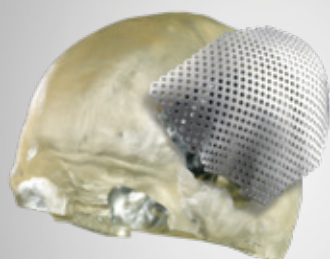


PRODUCTS CATALOG

CSF Management, Critical Care,
Cranial Repair, and Neuroendoscopy



Medtronic

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Note: Dimensions included in this catalog are for reference only.
Neither the finished product, nor materials used during manufacture of product, contain latex.

HYDROCEPHALUS THERAPY

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Note: Dimensions included in this catalog are for reference only.
Neither the finished product, nor materials used during manufacture of product, contain latex.

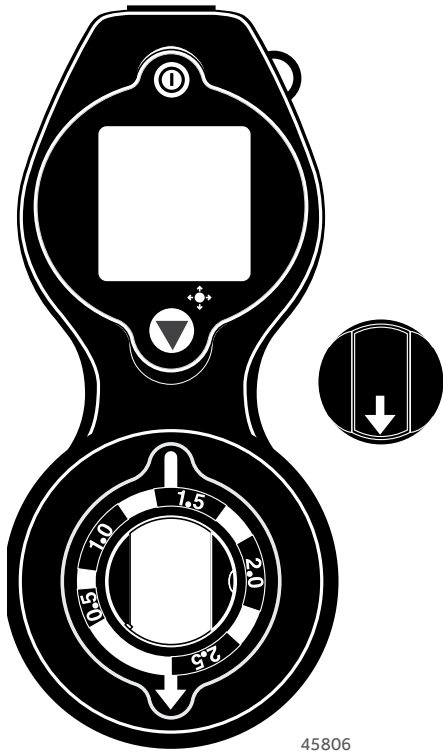
The **StrataVarius™ Adjustment System** is a battery-powered, handheld instrument that senses the location and orientation of the magnet contained in any Strata-type adjustable valve. The StrataVarius works in conjunction with the StrataVarius Adjustment Tool to change the magnet orientation, and thus the Performance Level (PL) setting of the valve.

StrataVarius™ Adjustment System

Included with Product:

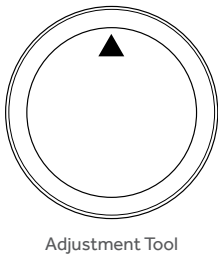
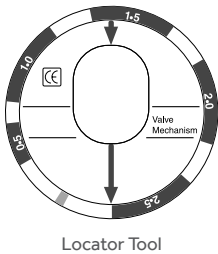
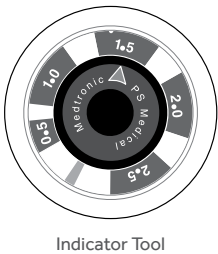
- StrataVarius System
- Adjustment Tool
- Strata II Smart Card
- Strata NSC Smart Card
- Batteries
- Storage/Carrying Case
- X-Ray Templates
- Instruction Manual

Product	Description
45806	StrataVarius Adjustment System
45807	Strata (II) Smart Card (Replacement)
45808	Strata NSC Smart Card (Replacement)
45809	StrataVarius Magnet (Replacement)



Strata Valve Adjustment Tools

Product
45805



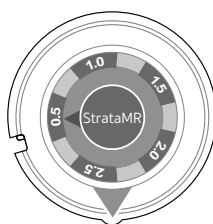
StrataMR™ Adjustment Tools are used to non-invasively adjust and verify the performance level setting of StrataMR valves pre-op and post-op.

Not compatible with Strata™ II or Strata™ NSC valves.

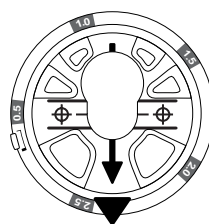
StrataMR Valve Adjustment Tools

Product

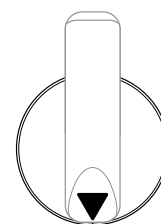
45905



Indicator Tool



Locator Tool



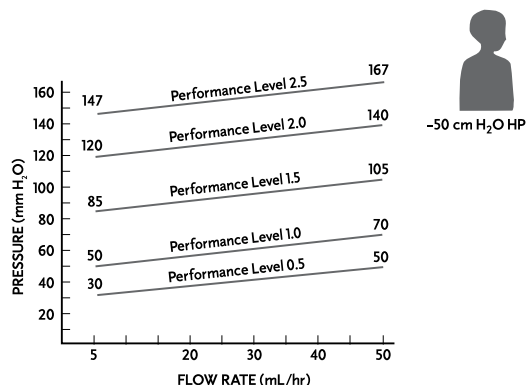
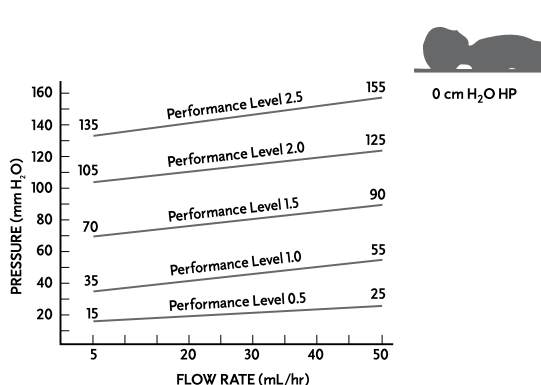
Adjustment Tool

Dimensions included in this catalog are for reference only.

VALVES

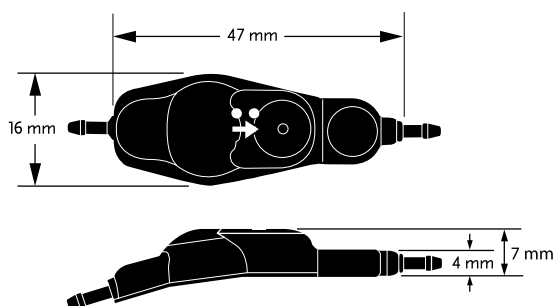
The **Strata II valve** was created to allow for preoperative and noninvasive postoperative pressure level adjustments. This adjustment ability is intended to reduce both the potential trauma and cost a patient might endure as a result of valve revisions relating to pressure changes. Neither the finished product, nor materials used during manufacture of product, contain latex.

The exterior surface of the Strata II valve with BioGlide is surface modified with a covalently bonded hydrogel. (The exterior of the Delta Chamber mechanism is not surface modified so as not to interfere with valve function). The BioGlide surface has hydrophilic properties for enhanced lubricity.



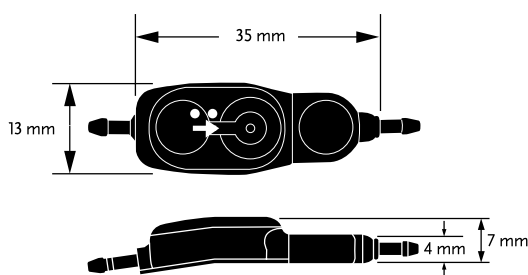
Strata II Valve, Regular

Product	Description
42866	
92866	with BioGlide



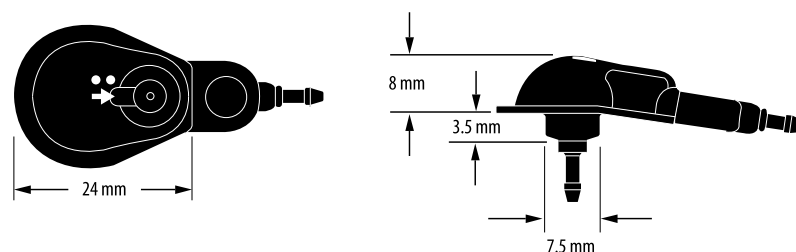
Strata II Valve, Small

Product	Description
42856	
92856	with BioGlide



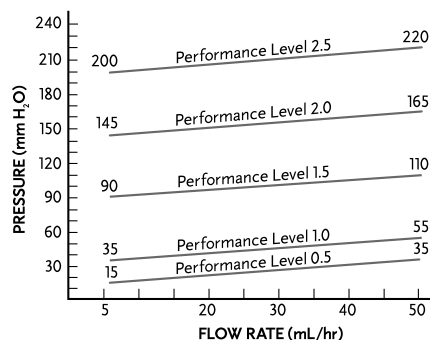
Strata Burr Hole Valve

Product	Description
42836	



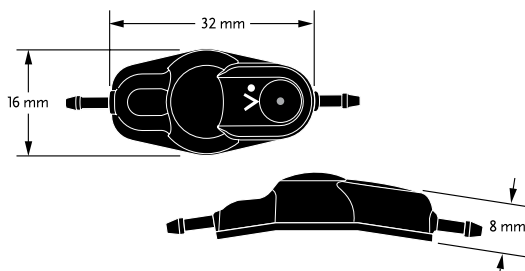
The **Strata™ NSC valve** was created to allow for preoperative and noninvasive postoperative pressure level adjustments. This adjustment ability is intended to reduce both the potential trauma and cost a patient might endure as a result of valve revisions relating to pressure changes. Neither the finished product, nor materials used during manufacture of product, contain latex.

The exterior surface of the Strata NSC valve with BioGlide™ is surface modified with a covalently bonded hydrogel. The exterior surface has hydrophilic properties for enhanced lubricity.



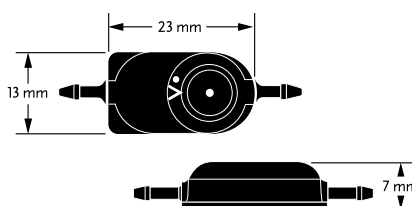
Strata NSC Valve, Regular

Product	Description
42365	
92365	with BioGlide



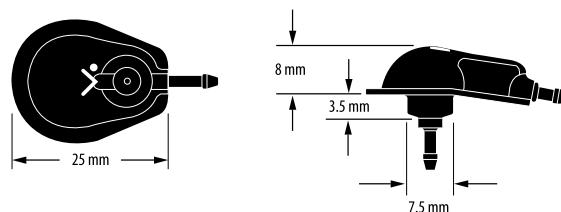
Strata NSC Valve, Small

Product	Description
42355	
92355	with BioGlide



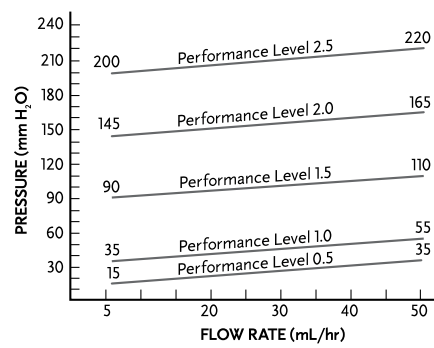
Strata NSC Burr Hole Valve

Product	Description
42335	



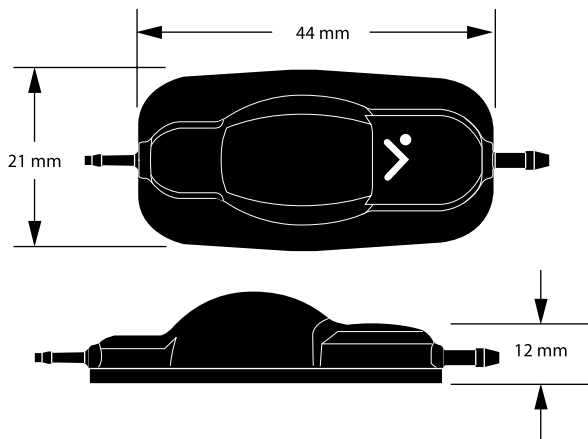
Dimensions included in this catalog are for reference only.

The **Strata™ NSC LP valve** is sized for subcutaneous placement in a lumboperitoneal (LP) shunt. It features an integral lumbar connector and strain relief for easy, non-kinking attachment of the proximal lumbar catheter. The larger valve flange allows the user to suture the valve up to the dermal layer. Neither the finished product, nor materials used during manufacture of product, contain latex.



Strata NSC LP Valve

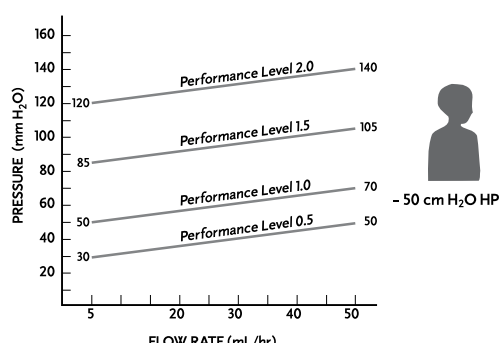
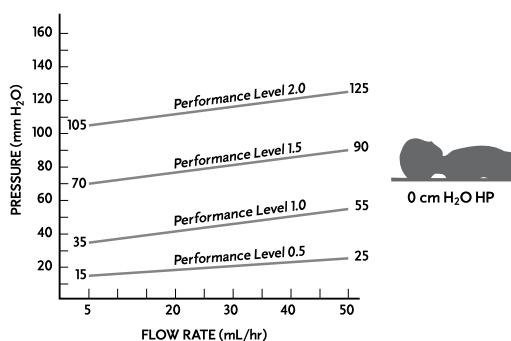
Product	Description
44465	



The **Delta™ valve** is designed to minimize overdrainage of CSF and maintain intraventricular pressure (IVP) within a normal physiologic range, regardless of patient position. The normally closed Delta chamber mechanism opens in response to positive intraventricular pressure. Working with the membrane valve, this mechanism minimizes overdrainage by utilizing the principle of hydrodynamic leverage.

All Delta valves incorporate an injectable reservoir dome, occluders for selective flushing, and a non-metallic design. The valves are fabricated of dissimilar materials — polypropylene and silicone elastomer — reducing valve sticking and deformation. The non-metallic design of the valves ensures non-interference with MRI or CT scans. Neither the finished product, nor materials used during manufacture of product, contain latex. Delta valves are available in multiple configurations meeting the needs of all patient groups.

The exterior of Delta valves with BioGlide™ is surface modified with a covalently bonded hydrogel (the exterior of the Delta chamber mechanism is not surface modified, so as not to interfere with the valve function). The BioGlide surface has hydrophilic properties for enhanced lubricity.



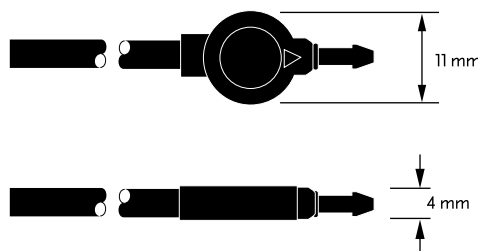
Product Dot Codes

▶▶ Performance Level 0.5 ▶ Performance Level 1.0 ●▶ Performance Level 1.5 ▶▶ Performance Level 2.0

Delta Chamber

Product

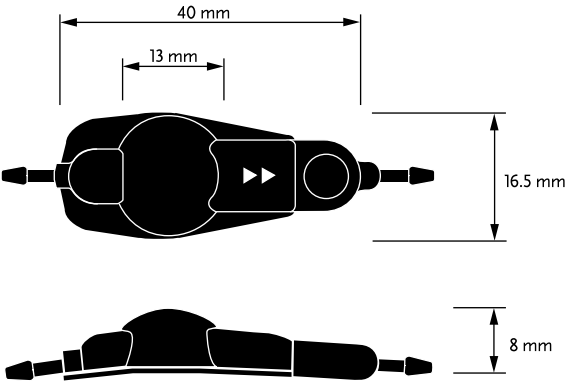
24053



Dimensions included in this catalog are for reference only.

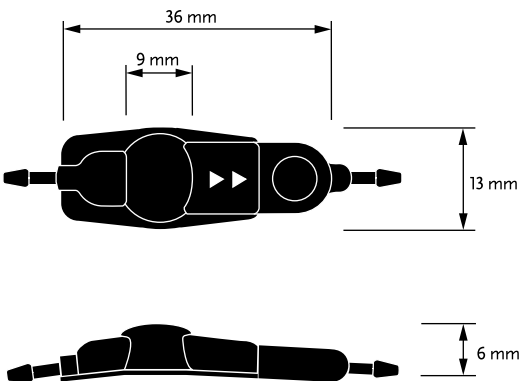
Delta Valve, Regular

Product	Performance Level	Description
24048	0.5	
42822	1.0	
42823	1.5	
42824	2.0	
92822	1.0	with BioGlide
92823	1.5	with BioGlide
92824	2.0	with BioGlide



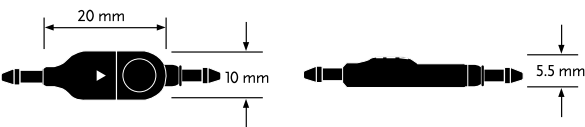
Delta Valve, Small

Product	Performance Level	Description
24147	0.5	
42812	1.0	
42813	1.5	
42814	2.0	
92812	1.0	with BioGlide
92813	1.5	with BioGlide
92814	2.0	with BioGlide



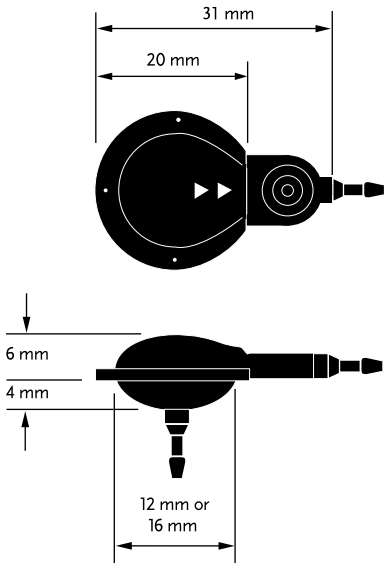
Delta Valve, Neonatal

Product	Performance Level	Description
27219-1	1.0	
27219-5	1.5	
27219-2	2.0	



Delta Valve, Burr Hole

Product	Performance Level	Size
42830	0.5	12 mm
42832	1.0	12 mm
42833	1.5	12 mm
42840	0.5	16 mm
42842	1.0	16 mm
42843	1.5	16 mm

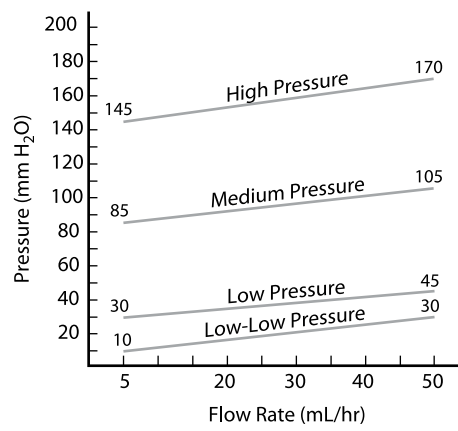


Dimensions included in this catalog are for reference only.

CSF-Flow Control valves (Contoured valves) are fabricated of dissimilar materials — polypropylene and silicone elastomer — reducing valve sticking and deformation. The internal flow path, combined with the membrane valve design, contribute to optimum valve performance. Each valve is individually tested to ensure conformance with individual flow characteristics.

All valve designs include integral connectors to facilitate catheter connection. The contoured, burr hole, and ultra small models include central reservoirs with needle guards for percutaneous CSF access. One or two flushing occluders are incorporated in the contoured and ultra small models for selective flushing. The non-metallic design of the valves ensures non-interference with MRI or CT scans. Neither the finished product, nor materials used during manufacture of product, contain latex.

CSF-Flow Control valves are available in multiple configurations meeting the needs of all patient groups. The exterior surface of the Contoured valve with BioGlide™ is surface modified with a covalently bonded hydrogel. The BioGlide surface has hydrophilic properties for enhanced lubricity.

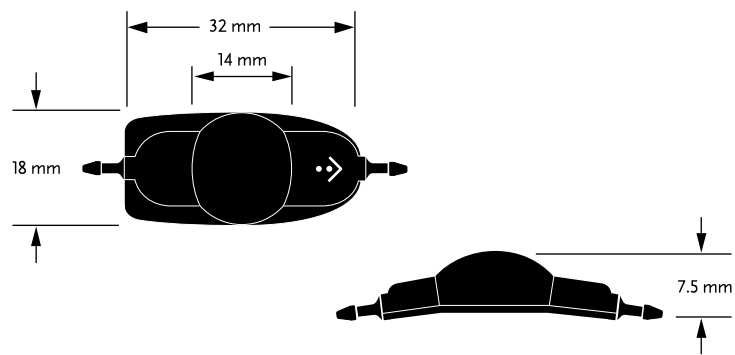


Product Dot Codes

Low-Low Pressure ● Low Pressure ●● Medium Pressure ●●● High Pressure

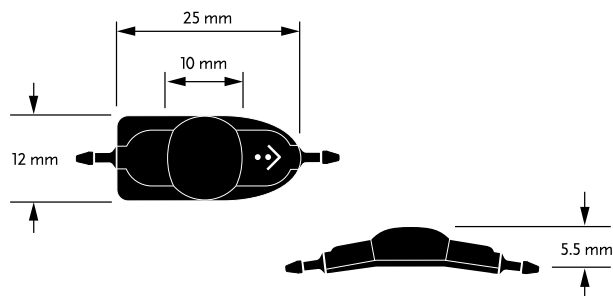
CSF-Flow Control Valve,
Contoured Regular

Product	Pressure	Description
23093	Low-Low	
42322	Low	
42324	Medium	
42326	High	
92322	Low	with BioGlide
92324	Medium	with BioGlide
92326	High	with BioGlide



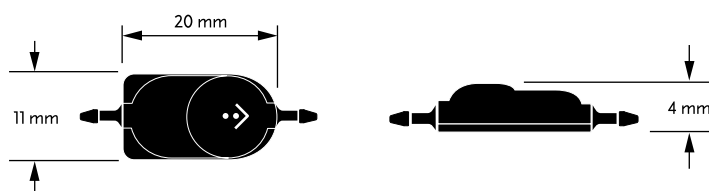
CSF-Flow Control Valve, Contoured Small

Product	Pressure	Description
27102	Low-Low	
42312	Low	
42314	Medium	
42316	High	
92312	Low	with BioGlide
92314	Medium	with BioGlide
92316	High	with BioGlide



CSF-Flow Control Valve, Ultra Small

Product	Pressure
42410	Low-Low
42412	Low
42414	Medium

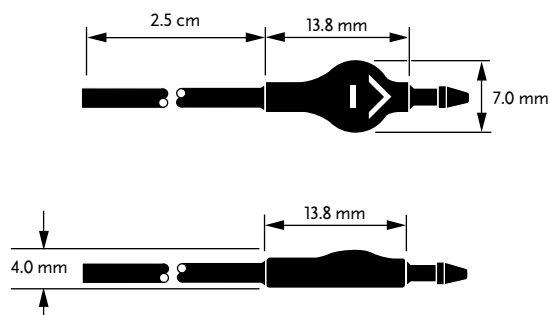


CSF-Flow Control Valve, Button

Included with product:

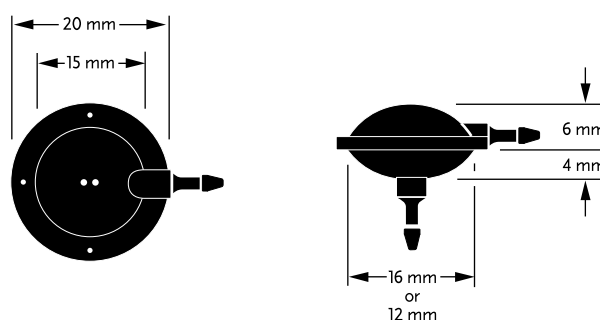
- **Straight Connector (not shown)**

Product	Pressure
24003 LL	Low-Low
24003 L	Low
24003 M	Medium



CSF-Flow Control Valve, Burr Hole

Product	Pressure	Size
42532	Low	12 mm
42534	Medium	12 mm
42536	High	12 mm
42542	Low	16 mm
42544	Medium	16 mm
42546	High	16 mm



Dimensions included in this catalog are for reference only.

CATHETERS

Ares™ Ventricular catheters have been shown in laboratory studies to reduce the colonization of gram-positive bacteria on the tubing surface.

Rivulet™ Ventricular catheters are designed with graduated inlet holes, allowing the inflowing fluid to be evenly distributed across all holes of the catheter. Compare this to a standard catheter where the vast majority of the fluid enters through the holes closest to the valve, while nearly none enters through the holes closest to the tip. Inlet holes are positioned within 1 cm of the tip enabling intraventricular placement further away from the choroid plexus.

Ventricular catheters with BioGlide™ are treated with a unique, patented process which covalently bonds hydrogel to the interior and exterior silicone surfaces of the catheter. The BioGlide surface has hydrophilic properties for enhanced lubricity.

Innervision Ventricular catheters are designed to be used with a NeuroPEN™ endoscope. The NeuroPEN endoscope is used when a physician wishes to place a catheter's tip at a specific intraventricular location or to view intraventricular anatomy. The Innervision ventricular catheter has a slit tip to accommodate passage of the endoscope.

Slotted Ventricular catheters feature enlarged rectangular flow holes. These flow holes are recessed in axial channels.

Opus Ventricular catheters feature the Opus stylet. The Opus stylet is hollow, allowing the physician immediate visualization of CSF prior to stylet withdrawal. The Opus stylet has a luer lock connector. Passage of CSF may be stopped by covering the luer lock with a finger.

Ventricular catheters are available in a wide variety of models. The **standard** catheters may be ordered in radiopaque (barium impregnated) silicone elastomer tubing, or in translucent, lower durometer (softer) silicone elastomer tubing. The **small** catheter has the same material characteristics as the **standard** radiopaque catheter; its smaller diameter is recommended for infants. The **snap shunt** ventricular catheter is of standard-sized silicone elastomer tubing, and is designed to connect to the CSF-snap shunt assembly. The non-metallic design of ventricular catheters ensures non-interference with MRI or CT scans. Neither the finished product, nor materials used during manufacture of product, contain latex.

Ares Antibiotic-Impregnated
Ventricular Catheter

**Standard, Numeric Length Markers,
Barium Impregnated, 23 cm**

Included with product:

- Right Angle Clip
- Stainless Steel Stylet

Product

91101



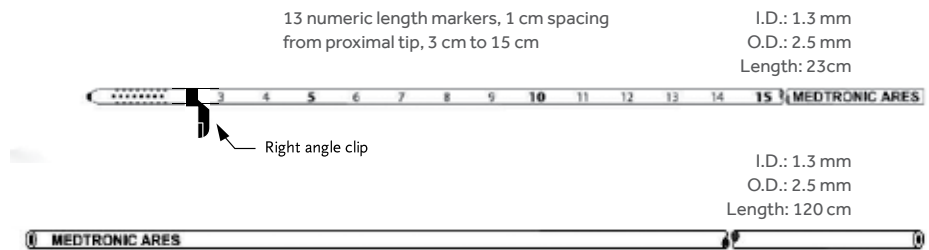
Ares Antibiotic-Impregnated Catheter Kit

Included with product:

- Ares Ventricular Catheter
- Ares Peritoneal Catheter
- Right Angled Clip
- Stainless Steel Stylet (Now Shown)

Product

95001



Ventricular Catheter

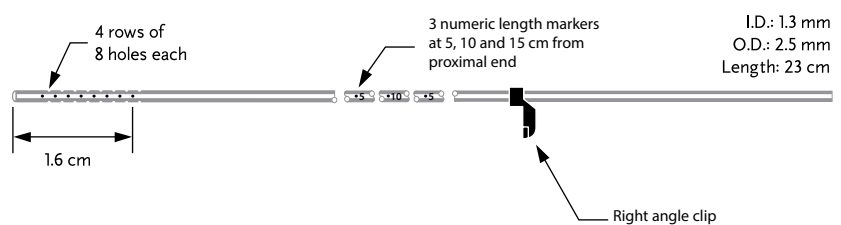
Standard, Translucent with Barium Impregnated Stripe, 23 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

24154



Ventricular Catheter

Standard or Small Barium Impregnated, 23 cm

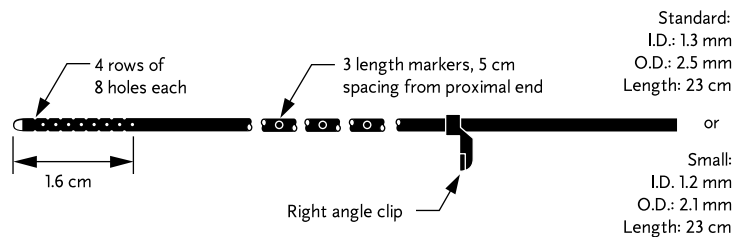
Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

41101

41207



Ventricular Catheter

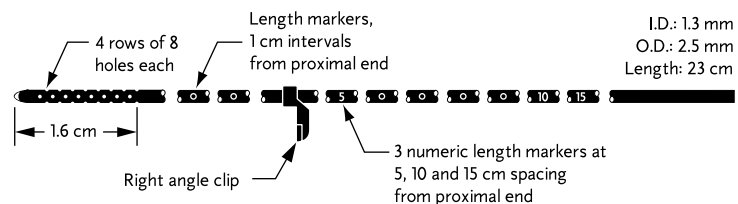
Standard, Extra Length Markers Barium Impregnated, 23 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

9025



Dimensions included in this catalog are for reference only.

CATHETERS

Rivulet Ventrical Catheter

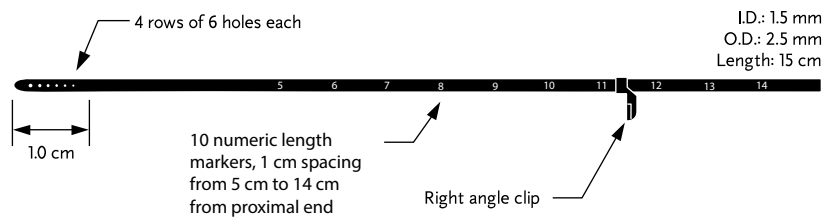
Standard, graduated inlet holes, Barium Impregnated, 15cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

41701



Ventricular Catheter

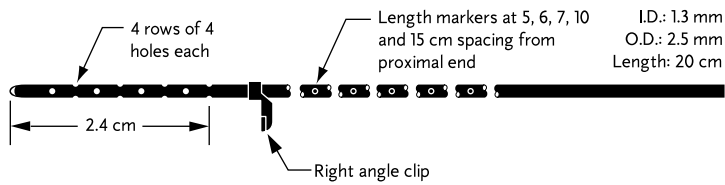
Standard, Large Flow Holes, Extra Length Markers, Barium Impregnated, 20 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

27771



Ventricular Catheter

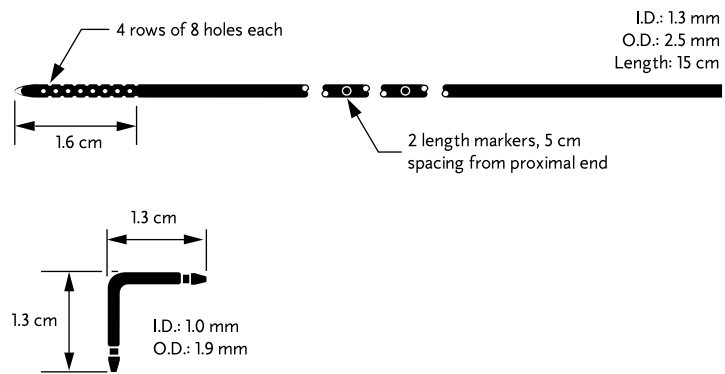
Standard, Pliant, Barium Impregnated, 15 cm

Included with product:

- Catheter Connector, Right Angle
- Stainless Steel Stylet (not shown)

Product

41103



Ventricular Catheter

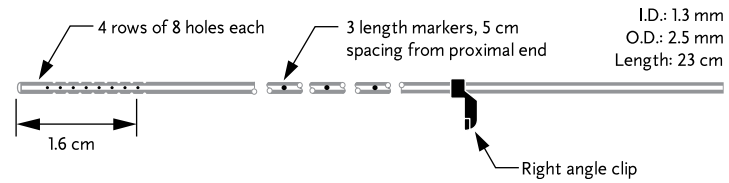
Standard, Translucent, 23 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

41115



Ventricular Catheter with BioGlide

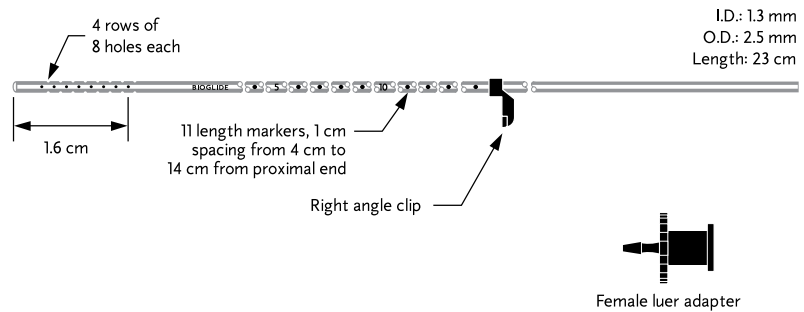
Standard, Translucent with Barium Impregnated Stripe, 23 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)
- Female Luer Adapter

Product

91503



Ventricular Catheter

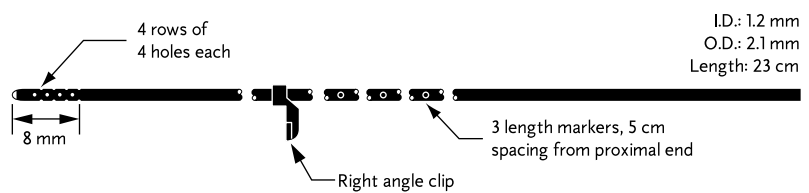
Small, 8 mm Flow Holes, Barium Impregnated, 23 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product

27251



Dimensions included in this catalog are for reference only.

CATHETERS

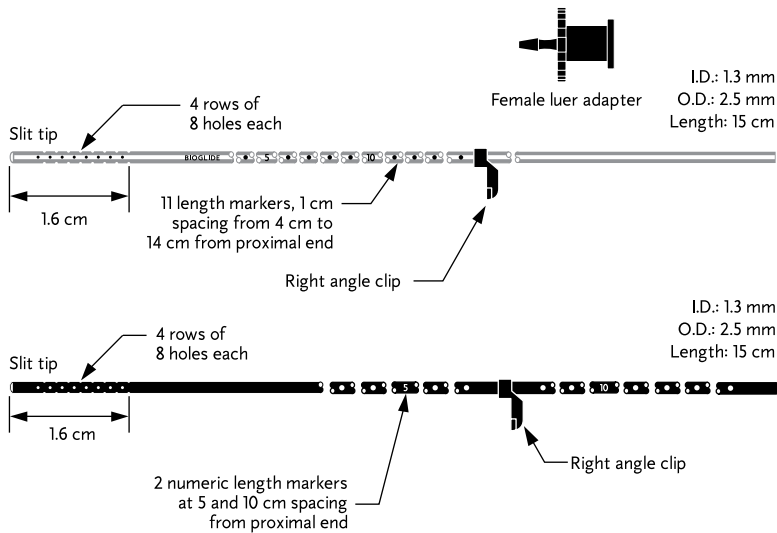
Innervision Ventricular Catheter

Standard, Translucent with Barium Impregnated Stripe, 15 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)
- Female Luer Adapter (BioGlide version only)

Product	Description
99102	with BioGlide
27240	without BioGlide, Barium Impregnated



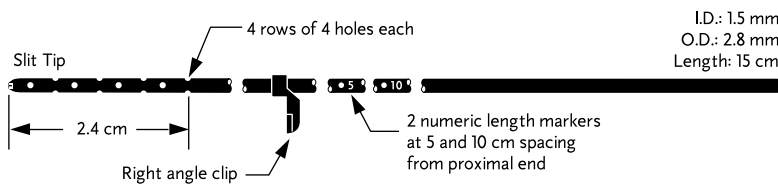
Innervision Ventricular Catheter

Large Diameter, Larger Flow Holes, Barium Impregnated, 15 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product
27165



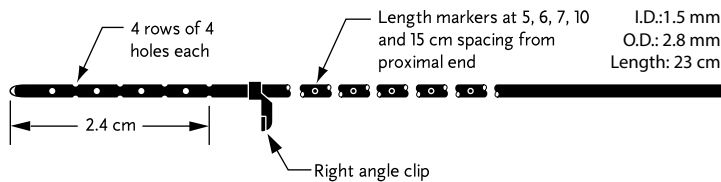
Ventricular Catheter

Large Diameter, Larger Flow Holes, Barium Impregnated, 23 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product
20046



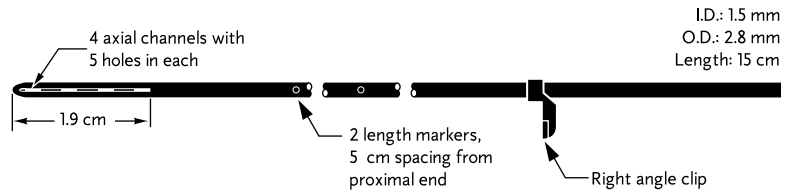
Slotted Ventricular Catheter

Large Diameter, Barium Impregnated, 15 cm

Included with product:

- Right Angle Clip
- Stainless Steel Stylet (not shown)

Product	Description
27211	
27600	Innervision tip



Opus Ventricular Catheter

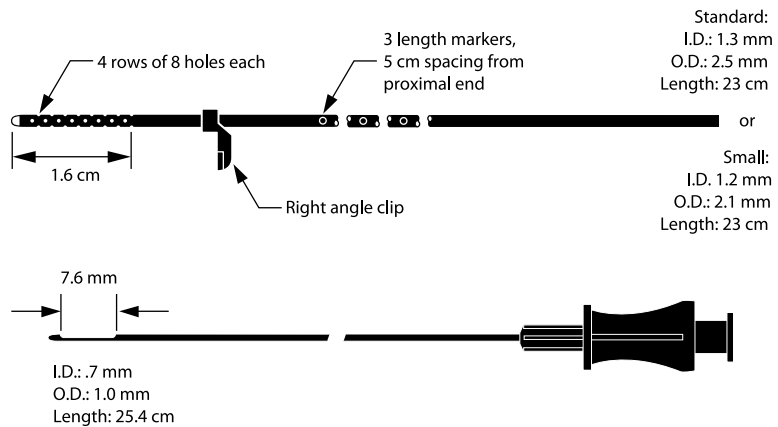
Standard or Small, Barium Impregnated, 23 cm

Included with product:

- Right Angle Clip
- Opus Stylet

Product

41501
41503



Dimensions included in this catalog are for reference only.

