

Leading the way with new technologies and products

# MicroVention Product 2014 Catalog International

 **MicroVention®**  
**TERUMO**  
[microvention.com](http://microvention.com)

MicroVention, Inc.  
Worldwide Headquarters  
1311 Valencia Avenue  
Tustin, CA 92780 USA  
PH +1.714.247.8000  
PH 1.800.990.8368

MicroVention UK Limited  
Suite 3, The Barracks Building  
10 Cliffords Fort, North Shields  
Tyne and Wear, NE30 1JE  
United Kingdom  
PH +44 (0) 191 258 6777  
F +44 (0) 191 258 5999

MicroVention Europe, S.A.R.L.  
30 bis, rue du Vieil Abrevoir  
78100 Saint-Germain-en-Laye  
France  
PH +33 (1) 39 21 77 46  
F +33 (1) 39 21 16 01

MicroVention Deutschland GmbH  
Hildebrandtstr. 4 F  
D-40215 Düsseldorf  
Germany  
PH +49 211 210 798-0  
F +49 211 210 798-29

# Table of Contents

## Products

### A. Coils

#### MicroPlex® Coil System

- Cosmos® Complex Coils A1
- Complex Platinum Coils A2
- VFC® Complex Coils A3
- HyperSoft® 3D Complex Coils A4
- Helical Platinum Coils A5
- HyperSoft® Finishing Coils A6

#### Hydrogel Coated Coils

- HydroFrame® HydroCoil Embolic System A7
- HydroFill® HydroCoil Embolic System A8
- HydroSoft® HydroCoil Embolic System A9

### B. Delivery and Detachment Systems

- V-Trak® Delivery Pusher and  
V-Grip® Detachment Controller B1

### C. Access Products

#### Guide Catheters

- Chaperon® Guiding Catheter System C1
- Chaperon® Guiding Catheter Single C2
- SOFIA™ Distal Access Catheter C3

#### Guidewires

- Traxcess® Guidewire and Docking Wire C4

#### Microcatheters

- Headway® Microcatheter C5
- Headway® Duo Microcatheter C6

#### Balloon Catheters

- Scepter C® Occlusion Balloon Catheter C7
- Scepter XC® Occlusion Balloon Catheter C8

### D. Intraluminal Devices

- LVIS® Intraluminal Support Device D1
- LVIS® Jr. Intraluminal Support Device D2
- FRED® System D3

### E. Thrombectomy/Ischemic Stroke

- ERIC® Retrieval Device and  
ERIC® Retrieval Device Kit E1
- CASPER™ Carotid Artery Stent E2

### F. Liquid Embolics

- PHIL™ Liquid Embolic System F1

### G. Ordering Information

- International G1

Note: this international catalog may contain products which are not available for sale or distribution in all countries, due to Regulatory requirements.



MICROVENTION, MicroPlex, Cosmos, VFC, HyperSoft, HydroSoft, HydroFrame, HydroFill, V-Trak, V-Grip, Chaperon, Traxcess, Headway, Scepter C, Scepter XC, LVIS, FRED and ERIC are registered trademarks of MicroVention, Inc. PHIL, SOFIA and CASPER are trademarks of MicroVention, Inc. Scientific and clinical data related to this document are on file at MicroVention, Inc. Refer to Instructions for Use, contraindications and warnings for additional information. ©2014 MicroVention, Inc. MM259(I) 12/14 Rev.C





<b>Cosmos® Complex Coils</b> For framing, filling and finishing		
<b>10 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen (Stretch-Resistant)		
V-Trak® Soft Delivery System Reference No.	Large Loop Dia. (mm)	Length (cm)
100202CSSR-V*	2	2
100254CSSR-V*	2.5	4
100306CSSR-V*	3	6
100408CSSR-V*	4	8
100412CSSR-V*	4	12
100515CSSR-V	5	15
100522CSSR-V	5	22
100618CSSR-V	6	18
100626CSSR-V	6	26
100722CSSR-V	7	22
100731CSSR-V	7	31
100825CSSR-V	8	25
100837CSSR-V	8	37
100933CSSR-V	9	33
101036CSSR-V	10	36

<b>Cosmos® Complex Coils</b> For framing, filling and finishing		
<b>18 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen		
V-Trak® Delivery System Reference No.	Large Loop Dia. (mm)	Length (cm)
180619CS-V	6	19
180723CS-V	7	23
180827CS-V	8	27
180931CS-V	9	31
181036CS-V	10	36
181139CS-V	11	39
181243CS-V	12	43
181347CS-V	13	47
181451CS-V	14	51
181652CS-V	16	52
181859CS-V	18	59
182065CS-V	20	65
182263CS-V	22	63
182468CS-V	24	68

\*2mm - 4mm features  Delivery System

## Features

Initial Progressively-Sized Loops

Combination of Unique  
Variable-Diameter Loops and  
Innovative Deployment

Stability

Choices of Length

## Benefits

Allows better controlled deployment into the aneurysm

Optimum framing provided by variable diameter loops directed towards periphery of aneurysm

As loops deploy, they brace the previously deployed loops

Loops find space along aneurysm periphery and provide excellent neck coverage

Stable basket upon subsequent coil deployment

Ability to concentrically fill

Long lengths provide greater volume fill and extensive coverage



<b>MicroPlex® Complex Coils</b> For framing and filling		
<b>10 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen		
<b>V-Trak® Delivery System Reference No.</b>	<b>Loop Dia. (mm)</b>	<b>Length (cm)</b>
100204CC-V	2	4
100307CC-V	3	7
100410CC-V	4	10
100512CC-V	5	12
100615CC-V	6	15
100718CC-V	7	18
100820CC-V	8	20
100924CC-V	9	24
101026CC-V	10	26

