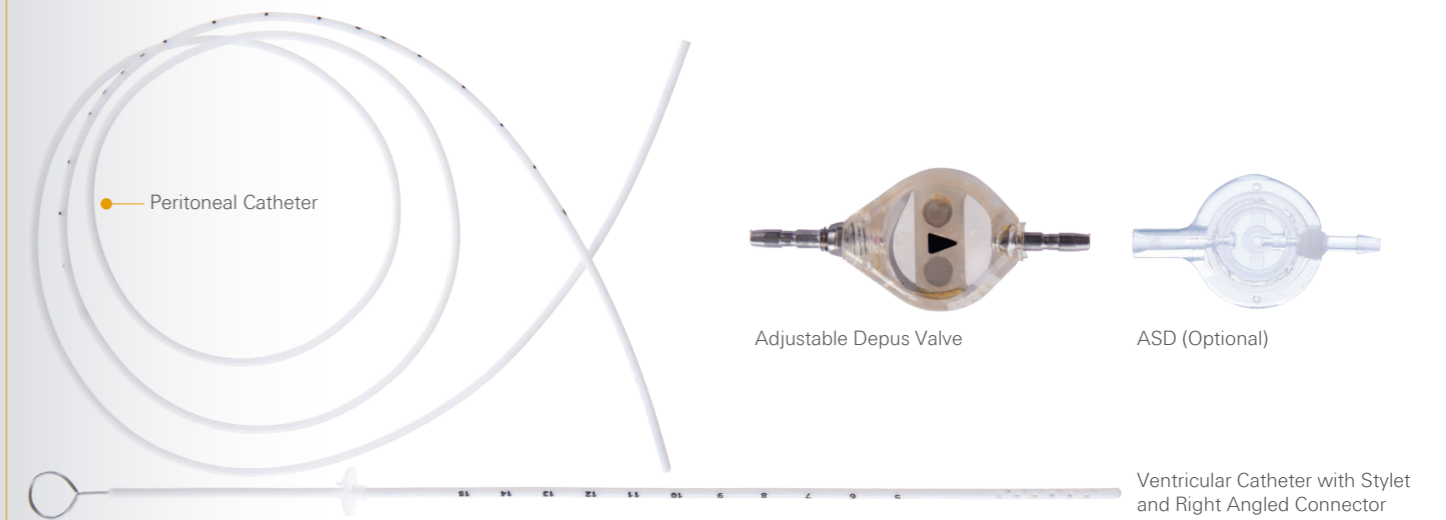
Depus Shunts

Adjustable Ventriculoperitoneal Shunt Kits

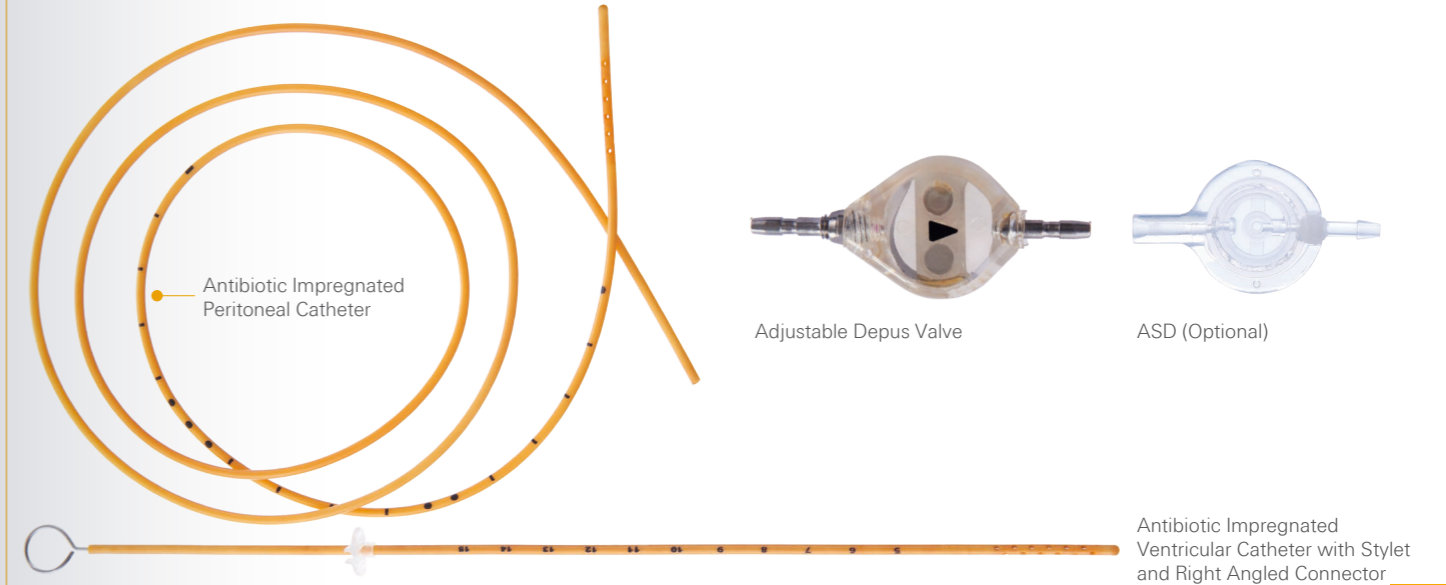
The valve size is suitable to use in pediatric and adults. There are four different silicone reservoirs with Depus Adjustable Shunt; Adult Flat-Bottom, Pediatric Flat-Bottom, Adult Burr-Hole and Pediatric Burr-Hole. Standard and semi-antibiotic kit options are available.
 Depus VP Adjustable Shunt Kit Included With; Depus Valve, Ventricular Catheter, Peritoneal Catheter, Stylet, Right Angled Connector, Silicone Reservoir, ASD (Optional).



Standard Depus Shunt Kit



Semi Antibiotic Depus Shunt Kit



Reference Code	Product Description	Page
D-DP-H	Depus Polysulfone Shunt High Pressure	7
D-DP-L	Depus Polysulfone Shunt Low Pressure	7
D-DP-M	Depus Polysulfone Shunt Medium Pressure	7
D-DP-H-VCK	Depus Polysulfone Shunt High Pressure with Ventriculoperitoneal Catheter Kit	8
D-DP-H-VACK	Depus Polysulfone Shunt High Pressure with AI Ventriculoperitoneal Catheter Kit	8
D-DP-H-VCK-ASD	Depus Polysulfone Shunt High Pressure with Ventriculoperitoneal Catheter Kit and Antisiphone Device	8
D-DP-H-VACK-ASD	Depus Polysulfone Shunt High Pressure with AI Ventriculoperitoneal Catheter Kit and Antisiphone Device	8
D-DP-L-VCK	Depus Polysulfone Shunt Low Pressure with Ventriculoperitoneal Catheter Kit	8
D-DP-L-VACK	Depus Polysulfone Shunt Low Pressure with AI Ventriculoperitoneal Catheter Kit	8
D-DP-L-VCK-ASD	Depus Polysulfone Shunt Low Pressure with Ventriculoperitoneal Catheter Kit and Antisiphone Device	8
D-DP-L-VACK-ASD	Depus Polysulfone Shunt Low Pressure with AI Ventriculoperitoneal Catheter Kit and Antisiphone Device	8
D-DP-M-VCK	Depus Polysulfone Shunt Medium Pressure with Ventriculoperitoneal Catheter Kit	8
D-DP-M-VACK	Depus Polysulfone Shunt Medium Pressure with AI Ventriculoperitoneal Catheter Kit	8
D-DP-M-VCK-ASD	Depus Polysulfone Shunt Medium Pressure with Ventriculoperitoneal Catheter Kit and Antisiphone Device	8
D-DP-M-VACK-ASD	Depus Polysulfone Shunt Medium Pressure with AI Ventriculoperitoneal Catheter Kit and Antisiphone Device	8
D-LPDP-H-LTCK	Depus Lumboperitoneal Polysulfone Shunt High Pressure with Lumboperitoneal Catheter	9
D-LPDP-H-LTACK	Depus Lumboperitoneal Polysulfone Shunt High Pressure with AI Lumboperitoneal Catheter	9
D-LPDP-L-LTCK	Depus Lumboperitoneal Polysulfone Shunt Low Pressure with Lumboperitoneal Catheter	9
D-LPDP-L-LTACK	Depus Lumboperitoneal Polysulfone Shunt Low Pressure with AI Lumboperitoneal Catheter	9
D-LPDP-M-LTCK	Depus Lumboperitoneal Polysulfone Shunt Medium Pressure with Lumboperitoneal Catheter	9
D-LPDP-M-LTACK	Depus Lumboperitoneal Polysulfone Shunt Medium Pressure with AI Lumboperitoneal Catheter	9

