

Codman[®]
SPECIALTY SURGICAL

A DIVISION OF INTEGRA LIFESCIENCES



Hydrocephalus

Product Catalogue

Codman® brings you a complete range of shunt solutions

Our shunt offering provides Versatility, Precision, Flow Regulation, Infection Prevention and more.
An array of benefits for simplicity, safety, versatility and control



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- Surgical instruments are guaranteed to be free from defects in material and workmanship when maintained and cleaned properly and used normally for their intended purpose.
- Any covered product that is placed by INTEGRA under a lease, rental or installment purchase agreement and that requires repair service during the term of such placement agreement shall be repaired in accordance with the terms of such agreement.

If any covered defect occurs during the warranty period or term of such placement agreement, the purchaser or distributor should communicate directly with INTEGRA. If purchaser or distributor seeks to invoke the terms of this warranty, the product must be returned to INTEGRA. The defective product should be returned promptly, properly packaged and postage prepaid. Loss or damage in return shipment to INTEGRA shall be at sender's risk. INTEGRA's sole responsibility under this warranty shall be repair or replacement, at INTEGRA's sole discretion at INTEGRA's expense, subject to the terms of this warranty and applicable agreements.

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Programmable Valves

Codman[®] CERTAS[™] Plus

Codman[®] Hakim[®] Programmable Valve

Products Comparison



Codman® CERTAS™ Plus

**Codman® Hakim®
Programmable Valve**

Settings	8 (incl. Virtual Off)	18
Regular	●	●
Cylindrical	-	●
Small	●	●
Right Angle / Burr Hole	●	●
SiphonGuard® integrated Option	●	●
Bactiseal® unitized Option	●	-
MRI Resistance (up to 3 Tesla)	●	-
MRI compatibility (Up to 3 tesla)*	●	●

* Check Instructions For Use document for conditional MRI compatibility details.

Products References Summary

All programmable valves are packaged sterile in box of 1.

Codman® CERTAS™ Plus

	Regular		Small		Right Angle		
	Without SiphonGuard®	With SiphonGuard®	Without SiphonGuard®	With SiphonGuard®	Without SiphonGuard®	With SiphonGuard®	
Valve Only	828800	828804	828810	828814	828820	828824	
Valve System	828801	828805	828811	828815	828821	828825	
Valve System Unitized	828802	828806	828812	828816	828822	828826	
Valve System Unitized with Bactiseal®	828803	828807	828813	828817	828823	828827	
Codman CERTAS® Tool Kit						828851	
Codman® CERTAS™ Plus Electronic Tool Kit						828852	

Codman® Hakim® Programmable Valve

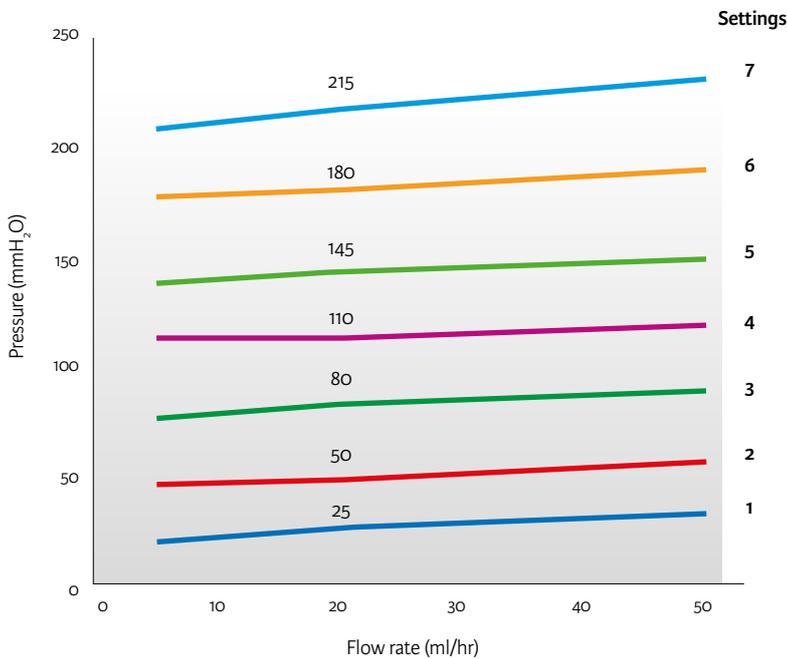
	Cylindrical		Micro		Regular		Burr Hole	
	Without Pre-Chamber	With Pre-Chamber	Without Rickham® Reservoir	With Rickham® Reservoir	Without SiphonGuard®	With SiphonGuard®	Without SiphonGuard®	With SiphonGuard®
Valve Only	823115	823110	823112	823116	823164	823162	823184	823182
Valve System	823101	823100	-	-	823834	823832	823838	823136
Valve System Unitized	-	823111	823114	823113	823844	823842	823148	823146
VPV® System						823192R		
Codman® Hakim® Programmer						823190R		

Codman® CERTAS™ Plus

The Codman® CERTAS™ Plus programmable valve offers the ability to optimize the opening pressure of a shunt system before and after implantation. A shunted patient's condition will often change over the course of their treatment making pressure changes necessary. The Codman® CERTAS™ Plus programmable valve allows a surgeon to non-invasively change the opening pressure (from 25 to 215 mm H₂O) to one of eight performance settings, which range from 1 (low pressure) to 7 (high pressure), plus performance setting 8, which is a "Virtual Off." The setting of the Codman® CERTAS™ Plus programmable valve is changed through the use of an externally applied magnetic field. Applying a specific magnetic field to the adjustable valve mechanism will permit the cam to turn slightly, increasing or decreasing the tension on the spring, and changing the setting of the valve. To avoid unintended pressure setting changes, the valve is designed to withstand external magnetic influences, including MRI up to 3 Tesla. The Codman® CERTAS™ Plus programmable valve is available in 3 different designs (regular, small and right angle) and with integrated SiphonGuard® anti-siphon device and/or unitized Bactiseal® impregnated antimicrobial catheters.

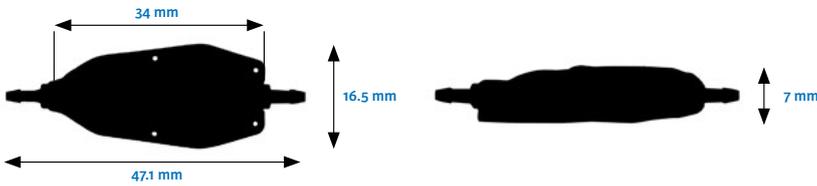


Valve Performance Chart



Settings 1, 2, 3	±20 mm H ₂ O
Setting 4	±25 mm H ₂ O
Settings 5, 6, 7	±35 mm H ₂ O
Setting 8	Intended to limit flow. Average pressure > 400 mm H ₂ O for flow rates 5 to 50 ml/hr

Codman® CERTAS™ Plus Regular

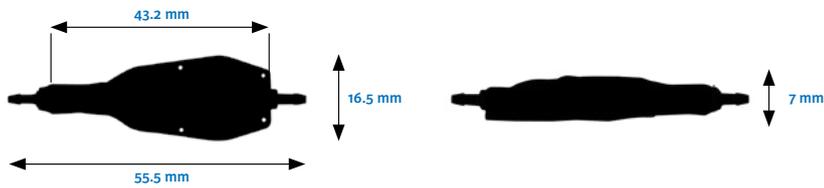


Reference	Package Content
828800	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic
828801	<p>Valve System</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter (ref. 823041) • Stainless steel stylet • 120 cm distal catheter (ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828802	<p>Valve System Unitized</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm ventricular catheter (ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828803	<p>Valve System Unitized Bactiseal®*</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm Bactiseal® ventricular catheter (Ref. 823073) • Stainless steel stylet • 120 cm Bactiseal® distal (Ref. 823074) catheter unitized • Priming adaptor plastic • Right angle adaptor plastic



*This product (828803) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Codman® CERTAS™ Plus Regular - with SiphonGuard®

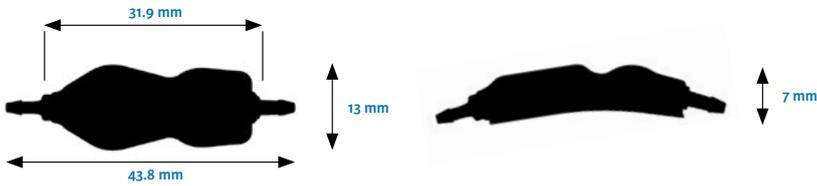


Reference	Package Content
828804	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors and SiphonGuard® device • Priming adaptor plastic
828805	<p>Valve System</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors and SiphonGuard® device • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828806	<p>Valve System Unitized</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector and SiphonGuard® device • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828807	<p>Valve System Unitized Bactiseal®*</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector and SiphonGuard® device • 14 cm Bactiseal® ventricular catheter (Ref. 823073) • Stainless steel stylet • 120 cm Bactiseal® distal catheter unitized (Ref. 823074) • Priming adaptor plastic • Right angle adaptor plastic



*This product (828807) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Codman® CERTAS™ Plus Small

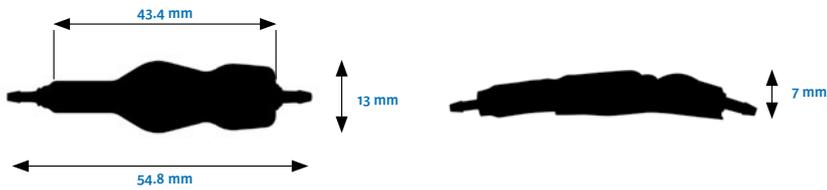


Reference	Package Content
828810	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic
828811	<p>Valve System</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828812	<p>Valve System Unitized</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828813	<p>Valve System Unitized Bactiseal®*</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm Bactiseal® ventricular catheter (Ref. 823073) • Stainless steel stylet • 120 cm Bactiseal® distal catheter unitized (Ref. 823074) • Priming adaptor plastic • Right angle adaptor plastic



*This product (828813) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Codman® CERTAS™ Plus Small - with SiphonGuard®

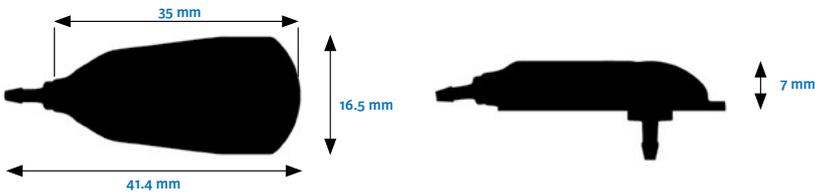


Reference	Package Content
828814	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors and SiphonGuard® device • Priming adaptor plastic
828815	<p>Valve System</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors and SiphonGuard® device • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828816	<p>Valve System Unitized</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector and SiphonGuard® device • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828817	<p>Valve System Unitized Bactiseal®*</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector and SiphonGuard® device • 14 cm Bactiseal® ventricular catheter (Ref. 823073) • Stainless steel stylet • 120 cm Bactiseal® distal catheter unitized (Ref. 823074) • Priming adaptor plastic • Right angle adaptor plastic



*This product (828817) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Codman® CERTAS™ Plus Right Angle

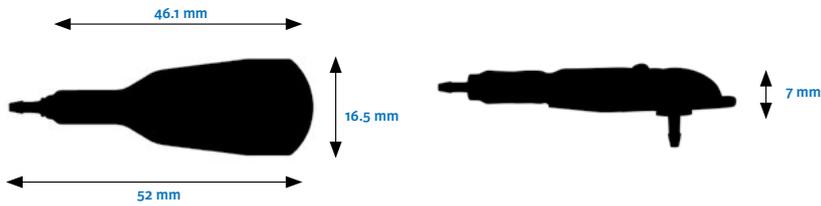


Reference	Package Content
828820	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic
828821	<p>Valve System</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828822	<p>Valve System Unitized</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828823	<p>Valve System Unitized Bactiseal®*</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm Bactiseal® ventricular catheter (Ref. 823073) • Stainless steel stylet • 120 cm Bactiseal® distal catheter unitized (Ref. 823074) • Priming adaptor plastic • Right angle adaptor plastic



*This product (828823) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Codman[®] CERTAS[™] Plus Right Angle - with SiphonGuard[®]



Reference	Package Content
828824	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors and SiphonGuard[®] device • Priming adaptor plastic
828825	<p>Valve System</p> <ul style="list-style-type: none"> • Valve with integrated plastic connectors and SiphonGuard[®] device • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828826	<p>Valve System Unitized</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector and SiphonGuard[®] device • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Priming adaptor plastic • Right angle adaptor plastic
828827	<p>Valve System Unitized Bactiseal[®]*</p> <ul style="list-style-type: none"> • Valve with integrated plastic connector and SiphonGuard[®] device • 14 cm Bactiseal[®] ventricular catheter (Ref. 823073) • Stainless steel stylet • 120 cm Bactiseal[®] distal catheter unitized (Ref. 823074) • Priming adaptor plastic • Right angle adaptor plastic



*This product (828827) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Programmers

Reference	Package Content
828852	<p>Codman® CERTAS™ Plus Electronic Tool Kit</p> <ul style="list-style-type: none"> • Locator tool • Adjustment tool • X-Ray overlay • Instructions for use • Spare batteries (one set of 2 batteries) • Screw driver
828851	<p>Codman CERTAS® Tool Kit</p> <ul style="list-style-type: none"> • Indicator tool • Adjustment tool • Locator tool, adjustable height • Locator tool, low profile • X-Ray overlay • Instructions for use
828859	<p>Codman CERTAS® X-Ray Overlay For Codman CERTAS® Tool Kit or Codman® CERTAS™ Plus Electronic Tool Kit</p>
828860	<p>Codman Certas® indicator tool</p>
828861	<p>Codman Certas adjustable height locator</p>



Pozicija Nr 35, 36, 38

Codman® Hakim® Programmable Valve*

The Codman® Hakim® Programmable Valve offers the ability to optimize the opening pressure of a shunt system before and after implantation. A shunted patient's condition will often change over the course of their treatment making pressure changes necessary. The programmable valve allows a surgeon to non-invasively change the opening pressure **between 30 mm H₂O and 200 mm H₂O in 18 steps.** The setting of the Codman® Hakim® Programmable Valve is changed through the use of an externally applied, codified magnetic field. The spring in the ball-spring mechanism of the valve sits atop a rotating spiral cam which contains a stepper motor. Applying a specific magnetic field to the stepper motor will cause the cam to turn slightly, increasing or decreasing the tension on the spring, and changing the opening pressure of the valve. The Codman® Hakim® Programmable Valve is available in multiple designs (Cylindrical, Regular, Micro, Burr Hole) and configurations.