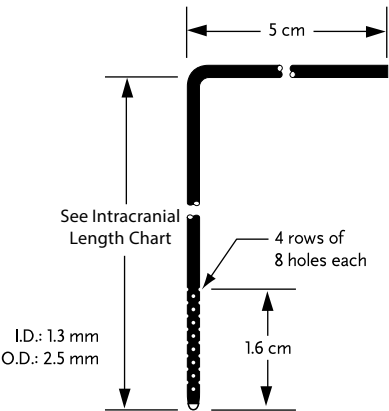
Ventricular Catheter

Standard, Right Angle, Barium Impregnated

Included with product:

- Stainless Steel Stylet (not shown)

Product	Intracranial Length
5005 F	4.0 cm
5005 E	5.0 cm
5005 G	6.0 cm
5005 A	7.0 cm
5005 I	8.0 cm
5005 B	9.0 cm
5005 H	10.0 cm
5005 C	11.0 cm



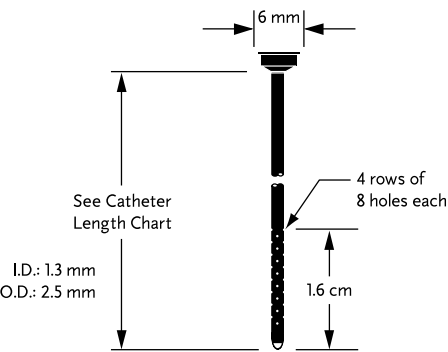
CSF-Snap Shunt Ventricular Catheter

Standard, Barium Impregnated

Included with product:

- Unitized Snap Assembly Reservoir Base, Burr Hole, 6 mm, Shallow Depth
- Stainless Steel Stylet (not shown)

Product	Catheter Length
41404	4.0 cm
41405	5.0 cm
41406	6.0 cm
22082H	6.5 cm
41407	7.0 cm
41408	8.0 cm
41409	9.0 cm
22082F	10.0 cm
22082G	11.0 cm



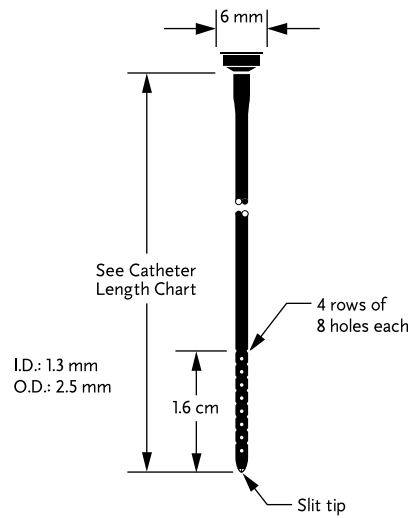
Innervision Snap Shunt Ventricular Catheter

Standard, Barium Impregnated

Included with product:

- Unitized Snap Assembly Reservoir Base, Burr Hole, 6 mm, Shallow Depth
- Stainless Steel Stylet (not shown)

Product	Catheter Length
27065A	4.0 cm
27065B	5.0 cm
27065C	6.0 cm
27065D	7.0 cm
27065E	8.0 cm
27065F	9.0 cm
27065G	10.0 cm
27065H	11.0 cm



CSF-Snap Shunt Ventricular Catheter Kit

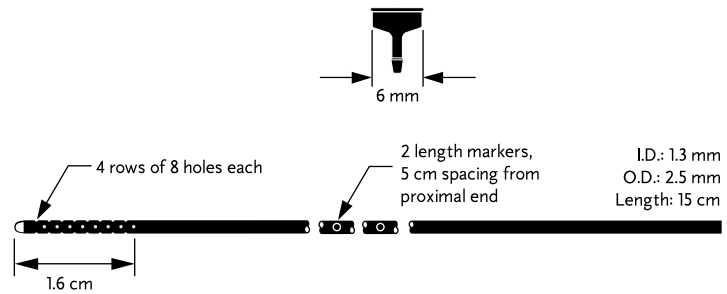
Standard, Barium Impregnated, 15 cm

Included with product:

- Snap Assembly Reservoir Base, Burr Hole, 6 mm, Shallow Depth
- Stainless Steel Stylet (not shown)

Product

24094



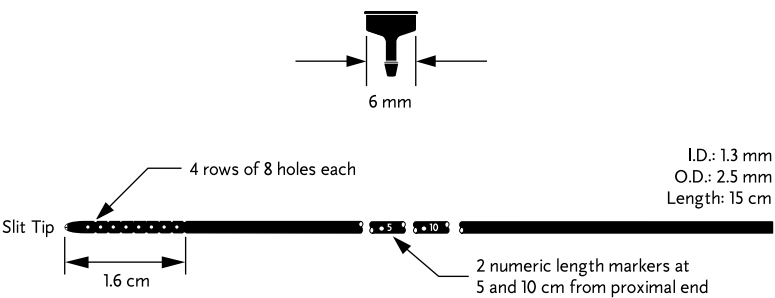
Innervision Snap Shunt Ventricular Catheter Kit

Included with product:

- Innervision Ventricular Catheter, Standard, Barium Impregnated, 15 cm
- Snap Assembly Reservoir Base, Burr Hole, 6 mm, Shallow Depth
- Stainless Steel Stylet (not shown)

Product

27298



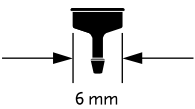
CSF-Snap Assembly Ventriculostomy Reservoir Base

Included with product:

- Snap Assembly Ventriculostomy Reservoir Base, 6 mm, Shallow Depth

Product

27106



Ares™ Peritoneal catheters have been shown in laboratory studies to reduce the colonization of gram-positive bacteria on the tubing surface.

Small Lumen Peritoneal catheters feature a small inner diameter that limits fluid flow six times more than a standard peritoneal catheter, when measured at a constant flow rate of 20 ml/hr. Using the Small Lumen peritoneal catheter with an adjustable valve allows the pressure/flow characteristics of the shunt to be customized for each patient's needs.

Peritoneal catheters with BioGlide™ are treated with a unique, patented process which covalently bonds hydrogel to the interior and exterior silicone surfaces of the catheters. The BioGlide surface has hydrophilic properties for enhanced lubricity.

Peritoneal and Cardiac/Peritoneal catheters are available in a wide variety of models, differentiated by diameter, material type, and tip design. Catheter slits are coated with graphite to prevent silicone edges from cohering during storage. Neither the finished product, nor materials used during manufacture of product, contain latex.

Closing Pressure Cardiac/Peritoneal catheter are available in low, medium, or high, and fabricated with the same materials and specifications as the cardiac/peritoneal catheters. The slit openings near the distal tip of the catheter are available in three closing pressure ranges. They are not designed as pressure/flow control valves. They are designed to provide a defined closing pressure range only. The closing pressure range is identified by a dot code at the distal end of the catheter as shown below.

Dot Code	Closing Pressure	Closing Pressure Range (cm H2O)
•	Low	0.5 – 5.4
••	Medium	5.5 – 9.4
•••	High	9.5 – 14.4

Ares Antibiotic-Impregnated
Peritoneal Catheter

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 120 cm

Standard, Barium Impregnated, 120 cm



Product

93092

Ares Antibiotic-Impregnated
Catheter Kit

13 numeric length markers, 1 cm spacing
from proximal tip, 3 cm to 15 cm

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 23cm

Included with product:

- Ventricular Catheter
- Peritoneal Catheter
- Right Angle Clip
- Stainless Steel Stylet (Not Shown)



Right angle clip



I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 120 cm

Product

95001

Dimensions included in this catalog are for reference only.

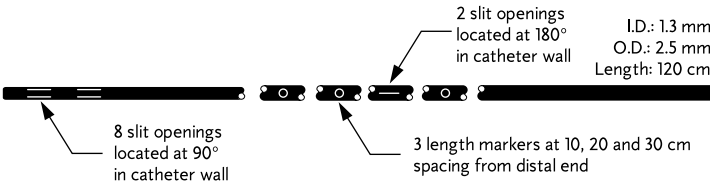
CATHETERS

Peritoneal Catheter

**Standard, Open End with Wall Slits,
Barium Impregnated, 120 cm**

Product

23047

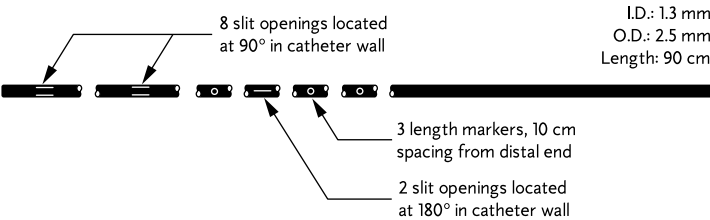


Peritoneal Catheter

**Standard Open End with Wall Slits
Barium Impregnated, 90 cm**

Product

43522

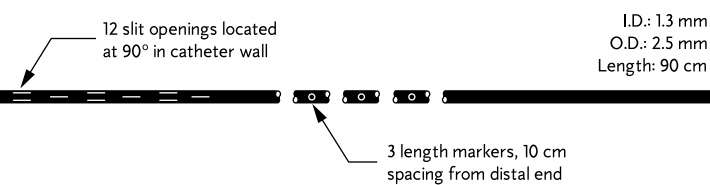


Peritoneal Catheter

**Standard Open End with Wall Slits, Pliant,
Barium Impregnated, 90 cm**

Product

43551

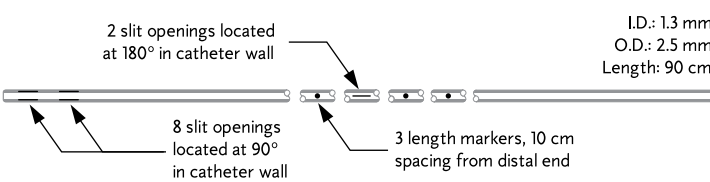


Peritoneal Catheter

**Standard, Open End with Wall Slits,
Translucent with Barium Impregnated Stripe,
90 cm**

Product

25024



Peritoneal Catheter, Small Lumen

Radiopaque core with Translucent Wall, 120 cm

Included with product:

- Fixation Tab, Large (not shown)

Product

43555



Peritoneal Catheter

Standard, Open End, Barium Impregnated, 96 cm

Product

22014

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 96 cm



Peritoneal Catheter with BioGlide

Standard, Translucent with Barium Impregnated Stripe, Open End with Wall Slits, 90 cm

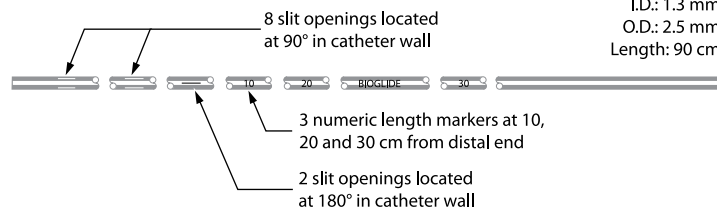
Included with product:

- Female Luer Adapter

Product

93522

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 90 cm



Female luer adapter

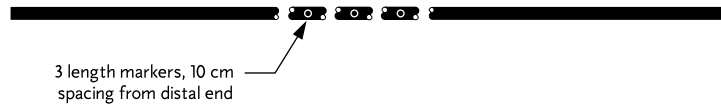
Peritoneal Catheter

Standard, Open End, Barium Impregnated, 120 cm

Product

23092

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 120 cm



Peritoneal Catheter

Small, Open End, Barium Impregnated, 90 cm

Product

22013

I.D.: 1.2 mm
O.D.: 2.1 mm
Length: 90 cm



Dimensions included in this catalog are for reference only.

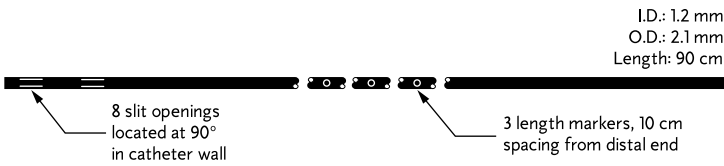
CATHETERS

Peritoneal Catheter

**Small, Open End, with Wall Slits,
Barium Impregnated, 90 cm**

Product

21004

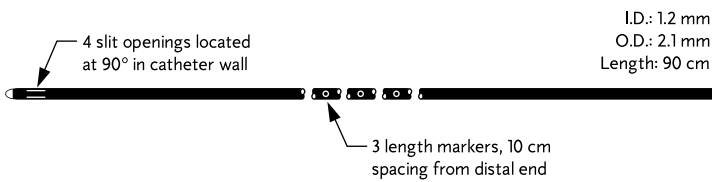


Cardiac/Peritoneal Catheter

Small, Barium Impregnated, 90 cm

Product

43209

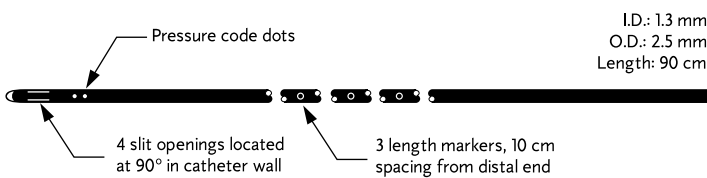


Cardiac/Peritoneal Catheter

**Closing Pressure, Standard, Barium
Impregnated, 90 cm**

Product Closing Pressure Dot Code

9007 L	Low	•
9007 M	Medium	••
9007 H	High	•••

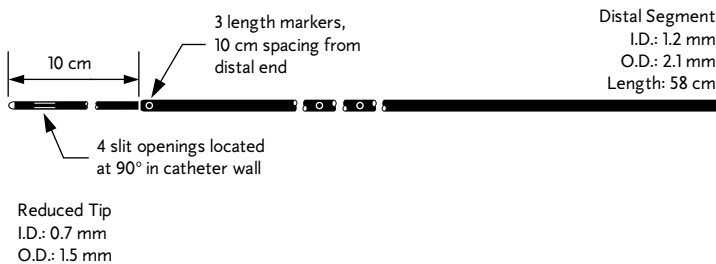


Cardiac Catheter

**Reduced Tip, Small, Barium Impregnated,
58 cm**

Product

43418

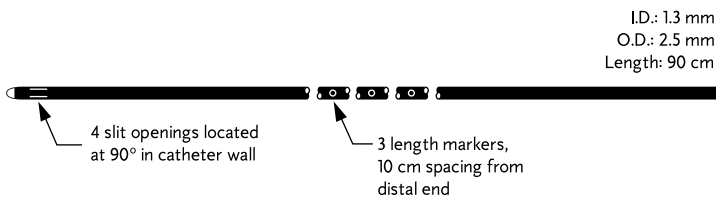


Cardiac/Peritoneal Catheter

Standard, Barium Impregnated, 90 cm

Product

43103



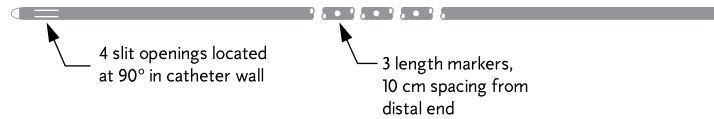
Cardiac/Peritoneal Catheter

Standard, Translucent, 90 cm

Product

43111

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 90 cm



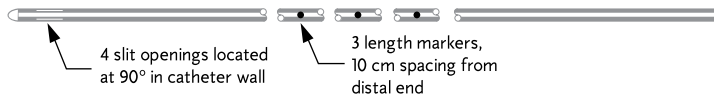
Cardiac/Peritoneal Catheter

Standard, Translucent with Barium Impregnated Stripe, 90 cm

Product

25104

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 90 cm



Cardiac/Peritoneal Catheter

Standard, Barium Impregnated, 110 cm

Product

24148

I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 110 cm



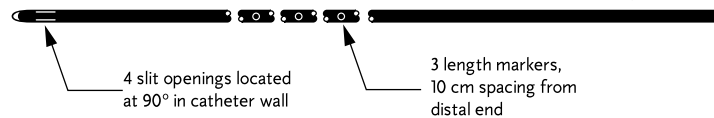
Cardiac/Peritoneal Catheter

Standard, Barium Impregnated, 120 cm

Product

24010

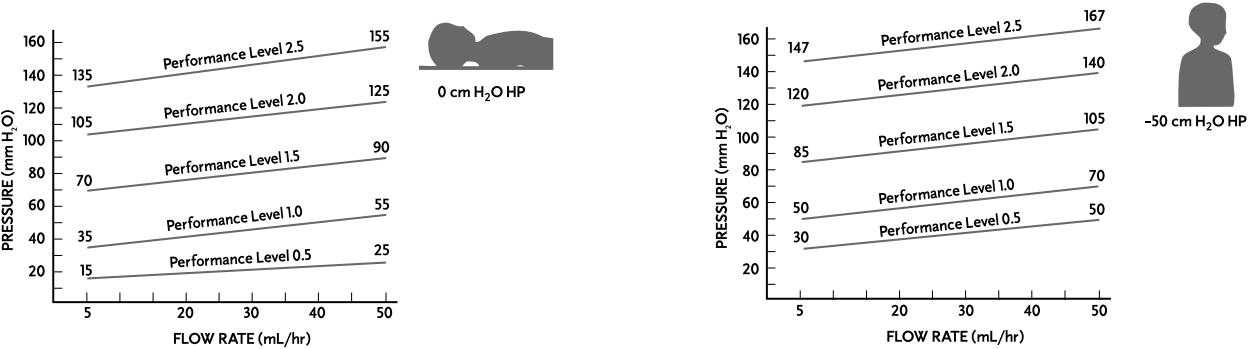
I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 120 cm



Dimensions included in this catalog are for reference only.

SHUNTS

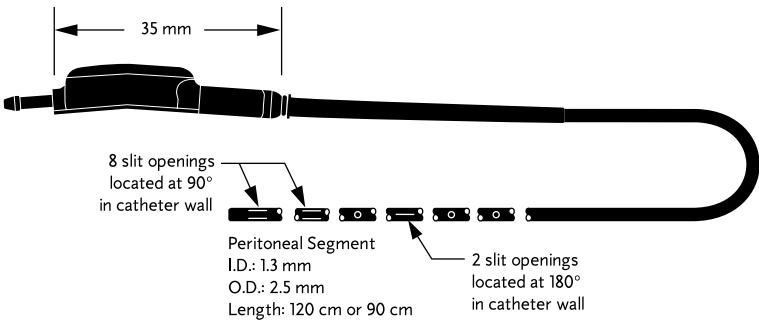
Strata™ Shunt combines either the Strata II valve or Strata NSC valve with integral catheters. The Strata shunt assembly includes an integral distal catheter. The Strata unitized shunt includes an integral ventricular catheter and integral distal catheter. Neither the finished product, nor materials used during manufacture of product, contain latex. The Strata shunts can be adjusted to five different performance level settings pre- and post-operatively. The Strata snap shunt assemblies include integral snap assembly ventriculostomy reservoir domes. When used with a snap assembly reservoir base, a complete shunt can be assembled without the need for ligatures. The exterior surface of the Strata shunt with BioGlide™ is surface modified with a covalently bonded hydrogel. (The exterior of the Delta™ Chamber mechanism is not surface modified so as not to interfere with valve function). The BioGlide surface has hydrophilic properties for enhanced lubricity.



Strata II Shunt Assembly, Small

Included with product:

- Strata II Valve, Small, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Disposable Subcutaneous Catheter Passer, 60 cm (not shown)



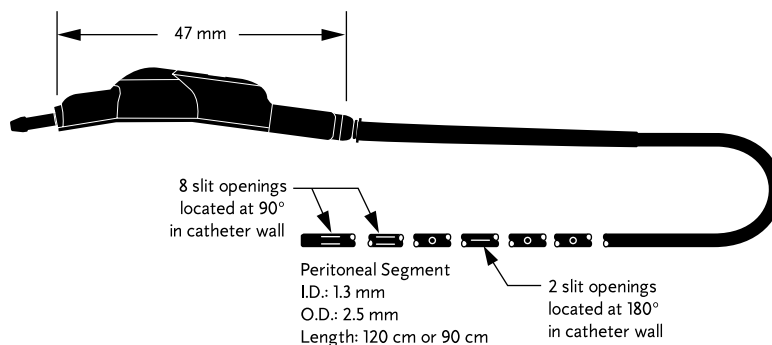
Product	Distal Catheter Length
46856	120 cm
27814	90 cm

Strata II Shunt Assembly, Regular

Included with product:

- Strata II Valve, Regular, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Disposable Subcutaneous Catheter Passer, 60 cm (not shown)

Product	Distal Catheter Length
46866	120 cm
27815	90 cm

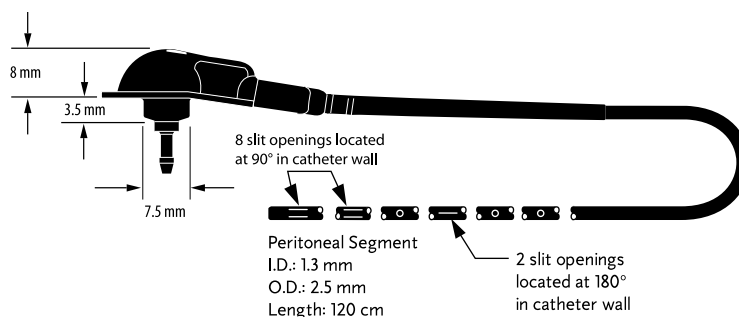


Strata Burr Hole Shunt Assembly

Included with product:

- Strata Burr Hole Shunt:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated

Product	Distal Catheter Length
46837	120 cm

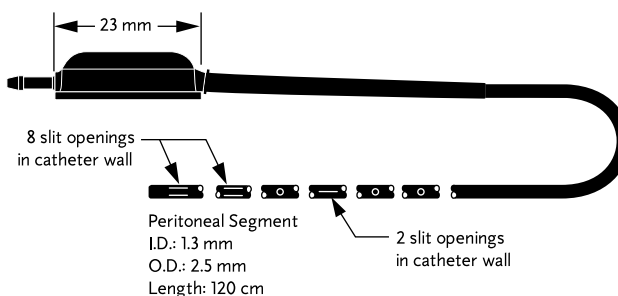


Strata NSC Shunt Assembly, Small

Included with product:

- Strata NSC Valve, Small, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Disposable Peritoneal Catheter Passer, 60 cm (not shown)

Product	Distal Catheter Length
46655	120 cm

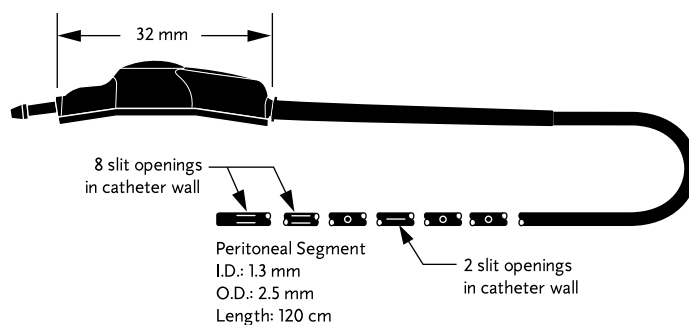


Strata NSC Shunt Assembly, Regular

Included with product:

- Strata NSC Valve, Regular, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Disposable Peritoneal Catheter Passer, 60 cm (not shown)

Product	Distal Catheter Length
46665	120 cm



Dimensions included in this catalog are for reference only.

SHUNTS

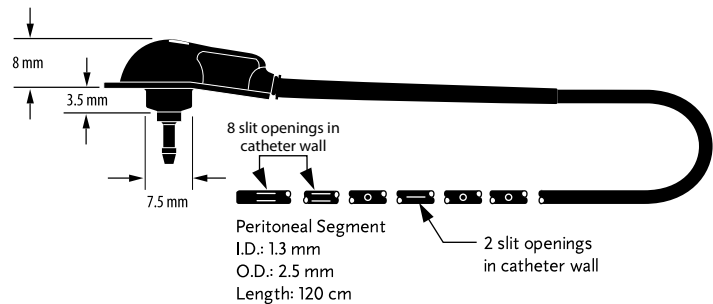
Strata NSC Burr Hole Shunt Assembly

Included with product:

- Strata NSC Burr Hole Shunt Assembly:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated

Product

46636



Strata NSC Shunt Assembly, with BioGlide

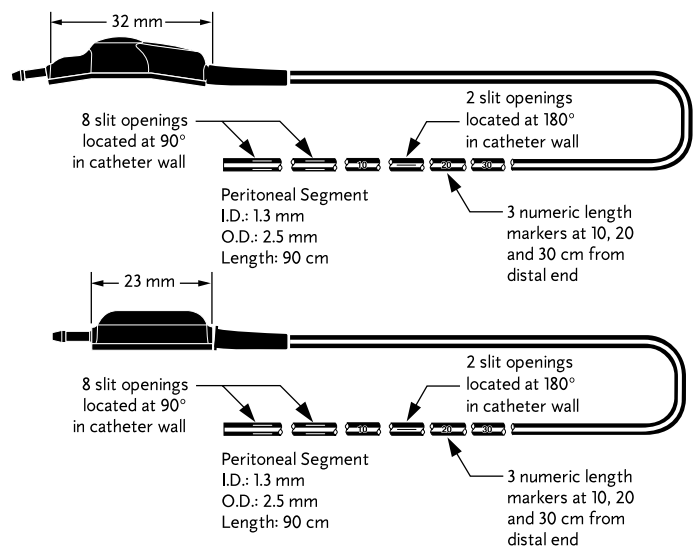
Included with product:

- Strata NSC Valve, Small or Regular, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Translucent with Barium Impregnated Stripe
 - Disposable Peritoneal Catheter Passer, 60 cm (not shown)
 - Female Luer Adapter and Prefill Tubing (not shown)

Product

Valve Size

96655	Small
96665	Regular



Strata II Shunt Assembly, with BioGlide

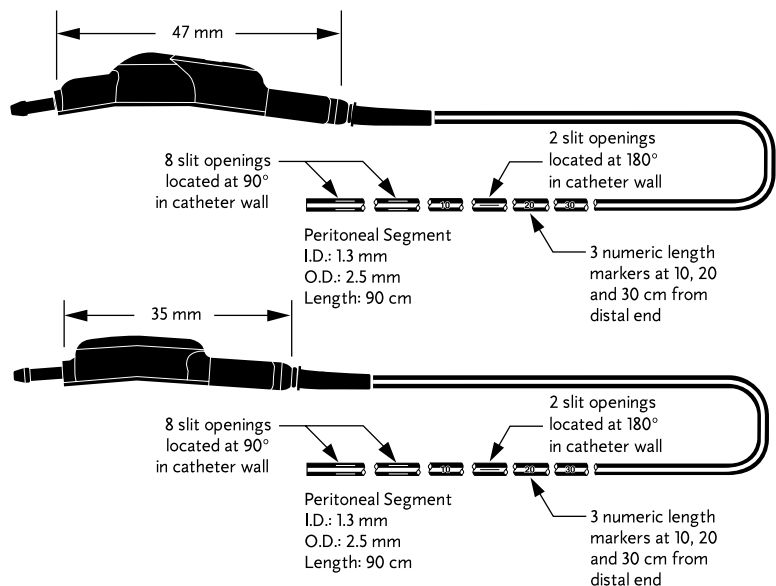
Included with product:

- Strata II Valve, Small or Regular, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Translucent with Barium Impregnated Stripe
 - Disposable Peritoneal Catheter Passer, 60 cm (not shown)
 - Female Luer Adapter and Prefill Tubing (not shown)

Product

Valve Size

27818	Small
27819	Regular

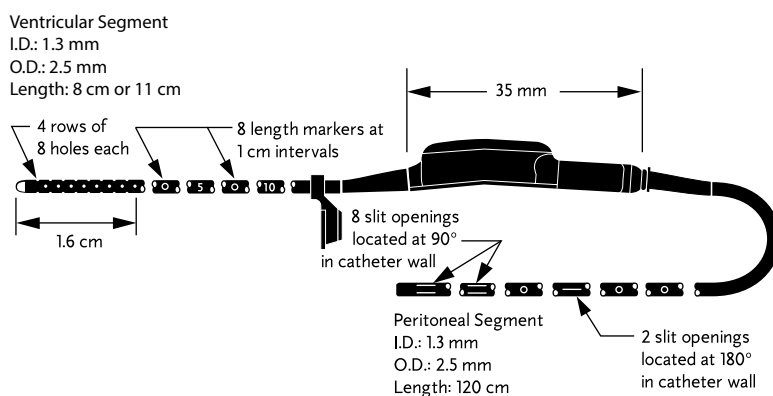


Strata II Unitized Shunt, Small

Included with product:

- Strata II Valve, Small, with
 - Integral Ventricular Catheter, Standard, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
- Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Peritoneal Catheter Passer, 60 cm (not shown)

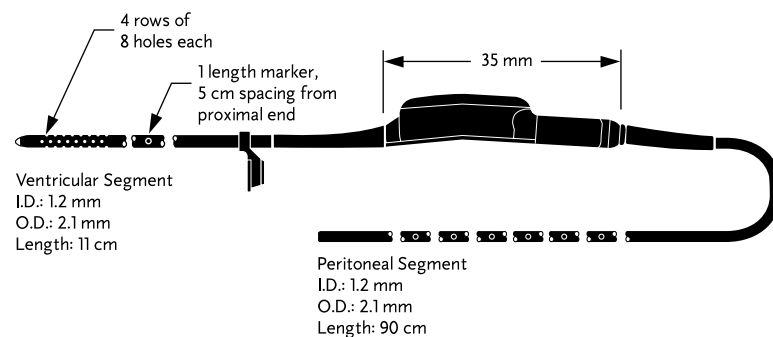
Product	Ventricular Length
46871	8 cm
46876	11 cm



Strata II Unitized Shunt, Small

Included with product:

- Strata II Valve, Small, with
 - Integral Ventricular Catheter, Small, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
- Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Subcutaneous Catheter Passer, 60 cm (not shown)

**Product**

27820

Dimensions included in this catalog are for reference only.

SHUNTS

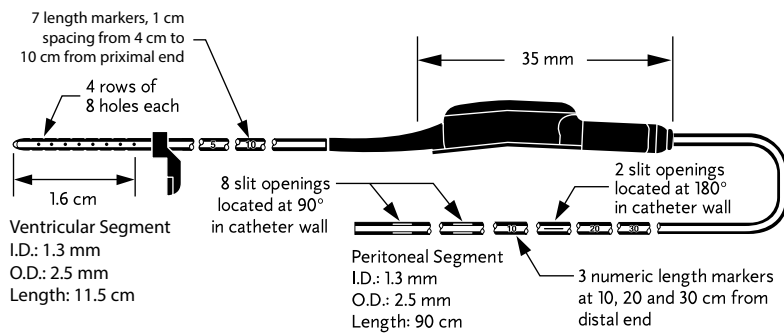
Strata II Unitized Shunt, Small, with BioGlide

Included with product:

- Strata II Valve, Small, with:
 - Integral Ventricular Catheter, Standard, Translucent with Barium Impregnated Stripe
 - Integral Peritoneal Catheter, Standard, Translucent with Barium Impregnated Stripe
 - Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Subcutaneous Catheter Passer, 60 cm (not shown)
- Tuohy-Borst Prefill Adapter (not shown)

Product

27824



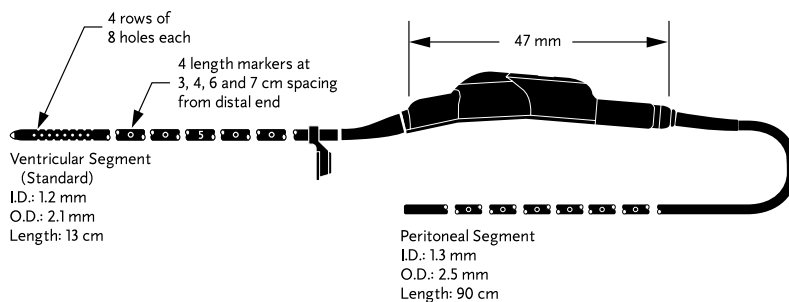
Strata II Unitized Shunt, Regular

Included with product:

- Strata II Valve, Regular, with:
 - Integral Ventricular Catheter, Standard, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
 - Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Subcutaneous Catheter Passer, 60 cm (not shown)

Product

27821

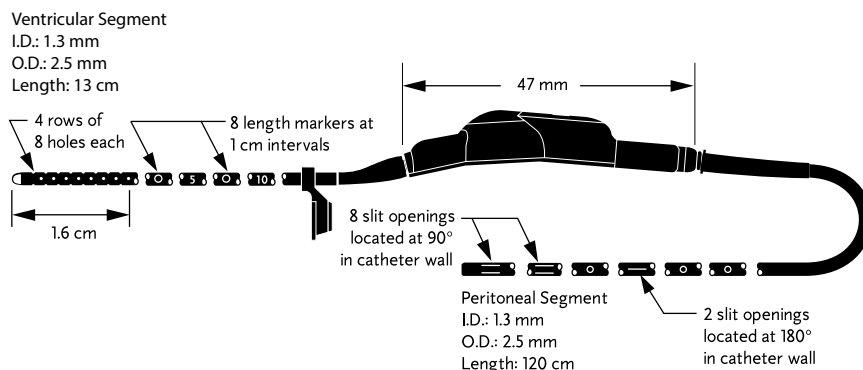


Strata II Unitized Shunt, Regular

Included with product:

- Strata II Valve, Regular, with:
 - Integral Ventricular Catheter, Standard, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
- Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Subcutaneous Catheter Passer, 60 cm (not shown)

Product	Ventricular Length
46881	11 cm
46886	13 cm



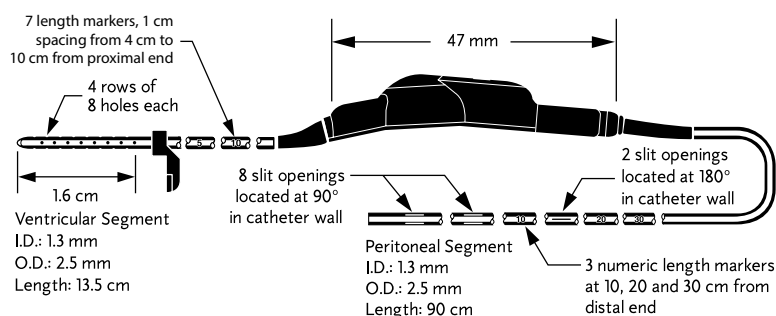
Strata II Unitized Shunt, Regular, with BioGlue

Included with product:

- Strata II Valve, Regular, with:
 - Integral Ventricular Catheter, Standard, Open End, Translucent with Barium Impregnated Stripe
 - Integral Peritoneal Catheter, Standard, Open End, Translucent with Barium Impregnated Stripe
- Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Subcutaneous Catheter Passer, 60 cm (not shown)
- Tuohy-Borst Prefill Adapter (not shown)

Product

27825



Dimensions included in this catalog are for reference only.