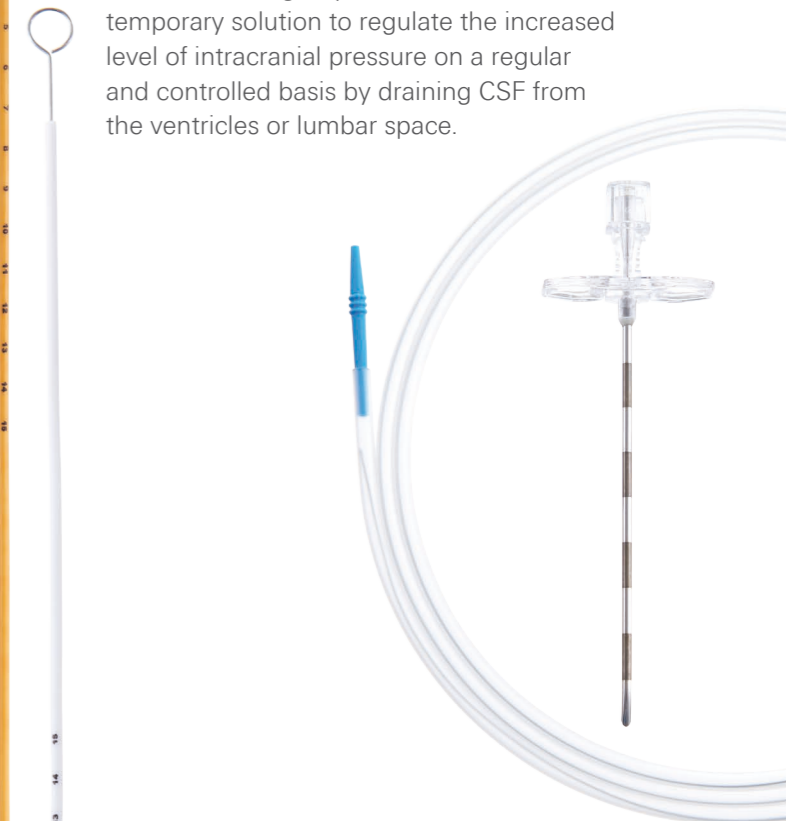
AI: Antibiotic Impregnated

You can contact us to get information about the reference codes of the products on page 10.



Neurosurgical Drainage Systems

External Drainage Systems are used as a temporary solution to regulate the increased level of intracranial pressure on a regular and controlled basis by draining CSF from the ventricles or lumbar space.



External Ventricular Drainage System

With Ventricular Catheter

Barium Impregnated External Ventricular Drainage Catheter and Drainage System are combined to each other. System included with;

Barium Impregnated Standard Ventricular Catheter (ID 1,5 mm, OD 3,0 mm, L 31 cm) with;

- Stylet
- Fixation tab
- Luer Lock Connector and Distal Cap
- Angled Trocar

Drainage System with;

- 60 cm Reinforced Cord with Locking Mechanism
- 30 cm Measuring Chart to adjust the CSF pressure (mmHg / cmH₂O)
- 150 ml Drip Chamber
- 800 ml Drainage Bag with Air Filter
- Three Way Connector (x2)
- Hydrophobic Filter



External Ventricular Drainage System

With Antibiotic Impregnated Ventricular Catheter

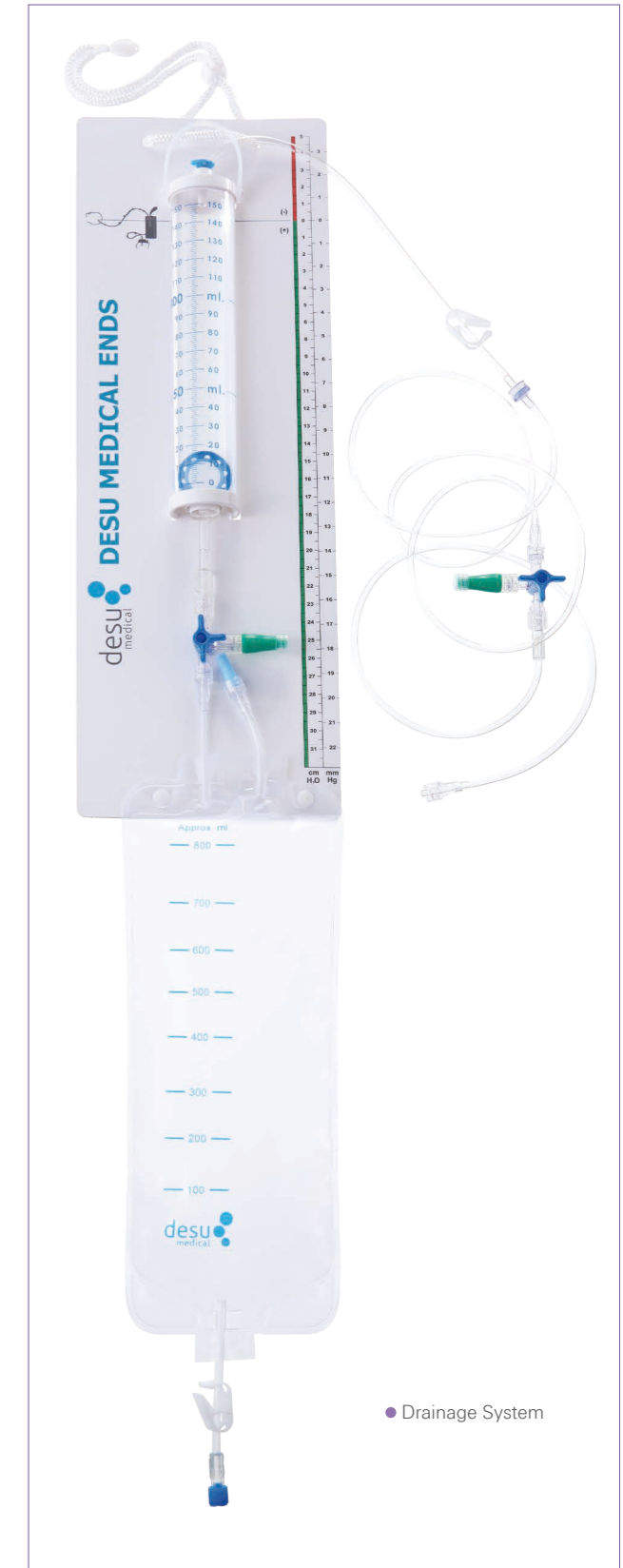
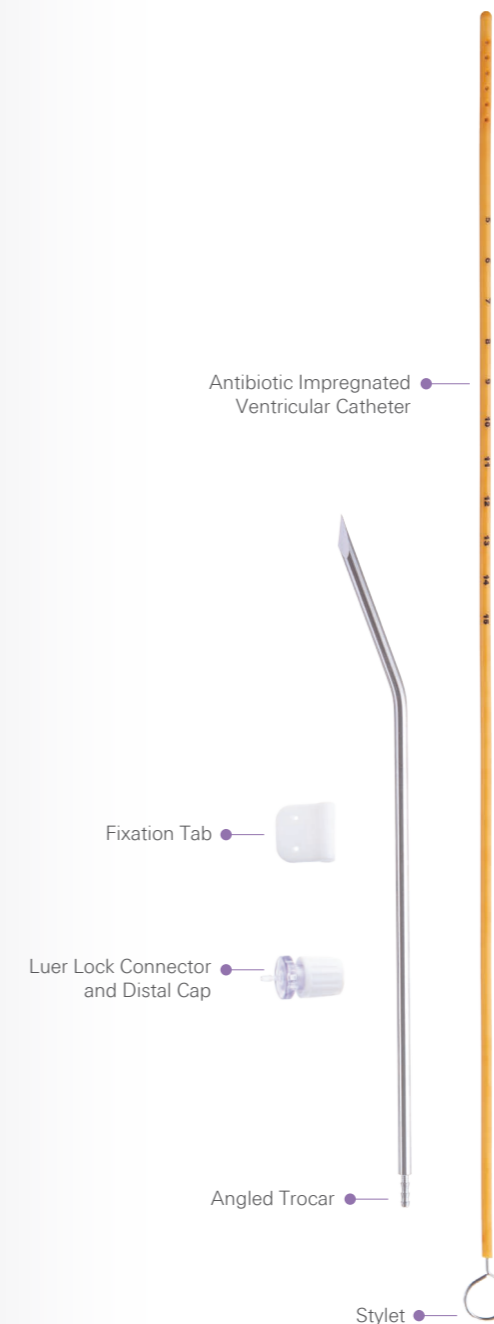
Antibiotic Impregnated External Ventricular Drainage Catheter and Drainage System are combined to each other. System included with;