<b>MicroPlex® Complex Coils</b> For framing and filling		
<b>18 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen for coils 12mm or smaller ≥.018" Lumen for coils 13mm or larger		
<b>1 Diameter Loop</b>		
<b>V-Trak® Delivery System Reference No.</b>	<b>Loop Dia. (mm)</b>	<b>Length (cm)</b>
180410CC-V	4	10
180512CC-V	5	12
180615CC-V	6	15
180717CC-V	7	17
180820CC-V	8	20
180923CC-V	9	23
181026CC-V	10	26
181128CC-V	11	28
181231CC-V	12	31
181332CC-V	13	32
181434CC-V	14	34
181639CC-V	16	39
181844CC-V	18	44
182050CC-V	20	50

## Features

### Versatile Framework

## Benefits

Designed to reduce compartmentalization and provide greater neck coverage

Provides even distribution of coil loops at the periphery of the aneurysm

### Enhanced Stability

Each successive loop gently rotates course, changing direction as it is deployed

### Superior Conformability

Without assuming a pre-determined three-dimensional shape, the complex coil is able to frame a wide range of aneurysm morphologies

Facilitates placement of multiple consecutive complex coils



# Complex Coils



<b>VFC® Versatile Range Fill Coil</b> For filling		
Recommended 2-Tip Marker Microcatheter ≥ 0.0165" Lumen <b>(Stretch-Resistant)</b>		
V-Trak® Soft Delivery System Reference No.	Diameter Range (mm)	Length (cm)
VFC010303-V*	1 - 3	3
VFC030606-V*	3 - 6	6
VFC030610-V*	3 - 6	10
VFC030615-V*	3 - 6	15
VFC061020-V	6 - 10	20
VFC061030-V	6 - 10	30
VFC101530-V	10 -15	30
VFC101540-V	10 -15	40
VFC152040-V	15 - 20	40
VFC152060-V	15 - 20	60

\*1mm - 6mm features  Delivery System

## Features

Revolutionary Coil Design With Complex Loops And Waves

Single Coil Fills A Range Of Diameters

Long Length Options

Progressive Diameter Design

## Benefits

Allows for improved coil distribution, greater packing density and easier placement

Seeks out and fills open spaces

Efficient aneurysm coiling

Simplified coil selection

May significantly reduce coil inventory levels

Greater volume fill potential with a single coil

Less microcatheter movement

Softer coil during deployment

All coils are compatible with .0165" (0.42mm) ID microcatheters



### HyperSoft® 3D Complex Coil

For framing, filling and finishing

#### 10 Coil Size

Recommended 2-Tip Marker Microcatheter  
≥ 0.0165" Lumen

**Stretch-Resistant**

V-Trak® Soft Delivery System Reference No.	Diameter (mm)	Length (cm)
100102HS3D-V	1	2
100103HS3D-V	1	3
100152HS3D-V	1.5	2
100153HS3D-V	1.5	3
100154HS3D-V	1.5	4
100202HS3D-V	2	2
100203HS3D-V	2	3
100204HS3D-V	2	4
100254HS3D-V	2.5	4
100256HS3D-V	2.5	6
100304HS3D-V	3	4
100306HS3D-V	3	6
100355HS3D-V	3.5	5
100358HS3D-V	3.5	8
100406HS3D-V	4	6
100408HS3D-V	4	8
100510HS3D-V	5	10
100515HS3D-V	5	15

### Features

All-in-One Coil

Soft Complex Shape

Wider Range in Coil  
Sizes and Lengths

True to Size

### Benefits

Hybrid design provides ability to  
Frame, Fill, and Finish

Engineered to easily conform to  
various aneurysm morphologies

Provides optimal choices in complex  
aneurysm morphologies

Finish with Precision – Eliminates  
the need to under or oversize a coil



<b>MicroPlex® Helical Coils</b>		
For filling		
<b>10 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen <b>(Stretch-Resistant)</b>		
V-Trak® Delivery System Reference No.	Loop Dia. (mm)	Length (cm)
<b>Soft</b>		
100202HCSR-S-V	2	2
100204HCSR-S-V	2	4
100206HCSR-S-V	2	6
100208HCSR-S-V	2	8
100304HCSR-S-V	3	4
100306HCSR-S-V	3	6
100308HCSR-S-V	3	8
100310HCSR-S-V	3	10
100404HCSR-S-V	4	4
100408HCSR-S-V	4	8
100410HCSR-S-V	4	10
<b>Regular</b>		
100515HCSR-R-V	5	15
100520HCSR-R-V	5	20
100620HCSR-R-V	6	20
100730HCSR-R-V	7	30
100830HCSR-R-V	8	30
100930HCSR-R-V	9	30
101030HCSR-R-V	10	30

<b>MicroPlex® Helical Coils</b>		
For filling		
<b>18 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen		
V-Trak® Delivery System Reference No.	Loop Dia. (mm)	Length (cm)
<b>Soft</b>		
180204HC-S-V	2	4
180208HC-S-V	2	8
180304HC-S-V	3	4
180308HC-S-V	3	8
180406HC-S-V	4	6
180410HC-S-V	4	10
180512HC-S-V	5	12
180615HC-S-V	6	15
<b>Regular</b>		
180520HC-R-V	5	20
180620HC-R-V	6	20
180730HC-R-V	7	30
180830HC-R-V	8	30
180930HC-R-V	9	30
181030HC-R-V	10	30
181230HC-R-V	12	30
181430HC-R-V	14	30
181630HC-R-V	16	30
181830HC-R-V	18	30
182030HC-R-V	20	30