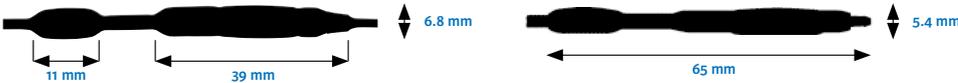
Programmer

Reference	Package Content
823192R	VPV® System* <ul style="list-style-type: none"> • Programmer • Transmitter • Power cord • Carrying case • transmission gel
823190R	Codman® Hakim® Programmer <ul style="list-style-type: none"> • Programmer • Transmitter • Power cord • Carrying case



*This product (823192R) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Codman® Hakim® Cylindrical - with Pre-Chamber



Reference Package Content

823110 **Valve Only**
 • Valve with pre-chamber
 • Straight connector titanium
 • Valve introducer plastic



14 cm open-ended proximal tube, 1.14 mm ID x 2.5 mm OD

823100 **Valve System**
 • Valve with pre-chamber
 • 114 cm ventricular catheter (Ref. 823041)
 • Stainless steel stylet
 • 120 cm distal catheter (Ref. 823045)
 • Valve introducer plastic
 • Right-angled adaptor plastic
 • Straight connector titanium



14 cm open-ended proximal tube, 1.14 mm ID x 2.5 mm OD

823111 **Valve System Unitized**
 • Valve with pre-chamber
 • 14 cm ventricular catheter (Ref. 823041)
 • Stainless steel stylet
 • 120 cm distal catheter unitized (Ref. 823045)
 • Valve introducer plastic
 • Right-angled adaptor plastic
 • Straight connector titanium



14 cm open-ended proximal tube, 1.14 mm ID x 2.5 mm OD

Codman® Hakim® Cylindrical - without Pre-Chamber



Reference Package Content

823115 **Valve Only**
 • Valve
 • Straight connector titanium
 • Valve introducer plastic



14 cm open-ended proximal tube, 1.14 mm ID x 2.5 mm OD

823101 **Valve System**
 • Valve
 • 14 cm ventricular catheter (Ref. 823041)
 • Stainless steel stylet
 • 120 cm distal catheter (Ref. 823045)
 • Valve introducer plastic
 • Right-angled adaptor plastic
 • Straight connector titanium



14 cm open-ended proximal tube, 1.14 mm ID x 2.5 mm OD

Codman® Hakim® Micro



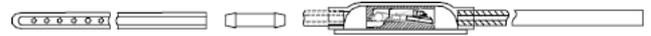
Reference	Package Content
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- | | |
|---------------|--|
| 823112 | Valve Only <ul style="list-style-type: none"> • Valve • 2 straight connectors titanium • Priming adaptor plastic |
|---------------|--|



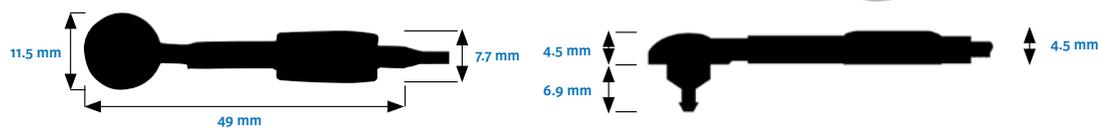
5 cm open-ended proximal tube, 1.4 mm ID x 2.7 mm OD
2.5 cm distal tube, 1 mm ID x 2.15 mm OD

- | | |
|---------------|---|
| 823114 | Valve System Unitized <ul style="list-style-type: none"> • Valve • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Valve introducer plastic • Right-angled adaptor plastic • Straight connector titanium • Priming adaptor plastic |
|---------------|---|



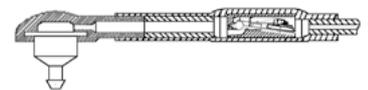
5 cm open-ended proximal tube, 1.4 mm ID x 2.7 mm OD

Codman® Hakim® Micro - with Rickham™ Reservoir



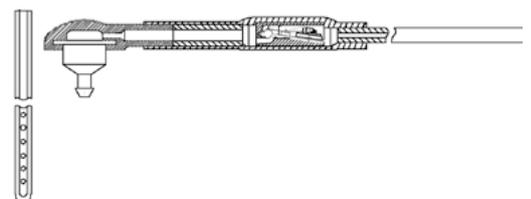
Reference	Package Content
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- | | |
|---------------|--|
| 823116 | Valve Only <ul style="list-style-type: none"> • Valve • Priming adaptor plastic |
|---------------|--|

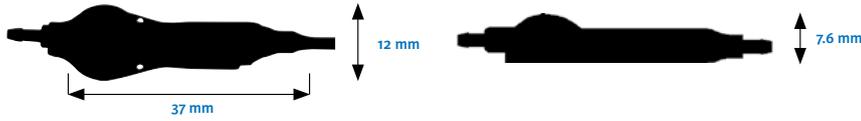


2.5 cm distal tube, 1 mm ID x 2.15 mm OD

- | | |
|---------------|--|
| 823113 | Valve System Unitized <ul style="list-style-type: none"> • Valve • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Priming adaptor plastic |
|---------------|--|



Codman® Hakim® Regular



Reference	Package Content
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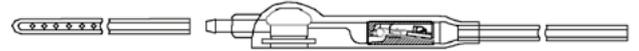
- | | |
|--------|---|
| 823164 | Valve Only <ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic |
|--------|---|



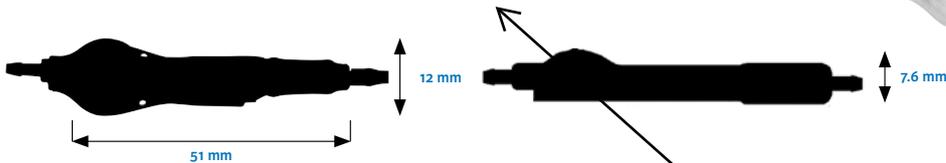
- | | |
|--------|---|
| 823834 | Valve System <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Right-angled adaptor plastic • Priming adaptor plastic |
|--------|---|



- | | |
|--------|--|
| 823844 | Valve System Unitized <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Right-angled adaptor plastic • Priming adaptor plastic |
|--------|--|



Codman® Hakim® Regular - with SiphonGuard®



Reference	Package Content
-----------	-----------------

- | | |
|--------|---|
| 823162 | Valve Only <ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic |
|--------|---|

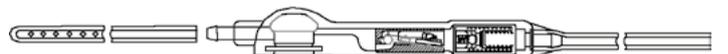


- | | |
|--------|---|
| 823832 | Valve System <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter (Ref. 823045) • Right-angled adaptor plastic • Priming adaptor plastic |
|--------|---|

Pozicija Nr 8



- | | |
|--------|--|
| 823842 | Valve System Unitized <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm ventricular catheter (Ref. 823041) • Stainless steel stylet • 120 cm distal catheter unitized (Ref. 823045) • Right-angled adaptor plastic • Priming adaptor plastic |
|--------|--|

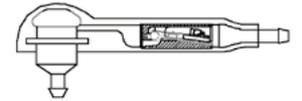


Codman® Hakim® Burr Hole

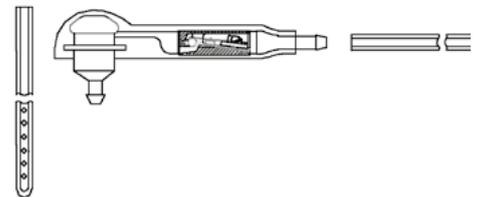


Reference Package Content

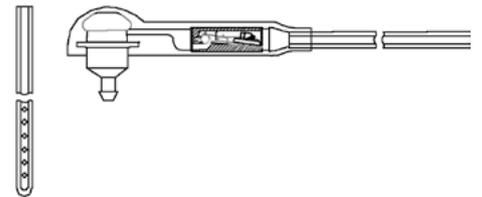
- 823184 Valve Only**
- Valve with integrated plastic connectors
 - Priming adaptor plastic



- 823838 Valve System**
- Valve with integrated plastic connectors
 - 14 cm ventricular catheter (Ref. 823041)
 - Stainless steel stylet
 - 120 cm distal catheter (Ref. 823045)
 - Priming adaptor plastic



- 823148 Valve System Unitized**
- Valve with integrated plastic connector
 - 14 cm ventricular catheter (Ref. 823041)
 - Stainless steel stylet
 - 120 cm distal catheter unitized (Ref. 823045)
 - Priming adaptor plastic



Codman® Hakim® Burr Hole - with SiphonGuard®

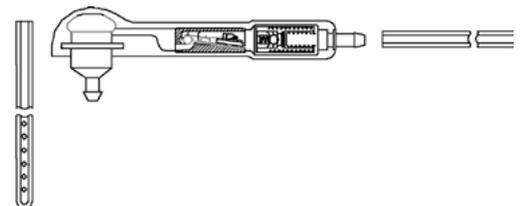


Reference Package Content

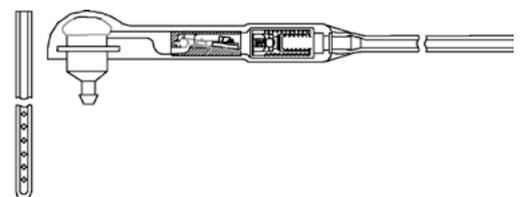
- 823182 Valve Only**
- Valve with integrated plastic connectors
 - Priming adaptor plastic



- 823136 Valve System**
- Valve with integrated plastic connectors
 - 14 cm ventricular catheter (Ref. 823041)
 - Stainless steel stylet
 - 120 cm distal catheter (Ref. 823045)
 - Priming adaptor plastic



- 823146 Valve System Unitized**
- Valve with integrated plastic connector
 - 14 cm ventricular catheter (Ref. 823041)
 - Stainless steel stylet
 - 120 cm distal catheter unitized (Ref. 823045)
 - Priming adaptor plastic



Flow Regulated Valves

OSV II[™]

Integra[®] Low Flow

Products Comparison



OSV II™

Regular	●
Small	●
Burr Hole	●
Lumbar	●
Flow Rate	20 ml/h
MRI compatibility (up to 3Tesla)*	●

* Check Instructions For Use document for conditional MRI compatibility details.
These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

Products References Summary

All flow regulated valves are packaged sterile in box of 1.

OSV II™

	Regular		Burr Hole		Lumbar		Low Pro
	With Antechamber	Without Antechamber	With Antechamber	Without Antechamber	With Antechamber	Without Antechamber	With Antechamber
Valve Only	909700	909701	-	-	-	-	909700P
Valve System Unitized	909707S 909712	909708S 909713	909721	909720	-	-	909712P
Valve System One-Piece	909718 909706 909704	909719 909705	-	-	909711	909710	-

These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

OSV II™

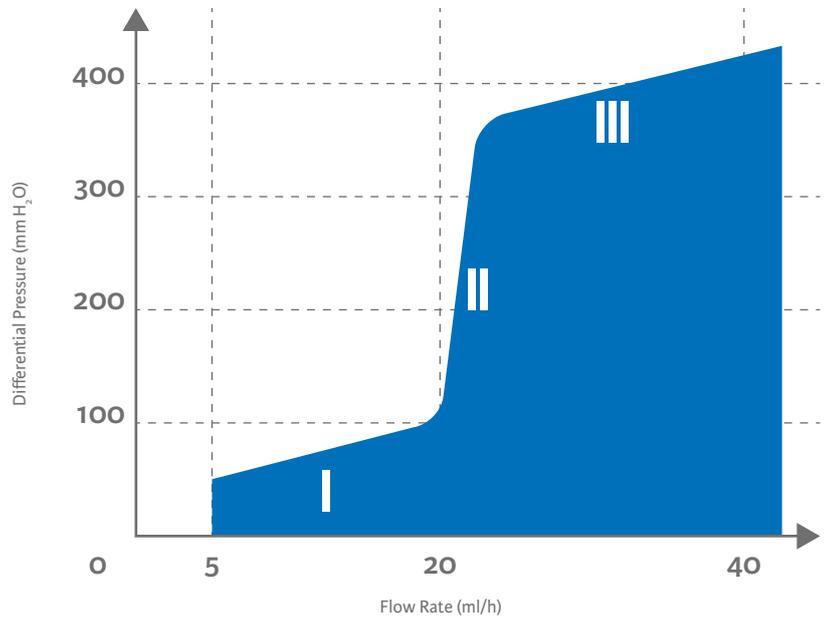
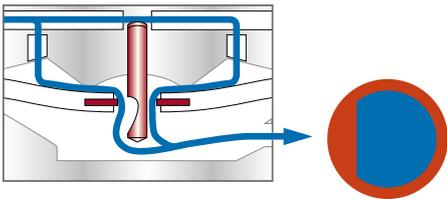
Introduced in 1987, the Orbis-Sigma Valve was the first valve to manage hydrocephalus through flow-regulation rather than conventional differential pressure regulation. The valve operates a 3-stage, variable resistance mechanism that regulates flow through the valve (Stage II) at a rate close to that of CSF secretion (around 20 ml/h).



