

**C a t h e t e r**

**S y s t e m s \***

## CATHETER TYPES

**VENTRICULAR CATHETER**  
(STANDARD / ANTIBIOTIC IMPREGNATED)

**PERITONEAL CATHETER**  
(STANDARD / ANTIBIOTIC IMPREGNATED)

**VENTRICULOPERITONEAL CATHETER KIT**  
(STANDARD / ANTIBIOTIC IMPREGNATED)

**EXTERNAL VENTRICULAR DRAINAGE CATHETER**  
(STANDARD / ANTIBIOTIC IMPREGNATED)

**EXTERNAL LUMBAR DRAINAGE CATHETER**  
(STANDARD / ANTIBIOTIC IMPREGNATED)

**LUMBAR CATHETER**

## Catheter Accessories

- A) STYLET
- B) TROCAR
- C) FIXATION TAB
- D) CONNECTORS

- Luer Connector
- Right Angle Connector
- Straight Connector
- L Type Connector
- Y Type Connector



\* All catheter systems are supplied sterile (method: EO-Ethylene Oxide).

## Catheter Types

**BIÇAKCILAR/DESU** Catheter systems are used as a component of shunt systems indicated for use to drain or shunt the cerebrospinal fluid (CSF) in treatment of hydrocephalus. All **BIÇAKCILAR/DESU** Catheters are manufactured with barium impregnated silicone raw material to allow radiopacity.

In addition, tantalum is used to mark the length measurements on the catheters, which allows visibility during magnetic resonance imaging (MRI). Antibiotic impregnated catheters (barium impregnated) are manufactured using long-term implantable grade silicone tubing.

THE CATHETERS, WHICH ARE IMPREGNATED WITH RIFAMPICIN AND CLINDAMYCIN HCL, ARE SHOWN TO DECREASE GRAM-POSITIVE BACTERIA COLONIZATION.



CATHETER TYPE	LENGTH (CM)	INNER DIAMETER / OUTER DIAMETER (MM)
Ventricular Catheter	23	1.3 / 2.5
Peritoneal Catheter	120	1.1 / 1.3
External Ventricular Catheter	31	1.5 / 3
External Lumbar Catheter	80	0.8 / 1.6
Lumbar Catheter	106	0.8 / 1.6

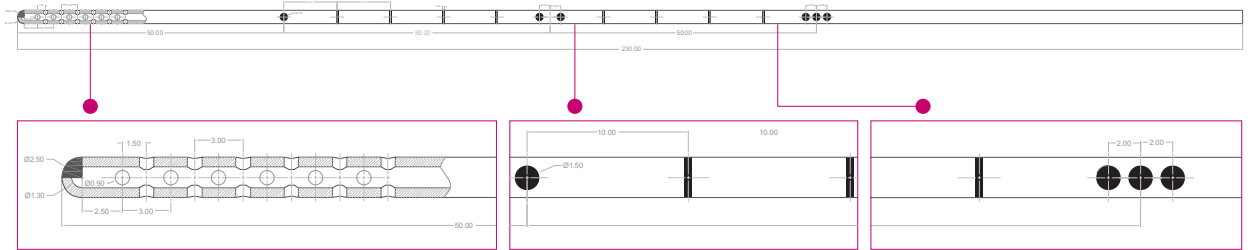
Length and Inner and Outer Diameter Measurements of the Catheters



## VENTRICULAR CATHETER (STANDARD / ANTIBIOTIC)

Ventricular catheter is used to transfer excess CSF (cerebrospinal fluid) from the brain ventricles to the shunt. Ventricular catheter length is 23 cm. Inner diameter of the catheter is 1.3 mm and outer diameter is 2.5 mm.

Tantalum is used to mark the length measurements on the catheters on 5, 10 and 15 cm points.