SHUNTS

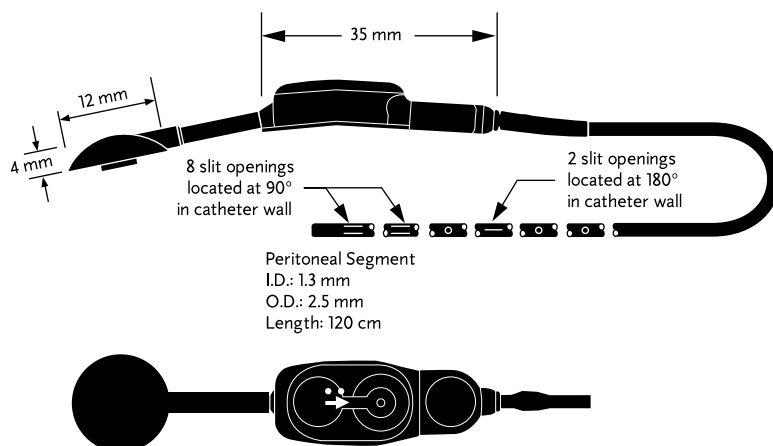
Strata II Snap Shunt Assembly, Small

Included with product:

- Strata II Valve, Small, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Snap Assembly Prefill Adapter (not shown)
 - Blunt Needle, 16-gauge (not shown)

Product

27816



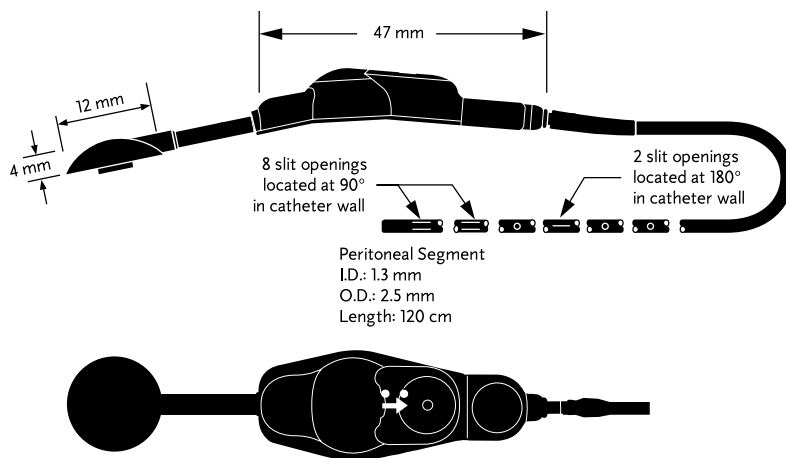
Strata II Snap Shunt Assembly, Regular

Included with product:

- Strata II Valve, Regular, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Snap Assembly Prefill Adapter (not shown)
 - Blunt Needle, 16-gauge (not shown)

Product

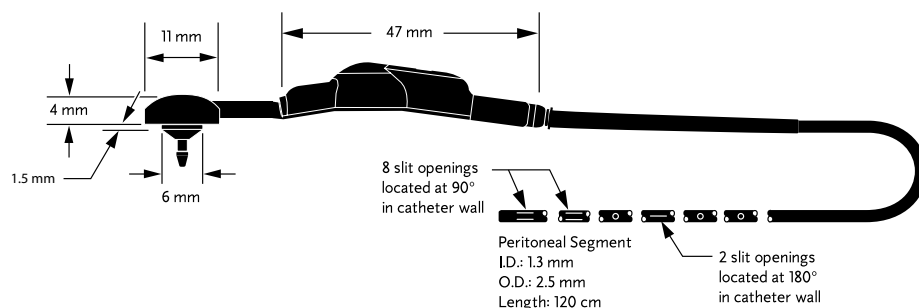
27817



Strata II Shunt Assembly, Regular with Integral Ventriculostomy Reservoir

Included with product:

- Strata II Valve, Regular, with:
 - Integral Ventriculostomy Reservoir, Regular Depth, 6 mm
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated



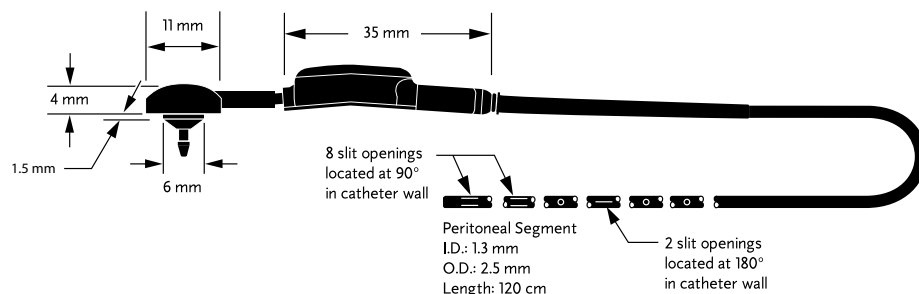
Product

27922

Strata II Shunt Assembly, Small with Integral Ventriculostomy Reservoir

Included with product:

- Strata II Valve, Small, with:
 - Integral Ventriculostomy Reservoir, Regular Depth, 6 mm
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated



Product

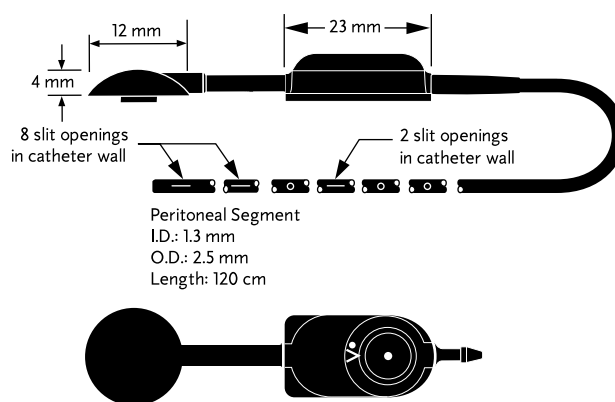
27923

SHUNTS

Strata NSC Snap Shunt Assembly, Small

Included with product:

- Strata NSC Valve, Small, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)



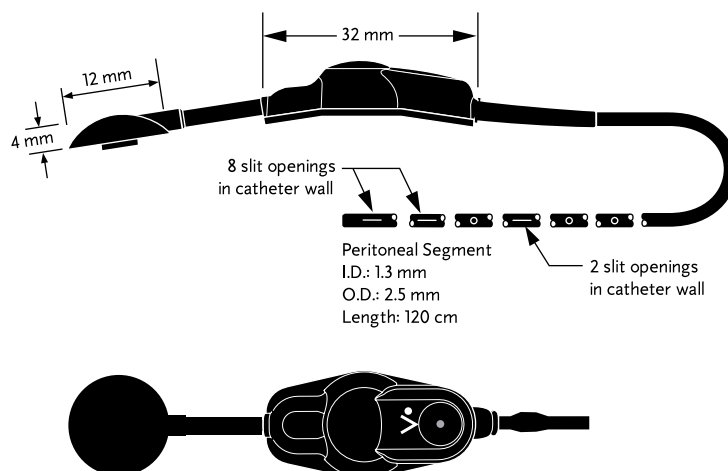
Product

27739

Strata NSC Snap Shunt Assembly, Regular

Included with product:

- Strata NSC Valve, Regular, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)



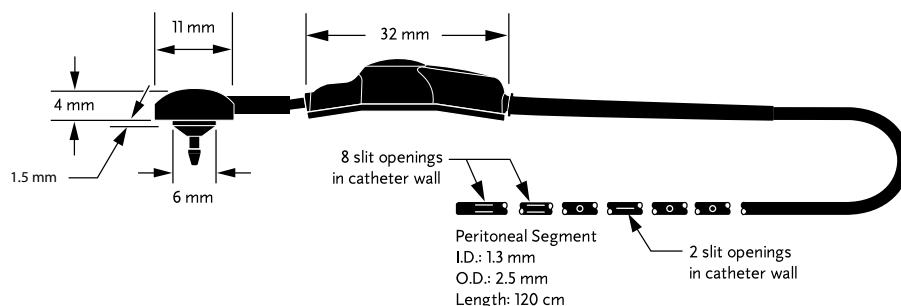
Product

27740

Strata NSC Shunt Assembly, Regular with Integral Ventriculostomy Reservoir

Included with product:

- Strata NSC Valve, Regular, with:
 - Integral Ventriculostomy Reservoir, Regular Depth, 6 mm
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated



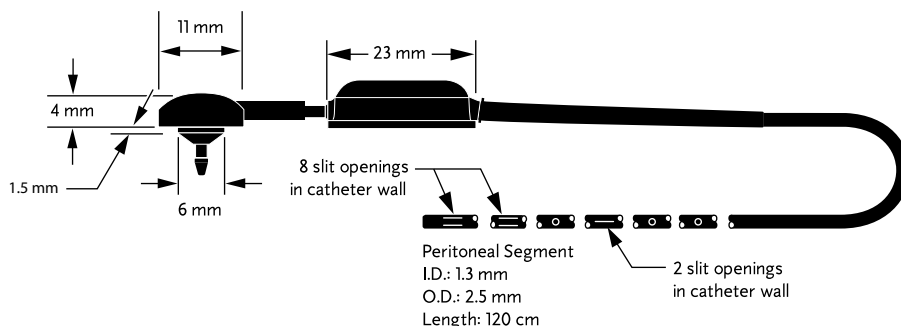
Product

27924

Strata NSC Shunt Assembly, Small with Integral Ventriculostomy Reservoir

Included with product:

- Strata NSC Valve, Small, with:
 - Integral Ventriculostomy Reservoir, Regular Depth, 6 mm
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated



Product

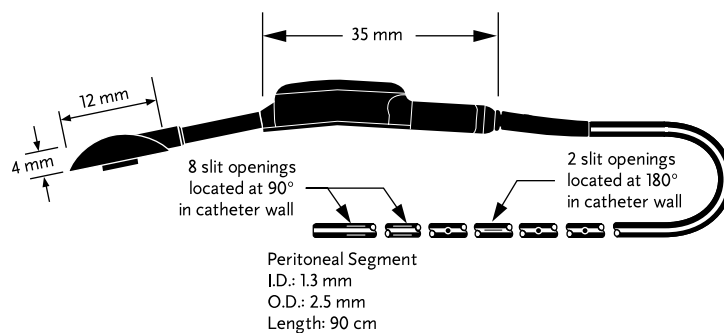
27925

SHUNTS

Strata II Snap Shunt Assembly, Small, with BioGlide

Included with product:

- Strata II Valve, Small, with:
 - Integral Snap Assembly
 - Ventriculostomy Reservoir Dome
- Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Translucent with Barium Impregnated Stripe
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)



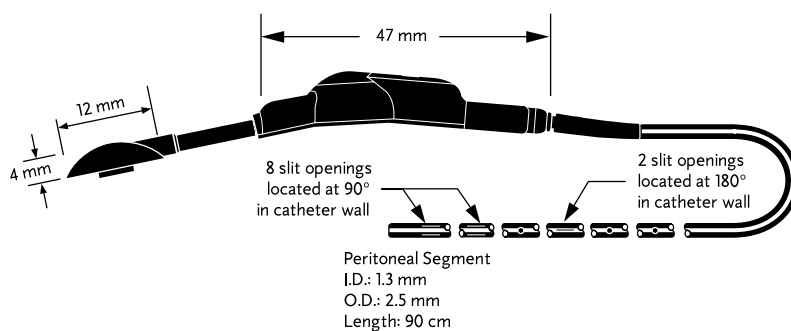
Product

27822

Strata II Snap Shunt Assembly, Regular, with BioGlide

Included with product:

- Strata II Valve, Regular, with:
 - Integral Snap Assembly
 - Ventriculostomy Reservoir Dome
- Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Translucent with Barium Impregnated Stripe
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)

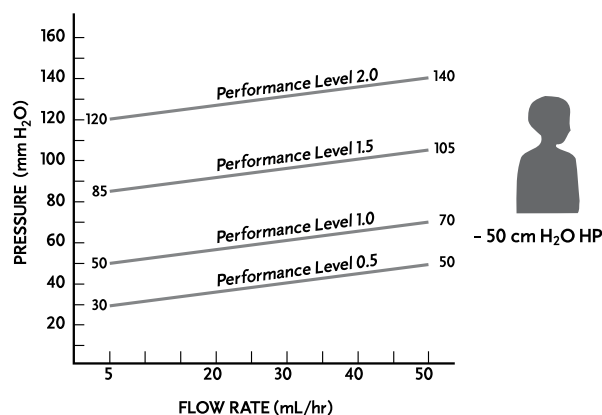
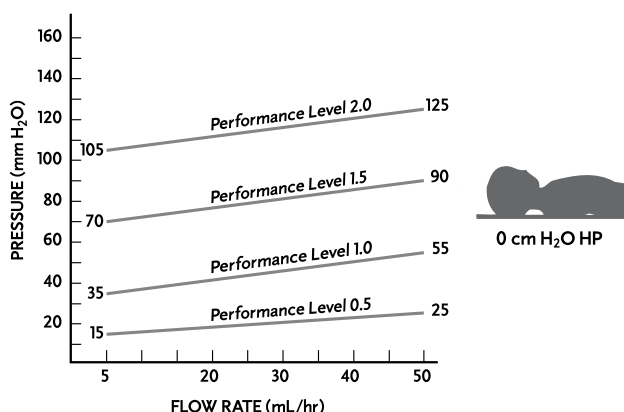


Product

27823

Delta™ Shunt combines the Delta valve with integral catheters. The Delta shunt assembly includes an integral distal catheter. The Delta unitized shunt includes an integral ventricular catheter and integral distal catheter. Neither the finished product, nor materials used during manufacture of product, contain latex. The non-metallic design ensures non-interference with MRI or CT scans.

The Delta snap shunt assemblies include integral snap assembly ventriculostomy reservoir domes. When used with a snap assembly reservoir base, a complete shunt can be assembled without the need for sutures. The exterior surface of the Delta shunt with BioGlide™ is surface modified with a covalently bonded hydrogel (the exterior of the Delta Chamber mechanism is not surface modified so as not to interfere with valve function). The BioGlide surface has hydrophilic properties for enhanced lubricity.



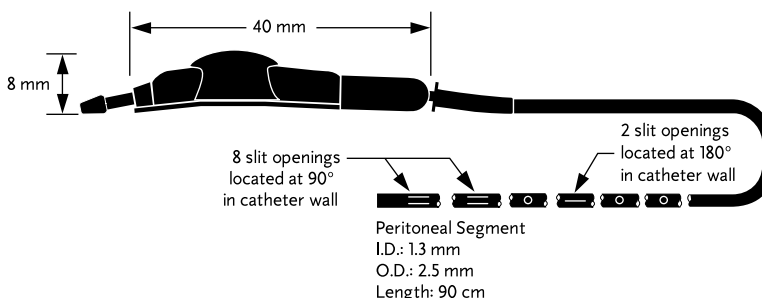
Product Dot Codes

▶▶ Performance Level 0.5 ▶ Performance Level 1.0 ●▶ Performance Level 1.5 ▶▶ Performance Level 2.0

Delta Shunt Assembly, Regular

Included with product:

- Delta Valve, Regular, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Disposable Subcutaneous Catheter Passer, 60 cm (Not Shown)



Product	P/L
46822	1.0
46823	1.5
46824	2.0
24039-1*	1.0
24039-5*	1.5
24039-2*	2.0

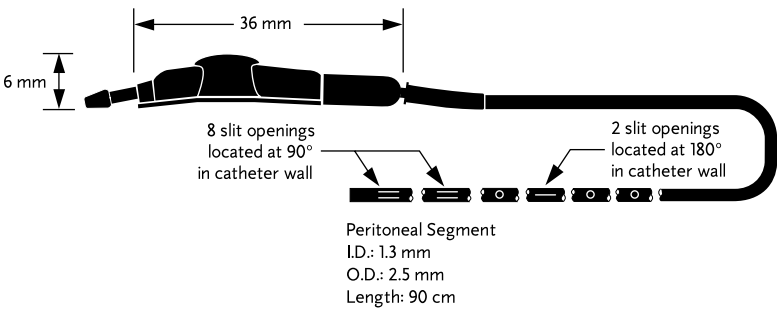
* Disposable Subcutaneous Catheter Passer Not Included

Dimensions included in this catalog are for reference only.

Delta Shunt Assembly, Small

Included with product:

- Delta Valve, Small, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated
 - Disposable Subcutaneous Catheter Passer, 60 cm (Not Shown)

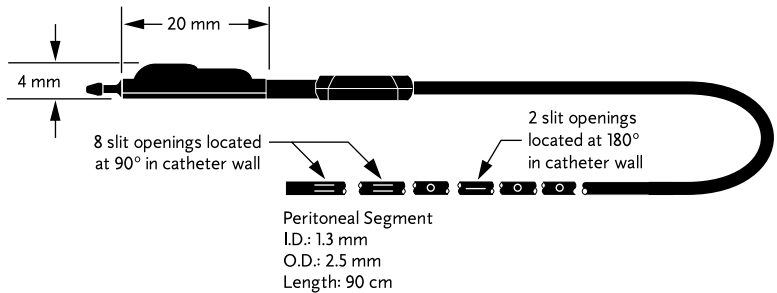


Product	P/L
46812	1.0
46813	1.5
46814	2.0

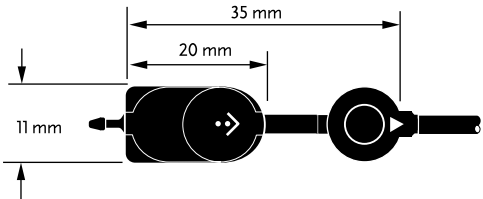
CSF-Shunt Assembly, Ultra Small, with Delta Chamber

Included with product:

- CSF-Flow Control Valve, Ultra Small, with:
 - Integral Delta Chamber
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated



Product	P/L
24133-1	1.0

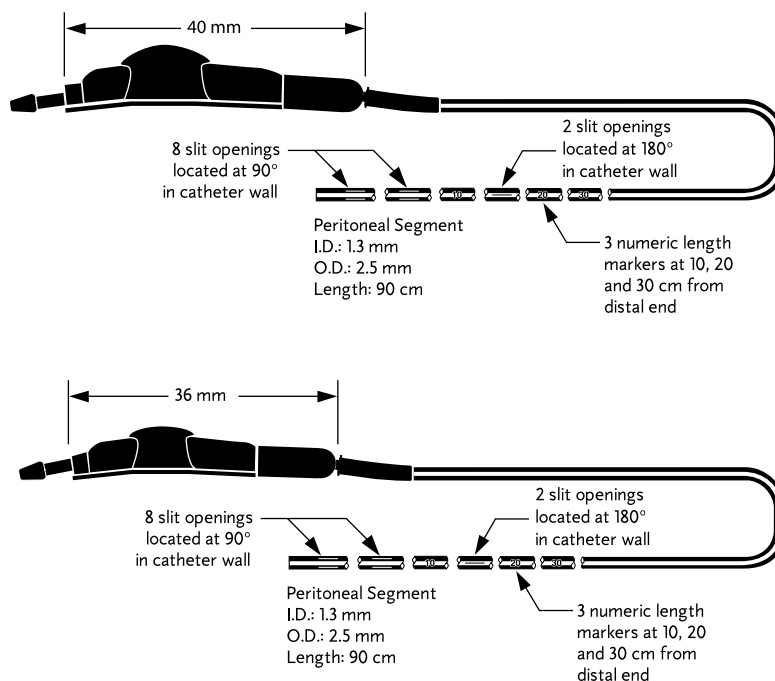


Delta Shunt Assembly, with BioGlide

Included with product:

- Delta Valve, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Translucent with Barium Impregnated Stripe
 - Disposable Peritoneal Catheter Passer, 60 cm (not shown)
 - Female Luer Adapter and Prefill Tubing (not shown)

Product	Valve Size	P/L
96822	Regular	1.0
96823	Regular	1.5
96824	Regular	2.0
96812	Small	1.0
96813	Small	1.5
96814	Small	2.0

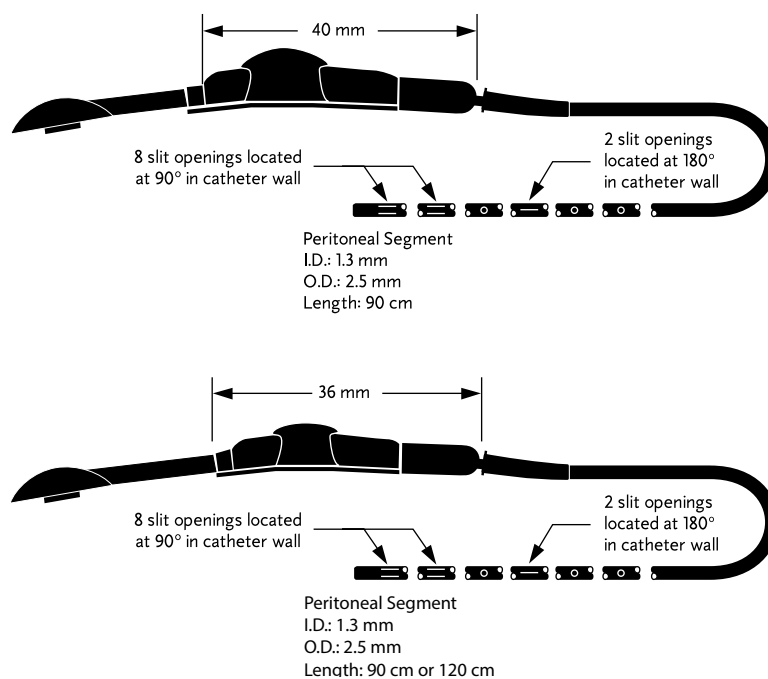


Delta Snap Shunt Assembly

Included with product:

- Delta Valve, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter, Standard, Open with Wall Slits, Barium Impregnated
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)

Product	Valve Size	Catheter Length	P/L
24028-1	Regular	90 cm	1.0
24028-5	Regular	90 cm	1.5
24028-2	Regular	90 cm	2.0
24027-1	Small	90 cm	1.0
24027-5	Small	90 cm	1.5
24027-2	Small	90 cm	2.0
25121-1	Small	120 cm	1.0
25121-5	Small	120 cm	1.5
25121-2	Small	120 cm	2.0



Dimensions included in this catalog are for reference only.

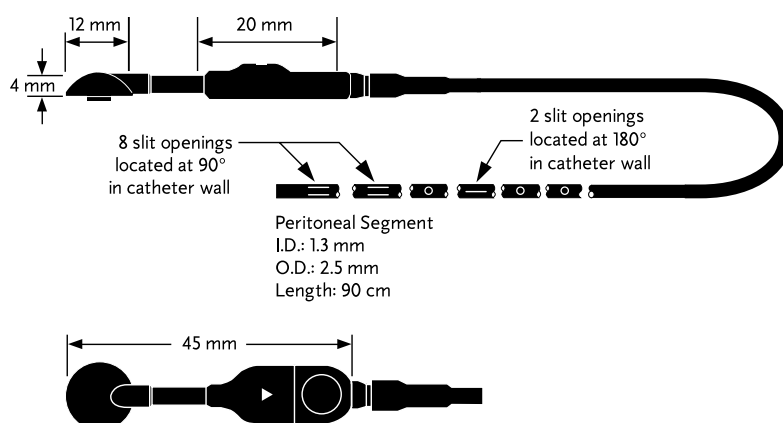
SHUNTS

Delta Snap Shunt Assembly, Neonatal

Included with product:

- Delta Valve, Neonatal, with:
 - Integral Ventriculostomy Reservoir Dome, Snap Assembly
 - Integral Peritoneal Catheter, Open End, Barium Impregnated
- Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)

Product	P/L
46832	1.0
46833	1.5
46834	2.0

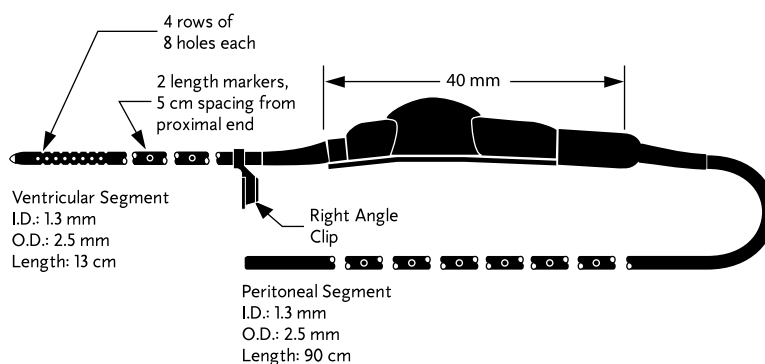


Delta Unitized Shunt, Regular

Included with product:

- Delta Valve, Regular, with:
 - Integral Ventricular Catheter, Standard, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
- Right Angle Clip
- Disposable Quick Release Ventricular Catheter Introducer (not shown)
- Disposable Catheter Passer, 38 cm and 60 cm (not shown)

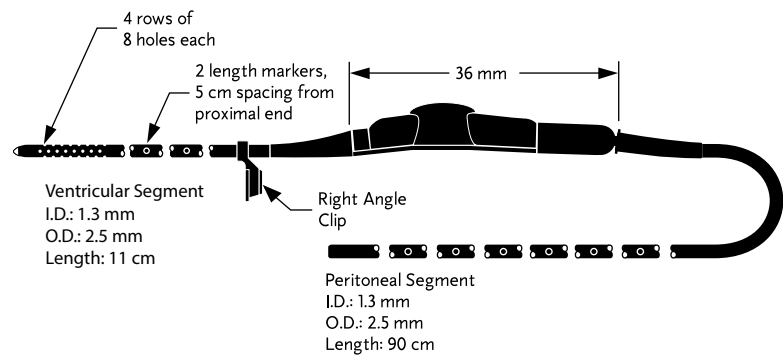
Product	P/L
24013-1	1.0
24013-5	1.5
24013-2	2.0



Delta Unitized Shunt, Small

Included with product:

- Delta Valve, Small, with:
 - Integral Ventricular Catheter, Small or Standard, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
- Right Angle Clip
- Disposable Quick-Release Ventricular Catheter Introducer (not shown)
- Disposable Catheter Passer, 60 cm (not shown)



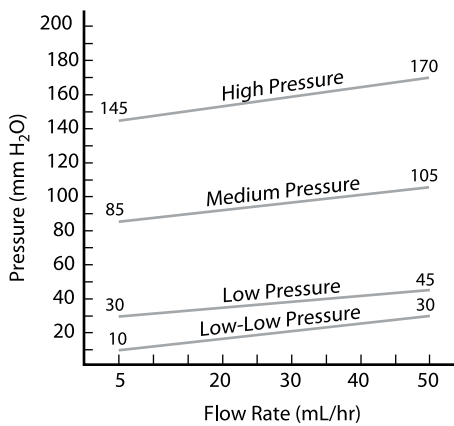
Product	P/L
25014-1	1.0
25014-5	1.5
25014-2	2.0

SHUNTS

CSF-Flow Control Shunt combines the CSF-flow control valve with integral catheters. The CSF-flow control shunt assembly includes an integral distal catheter. The CSF-flow control unitized shunt includes an integral ventricular catheter and integral distal catheter. The non-metallic design ensures non-interference with MRI or CT scans.

CSF-Snap Shunt Assemblies include an integral snap assembly ventriculostomy reservoir dome. When used with a snap assembly reservoir base, a complete shunt can be assembled without the need for ligatures.

The non-metallic design of the valves, reservoirs, and catheters ensures non-interference with MRI or CT scans. Neither the finished product, nor materials used during manufacture of product, contain latex.



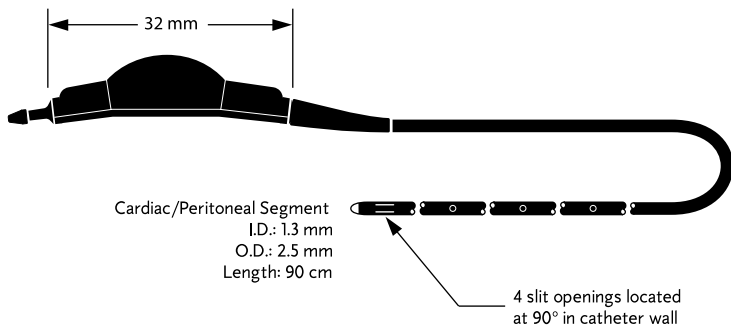
Product Dot Codes

■ Low-Low Pressure ● Low Pressure ●● Medium Pressure ●●● High Pressure

CSF-Shunt Assembly, Contoured Regular

Included with product:

- CSF-Flow Control Valve, Regular, with:
 - Integral Cardiac/Peritoneal Catheter, Standard, Barium Impregnated, 90 cm



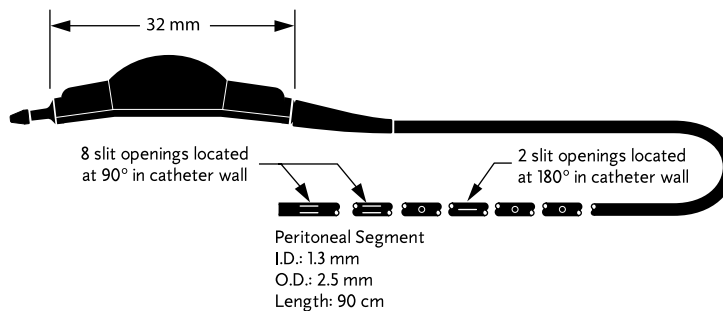
Product	Pressure
46642	Low
46644	Medium
46646	High

CSF-Shunt Assembly, Contoured Regular

Included with product:

- CSF-Flow Control Valve, Regular, with:
 - Integral Peritoneal Catheter, Standard, Open End with Wall Slits, Barium Impregnated

Product	Pressure
9046 B-L	Low
9046 B-M	Medium
9046 B-H	High

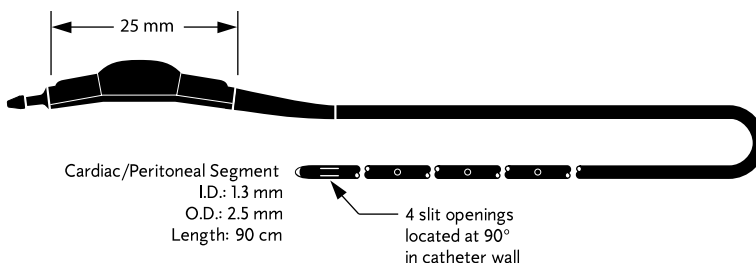


CSF-Shunt Assembly, Contoured Small

Included with product:

- CSF-Flow Control Valve, Small, with:
 - Integral Cardiac/Peritoneal Catheter, Standard, Barium Impregnated

Product	Pressure
46622	Low
46624	Medium
46626	High

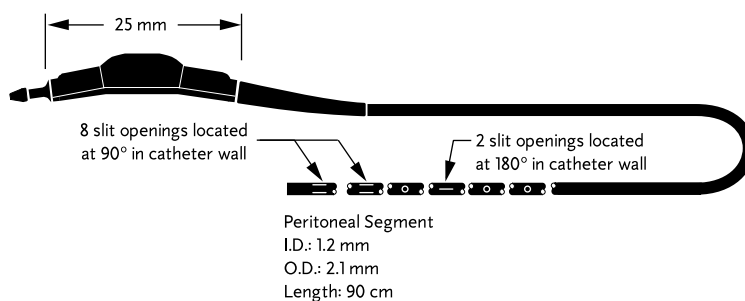


CSF-Shunt Assembly, Contoured Small

Included with product:

- CSF-Flow Control Valve, Small, with:
 - Integral Peritoneal Catheter, Small, Open End with Wall Slits, Barium Impregnated

Product	Pressure
9009 B-L	Low
9009 B-M	Medium
9009 B-H	High



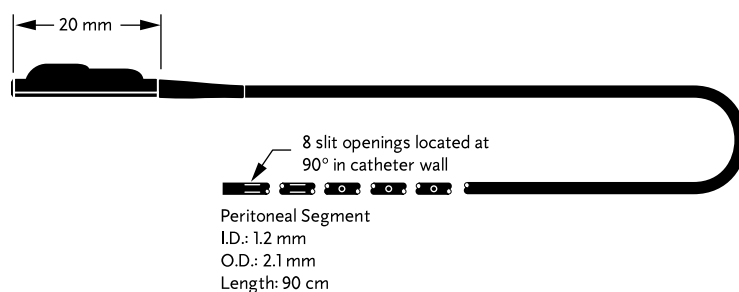
Dimensions included in this catalog are for reference only.

CSF-Shunt Assembly, Ultra Small

Included with product:

- CSF-Flow Control Valve, Ultra Small, with:
 - Integral Peritoneal Catheter, Small, Open End with Wall Slits, Barium Impregnated, 90 cm

Product	Pressure
22017 B-LL	Low-Low
22017 B-L	Low
22017 B-M	Medium

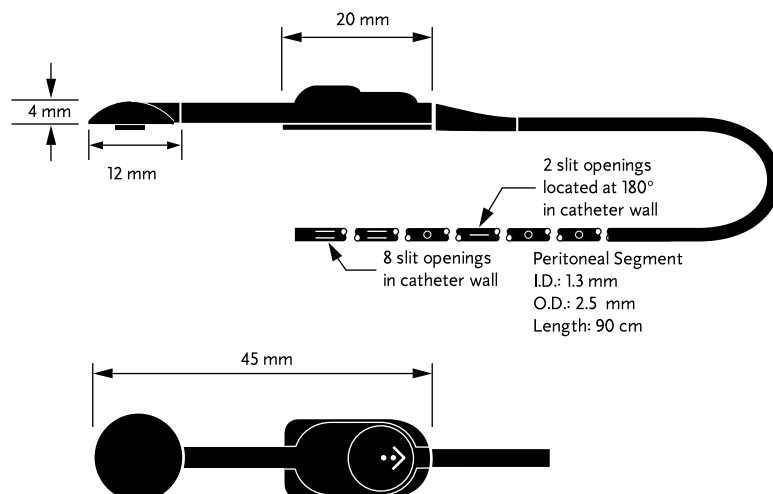


CSF-Snap Shunt Assembly, Ultra Small

Included with product:

- CSF-Flow Control Valve, Ultra Small, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter Standard, Open End with Wall Slits, Barium Impregnated
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)

Product	Pressure
46560	Low-Low
46562	Low
46564	Medium

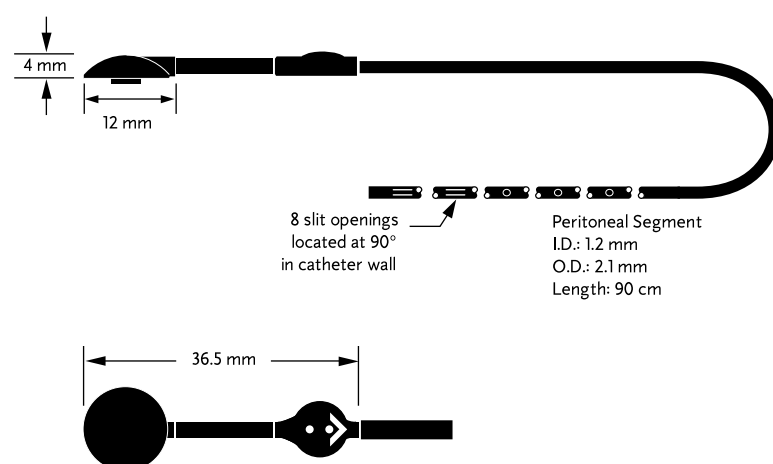


CSF-Snap Shunt Assembly, Button

Included with product:

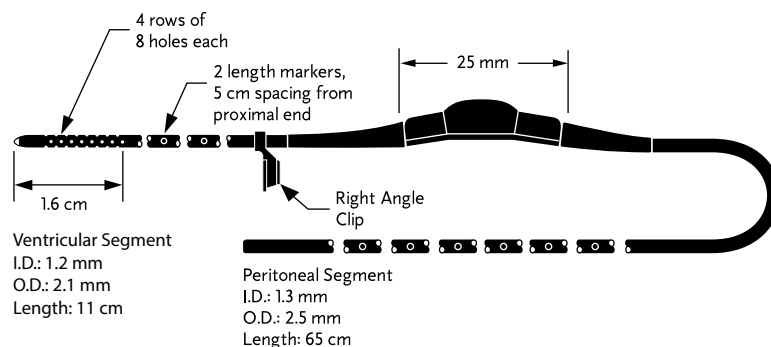
- CSF-Flow Control Valve, Button, with:
 - Integral Snap Assembly Ventriculostomy Reservoir Dome
 - Integral Peritoneal Catheter, Open End with Wall Slits, Small, Barium Impregnated
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)

Product	Pressure
46540	Low-Low
46542	Low
46544	Medium



CSF-Unitized Shunt,
Contoured Small**Included with product:**

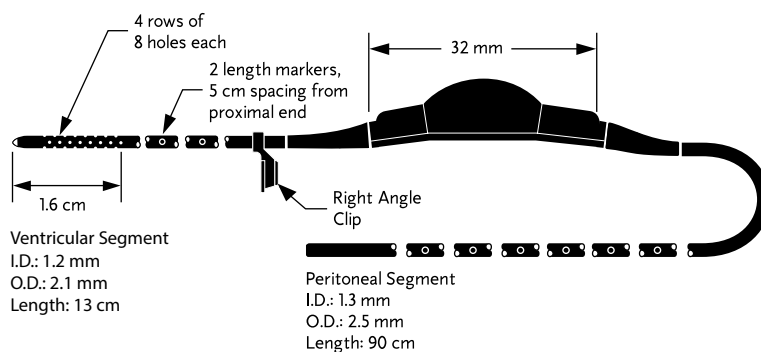
- CSF-Flow Control Valve, Small, with:
 - Integral Ventricular Catheter, Small, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
 - Right Angle Clip
- Peritoneal Catheter Passer, 38 cm (not shown)
- Disposable Quick-Release Ventricular Catheter Introducer (not shown)



Product	Pressure
46012	Low
46014	Medium
46016	High

CSF-Unitized Shunt,
Contoured Regular**Included with product:**

- CSF-Flow Control Valve, Regular, with:
 - Integral Ventricular Catheter, Small, Barium Impregnated
 - Integral Peritoneal Catheter, Standard, Barium Impregnated
 - Right Angle Clip
- Peritoneal Catheter Passer, 38 cm and 60 cm (not shown)
- Disposable Quick-Release Ventricular Catheter Introducer (not shown)



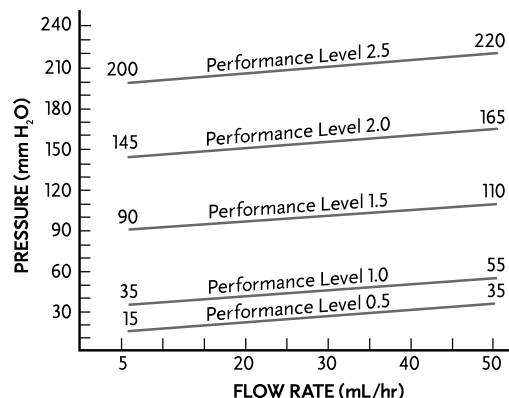
Product	Pressure
46022	Low
46024	Medium
46026	High

Dimensions included in this catalog are for reference only.

LUMBOPERITONEAL SHUNTS

Strata NSC Lumboperitoneal (LP) Shunt Systems provide continued cerebrospinal fluid flow from the subarachnoid space into the peritoneal cavity. The Strata NSC Lumboperitoneal valve allows the physician to adjust the pressure/flow performance pre- and post-implantation to address changing patient needs. The Strata NSC LP valve is sized for subcutaneous placement. It features an integral lumbar connector and strain relief for easy, non-kinking attachment of the proximal lumbar catheter. The Small Lumen Peritoneal catheter includes a small (0.7 mm) inner lumen to preserve distal shunt resistance, as well as a radiopaque core and translucent wall to minimize tissue contact with barium.

Lumboperitoneal catheter systems are designed to divert CSF from the lumbar subarachnoid space to the peritoneal cavity. The L/P shunt systems are comprised of barium impregnated lumboperitoneal catheters, fixation tabs, and separately available CSF-lumboperitoneal reservoirs. Neither the finished product, nor materials used during manufacture of product, contain latex. Valves and reservoirs are designed to allow injection or sampling through the dome using a 25-gauge or smaller noncoring needle.