Valve Performance Chart

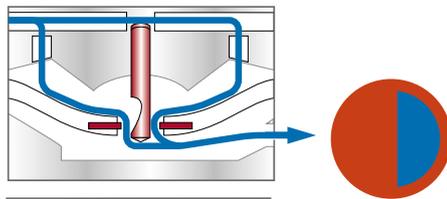
**STAGE I: 30-120 mm H₂O
Differential Pressure (DP) Stage**

This stage begins when the flow rate reaches 5 ml/h.



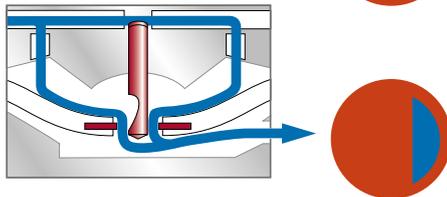
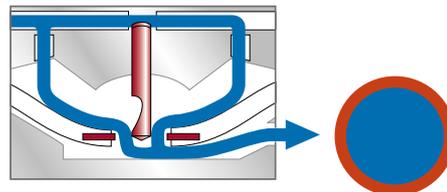
**STAGE II: 120-300 mm H₂O
Flow Regulating Stage**

Maintains a close balance between CSF flow and production rate, restricting flow around 20 ml/h, whatever the differential pressure is.



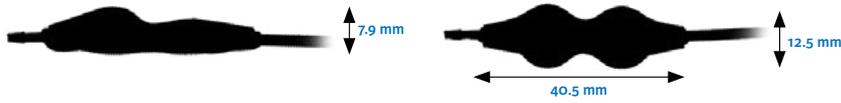
**STAGE III: Above 300 mm H₂O
Safety Stage**

Immediately restores normal ICP during unexpected pressure elevation. Rarely needed.



These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

OSV II™ - with Antechamber



Reference

Package Content

909700

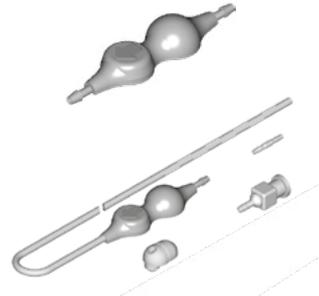
Valve Only

- Valve with antechamber and integrated connectors

909707S

Valve System Unitized - without ventricular catheter

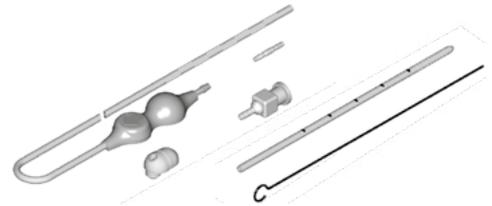
- Valve with antechamber and integrated plastic connector
- 110 cm open-ended striped drainage distal catheter unitized (F7)
- Straight connector polypropylene
- Luer connector
- Right angle guide



909712

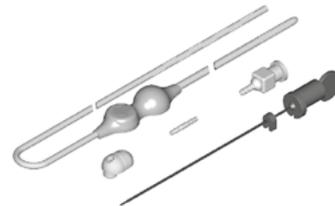
Valve System Unitized - with ventricular catheter

- Valve with antechamber and integrated plastic connector
- 110 cm open-ended striped drainage distal catheter unitized (F7)
- Straight connector polypropylene
- Luer connector
- Right angle guide
- 15 cm straight ventricular catheter (F8)
- Introducing rod



Valve System One-Piece

- Valve with antechamber
- Straight ventricular catheter (F8) and 110 cm open-ended striped drainage distal catheter unitized (F7)
- Ventricular catheter introducer
- Right angle guide
- Straight polypropylene connector
- Luer connector



909718

7 cm ventricular catheter

909706

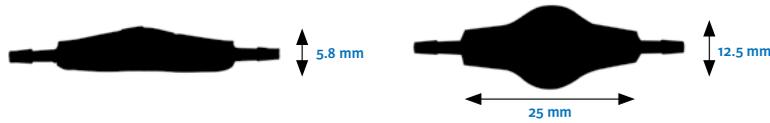
9 cm ventricular catheter

909704

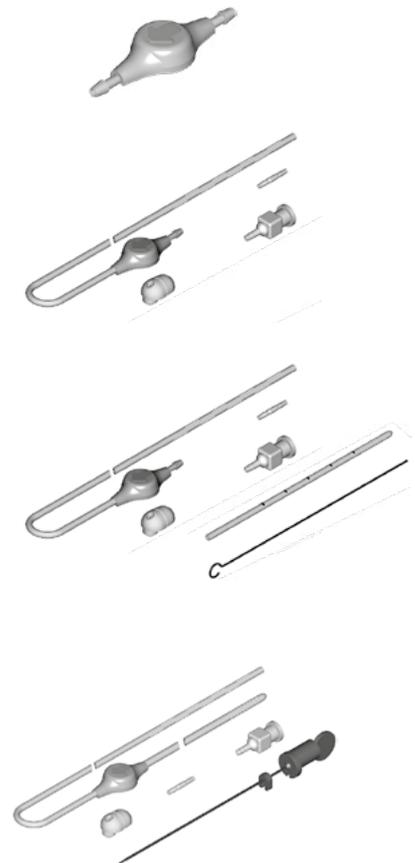
13 cm ventricular catheter

These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

OSV II™ - without Antechamber

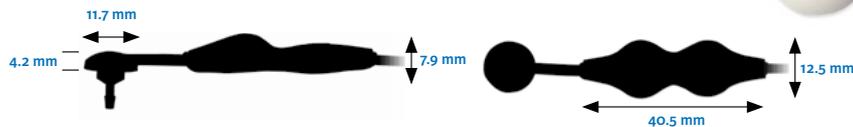


Reference	Package Content
909701	<p>Valve Only</p> <ul style="list-style-type: none"> • Valve without antechamber and with integrated plastic connectors
909708S	<p>Valve System Unitized - without ventricular catheter</p> <ul style="list-style-type: none"> • Valve without antechamber and with integrated plastic connector • 110 cm open-ended striped drainage distal catheter unitized (F7) • Straight polypropylene connector • Luer connector • Right angle guide
909713	<p>Valve System Unitized - with ventricular catheter</p> <ul style="list-style-type: none"> • Valve without antechamber and with integrated plastic connector • 110 cm open-ended striped drainage distal catheter unitized (F7) • Straight polypropylene connector • Luer connector • Right angle guide • 15 cm straight ventricular catheter (F8) • Introducing rod <p>Valve System One-Piece</p> <ul style="list-style-type: none"> • Valve without antechamber • Straight ventricular catheter (F8) and 110 cm open-ended striped drainage distal catheter unitized (F7) • Ventricular catheter introducer • Right angle guide • Straight polypropylene connector • Luer connector
909719	7 cm ventricular catheter
909705	9 cm ventricular catheter



These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

OSV II™ Burr Hole - with Antechamber



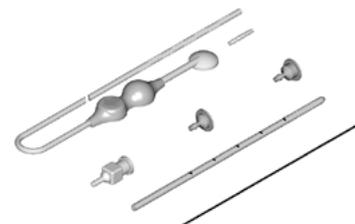
Reference

Package Content

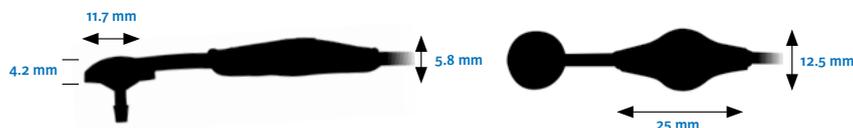
909721

Valve System Unitized

- Valve with antechamber and 6.4 mm burr hole cap
- 10 cm open ended striped drainage distal catheter unitized (F7)
- 15 cm straight ventricular catheter (F8) with radiopaque length dots
- Introducing rod
- Straight polypropylene connector
- Regular and shallow polypropylene burr hole reservoir
- Luer connector



OSV II™ Burr Hole - without Antechamber



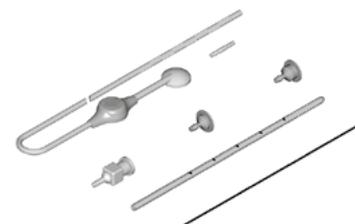
Reference

Package Content

909720

Valve System Unitized

- Valve without antechamber and with 6.4 mm burr hole cap
- 110 cm open ended striped drainage distal catheter unitized (F7)
- 15 cm straight ventricular catheter (F8) with radiopaque length dots
- Introducing rod
- Straight polypropylene connector
- Regular and shallow polypropylene burr hole reservoirs
- Luer connector



These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

OSV II™ Lumbar - with Antechamber



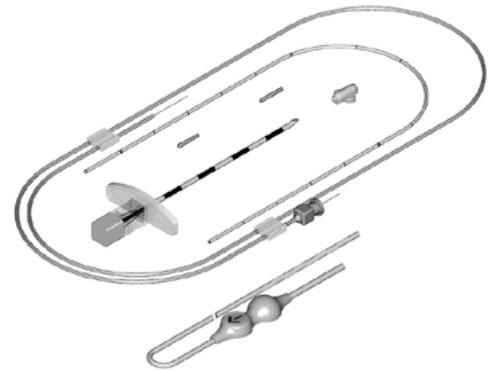
Reference

Package Content

909711

Valve System One-Piece

- Valve with antechamber
- 5 cm proximal tubing (F8) and 110 cm open ended striped drainage distal catheter unitized (F7)
- 80 cm closed tip lumbar catheter (F5)
- Guidewire in dispenser
- 14G Tuohy needle
- Stepdown polypropylene connector (F8/F5)
- Luer connector
- Suture clamp (F5)
- Straight polypropylene connector



OSV II™ Lumbar - without Antechamber



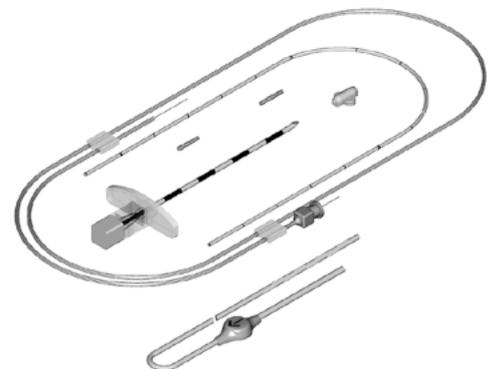
Reference

Package Content

909710

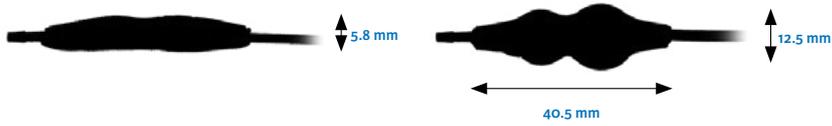
Valve System One-Piece

- Valve without antechamber
- 5 cm proximal tubing (F8) and 110 cm open ended striped drainage distal catheter unitized (F7)
- 80 cm closed tip lumbar catheter (F5)
- Guidewire in dispenser
- 14G Tuohy needle
- Stepdown polypropylene connector (F8/F5)
- Luer connector
- Suture clamp (F5)
- Straight polypropylene connector



These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

OSV II™ Low Pro - with Antechamber



Reference

Package Content

909700P

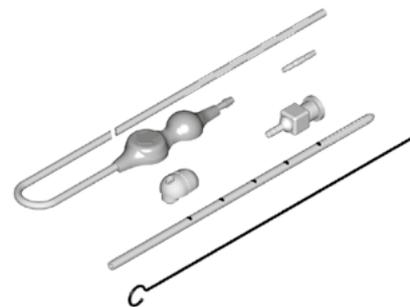
Valve Only

- Valve with antechamber and integrated connectors

909712P

Valve System Unitized

- Valve with antechamber and integrated connector
- 110 cm open-ended striped drainage distal catheter unitized (F7)
- 15 cm straight ventricular catheter (F8) with radiopaque dots every 2 cm
- Introducing rod
- Straight polypropylene connector
- Luer connector
- Right angle guide



These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

Fixed Pressure Valves

Codman[®] Hakim[®] Precision

Essential

Products Comparison

	Codman [®] Hakim [®] Precision	Essential
Cylindrical	●	-
Regular - Inline	●	●
Small	●	-
Burr Hole	●	●
Lumbar	-	-
Pressure range	5	3
MRI compatibility*	● (Up to 1.5 tesla)	● (Up to 3 tesla)
SiphonGuard [®] unitized Option	●	-

* Check Instructions For Use document for conditional MRI compatibility details.

Products References Summary

All fixed pressure valves are packaged sterile in box of 1.