Antibiotic Impregnated Ventricular Catheter (ID 1,5 mm, OD 3,0 mm, L 31 cm) with;

- Stylet
- Fixation tab
- Luer Lock Connector and Distal Cap
- Angled Trocar

Drainage System with;

- 60 cm Reinforced Cord with Locking Mechanism
- 30 cm Measuring Chart to adjust the CSF pressure (mmHg / cmH₂O)
- 150 ml Drip Chamber
- 800 ml Drainage Bag with Air Filter
- Three Way Connector (x2)
- Hydrophobic Filter



External Lumbar Drainage System

With Lumbar Catheter

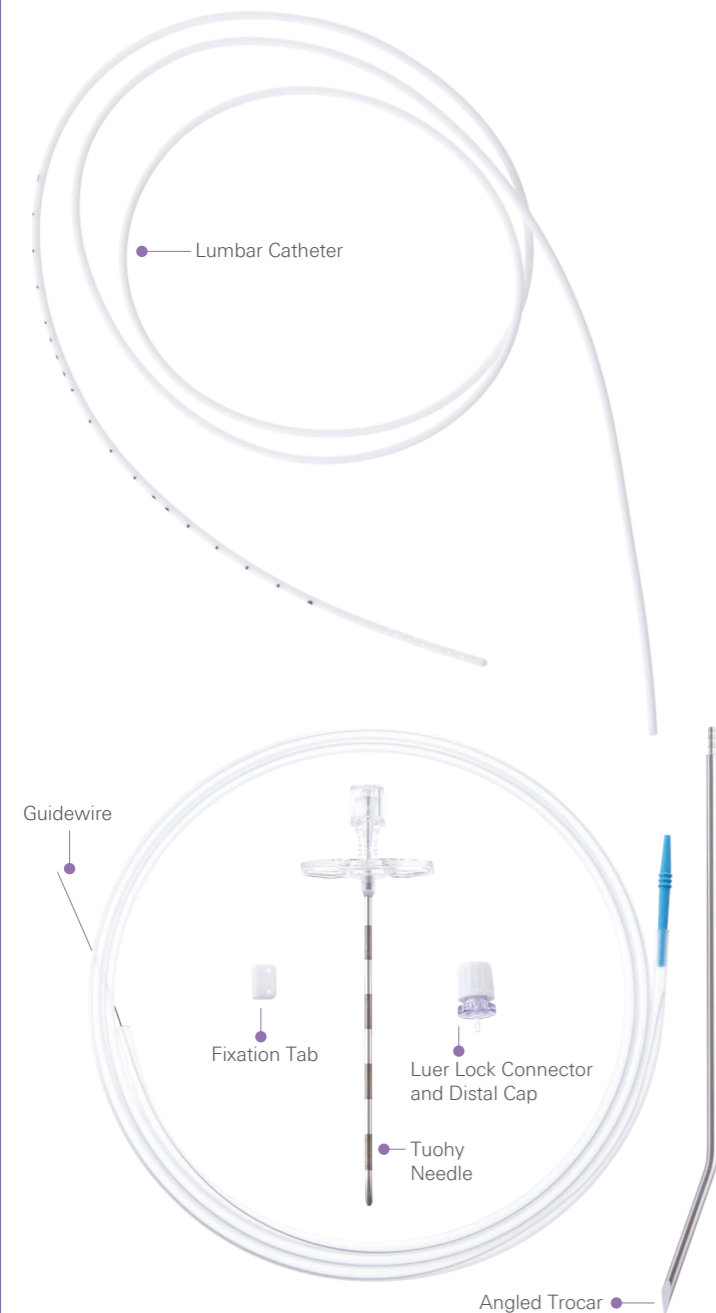
Barium Impregnated External Lumbar Drainage Catheter and Drainage System are combined to each other. System included with;

Barium Impregnated Lumbar Catheter (ID 0,8 mm, OD 1,6 mm, L 80 cm) with;

- Fixation Tab
- Luer Lock Connector
- Angled Trocar
- 14G Tuohy Needle
- Guidewire

Drainage System with;

- 60 cm Reinforced Cord with Locking Mechanism
- 30 cm Measuring Chart to adjust the CSF pressure (mmHg / cmH₂O)
- 150 ml Drip Chamber
- 800 ml Drainage Bag with Air Filter
- Three Way Connector (x2)
- Hydrophobic Filter