## Features

Versatile Framework

Available in Wide Range of Sizes

## Benefits

Exceptionally soft for easy deployment and repositioning

10 and 18 systems with 10 system stretch-resistant available

Provides efficient packing



## MicroPlex® HyperSoft® Coils

For finishing

### 10 Coil Size

Recommended 2-Tip Marker Microcatheter  
≥.0165" Lumen  
(Stretch-Resistant)

V-Trak® Soft Delivery System Reference No.	Loop Dia. (mm)	Length (cm)
100151HS-V	1.5	1
100152HS-V	1.5	2
100153HS-V	1.5	3
100154HS-V	1.5	4
100201HS-V	2	1
100202HS-V	2	2
100203HS-V	2	3
100204HS-V	2	4
100206HS-V	2	6
100254HS-V	2.5	4
100256HS-V	2.5	6
100304HS-V	3	4
100306HS-V	3	6
100308HS-V	3	8
100404HS-V	4	4
100406HS-V	4	6
100408HS-V	4	8
100506HS-V	5	6
100508HS-V	5	8
100606HS-V	6	6
100608HS-V	6	8

## Features

Soft and Conformable Coil

Softer Pusher

New 1.5mm and 2.5mm Sizes

## Benefits

Greater packing density and easier placement

Ability to place coil in confined spaces

Less microcatheter movement or deflection for better control placing the coil into the aneurysm

Designed to reduce microcatheter kickback

1.5mm with 4 lengths and 2.5 with 2 lengths offer greater flexibility of choice

Featuring **V-Trak** Delivery System  
*Soft*





<b>HydroFrame® Complex Coils</b> For framing and filling		
<b>10 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen <b>(Stretch-Resistant)</b>		
V-Trak® Soft Delivery System Reference No.	Loop Dia. (mm)	Length (cm)
100202HFRM-V*	2	2
100254HFRM-V*	2.5	4
100306HFRM-V*	3	6
100405HFRM-V*	4	5
100408HFRM-V*	4	8
100510HFRM-V	5	10
100515HFRM-V	5	15
100612HFRM-V	6	12
100619HFRM-V	6	19
100715HFRM-V	7	15
100728HFRM-V	7	28
100817HFRM-V	8	17
100833HFRM-V	8	33
100931HFRM-V	9	31
101036HFRM-V	10	36

<b>HydroFrame® Complex Coils</b> For framing and filling		
<b>18 Coil Size</b>		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen		
V-Trak® Delivery System Reference No.	Loop Dia. (mm)	Length (cm)
180619HFRM-V	6	19
180723HFRM-V	7	23
180827HFRM-V	8	27
180931HFRM-V	9	31
181036HFRM-V	10	36
181139HFRM-V	11	39
181243HFRM-V	12	43
181347HFRM-V	13	47
181445HFRM-V	14	45
181644HFRM-V	16	44
181850HFRM-V	18	50
182048HFRM-V	20	48

\*2mm - 4mm features  Delivery System

## Features

First Two Loops Progressively-Sized

Variable-Diameter Loops and Innovative Deployment

Stability

Ease of Use

Greater Volume Fill

Ability to Deliver Hydrogel at the Neck

## Benefits

Better initial deployment

Excellent framing along aneurysm periphery and neck

Stable basket upon subsequent coil deployment

Ability to concentrically fill

No prepping or steaming

HydroFrame provides greater volume fill than other 10 system framing coils

Hydrogel at the neck has been shown to reduce recurrence rates<sup>1</sup>

1. H.J. Cloft, for the HEAL Investigators. HydroCoil for Endovascular Aneurysm Occlusion (HEAL) Study: 3-6 Month Angiographic Follow-Up Results. AJNR AM J Neuroradiology; 28:152-154, Jan 2007 (197 aneurysms; 135 follow-up cases)



<b>HydroFill® Helical Coils</b> For filling		
Recommended 2-Tip Marker Microcatheter ≥.0165" Lumen (Stretch-Resistant)		
<b>V-Trak® Soft Delivery System Reference No.</b>	<b>Loop Dia. (mm)</b>	<b>Length (cm)</b>
100202HFIL-V*	2	2
100204HFIL-V*	2	4
100206HFIL-V*	2	6
100304HFIL-V*	3	4
100306HFIL-V*	3	6
100408HFIL-V*	4	8
100410HFIL-V*	4	10
100510HFIL-V	5	10
100515HFIL-V	5	15
100610HFIL-V	6	10
100615HFIL-V	6	15
100620HFIL-V	6	20
100715HFIL-V	7	15
100720HFIL-V	7	20
100820HFIL-V	8	20
100830HFIL-V	8	30
100920HFIL-V	9	20
100930HFIL-V	9	30
101020HFIL-V	10	20
101030HFIL-V	10	30
101230HFIL-V	12	30
101440HFIL-V	14	40
101640HFIL-V	16	40
101850HFIL-V	18	50
102050HFIL-V	20	50
102250HFIL-V	22	50
102450HFIL-V	24	50

## Features

No Steaming or Preparation of Coil Required

Longer Working Time

Volume Fill

Longer Lengths

Hydrogel-Based Coil System

Ability to Perform All-Hydrogel Cases

V-Trak® Soft Delivery System, Sizes 2mm - 4mm

## Benefits

Saves time and work of preparing coil

Ability to utilize more time if needed to deploy coil:

**Microcatheters ≥ .0165"**

– 30 minutes for 2mm - 4mm

– 10 minutes for 5mm - 24mm

**Microcatheters ≥ .021"**

– 30 minutes for all sizes

2mm - 4mm .016" expanded diameter  
5mm - 24mm .018" expanded diameter

Up to 50cm on larger sizes

Clinical benefits of hydrogel, proven in numerous clinical studies, including HELPS