Codman® Hakim® Precision

Radiopaque code	Cylindrical		Micro	
	Without Pre-Chamber	With Pre-Chamber	Without Rickham® Reservoir	With Rickham® Reservoir
Valve Only				
•	823082	823011	823026	823095
••	823083	823012	823027	823096
•••	823084	823013	823028	823097
••••	823085	823014	823029	823098
•••••	823086	823015	823030	823099
Valve System				
•	823016	823001	-	823021
••	823017	823002	-	823022
•••	823018	823003	-	823023
••••	823019	823004	-	823024
•••••	823020	823005	-	823025
Valve System Unitized				
•	-	823006	823035	-
••	-	823007	823036	-
•••	-	823008	823037	-
••••	-	823009	823038	-
•••••	-	823010	823039	-

Radiopaque code	Regular		Burr Hole	
	Without SiphonGuard®	With SiphonGuard®	Without SiphonGuard®	With SiphonGuard®
Valve Only				
•	825471	825461	825491	825481
••	825472	825462	825492	825482
•••	825473	825463	825493	825483
••••	825474	825464	825494	825484
•••••	825475	825465	825495	825485
Valve System				
•	823816	823811	-	823361
••	823817	823812	823802	823362
•••	823818	823813	823803	823363
••••	823819	823814	823804	823364
•••••	823820	823815	823805	823365
Valve System Unitized				
•	823806	823821	823281	823261
••	823807	823822	823282	823262
•••	823808	823823	823283	823263
••••	823809	823824	823284	823264
•••••	823810	823825	823285	823265

Products References Summary

Essential

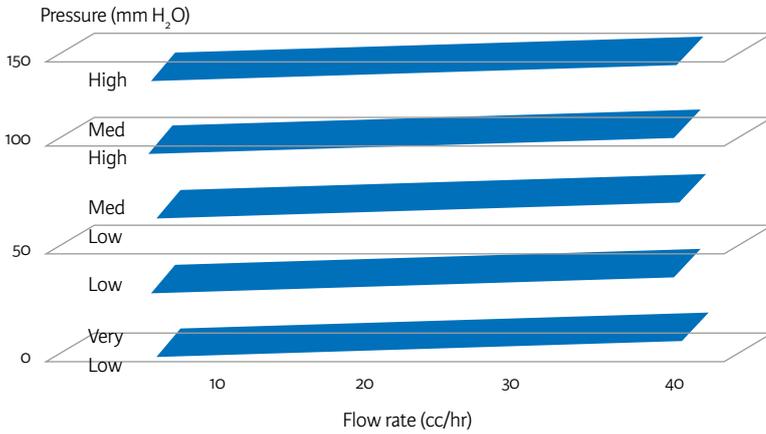
Radiopaque code	Flat Bottom	Burr Hole
Valve System Unitized		
•	NL8504120	NL8504110
••	NL8504121	NL8504111
•••	-	NL8504112

Codman® Hakim® Precision

The Codman® Hakim® Precision Fixed Pressure Valve features ball and spring mechanism with 5 distinct operating pressures to adapt patient's specific needs. The Codman® Hakim® Precision Valve is available in multiple designs (cylindrical, regular, micro, burr hole) and configurations including with SiphonGuard® Device integrated.



Valve Performance Chart



For Codman® Hakim® Precision Fixed Pressure Valves dimensions, please refer to Codman® Hakim® Programmable Valves section.

Codman® Hakim® Precision Cylindrical - with Pre-Chamber



Reference	Pressure		Radiopaque code	Package Content
823011	10 mm H ₂ O	Very Low	●	Valve Only  <ul style="list-style-type: none"> • Valve with pre-chamber and integrated plastic connector • Valve introducer plastic • Straight connector titanium
823012	40 mm H ₂ O	Low	●●	
823013	70 mm H ₂ O	Medium	●●●	
823014	100 mm H ₂ O	Medium High	●●●●	
823015	130 mm H ₂ O	High	●●●●●	
823001	10 mm H ₂ O	Very Low	●	Valve System  <ul style="list-style-type: none"> • Valve with pre-chamber and integrated plastic connector • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Valve introducer plastic • Right-angled adaptor plastic • Straight connector titanium
823002	40 mm H ₂ O	Low	●●	
823003	70 mm H ₂ O	Medium	●●●	
823004	100 mm H ₂ O	Medium High	●●●●	
823005	130 mm H ₂ O	High	●●●●●	
823006	10 mm H ₂ O	Very Low	●	Valve System Unitized  <ul style="list-style-type: none"> • Valve with pre-chamber • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone unitized • Valve introducer plastic • Right-angled adaptor plastic • Straight connector titanium
823007	40 mm H ₂ O	Low	●●	
823008	70 mm H ₂ O	Medium	●●●	
823009	100 mm H ₂ O	Medium High	●●●●	
823010	130 mm H ₂ O	High	●●●●●	

Codman® Hakim® Precision Cylindrical - without Pre-Chamber



Reference	Pressure		Radiopaque code	Package Content
823082	10 mm H ₂ O	Very Low	●	Valve Only  <ul style="list-style-type: none"> • Valve with integrated plastic connector • Valve introducer plastic • Straight connector titanium
823083	40 mm H ₂ O	Low	●●	
823084	70 mm H ₂ O	Medium	●●●	
823085	100 mm H ₂ O	Medium High	●●●●	
823086	130 mm H ₂ O	High	●●●●●	
823016	10 mm H ₂ O	Very Low	●	Valve System  <ul style="list-style-type: none"> • Valve with integrated plastic connector • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Valve introducer plastic • Right-angled adaptor plastic • Straight connector titanium
823017	40 mm H ₂ O	Low	●●	
823018	70 mm H ₂ O	Medium	●●●	
823019	100 mm H ₂ O	Medium High	●●●●	
823020	130 mm H ₂ O	High	●●●●●	

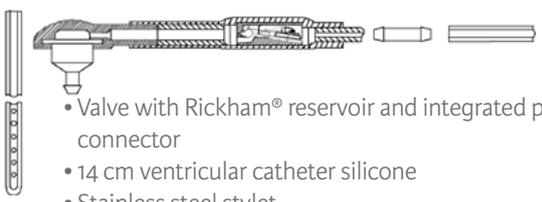
Codman® Hakim® Precision Micro



Reference	Pressure	Pressure	Radiopaque code	Package Content
823026	10 mm H ₂ O	Very Low	●	Valve Only  • Valve • 2 straight connectors titanium • Priming adaptor plastic
823027	40 mm H ₂ O	Low	●●	
823028	70 mm H ₂ O	Medium	●●●	
823029	100 mm H ₂ O	Medium High	●●●●	
823030	130 mm H ₂ O	High	●●●●●	
823035	10 mm H ₂ O	Very Low	●	Valve System Unitized  • Valve • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone Unitized • Right-angled adaptor plastic • Straight connector titanium • Priming adaptor plastic
823036	40 mm H ₂ O	Low	●●	
823037	70 mm H ₂ O	Medium	●●●	
823038	100 mm H ₂ O	Medium High	●●●●	
823039	130 mm H ₂ O	High	●●●●●	

Codman® Hakim® Precision Micro - with Rickham® Reservoir



Reference	Pressure	Pressure	Radiopaque code	Package Content
823095	10 mm H ₂ O	Very Low	●	Valve Only  • Valve with Rickham® reservoir and integrated plastic connector • Straight connector titanium • Priming adaptor plastic
823096	40 mm H ₂ O	Low	●●	
823097	70 mm H ₂ O	Medium	●●●	
823098	100 mm H ₂ O	Medium High	●●●●	
823099	130 mm H ₂ O	High	●●●●●	
823021	10 mm H ₂ O	Very Low	●	Valve System  • Valve with Rickham® reservoir and integrated plastic connector • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Priming adaptor plastic
823022	40 mm H ₂ O	Low	●●	
823023	70 mm H ₂ O	Medium	●●●	
823024	100 mm H ₂ O	Medium High	●●●●	
823025	130 mm H ₂ O	High	●●●●●	

Codman® Hakim® Precision Regular



Reference	Pressure		Radiopaque code	Package Content
825471	10 mm H ₂ O	Very Low	●	Valve Only  • Valve with integrated plastic connectors • Priming adaptor plastic
825472	40 mm H ₂ O	Low	●●	
825473	70 mm H ₂ O	Medium	●●●	
825474	100 mm H ₂ O	Medium High	●●●●	
825475	130 mm H ₂ O	High	●●●●●	
823816	10 mm H ₂ O	Very Low	●	Valve System  • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Priming adaptor plastic • Right angled adaptor plastic
823817	40 mm H ₂ O	Low	●●	
823818	70 mm H ₂ O	Medium	●●●	
823819	100 mm H ₂ O	Medium High	●●●●	
823820	130 mm H ₂ O	High	●●●●●	
823806	10 mm H ₂ O	Very Low	●	Valve System Unitized  • Valve with integrated plastic connector • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone unitized • Priming adaptor plastic • Right angled adaptor plastic
823807	40 mm H ₂ O	Low	●●	
823808	70 mm H ₂ O	Medium	●●●	
823809	100 mm H ₂ O	Medium High	●●●●	
823810	130 mm H ₂ O	High	●●●●●	

Codman® Hakim® Precision Regular - with SiphonGuard®

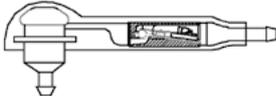
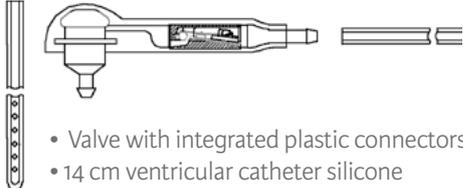
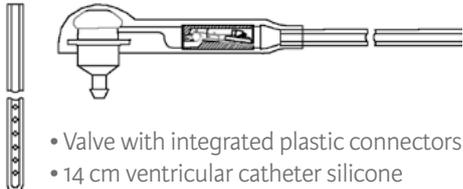


Reference	Pressure		Radiopaque code	Package Content
825461	10 mm H ₂ O	Very Low	●	Valve Only  • Valve with integrated plastic connectors • Priming adaptor plastic
825462	40 mm H ₂ O	Low	●●	
825463	70 mm H ₂ O	Medium	●●●	
825464	100 mm H ₂ O	Medium High	●●●●	
825465	130 mm H ₂ O	High	●●●●●	
823811	10 mm H ₂ O	Very Low	●	Valve System  • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Priming adaptor plastic • Right angled adaptor plastic
823812	40 mm H ₂ O	Low	●●	
823813	70 mm H ₂ O	Medium	●●●	
823814	100 mm H ₂ O	Medium High	●●●●	
823815	130 mm H ₂ O	High	●●●●●	
823821	10 mm H ₂ O	Very Low	●	Valve System Unitized  • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone unitized • Priming adaptor plastic • Right angled adaptor plastic
823822	40 mm H ₂ O	Low	●●	
823823	70 mm H ₂ O	Medium	●●●	
823824	100 mm H ₂ O	Medium High	●●●●	
823825	130 mm H ₂ O	High	●●●●●	

Pozicija Nr 9

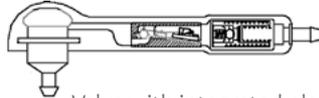
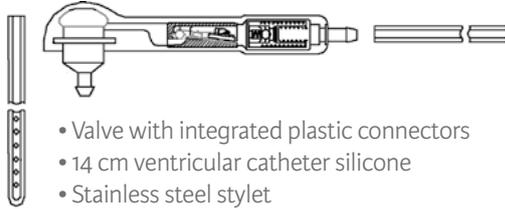
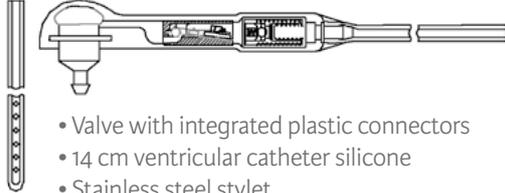
Codman® Hakim® Precision Burr Hole



Reference	Pressure		Radiopaque code	Package Content
825491	10 mm H ₂ O	Very Low	●	Valve Only  <ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic
825492	40 mm H ₂ O	Low	●●	
825493	70 mm H ₂ O	Medium	●●●	
825494	100 mm H ₂ O	Medium High	●●●●	
825495	130 mm H ₂ O	High	●●●●●	
823802	40 mm H ₂ O	Low	●●	Valve System  <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Priming adaptor plastic
823803	70 mm H ₂ O	Medium	●●●	
823804	100 mm H ₂ O	Medium High	●●●●	
823805	130 mm H ₂ O	High	●●●●●	
823281	10 mm H ₂ O	Very Low	●	Valve System Unitized  <ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone unitized • Priming adaptor plastic
823282	40 mm H ₂ O	Low	●●	
823283	70 mm H ₂ O	Medium	●●●	
823284	100 mm H ₂ O	Medium High	●●●●	
823285	130 mm H ₂ O	High	●●●●●	

Codman® Hakim® Precision Burr Hole - with SiphonGuard®



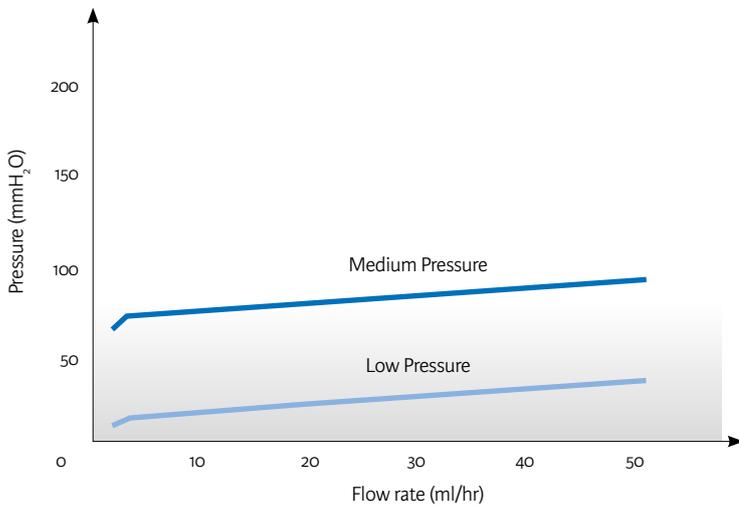
Reference	Pressure		Radiopaque code	Package Content
825481	10 mm H ₂ O	Very Low	●	Valve Only
825482	40 mm H ₂ O	Low	●●	
825483	70 mm H ₂ O	Medium	●●●	<ul style="list-style-type: none"> • Valve with integrated plastic connectors • Priming adaptor plastic
825484	100 mm H ₂ O	Medium High	●●●●	
825485	130 mm H ₂ O	High	●●●●●	
823361	10 mm H ₂ O	Very Low	●	Valve System
823362	40 mm H ₂ O	Low	●●	
823363	70 mm H ₂ O	Medium	●●●	<ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone • Priming adaptor plastic
823364	100 mm H ₂ O	Medium High	●●●●	
823365	130 mm H ₂ O	High	●●●●●	
823261	10 mm H ₂ O	Very Low	●	Valve System Unitized
823262	40 mm H ₂ O	Low	●●	
823263	70 mm H ₂ O	Medium	●●●	<ul style="list-style-type: none"> • Valve with integrated plastic connectors • 14 cm ventricular catheter silicone • Stainless steel stylet • 120 cm distal catheter silicone unitized • Priming adaptor plastic
823264	100 mm H ₂ O	Medium High	●●●●	
823265	130 mm H ₂ O	High	●●●●●	

Essential

The Essential Shunt Kit Flat Bottom Design, can be used in (but is not restricted to) situations where skin erosion may be a problem. The Essential Shunt Kit Burr Hole allows to accommodate surgical preferences. Valve and catheters contains barium sulfate. No metal part used in the system eliminating possibility of interference with imaging technology. The implantation is simplified by eliminating connections. The shunt is available in two configurations (flat bottom and burr hole) with varying pressure ranges.