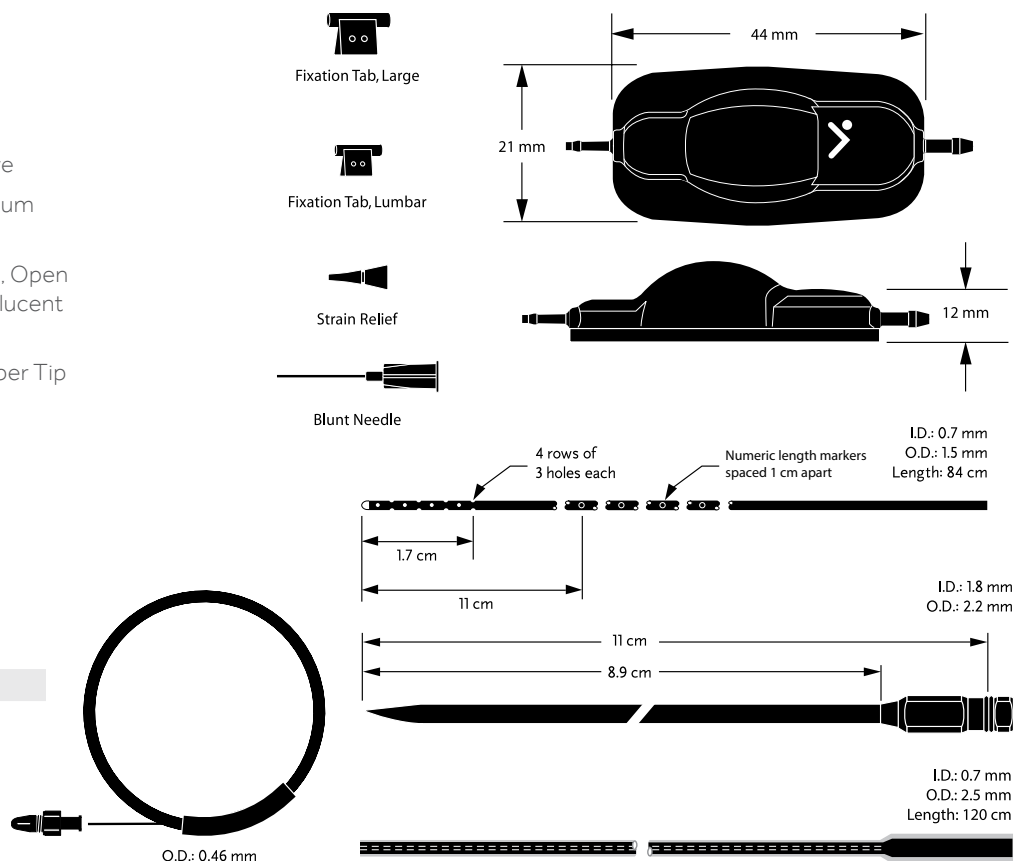
Strata NSC LP Shunt Kit with Closed Tip Lumbar Catheter

Included with product:

- Strata NSC Lumboperitoneal Valve
- Lumbar Catheter, Closed Tip, Barium Impregnated
- Peritoneal Catheter, Small Lumen, Open End, Radiopaque Core, with Translucent Wall
- Touhy Needle, 14-Gauge with Huber Tip
- Fixation Tab, Lumbar (2)
- Fixation Tab, Large (1)
- Blunt Needle, 20-Gauge
- Guidewire with Adjustable Stop
- Strain Relief

Product

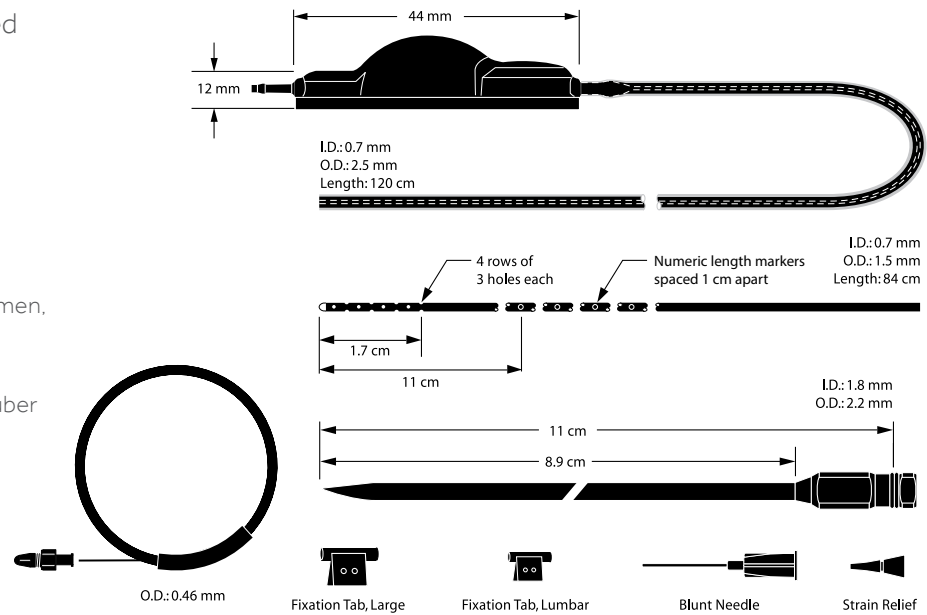
44420



Strata NSC LP Shunt Kit with Closed Tip Lumbar Catheter and Integral Peritoneal Catheter, Small Lumen

Included with product:

- Strata NSC Lumboperitoneal Valve
- Integral Lumbar Catheter, Closed Tip, Barium Impregnated
- Integral Peritoneal Catheter, Small Lumen, Open End, Radiopaque Core, with Translucent Wall
- Touhy Needle core, 14-Gauge with Huber Tip
- Fixation Tab, Lumbar (2)
- Fixation Tab, Large (1)
- Blunt Needle, 20-Gauge
- Guidewire with Adjustable Stop
- Strain Relief



Product

44430

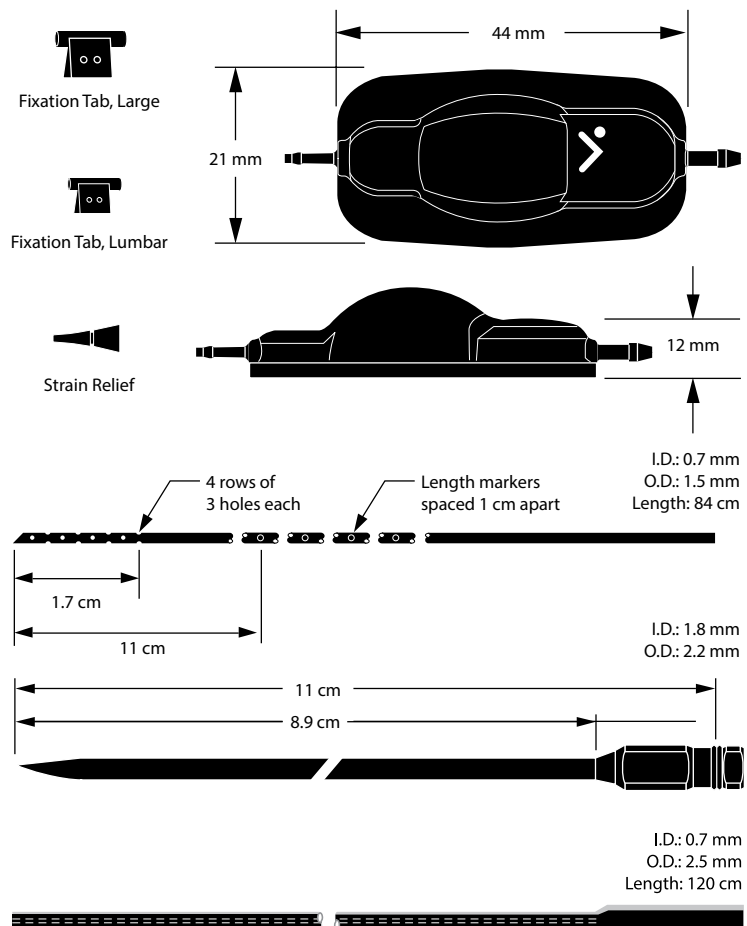
Strata NSC LP Shunt Kit with Open Tip Lumbar Catheter

Included with product:

- Strata NSC Lumboperitoneal Valve
- Lumbar Catheter, Open Tip, Barium Impregnated
- Peritoneal Catheter, Small Lumen, Open End, Radiopaque Core, with Translucent Wall
- Touhy Needle, 14-Gauge with Huber Tip
- Fixation Tab, Lumbar (2)
- Fixation Tab, Large (1)
- Strain Relief

Product

44421



Dimensions included in this catalog are for reference only.

LUMBOPERITONEAL SHUNTS

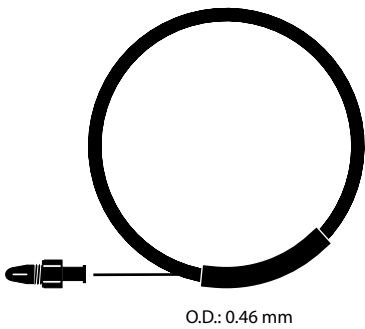
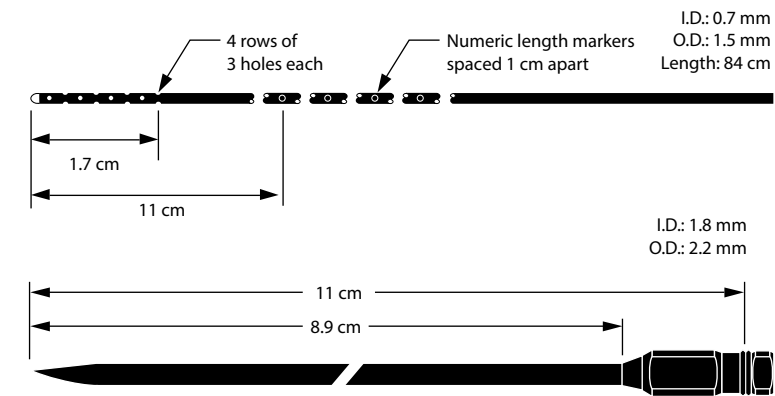
Lumbar Catheter Kit, Closed Tip, 84 cm

Included with product:

- Lumbar Catheter, Closed Tip, Barium Impregnated
- Touhy Needle, 14-Gauge with Huber Tip
- Fixation Tab, Lumbar (2)
- Blunt Needle, 20-Gauge
- Guidewire with Adjustable Stop
- Strain Relief

Product

44405



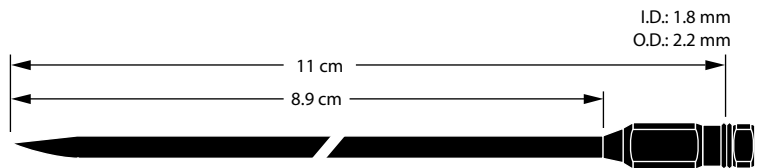
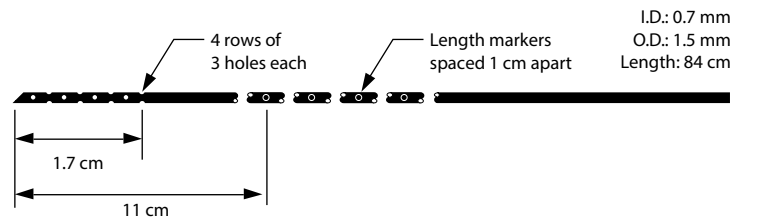
Lumbar Catheter Kit, Open Tip, 84 cm

Included with product:

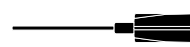
- Lumbar Catheter, Open Tip, Barium Impregnated
- Touhy Needle, 14-Gauge with Huber Tip
- Fixation Tab, Lumbar (2)
- Blunt Needle, 20-Gauge
- Strain Relief

Product

44406



Fixation
Tab, Lumbar



Blunt Needle



Strain Relief

Peritoneal Catheter, Small Lumen

Radiopaque core with Translucent Wall, 120 cm

Included with product:

- Fixation Tab, Large (not shown)

Product

43555



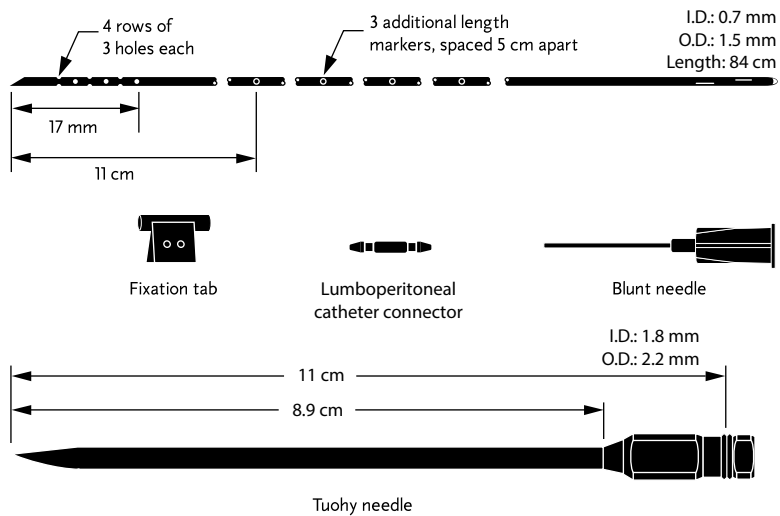
LUMBOPERITONEAL SHUNTS

CSF-Lumboperitoneal Catheter System

Included with product:

- Lumboperitoneal Catheter, Barium Impregnated, 84 cm
- Catheter Connector
- Fixation Tab (3 each)
- Blunt Needle, 20-gauge
- Tuohy Needle, 14-gauge with Huber Tip

Product	Length	Pressure/Flow @20 mL/hr
44410	84 cm	14.0-24.0 cm H ₂ O

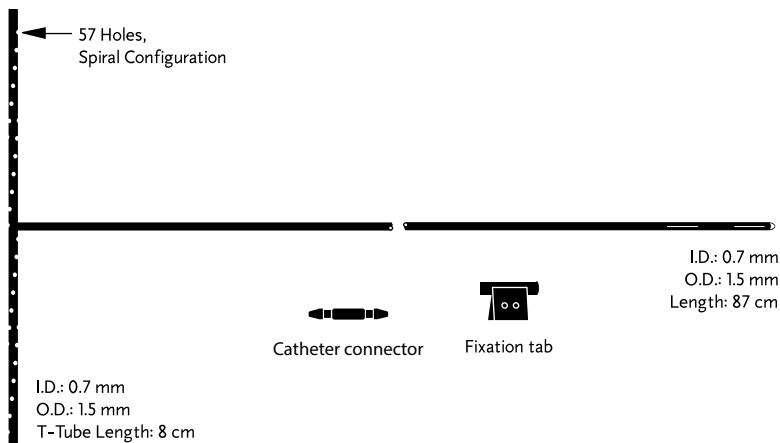


CSF-Lumboperitoneal Shunt, T-Tube

Included with product:

- Lumboperitoneal Catheter, T-Tube
- Catheter Connector
- Fixation Tabs (2 each)

Product
44520

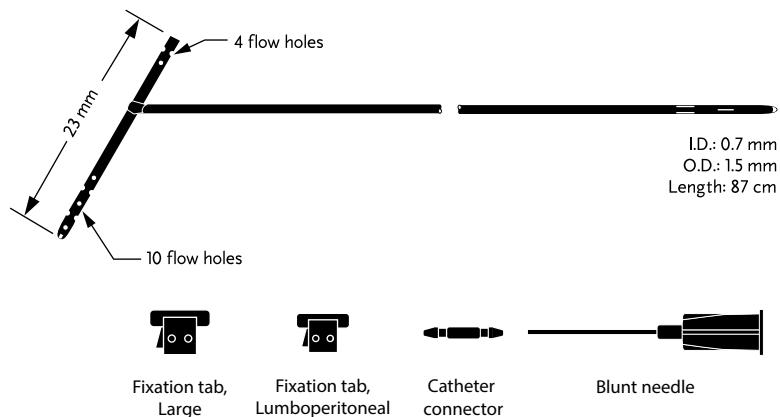


CSF-Lumboperitoneal Shunt, K-Tube

Included with product:

- Lumboperitoneal Catheter, K-Tube
- Catheter Connector
- Fixation Tab, Large
- Fixation Tab, Lumboperitoneal
- Blunt Needle, 20-gauge

Product
23069



CSF-Ventricular Reservoirs are available in several configurations differentiated by inlet connector orientation and dome diameter. Each model has an injectable translucent silicone elastomer dome, polypropylene needle guard, radiopaque silicone elastomer ventricular catheter with right angle clip (side inlet models), and a stainless steel stylet or quick-release introducer. The reservoirs are designed to tolerate punctures with a 25-gauge or smaller non-coring needle. Connectors facilitate attachment of a ventricular catheter. The 12 mm convertible reservoir, specifically designed for use in neonates, is fabricated with a short, preformed, right angle intracranial catheter. Convertible reservoirs may be converted to CSF Shunt components by cutting off the outlet tube plug and connecting the outlet tube to a shunt valve.

CSF-Ventriculostomy Reservoirs and Ventriculostomy Reservoir Kits are burr hole models, some featuring removable reservoir caps. All models can be easily converted to a CSF-flow control valve component. The reservoir domes are designed to tolerate punctures with a 25-gauge or smaller non-coring needle.

CSF-Ventricular Access Ports are fabricated with a molded, firm polypropylene base which helps to prevent needle penetration, invested in a silicone elastomer housing. The port septums have an inner ring design for location of the injection site. The septum will tolerate punctures with a 25-gauge or smaller non-coring needle.

The non-metallic design of the reservoirs and ports ensures artifact-free MRI and CT scans, and will not block the effects of radiation therapy. Neither the finished product, nor materials used during manufacture of product, contain latex.

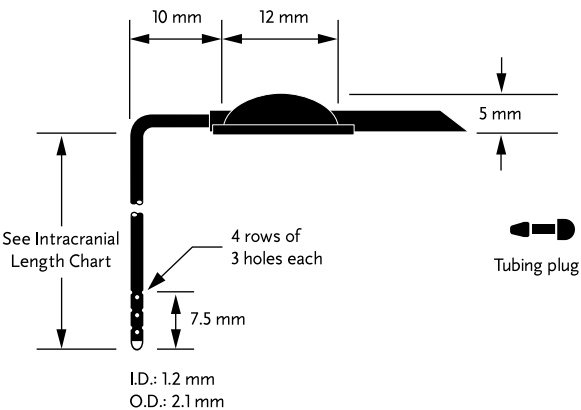
CSF-Ventricular Reservoir

12 mm, Convertible, with Integral Right Angle Ventricular Catheter, Small, Barium Impregnated

Included with product:

- Stainless Steel Stylet (not shown)
- Tubing Plug

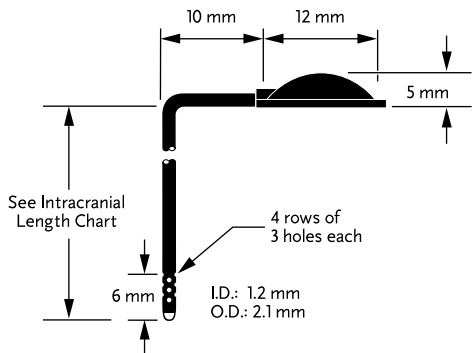
Product	Intracranial Length	Fluid Volume
44100	2.0 cm	0.1 mL
44101	3.0 cm	0.1 mL



CSF-Ventricular Reservoir

12 mm, with Integral Right Angle Ventricular Catheter, Small, Barium Impregnated

Product	Intracranial Length	Fluid Volume
20038A	2.0 cm	0.1 mL
20038B	3.0 cm	0.1 mL
20038C	4.0 cm	0.1 mL
20038D	5.0 cm	0.1 mL



Dimensions included in this catalog are for reference only.

RESERVOIRS AND PORTS

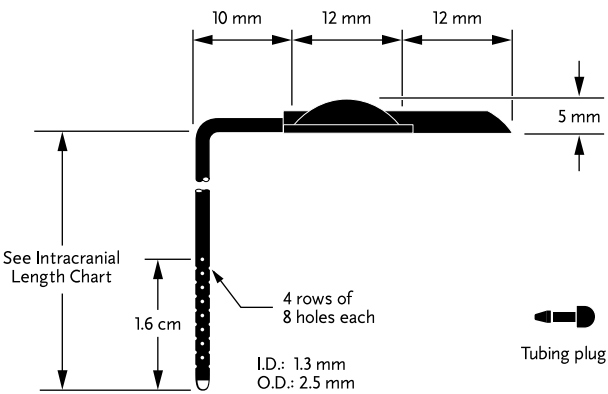
CSF-Ventricular Reservoir

12 mm Convertible with Integral Right Angle Ventricular Catheter, Standard, Barium Impregnated

Included with product:

- Tubing Plug
- Stainless Steel Stylet (not shown)

Product	Intracranial Length	Fluid Volume
9013A	5.0 cm	0.1 mL
9013B	6.0 cm	0.1 mL
9013F	7.0 cm	0.1 mL



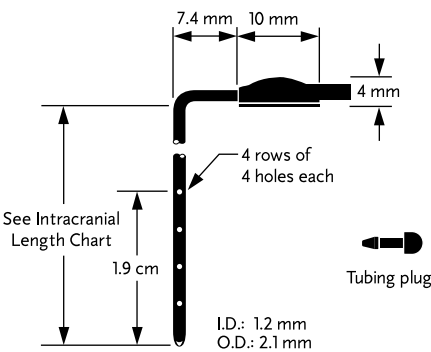
CSF-Neonatal Reservoir

10 mm with Integral Right Angle Ventricular Catheter, Small, Barium Impregnated

Included with product:

- Tubing Plug
- Stainless Steel Stylet (not shown)

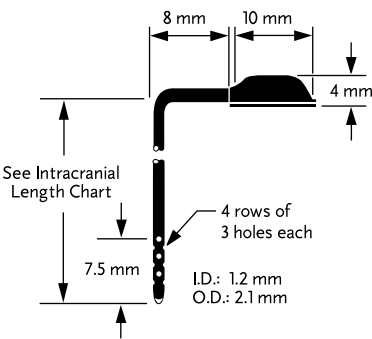
Product	Intracranial Length	Fluid Volume
24106A	3.0 cm	0.1 mL
24106B	4.0 cm	0.1 mL
24106C	5.0 cm	0.1 mL
24106D	6.0 cm	0.1 mL
24106E	7.0 cm	0.1 mL



CSF-Neonatal Reservoir

10 mm with Integral Right Angle Ventricular Catheter, Small, Barium Impregnated

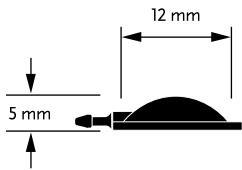
Product	Intracranial Length	Fluid Volume
23038A	2.0 cm	0.1 mL
23038B	3.0 cm	0.1 mL
23038C	3.5 cm	0.1 mL
23038D	4.0 cm	0.1 mL
23038E	4.5 cm	0.1 mL



CSF-Ventricular Reservoir

12 mm, Side Inlet Connector

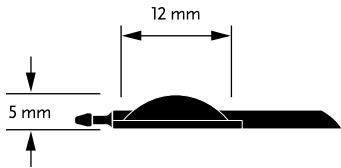
Product	Fluid Volume
22039	0.1 mL



CSF-Ventricular Reservoir

12 mm, Convertible with Integral Side Inlet Connector

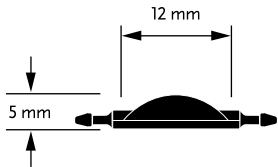
Product	Fluid Volume
9053	0.1 mL



CSF-Ventricular Reservoir

12 mm, with Integral Inlet and Outlet Connectors

Product	Fluid Volume
24084	0.1 mL



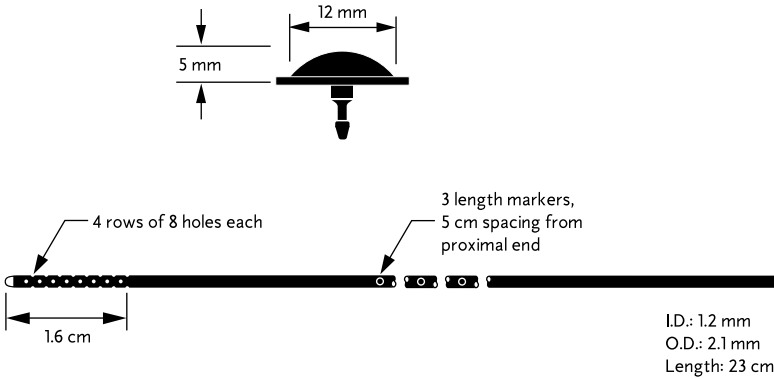
CSF-Ventricular Reservoir

12 mm, Bottom Inlet Connector

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 23 cm
- Stainless Steel Stylet (not shown)

Product	Fluid Volume
21029	0.1 mL



Dimensions included in this catalog are for reference only.

RESERVOIRS AND PORTS

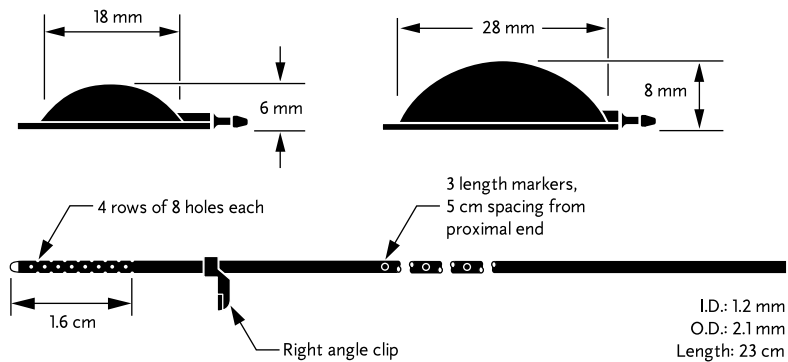
CSF-Ventricular Reservoir

Side Inlet Connector

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 23 cm
- Right Angle Clip
- Stainless Steel Stylet (not shown)

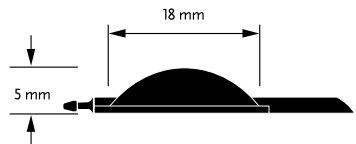
Product	Reservoir Dia.	Fluid Volume
44102	18 mm	0.3 mL
44103	28 mm	1.1 mL



CSF-Ventricular Reservoir

18 mm, Convertible with Integral Side Inlet Connector

Product	Fluid Volume
9019	0.3 mL



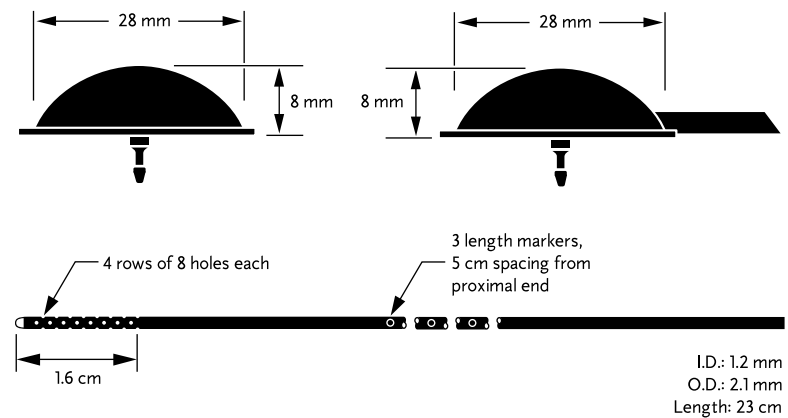
CSF-Ventricular Reservoir

28 mm, Bottom Inlet Connector

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 23 cm
- Stainless Steel Stylet (not shown)

Product	Description	Fluid Volume
44104		1.1 mL
44105	Convertible	1.1 mL



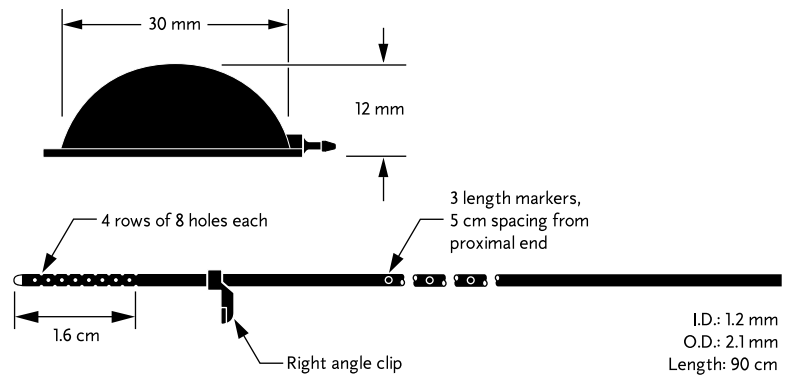
CSF-Ventricular Reservoir

30 mm, Side Inlet

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 90 cm
- Disposable Quick-Release Ventricular Catheter Introducer (not shown)
- Right Angle Clip

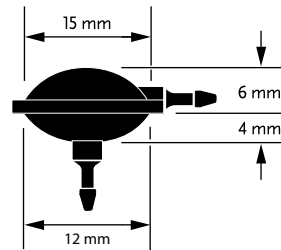
Product	Fluid Volume
44108	2.4 mL



CSF-Ventricular Reservoir

12 mm Burr Hole, with Integral Inlet and Outlet Connectors

Product	Fluid Volume
21000A	0.6 mL



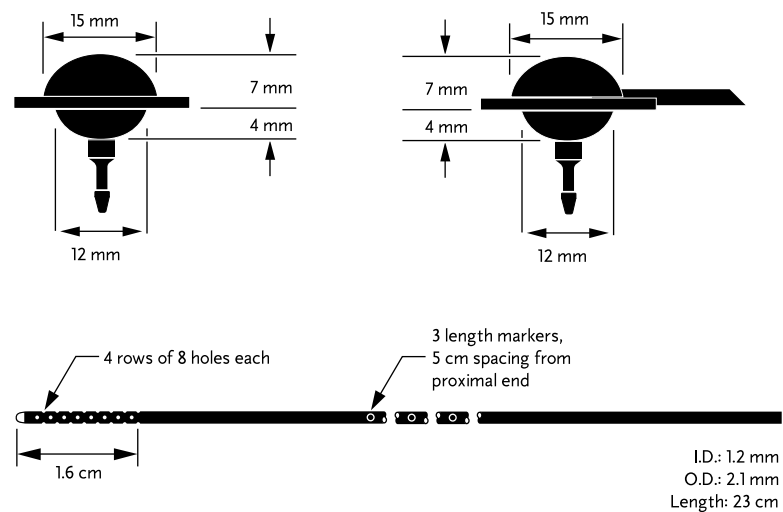
CSF-Ventricular Reservoir

12 mm, Burr Hole

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 23 cm
- Stainless Steel Stylet (not shown)

Product	Description	Fluid Volume
44111		0.6 mL
44113	Convertible	0.6 mL



Dimensions included in this catalog are for reference only.

RESERVOIRS AND PORTS

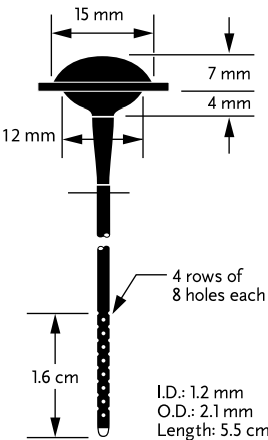
CSF-Ventricular Reservoir

12 mm Burr Hole, with Integral Ventricular Catheter, Small, Barium Impregnated, 5.5 cm

Included with product:

- Disposable Quick-Release Ventricular Catheter Introducer (not shown)

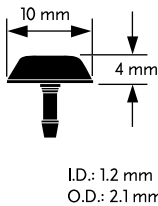
Product	Fluid Volume
20028	0.6 mL



CSF-Neonatal Reservoir

10 mm, with Bottom Inlet Connector

Product	Fluid Volume
22104	0.1 mL



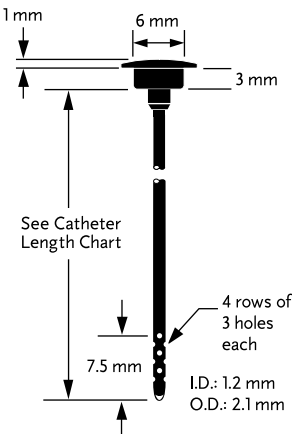
CSF-Neonatal Reservoir

Flat Dome with Integral Ventricular Catheter, Small, Barium Impregnated

Included with product:

- Ventricular Catheter, Small, Barium Impregnated

Product	Catheter Length	Fluid Volume
22101E	2.0 cm	0.1 mL
22101C	2.5 cm	0.1 mL
22101B	3.5 cm	0.1 mL
22101D	4.0 cm	0.1 mL

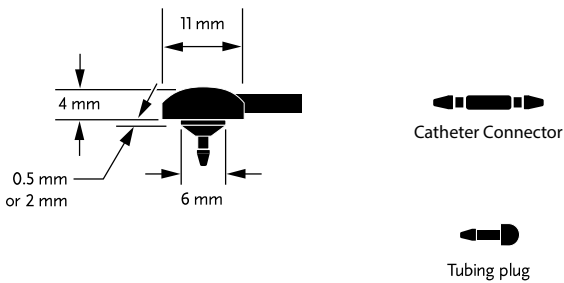


CSF-Ventriculostomy Reservoir

6 mm, Burr Hole

Included with product:

- Catheter Connector
- Tubing Plug

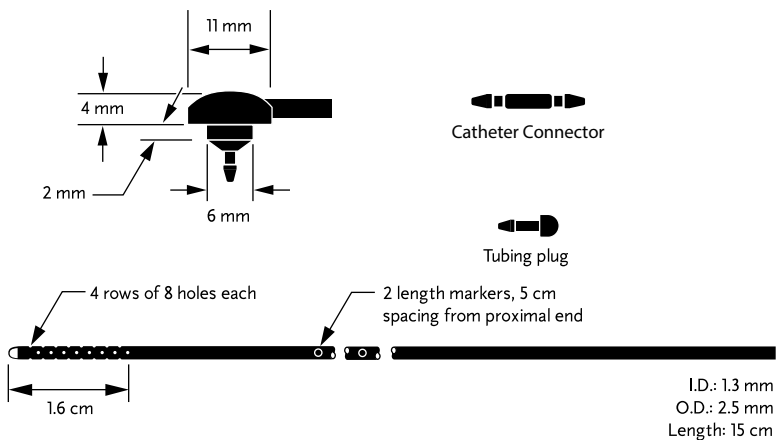


Product	Depth	Fluid Volume
44210	Shallow (0.5 mm)	0.10 mL
44200	Regular (2 mm)	0.15 mL

CSF-Ventriculostomy Reservoir Kit

Included with product:

- CSF-Ventriculostomy Reservoir, 6 mm, Burr Hole, Regular Depth
- Ventricular Catheter, Standard, Barium Impregnated, 15 cm
- Catheter Connector
- Tubing Plug
- Stainless Steel Stylet (not shown)

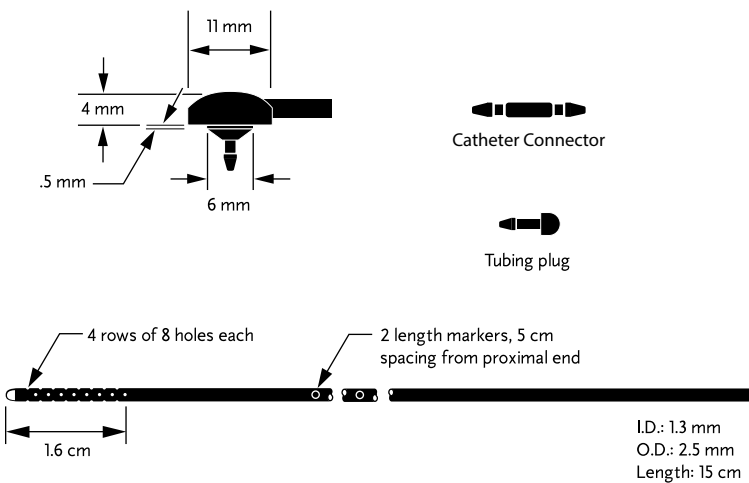


Product	Fluid Volume
44201	0.15 mL

CSF-Ventriculostomy Reservoir Kit

Included with product:

- CSF-Ventriculostomy Reservoir, 6 mm, Burr Hole, Shallow Depth
- Ventricular Catheter, Standard, Barium Impregnated, 15 cm
- Catheter Connector
- Tubing Plug
- Stainless Steel Stylet (not shown)



Product	Fluid Volume
44211	0.10 mL

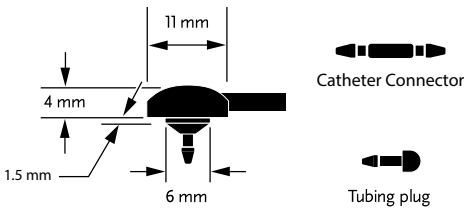
Dimensions included in this catalog are for reference only.