Ability to utilize easy-to use hydrogel coils for framing, filling and finishing: HydroFrame®, HydroFill®, and HydroSoft® Embolic Coil Systems

Less microcatheter movement or deflection for better control placing the coil into the aneurysm

Designed to reduce microcatheter kickback

\*2mm - 4mm features **V-Trak® Soft** Delivery System



## HydroSoft® Helical Coils

For filling and finishing

### 10 Coil Size

Recommended 2-Tip Marker Microcatheter  
≥.0165" Lumen  
**(Stretch-Resistant)**

V-Trak® Soft Delivery System Reference No.	Loop Dia. (mm)	Length (cm)
100152H2HS-V*	1.5	2
100154H2HS-V*	1.5	4
100201H2HS-V*	2	1
100202H2HS-V*	2	2
100203H2HS-V*	2	3
100204H2HS-V*	2	4
100206H2HS-V*	2	6
100208H2HS-V*	2	8
100254H2HS-V*	2.5	4
100256H2HS-V*	2.5	6
100304H2HS-V*	3	4
100306H2HS-V*	3	6
100308H2HS-V*	3	8
100310H2HS-V*	3	10
100404H2HS-V*	4	4
100406H2HS-V*	4	6
100408H2HS-V*	4	8
100410H2HS-V*	4	10
100506H2HS-V	5	6
100508H2HS-V	5	8
100510H2HS-V	5	10
100515H2HS-V	5	15
100520H2HS-V	5	20
100606H2HS-V	6	6
100608H2HS-V	6	8
100610H2HS-V	6	10
100615H2HS-V	6	15

## Features

Gel on the Inside

Microcatheter Compatibility

Stretch-Resistant

## Benefits

No prep, no steaming

Provides the softness of a platinum finishing coil

30 minute working time and compatible with .0165" - .021" microcatheters

Facilitates repositioning

\*1.5mm - 4mm features



Delivery System

## V-Trak Delivery Pusher

### Features

No Preparation

More Flexible Delivery Pusher

Softer, Shorter Detachment Zone

Pusher Stability

Coil Exit Markers

### Benefits

Simplifies operation; reduces procedure time

Minimizes microcatheter movement; enhances coil deliverability

Superior coil placement ability; reduces microcatheter tip deflection

Solid mandrel pusher offers more kink-resistance and improved coil advancement

Indicates coil is approaching microcatheter tip, reducing fluoroscopy time



## V-Grip

### Features

Self-contained Integrated Power Supply

Rapid Coil Detachment

Sterile, Disposable Design

Ergonomic Design

Visual and Audible Indicators

### Benefits

Ready to use; no accessories, no patient grounding, no connecting cables or additional batteries

Single person operation; simple one-button coil detachment in 0.75 seconds for maximum efficiency and speed

Reduces set-up and procedure time

Lightweight, no device preparation, and easily identifiable

Provides instant notification that device is ready for use

### V-Grip<sup>®</sup> Detachment Controller

For use with the V-Trak<sup>®</sup> Delivery System

**5 Detachment Controllers Per Box**

Reference No.

VG501



## Chaperon® Guiding Catheter System

Guiding Catheter System

5F Neuro Guiding Catheter / System					6F Neuro Guiding Catheter / System				
Product Code	Type	OD Inner/Outer (French)	Shape	ID (inches)	Product Code	Type	OD Inner/Outer (French)	Shape	ID (inches)
GC595STJB	System	4/5	STR/JB2	0.059	GC695STJB	System	5/6	STR/JB2	0.071
GC595STVT	System	4/5	STR/VTR	0.059	GC695STVT	System	5/6	STR/VTR	0.071
GC595STSI	System	4/5	STR/SIM	0.059	GC695STSI	System	5/6	STR/SIM	0.071
GC595M2JB	System	4/5	MP2/JB2	0.059	GC695M2JB	System	5/6	MP2/JB2	0.071
GC595M2SI	System	4/5	MP2/SIM	0.059	GC695M2SI	System	5/6	MP2/SIM	0.071
GC595M2VT	System	4/5	MP2/VTR	0.059	GC695M2VT	System	5/6	MP2/VTR	0.071
					GC695BUJB	System	5/6	BUR/JB2	0.071
					GC695BUVT	System	5/6	BUR/VTR	0.071

### Guiding Catheter Shapes



STR

MP2

BUR

### Inner Catheter Shapes



VTR

JB2

SIM2

## Features

Inner Catheter Combined System

Largest ID

Flat Braid Reinforced Shaft

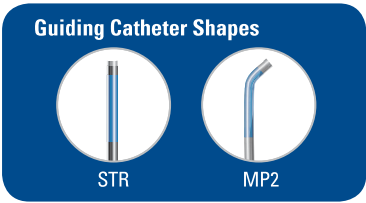
## Benefits

Atraumatic access and deeper positioning for more support with high maximum injection pressure (**4F**-750 PSI **5F**-1000 PSI)

Enhanced work space for multiple catheter usage (**5F**-0.059" **6F**-0.071")

Increased kink resistance and greater torque control

<b>Chaperon</b> <sup>®</sup> Guiding Catheter Single					<b>Chaperon</b> <sup>®</sup> Guiding Catheter Single				
Guiding Catheter / Single					Guiding Catheter / Single				
<b>5F</b> Neuro Guiding Catheter / Single					<b>6F</b> Neuro Guiding Catheter / Single				
Product Code	Type	OD Outer (French)	Shape	ID (inches)	Product Code	Type	OD Outer (French)	Shape	ID (inches)
<b>GC595ST</b>	Single	5	STR	0.059	<b>GC695ST</b>	Single	6	STR	0.071
<b>GC595M2</b>	Single	5	MP2	0.059	<b>GC695M2</b>	Single	6	MP2	0.071