Essential Flat Bottom



Closing Pressure	5 - 50 mm H ₂ O	51 - 110 mm H ₂ O
Pressure Range	Low	Medium
Radiopaque Code	●	●●

Note: The above curves describe typical in-vitro valve performance characteristics for each closing pressure range. Due to characteristics of silicone materials, some variation in pressure performance may occur which historically has no compromised effective control and treatment of hydrocephalus. Trimming the peritoneal catheter will result in an overall decrease in system pressure of approximately 1 mm H₂O at a flow rate of 23 ml/h for each 6 cm of catheter length removed.

Reference	Pressure	Radiopaque code	Package Content
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NL8504120
NL8504121

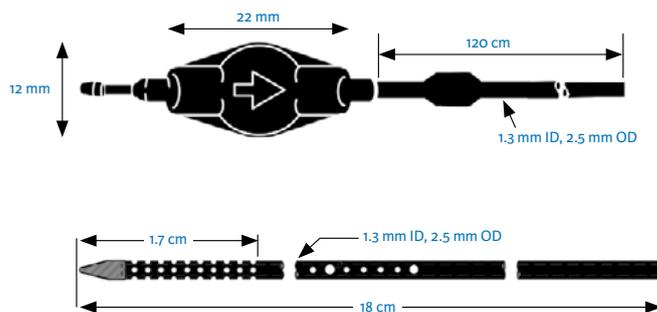
5-50 mm H₂O
51-110 mm H₂O

Low
Medium

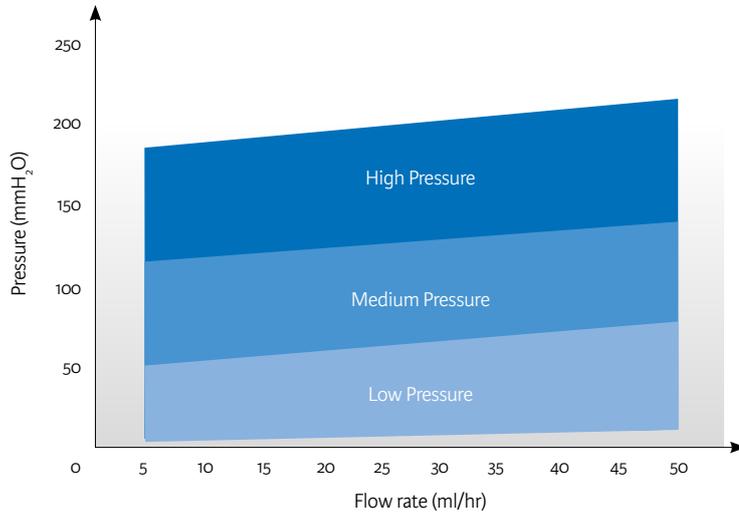


Valve System Unitized

- Valve
- 120 cm kink resistant striped peritoneal catheter unitized
- 18 cm ventricular catheter with radiopaque markers
- Stylet
- Right angle guide



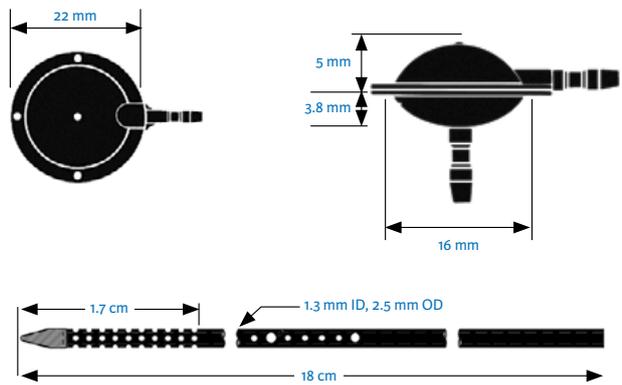
Essential Burr Hole



Closing Pressure Range	5 - 50 mm H ₂ O	51 - 110 mm H ₂ O	111 - 180 mm H ₂ O
Pressure at 5 ml/h Flow	5 mm H ₂ O	50 mm H ₂ O	110 mm H ₂ O
Pressure at 50 ml/h Flow	75 mm H ₂ O	140 mm H ₂ O	220 mm H ₂ O
Pressure Range	Low	Medium	High
Radiopaque Code	●	● ●	● ● ●

Note: Values shown in the flow/pressure-range chart are the low point of the established 5 ml/h range and the high point of the 50 ml/h range.

Reference	Pressure	Radiopaque code	Package Content
NL8504110	5-50 mm H ₂ O	Low ●	Valve System • Valve
NL8504111	51-110 mm H ₂ O	Medium ● ●	• 120 cm kink resistant striped peritoneal catheter
NL8504112	111-180 mm H ₂ O	High ● ● ●	• 18 cm ventricular catheter with radiopaque markers • Stylet



Notes

A series of horizontal dotted lines for taking notes, spanning the width of the page.



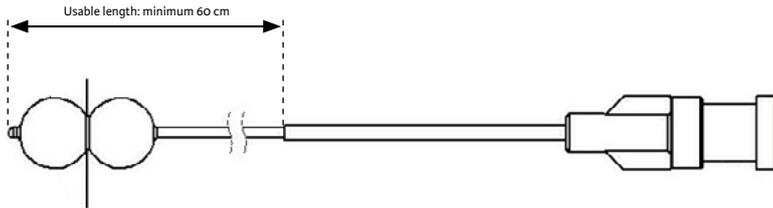
Neuro Endoscopy

NeuroBalloon™ Catheter

NeuroBalloon™

NeuroBalloon™

The NeuroBalloon™ Catheter is designed for dilatation of prepunctured cerebral membrane fenestrations such as for Endoscopic Third Ventriculostomies (ETVs). The unique double balloon design assures its positioning. The dilatation of the membrane can be observed through the transparent silicone material of the NeuroBalloon™ catheter. This positioning is especially important during ETVs.



The NeuroBalloon™ Catheter is compatible with a F4 working channel lumen diameter of 1.35 mm minimum. Diameter of the waist when inflated with 0.6 ml (cc) of air and after a pre-inflation with 1 ml (cc) is 3.5 mm minimum. Diameter of the waist when inflated with 1 ml (cc) of air and after a pre-inflation with 1 ml (cc) is 6.0 mm maximum.



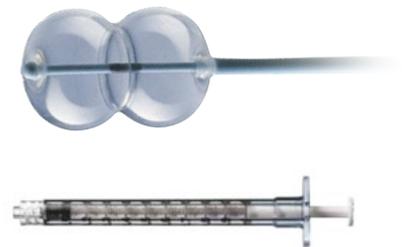
Reference

7CBD10

Package Content

NeuroBalloon™ Catheter

- 60 cm minimum usable length catheter with female luer lock connector and silicone balloon
- 1 ml syringe supplied sterile



These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

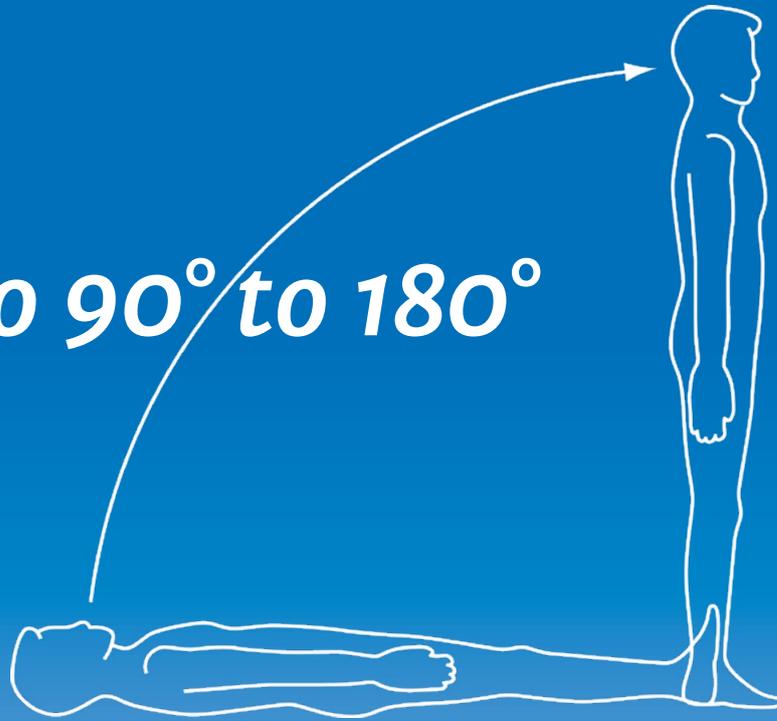
Specialty Drainage Products

SiphonGuard[®]

Anti-Siphon Device

SiphonGuard®*

Up to 90° to 180°



Any position; supine, reclined or upright.

Flow-sensing SiphonGuard protects patients when everyday activities cause increased CSF production or flow that may not be detected by a gravitational device.



Coughing



Exercise



Sneezing



REM Sleep

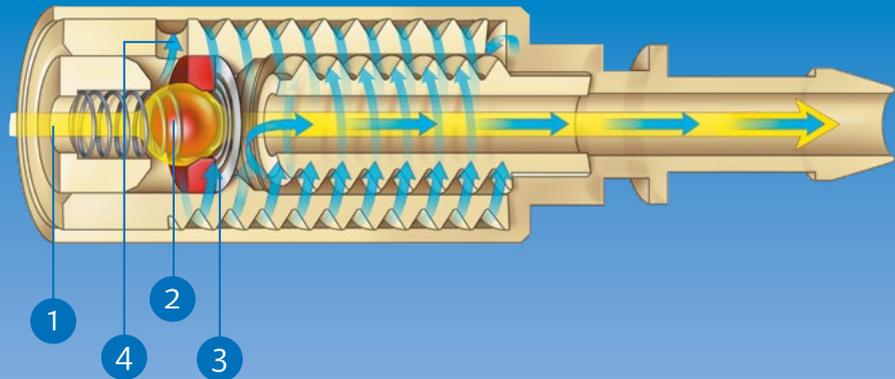
These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

The SiphonGuard® anti-siphon device is available as an integral component of the Codman® CERTAS™ Plus programmable valve and the Codman® Hakim® programmable and Precision valves, or as a stand-alone upgrade to current shunt implants. The stand-alone device is **position independent, and can be placed anywhere distal to any valve** and includes all the mechanical and durability design features that make SiphonGuard® device so robust. When added to an existing valve configuration, the inlet tubing of the SiphonGuard® device can be cut to the desired length and connected to the shunt valve outlet. When activated, SiphonGuard anti-siphoning device does not shut down drainage totally. The reduced flow, through the secondary pathway, **could reduce the risk of excess ventricular CSF accumulation and ventriculomegaly.**



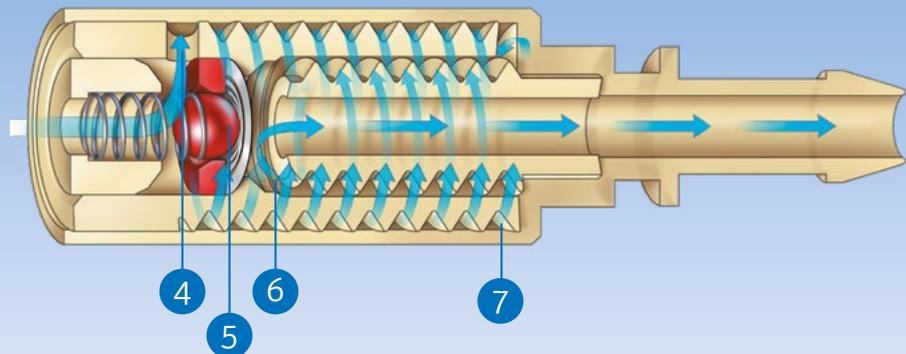
Normal flow, (*SiphonGuard not activated*)