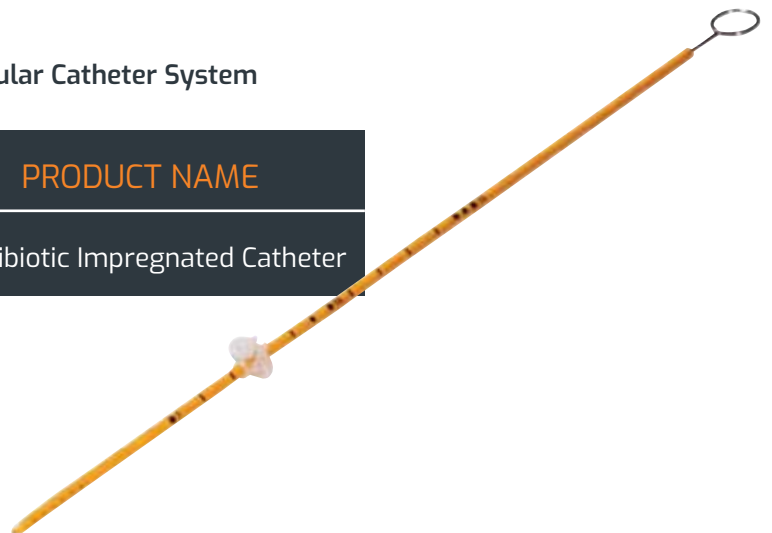
### • Standard Ventricular Catheter System

PRODUCT CODE	PRODUCT NAME
SVCK	Standard Ventricular Catheter



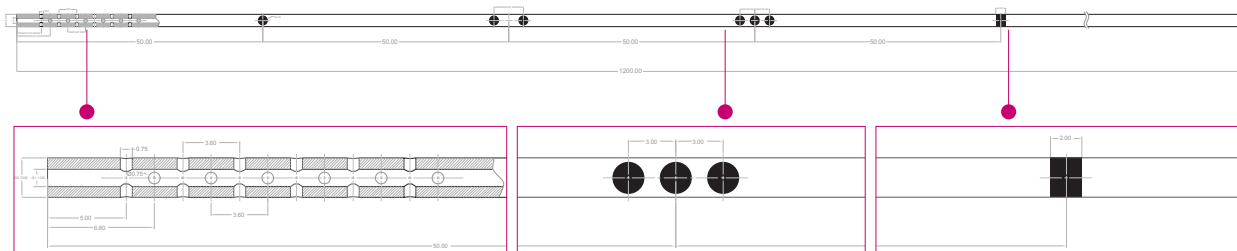
### • Antibiotic impregnated Ventricular Catheter System

PRODUCT CODE	PRODUCT NAME
SVCK	Antibiotic Impregnated Catheter



## PERITONEAL CATHETER (STANDARD / ANTIBIOTIC IMPREGNATED)

Peritoneal catheter is used to transfer excess CSF, that is drained with a controlled pressure from the ventricles by the use of ventriculoperitoneal shunt. Peritoneal catheter length is 120 cm. Inner diameter of the catheter is 1.1 mm and outer diameter is 1.3 mm. Tantalum is used to mark the length measurements on the catheters on 5, 10, 15 and 20 cm points.



- Standard Peritoneal Catheter System

PRODUCT CODE	PRODUCT NAME
SPCK	Peritoneal distal catheter – closed tip



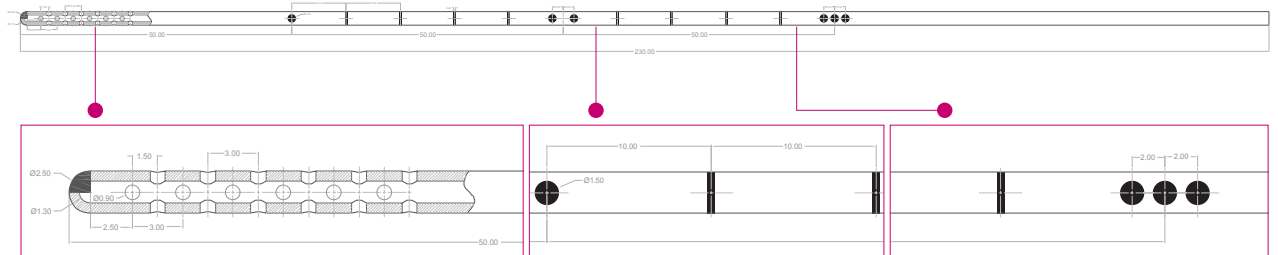
- Antibiotic Impregnated Peritoneal Catheter System

