



Innovative Catheter Technology

Unique braid/coil construction for the lowest profile of any 0.014"/0.012" guidewire compatible catheter

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)	Flexible Distal Length (cm)	OD Prox./Dist. (French)	Dead Space	Tip Markers
Headway Duo, 156cm	MC162156S	0.0165 / 0.0165	STR	156	9	2.1 / 1.6	0.34 ml	2
Headway Duo, 167cm	MC162167S	0.0165 / 0.013	STR	167	9	2.1 / 1.3	0.35 ml	1

Features

Hybrid Braid/Coil Design

Tight pitch coil provides lumen integrity and bending flexibility
Proximal braid provides firmness and a torqueable catheter body
Resists kinking and ovalization

Small OD, Large ID

156cm Headway® Duo microcatheter compatible with coils and $\leq 0.014"$ OD guidewires
0.0165" body ID microcatheter with low profile distal tip
167cm Headway® Duo microcatheter compatible with $\leq 0.014"/\leq 0.012"$ (proximal/distal OD) guidewires
0.0165" body ID microcatheter with 0.013" ID distal tapered tip

Superior Trackability

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

Liquid Embolic Compatibility

Compatible with PHIL™ Liquid Embolic, Onyx™ Liquid Embolic, nBCA and DMSO
High burst strength (700 psi)
Long length allows distal lesion access

Soft Distal Tip

Smooth, atraumatic tracking
Excellent tip "painting" ability



MicroVention, Inc.
Worldwide Headquarters
1311 Valencia Avenue
Tustin, CA 92780, USA
MicroVention UK Limited
MicroVention Europe, S.A.R.L.
MicroVention Deutschland GmbH
Web

PH +1.714.247.8000

PH +44 (0) 191 258 6777
PH +33 (1) 39 21 77 46
PH +49 211 210 798-0
microvention.com



MICROVENTION and Headway are registered trademarks of MicroVention, Inc. PHIL is a trademark of MicroVention, Inc. Onyx is a trademark of Covidien. • Scientific and clinical data related to this document are on file at MicroVention, Inc. Refer to Instructions for Use for additional information. ©2014 MicroVention, Inc. MM268(I) Rev.C 8/14