## Features

Largest ID

Flat Braid Reinforced Shaft

Proprietary Polyester for Outer Material

## Benefits

Enhanced work space for multiple catheter usage (5F-0.059" 6F-0.071")

Increased kink resistance and greater torque control

Provides better support

## **SOFIA™** Distal Access Catheter    Soft Torqueable Catheter Optimized For Intracranial Access

1 per box and includes shaping mandrel and introducer sheath

Product Code	Catheter Size (French)	Proximal OD (inch/mm)	Distal OD (inch/mm)	ID (inch)	Working Length (cm)	Distal Length (cm)	Distal Tip Shape
DA5125ST	5F	0.068 / 1.7	0.068 / 1.7	0.055	125	17	STRAIGHT

### Features

Exceptionally Soft Distal Shaft

Low Profile

Steam Shapeable Tip and Torqueable Shaft

Enhanced Kink Resistance

### Benefits

Easier navigation in tortuous vessels

Compatible with 6F .070 inch ID guide catheter systems

Steerable around bifurcations

Easy to handle with 1:1 push/pull control



# Guidewire with Hydrophilic Coating

<b>Traxcess® Guidewire and Docking Wire</b>						
Guidewire (0.014")						
One unit per box / Guidewires include shaping mandrel, insertion tool, and torque device						
Product Name	Product Code	Description	Tip Shape	Total/Distal Length (cm)	Proximal/Distal OD (inches)	Shapeable Tip Length (cm)
Traxcess 14	GW1420040	Soft	STR	200 / 40	0.014 / 0.012	1.4
Traxcess 14EX	GW1420040X	Support	STR	200 / 40	0.014 / 0.012	1.4
<b>Docking Wire (0.014")</b>						
Traxcess Docking Wire	GW14100EX	Docking	—	115	0.014	—



## Features

- Nitinol Property Control Technology
- Hybrid Guidewire Core Construction
- Terumo Glide Technology™

## Benefits

- Excellent tip shapability and shape retention
- 1:1 torque transmission and direct wire control
- Enhanced durability and lubricity in hydrophilic coating



## Features

- Compatible with Traxcess Guidewires
- Simple Docking Wire System

## Benefits

- Total length is 313cm when combined with the Traxcess Guidewire (2cm overlap)
- Easily convert the Traxcess Guidewire into exchange length





# Microcatheter with Hydrophilic Coating

<b>Headway® Microcatheter</b> Microcatheter with Hydrophilic Coating							
One unit per box and includes shaping mandrel and introducer sheath							
Product Name	Description	Product Code	ID (inches)	Tip Shape	Usable Length (cm)	OD Prox./Distal (French)	Tip Markers
Headway17 Advanced 'Soft'	Straight	MC172150S	0.017	STR	150	2.4 / 1.7	2
Headway17 Advanced	Straight	MC172150SX	0.017	STR	150	2.4 / 1.7	2
Headway17 Advanced	Pre-shaped tip 45	MC17215045X	0.017	45	150	2.4 / 1.7	2
Headway17 Advanced	Pre-shaped tip 90	MC17215090X	0.017	90	150	2.4 / 1.7	2
Headway17 Advanced	Pre-shaped tip J	MC172150JX	0.017	J	150	2.4 / 1.7	2
Headway21	Straight	MC212150S	0.021	STR	150	2.5 / 2.0	2
Headway27	Straight	MC272150S	0.027	STR	150	3.0 / 2.6	2

## Product

### Headway17 Advanced

0.017 inch ID microcatheter with atraumatic 1.7F distal tip with enhanced catheter control, superior shapability and shape retention. An enhanced distal shaft provides excellent support for coiling while the segmented design ensures smooth trackability

### Headway17 Advanced 'Soft'

0.017 inch ID microcatheter with a softer distal shaft to provide more sensitivity to coil deployment force

### Headway21

0.021 inch ID microcatheter with a 2.0F rounded distal tip, optimized for stent delivery and the ability to track through tortuous anatomy

### Headway27

0.027 inch ID microcatheter with 2.6F distal tip diameter, designed specifically for flow diverting stent delivery

## Benefits



# Innovative Catheter Technology

## Headway® Duo Microcatheter

Microcatheter with Hydrophilic Coating

1 per box; includes shaping mandrel and introducer sheath

Product Name	Product Code	ID Body/Tip (inches)	Tip Shape	Usable Length (cm)	Distal Length (cm)	OD Prox./Dist. (French)	Tip Markers
Headway Duo, 156cm	MC162156S	0.0165 / 0.0165	STR	156	9	2.1 / 1.6	2
Headway Duo, 167cm	MC162167S	0.0165 / 0.013	STR	167	9	2.1 / 1.3	1

### Features

#### Hybrid Braid/Coil Design

Tight pitch coil provides lumen integrity and bending flexibility  
 Proximal braid provides firmness and a torqueable catheter body  
 Will not ovalize or kink

#### Small OD, Large ID

0.0165" body ID microcatheter with low profile distal tip  
 156cm Headway® Duo microcatheter compatible with coils and ≤0.014" guidewires  
 167cm Headway® Duo microcatheter compatible with ≤0.014"/0.012" (proximal/distal) guidewires

#### Superior Trackability


True 1:1 push/pull while tracking through tortuous anatomy

#### Liquid Embolic Compatibility

Compatible with Onyx™ Liquid Embolic and nBCA  
 High burst strength  
 Long length allows distal lesion access