RESERVOIRS AND PORTS

Ventriculostomy Reservoir Assembly

Included with product:

- Ventriculostomy Reservoir, Burr Hole, 6 mm, Regular Depth, with integrated Reservoir Base
- Catheter Connector, Straight
- Tubing Plug

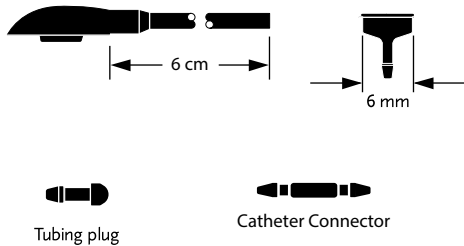


Product	Fluid Volume
27051	0.10 mL

CSF-Snap Assembly Ventriculostomy Reservoir Kit

Included with product:

- Snap Assembly Ventriculostomy Reservoir Dome, with Integral Tubing, Standard, 6 cm, Barium Impregnated
- Snap Assembly Ventriculostomy Reservoir Base, 6 mm, Burr Hole, Shallow Depth
- Tubing Plug
- Catheter Connector, Straight
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)
- Stainless Steel Stylet (not shown)

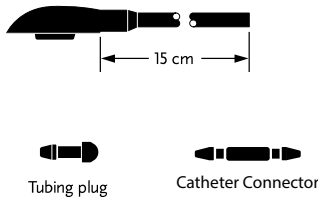


Product
22050B

CSF-Snap Assembly Ventriculostomy Reservoir Dome

Included with product:

- Snap Assembly Ventriculostomy Reservoir Dome with Integral Tubing, Standard, Barium Impregnated, 15 cm
- Tubing Plug
- Catheter Connector
- Snap Assembly Prefill Adapter (not shown)
- Blunt Needle, 16-gauge (not shown)



Product
24085

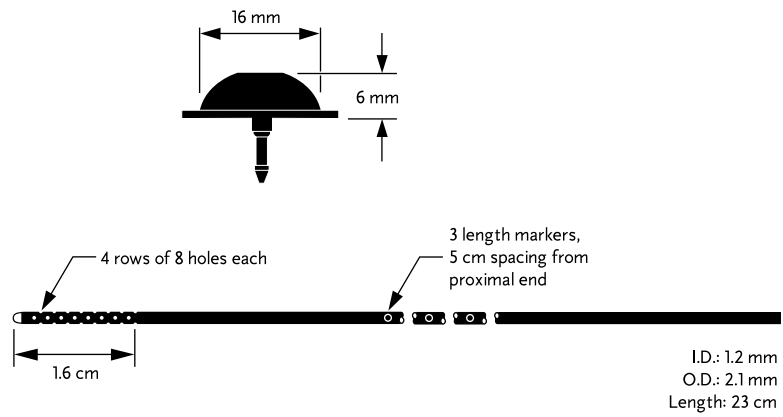
CSF-Ventricular Port

16 mm, Bottom Inlet Connector

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 23 cm
- Stainless Steel Stylet (not shown)

Product	Fluid Volume
44000	0.3 mL



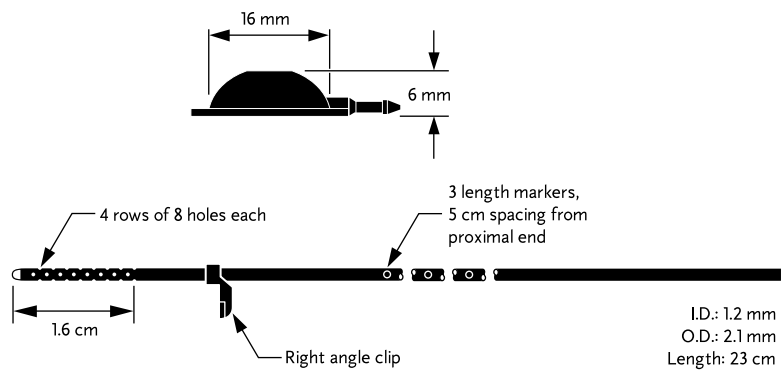
CSF-Ventricular Port

16 mm, Side Inlet Connector

Included with product:

- Ventricular Catheter, Small, Barium Impregnated, 23 cm
- Stainless Steel Stylet (not shown)
- Right Angle Clip

Product	Fluid Volume
44010	0.3 mL

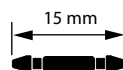


Dimensions included in this catalog are for reference only.

Catheter Connector
Straight, Nylon

Product

45103

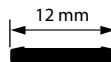


I.D.: 1.0 mm
O.D.: 1.9 mm

Catheter Connector
Straight, Stainless Steel

Product

25027

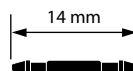


I.D.: 1.1 mm
O.D.: 1.5 mm
Flared O.D.: 2.1 mm

Catheter Connector
Lumboperitoneal

Product

21066



I.D.: 0.8 mm
O.D.: 1.8 mm

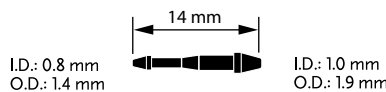
Catheter Connector
Stepdown

Included with product:

- Silicone Tubing, Standard, 5 cm, Barium Impregnated

Product

22063

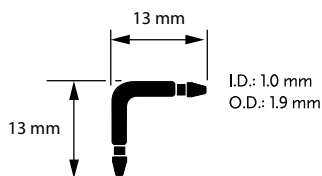


I.D.: 1.3 mm
O.D.: 2.5 mm
Length: 5 cm

Catheter Connector
Right Angle

Product

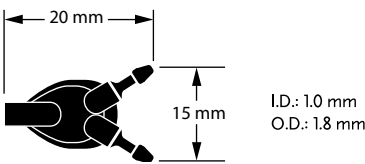
45104



I.D.: 1.0 mm
O.D.: 1.9 mm

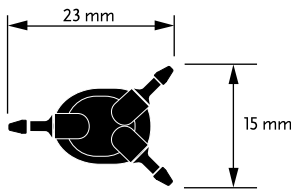
Catheter Connector
3-Way

Product
45105



Catheter Connector
3-Way, All Male Connectors

Product
20033



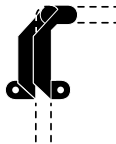
Fixation Tab
Silicone, Barium Impregnated

Product	Fits Tubing Size of:
25077	1.5 mm O.D.
8023B	2.5 mm O.D.



Right Angle Clip

Product	Fits Tubing Size of:
3008A	2.1 mm O.D.
3008B	2.5 mm O.D.



Dimensions included in this catalog are for reference only.

Female Luer Lock Connector with Integral Plug

Product	Fits Tubing Size of:
24114	0.7 mm I.D.
9041	1.3 mm I.D.



Blunt Needle
20-gauge, Individually Packaged

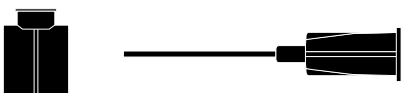
Product
21048



Snap Assembly Prefill Adapter

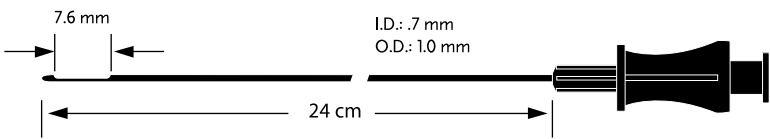
- Included with product:
- Blunt Needle, 16-gauge

Product
23067



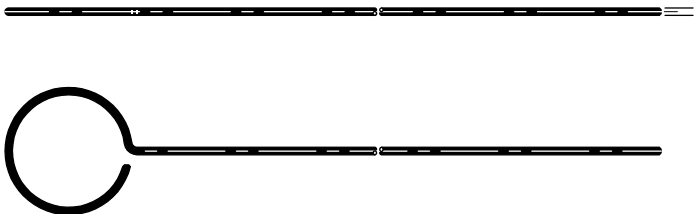
Opus Stylet

Product	Length
23085B	24 cm



Standard Stylet

Product
27938



Disposable Quick-Release
Ventricular Catheter Introducer

Product

9032



Tuohy Needle, 14-gauge
with Huber Tip

Product

Length A

24043	8.9 cm
27186	12 cm



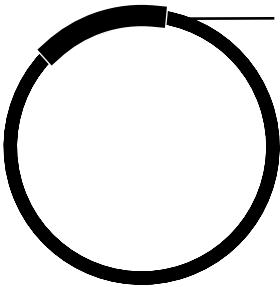
Guidewire
Straight, Fixed Core, Teflon Coated

Included with product:

- Adjustable Stop

Product

21038



Wire O.D.: 0.46 mm
Wire Length: 100 cm

Snap Assembly Tool
(Reusable, provided non-sterile)

Product

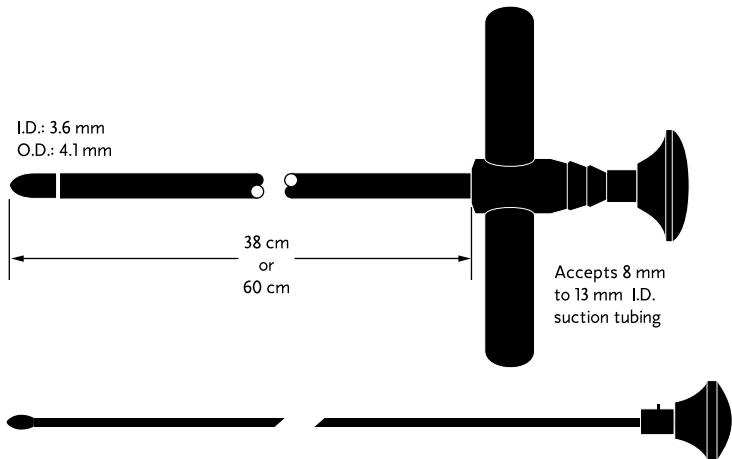
45402



Dimensions included in this catalog are for reference only.

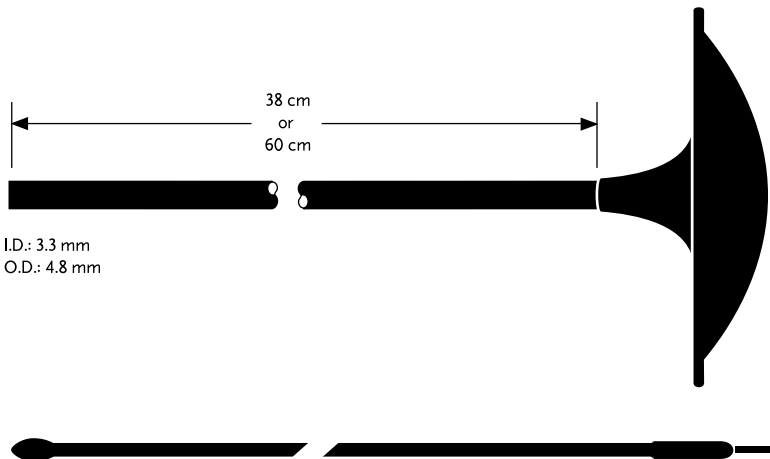
Subcutaneous Catheter Passer
(Reusable, provided non-sterile)

Product	Length
48403	38 cm
48405	60 cm



Disposable Subcutaneous
Catheter Passer

Product	Length
48407	38 cm
48409	60 cm



CRITICAL CARE

Contents

External Drainage Catheters	70
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Exacta EDMS	90
Duet EDMS	95
Basic EDM Systems & Accessories	98
Ventriculostomy Kits	103
Subdural Evacuation Port System (SEPS™)	105

Note: Dimensions included in this catalog are for reference only.
Neither the finished product, nor materials used during manufacture of product, contain latex.

EXTERNAL DRAINAGE AND MONITORING

External Drainage and Monitoring Products meet a variety of needs for CSF drainage and flow rate and pressure monitoring. From the complete closed drainage and monitoring system of the Becker™ EDMS to the Ventriculostomy Kit — all products are designed for convenience in emergency situations.

EDM ventricular catheters with BioGlide™ are treated with a unique, patented process which covalently bonds hydrogel to the interior and exterior silicone surfaces of the catheter. When hydrated, the catheters become hydrophilic and lubricious, for ease of insertion. EDM ventricular catheters with BioGlide have bullet-shaped tips, which are filled with radiopaque (tantalum impregnated) silicone elastomer.

EDM ventricular catheters are fabricated of radiopaque (barium impregnated) silicone tubing, and are packaged with stainless steel stylets inserted into the lumen. To minimize flow obstruction, the catheters have larger diameter flow holes and a larger inside diameter. All EDM ventricular catheters include luerlock connectors to facilitate catheter connection to an external drainage system. EDM ventricular catheters (REF Nos. 46118 and 96118 only) include a trocar for catheter tunneling. The non-metallic design of the external drainage catheters ensures non-interference with MRI or CT scans. Neither the finished product, nor the materials used during manufacture of all external drainage catheters, contain latex.

Small External Ventricular Catheters

EDM Ventricular Catheter

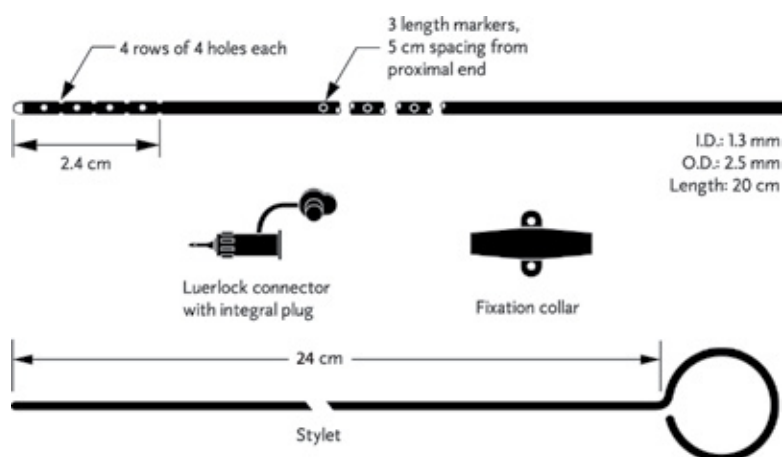
Barium Impregnated, 20 cm

Included with product:

- Catheter, 20 cm (REF. No. 46115)
- Luer Connector with Integral Plug
- Fixation Collar
- Stainless Steel Stylet

Product

27156



EDM Ventricular Catheter

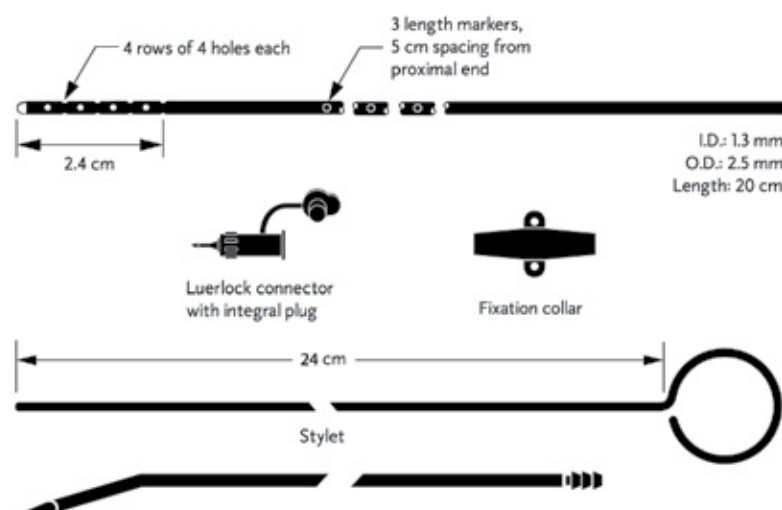
Barium Impregnated, 20 cm

Included with product:

- Catheter, 20 cm (REF. No. 46115)
- Luer Connector with Integral Plug
- Fixation Collar
- Stainless Steel Stylet
- Trocar

Product

27384



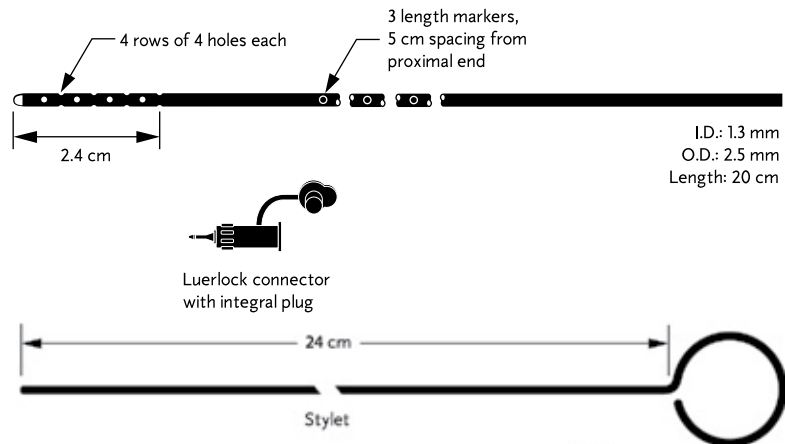
EDM Ventricular Catheter Barium Impregnated, 20 cm

Included with product:

- Luerlock Connector with Integral Plug
- Stainless Steel Stylet

Product

46115



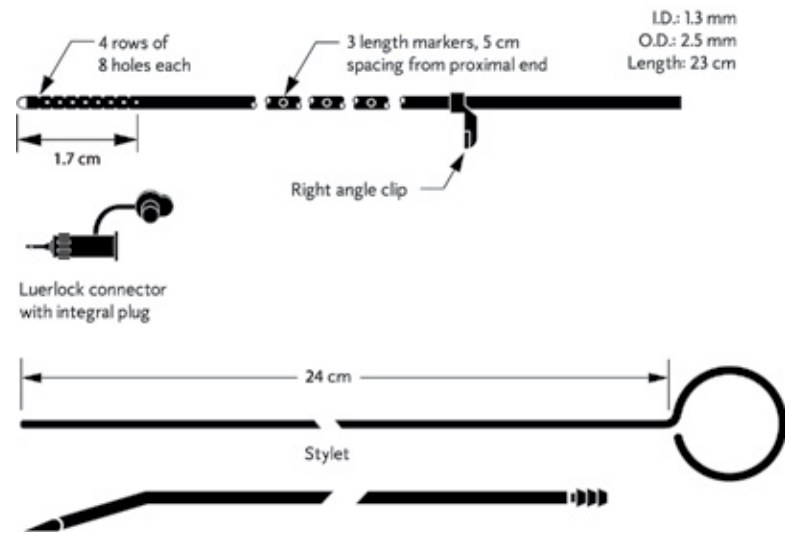
EDM Ventricular Catheter Barium Impregnated, 23 cm

Included with product:

- Catheter, 23 cm (REF No. 41101)
- Luer Connector with Integral Plug
- Stylet
- Trocar
- Right Angle Clip

Product

26057



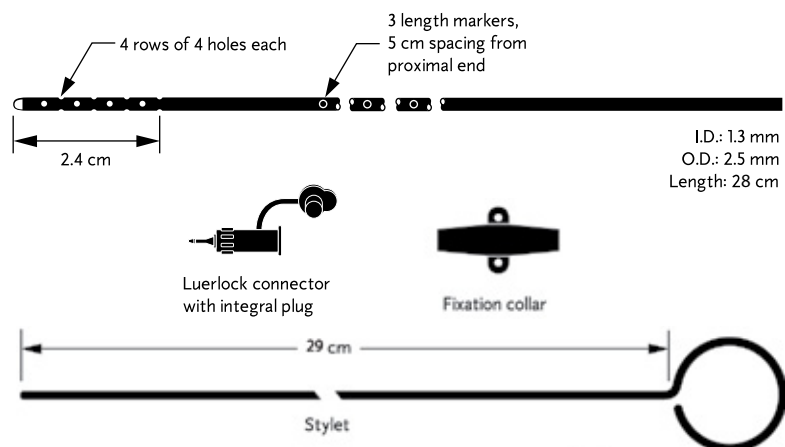
EVD Ventricular Catheter Barium Impregnated, 28 cm

Included with product:

- 3 length markers
- 5 cm spacing from proximal end
- Luerlock Connector with Integral Plug, Fixation Collar, Stainless Steel Stylet

Product

27842



Standard External Ventricular Drainage Catheters

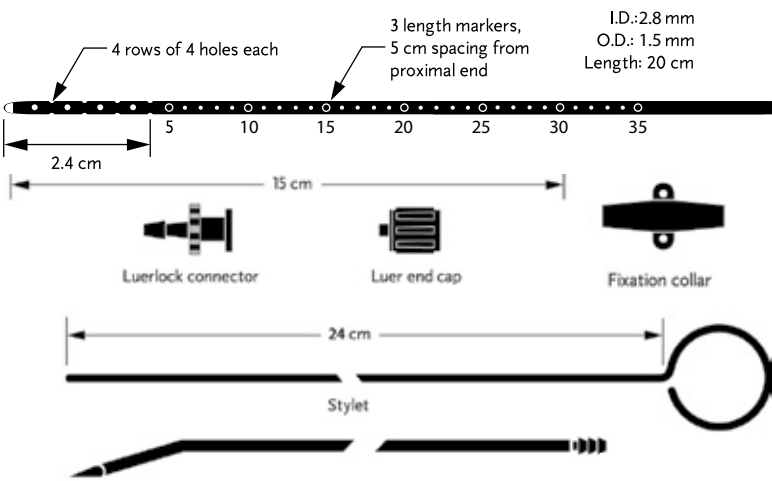
EVD Ventricular Catheter
Barium Impregnated, 20 cm

Included with product:

- Numerical length markers
- 5 cm spacing from proximal end with dots in between
- Luer Connector with Red End Cap,
- Fixation Collar,
- Stainless Steel Stylet
- Trocar

Product

27659



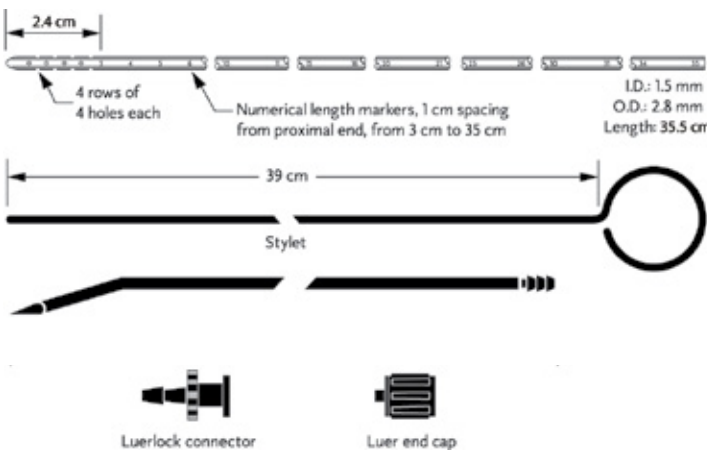
EDM Ventricular Catheter
Translucent, with Striped Tubing, 35 cm

Included with product:

- Stainless Steel Stylet
- Trocar
- Luerlock Connector
- Luer End Cap

Product

27695



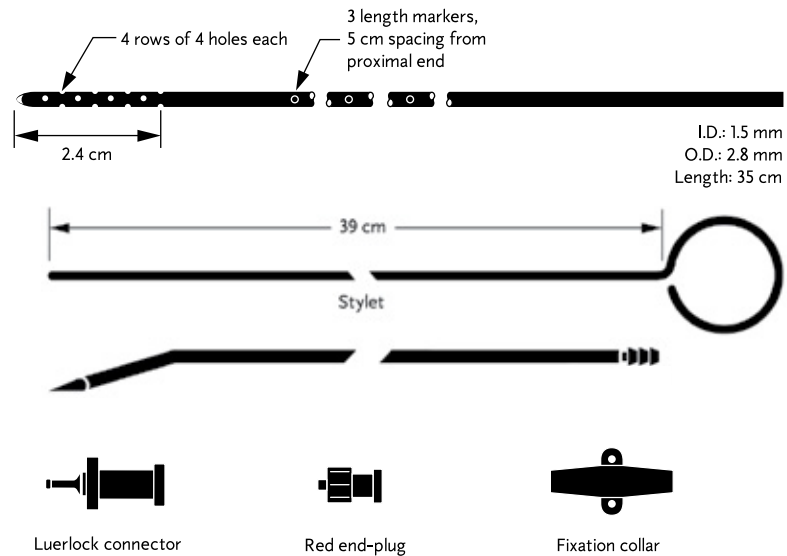
EDM Ventricular Catheter Barium Impregnated, 35 cm

Included with product:

- Trocar
- Luerlock Connector
- Red End-Plug
- Fixation Collar
- Stainless Steel Stylet

Product

46118



Large External Ventricular Drainage Catheters

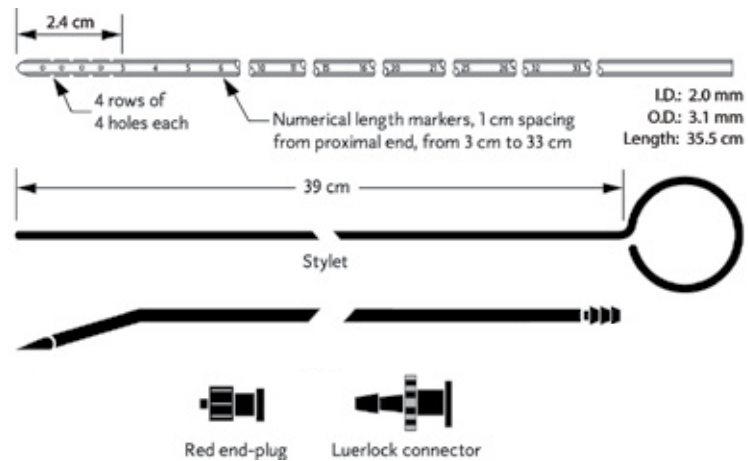
EDM Ventricular Catheter Translucent, with Striped Tubing, 35 cm

Included with product:

- Trocar
- Stainless Steel Stylet
- Red End-Plug
- Luerlock Connector

Product

27703



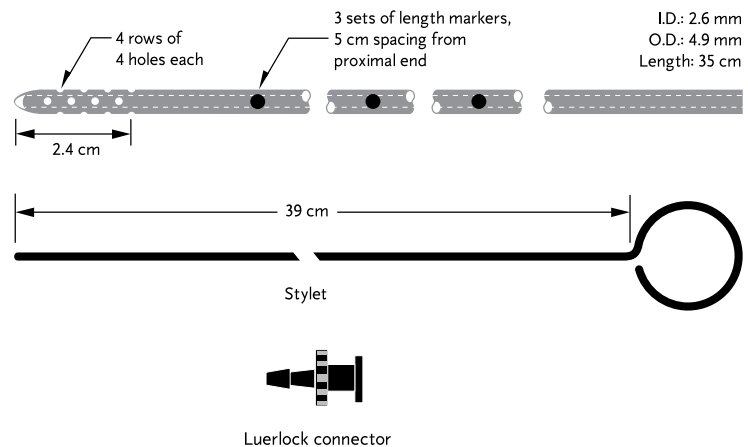
EDM Ventricular Catheter Translucent, 35 cm

Included with product:

- Stainless Steel Stylet
- Luerlock Connector

Product

26020



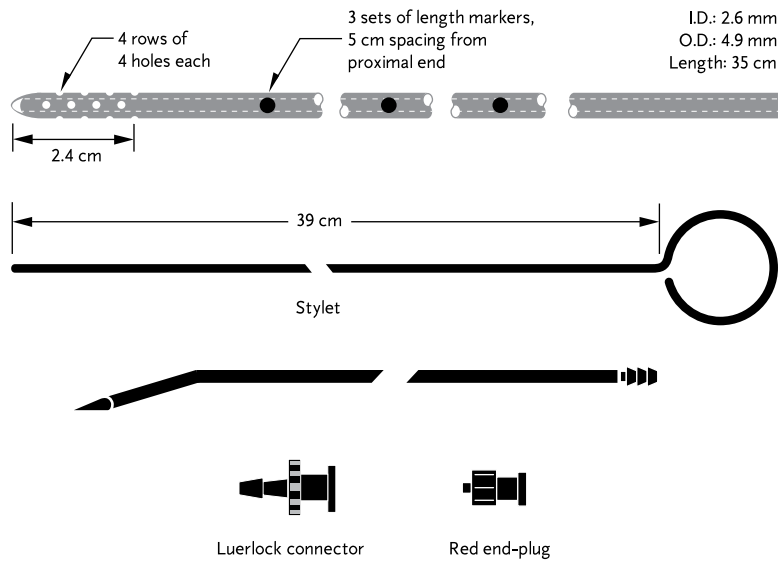
EDM Ventricular Catheter
Translucent, 35 cm

Included with product:

- Trocar
- Stainless Steel Stylet
- Luerlock Connector
- Red-End Plug

Product

27637



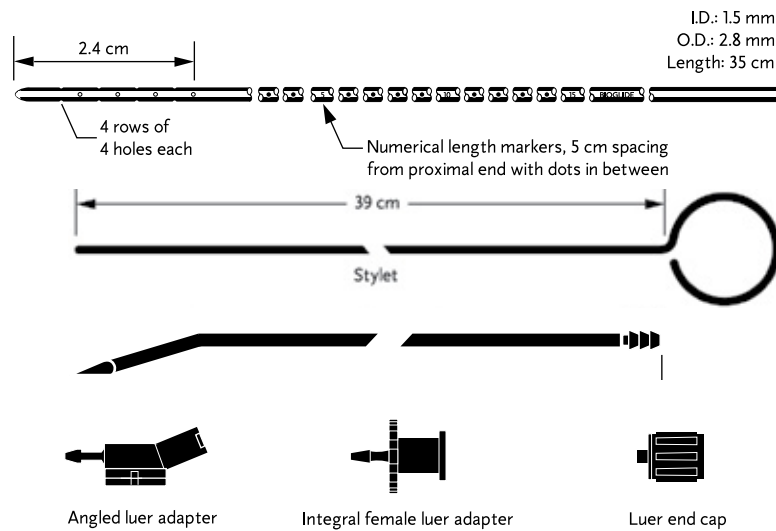
EDM Ventricular Catheter,
with BioGlide
Translucent with Barium Stripe, 35 cm

Included with product:

- Trocar
- Angled Luer Adapter
- Integral Female Luer Adapter
- Luer End Cap
- Stainless Steel Stylet

Product

96118



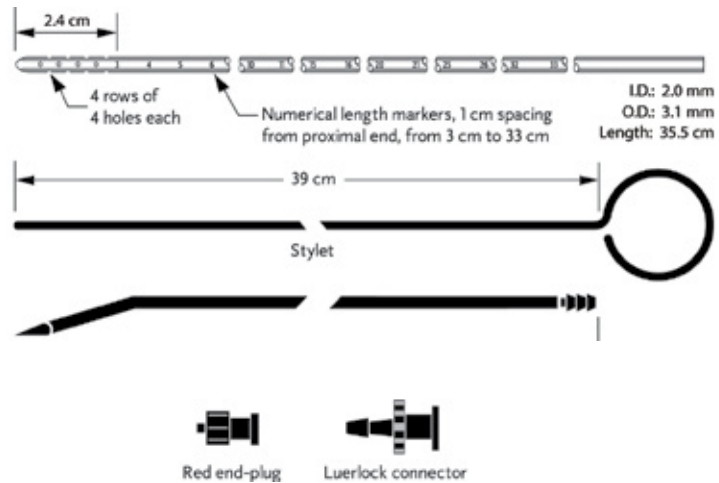
EDM Ventricular Catheter
with BioGlide
Translucent, with Striped Tubing, 35 cm

Included with product:

- Trocar
- Stainless Steel Stylet
- Red End-Plug
- Luerlock Connector

Product

27705



EXTERNAL DRAINAGE AND MONITORING

VentriClear™ Ventricular Drainage Catheter Set with Cook Spectrum™ Antibiotic Impregnation

Included with product:

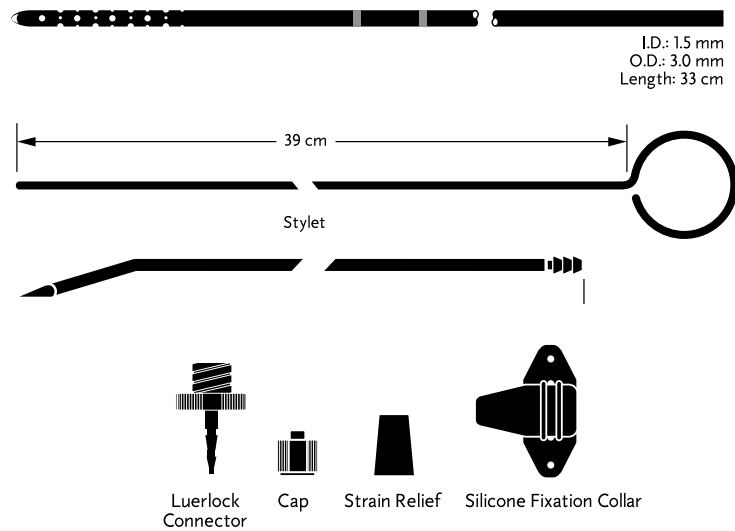
- Stainless Steel Stylet
- Trocar
- Luerlock Connector
- Strain Relief
- Cap for Luerlock Connector
- Silicone Fixation Collar

Antibiotics Impregnated into Catheter:

- Minocycline
- Rifampin

Product

NVDC01ABRM 5-Pack



VentriClear™ II Ventricular Drainage Catheter Set with Cook Spectrum™ Antibiotic Impregnation

Included with Product:

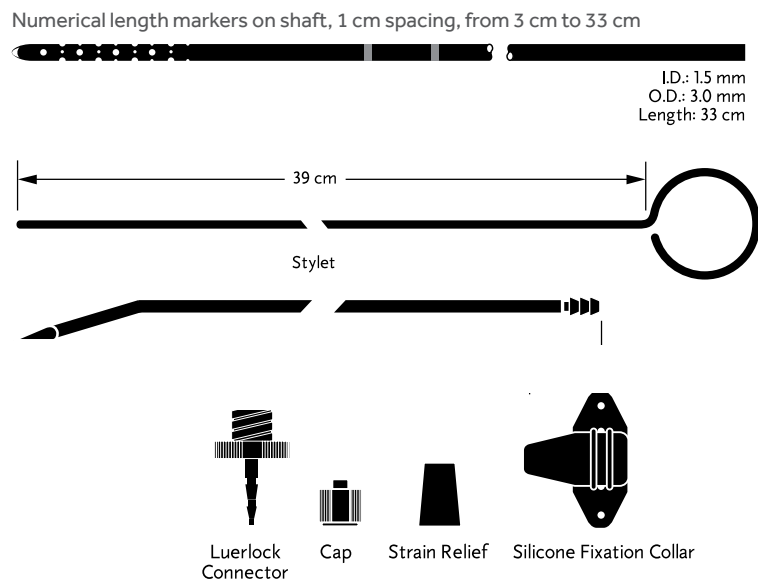
- Stainless Steel Stylet
- Trocar
- Luer Lock Connector
- Strain Relief
- Cap for Luer Lock Connector
- Silicon Fixation Collar
- Barium Impregnated Stripe

Antibiotics Impregnated into Catheter:

- Minocycline
- Rifampin

Product

50318 5-Pack



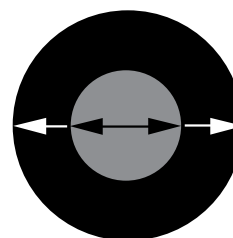
External Ventricular Catheters

Catalog Number	Length	Inner Dia.	Outer Dia.	Flow Hole Size	Translucent Catheter	Dots or Numeric Length Markers	BioGlide Coating	Right Angle Clip	Antibiotic Impregnated
26020	35 cm	2.6 mm	4.9 mm	2.2 mm	Yes	Dots	-	-	-
26057	23 cm	1.3 mm	2.5 mm	0.5 mm	No, Barium Impregnated	Dots	-	Yes	-
27156	20 cm	1.3 mm	2.5 mm	1.1 mm	No, Barium Impregnated	Dots	-	-	-
27384	20 cm	1.3 mm	2.5 mm	1.1 mm	No, Barium Impregnated	Dots	-	-	-
27637	35 cm	2.6 mm	4.9 mm	2.2 mm	Yes	Dots	-	-	-
27659	20 cm	1.5 mm	2.8 mm	1.1 mm	No, Barium Impregnated	Numeric & Dots	-	-	-
27695	35.5 cm	1.5 mm	2.8 mm	1.1 mm	Yes, with Barium Stripe	Numeric	-	-	-
27703	35.5 cm	2.0 mm	3.1 mm	1.1 mm	Yes, with Barium Stripe	Numeric	-	-	-
27705	35.5 cm	2.0 mm	3.1 mm	1.1 mm	Yes, with Barium Stripe	Numeric	Yes	-	-
27842	28 cm	1.3 mm	2.5 mm	1.1 mm	No, Barium Impregnated	Dots	-	-	-
46115	20 cm	1.3 mm	2.5 mm	1.1 mm	No, Barium Impregnated	Dots	-	-	-
46118	35 cm	1.5 mm	2.8 mm	1.1 mm	No, Barium Impregnated	Dots	-	-	-
50318	33 cm	1.5 mm	2.8 mm	1.1 mm	Yes, with Barium Stripe	Numeric	-	-	Yes
96118	35 cm	1.5 mm	2.8 mm	1.1 mm	Yes, with Barium Stripe	Numeric	Yes	-	-
NVDC01ABRM	33 cm	1.5 mm	2.8 mm	0.5/1.1 mm	No, Barium Impregnated	Dots	-	-	Yes

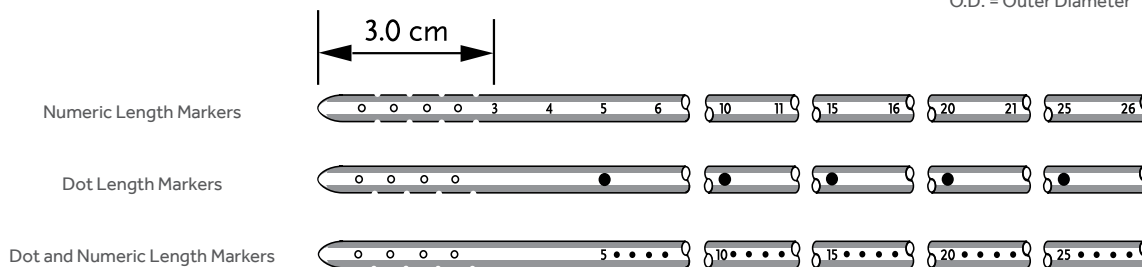
EVD Catheter Accessories

Catalog Number	Description
9041	Luerlock w/ integral cap, to fit 1.3mm catheters
23021	Luer lock w/ non-vented Red cap to fit 1.5mm ID catheters
25123	Trocar with Protective Sheath
8023 A	Fixation collar for catheters w/ OD <2.1mm
8023 B	Fixation collar for catheters w/ OD <2.5mm

External Ventricular Drainage (EVD) Catheters



I.D. = Inner Diameter
O.D. = Outer Diameter



EDM Catheter Accessories

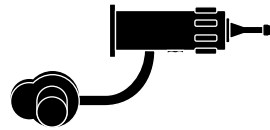
EDM lumbar catheters are made from radiopaque (barium impregnated) kink-resistant silicone tubing. Accessories include fixation tabs to anchor the catheter and luerlock connectors for catheter and drainage system attachment. Silicone strain reliefs are included with each catheter to reduce catheter stress and prevent the catheter from kinking at the luerlock connection. A 14-gauge Tuohy needle is also included to facilitate percutaneous catheter placement without need for laminectomy. Maneuverability of the closed tip catheter is increased by a stainless steel-coated guidewire with adjustable stop.