Trackability / Shape Retention / Durability



Used with





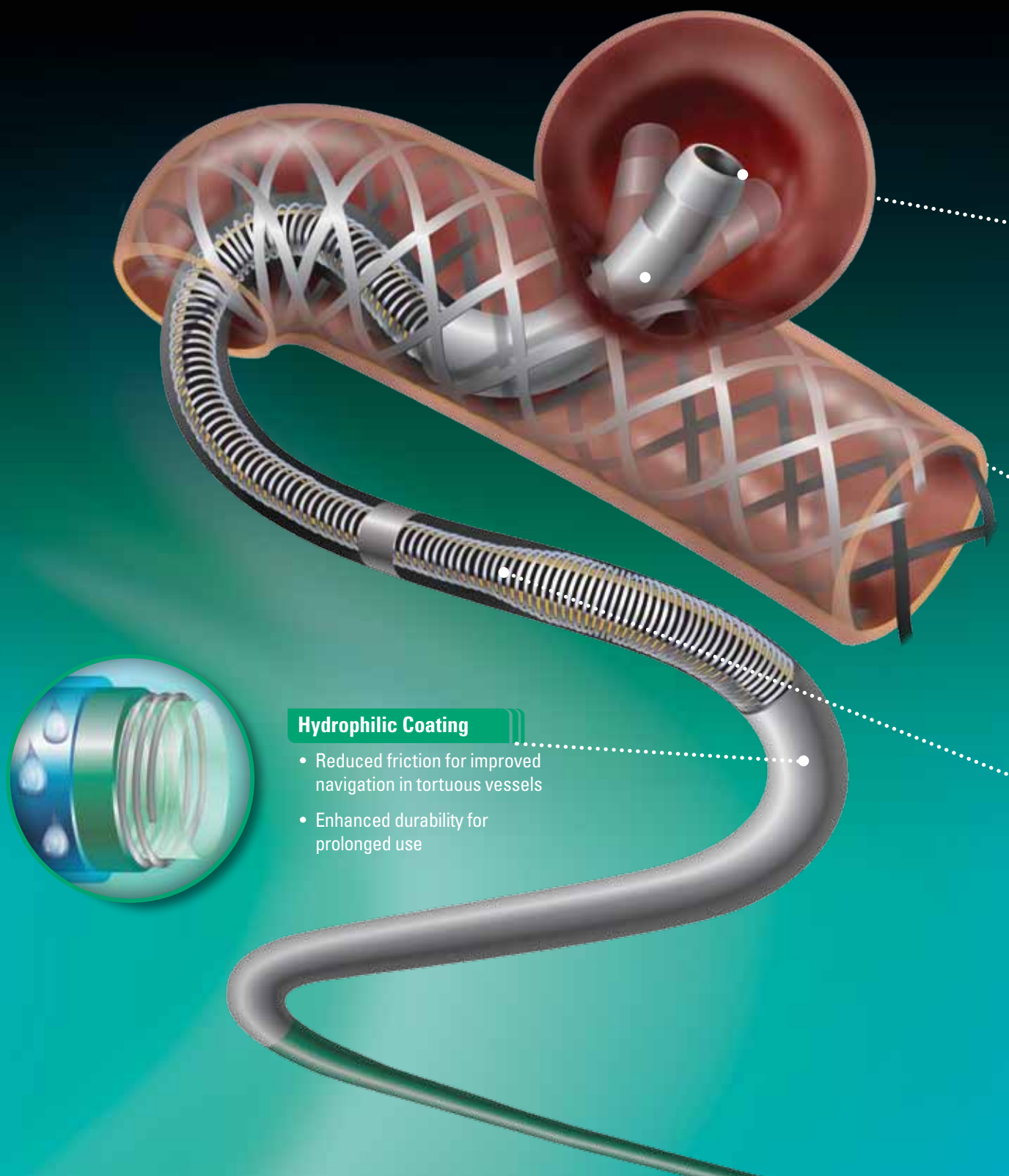
HEADWAY® MICROCATHETER - N

Headway^{Advanced} 17
Microcatheter

Headway^{Advanced} 17
Microcatheter Pre-shaped tip

Headway^{Advanced} 17 Soft
Microcatheter

Used with



Hydrophilic Coating

- Reduced friction for improved navigation in tortuous vessels
- Enhanced durability for prolonged use

EXT GENERATION CATHETER PERFORMANCE WITH IMPRO

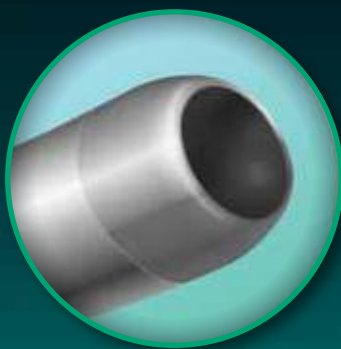
Innovative Catheter Construction

Headway 17 The unique construction of the Headway 17 microcatheter combines 7 progressive segments with a tapered PTFE liner and an atraumatic soft tip for enhanced performance in challenging anatomies. Two levels of softness and superior tip shapability allow for an optimized configuration for every procedure.

Headway 21 and 27 The multi-segmented design of the Headway 21 and 27 microcatheters provides superb trackability and resistance to elongation, while the combination of a tight-pitch coil reinforcement and PTFE inner liner allows for the delivery of stents in a smooth, controlled manner.

Rounded Tip

- Atraumatic soft tip facilitates smooth catheter advancement
- Rounded shape allows easier navigation through a deployed stent



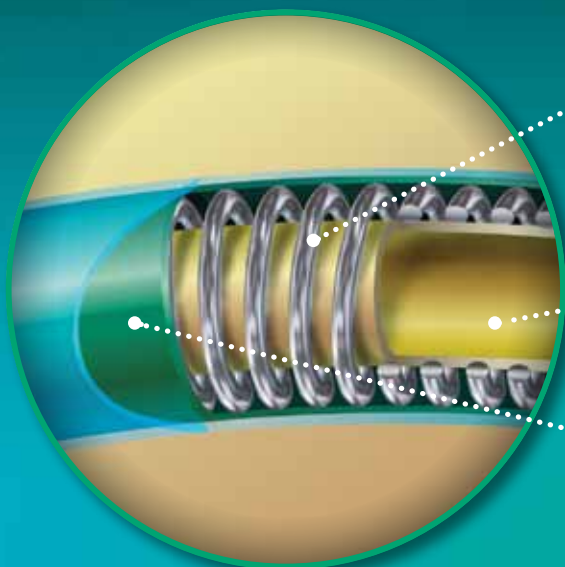
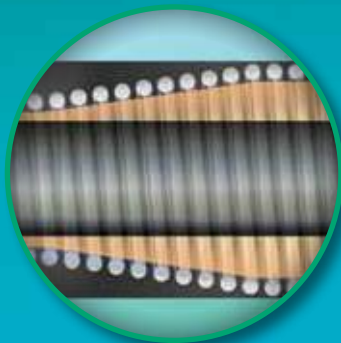
Designed for Tip Shapability