External Lumbar Drainage System

With Antibiotic Impregnated Lumbar Catheter

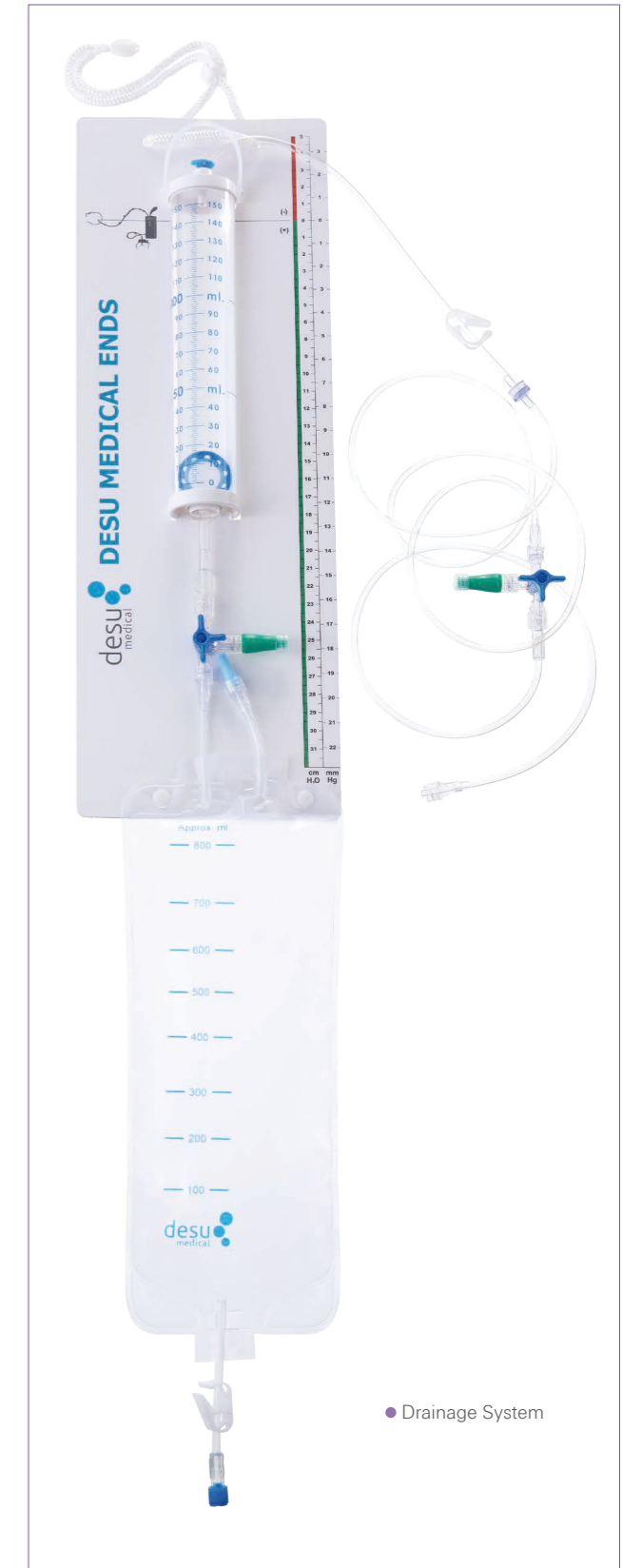
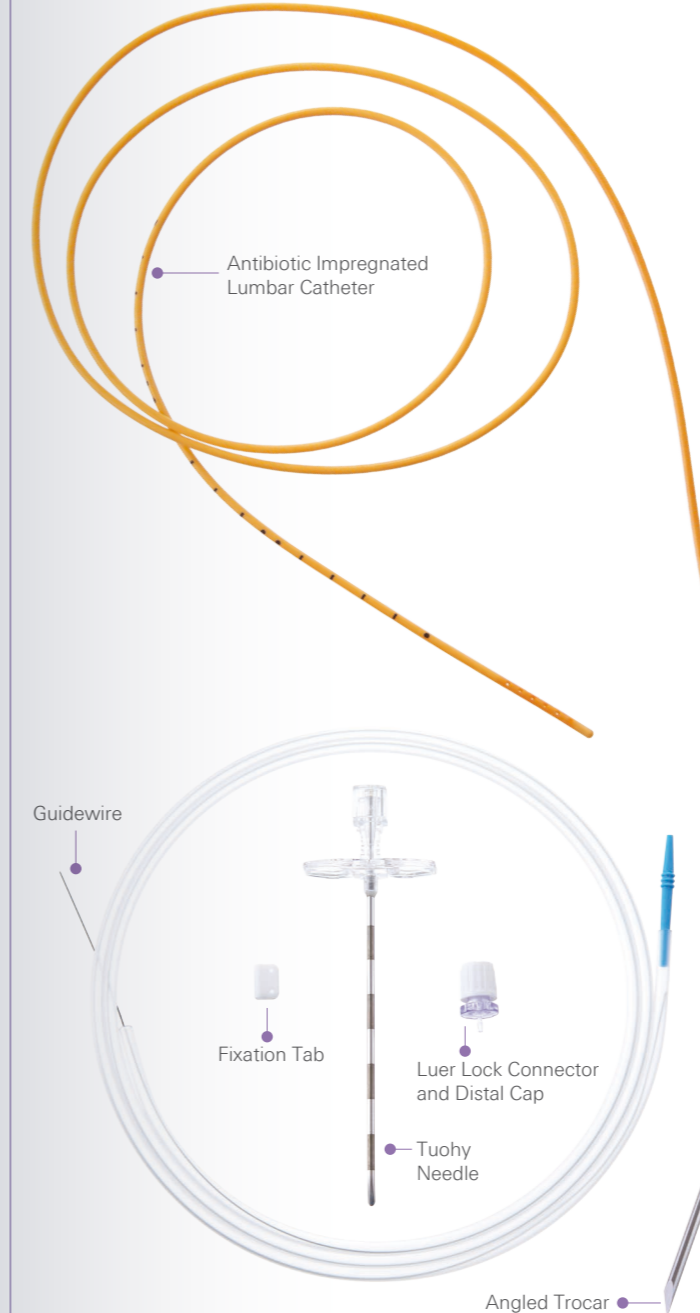
Antibiotic Impregnated External Lumbar Drainage Catheter and Drainage System are combined to each other. System included with;

Antibiotic Impregnated Lumbar Catheter (ID 0,8 mm, OD 1,6 mm, L 80 cm) with;

- Fixation Tab
- Luer Lock Connector
- Angled Trocar
- 14G Tuohy Needle
- Guidewire

Drainage System with;

- 60 cm Reinforced Cord with Locking Mechanism
- 30 cm Measuring Chart to adjust the CSF pressure (mmHg / cmH₂O)
- 150 ml Drip Chamber
- 800 ml Drainage Bag with Air Filter
- Three Way Connector (x2)
- Hydrophobic Filter



Reference Code	Product Description	Page
D-ENDS-C-010	External Ventricular Drainage System with Ventricular Catheter	15
D-ENDS-AC-010	External Ventricular Drainage System with AI Ventricular Catheter	16
D-LCK-ENDS-010	External Lumbar Drainage System with Lumbar Catheter	17
D-LACK-ENDS-010	External Lumbar Drainage System with AI Lumbar Catheter	18

AI: Antibiotic Impregnated



Neurosurgical Catheters

Catheter Systems are designed to be used with shunt or drainage systems for the controlled drainage of cerebrospinal fluid (CSF).