- 1 Normal flow through open primary path (yellow)
- 2 During normal flow, ball is balanced off the seat between two opposing springs
- 3 Secondary path (blue) is always open
- 4 Opening for flow to enter secondary path is always open



Excessive flow (*SiphonGuard activated*)

- 5 During excessive flow, ball seats and closes primary path
- 6 Secondary path directs CSF down an outer spiral then upward along an inner spiral to exit just below seated ball
- 7 Opening for flow to enter inner spiral of secondary path



Reference

823090

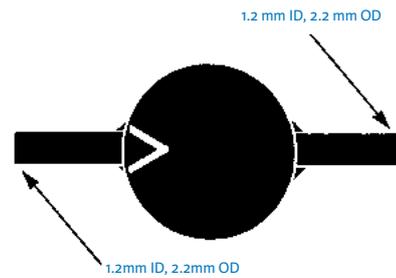
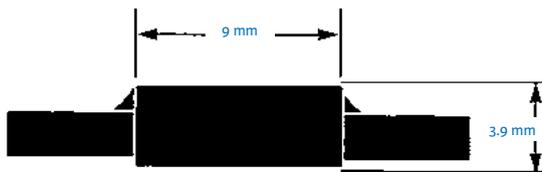
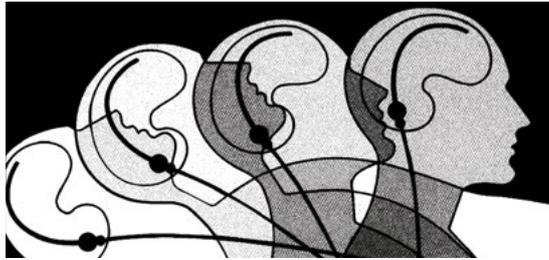
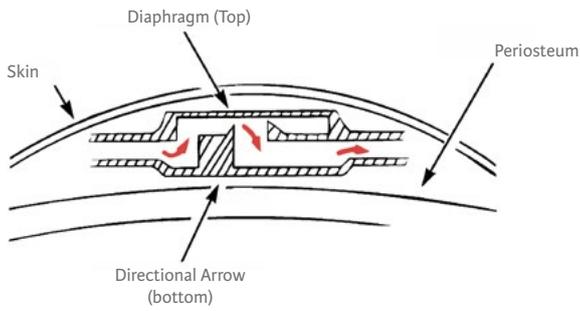
Package Content

SiphonGuard® CSF Flow Control Device

These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

Anti-Siphon Device

The Anti-Siphon Device minimizes siphon effect by closing as the hydrostatic pressure changes relative to patient position (standing, sitting or supine).

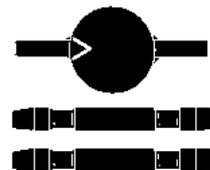


Reference

NL8500200

Package Content

- Anti-Siphon device
- 2 Pudenz straight connectors



Reservoirs

Holter[®] Ventricular Catheter Integra CSF Reservoirs

Standard Integra[®] CSF Reservoirs

Side Inlet Integra[®] CSF Reservoirs

Holter[®] Selker Ventriculostomy Reservoirs

Holter[®] Rickham[™] Ventriculostomy Reservoirs

Holter[®] Salmon-Rickham[™] Ventriculostomy Reservoirs

Rickham[™]-Style Reservoirs

All reservoirs are packaged sterile in box of 1.

Holter® Ventricular Catheter Reservoirs

Also referred to as Cerebral Catheter Reservoirs, the Holter® Ventricular Catheter-Reservoir is an all silicone rubber reservoir and right-angle catheter molded together as one unit, X-ray detectable. The dome-shaped reservoir has a base made of reinforced sheeting, coated with silicone rubber. The reservoir base, which extends beyond the diameter of the reservoir to accommodate sutures, has a diameter of 15.7 mm. The distal end of the Catheter Reservoir is designed to accommodate the inlet adapter of a Holter® Valve when the reservoir is used in a shunt system. The plug inserted in the distal end of the reservoir should be removed when the Holter® Ventricular Catheter-Reservoir is being used in a shunt system.

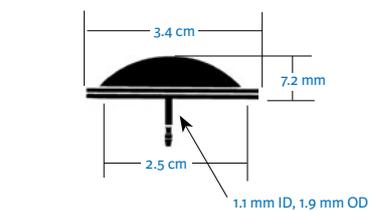
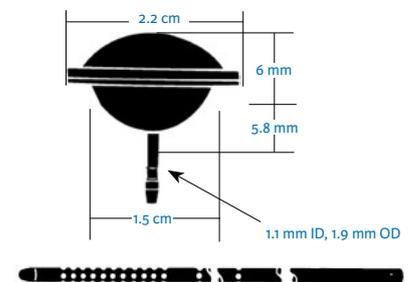
Reference	Package Content
	Holter® Ventricular Catheter Reservoir Height 6.0 mm, Diameter 15.7 mm, ID 1.5 mm, OD 3.1 mm, Sterile <ul style="list-style-type: none"> • Ventricular right angle barium catheter reservoir with stainless steel plug inserted in the distal end • Stainless steel stylet
821630	3 cm length (x)
821632	4 cm length (x)
821634	5 cm length (x)
821636	6 cm length (x)
821638	7 cm length (x)
821640	8 cm length (x)
821642	9 cm length (x)



Standard Integra® CSF Reservoirs

The Standard Integra® CSF Reservoirs consist of a single flushing reservoir, supplied with a separate ventricular catheter. The reservoir is designed for subcutaneous placement and attaches to the ventricular catheter at the straight connector. The reservoir is made with a suture flange at its base for attachment to the periosteum. The 1.5 cm size is a formal burr hole, bottom inlet design. The larger 2.5 cm reservoir is a flat bottom device requiring only a small (3 mm) burr hole opening to accommodate the inlet tubing on the base of the reservoir. The reservoir is fitted with a polypropylene needle-puncture shield. A 25G or smaller needle should be used to puncture the reservoir.

Reference	Package Content
NL8501210	Burr Hole Reservoir Size 1.5 cm, Flushing volume 0.68 ml, Sterile <ul style="list-style-type: none"> • Reservoir with integrated connector • Small Pudenz ventricular catheter • Stylet
NL8501211	Flat-Bottom Reservoir Size 2.5 cm, Flushing volume 1.26 ml, Sterile <ul style="list-style-type: none"> • Reservoir with integrated connector • Small Pudenz ventricular catheter • Stylet

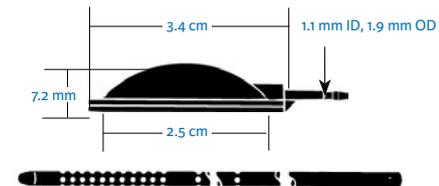
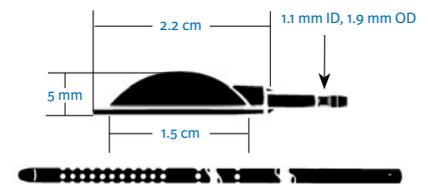


Side Inlet Integra® CSF Reservoirs

The Side Inlet Integra® CSF Reservoirs vary from the Standard Model in that the inlet tubing enters from the side of the reservoir rather than from the base. This flat bottom side inlet design eliminates the need for a formal burr hole, provides greater latitude in positioning and allows the ventricular catheter to be revised without disturbing the reservoir. The reservoir is fitted with a polypropylene needle-puncture shield. A 25G or smaller needle should be used to puncture the reservoir.



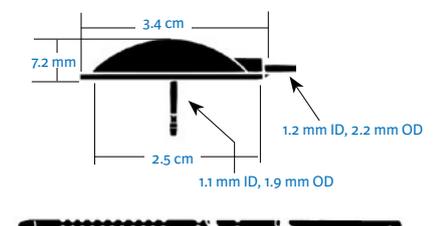
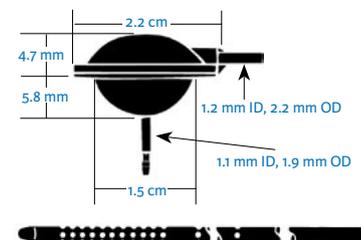
Reference	Package Content
NL8501214	<p>Small Flat-Bottom Reservoir</p> <p>Size 1.5 cm, Flushing volume 0.31 ml, Sterile</p> <ul style="list-style-type: none"> • Reservoir with integrated connector • Small Pudenz ventricular catheter • Right-angle guide • Stylet
NL8501212	<p>Large Flat-Bottom Reservoir</p> <p>Size 2.5 cm, Flushing volume 1.14 ml, Sterile</p> <ul style="list-style-type: none"> • Reservoir with integrated connector • Small Pudenz ventricular catheter • Right-angle guide • Stylet



Convertible Integra® CSF Reservoirs

The Convertible Integra® CSF Reservoirs vary from the Standard Model in incorporating an outlet tube in addition to an inlet tube. The outlet tube may be connected to a distal catheter, allowing the reservoir to be used in a shunting system, if later indicated. Since the distal tip of the outlet tube is plugged, conversion to a shunting system requires cutting off the outlet tube proximal to the plugged end for connection to a distal shunt catheter. The reservoir is fitted with a polypropylene needle-puncture shield. A 25G or smaller needle should be used to puncture the reservoir.

Reference	Package Content
NL8501215	<p>Burr Hole Convertible Reservoir</p> <p>Size 1.5 cm, Flushing volume 0.68 ml, Sterile</p> <ul style="list-style-type: none"> • Reservoir with integrated connectors • Small Pudenz ventricular catheter • Right-angle guide • Stylet
NL8501213	<p>Flat-Bottom Convertible Reservoir</p> <p>Size 2.5 cm, Flushing volume 1.31 ml, Sterile</p> <ul style="list-style-type: none"> • Reservoir with integrated connectors • Small Pudenz ventricular catheter • Right-angle guide • Stylet

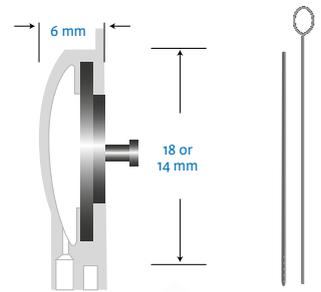


Holter® Selker Ventriculostomy Reservoirs

The Holter® Selker Ventriculostomy Reservoirs are flat base nylon reservoirs. Attached to the reservoir is a radiopaque silicone rubber cap with a nylon plug inserted in the lumen of the side arm. The plug is left in place for simple ventriculostomy and is removed when the reservoir is connected to the Holter(r) Valve System. The cap is equipped with four tabs to aid suturing. The Holter® Selker Ventriculostomy Reservoirs require only a 4 mm drilled hole to accommodate the ventricular catheter. This style reservoir provides a larger target area for puncturing and a low profile recommended for pediatric use. A 25G Huber type needle or smaller should be used to puncture the reservoir.



Reference	Package Content
	Holter® Selker Ventriculostomy Reservoir Sterile <ul style="list-style-type: none"> • Reservoir with preassembled cap and plug • 15 cm straight ventricular catheter radiopaque, ID 1.5 mm, OD 3.1 mm • Stylet
821618	Small (Size 14 mm)
821619	Large (Size 18 mm)

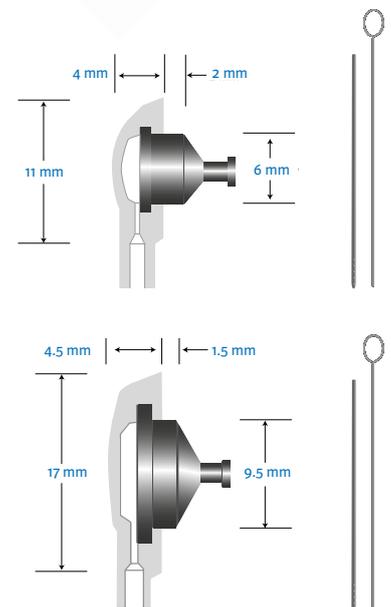


Holter® Rickham™ Ventriculostomy Reservoirs

Holter® Rickham™ Ventriculostomy Reservoirs are available in 316 stainless steel or nylon. Attached to the reservoir is a radiopaque silicone rubber cap with a stainless steel or nylon plug inserted in the lumen of the side arm. The plug is left in place for simple ventriculostomy and is removed when the reservoir is connected to the Holter® Valve System. The Holter® Rickham™ Ventriculostomy Reservoirs require a 6 mm burr hole or skull recess. A 25G Huber type needle or smaller should be used to puncture the reservoir.