- Easy to shape with steamer
- Advanced technology for better shape retention on distal tip



Tapered PTFE Liner with Coil Reinforcement

- Tapered liner design allows true 1:1 push/pull control
- Tight-pitch coil reinforcement resists ovalization while maintaining maximum flexibility



VED TRACKABILITY AND CONTROL

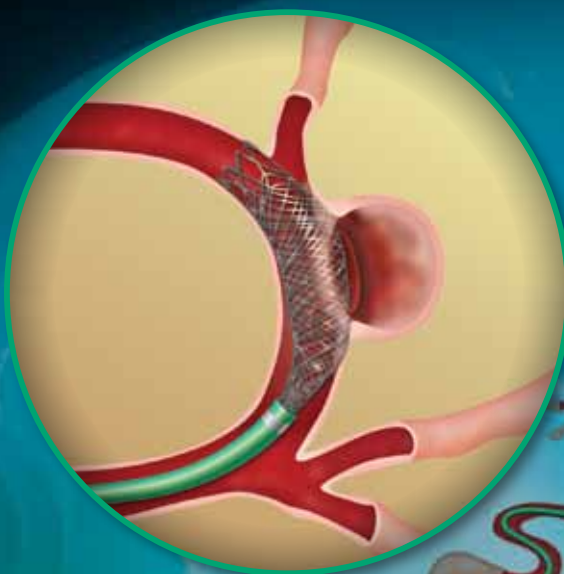


Headway[®]21
Microcatheter

Used with **LVIS[®]**
Intraluminal Support Device

Headway[®]27
Microcatheter

Used with **FRED[®]**
Flow Redirection Embolism Device



Coil Reinforced Catheter

- Tight pitch coil wind resists kinking and ovalization while maintaining maximum flexibility

PTFE Liner

- Lubricious, yet durable inner liner for smooth stent delivery

Robust Catheter Body

- Offers enhanced resistance to stretching and elongation while delivering stents or other less flexible devices



Headway

Microcatheter

CHOOSE
YOUR SIZE &
LEVEL OF
SOFTNESS

A Complete Range of Sizes & Softness

Headway® microcatheters offer a wider selection of access solutions. With three sizes, two levels of support and three pre-shaped tip options available, there is a Headway microcatheter available for use in nearly any procedure. All Headway microcatheters are designed to optimize the performance of LVIS® and LVIS® Jr. Intraluminal Support Devices, FRED® System flow diverting stents, ERIC® Retrieval Devices, and embolic coils. Headway microcatheters are also PHIL™ Liquid Embolic System and DMSO compatible.

SOFT SUPPORT ZONE

Soft support zone for greater sensitivity to coil delivery force

Headway¹⁷ Advanced Soft
Microcatheter

Headway¹⁷ Advanced
Microcatheter

Headway¹⁷ Advanced
Microcatheter Pre-shaped tip

Pre-Shaped Tips



45°



90°



"J"

Headway²¹
Microcatheter

Headway²⁷*
Microcatheter

ENHANCED SUPPORT ZONE

More support in the distal shaft to reduce catheter movement in challenging anatomy and ensure accurate device delivery.

*Also available in 156cm hybrid braid/coil design version for improved flow diverter delivery experience.

SPECIFICATIONS

Headway®

Microcatheter with Hydrophilic Coating

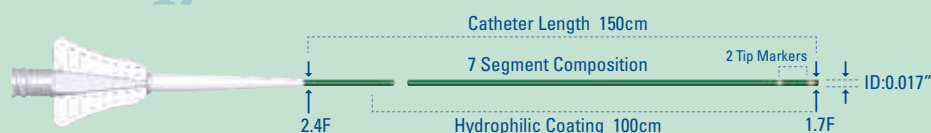
1 per box. Includes shaping mandrel and introducer sheath.