BIÇAKCILAR
Touching Lives One Device at a Time

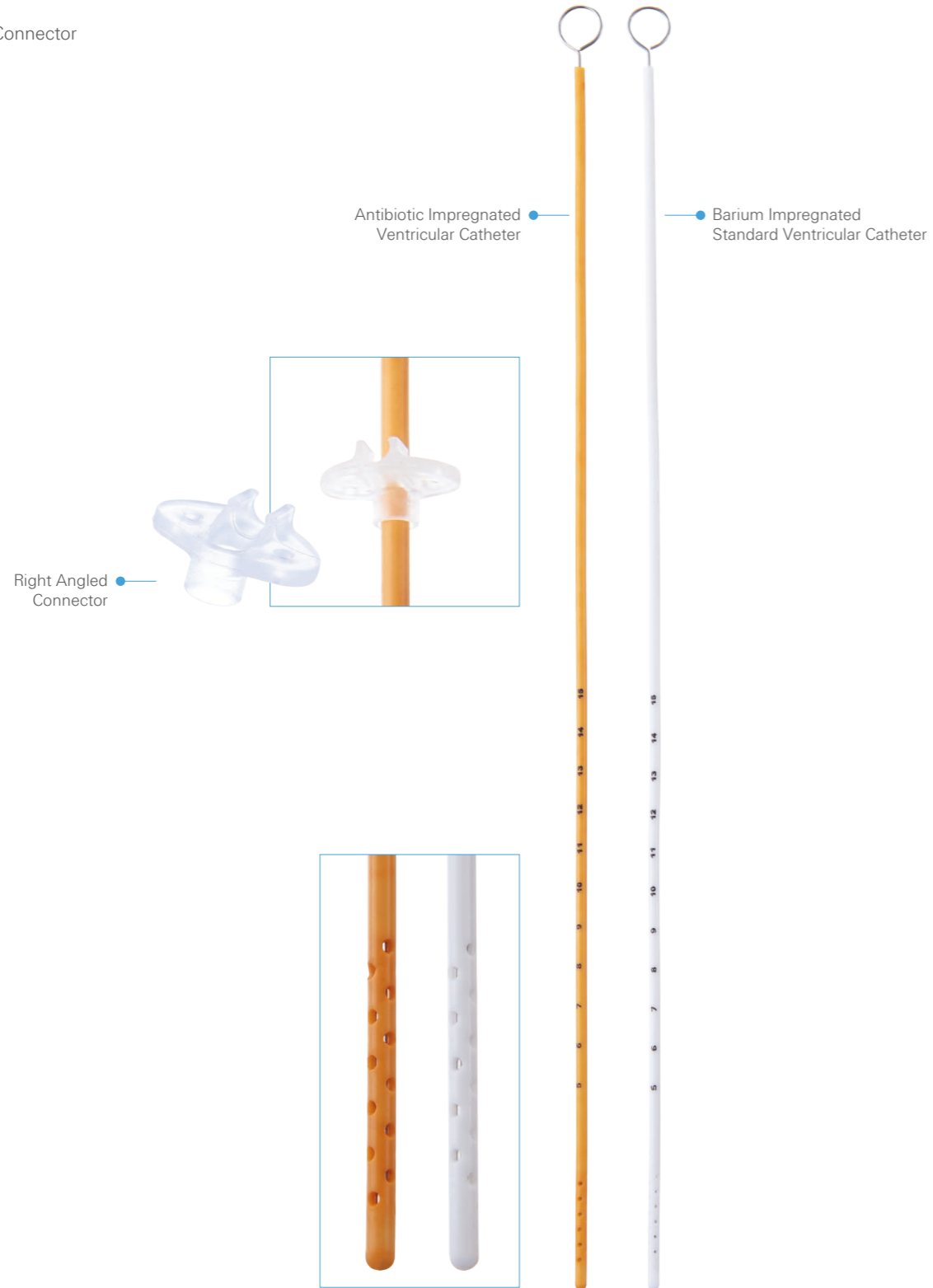
Ventricular Catheter Kit

Catheters are made of barium silicon material. Tantalum length markings are located on the catheter in each centimeter from the 5th centimeter of the catheter to 15th. At the proximal end of the catheter, there are 6 drainage holes along 4 rows.

Ventricular Catheters are also available with an antibiotic-impregnated option. Clindamycin HCl and Rifampicin, which are impregnated on the catheters, are released in a controlled manner for 28 days.

Ventricular Catheter Kit included with;

- Ventricular Catheter (ID:1,3 mm OD:2,5 mm L:23 cm)
- Stylet
- Right Angled Connector



Peritoneal Catheter Kit

Peritoneal Catheters are made of barium silicon material. Tantalum length markings are located on the catheter in each centimeter from the 5th centimeter of the catheter to 20th. At the proximal end of the catheter, there are 6 drainage holes along 4 rows.

Peritoneal Catheters are also available with an antibiotic-impregnated option. Clindamycin HCl and Rifampicin, which are impregnated on the catheters, are released in a controlled manner for 28 days.

Peritoneal Catheter Kit included with;

- Peritoneal Catheter (ID:1,1 mm OD:2,5 mm L:120 cm)



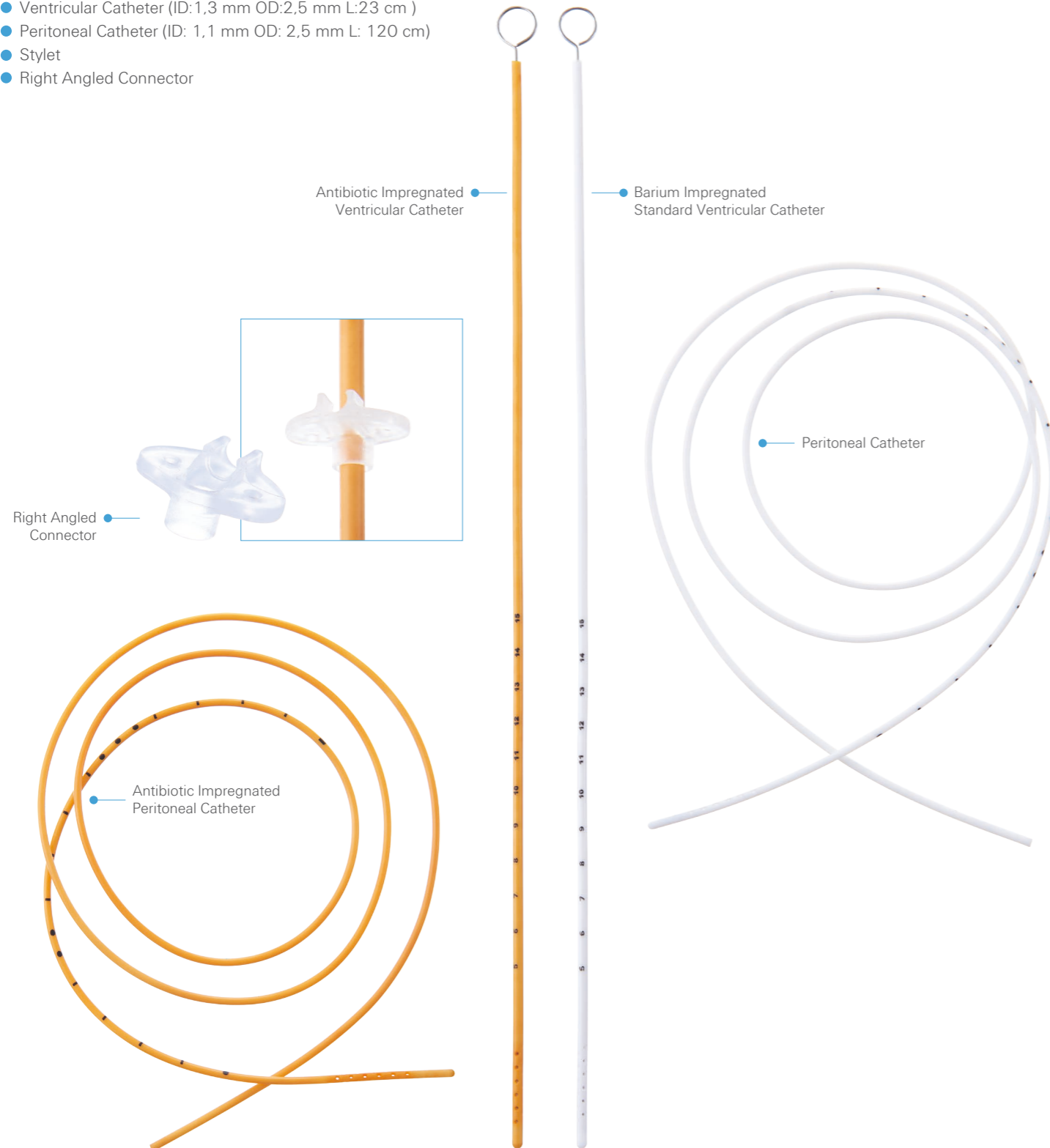
Ventriculoperitoneal Catheter Kit

Ventriculoperitoneal Catheters are made of barium silicon material. Tantalum length markings are located on the Ventricular Catheter in each centimeter from the 5th centimeter of the catheter to 15th, on the Peritoneal Catheter in each centimeter from the 5th centimeter of the catheter to 20th. The 24 drainage holes are located at the proximal end of the catheter as 6 drainage holes along 4 rows.