PRODUCT CODE	PRODUCT NAME
ASPCK	Antibiotic impregnated distal catheter – closed tip



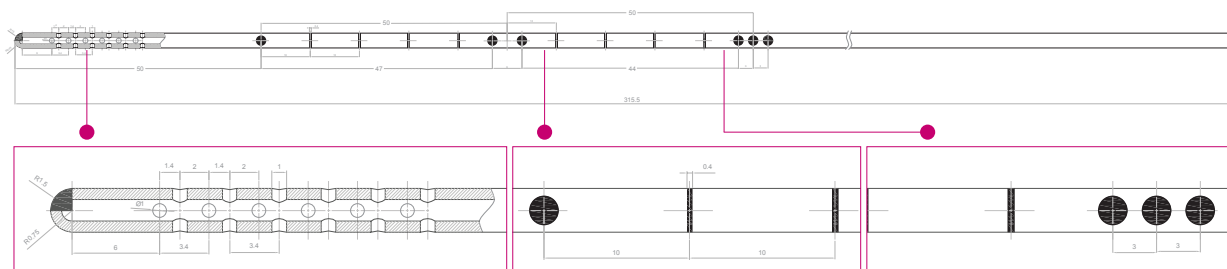
## VENTRICULOPERITONEAL CATHETER KIT (STANDARD / ANTIBIOTIC IMPREGNATED)

Standard Ventriculoperitoneal Catheter Kit	Antibiotic Impregnated Ventriculoperitoneal Catheter Kit
<p>Barium impregnated radiopaque silicone material</p> <p>Magnetic Resonance Imaging (MRI) visibility through the use of tantalum markings</p> <p>24 entry holes at the proximal tip to avoid obstructio</p>	<p>Barium impregnated radiopaque silicone material</p> <p>Magnetic Resonance Imaging (MRI) visibility through the use of tantalum markings</p> <p>24 entry holes at the proximal tip to avoid obstruction</p> <p>Antibacterial protection for 28 days, through impregnation of Rifampicin and Clindamycin HCl</p> <p>Colonization and obstruction preventing inner and outer surface through hydrophilic characteristic</p> <p>(0.054%) Rifampicin and (0.15%) Clidamycin HCl content</p> <p>Antibiotic dose suitable for pediatric use</p>



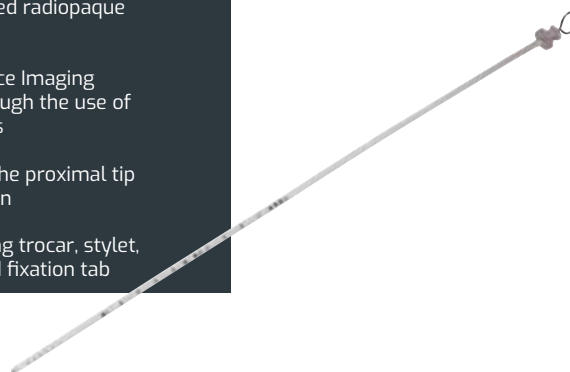
## EXTERNAL VENTRICULAR DRAINAGE CATHETER KIT (STANDARD / ANTIBIOTIC IMPREGNATED)

External Ventricular Drainage Catheter is the main component of the External Neurological Drainage System and is used to drain excess CSF from the brain ventricles and transfer it to the drainage system.