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	3.1 / 2.6	2
Headway27	Straight	MC272156S	0.027	STR	156	3.1 / 2.6	2

Dead space of Headway® 17 microcatheter is 0.41cc and 0.26cc with MicroVention hub adaptor.

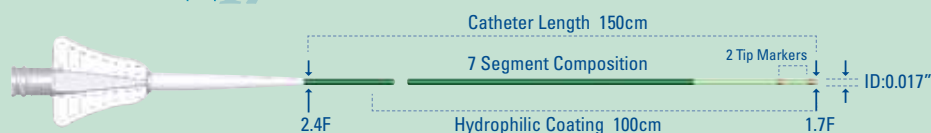
Headway¹⁷
Microcatheter

ADVANCED & ADVANCED 'SOFT'

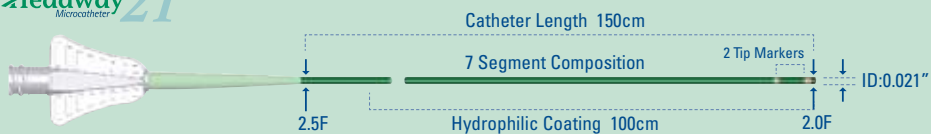


Headway^{Advanced}
Microcatheter Pre-shaped tip

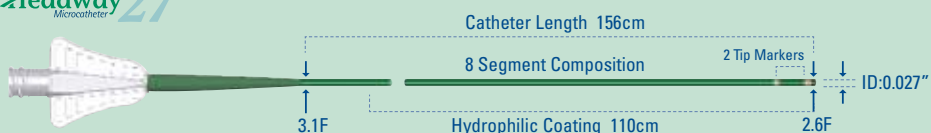
PRE-SHAPED TIPS



Headway²¹
Microcatheter



Headway²⁷
Microcatheter



Includes Shaping Mandrel and Introducer Sheath



www.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 UK
PH +44 (0) 191 258 6777
F +44 (0) 191 258 5999

MicroVention Europe
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

MICROVENTION, Headway, LVIS, FRED and ERIC are registered trademarks of MicroVention, Inc. PHIL is a trademark 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.MM304(I) Rev.B 11/14

Unique braid/coil construction for the lowest profile of any 0.014"/0.012" guidewire compatible catheter

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)	Flexible Distal Length (cm)	OD Prox./Dist. (French)	Dead Space	Tip Markers
Headway Duo, 156cm	MC162156S	0.0165 / 0.0165	STR	156	9	2.1 / 1.6	0.34 ml	2
Headway Duo, 167cm	MC162167S	0.0165 / 0.013	STR	167	9	2.1 / 1.3	0.35 ml	1

Features

Hybrid Braid/Coil Design

Tight pitch coil provides lumen integrity and bending flexibility
Proximal braid provides firmness and a torqueable catheter body
Resists kinking and ovalization

Small OD, Large ID

156cm Headway® Duo microcatheter compatible with coils and ≤0.014" OD guidewires
0.0165" body ID microcatheter with low profile distal tip
167cm Headway® Duo microcatheter compatible with ≤0.014"/≤0.012" (proximal/distal OD) guidewires
0.0165" body ID microcatheter with 0.013" ID distal tapered tip

Superior Trackability

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

Liquid Embolic Compatibility

Compatible with PHIL™ Liquid Embolic, Onyx™ Liquid Embolic, nBCA and DMSO
High burst strength (700 psi)
Long length allows distal lesion access

Soft Distal Tip

Smooth, atraumatic tracking
Excellent tip "painting" ability



MicroVention, Inc.
Worldwide Headquarters
1311 Valencia Avenue
Tustin, CA 92780, USA
MicroVention UK Limited
MicroVention Europe, S.A.R.L.
MicroVention Deutschland GmbH
Web

PH +1.714.247.8000

PH +44 (0) 191 258 6777
PH +33 (1) 39 21 77 46
PH +49 211 210 798-0
microvention.com