The non-metallic design of the external drainage catheters ensures non-interference with MRI or CT scans. All external drainage catheters are manufactured with components that do not contain latex.

Female Luer Lock Connector with
Integral Plug
1.3 mm I.D.

Product

9041



Female Luer Connector and End-Plug
Cap for EDM Drainage Catheters with
an ID of 1.5 mm

Included with product:

- Female Luer Connector
- Red End Plug

Product

23021



Female Luerlock connector



Red end-plug

Trocar for Tunneling EDM
Ventricular Catheters

Product

25123



Fixation Tab for Catheters with Outer
Diameter Less than 2.5mm

Product

8023 B



I.D.: 2.5mm

Lumbar Drainage Catheters

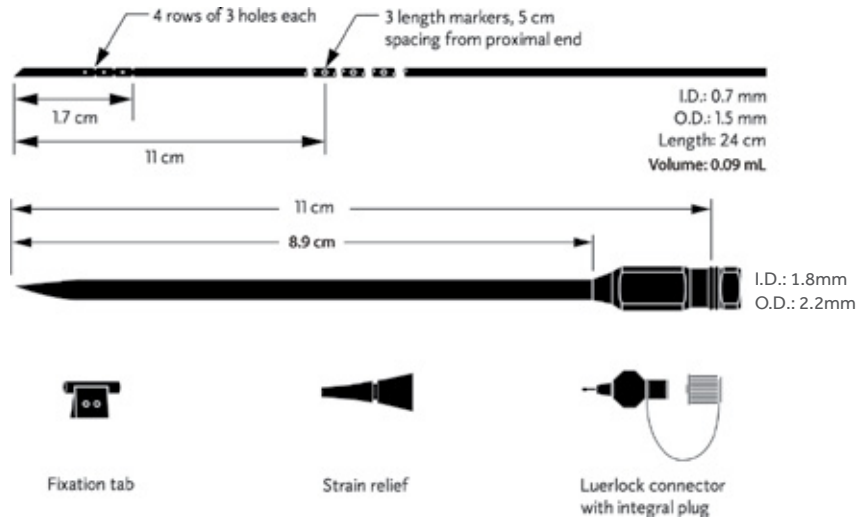
EDM Lumbar Catheter
Open Tip, Barium Impregnated, 24 cm

Included with product:

- Tuohy Needle, 14-gauge, with Huber Tip
- Luerlock Connector with Integral Plug
- Fixation Tab
- Strain Relief

Product

46418



EDM Lumbar Catheter
Barium Impregnated, 80 cm

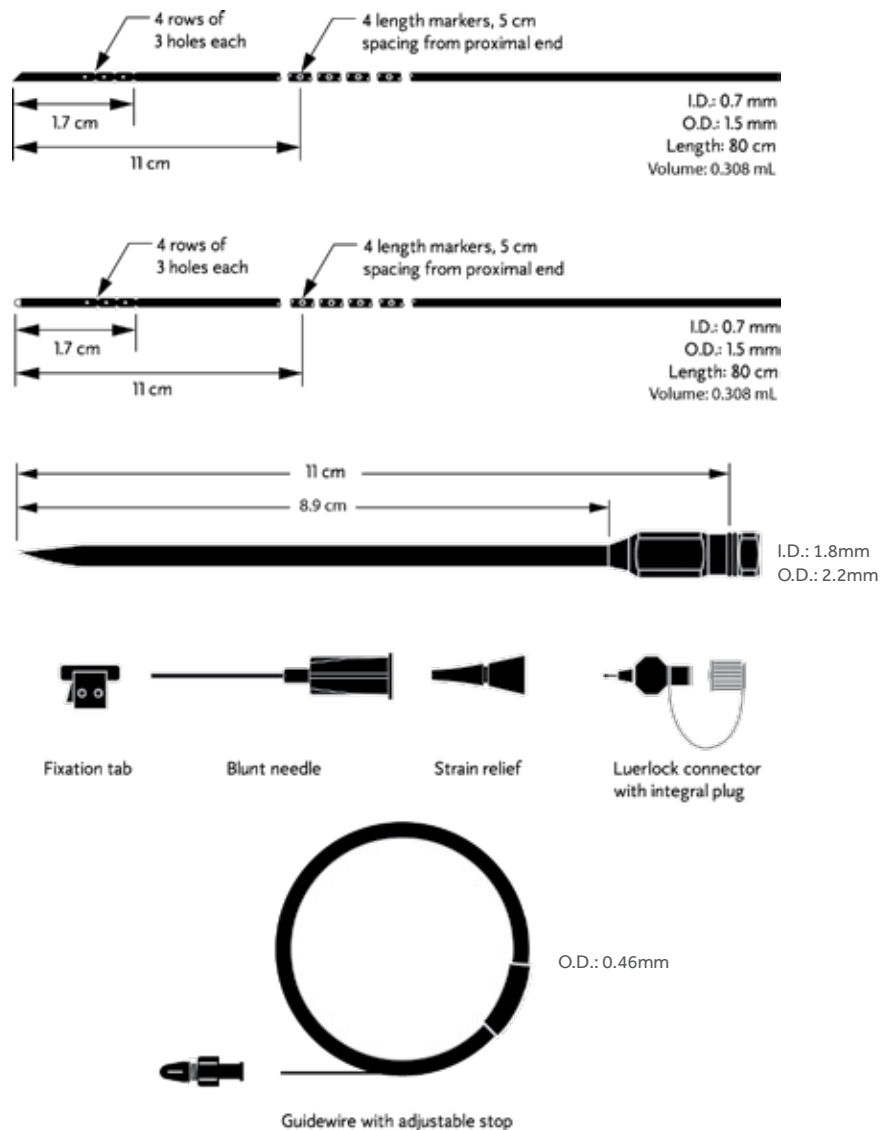
Included with product:

- Tuohy Needle, 14-gauge, Huber Tip
- Luerlock Connector with Integral Plug
- Fixation Tab (2 each)
- Blunt Needle, 20-gauge
- Guidewire with Adjustable Stop (with closed tip only)
- Strain Relief

Product

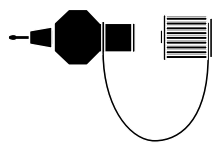
46419 - Closed Tip

46420 - Open Tip



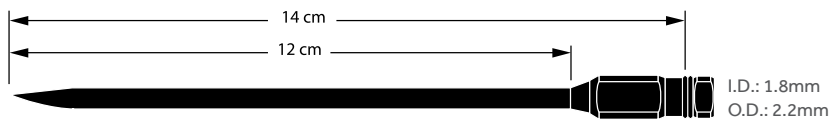
Lumbar Catheter Accessories

Female Luer Lock Connector with Integral Plug



Product	Fits Tubing Size of:
24114	0.7 mm I.D.

Longer 14-gauge Tuohy Needle with Huber Tip



Product
27186

External Lumbar Catheters

Catalog Number	Length	Inner Dia.	Outer Dia.	Internal Volume	Tip Type
46418	24 cm	0.7 mm	1.5 mm	0.09 mL	Open Tip
46419	80 cm	0.7 mm	1.5 mm	0.308 mL	Closed Tip
46420	80 cm	0.7 mm	1.5 mm	0.308 mL	Open Tip

Lumbar Catheter Accessories

Catalog Number	Description
24114	Luer lock and integral cap, to fit 0.7mm ID catheters
27186	12 cm, 14G Touhy Needle

Standard Becker™ External Drainage and Monitoring System

Product Features:

- Hydrophobic Vent
- Blue Striped Tubing
- Two Latex-free Injection Sites
- Cord and Cord Lock
- 50 mL Graduated Drip Chamber
- Removable Drainage Bag, 700 mL
- Transducer Attachment Site
- Instructions Printed on System Panel

Standard Becker External Drainage and Monitoring System (English language instructions)

With Single Injection Site
(not shown)

- Standard Becker with Red Warning Tape around Patient Line Sample Site
- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Patient Line

Product

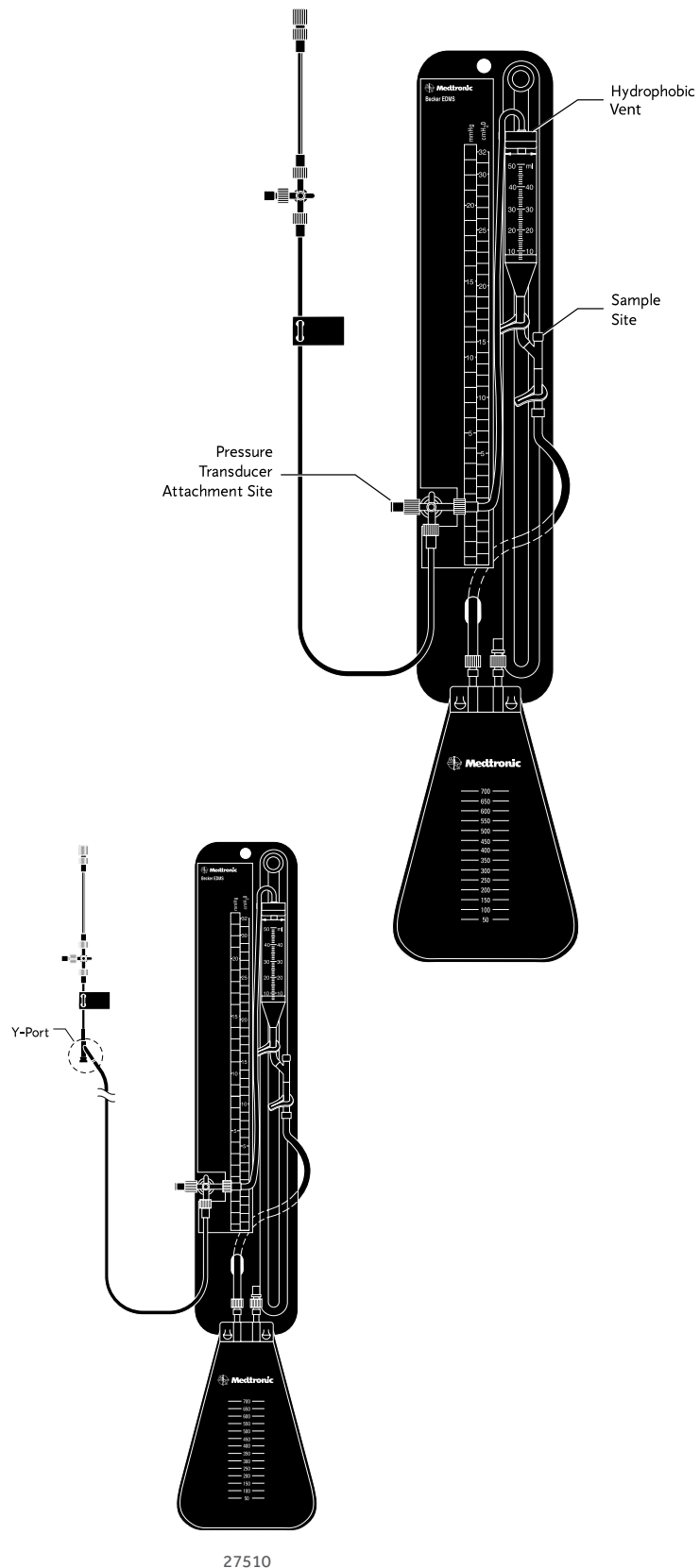
24146

Becker™ EDMS with Patient Line Y-Port

- Standard Becker with 65" patient line
- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Patient Line
- Y-port on Patient Line

Product

27510 – European Version



EXTERNAL DRAINAGE AND MONITORING

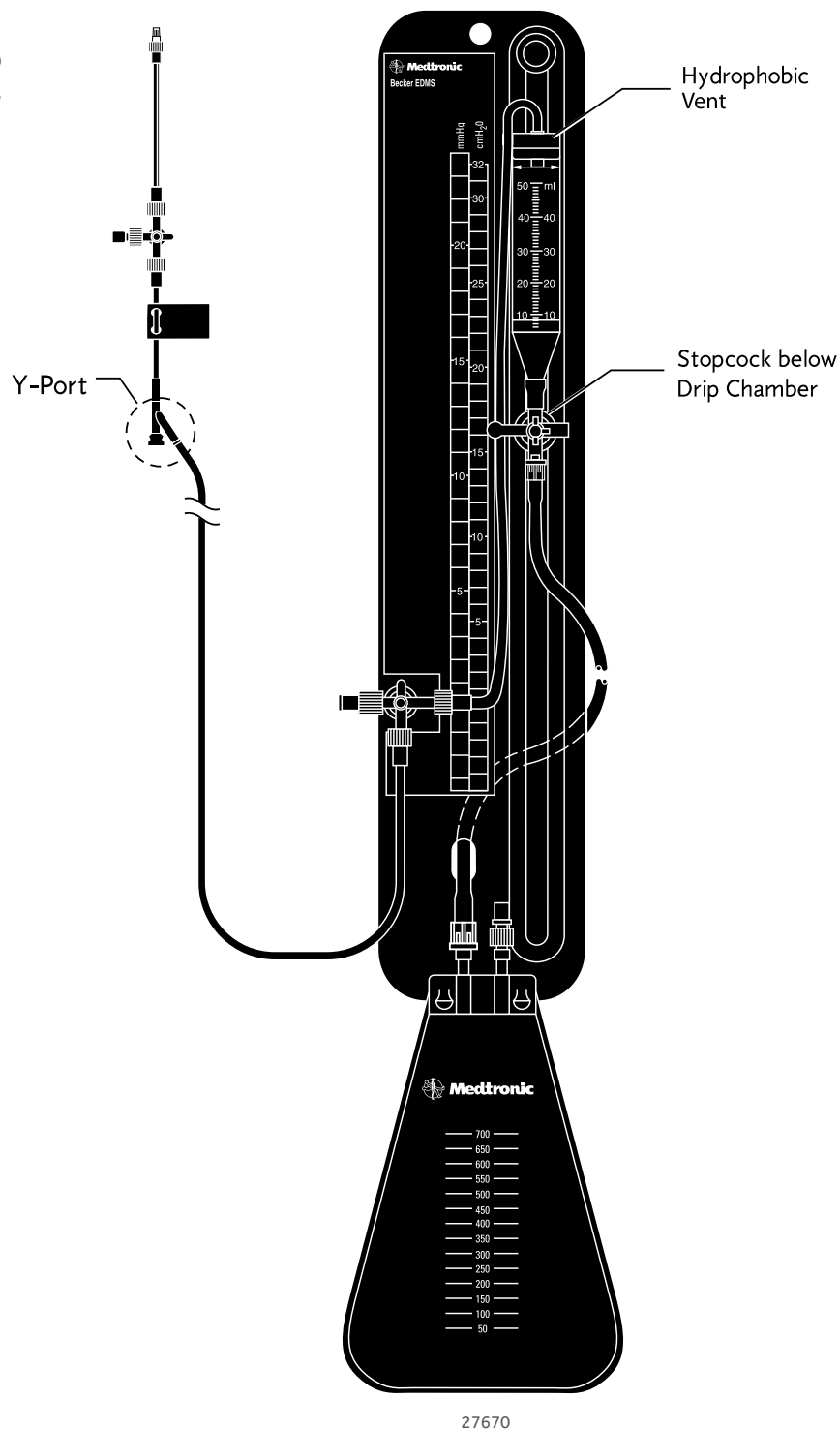
Becker™ External Drainage and Monitoring System with Stop Below Drip Chamber and Needleless Injection Sites

Included with product:

- Hydrophobic Vent
- Locking Bracket and Locking Cord
- 50 mL Graduated Chamber
- Removable Drainage Bag, 700 mL
- Two Transducer Attachment Sites
- Clearly Marked Ventricular Access
- Instructions Printed Directly on System Panel
- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Line
- Y-port on Patient Line

Product

27670



Standard Becker without Ports on Patient Line

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- No Stopcock on Patient Line

Product

27767

Standard Becker External Drainage and Monitoring System (English language instructions)

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Patient Line

Product

46128

Standard Becker with 72" Patient Line and SmartSite™ Needleless Sample Sites

Included with product:

- SmartSite™ Needleless Sample Site
- Blue Striped Patient Line
- Stopcock on Patient Line
- Stopcock below Drip Chamber

Product

27761

EXTERNAL DRAINAGE AND MONITORING

Standard Becker with Green Striped Patient Line

Standard Becker with Green Striped Patient Line and Anti-Reflux Valve

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Green Striped Patient Line
- Stopcock on Patient Line
- Y-port on Patient Line
- Anti-Reflux Valve on Patient Line

Product

25120

Standard Becker with Green Striped Patient Line and SmartSite™ Needleless Sample Sites

Included with product:

- SmartSite™ Needleless Sample Site
- Green Striped Patient Line
- Stopcock on Patient Line
- Y-port on Patient Line
- Stopcock below Drip Chamber

Product

27873

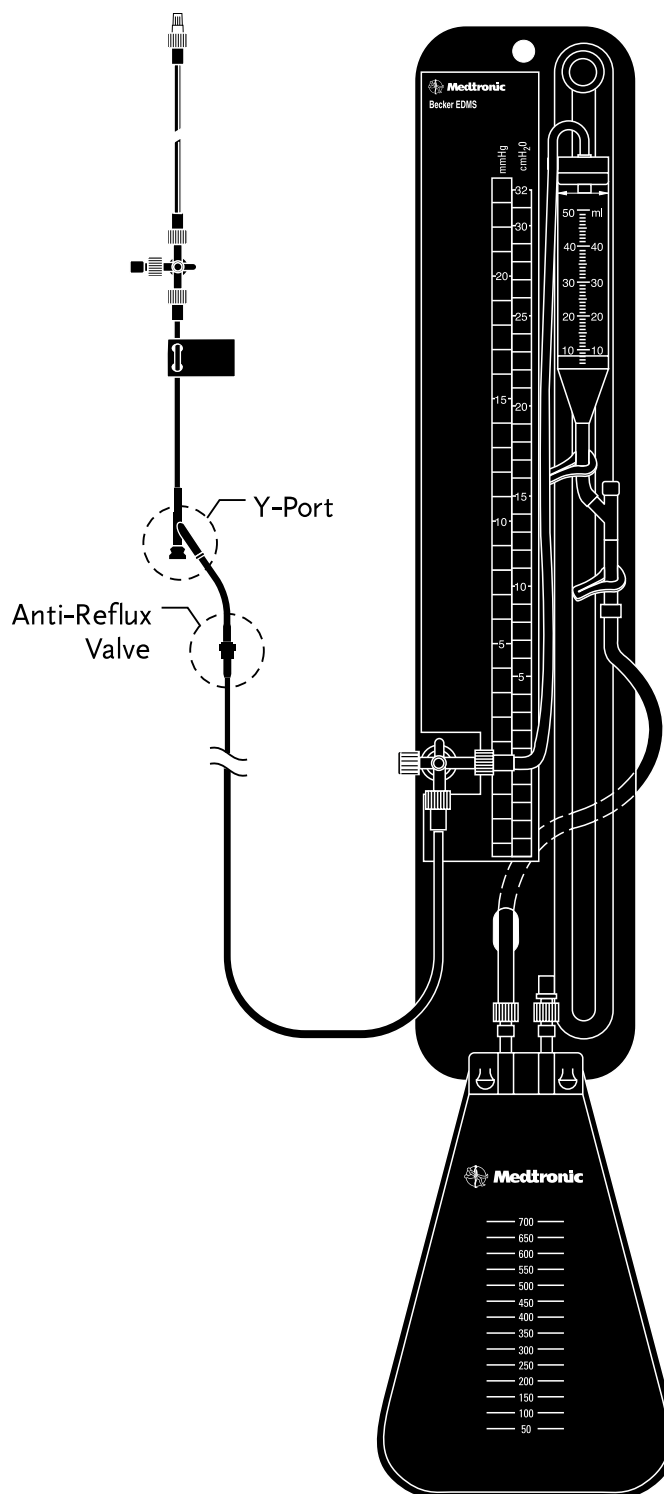
Standard Becker with 72" Green Striped Patient Line and SmartSite™ Needleless Sample Sites

Included with product:

- SmartSite™ Needleless Sample Site
- Green Striped Patient Line
- Stopcock on Patient Line
- Stopcock below Drip Chamber

Product

27931



European Version of Becker System

European* Version Becker
External Drainage and Monitoring System
(Multi-language instructions)

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Patient Line

Product

46129

European* Becker with Anti-Reflux Valve
on Patient Line

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Patient Line
- Y-port on Patient Line
- Anti-Reflux Valve on Patient Line

Product

27672

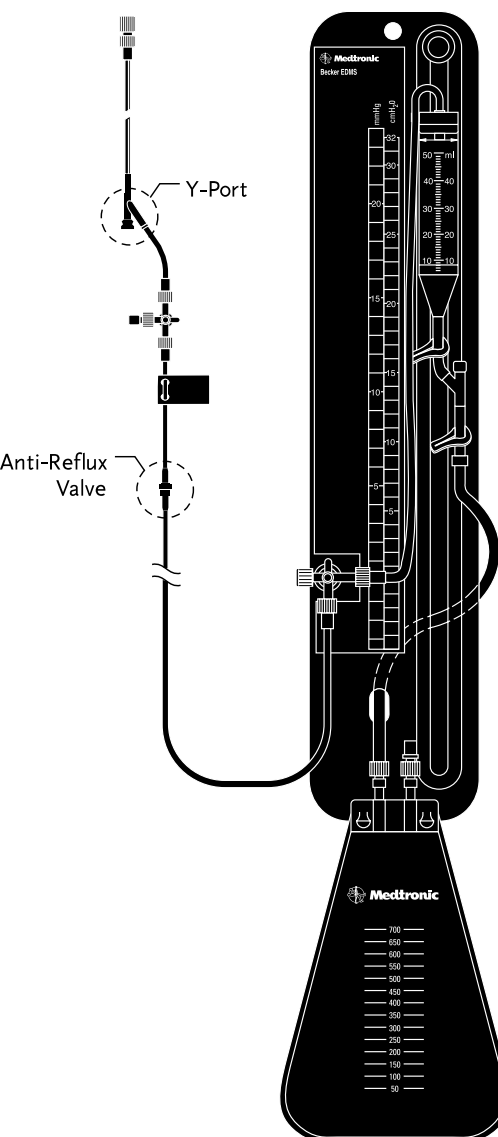
European* Version of Becker System
with Green Striped Tubing

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Green Striped Patient Line
- Stopcock on Patient Line

Product

27702



European* Version of Becker System with
Blue Striped Tubing and SmartSite™ Needleless
Injection Sites that are Bonded Connections

Included with product:

- SmartSite™ Needleless Sample Site
- Blue Striped Patient Line
- Stopcock on Patient Line

Product

27779

*European Version includes multi-language labeling stickers for back panel

Becker Systems with EVD Catheter Included

European* Version of Becker System
with Green- Striped Tubing and
Standard EVD Catheter
(REF No. 46118)

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Green Striped Patient Line
- Stopcock on Patient Line

Product

27811

* European Version includes multi-language labeling
stickers for back panel

Becker External Drainage and
Monitoring System

**Packaged with 35cm EDM Ventricular
Catheter (REF No. 46118)(Becker REF No. 46129)**

Included with product:

- Baxter Interlink™ Needleless Injection Sites
- Blue Striped Patient Line
- Stopcock on Patient Line

Product

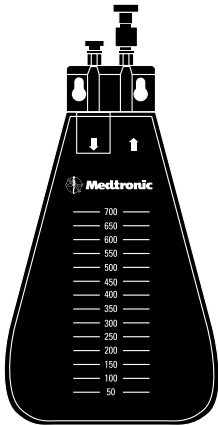
26040

Replacement Drainage Bag for
Becker System, 700 mL

Included with product:

- Braided Cord (not shown)

Product	Quantity
46124	Single
46430	10 pack carton

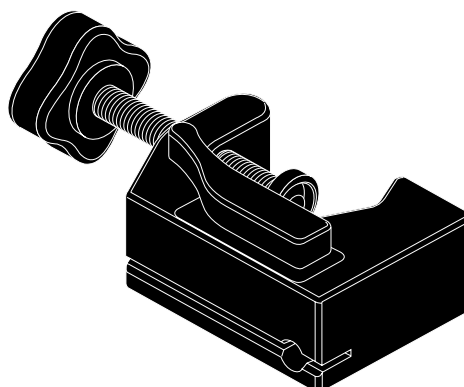


Becker Quick-Attach Pole Clamp*

Product

46135

* For use with all Becker External Drainage and Monitoring Systems

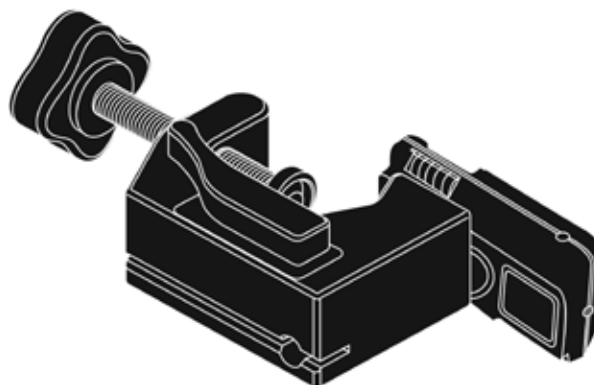


Becker Quick-Attach Pole Clamp with Laser Level*

Product

46137

* For use with all Becker External Drainage and Monitoring Systems



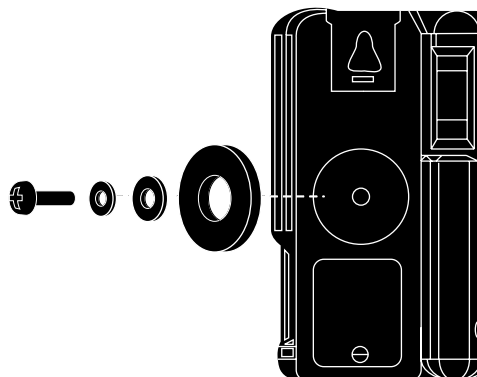
Replacement Laser Assembly

Product

27613

For use with Exacta Pole Clamps
REF No.'s 46711, 46713, 46715, 46717

For use with EDM Quick Attach Pole Clamps
REF No.'s 46135 and 46137



Becker Drainage Systems

Catalog Number	Catheter Included	Sample Site Type	Tubing Stripe Color	Patient Line Tubing Length	Stopcock on Patient Line	"Y-Site" On Patient Line	Stopcock or Y-Site under Drip Chamber	International Version	Anti-Reflux Valve on Patient Line
24146	No	Interlink	Blue	60"	Yes	-	Y-Site	-	-
25120	No	Interlink	Green	63"	Yes	Yes	Y-Site	-	Yes
26040	46118	Interlink	Blue	60"	Yes	-	Y-Site	-	-
27510	No	Interlink	Blue	65"	Yes	Yes	Y-Site	-	-
27609	No	Interlink	Blue	60"	Yes	-	Y-Site	Yes	-
27670	No	Interlink	Blue	60"	Yes	-	Stopcock	-	-
27672	No	Interlink	Blue	60"	Yes	Yes	Y-Site	Yes	Yes
27702	No	Interlink	Green	60"	Yes	-	Y-Site	Yes	-
27761	No	SmartSite	Blue	72"	Yes	-	Stopcock	-	-
27767	No	Interlink	Blue	63"	-	-	Y-Site	-	-
27779	No	SmartSite	Blue	60"	Yes	-	Y-Site	Yes	-
27811	46118	Interlink	Green	60"	Yes	-	Y-Site	Yes	-
27873	No	SmartSite	Green	60"	Yes	Yes	Stopcock	-	-
27931	No	SmartSite	Green	72"	Yes	-	Stopcock	-	-
46128	No	Interlink	Blue	60"	Yes	-	Y-Site	-	-
46129	No	Interlink	Blue	60"	Yes	-	Y-Site	Yes	-

Becker System Accessories

Catalog Number	Description
46124	Becker Replacement Drainage Bag, (single pack)
46430	Becker Drainage Bag (10 pack)
46135	Becker Quick Attach Pole Clamp No Laser
46137	Becker Quick Attach Pole Clamp w/ Laser
27613	Replacement Laser for Becker Quick Attach Pole Clamp

Exacta Drainage Systems

External Drainage and Monitoring Products meet a variety of needs for CSF drainage and flow rate and pressure monitoring. From the complete closed drainage and monitoring system of the Becker™ EDMS to the Ventriculostomy Kit — all products are designed for convenience in emergency situations.

Medtronic Exacta™ Drainage System

Product Features:

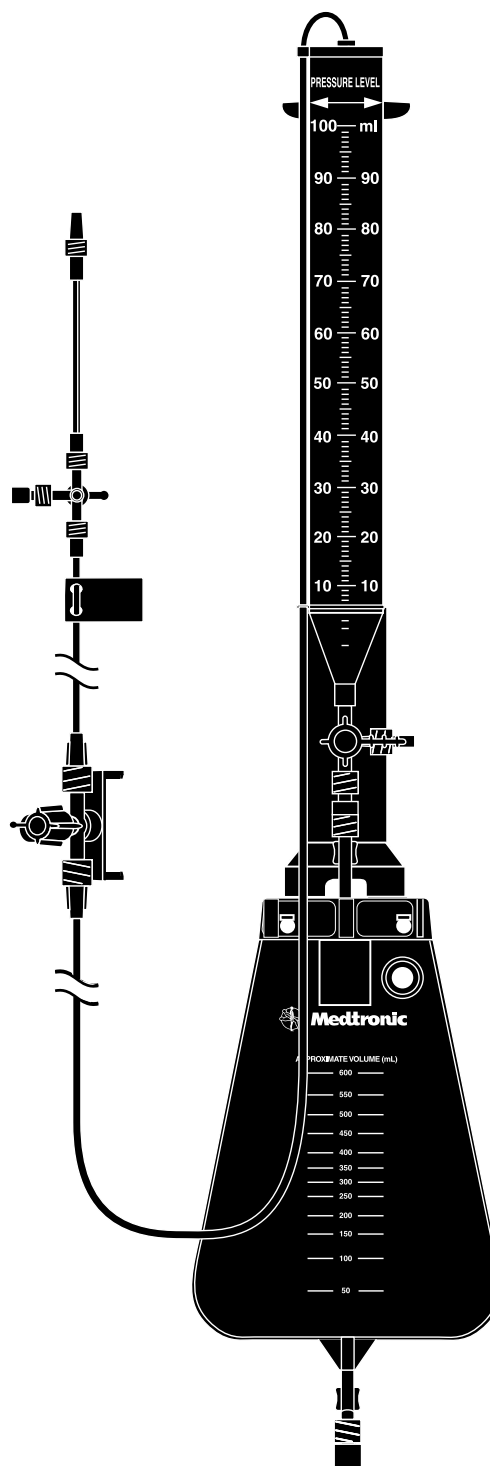
Reusable Pole Clamp

- Two scales, mm of Hg and cm of H₂O
- Accurate Laser Leveling Device
- Extended Negative Scale for Lumbar Drainage

Disposable Drainage System

- Small Profile Design
- Hydrophobic vent
- Two Latex-free Needleless Injection Sites*
- 50 or 100 mL Graduated Drip Chamber
- Removable Drainage Bag (600 mL)
- Two Transducer Attachment Sites
- Clearly Marked Ventricular Access

* Note: All Medtronic Exacta Systems are designed with the Baxter Interlink™ Needleless Injection Sites, unless otherwise noted.



A Exacta Drainage System

**Standard Exacta with Baxter Interlink™
Needleless Injection Sites, and 50 mL Drip
Chamber**

Product

46700

**A Exacta (50 mL) with Baxter Interlink™
Needleless Injection Sites and EDM
Ventricular Catheter, REF No. 46118**

Product

27581

**A Exacta (50 mL) with Baxter Interlink™
Needleless Injection Sites, Glued Stopcock
and Green Striped Patient Line**

Product

27666

**A Exacta (50 mL) with Baxter Interlink™
Needleless Injection Sites, Cord and Cord
Lock**

Product

27636

**A Exacta (50 mL) Red-Capped Needleless
Injection Sites**

Product

27732

**A Exacta (50 mL) with SmartSite™
Needleless Injection Sites**

Product

27785

B Exacta Drainage System

**Exacta (100 mL) with Baxter Interlink™
Needleless Injection Sites**

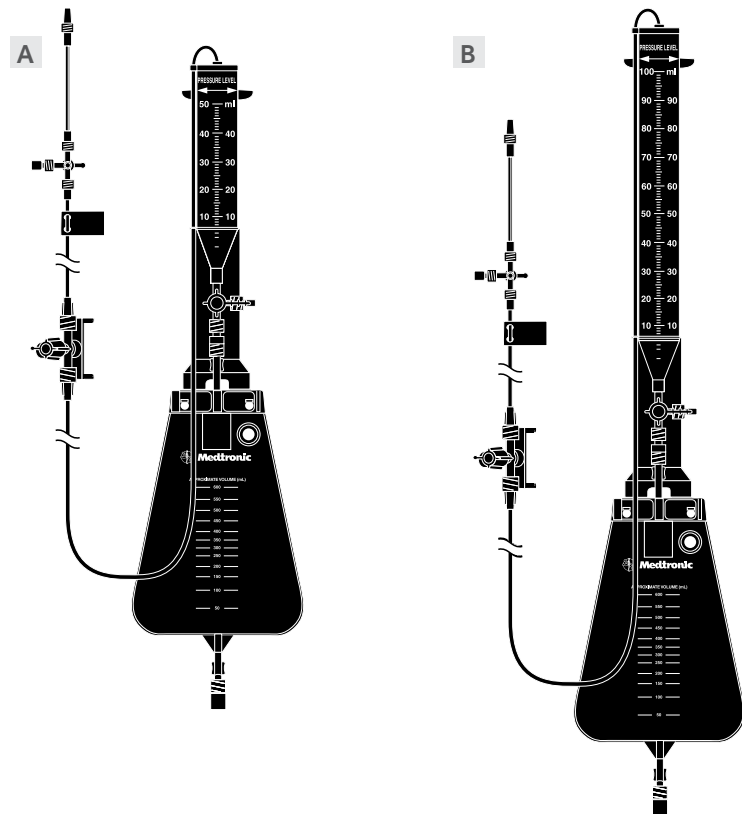
Product

46705

**B Exacta (100 mL) with Baxter Interlink™
Needleless Injection Sites, Graduated
Drip Chamber, Cord, Cord Lock and EDM
Ventricular Catheter (REF No. 46118)**

Product

27795



EXTERNAL DRAINAGE AND MONITORING

Exacta, with Baxter Interlink™ Needleless Injection Sites and Patient Line Y-Port

Product

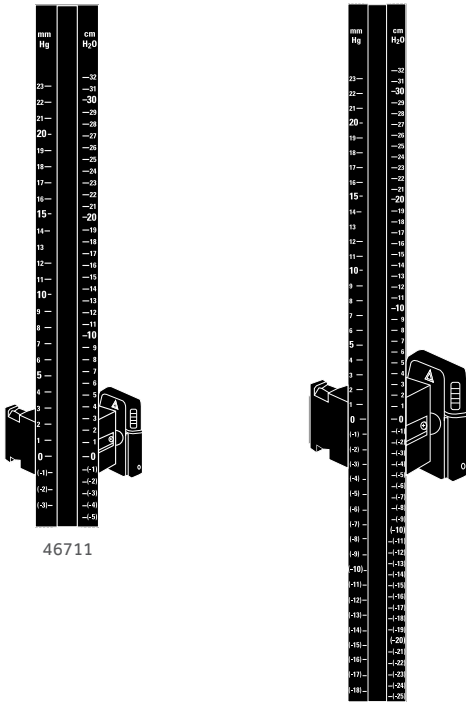
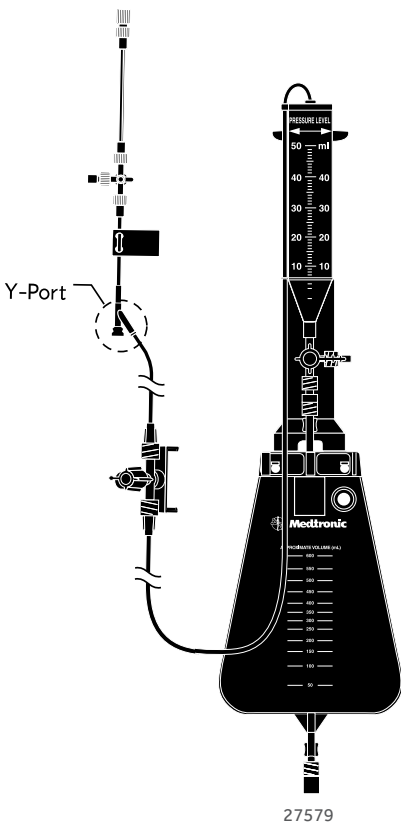
27579

Exacta Pole Clamp, Reusable

Product	Description
46711	with Laser Level
46713	without Laser Level (not shown)

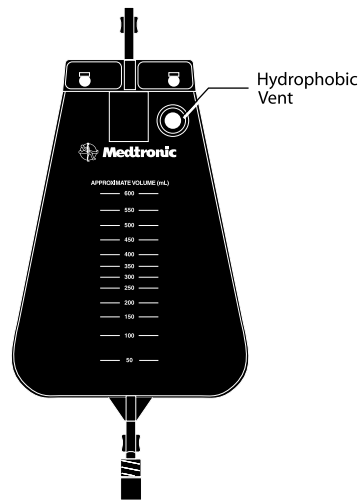
Exacta Pole Clamp, Reusable
(Extended Negative Scale)

Product	Description
46715	with Laser Level (-25 cm H2O)
46717	without Laser Level (-25 cm H2O) (not shown)



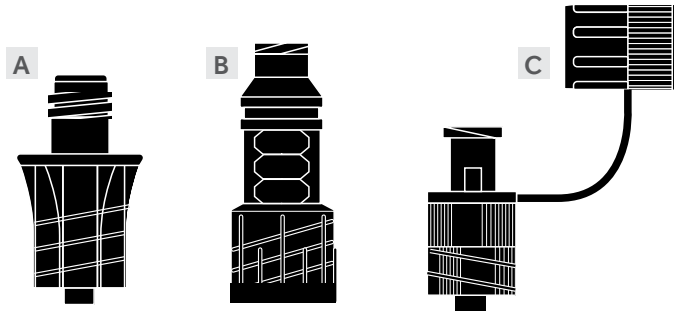
Exacta Drainage Bag, 600 mL

Product	Quantity
46710	Single
46712	10 pack carton



Needleless Injection Sites
(for reference only)

- A** Baxter Interlink™ Needleless Injection Sites used with BD™ Blunt Plastic Cannula
- B** SmartSite™ Needleless Injection Site
- C** Red-Capped Needleless Injection Site



Exacta Drainage Systems

Catalog Number	Catheter Included	Drip Chamber Size (ml)	Injection Site Type	Tubing Stripe Color	Patient Line Tubing Length	Stopcock on Patient Line	"Y-Site" On Patient Line	Anti-Reflux Valve on Patient Line	Cord with Cord-Lock
27579	-	50	Interlink	Blue	72"	Yes	Yes	-	-
27581	46118	50	Interlink	Blue	60"	Yes	-	-	-
27636	-	50	Interlink	Blue	60"	Yes	-	-	Yes
27666	-	50	Interlink	Green	60"	Yes	-	-	-
27678	-	100	SmartSite	Blue	60"	2	-	-	Yes
27732	-	50	Red Capped Luer Connection	Blue	60"	Yes	-	-	-
27785	-	50	SmartSite	Blue	60"	Yes	-	-	-
27795	46118	100	Interlink	Blue	60"	Yes	-	-	Yes
27855	46118	50	Red Capped Luer Connection	Green	60"	Yes	-	-	-
27861	-	50	Interlink	Green	60"	Yes	-	Yes	-
46700	-	50	Interlink	Blue	60"	Yes	-	-	-
46705	-	100	Interlink	Blue	60"	Yes	-	-	-

Exacta System Accessories

Catalog Number	Description
27613	Laser Replacement Assembly
46711	Exacta Pole, Reusable, -5 cm H2O scale, with Laser Level
46713	Exacta Pole, Reusable, -5 cm H2O scale, without Laser Level
46715	Exacta Pole, Reusable, -25 cm H2O scale, with Laser Level
46717	Exacta Pole, Reusable, -25 cm H2O scale, without Laser Level
46710	Replacement Drainage Bag for the Exacta External Drainage and Monitoring System (single pack)
46712	Replacement Drainage Bag for the Exacta External Drainage and Monitoring System (10 pack)

Duet Drainage Systems

Duet™ External Drainage and Monitoring Systems

General Product Features

- Streamlined design
- Completely disposable
- Can be hung from string or attached to IV pole via integrated pole clamp
- Identifiable green striped patient line tubing
- Two latex-free needleless injection/sampling sites
- Supplied with either SmartSite™ or Interlink™ needleless injection sites
- Main-system stopcock for attachment of external pressure transducer
- Hydrophobic vent
- Drip chamber capacity of 75 ml
- Removable drainage bag with 600 ml capacity
- Rotating pressure scales to provide both ventricular and lumbar drainage options
- Pressure scales with large easy to read numbers (mm of Hg or cm of H₂O)
- Can be used with Clear-Site™ laser level
- Magnifying lens on front of drip chamber
- MRI Conditional (when Clear-Site laser has been removed)



EXTERNAL DRAINAGE AND MONITORING

Duet™ External Drainage and Monitoring Systems

Duet External Drainage and Monitoring System with Baxter Interlink™ Needleless Injection Sites

Product

46913

Duet External Drainage and Monitoring System with SmartSite™ Needleless Injection Sites

Product

46914

Duet External Drainage and Monitoring System with Baxter Interlink™ Needleless Injection Sites, packaged with a 35 cm EDM Ventricular Drainage Catheter (REF No. 46118)

Product

46915

Duet External Drainage and Monitoring System with SmartSite™ Needleless Injection Sites, packaged with a 35 cm EDM Ventricular Drainage Catheter (REF No. 46118)

Product

46916

Duet External Drainage and Monitoring System with Baxter Interlink™ Needleless Injection Sites, packaged with an 80 cm, closed tipped, EDM Lumbar Drainage Catheter (REF No. 46419)

Product

46917

Clear-Site™ Laser Level

Product

46918

Replacement Drainage Bag for the Duet External Drainage and Monitoring System (single pack)

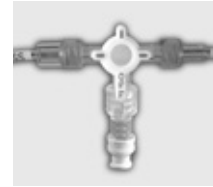
Product

46911

Replacement Drainage Bag for the Duet External Drainage and Monitoring System (10 pack)

Product

46912



Interlink™ is a registered trademark of Baxter International, Inc.
SmartSite™ is a registered trademark of Cardinal Health, Inc.