### ● Standard EVD Catheter System

PRODUCT CODE	PRODUCT NAME	PRODUCT PROPERTIES
EVDCK	External Ventricular Drainage Catheter System	<p>Barium impregnated radiopaque silicone material</p> <p>Magnetic Resonance Imaging (MRI) visibility through the use of tantalum markings</p> <p>24 entry holes at the proximal tip to avoid obstruction</p> <p>Kit system including trocar, stylet, luer connector and fixation tab</p>



### ● Antibiotic Impregnated EVD Catheter System

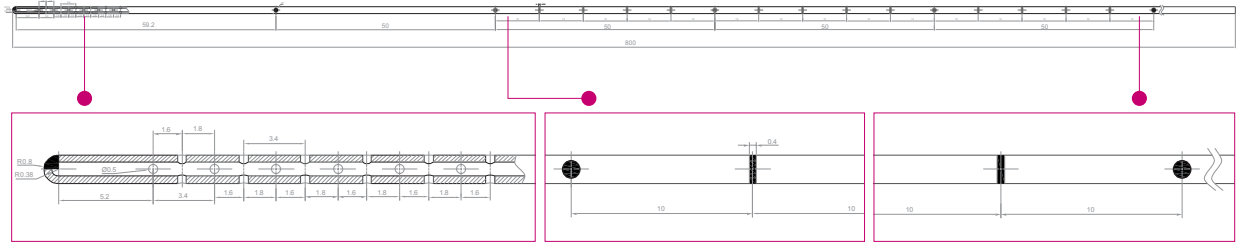
PRODUCT CODE	PRODUCT NAME	PRODUCT PROPERTIES
EVDACK	Antibiotic Impregnated External Ventricular Drainage Catheter System	<p>Barium impregnated radiopaque silicone material</p> <p>Magnetic Resonance Imaging (MRI) visibility through the use of tantalum markings</p> <p>24 entry holes at the proximal tip to avoid obstruction</p> <p>Antibacterial protection for 28 days, through impregnation of Rifampicin and Clindamycin HCL on the catheter</p> <p>Colonization and obstruction preventing inner and outer surface through hydrophilic characteristic</p> <p>(0.054%) Rifampicin and (0.15%) Clindamycin HCL content</p> <p>Antibiotic dose suitable for pediatric use</p> <p>Kit system including trocar, stylet, luer connector and fixation tab</p>





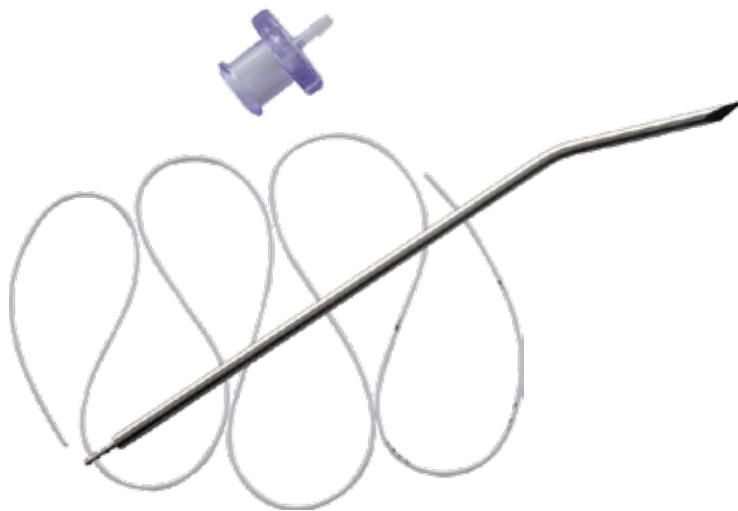
## EXTERNAL LUMBAR DRAINAGE CATHETER

External Lumbar Drainage Catheter is the main component of the External Neurological Drainage System and is used to drain excess CSF from the lumbar subarachnoid cavity and transfer it to the drainage system.