Headway 156cm
Microcatheter

Now with **Duo!** Technology

microcatheter

Hybrid braid/coil construction to improve stent delivery experience



Headway 21 156cm
Microcatheter

Headway 27 156cm
Microcatheter

LVIS
Intraluminal Support Device

ERIC
Endovascular Retriever with Internalized Coils

FRED Jr.
Flow Re-Direction Endoluminal Device

Sofia
Distal Access Catheter

Soft torqueable catheter. Optimized for Intracranial Access

FRED
Flow Re-Direction Endoluminal Device

Sofia
Distal Access Catheter

Soft torqueable catheter. Optimized for Intracranial Access

Stretch Resistant Shaft

- For stability and prevention of catheter body twisting

Hybrid Braid & Coil Design

- Coil reinforcement provides lumen integrity, bending flexibility and excellent shape retention
- Proximal variable braid reinforcement provides support and torque control
- Hybrid design provides 1:1 push/pull control for trackability

Soft Distal Shaft

- Smooth and atraumatic tracking

PTFE Liner

- Lubricious, durable inner liner for smooth stent delivery

Lubricious Hydrophilic Coating

- Reduced friction during navigation in tortuous anatomy and during lengthy procedures

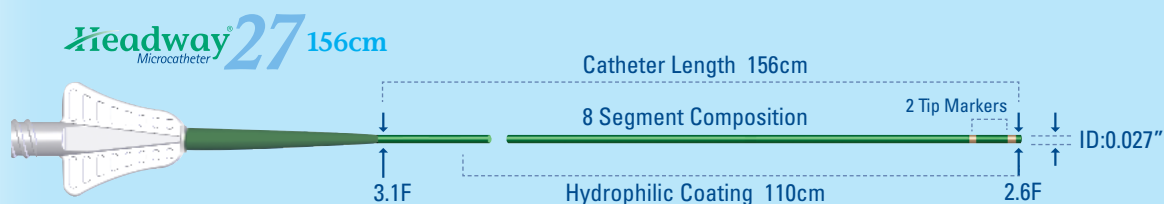
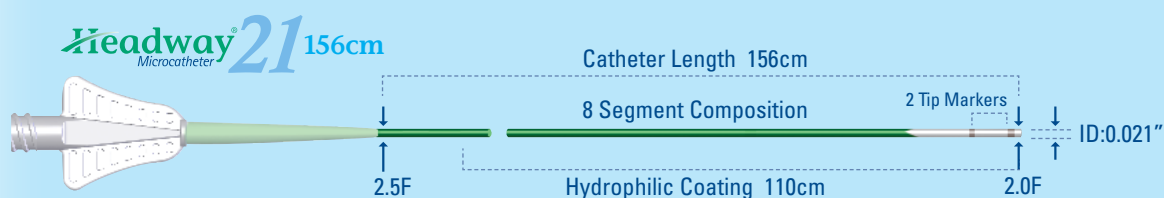
SPECIFICATIONS

Headway® 21 & 27 (156cm) Microcatheter

Microcatheter with Hydrophilic Coating

Packed 1 per box; includes shaping mandrel and introducer sheath

Product Name	Description	Product Code	ID (inches)	Tip Shape	Usable Length (cm)	OD Prox./Distal (French)	Tip Markers
Headway 21 156cm	Straight	MC212156S	0.021	STR	156	2.5 / 2.0	2
Headway 27 156cm	Straight	MC272156S	0.027	STR	156	3.1 / 2.6	2



Hybrid Braid/Coil
Design

Features

- Proximal column strength for stability and torqueability
- 156cm working length with distal flexible transitions
- Resistance to kinking and ovalization
- Resistance to stretching
- Resistance to twisting

Benefits

- ✓ Facilitate access to the lesion
- ✓ Smooth device trackability
- ✓ Controlled device delivery

INDICATIONS FOR USE

The Headway Microcatheter is intended for general intravascular use, including the peripheral, coronary and neuro vasculature for the infusion of diagnostic agents, such as contrast media, and therapeutic agents, such as occlusion coils.

MICROVENTION, Headway, LVIS, FRED, Sofia and ERIC are registered 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. ©2016 MicroVention, Inc. MM457(i) 3/16



MicroVention, Inc.
Worldwide Headquarters
1311 Valencia Avenue
Tustin, CA 92780 USA
MicroVention UK Limited
MicroVention Europe, S.A.R.L.
MicroVention Deutschland GmbH
Web

PH +1.714.247.8000

PH +44 (0) 191 258 6777
PH +33 (1) 39 21 77 46
PH +49 211 210 798-0
microvention.com