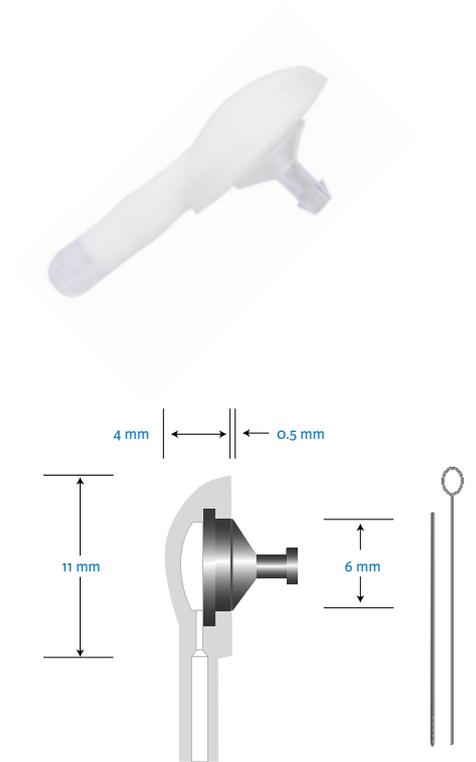
Reference	Package Content
	Holter® Rickham™ Ventriculostomy Reservoir Standard Size 6 mm, Sterile <ul style="list-style-type: none"> • Reservoir with preassembled cap and plug • 15 cm straight ventricular catheter radiopaque, ID 1.5 mm, OD 3.1 mm • Stylet
821615	Plastic base
821621	Stainless steel base
	Holter® Rickham™ Ventriculostomy Reservoir Large Size 9.5 mm, Sterile <ul style="list-style-type: none"> • Reservoir with preassembled cap and plug • 15 cm straight ventricular catheter radiopaque, ID 1.5 mm, OD 3.1 mm • Stylet
821616	Plastic base
821623	Stainless steel base



Holter® Salmon-Rickham™ Ventriculostomy Reservoirs

The Holter® Salmon-Rickham™ Ventriculostomy Reservoirs are available in 316 stainless steel or nylon. Attached to the reservoir is a radiopaque silicone rubber cap with a stainless steel or nylon plug inserted in the lumen of the side arm. The plug is left in place for simple ventriculostomy and is removed when the reservoir is connected to the Holter® Valve System. The Holter® Salmon-Rickham™ Ventriculostomy Reservoirs are designed for pediatric use. They are ideal for seating in very thin to medium thickness cranium and require a 6 mm burr hole or drilled-skull recess. A 25G Huber type needle or smaller should be used to puncture the reservoir.

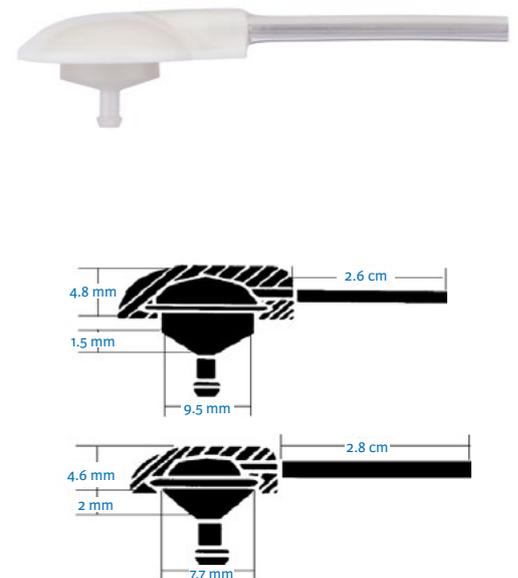
Reference	Package Content
	Holter® Salmon-Rickham™ Ventriculostomy Reservoir Low Profile, Size 6 mm, Sterile
	<ul style="list-style-type: none"> • Reservoir with preassembled cap and plug • 15 cm straight ventricular catheter radiopaque, ID 1.5 mm, OD 3.1 mm • Stylet
821617	Plastic base
821625	Stainless steel base



Rickham™-Style Reservoirs

The Rickham™-Style Reservoirs consist of a dome, manufactured from barium-sulfate-impregnated silicone elastomer, and a nylon base which acts as a needle-puncture shield. The reservoir dome may be injected with a 25G or smaller needle.

Reference	Package Content
NL850132	Large Rickham™-Style Reservoir Size 9.5 mm, Sterile
NL850121	Small Rickham™-Style Reservoir Size 7.7 mm, Sterile



Catheters

Bactiseal[®] Catheters

Ventricular Catheters

Peritoneal Catheters

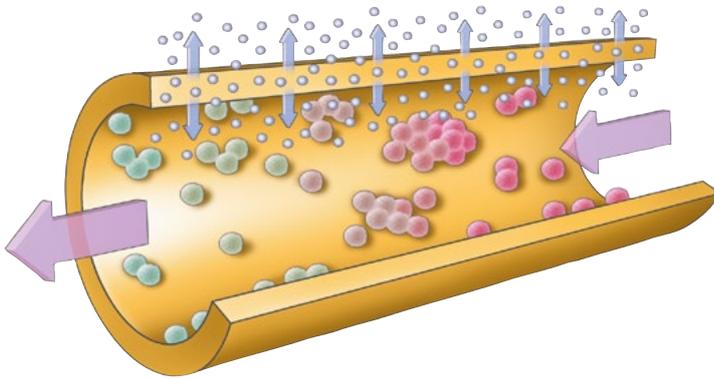
Lumbar-Peritoneal Catheters

Atrial Catheters

Bactiseal® Catheters

Bactiseal® antimicrobial silicone impregnated catheter with 0.15% of Clindamycin and 0.054% of Rifampicin targets infections caused by Gram Positive bacteria. The highest at risk groups are the PAEDIATRIC group, especially neonates. Bactiseal® offers proven dual-drug action against Gram Positive bacteria, kills 100% of target organisms within 52 h and provides 50 days of constant protection on all catheter surfaces.

Pozicija Nr 37



Reference	Package Content
823072	Bactiseal® Catheters Kit <ul style="list-style-type: none"> Ventricular catheter Peritoneal catheter
823073	Bactiseal® Ventricular Catheter Length 14 cm, ID 1.4 mm, OD 2.7 mm <ul style="list-style-type: none"> Ventricular catheter Stainless steel stylet Right angle adapter
823074	Bactiseal® Peritoneal Catheter Length 120 cm, ID 1.0 mm, OD 2.2 mm <ul style="list-style-type: none"> Peritoneal catheter

Pozicija Nr 37



All catheters are packaged sterile in box of 1.

Ventricular Catheters*

Codman® Hakim® Ventricular Catheter

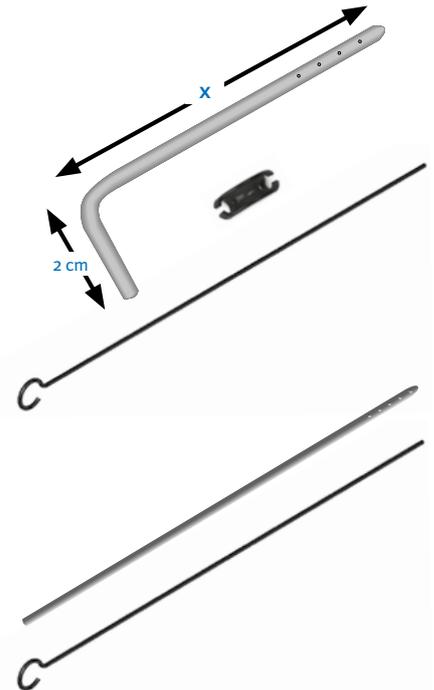
Reference	Package Content
823041	Codman® Hakim® Ventricular Catheter Silicone impregnated with barium sulphate, Sterile Length 14 cm, ID 1.4 mm, OD 2.7 mm <ul style="list-style-type: none"> Ventricular catheter Stainless steel stylet Right-angled adaptor plastic

Pozicija Nr 35, 36, 38



Holter® Ventricular Catheters

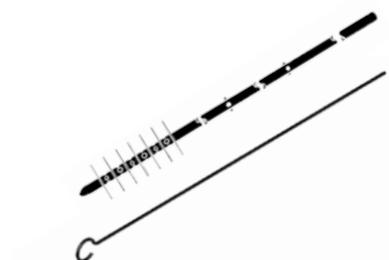
Reference	Package Content
	Holter® Right Angle Ventricular Catheter Silicone impregnated with barium, radiopaque, multiple perforations, Sterile ID 1.5 mm, OD 3.1 mm <ul style="list-style-type: none"> Ventricular catheter Stainless steel stylet Right-angled adaptor plastic
821652	3 cm length (x)
821654	4 cm length (x)
821656	5 cm length (x)
821658	6 cm length (x)
821660	7 cm length (x)
821662	8 cm length (x)
821664	9 cm length (x)
821666	10 cm length (x)
821650	Holter® Straight Ventricular Catheter Silicone impregnated with barium, radiopaque, multiple perforations, Sterile Length 15 cm, ID 1.5 mm, OD 3.1 mm <ul style="list-style-type: none"> Ventricular catheter Stainless steel stylet



Portnoy Ventricular Catheter

7 elastomer flanges spaced approximately 2.5 mm apart along 15 mm of the proximal end to help reduce the possibility of obstruction of the drainage holes during insertion and resultant occlusion of the catheter.

Reference	Package Content
NL8501229	Portnoy Ventricular Catheter Barium impregnated, Sterile Length 18 cm, ID 1.3 mm, OD 2.2 mm <ul style="list-style-type: none"> Ventricular catheter Introducing rod

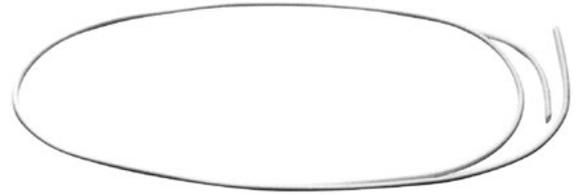


Peritoneal Catheters

Pozicija Nr 35, 36, 38

Codman® Peritoneal Catheter*

Reference	Package Content
823045	Codman® Peritoneal Catheter Silicone, Sterile Length 120 cm, ID 1 mm, OD 2.2 mm • Peritoneal catheter



Holter® Distal Peritoneal Catheters

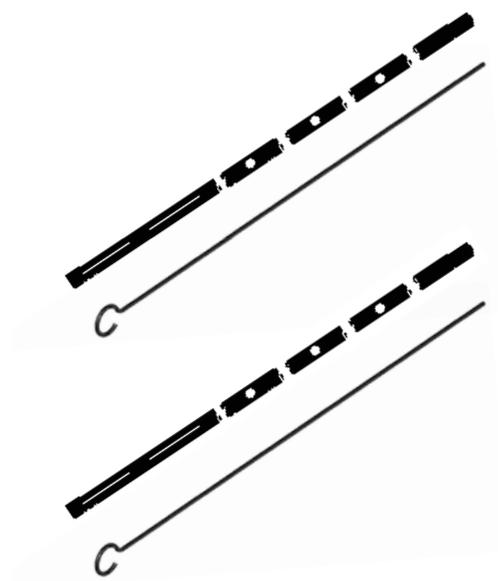
Reference	Package Content
821682	Holter® Distal Peritoneal Catheter Barium impregnated, open end, Sterile Length 90 cm, ID 1.2 mm, OD 2.5 mm • Peritoneal catheter • 2 stainless steel Holter® type A connectors
821684	Holter® Distal Peritoneal Catheter Salmon Style Barium impregnated, closed distal tip with 4 side slits 90° apart, tip in solid silicone to be more heavily opacified for positive X-ray identification, Sterile Length 90 cm, ID 1.2 mm, OD 2.5 mm • Peritoneal catheter • 2 stainless steel Holter® type A connectors



Peritoneal Catheters Open-Ended with Slits

Distal end of the catheter with 4 staggered rows of 6 mm slits. If distal outlet hole of the catheter becomes obstructed, slits open for drainage.

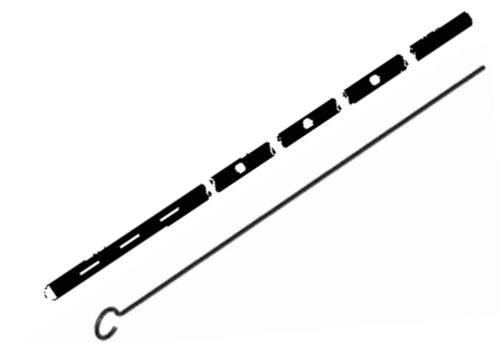
Reference	Package Content
	Peritoneal Catheters Open-Ended with Slits , Barium stripe Barium stripe, Sterile <ul style="list-style-type: none"> • Peritoneal catheter • Introducing rod
NL8501376	Length 120 cm, ID 1.3 mm, OD 2.5 mm



Reflux Control Peritoneal Catheter

Minimum flow resistance through a series of slits along the catheter's distal section. One set of 4 slits at the catheter's distal end and two sets of 4 slits spaced at 2.5 cm intervals along the catheter help resist retrograde flow of CSF while minimizing occlusion at the distal catheter tip. Catheter made of high durometer silicone elastomer. Stripe, made of barium sulfate-impregnated silicone elastomer imbedded in the wall of the catheter, make the catheter radiopaque throughout its entire length .

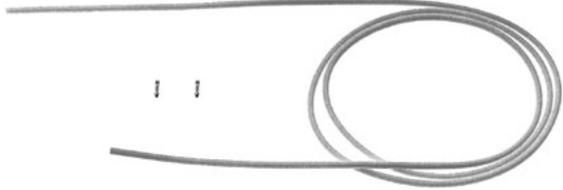
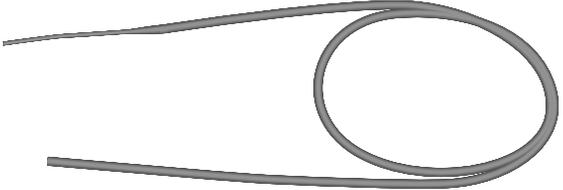
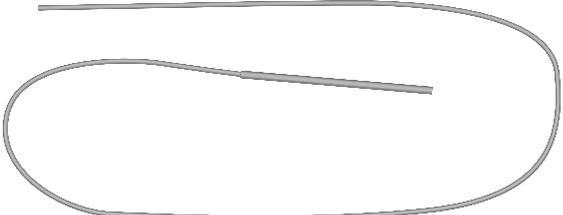
Reference	Package Content
	Reflux Control Peritoneal Catheter Barium sulfate impregnated, Sterile Length 120 cm, ID 1.3 mm, OD 2.5 mm <ul style="list-style-type: none"> • Peritoneal catheter • Introducing rod
NL8501375	



Atrial Catheters

Holter® Distal Atrial Catheters

Barium impregnated with 2 lumen configurations to meet various shunting needs.