Duet Drainage Systems

Catalog Number	Ventricular Catheter Included	Lumbar Catheter Included	Injection Site Type	Drip Chamber Size (ml)	Patient Line Tubing Color	Patient Line Tubing Length
46913	-	-	Interlink	75	Green	60"
46914	-	-	SmartSite	75	Green	60"
46915	46118	-	Interlink	75	Green	60"
46916	46118	-	SmartSite	75	Green	60"
46917	-	46419	Interlink	75	Green	60"

Duet System Accessories

Catalog Number	Description
46918	ClearSite Laser Level
46911	Replacement Drainage Bag for the Duet External Drainage and Monitoring System (single pack)
46912	Replacement Drainage Bag for the Duet External Drainage and Monitoring System (10 pack)

EXTERNAL DRAINAGE AND MONITORING

Basic External Drainage and Monitoring Systems

EDM Drainage Assembly with
120 mL Graduated Chamber

Included with product:

- EDM Drainage Bag, 700 mL
- Braided Cord (not shown)
- Graduated Pressure Tape Scale (not shown)
- Anti-Reflux Valve

Product

46422

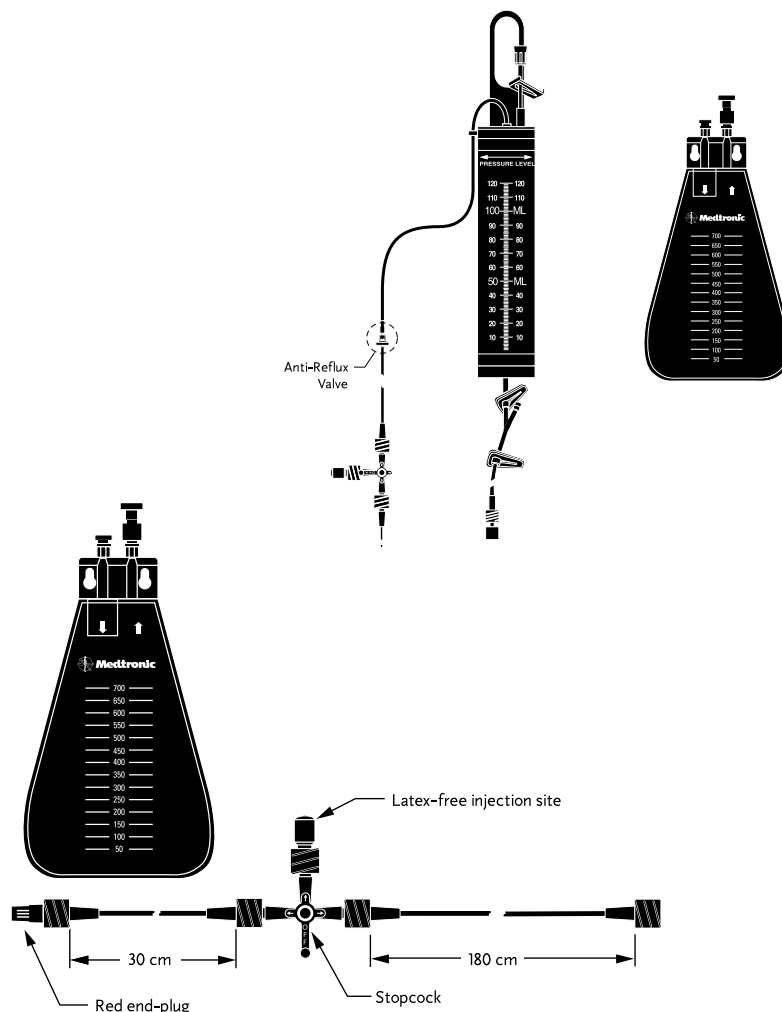
EDM Kit, with Becker EDMS
Drainage Bag, 700 mL, and EDM Patient
Connection Line Assembly

Included with product:

- Drainage Bag (REF No. 46124)
- Patient Line (REF No. 46126)

Product

25068



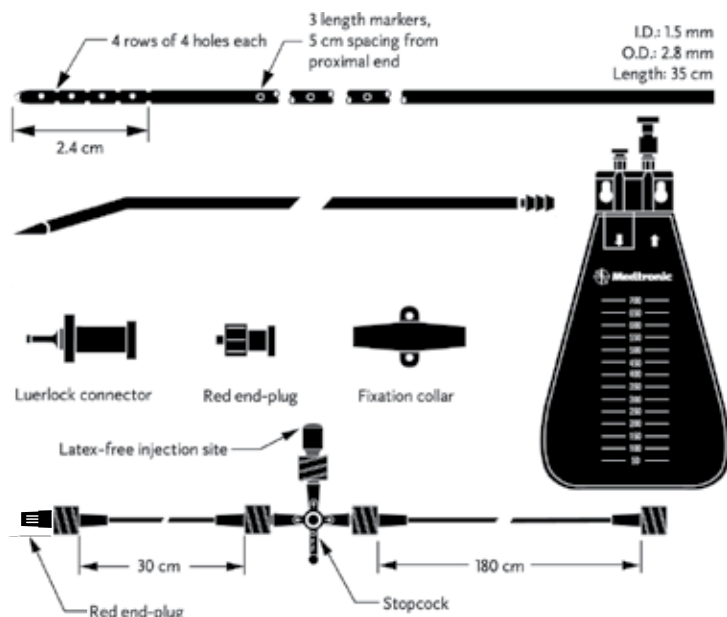
EDM Ventricular Drainage Kit

Included with product:

- EDM Catheter, 35 cm (REF No. 46118)
- Trocar, 15 cm
- Female Luerlock Connector
- Fixation Collar
- Stainless Steel Stylet (not shown)
- Red End-plug
- Becker Drainage Bag, 700 mL (REF No. 46124)
- Patient Line (REF No. 46126)

Product

20034



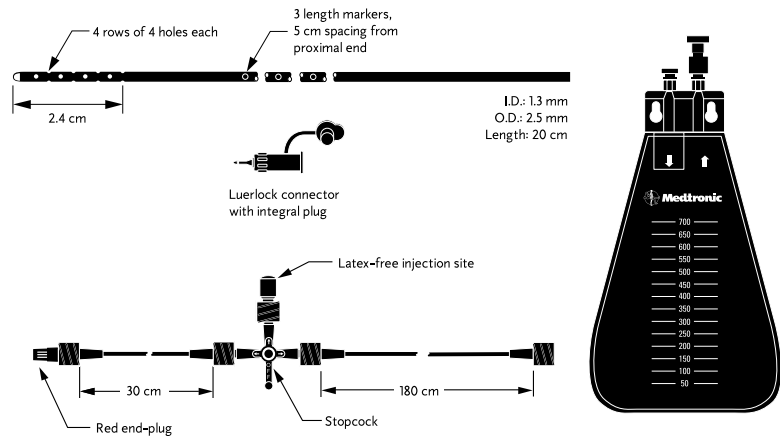
EDM Ventricular Drainage Kit

Included with product:

- Becker EDM Ventricular Catheter, Barium Impregnated, 20 cm (REF No. 46115)
- Luerlock Connector with Integral Plug
- Stainless Steel Stylet (not shown)
- Becker EDMS Drainage Bag, 700 mL
- Braided Cord (not shown)
- EDM Patient Connection Line Assembly

Product

25030



EDM Ventricular Drainage Kit with 120 mL Graduated Chamber

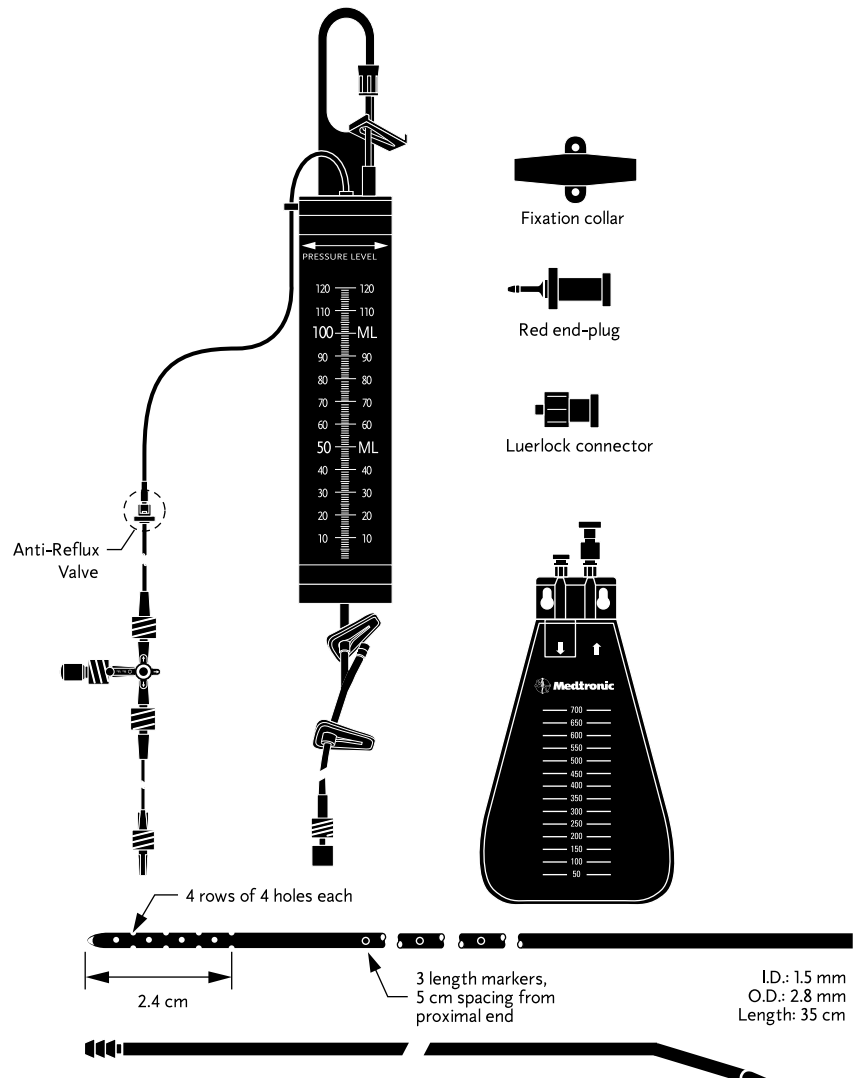
Included with product:

- EDM Drainage Assembly
- EDM Ventricular Catheter, 35 cm, Barium Impregnated (REF No. 46118), with Trocar
- Stainless Steel Stylet (not shown)
- Luerlock Connector
- Red End-Plug
- Fixation Collar
- EDM Drainage Bag, 700 mL (REF No. 46124)
- Braided Cord (not shown)
- Graduated Pressure Scale Tape (not shown)
- Anti-Reflux Valve

Product

Quantity

27297	Kit (single)
46141	5 pack carton



Basic Lumbar Drainage Systems

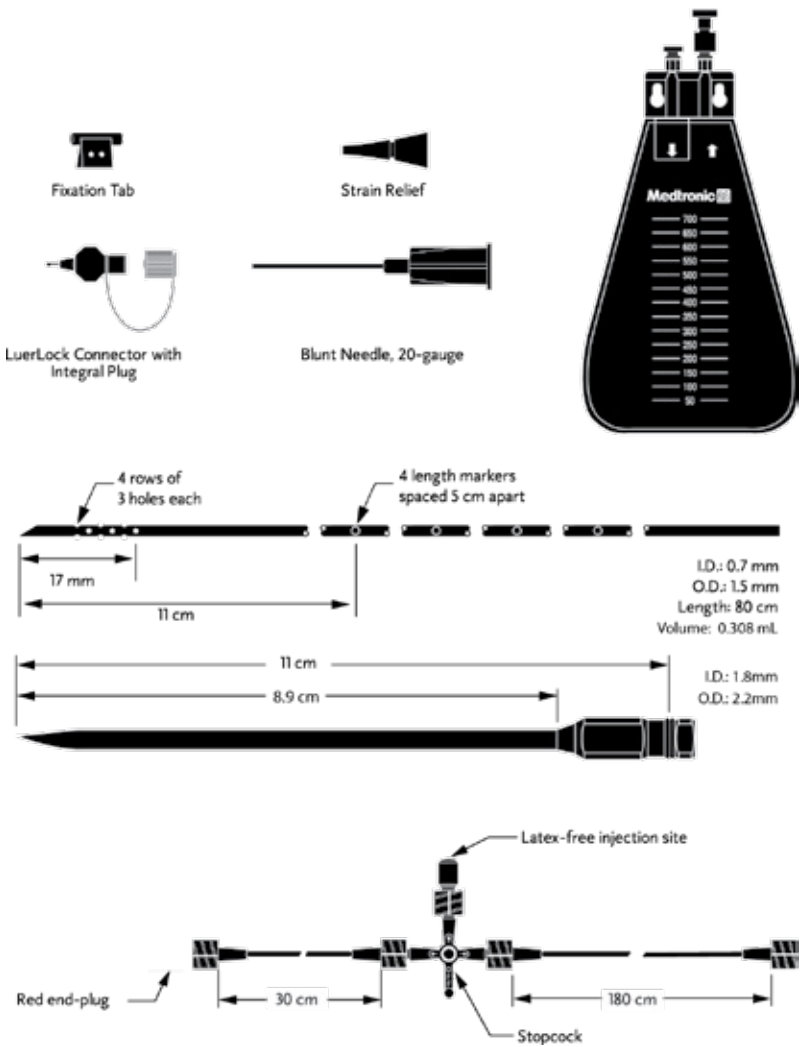
EDM Lumbar Drainage Kit

Included with product:

- EDM Lumbar Catheter, 80 cm, Barium Impregnated
- Tuohy Needle, 14-gauge, with Huber Tip
- Blunt Needle, 20-gauge
- Fixation Tabs (2)
- Luerlock Connector with Integral Plug
- Strain Relief
- EDM Patient Connection Line Assembly
- EDM Drainage Bag, 700 mL
- Braided Cord (not shown)
- Guidewire with Adjustable Stop (with closed tip only; not shown)

Product	Quantity
27303	Open Tip (Kit), Single
27304	Closed Tip (Kit), Single (not shown)*
46441	Open Tip, 5 pack carton (not shown)
46442	Closed Tip, 5 pack carton (not shown)*

*See REF No. 46419 for illustration of a Closed Tip Lumbar Catheter.

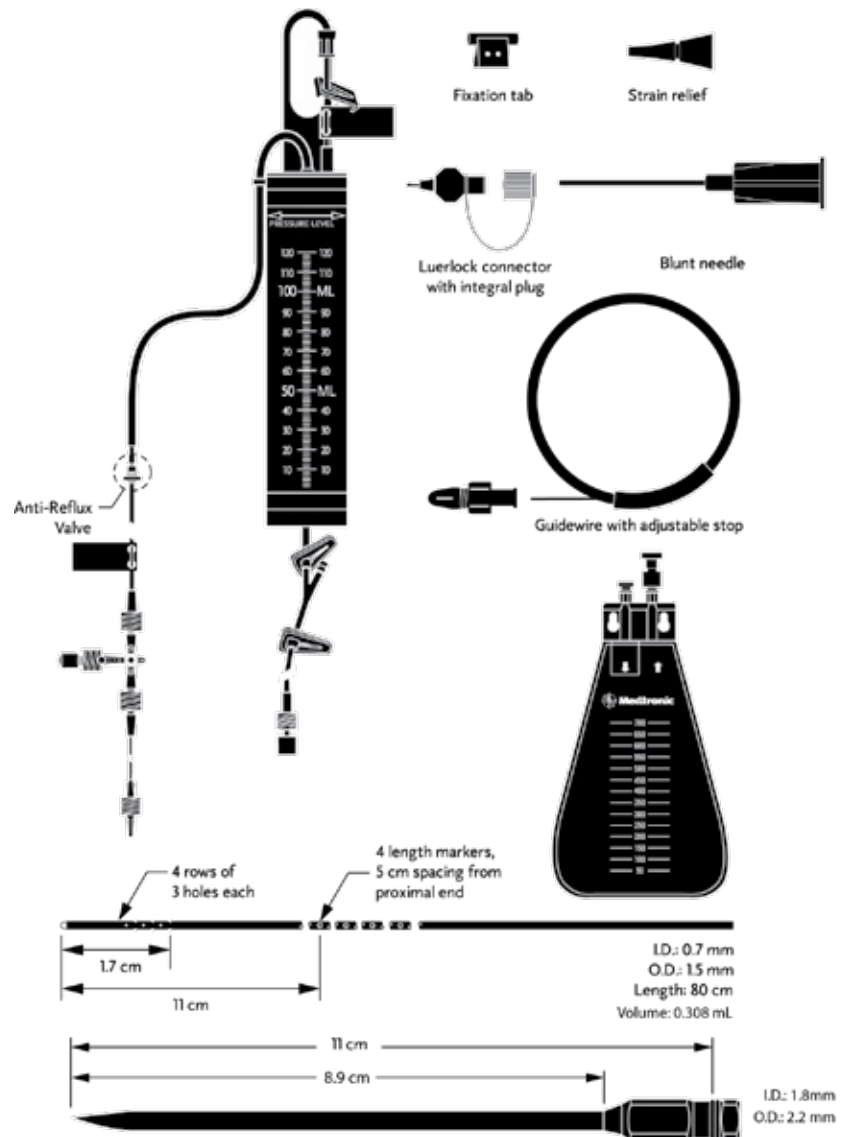


EDM Lumbar Drainage Kit with 120 mL Graduated Chamber

Included with product:

- EDM Drainage Assembly
- Lumbar Catheter, 80 cm, Closed Tip,
- Barium Impregnated
- Tuohy Needle, 14-gauge, with Huber Tip
- Guidewire with Adjustable Stop
- Strain Relief
- Fixation Tabs (2)
- Luerlock Connector with Integral Plug
- Blunt Needle, 20-gauge
- EDM Drainage Bag, 700 mL
- Braided Cord (not shown)
- Graduated Pressure Scale Tape (not shown)
- Anti-Reflux Valve

Product	Quantity
27302	Kit (Single)
46440	5 pack carton

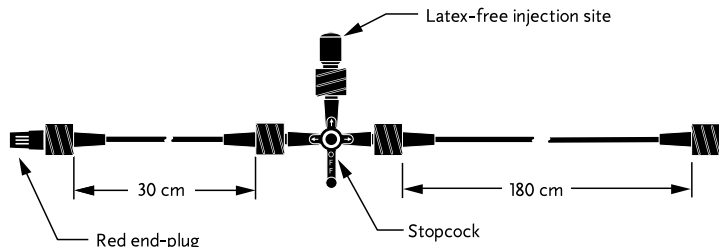


General Drainage Accessories

EDM Patient Connection Line Assembly

Product

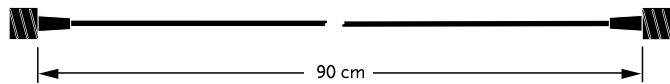
46126



EDM Patient Connection Line Assembly with No Stopcock

Product

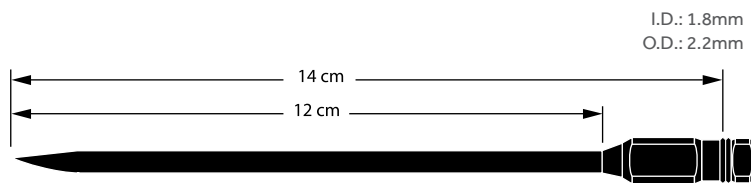
23045



Longer 14-gauge Tuohy Needle with Huber Tip

Product

27186



Ventriculostomy Kit

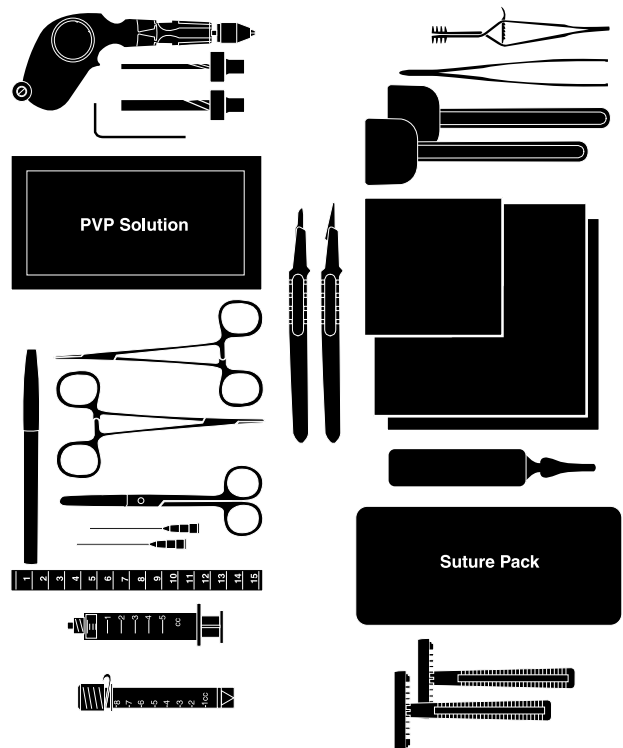
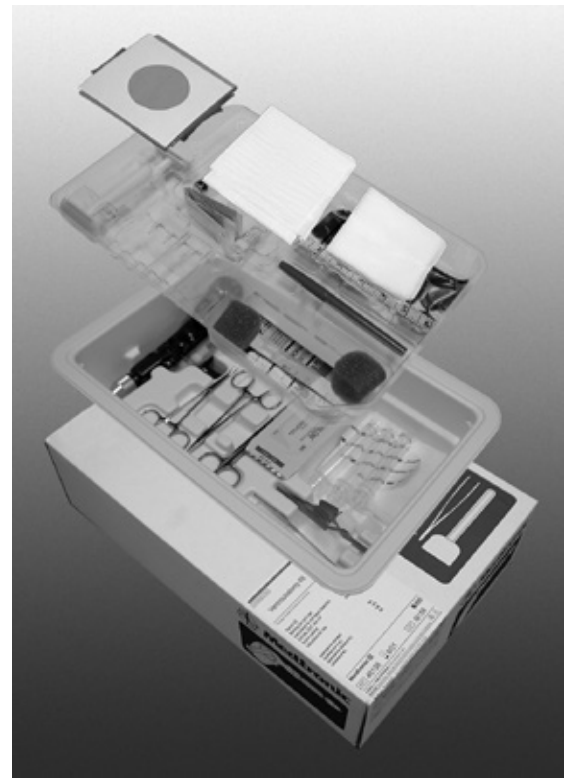
Product

46156*

* Not available in Europe

Included with product:

Description	Quantity
Razor	2
Sponge Stick	2
PVP Scrub Pack	1
PVP Solution, 4 oz.	1
Clear Fenestrated Procedure Drape with Adhesive	1
Blotting Towels	2
Luerlock Syringe	1
23-gauge x 1-1/2" Needle	1
18-gauge x 1-1/2" Needle	1
#11 Scalpel	1
#15 Scalpel	1
Adson Forcep with Teeth	1
Skin Marker with 6" Ruler	1
Mosquito Forcep, Curved	1
Webster Needle Holder	1
Small Self-Retaining Retractor	1
Cranial Hand Drill with Adjustable Chuck	1
5/32" Drill Bit with Adjustable Stop	1
1/4" Drill Bit with Adjustable Stop	1
Allen Wrench	1
Prep Tray	1
Instrument Tray	1
CSR Wrap, 36" x 36"	1
30 cc 1% Lidocaine with Epinephrine and Leaflet	1
4-0 Nylon Suture with FS-2 Needle	1
Blunt Suture Scissors	1
PVP Ointment	1
4" x 4" 12-ply Gauze	20
Culture Tube with Screw Cap	3
Transparent Wound Dressing	1



Ventriculostomy Kit – European

Does not include Lidocaine with Epinephrine, PVP Scrub, PVP Solution, or PVP Ointment

Product

46154

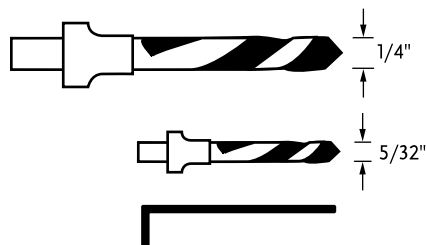
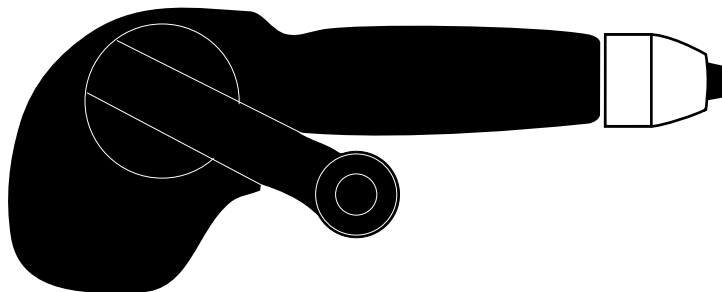
Cranial Hand Drill

Included with product:

- Adjustable Chuck
- 5/32" Drill Bit with Adjustable Stop
- 1/4" Drill Bit with Adjustable Stop
- Allen Wrench

Product

24050



SEPS - Subdural Evacuating Port System

Product

11-0401-CAL*

Kit Includes:

Description	Quantity
Evacuating Port	1
Drill Bit	1
Safety Stop Collar	1
Stop Collar Setscrew	1
L-Key Hex Wrench	1
Suction Reservoir	1
Silicone Tubing	1
6" Plastic Ruler	1
Hand Drill	1
Adson Forceps, 1 x 2 Teeth	1
Adson Forcep, Serrated	1
Needle Holder	1
Skin Retractor	1
#11 Scalpel With Handle	1
#15 Scalpel With Handle	1
Iris Scissors	1
Razor	1
12cc Syringe	1
18G x 1.5" Filtered Needle	1
25G x 1.5" Needle	1
25G x 5/8" Needle	1
18G x 3.5" Spinal Needle	1
3-0 Nylon Sutures	1
Fenestrated Drape	1
Absorbent Towels	4
Gauze Sponges	10
Tegaderm™ Wound Dressing	2
Medicine Cups	2
Skin Marker	1
IFU	1
Chloraprep™ Applicator	1
PVP Ointment	3
1% Lidocaine with Epinephrine	1

* Not available in Europe



SUBDURAL EVACUATION PORT SYSTEM (SEPS™)

SEPS - Subdural Evacuating Port System

Product

11-0401-CE

Kit Includes:

Description	Quantity
Evacuating Port	1
Drill Bit	1
Safety Stop Collar	1
Stop Collar Setscrew	1
L-Key Hex Wrench	1
Suction Reservoir	1
Silicone Tubing	1
6" Plastic Ruler	1
Hand Drill	1
Adson Forceps, 1 x 2 Teeth	1
Adson Forcep, Serrated	1
Needle Holder	1
Skin Retractor	1
#11 Scalpel With Handle	1
#15 Scalpel With Handle	1
Iris Scissors	1
Razor	1
12cc Syringe	1
18G x 1.5" Filtered Needle	1
25G x 1.5" Needle	1
25G x 5/8" Needle	1
18G x 3.5" Spinal Needle	1
3-0 Nylon Sutures	1
Fenestrated Drape	1
Absorbent Towels	4
Gauze Sponges	10
Tegaderm™ Wound Dressing	2
Medicine Cups	2
Skin Marker	1
IFU	1



NEUROENDOSCOPY

Contents

Neuroendoscopy 108

Note: Dimensions included in this catalog are for reference only.
Neither the finished product, nor materials used during manufacture of product, contain latex.

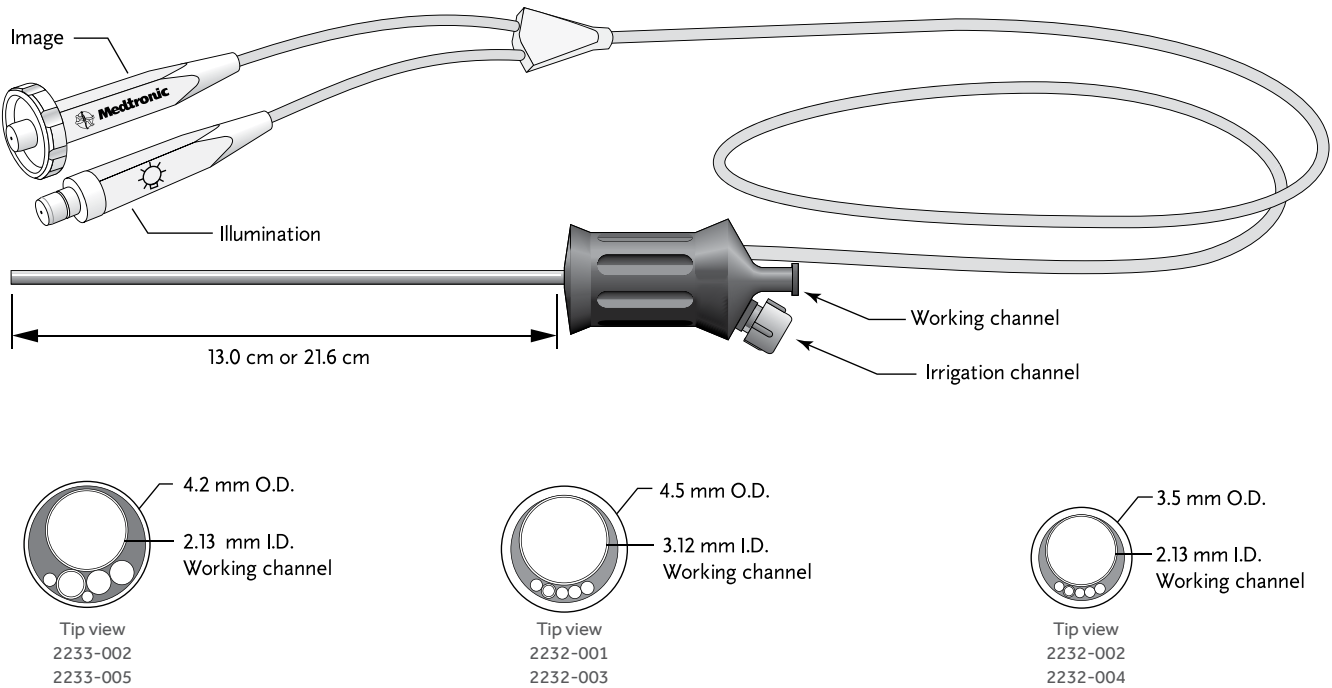
NEUROENDOSCOPY

Neuroendoscopy products meet a variety of needs for visualization of small and difficult-to-access surgical compartments. From the ChannelScope™ to the NeuroPEN™ — all neuroendoscopes are designed to be lightweight single-use disposable products. These scopes minimize the risk of cross contamination, simplify set-up time, and provide consistent, high-quality imagery. Neither the finished product, nor materials used during manufacture of product, contain latex.

Channel™ Neuroendoscopes

Designed for intraventricular surgery

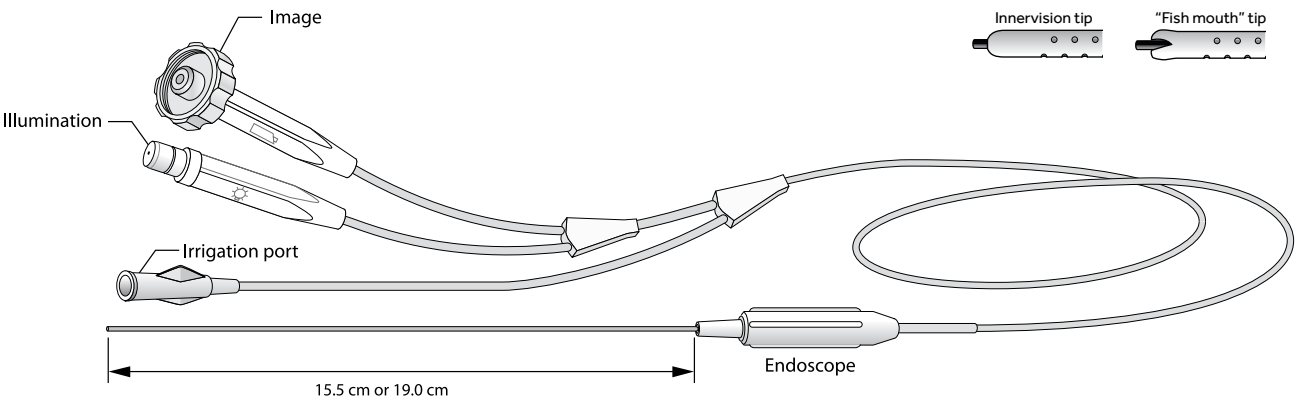
- High-resolution endoscopes with 30,000 pixel fibers provide consistent, high-quality imagery.
- Separate inflow and outflow channels facilitate balancing irrigation with intracranial pressure.
- Lightweight design removes the bulk and weight of the camera away from the hand.
- The fiberoptic design permits the endoscope to be held in a retractor arm with minimal risk of damage to the optics.