#### Soft Distal Tip

Smooth, atraumatic tracking  
 High sensitivity to coil deployment force  
 Excellent tip "painting" ability

<b>Scepter C<sup>®</sup> Occlusion Balloon Catheter</b> Compliant Balloon Catheter				
Product Code	Description	Balloon Diameter (mm)	Balloon Length (mm)	Distal Tip Length (mm)
1 balloon catheter per box				
BC0410C	Compliant Occlusion Balloon 4.0mm	4.0	10	5
BC0415C	Compliant Occlusion Balloon 4.0mm	4.0	15	5
BC0420C	Compliant Occlusion Balloon 4.0mm	4.0	20	5

## Features

### 14 Wire Compatible

Provides more choices of guidewire (Traxcess<sup>®</sup> docking wire compatible)  
Improves trackability and stability with better performance of the wire

### Hydrophilic Coating on the Balloon

Significantly improves trackability  
Enables use of longer balloons without compromising trackability

### Soft & Long Tip

Improves balloon stability and trackability


### Low Profile

Ensures compatibility with double catheter technique in 6F guide  
Improves trackability

### Distal Tip Marker

Positive identification of distal tip location

<b>Scepter XC<sup>®</sup> Occlusion Balloon Catheter</b> X-tra Compliant Balloon Catheter				
Product Code	Description	Balloon Diameter (mm)	Balloon Length (mm)	Distal Tip Length (mm)
1 balloon catheter per box				
BC0411XC	X-tra Compliant Occlusion Balloon 4.0mm x 11mm	4.0	11	5



## Features

### 14 Wire Compatible

Provides more choices of guidewire (Traxcess<sup>®</sup> docking wire compatible)  
Improves trackability and stability with better performance of the wire

### Hydrophilic Coating on the Balloon

Significantly improves trackability  
Enables use of longer balloons without compromising trackability

### Soft & Long Tip

Improves balloon stability and trackability

### Low Profile

Ensures compatibility with double catheter technique in 6F guide  
Improves trackability

### Distal Tip Marker

Positive identification of distal tip location

<b>LVIS<sup>®</sup> Device</b>		<b>Low-profile Visualized Intraluminal Support</b>						
One unit per box								
Product Code	Unconstrained Diameter x Total Length (mm)	Total Length*/Working Length in Different Vessel Diameters (mm)						
		2.5mm	3.0mm	3.5mm	4.0mm	4.5mm	5.0mm	5.5mm
212517-CAS	3.5 x 19	22 / 18	20 / 16	19 / 15				
212525-CAS	3.5 x 24	30 / 26	27 / 23	24 / 20				
213015-CAS	4.5 x 16		20 / 16	19 / 15	18 / 14	16 / 12		
213025-CAS	4.5 x 23		30 / 26	28 / 24	26 / 22	23 / 19		
213041-CAS	4.5 x 34		46 / 42	43 / 39	39 / 35	34 / 30		
214035-CAS	5.5 x 27				40 / 36	37 / 33	32 / 28	27 / 23
214049-CAS	5.5 x 34				54 / 50	49 / 45	43 / 39	34 / 30

Notes: Compatible Microcatheter: Headway<sup>®</sup>21  
\*Total Length (includes flared ends) = Working Length + 4mm

## Features

Woven braid device made with 16 passes of a single nitinol wire

1mm compliant cell design

Radiopaque markers at both ends and two radiopaque helical strands along the length of the stent

Up to 75% retractable

## Benefits

Up to 22% metal coverage provides effective scaffold across aneurysm neck and optimal vessel wall apposition

Allows for easier passage of microcatheters

Enhanced radiopacity helps ensure optimal deployment and visibility

Improves accuracy in targeting the landing zone during deployment



# Intraluminal Support Device

<b>LVIS® Jr. Device</b>		Low-profile Visualized Intraluminal Support			
One unit per box					
Product Code	Unconstrained Diameter x Total Length (mm)	Total Length* / Working Length in Different Vessel Diameters (mm)			
		2.0mm	2.5mm	3.0mm	3.5mm
172010-CASJ	2.5 x 13	14 / 10	13 / 9		
172014-CASJ	2.5 x 17	18 / 14	17 / 13		
172020-CASJ	2.5 x 23	24 / 20	23 / 19		
172032-CASJ	2.5 x 34	36 / 32	34 / 30		
172516-CASJ	3.5 x 18		20 / 16	19 / 15	18 / 14
172524-CASJ	3.5 x 23		27 / 23	25 / 21	23 / 19
172530-CASJ	3.5 x 28		34 / 30	32 / 28	28 / 24
172537-CASJ	3.5 x 33		40 / 36	37 / 33	33 / 29

Notes: Compatible Microcatheter: Headway®17 or Scepter Occlusion Balloon  
 \*Total Length (includes flared ends) = Working Length + 4mm

## Features

- Compatible with Headway®17 Advanced microcatheter
- Deliverable through Scepter Occlusion Balloon Catheter
- 1.5mm compliant cell design
- Up to 75% retractable

## Benefits

- Low profile 1.7F delivery system improves navigability
- Post-balloon stenting provides new method of stent utilization
- Allows for easier passage of microcatheters
- Improves accuracy in targeting the landing zone during deployment