Ventriculoperitoneal Catheters are also available with an antibiotic-impregnated option. Clindamycin HCl and Rifampicin, which are impregnated on the catheters, are released in a controlled manner for 28 days.

Ventriculoperitoneal Catheter Kit included with;

- Ventricular Catheter (ID: 1,3 mm OD: 2,5 mm L: 23 cm)
- Peritoneal Catheter (ID: 1,1 mm OD: 2,5 mm L: 120 cm)
- Stylet
- Right Angled Connector

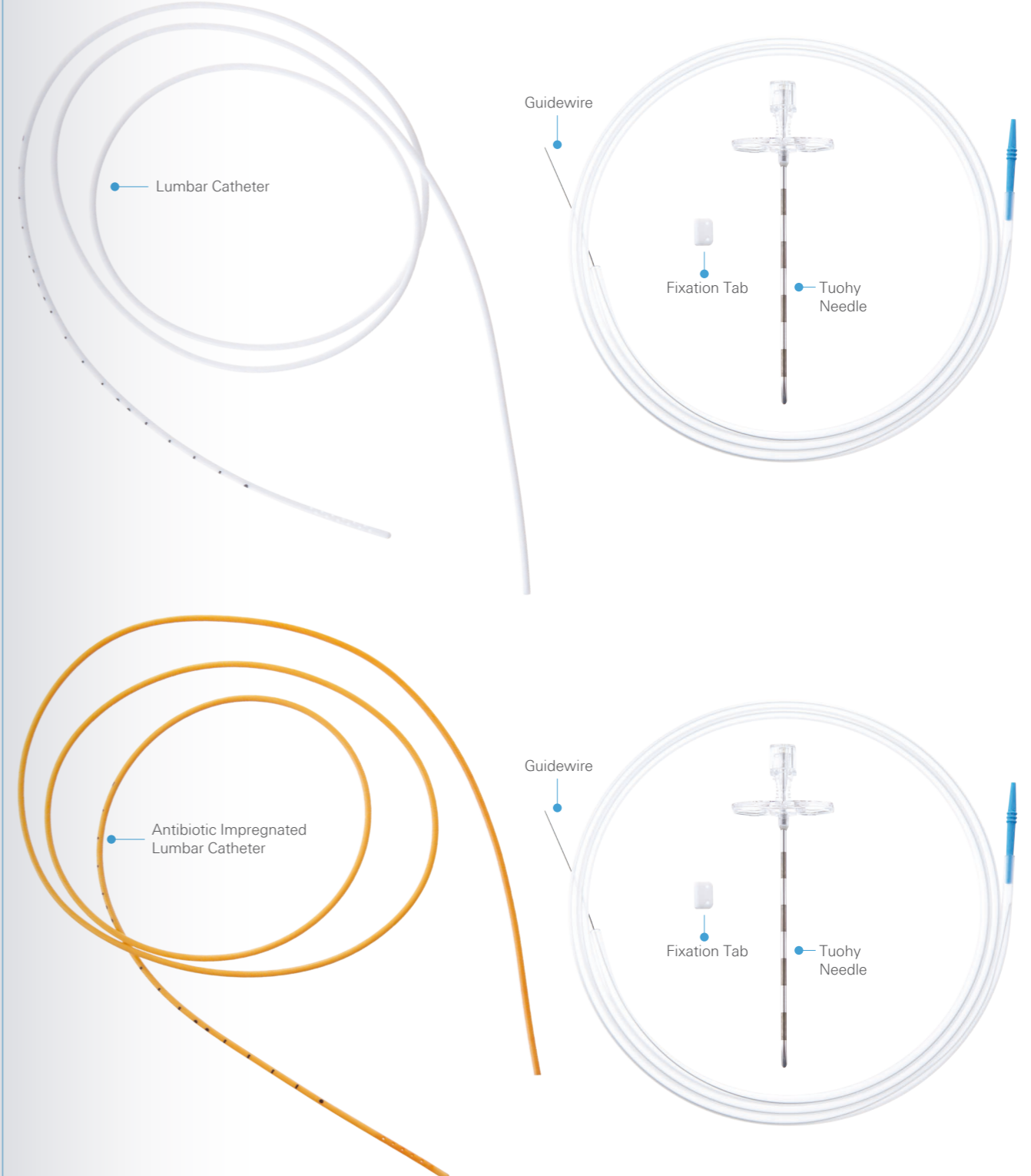


Lumbar Catheter Kit

Lumbar catheters are made of barium silicon material. Tantalum length markings are located on the catheter in each centimeter from the 5th centimeter of the catheter to 20th. The 24 drainage holes are located at the proximal end of the catheter as 6 drainage holes along 4 rows.

Lumbar Catheter included with;

- Lumbar Catheter (ID: 0,8 mm OD: 1,6 mm L: 100 cm)
- 14G Tuohy Needle
- Guidewire
- Fixation Tab



Lumboperitoneal Catheter Kit

Lumboperitoneal Catheters are made of barium silicon material. Tantalum length markings are located on the Lumbar Catheter in each centimeter from the 5th centimeter of the catheter to 20th, on the Peritoneal Catheter in each centimeter from the 5th centimeter of the catheter to 20th. The 24 drainage holes are located at the proximal end of the catheter as 6 drainage holes along 4 rows.

Lumboperitoneal Catheter Kit included with;

- Lumbar Catheter (ID: 0,8 mm OD: 1,6 mm L: 100 cm)
- Peritoneal Catheter (ID: 1,1 mm OD: 2,5mm L: 120cm)
- 14G Tuohy Needle
- Guidewire