Shaft Product	Total Scope Length	Outer Length	Working Channel Diameter	Inner Diameter	Pixel Resolution	Peelaway Sheath Fibers	Needed for Surgery
2233-005	13.0 cm	17.2 cm	4.2 mm	2.13 mm	High	30,000	3805-014
2233-002	21.6 cm	25.8 cm	4.2 mm	2.13 mm	High	30,000	3805-014
2232-003	13.0 cm	17.2 cm	4.5 mm	3.12 mm	Standard	10,000	3805-015
2232-001	21.6 cm	25.8 cm	4.5 mm	3.12 mm	Standard	10,000	3805-015
2232-004	13.0 cm	17.2 cm	3.5 mm	2.13 mm	Standard	10,000	3805-012
2232-002	21.6 cm	25.8 cm	3.5 mm	2.13 mm	Standard	10,000	3805-012

NeuroPEN™ Neuroendoscopes
Designed for shunt placement

- Stylet handle enables unencumbered placement of ventricular catheters away from the choroid plexus and other anatomical structures.
- Irrigation channel maintains clear field of view.
- Kits contain an endoscope and a catheter
- Length markers on catheters clearly identify insertion depth.
- Patented right angle clip provides a non-kinking bend in the catheter at the burr hole site.
- Unique slit tip configuration glides smoothly through tissue, unlike conventional "fish mouth" tips, which can trap tissue.

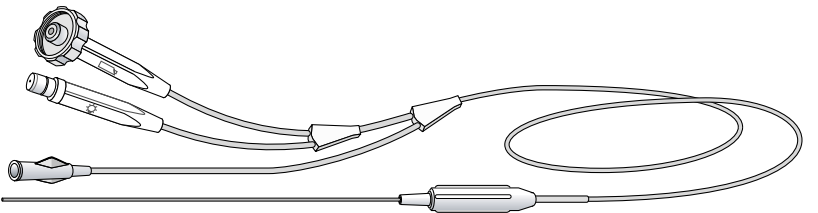


Product	Shaft Length	Outer Diameter	Shaft	Focal Length	Pixel Fibers
2120-025	15.5 cm	1.14 mm	Semi-Rigid	Long	10,000
2120-035	19.0 cm	1.14 mm	Semi-Rigid	Long	10,000

Innervision™ Endoscopic Shunt Placement Kit with Ventricular Catheter

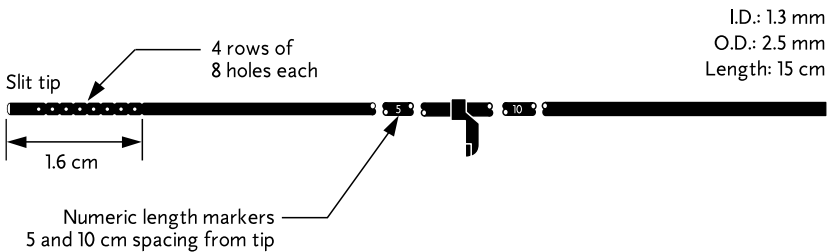
Included with product:

- Innervision Ventricular Catheter, 15 cm (Product 27240)
- NeuroPEN (Product 2120-025)



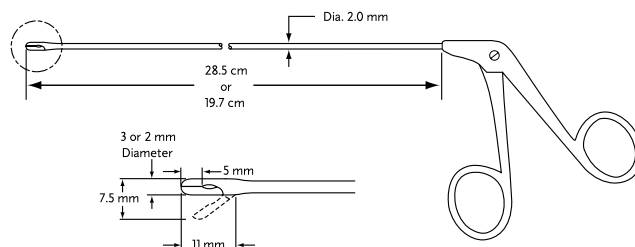
Product

2120-125



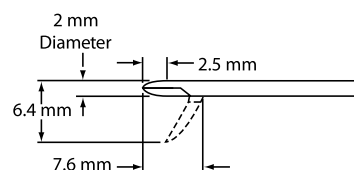
Biopsy Forceps

Product	Diameter	Working Length
3221-002	2 mm	19.7 cm
3220-002	2 mm	28.5 cm
3221-001	3 mm	19.7 cm
3220-001	3 mm	28.5 cm



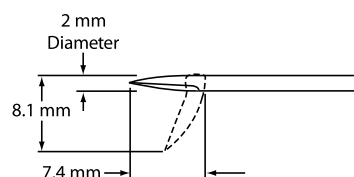
Grasping Forceps

Product	Diameter	Working Length
3241-002	2 mm	19.7 cm
3240-002	2 mm	28.5 cm



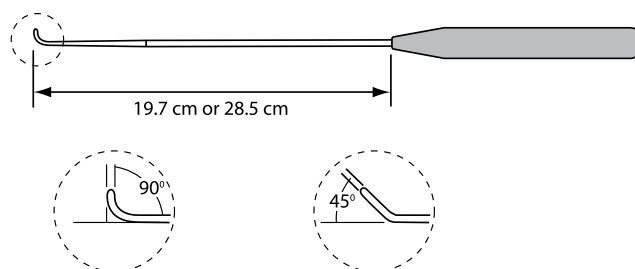
Scissors

Product	Diameter	Working Length
3321-002	2 mm	19.7 cm
3320-002	2 mm	28.5 cm



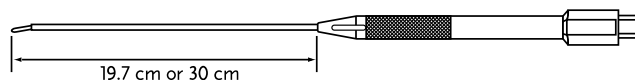
Dissecting Probe

Product	Tip Angle	Shaft Length
3700-003	90°	19.7 cm
3700-001	90°	28.5 cm
3701-003	45°	19.7 cm
3701-001	45°	28.5 cm



BiPolar Pencil Coagulator

Product	Diameter	Working Length
3900-002	2 mm	30.0 cm
3901-002	2 mm	19.7 cm



Peelaway Introducer Sheath

Disposable

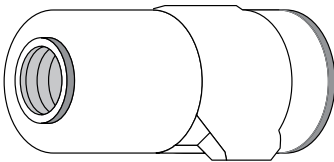
Product	Size	Qty/Pack	Used with these ChannelScopes
3805-012	12F	5	2232-002 and 2232-004
3805-014	14F	5	2233-002 and 2233-005
3805-015	15F	5	2232-001 and 2232-003



Optical Coupler, High Resolution

Product

5189-001

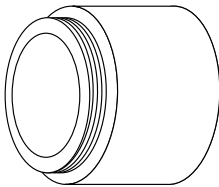


Expansion Ring

For use with the NeuroPEN and Standard Resolution Channel Neuroendoscopes (All endoscopes with 10,000 pixel-fiber resolution need this adapter)

Product

5189-901

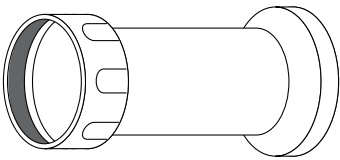


Eyepiece

Adapter needed for use with "B-mount" type Camera Systems.

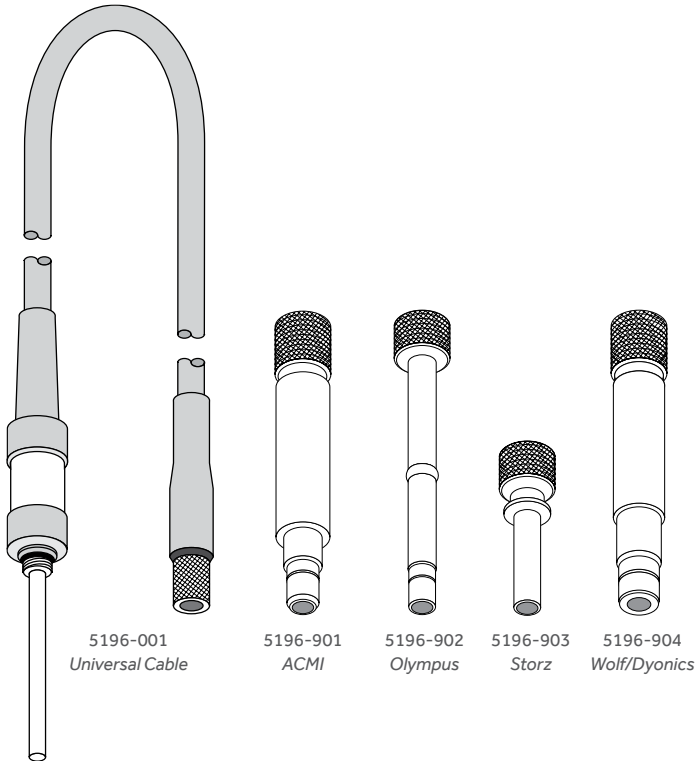
Product

5188-001



Universal Cable and Adapters

Product	For use with	Size
5196-001	Universal Cable	1 mm
5196-901	ACMI	n/a
5196-902	Olympus	n/a
5196-903	Storz	n/a
5196-904	Wolf/Dyonics	n/a



CRANIAL REPAIR

Contents

TiMesh™ Cranial Plating System.....	114
INVISx™ Cranial Fixation System	124
Clip Gun™	126
Durepair™ Dura Regeneration Matrix.....	128
Neuray™ Surgical Patties and Strips	129

Note: Dimensions included in this catalog are for reference only.
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TIMESH™ CRANIAL PLATING SYSTEM

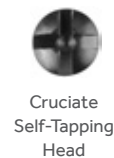
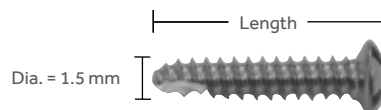
1.5/1.6 mm System

Screws — Titanium (ASTM F-136)

- 1.6 mm Screws are compatible with all 1.5 mm Plates

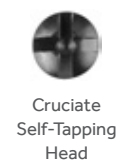
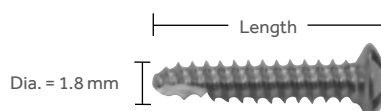
Cruciate, Self-Tapping Screws

Product	Diameter (mm)	Length (mm)	Quantity/Pkg.
015030	1.5	3	6
015040	1.5	4	6
015050	1.5	5	6



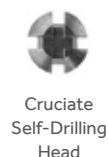
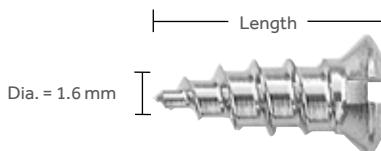
Cruciate, Rescue Screws

Product	Diameter (mm)	Length (mm)	Quantity/Pkg.
018030	1.8	3	6
018050	1.8	5	6



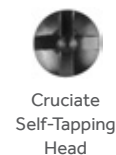
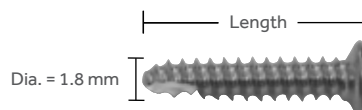
Cruciate, Self-Drilling Screws (SDS)

Product	Diameter (mm)	Length (mm)	Quantity/Pkg.
9001635	1.6	3.5	6
9011635	1.6	3.5	1
9001640	1.6	4.0	6
9011640	1.6	4.0	1



Cruciate, Rescue Screws (for SDS)

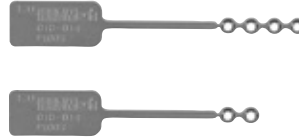
Product	Diameter (mm)	Length (mm)	Quantity/Pkg.
8001830	1.8	3	6
8011830	1.8	3	1
8001850	1.8	5	6
8011850	1.8	5	1



Plates — CP Titanium (ASTM F-67): Grades 1, 3

Straight Plates, Standard

Product	No. of Holes	Shaft Size (mm)
015-040	2	4
015-042	2	8
015-044	2	12
015-246	4	2.5
015-247	4	5
015-016	20	3.3
015-017	20	4
015-018	20	5



Straight Plates, Rigid

Product	No. of Holes	Shaft Size (mm)
015-040-C	2	4
015-042-C	2	8
015-044-C	2	12
015-016-C	20	3.3
015-017-C	20	4
015-018-C	20	5



Curved Plates, Standard

Product	No of Holes	Description
015-090	12	Curved Plate



Square and Rectangle-Plates, Standard

Product	No. of Holes	Description
015-257	4	Standard Plate, Square
015-258	4	Small Rectangle



Square Plates, Rigid

Product	No. of Holes	Description
015-257-C	4	Small Square



H Plates, Standard

Product	No. of Holes	Hole Config.
015-160	7	3H x 1H x 3H



Plates — CP Titanium (ASTM F-67): Grades 1, 3

T Plates, Standard

Titanium Product	No. of Holes	Hole Config.	Shaft Size (mm)
015-130	6	3H x 3H	2.5



Y Plates, Standard

Titanium Product	No. of Holes	Hole Config.	Shaft Size (mm)
015-230	6	1H x 1H x 4H	2.5
015-233	6	3H x 3H	2.5



Double Y Plates, Standard

Titanium Product	No. of Holes	Hole Config.	Shaft Size (mm)
015-236	6	3H x 3H	2.5
015-237	6	3H x 3H	5



X Plates, Standard

Titanium Product	No. of Holes
015-255	4



Bur Hole Covers, Standard

Titanium Product	Dia. (mm)	Description
015-262-11	11	Fan Blade
015-262-14	14	Fan Blade
015-262-18	18	Fan Blade



Bur Hole Covers, Standard

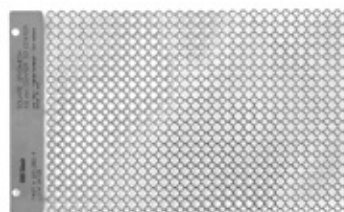
Titanium Product	Dia. (mm)	Description
015-260-11	11	Mesh
015-260-14	14	Mesh
015-260-18	18	Mesh



Mesh — Titanium (ASTM F-67): Grades 1, 3

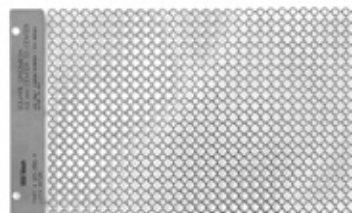
Grids, Standard

Titanium Product	Shaft Length (mm)	Description
015-2001-4	4	Grid, 115 x 75 mm x 0.6 mm
015-2001-5	5	Grid, 113 x 78 mm x 0.6 mm



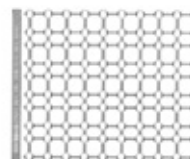
Grids, Rigid

Titanium Product	Shaft Length (mm)	Description
015-2001-4-C	4	Grid, 115 x 75 mm x 0.6 mm
015-2001-5-C	5	Grid, 113 x 78 mm x 0.6 mm



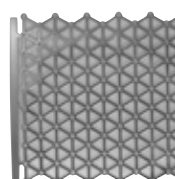
Square-Rectangle Grid, Standard

Titanium Product	Description
015-2010	Square-Rectangular Gridmesh, 45 x 55 mm x 0.6 mm



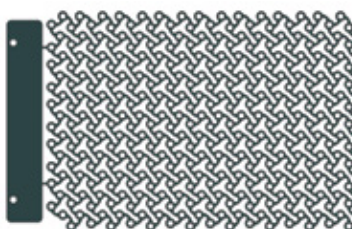
Isogrid, Standard

Titanium Product	Description
015-2050	Isogrid, 75 x 72 mm x 0.6mm



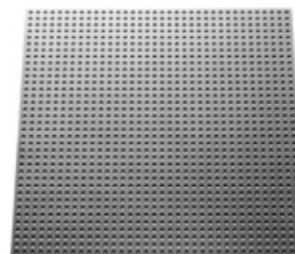
FlexMesh™

Product	Description
8001511-3	50 mm x 56 mm, 0.3 mm thickness, CP 1 (Std.)
8001511-6	50 mm x 56 mm, 0.6 mm thickness, CP 1 (Std.)
8001521-3	113 mm x 77 mm, 0.3 mm thickness, CP 1 (Std.)
8001521-6	113 mm x 77 mm, 0.6 mm thickness, CP 1 (Std.)
8001523-6	113 mm x 77 mm, 0.6 mm thickness, CP 3 (Rigid)
8001531-6	148 mm x 148 mm, 0.6 mm thickness, CP 1 (Std.)
8001533-6	148 mm x 148 mm, 0.6 mm thickness, CP 3 (Rigid)



Rigid Cranial Mesh

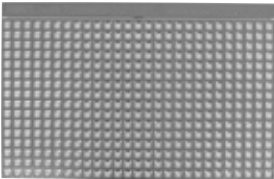
Product	Description
016-200	200 mm x 200 mm x 0.6 mm
016-152	152 mm x 152 mm x 0.6 mm
016-128	128 mm x 79 mm x 0.6 mm
016-120	120 mm x 120 mm x 0.6 mm
016-100	100 mm x 100 mm x 0.6 mm



Mesh — Titanium (ASTM F-67): Grades 1, 3

Panels, Standard

Product	Description
235	Mesh, 128 x 79 mm x .6 mm, Nonchamfered Holes



Straps, Standard

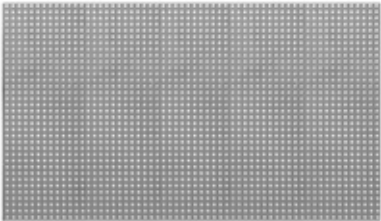
Product	Shaft Length (mm)	Description
241-02	121	Strap, Chamfered 2 Hole



Mesh — Titanium (ASTM F-67)

Grids

Product	Description
000-2090	Sugar Mesh, 75 mm x 45 mm x 0.15 mm



Pre-Shaped Cranial Mesh Implants

Specially made to fit your patient's needs

Product available in US/Canada only

Preoperatively shaped cranial mesh implants offer speed, simplicity and strength. Each implant is specially made for your patient, which can save valuable OR time. Our cranial mesh features low-profile countersunk holes which may provide a more natural cosmetic result.

SPEED

Our cranial mesh implants are pre-shaped and ready to implant.

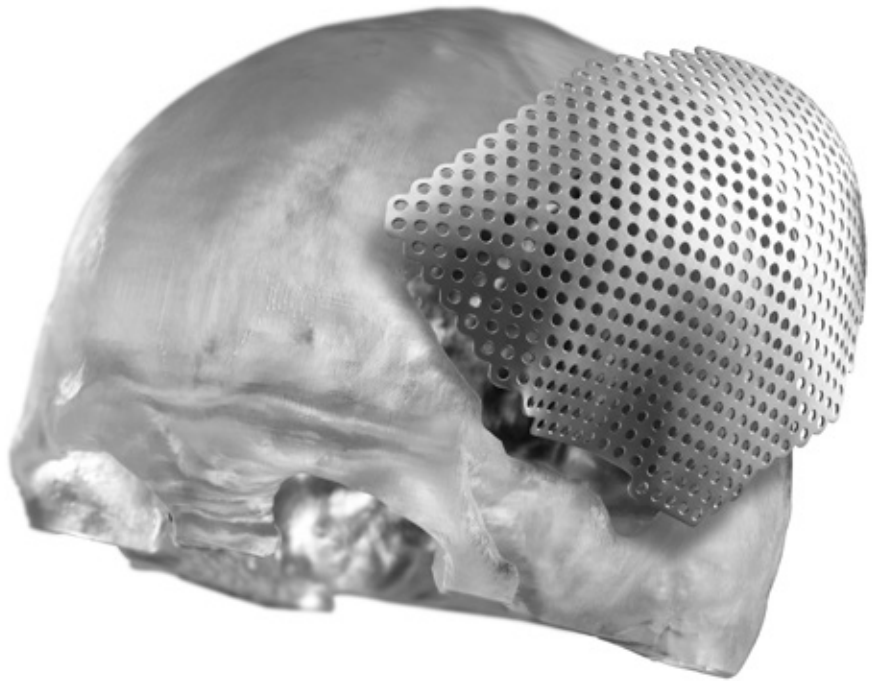
SIMPLICITY

Implantation is simplified with Medtronic's 1.6mm self-drilling or 1.5mm self-tapping screws from our titanium system.

STRENGTH

Titanium offers proven biocompatibility and strength.

Save precious OR time with a specially made cranial mesh implant for your patient.



Pre-Formed Mesh

Follow These Easy Steps to Order:

1. Provide CT scan data.

The data provided must meet the following CT scan requirements:

- Contiguous, non-overlapping slices (no gap, no overlap)
- Axial slices
- 1mm slice thickness
- Square matrix 512 x 512
- Circular (or square) FOV — the smallest FOV to encompass the entire area of interest
- Normal adult-size head
- No gantry tilt

2. Fill out the order form completely.

- A. Your order cannot be processed without a Purchase Order # (P.O.#), patient, hospital and scanner information completed on the order form.
- B. Be sure to include the P.O.# on the order form.
- C. Select your turnaround time. Your choices are 1, 2, or 3 weeks.

The process begins the 1st business day after all information (CT scan data and completed order form) is received.

If you do not have a blank order form, please contact Medtronic customer service at (800) 468-9710.

3. Send the completed order form with P.O.# and CT data using one of these methods:

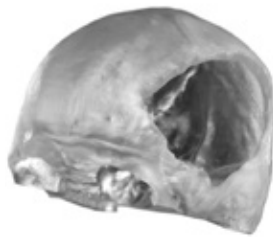
- A. Ship the Completed Form, Hard-Copy of the PO, and CT Data to:
Medtronic Neurosurgery
Attention: Specials Department
125 Cremona Drive
Goleta, CA 93117
- B. Fax order form to (651) 367-8986 and ship CT data to the above address.
- C. Email order form to rs.custommesh@medtronic.com, and ship CT data to the above address.

Note to Non-U.S. Physicians: In providing us with the patient information, you (i) confirm that you have obtained valid consent of the patient and that his/her data is forwarded to Medtronic NT in the U.S. for the purpose of designing a custom-made device, and (ii) warrant that all applicable data protection laws of the country of the patient's residence have been followed and adhered to.

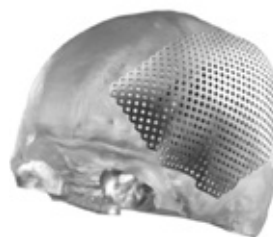
Here's How the Process Works



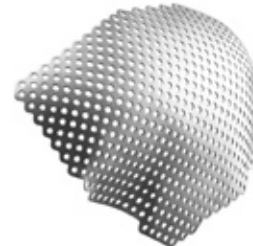
1. Send order form and disc.



2. The data is used to create an anatomical model of your patient's defect.



3. The skull models are the basis for shaping the mesh implant.



4. The patient's cranial mesh implant and skull model will be shipped based on the requested delivery time.

General Instrumentation

Legend™ Twist Drill

Product	Description	Tip Diameter (mm)	Tip Length (mm)
8TD154	1.5 mm, 4 mm Depth	1.5	4.0
8TD156	1.5 mm 6 mm Depth	1.5	6.0
8TD158	1.5 mm, 8 mm Depth	1.5	8.0
8TD174	1.7 mm, 4 mm Depth	1.7	4.0
8TD176	1.7 mm, 6 mm Depth	1.7	6.0
8TD178	1.7 mm, 8 mm Depth	1.7	8.0
8TD204	2 mm, 4 mmDepth	2.0	4.0
8TD206	2 mm, 6 mm Depth	2.0	6.0
8TD208	2 mm, 8 mm Depth	2.0	8.0



General Instrumentation

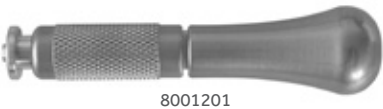
Plate Cutters

Product	Description
433	Scissor, Short Angled



Screwdriver

Product	Description
8001201	Modular Screwdriver Handle
8001205	1.6 mm, Cruciate, Self-Drilling, Shaft
8001215	1.5 mm, Cruciate, Self-Tapping, Shaft
8001222	2.2 mm, Cruciate, Self-Tapping, Shaft



Battery-Powered Screwdriver
US Only

Product	Description
8004100	Battery-Powered Driver Handpiece
8004101	Battery-Powered Driver, Battery, Single
8004105	Battery-Powered Driver, Battery, 5-Pack (not shown)



Storage Trays and Containers

1.5 Self-Tapping (Cruciate or Quadrive) Cranial Fixation System (Assembly) (not shown)

Product	Description
8001501	

System includes the following:

8009000	Base
8009002	Plate Caddy
8009008	Front Lid
8001503	Top Lid (shown)
8001505	Screw Caddy (1.5 Self Tapping Only) (not shown)

1.6 Self-Drilling (Cruciate) Cranial Fixation System Assembly

Product	Description
8001602	

System includes the following:

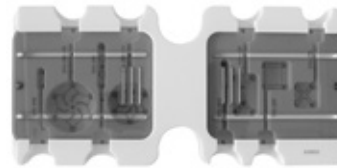
8009000	Base
8009002	Plate Caddy
8009008	Front Lid
8001603	Top Lid
8001605	Screw Caddy (1.6 SDS only)



8001602



8009000



8009002



8009008



8001603



8001605

INVISx™ CRANIAL FIXATION SYSTEM

The **INVISx™ cranial fixation system** is designed to assure the structural stability of the replaced skull flap following a craniotomy procedure.

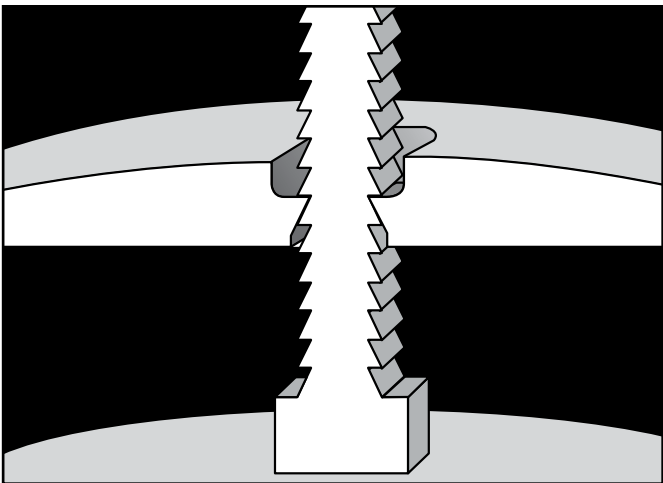
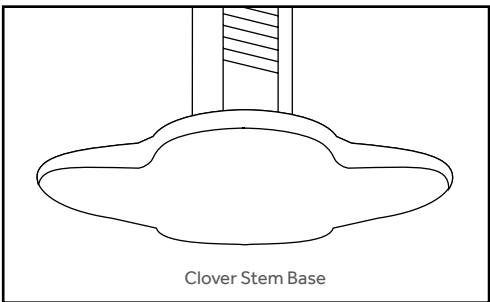
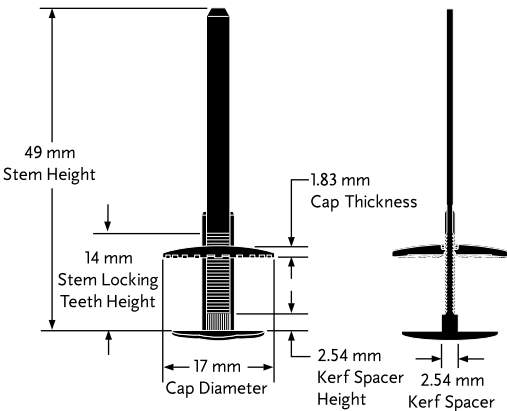
Features and Benefits

- Radiolucent – Permanent locks provide CT and MR compatibility, resulting in unobstructed imaging of patient anatomy
- Adaptable - Polymer material and design combine to augment ability of locks to contour to the anatomy
- Easy – Only four steps necessary to fixate a cranial flap
- Easy to Use - Intuitive ergonomic instrumentation facilitates handling

INVISx™ Lock

- Superior cap interfaces with stem teeth to provide stable, strong fixation
- Clover design of inferior cap enhances adaptability to anatomy

Product	Description
60100	(2/box)
60101	(1/box)
60110	Shelf Pack (10 boxes of REF 60100)



INVISX™ Cranial Fixation System Instrument Set (not shown)

Product

60700

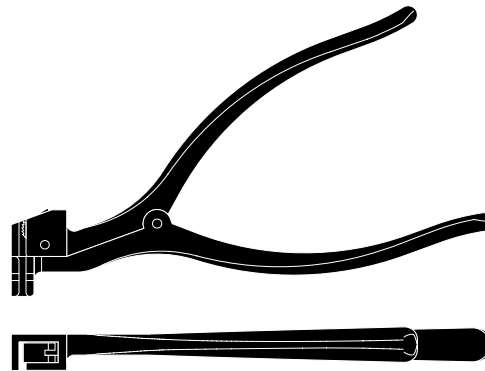
Includes REF No. 60710, 60720, 60730 (not shown)

Tensioning Instrument

- Intuitive stainless steel instrument designed to advance cap down onto skull
- Ergonomic design
- Easy to clean and sterilize (no disassembly required)

Product

60710

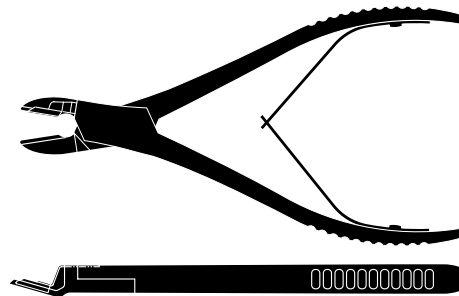


Trimming Instrument

- Stainless steel trimming instrument designed to trim stem flush with the top of the superior cap
- Retention clip designed to retain stem remnant
- Easy to clean and sterilize
- Instrument can be used to remove cap from stem for site revisits

Product

60720

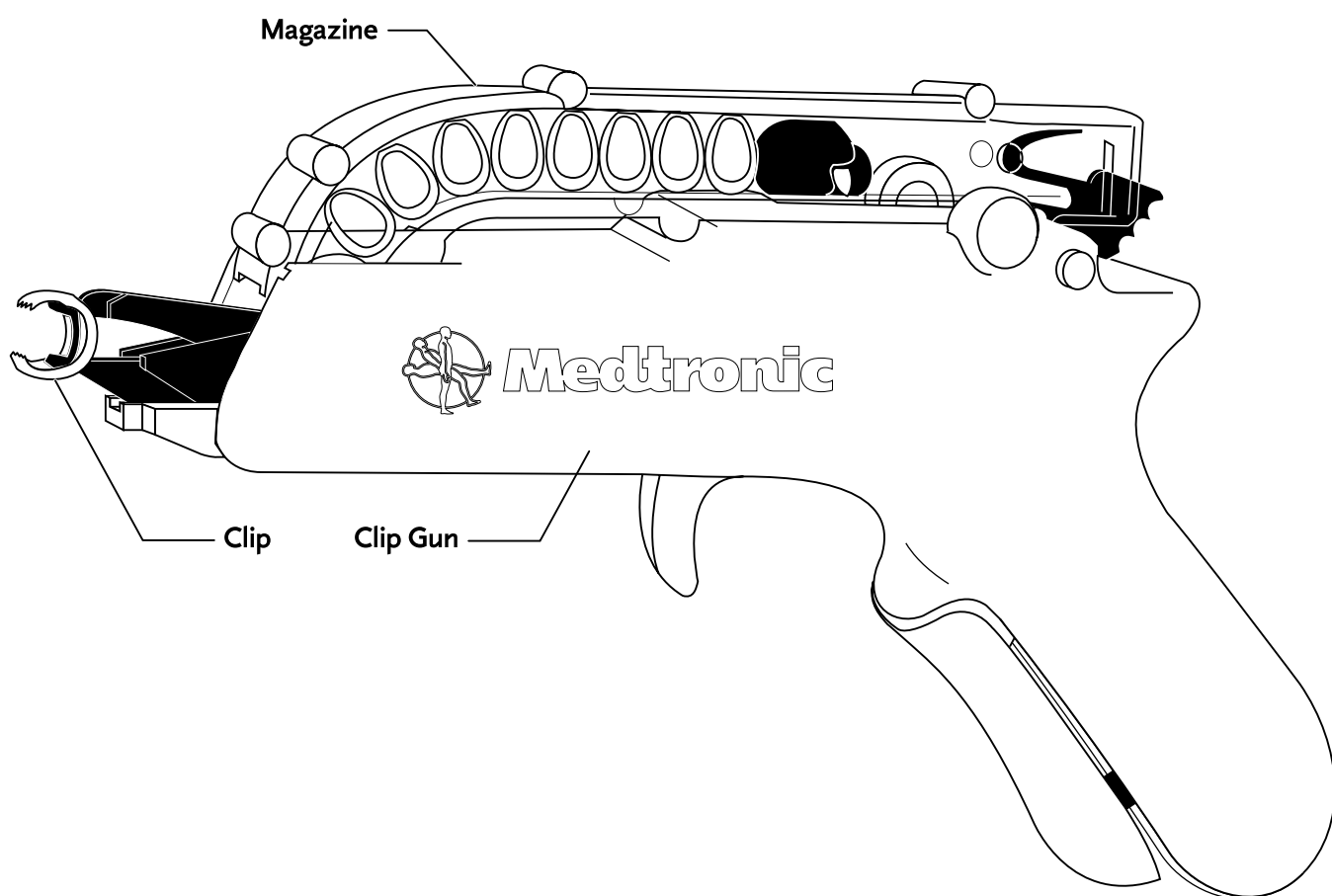


The single-use disposable Clip Gun Kit contains a Clip Gun, pre-loaded magazines with scalp clips, and removal forceps.

Raney-type clips are designed to provide hemostasis during cranial surgery by preventing arterial bleeding from small vessels of the skin and deeper vessels under the scalp.

Each clip controls bleeding locally along the segment to which it is applied; therefore, the number of clips required for hemostasis is dictated by incision length. Clips are placed in tandem along the incision edge, with no more than a 1 cm gap between clips. Scalp clips are green to enhance visibility and are designed with a serrated edge and a round "hinge" area.

The Clip Gun, magazine with clips, and removal forceps are packaged sterile and non-pyrogenic and are for single (one-time) use only.

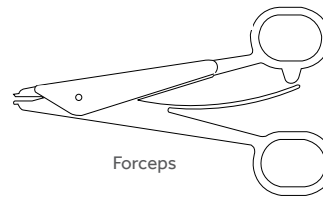
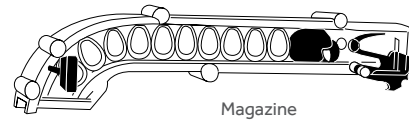
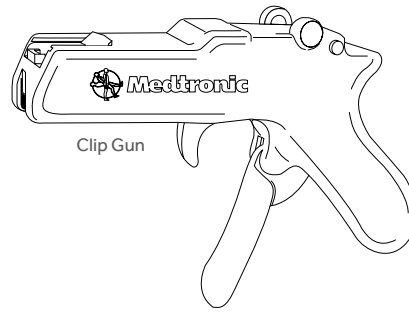


Clip Gun Kit

Included with Kit:

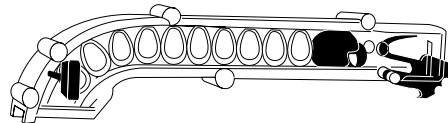
- Clip Gun (Qty. 1)
- Magazine (Qty. 3)
- Forceps (Qty. 1)

Product	Quantity
CG8900	1 Kit
CG8901	10 Kits



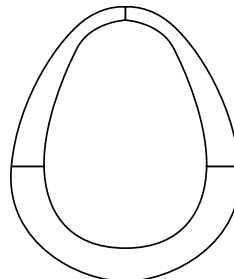
Clip Gun Magazine

Product	Quantity
CM8902	5



Raney Clips

Product	Quantity
CL8903	20 packs of 10 clips each



DUREPAIR™ DURA REGENERATION MATRIX

Durepair™ Dura Regeneration Matrix is a collagen implant indicated as a dura substitute for the repair of the dura mater. Durepair is supplied sterile, in a double-peel package, and is intended for **single** (one-time) **use-only**. Durepair is available in a variety of sizes intended to be cut by the surgeon to the desired shape.

Durepair™ is manufactured from bovine skin, one of the purest sources of collagen that is commercially available. The source material is solely derived from cattle obtained in compliance with United States and European regulatory requirements.*

Dura repair may be required during the following neurosurgical and spinal procedures:

- Cranial reconstruction
- Tumor removal - all craniotomies
- Skull base
- Spinal procedures
- Neurovascular procedures
- Posterior fossa decompressions
- Aneurysm clipping

Product	Description
61111	Durepair Dura Regeneration Matrix, 1" x 1"
61106	Durepair Dura Regeneration Matrix, 1" x 3"
61100	Durepair Dura Regeneration Matrix, 2" x 2"
61105	Durepair Dura Regeneration Matrix, 3" x 3"
61110	Durepair Dura Regeneration Matrix, 4" x 5"
62158	Durepair Dura Regeneration Matrix, 5" x 8" (US Only)



*Integra: PS-004rev13 Product Specifications for Durepair

NEURAY™ SURGICAL PATTIES AND STRIPS

Neuray™ Surgical Patties and Strips are intended for use during neurosurgical procedures to protect tissue, absorb fluids, and act as a filter through which to aspirate. They are used to assist in the control of bleeding with the proper surgical technique.

Neuray™ Surgical Patties

Product	Size (in.)	Size (mm)
8003097	1/4" x 1-1/2"	7 x 38 mm
8003098	1/4" x 3"	7 x 76 mm
8003099	1/4" x 1/4"	7 x 7 mm
8004000	1/2" x 1/2"	13 x 13 mm
8004001	3/4" x 3/4"	19 x 19 mm
8004002	1/2" x 1"	13 x 25 mm
8004003	1" x 1"	25 x 25 mm
8004004	1/2" x 1-1/2"	13 x 38 mm
8004005	1-1/2" x 1-1/2"	38 x 38 mm
8004006	1/2" x 2"	13 x 51 mm
8004007	1/2" x 3"	13 x 76 mm
8004008	1" x 3"	25 x 76 mm
8004009	3" x 3"	76 x 76 mm



CRANIAL REPAIR

Neuray™ Surgical Strips

Product	Size (in.)	Size (mm)
8004050	1/4" x 6"	7 x 152 mm
8004051	1/2" x 6"	13 x 152 mm
8004052	3/4" x 6"	19 x 152 mm
8004053	1" x 6"	25 x 152 mm
8004054	1-1/2" x 6"	38 x 152 mm
8004055	2" x 6"	51 x 152 mm
8004056	3" x 6"	76 x 152 mm
8004057	3-1/2" x 6"	89 x 152 mm

Non-sterile bulk product also available.



Rx only. Refer to product instruction manual/package insert for instructions, warnings, precautions and contraindications.

For further information, please call Medtronic Neurosurgery at 888.580.8860 and/or consult Medtronic's website at www.medtronic.com.

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