<b>FRED<sup>®</sup> System</b> Flow Re-Direction Endoluminal Device				
One unit per box				
Cross-Reference Product Code	New Product Code	Fully Open Implant Diameter* (mm)	Total Length / Working Length** (mm)	Fully Open Total Length / Working Length** (mm)
			3.0mm OD	3.5mm OD
FRED3505	FRED3507	3.5	16 / 10	13 / 7
N/A	FRED3511	3.5	22 / 17	17 / 11
FRED3525	FRED3516	3.5	30 / 24	22 / 16
N/A	FRED3524	3.5	40 / 34	31 / 24
N/A	FRED3536	3.5	54 / 49	40 / 36
			3.5mm OD	4.0mm OD
N/A	FRED4007	4.0	16 / 10	13 / 7
FRED4015	FRED4012	4.0	24 / 18	18 / 12
FRED4025	FRED4017	4.0	31 / 26	23 / 17
N/A	FRED4026	4.0	43 / 37	32 / 26
N/A	FRED4038	4.0	58 / 53	44 / 38
			4.0mm OD	4.5mm OD
N/A	FRED4508	4.5	18 / 11	15 / 8
FRED4515	FRED4513	4.5	26 / 19	20 / 13
FRED4525	FRED4518	4.5	34 / 27	25 / 18
N/A	FRED4528	4.5	45 / 39	34 / 28
N/A	FRED4539	4.5	62 / 56	45 / 39
			4.5mm OD	5.0mm OD
N/A	FRED5009	5.0	18 / 12	15 / 9
FRED5015	FRED5014	5.0	26 / 20	21 / 14
FRED5025	FRED5019	5.0	35 / 28	26 / 19
N/A	FRED5029	5.0	48 / 41	36 / 29
			5.0mm OD	5.5mm OD
FRED5515	FRED5514	5.5	28 / 22	22 / 14
FRED5535	FRED5526	5.5	46 / 38	32 / 26

## Features

### Integrated Dual-Layer Coverage

### Braided Self-Expanding Nickel Titanium, Paired-Stent Design

### Radiopaque Distal Wire Tip, Proximal and Distal Markers, and Interweaved Working Length Helical Strands

## Benefits

16-wire outer stent with 48-wire inner stent for enhanced radial force  
Inner stent provides high percentage metal surface area for flow-redirection

Enables simultaneous, dynamic push/pull dual-stent deployment with single operator ease of use  
Easy stent opening and superb vessel apposition, with partial resheathability

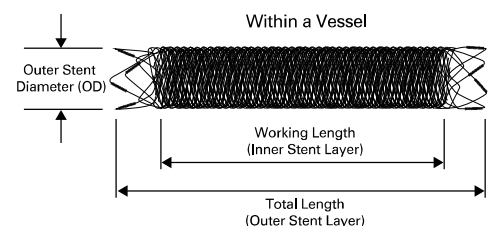
Full-stent length fluoroscopic visualization

### Notes:

Compatible with Headway<sup>®</sup> 27 Microcatheter

\* Max OD constrained in vessel

\*\* Outer device total length (including flared ends) and inner device working length (marked by helical strands), constrained in vessel





# Retrieval Device

<b>ERIC® Retrieval Device</b>		Embolus Retriever with Interlinked Cages		
Product Code	Product Name	# of Spheres	Diameter (mm)	Working Length (mm)
1 per box and includes introducer sheath				
ER173015	ERIC 3	3	3	15
ER173020	ERIC 3	4	3	20
ER174024	ERIC 4	4	4	24
ER174030	ERIC 4	5	4	30
ER176044	ERIC 6	5	6	44

## Features

### Interlinked Cage Design

## Benefits

Allows immediate clot-device integration at deployment  
 Independent cages that conform to tight curves to retain clot  
 Minimum contact to the vessel wall for atraumatic retrieval

### Headway17 Advanced Compatible

Improves access in the tortuous anatomy  
 Leaves more space for more suction with a small outer profile  
 Working length can be adjusted by re-sheathing

<b>ERIC® Retrieval Device Kit</b>		Comes with <b>HeadwayAdvanced</b> Microcatheter
Product Code	Product Name	Description
Includes 1 ERIC Retrieval Device and 1 Headway17 Advanced Microcatheter		
ER315KTA	ERIC 3 Kit	ERIC 3x15 with Headway 17 Advanced
ER320KTA	ERIC 3 Kit	ERIC 3x20 with Headway 17 Advanced
ER424KTA	ERIC 4 Kit	ERIC 4x24 with Headway 17 Advanced
ER430KTA	ERIC 4 Kit	ERIC 4x30 with Headway 17 Advanced
ER644KTA	ERIC 6 Kit	ERIC 6x44 with Headway 17 Advanced



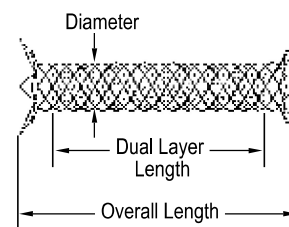
<b>CASPER™ RX Carotid Artery Stent</b>							
1 per box							
Product Code	Unconstrained Dimensions			Implanted Dimensions			
	Diameter (mm)	Dual Layer Length (mm)	Overall Length (mm)	1mm < Unconstrained Diameter		2mm < Unconstrained Diameter	
				Dual Layer Length (mm)	Overall Length (mm)	Dual Layer Length (mm)	Overall Length (mm)
CPR-0520-143RX	5	20	25	20	33	22	35
CPR-0530-143RX	5	30	37	35	47	38	52
CPR-0540-143RX	5	40	47	45	59	52	64
CPR-0616-143RX	6	16	22	20	32	23	35
CPR-0625-143RX	6	25	33	30	44	33	48
CPR-0630-143RX	6	30	40	40	53	43	58
CPR-0718-143RX	7	18	25	23	35	26	38
CPR-0725-143RX	7	25	35	30	47	36	52
CPR-0730-143RX	7	30	40	40	53	44	60
CPR-0820-143RX	8	20	25	25	36	27	40
CPR-0825-143RX	8	25	35	30	49	38	54
CPR-0830-143RX	8	30	40	40	55	45	61
CPR-0840-143RX	8	40	47	50	67	60	75
CPR-0920-143RX	9	20	33	30	45	33	48
CPR-0930-143RX	9	30	40	40	55	45	60
CPR-1020-143RX	10	20	35	30	45	35	50
CPR-1030-143RX	10	30	43	40	55	45	60