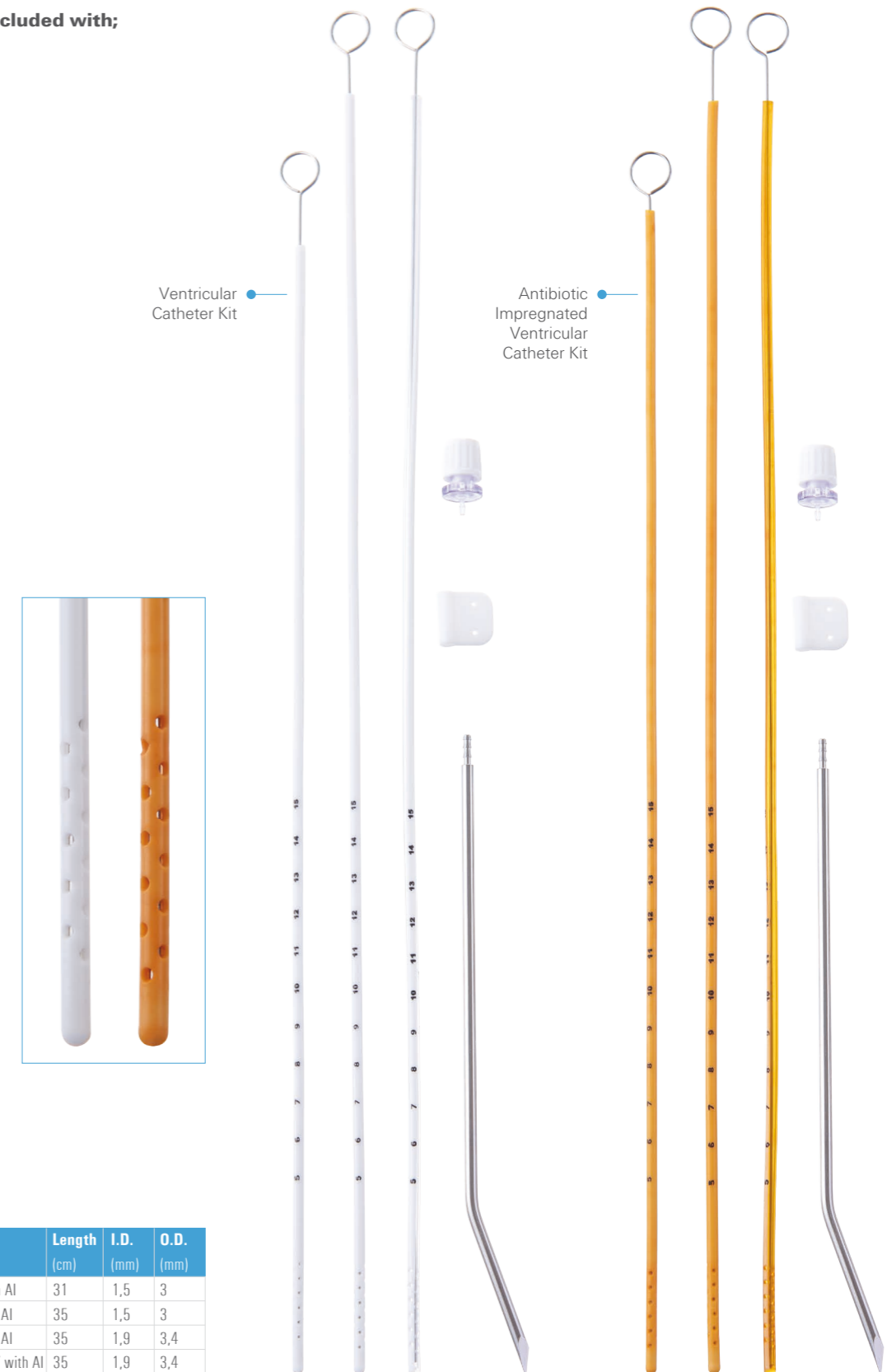
Ventricular Catheter Kit

Catheters are made of barium silicon material. Tantalum length markings are located on the Lumbar Catheter in each centimeter from the 5th centimeter of the catheter to 15th. The 24 drainage holes are located at the proximal end of the catheter as 6 drainage holes along 4 rows.

Ventricular Catheters are also available with an antibiotic-impregnated option. Clindamycin HCl and Rifampicin, which are impregnated on the catheters, are released in a controlled manner for 28 days.

Ventricular Catheter Kit included with;

- Ventricular Catheter
- Stylet
- Angled Trocar
- Luer Lock Connector
- Distal Cap



Ventricular Catheters

Catheter Description	Length (cm)	I.D. (mm)	O.D. (mm)
External Ventricular Catheter Standard / with AI	31	1,5	3
External Ventricular Catheter Standard / with AI	35	1,5	3
External Ventricular Catheter Standard / with AI	35	1,9	3,4
External Ventricular Clear Catheter Standard / with AI	35	1,9	3,4

AI: Antibiotic Impregnated

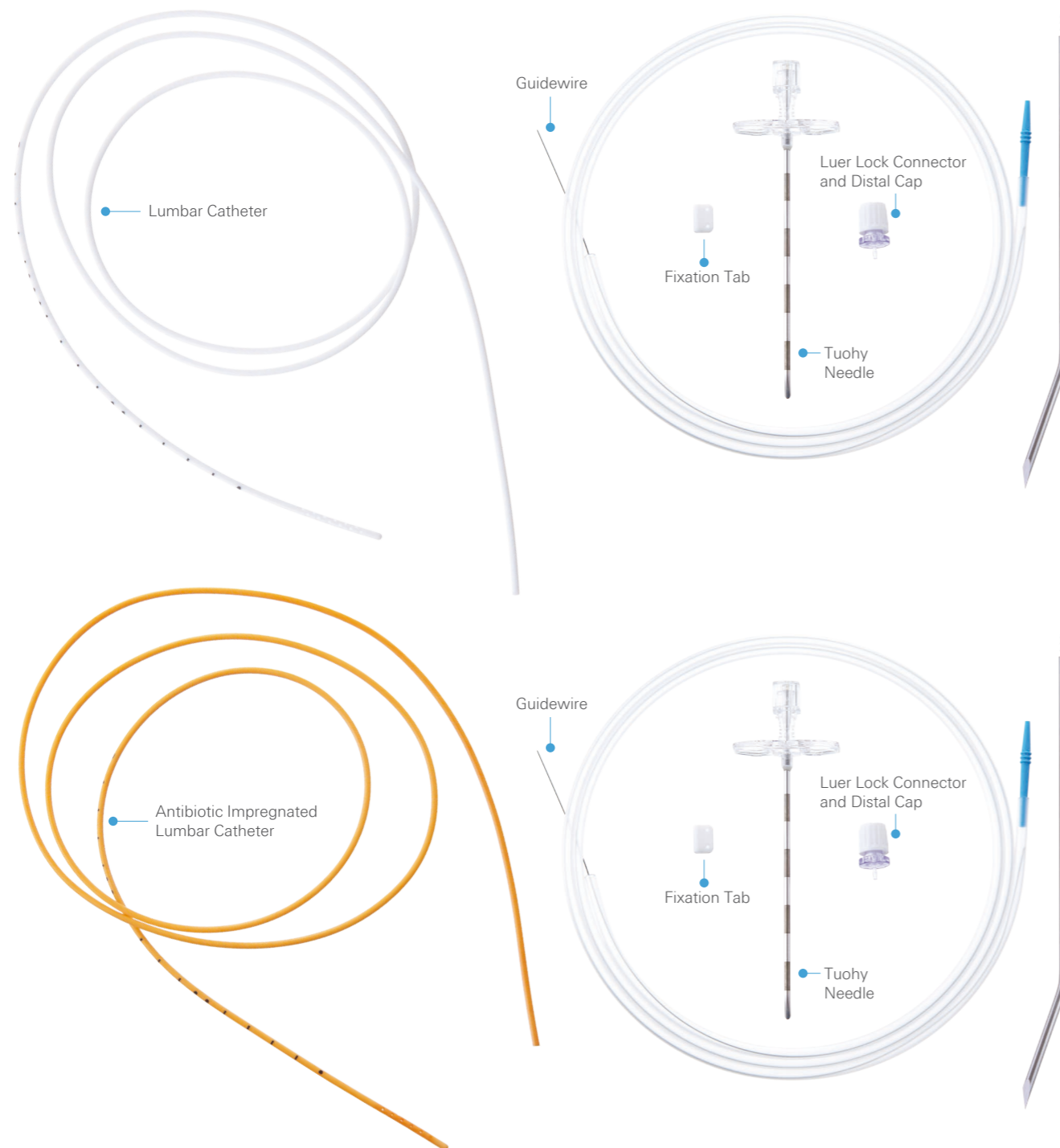
Lumbar Catheter Kit

Lumbar Catheters are made of barium silicon material. Tantalum length markings are located on the catheter in each centimeter from the 5th centimeter of the catheter to 20th. The 24 drainage holes are located at the proximal end of the catheter as 6 drainage holes along 4 rows.