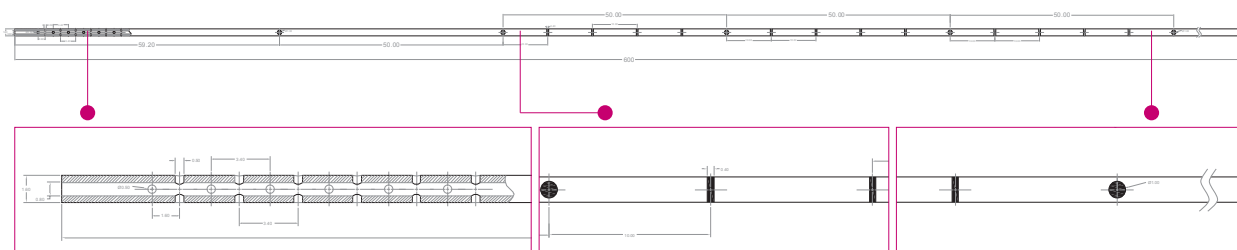
- **Standard Lumbar Drainage Catheter System**

PRODUCT CODE	PRODUCT NAME	PRODUCT PROPERTIES
ELCK	External Lumbar Drainage Catheter System	<p>Barium impregnated radiopaque silicone material</p> <p>Magnetic Resonance Imaging (MRI) visibility through the use of tantalum markings</p> <p>24 entry holes at the proximal tip to avoid obstruction</p> <p>Kit system including trocar, stylet, luer connector and fixation tab</p>



## LUMBAR CATHETER (STANDARD)

Lumbar catheter is one of the components of the lumboperitoneal catheter kit within the lumboperitoneal shunt system. Lumboperitoneal catheter kit consists of lumbar catheter and peritoneal catheter. Lumbar catheter is used to transfer excess CSF from the subarachnoid cavity to the shunt; while the shunt delivers the CSF with a pre-arranged pressure level to the peritoneal cavity.



### • Standard Lumboperitoneal Catheter System

PRODUCT CODE	PRODUCT NAME	PRODUCT PROPERTIES
LPCK	Lumbo Peritoneal Catheter System	<p>Barium impregnated radiopaque silicone material</p> <p>Magnetic Resonance Imaging (MRI) visibility through the use of tantalum markings</p> <p>24 entry holes at the proximal tip to avoid obstruction</p> <p>Lumboperitoneal catheter system with lumbar catheter and peritoneal catheter</p>







# Catheter Accessories

## STYLET

Stylet is used to transfer the catheter to the brain ventricle during catheterization of the ventricular shunt catheter or external ventricular drainage catheter.

- Stylet used for Ventricular Catheter



- Stylet used for External Ventricular Drainage Catheter



## TROCAR

Trocar is used for the transfer of the external ventricular catheter under the tissue during catheterization.

### NOTE:

- Trocar with the thinner connection tip is used with the external lumbar drainage system; while trocar with the thicker connection tip is used with the external ventricular drainage system.





## FIXATION TAB

Fixation tab is an aiding device that is used to fix the External Ventricular Drainage Catheter and the External Lumbar Drainage Catheter.

- EVD Catheter Fixation Tab



- External Lumbar Catheter Fixation Tab



- Fixation Tab Use



## CONNECTORS

- **Luer Connector**

Luer connector is an aiding device that is used to connect the External Ventricular Drainage Catheter / External Lumbar Catheter to the External Neurological Drainage System (ENDS).

- **Lumbar Drainage Luer Connector**



- **EVD Luer Connector**



- **Right Angle Connector**

Right angle connector is an aiding device that is used to change the direction of the Ventricular catheter, when needed during surgery, without causing bending or obstruction.



- **Straight Connector**

Straight connector is an aiding device that is used to connect different catheter pieces to each other during surgery.



- **L Type Connector**

L type connector is used to change the direction of the Ventricular / Peritoneal Catheter and/or connect different catheter pieces to each other, during surgery when needed, without causing bending or obstruction.



- **Y Type Connector**

Y connector is used in one of the following conditions: to connect two shunts to one peritoneal catheter; to have 2 peritoneal catheter outlets from one shunt or to have two ventricular catheter inlets to one shunt.