Headway 156cm
Microcatheter

Now with **Duo!** Technology

Hybrid braid/coil construction to improve stent delivery experience



Headway 21 156cm
Microcatheter

Headway 27 156cm
Microcatheter

LVIS
Intraluminal Support Device

ERIC
Endovascular Retriever with Internalized Coils

FRED Jr.
Flow Re-Direction Endoluminal Device

Sofia
Distal Access Catheter

Soft torqueable catheter. Optimized for Intracranial Access

FRED
Flow Re-Direction Endoluminal Device

Sofia
Distal Access Catheter

Soft torqueable catheter. Optimized for Intracranial Access

Stretch Resistant Shaft

- For stability and prevention of catheter body twisting

Hybrid Braid & Coil Design

- Coil reinforcement provides lumen integrity, bending flexibility and excellent shape retention
- Proximal variable braid reinforcement provides support and torque control
- Hybrid design provides 1:1 push/pull control for trackability

Soft Distal Shaft

- Smooth and atraumatic tracking

PTFE Liner

- Lubricious, durable inner liner for smooth stent delivery

Lubricious Hydrophilic Coating

- Reduced friction during navigation in tortuous anatomy and during lengthy procedures

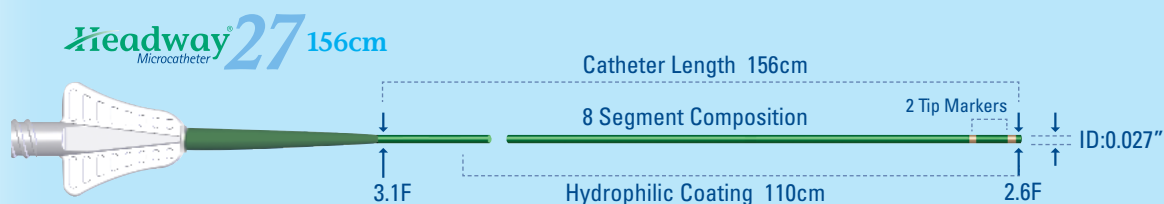
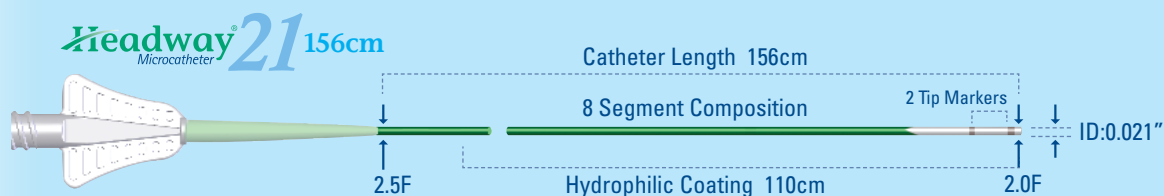
SPECIFICATIONS

Headway® 21 & 27 (156cm) Microcatheter

Microcatheter with Hydrophilic Coating

Packed 1 per box; includes shaping mandrel and introducer sheath

Product Name	Description	Product Code	ID (inches)	Tip Shape	Usable Length (cm)	OD Prox./Distal (French)	Tip Markers
Headway 21 156cm	Straight	MC212156S	0.021	STR	156	2.5 / 2.0	2
Headway 27 156cm	Straight	MC272156S	0.027	STR	156	3.1 / 2.6	2



Hybrid Braid/Coil
Design

Features

- Proximal column strength for stability and torqueability
- 156cm working length with distal flexible transitions
- Resistance to kinking and ovalization
- Resistance to stretching
- Resistance to twisting

Benefits

- ✓ Facilitate access to the lesion
- ✓ Smooth device trackability
- ✓ Controlled device delivery

INDICATIONS FOR USE

The Headway Microcatheter is intended for general intravascular use, including the peripheral, coronary and neuro vasculature for the infusion of diagnostic agents, such as contrast media, and therapeutic agents, such as occlusion coils.

MICROVENTION, Headway, LVIS, FRED, Sofia and ERIC are registered 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. ©2016 MicroVention, Inc. MM457(i) 3/16



MicroVention, Inc.
Worldwide Headquarters
1311 Valencia Avenue
Tustin, CA 92780 USA
MicroVention UK Limited
MicroVention Europe, S.A.R.L.
MicroVention Deutschland GmbH
Web

PH +1.714.247.8000

PH +44 (0) 191 258 6777
PH +33 (1) 39 21 77 46
PH +49 211 210 798-0
microvention.com