Lumbar Catheters are also available with an antibiotic-impregnated option. Clindamycin HCl and Rifampicin, which are impregnated on the catheters, are released in a controlled manner for 28 days.

Lumbar Catheter Kit included with;

- Lumbar Catheter (ID: 0,8 mm OD: 1,6 mm L: 80 cm)
- Tuohy Needle
- Guidewire
- Angled Trocar
- Luer Lock Connector
- Fixation Tab

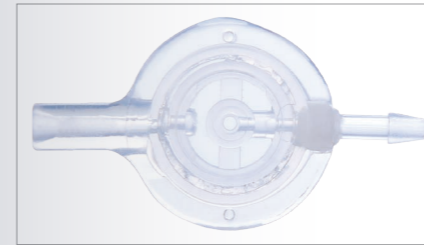


Reference Code	Product Description	Page
D-SVCK	Ventricular Catheter	21
D-ASVCK	AI Ventricular Catheter	21
D-SPCK	Peritoneal Catheter	22
D-ASPCK	AI Peritoneal Catheter	22
D-SVPCK	Ventriculoperitoneal Catheter	23
D-ASVPCK	AI Ventriculoperitoneal Catheter	23
D-LPCKK	Lumbar Catheter	24
D-LPACK-16081000	AI Lumbaperitoneal Catheter (ID:1.6 OD:0.8 mm L:100 cm)	24
D-LPCK	Lumboperitoneal Catheter	25
D-LPACK	AI Lumboperitoneal Catheter	25
D-EVDCK-1530310	External Ventricular Drainage Catheter (ID:1.5 OD:3.0 mm L:31 cm)	26
D-EVDACK-1530310	AI External Ventricular Drainage Catheter (ID:1.5 OD:3.0 mm L:31 cm)	26
D-EVDACK-1530350	AI External Ventricular Drainage Catheter (ID:1.5 OD:3.0 mm L:35 cm)	26
D-EVDACKS-1934350	AI External Ventricular Drainage Catheter (ID:1.9 OD:3.4 mm L:35 cm)	26
D-EVDCACK-1934350	AI External Ventricular Drainage Catheter (ID:1.9 OD:3.4 mm L:35 cm)	26
D-ELCK	External Lumbar Catheter	27
D-ELACK-1608800	AI External Lumbar Catheter	27

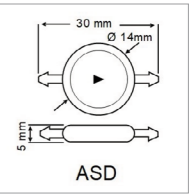
AI: Antibiotic Impregnated



Antisiphon Device



Antisiphon device is used to avoid from siphon effect that may occur when the peritoneal catheter turn to vertical position from horizontal during the drainage or shunting of the cerebrospinal fluid. The basic principle is to create an immediate closure effect to prevent excess drainage when the siphon effect occurs.



Straight Catheter Connector



It is a subsidiary accessory used to connect different catheter parts during surgery when needed.

L Type Catheter Connector



It is a subsidiary accessory used to guide the Ventricular / Peritoneal Catheter when needed without causing kinking and clogging, also to connect different catheter parts together during surgery.

Y Type Catheter Connector



It is a subsidiary accessory used to combine two shunts with a peritoneal catheter if needed, also provide output for two peritoneal catheters from a shunt, or to provide two ventricular catheter input into a shunt.

Adjustment Kit

Adjustment Kit is used to adjust the pressure of Adjustable Depus Shunts to different pressure levels, low, medium or high.



Adjustment Kit
Packaged in a non-sterile and reusable box



Compass
Pressure monitoring

Magnet
Adjusts the proper pressure levels

Adjustable Depus Shunt

Locator
Determines the target directions of pressure levels

Neurosurgical Product Accessories



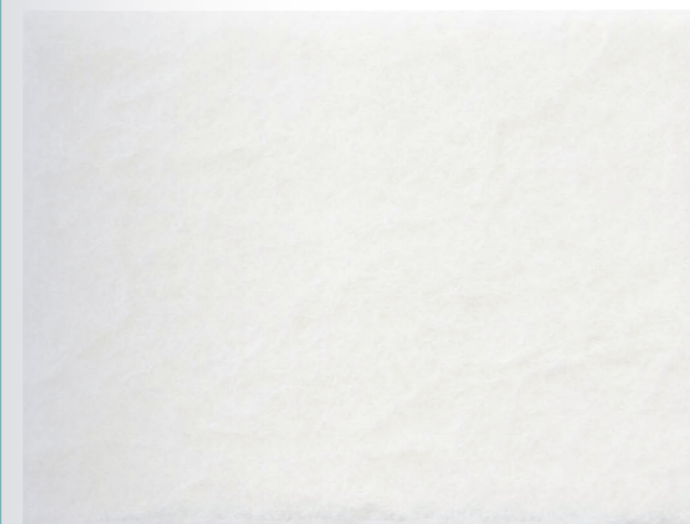
Reference Code	Product Description
D-ASD	Antisiphon Device
D-PPCCO	Straight Catheter Connector
D-PPRAC	L Type Catheter Connector
D-PP3WCCO	Y Type (3-way) Catheter Connector
D-DP-A-ADJKIT	Depus Adjustment Kit



DECOLL Collagen Dura Membrane

Decoll is designed for the substitute of a dura when repairing the defects on the dura mater.

- It is a collagen barrier produced from ultra pure type-1 bovine collagen (contains > 95.5 % type-1 collagen)
- Collagen-based, biodegradable to assist in fast healing
- Usable for various CSF pressure levels so it can be applied to a wide variety of cases
- Prevent the leakage a lot better than existing devices due to its impermeable pore structure
- It can be used as onlay
- Sterilized with Gamma
- A ready-to-use product that does not require pre-processing
- It can be used to treat dural defects due to surgical operations such as spinal tumor, trauma meningocele, myelomeningocele and lipoma



● DECOLL Collagen Dura Membrane



DECOLL Collagen Dura Membrane



Designed in various dimensions and are available to use in different size dural and spinal defects.

Reference Code	Product Description
D-DCL2525	DECOLL Collagen Based Dural Membrane 2.5x2.5 cm
D-DCL6080	DECOLL Collagen Based Dural Membrane 6x8 cm
D-DCL5040	DECOLL Collagen Based Dural Membrane 5x4 cm
D-DCL5050	DECOLL Collagen Based Dural Membrane 5x5 cm
D-DCL7575	DECOLL Collagen Based Dural Membrane 7.5x7.5 cm
D-DCL7525	DECOLL Collagen Based Dural Membrane 7.5x2.5 cm
D-DCL100100	DECOLL Collagen Based Dural Membrane 10x10 cm
D-DCL100125	DECOLL Collagen Based Dural Membrane 10x12.5 cm
D-DCL11080	DECOLL Collagen Based Dural Membrane 11x8 cm
D-DCL12575	DECOLL Collagen Based Dural Membrane 12.5x7.5 cm
D-DCL14080	DECOLL Collagen Based Dural Membrane 14x8 cm
D-DCL125125	DECOLL Collagen Based Dural Membrane 12.5x12.5 cm
D-DCL120160	DECOLL Collagen Based Dural Membrane 12x16 cm
D-DCL170170	DECOLL Collagen Based Dural Membrane 17x17 cm
D-DCL200140	DECOLL Collagen Based Dural Membrane 20x14 cm
D-DCL200160	DECOLL Collagen Based Dural Membrane 20x16 cm



● Both surfaces can be used as wet or dry