## Features

- Smallest stent pore size
- 5F Rx delivery system for all stent sizes
- Self-tapering braided stent design
- Stent can be recaptured after partial deployment
- Closed cell stent with wall apposition and flexibility of an open cell design

## Benefits

- Tacks down/contains plaque reducing embolic release
- Very low profile
- Optimize inventory with less model configurations
- Improved accuracy of stent placement/landing zone
- Stent conforms and adapts to all carotid anatomy





# Liquid Embolic System

<b>PHIL™</b> Non-adhesive Liquid Embolic System			
Product Code	Concentration	Viscosity	Content Per Syringe
1 pre-filled syringe of PHIL, 1 pre-filled syringe of DMSO and microcatheter hub adaptors*			
LEN10250	25%	Low	1mL
LEN10300	30%	Medium	1mL
LEN10350	35%	High	1mL

\*Available for Headway® DUO Microcatheter, Headway®17 Microcatheter, Scepter C® and Scepter XC® Balloon Occlusion Catheters and BALT® SONIC Microcatheter.

## Features

3 Concentrations Available

Pre-loaded Syringes

Iodine Bonded Radiopacifier

High Volume of Embolic Precipitate

## Benefits

To address different clinical needs involving embolization of low flow/high flow lesions or a need for distal/proximal penetration

No preparation required, ready to use

Homogenous radiopacity  
No need to shake  
No added metal for minimal artifact

More embolic capacity with less DMSO agent

## Microcatheter Compatibility

PHIL™ must be used with DMSO compatible catheters such as Headway® DUO Microcatheter, Headway®17 Microcatheter or Scepter Occlusion Balloon.

Product Name	Product Codes	Description	Working Length (cm)	Dead Space (cc)	Dead Space with Adaptor (cc)	OD Prox./Dist. (French)	Tip Markers
Scepter C®	BC0410C BC0415C BC0420C	Compliant Occlusion Balloon	150	0.44	0.23	2.8/2.1	3
Scepter XC®	BC0411XC	X-tra Compliant Occlusion Balloon	150	0.44	0.23	2.8/2.1	3
Headway® 17	MC172150S MC172150SX	Headway 17 Microcatheter	150	0.44	0.26	2.4/1.7	2
Headway® Duo 156cm	MC162156S	Headway Duo Microcatheter	156	0.34	0.24	2.1/1.6	2
Headway® Duo 167cm	MC162167S	Headway Duo Microcatheter	167	0.35	0.25	2.1/1.3	1

# Ordering Information

To place an order, contact a MicroVention Customer Service Representative at:

## Ordering Information Customer Service

**MicroVention, Inc.**  
Attn: Customer Service  
1311 Valencia Avenue  
Tustin, CA 92780

**N. Am. Toll Free** (800) 990 8368  
**Local** (714) 247 8000  
**Customer Service Fax** (714) 247 8007  
**Web** www.microvention.com

Please call customer service at 714 247 8000 to be connected with your local representative.

## MicroVention Locations Tustin Worldwide Headquarters and Europe

**MicroVention, Inc.**  
**Worldwide Headquarters**  
1311 Valencia Avenue  
Tustin, CA 92780 USA  
PH +1.714.247.8000  
PH 1.800.990.8368

**MicroVention UK Limited**  
Suite 3, The Barracks Building  
10 Cliffords Fort, North Shields  
Tyne and Wear, NE30 1JE  
United Kingdom  
PH +44 (0) 191 258 6777  
F +44 (0) 191 258 5999

**MicroVention Europe, S.A.R.L.**  
30 bis, rue du Vieil Abreuveoir  
78100 Saint-Germain-en-Laye  
France  
PH +33 (1) 39 21 77 46  
F +33 (1) 39 21 16 01

**MicroVention Deutschland GmbH**  
Hildebrandtstr. 4 F  
D-40215 Düsseldorf  
Germany  
PH +49 211 210 798-0  
F +49 211 210 798-29

### Ordering Information:

Customer Service Hours are 7:00 am - 4:30 pm PST. Orders may be placed by phone, fax or mail. If mailing, please mark Attn: Customer Service. All prices and product specifications are subject to change at the discretion of MicroVention, Inc. MicroVention, Inc. warrants its products to be free from defect in materials and workmanship.

### Shipping Terms:

Orders will be shipped FOB shipping point using Federal Express Standard Overnight service, or comparable, unless otherwise requested. All freight charges are prepaid and added to invoice.

### Payment Terms:

Net 30 days.

### Returned Goods Policy:

Authorization is required for all returns.

1. Request Returned Goods Authorization (RGA) number from Customer Service.
2. Once the authorization number has been obtained, Customer Service will provide all the information necessary for a proper return.
3. Return product to:

MicroVention, Inc.  
RGA # \_\_\_\_\_  
1311 Valencia Avenue  
Tustin, CA 92780

MicroVention, Inc. will accept the return of any standard catalog item under the following conditions:

- Merchandise processed or shipped in error by MicroVention, Inc. – *Full Credit*
- Product failure due to defect in materials or workmanship. – *Full Credit or Replacement at no charge.*