Reference	Package Content	
821670	<p>Holter® Distal Atrial Catheter Type A Barium impregnated, Large lumen, Sterile Length 45 cm, ID 1.2 mm, OD 2.5 mm</p> <ul style="list-style-type: none"> • Atrial catheter • 2 stainless steel Holter® type A connectors 	
821672	<p>Holter® Distal Atrial Catheter Type B Barium impregnated, Large lumen, Sterile Length 38 cm, ID 1.2 mm, OD 2.5 mm</p> <ul style="list-style-type: none"> • Atrial catheter • 2 Holter® type B connectors 	
821674	<p>Holter® Distal Atrial Catheter Type C Barium impregnated, Large lumen, Sterile Length 42 cm, ID 1.2 mm, OD 2.5 mm</p> <ul style="list-style-type: none"> • Atrial catheter 	
821676	<p>Holter® Distal Atrial Catheter Type E Barium impregnated, Sterile Small Catheter - Length 24 cm, ID 0.8 mm, OD 1.3 mm Large Catheter - Length 24 cm, ID 1.2 mm, OD 2.5 mm Total length 48 cm</p> <ul style="list-style-type: none"> • Atrial catheter • 1 stainless steel Holter® type A connector 	
821678	<p>Holter® Distal Atrial Catheter Type H Barium impregnated, Large lumen, Sterile Length 42 cm, ID 1.2 mm, OD 2.5 mm</p> <ul style="list-style-type: none"> • Atrial catheter 	

Codman[®] Atrial Catheter***Reference****Package Content****823044****Codman[®] Atrial Catheter***

Silicone, Sterile

Length 46 cm, ID 1 mm, OD 2.2 mm

- Atrial catheter



*This product (823044) is currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Connectors

Metal Connectors

Plastic Connectors

Catheter Accessories

The connectors are X-ray detectable, except for radiolucent ones. They have beveled ends and are grooved to hold sutures for preventing catheter disconnection.

Straight Connectors

Reference	Package Content		
823048	Straight Connector* Stainless steel, Sterile Length 10.4 mm, ID 1.10 mm, OD 1.95 mm Box of 1		90 eur
823053	Straight Connector Titanium, Sterile Length 14 mm, ID 1.0 mm, OD 2.2 mm Box of 1		300 Eur
821694	Holter® Type A Connectors Stainless steel, Non-sterile Length 10.4 mm, ID 1.4 mm, OD 2.0 mm Box of 5		350 eur

Right Angle Connector*

Reference	Package Content	
823049	Right Angle Connector* Stainless steel, Sterile ID 1.1 mm, OD 1.9 mm Box of 1	

*These products (823048, 823049) are currently non CE-marked. Please check with your local CSS Representative their availability for sale.

Stepdown Stepup Connectors

Reference	Package Content
821695	Holter[®] Type B Connectors (Stepdown/Stepup) Stainless steel, Non-sterile Length 7.9 mm, ID 1.0-1.2 mm, OD 1.3-1.9 mm Box of 5



Threaded Connectors

Reference	Package Content
NL8501911	Threaded Straight Connector Nylon, Sterile Length 16.0 mm, ID 1.1 mm, OD 1.9 mm Box of 1
NL8501919	Double-Threaded Straight Connector Nylon, Sterile Length 17.0 mm, ID 1.1 mm, OD 1.9 mm Box of 1



Catheter Accessories

Reference	Package Content
823052	CODMAN[®]-MEDOS[®] Right Angle Adaptor Plastic, Sterile Box of 1





Tunnelers and Introducers

Valve Introducer

Single Use Distal Catheter Introducers

Valve Introducer

The Codman® Medos Valve Introducer is intended for use with Codman® Hakim® Programmable Valve and Codman® Hakim® Precision Valve cylindrical design only.

Reference	Package Content
823055	Codman® Medos Valve Introducer Plastic, Length 21.8 cm Sterile, Box of 1 Single use



Single Use Distal Catheter Introducers

Reference	Package Content
	Codman® Malleable Catheter Passers Sterile, Box of 6
821515	Short - Length 36 cm
821516	Long - Length 55 cm
821517	XLong - Length 65 cm





Indications and Contraindications

Programmable Valves

Codman® CERTAS™ Plus

Indications

Certas implants are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman CERTAS® Tool Kit - Codman® CERTAS™ Plus Electronic Tool Kit

(ref 828851) (ref 828852)

Indications

The Certas programmer is a device allowing the noninvasive reading or adjustment of the programmable valve setting.

Codman® Hakim® Programmable Valve*

Indications

The Codman Hakim Programmable Valves are implantable devices that provide constant intraventricular pressure and drainage of CSF for the management of hydrocephalus.

Codman® Hakim® Programmer

(ref 823190R)

Indications

The Hakim programmer is a device allowing the noninvasive adjustment of the programmable valve setting.

VPV® System*

(ref 823192R)

Indications

The Hakim programmer is a device allowing the noninvasive adjustment of the programmable valve setting.

Flow Regulated Valves*

OSV II™

Indications

CSF Management systems are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

OSV II™ Lumbar

Indications

CSF Management systems are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Fixed Pressure Valves

Codman® Hakim® Precision

Indications

Hakim implants are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of Hydrocephalus.

Essential

Indications

CSF Management systems are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Neuro Endoscopy Catheter*

NeuroBalloon™

Indications

The NeuroBalloon™ Catheter is intended for dilatation of cerebral membrane fenestrations under direct or endoscopic visualization during intracranial procedures.

Speciality Drainage Products

SiphonGuard®*

(ref 823090)

Indications

Siphonguard implant is intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of Hydrocephalus

Anti-Siphon Device

(ref NL8500200)

Indications

The Anti-Siphon Device is intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of Hydrocephalus

Reservoirs

Integra® CSF Reservoirs

(ref NL8501210, NL8501211, NL8501214, NL8501212, NL8501215, NL8501213)

Indications

CSF Management systems are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Rickham™-Style Reservoirs

(ref NL8501132, NL8501121)

Indications

CSF Management systems are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Holter® Ventricular Catheter Reservoirs

(ref 821630, 821632, 821634, 821636, 821638, 821640, 821642)

Indications

The Cerebral Catheter Reservoir is indicated for use as a component of a shunting system to gain access to the cerebral ventricles or other intracranial cavities for the purpose of diagnostic studies, therapeutic drug administration, or the diversion of fluid.

Contraindications

This device is not designed, sold, or intended for use except as indicated.

Holter® Selker Ventriculostomy Reservoirs

(ref 821618, 821619)

Indications

The Ventriculostomy Reservoir Set is indicated for use to gain access to the cerebral ventricles or other intracranial cavities for the purpose of diagnostic studies or therapeutic drug administration with or without a shunting device. When used with the shunting device, the ventriculostomy reservoir is also indicated for use as the proximal fluid pathway.

*These products are currently non-CE Marked. Please check with your local CSS representative their availability for sale.

Holter[®] Rickham[™] Ventriculostomy Reservoirs

(ref 821615, 821621, 821616, 821623)

Indications

The Ventriculostomy Reservoir Set is indicated for use to gain access to the cerebral ventricles or other intracranial cavities for the purpose of diagnostic studies or therapeutic drug administration with or without a shunting device. When used with the shunting device, the ventriculostomy reservoir is also indicated for use as the proximal fluid pathway.

Holter[®] Salmon-Rickham[™] Ventriculostomy Reservoirs

(ref 821625, 821617)

Indications

The Ventriculostomy Reservoir Set is indicated for use to gain access to the cerebral ventricles or other intracranial cavities for the purpose of diagnostic studies or therapeutic drug administration with or without a shunting device. When used with the shunting device, the ventriculostomy reservoir is also indicated for use as the proximal fluid pathway.

Catheters

Bactiseal[®]

(ref 823072, 823073, 823074)

Indications

CSF Management Bactiseal catheters are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Portnoy Ventricular Catheter

(ref NL8501229)

Indications

The Portnoy Ventricular Catheter CSF Management catheters are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Reflux Control Peritoneal Catheter & Peritoneal Open-Ended Catheter with Slits

(ref NL8501375, NL8501376)

Indications

The Peritoneal Reflux Control CSF Management catheters are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman[®] Peritoneal Catheter

(ref 823045)

Indications

CSF Management catheters are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Holter[®] Distal Peritoneal Catheter

(ref 821682, 821684)

Indications

CSF Management catheters are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman[®] Hakim[®] Ventricular Catheter

(ref 823041)

Indications

Hakim implants are intended to be used for the drainage of cerebrospinal fluid (CSF) in the management of Hydrocephalus.

Holter[®] Ventricular Catheter

(ref 821652, 821654, 821656, 821658, 821660, 821662, 821664, 821666, 821650)

Indications

CSF Management catheters are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Holter[®] Type A Distal Atrial Catheter

(ref 821670)

Indications

The Type "A" Atrial Catheter is indicated for use to shunt cerebrospinal fluid, when shunting of cerebrospinal fluid to the atrium is the procedure of choice in the treatment of hydrocephalus.

Contraindications

This device is not designed, sold, or intended for use except as indicated. Ventriculoatrial shunting is contraindicated in patients with infection (e.g., meningitis, septicemia), risk of infection, pulmonary emboli, or a high right atrial pressure associated with congenital heart disease.

Holter[®] Type B Distal Atrial Catheter

(ref 821672)

Indications

The Type "B" Atrial Catheter is indicated for use to shunt cerebrospinal fluid, when shunting of cerebrospinal fluid to the atrium is the procedure of choice in the treatment of hydrocephalus.

Contraindications

This device is not designed, sold, or intended for use except as indicated. Ventriculoatrial shunting is contraindicated in patients with infection (e.g., meningitis, septicemia), risk of infection, pulmonary emboli, or a high right atrial pressure associated with congenital heart disease.

Holter[®] Type C Distal Atrial Catheter

(ref 821674)

Indications

The Type "C" Atrial Catheter is indicated for use to shunt cerebrospinal fluid, when shunting of cerebrospinal fluid to the atrium is the procedure of choice in the treatment of hydrocephalus.

Contraindications

This device is not designed, sold, or intended for use except as indicated. Ventriculoatrial shunting is contraindicated in patients with infection (e.g., meningitis, septicemia), risk of infection, pulmonary emboli, or a high right atrial pressure associated with congenital heart disease.

Holter[®] Type E Distal Atrial Catheter

(ref 821676)

Indications

The Type "E" Atrial Catheter is indicated for use to shunt cerebrospinal fluid, when shunting of cerebrospinal fluid to the atrium is the procedure of choice in the treatment of hydrocephalus.

Contraindications

This device is not designed, sold, or intended for use except as indicated. Ventriculoatrial shunting is contraindicated in patients with infection (e.g., meningitis, septicemia), risk of infection, pulmonary emboli, or a high right atrial pressure associated with congenital heart disease.

Holter® Type H Distal Atrial Catheter

(ref 821678)

Indications

The Type "H" Atrial Catheter is indicated for use to shunt cerebrospinal fluid, when shunting of cerebrospinal fluid to the atrium is the procedure of choice in the treatment of hydrocephalus.

Contraindications

This device is not designed, sold, or intended for use except as indicated. Ventriculoatrial shunting is contraindicated in patients with infection (e.g., meningitis, septicemia), risk of infection, pulmonary emboli, or a high right atrial pressure associated with congenital heart disease.

Codman® Distal Atrial Catheter *

(ref 823044)

Indications

For use in the treatment of hydrocephalus as a component of a shunt system when draining or shunting of cerebrospinal fluid (CSF) is indicated.

Contraindications

This device is not designed, sold, or intended for use except as indicated. Use of this device is contraindicated if systemic infection is present. Use of this device is contraindicated in patients receiving anticoagulants or who are known to have a bleeding diathesis.

Connectors

Connectors

(ref NL8501911, NL8501919)

Indications

CSF Management connectors and right angle adaptors are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

CODMAN®-MEDOS®Right Angle Adapter

(ref 823052)

Indications

CSF Management connectors and right angle adaptors are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman® Stainless Steel Connectors*

(ref 823049, 823048)

Indications

CSF Management connectors and right angle adaptors are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman® Type A Stainless Steel Connectors

(ref 821694)

Indications

CSF Management connectors are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman® Type B Stainless Steel Connectors

(ref 821695)

Indications

CSF Management connectors and right angle adaptors are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Codman® Titanium Connector

(ref 823053)

Indications

CSF Management connectors and right angle adaptors are intended to be used as components of systems for the drainage of cerebrospinal fluid (CSF) in the management of hydrocephalus.

Tunnelers and Introducers

Codman® Medos Valve Introducer

(ref 823055)

Indications

The Codman® Medos Valve Introducer, is a disposable instrument, specifically designed as an aid when passing the Codman® Hakim® Valve from the burr hole site to the mastoidal incision through the proper line of cleavage (between the galea and periosteum). Due to the malleability of this introducer, it can be performed to a desired curvature prior to valve placement. The introducer protects the valve unit tip connector, facilitates passage of the valve unit, and helps minimize tissue trauma.

Contraindications

This device is not designed, sold, or intended for use except as indicated.

Codman® Malleable Catheter Passer

(ref 821515, 821516, 821517)

Indications

The Catheter Passer is indicated for use as a subcutaneous guide in the placement of a hydrocephalic catheter for ventriculo-peritoneal shunting of CSF.

*These products are currently non CE-marked. Please check with your local CSS Representative their availability for sale.



Product References

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