



Arrow-Clark

VectorFlow Hemodialysis Catheter

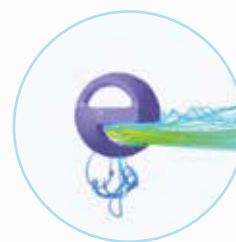
Because in Chronic Hemodialysis Catheters, the Tip Matters



Because in chronic hemodialysis catheters, the tip matters

Designed for Performance

- Tip design optimizes catheter flow and minimizes recirculation
- Sidehole design reduces the loss of lock solution¹, a contributing factor in reducing the risk of thrombus adherence²
- Catheter tip design reduces the risk of platelet damage caused by shear stress¹, helping to reduce the risk of thrombus accumulation on catheter surface³



Minimal Recirculation

Deflects venous blood away from the catheter, in a direction opposite to blood entering the catheter in arterial lumen

Symmetrical Tip
Allows for ease of
placement over guidewire

Sidehole Design
Optimizes catheter flow and
reduces loss of lock solution

Easy-to-read Catheter
Information on clamp inserts



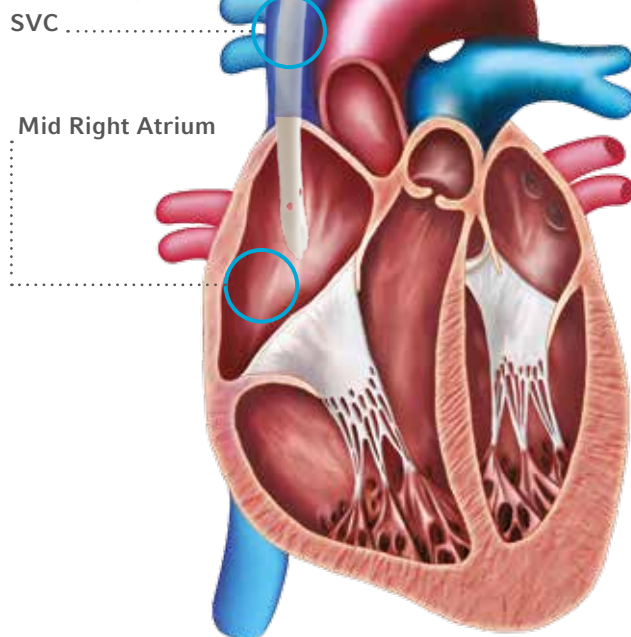
VectorFlow Catheter makes it easy for you

Designed for Ease of Placement and Sustained High Flows

- No stylet needed for insertion, resulting in fewer steps when compared to catheters requiring a stylet
- Antegrade and Retrograde placement available
- Catheter tip design allows for placement flexibility with minimal impact on recirculation¹

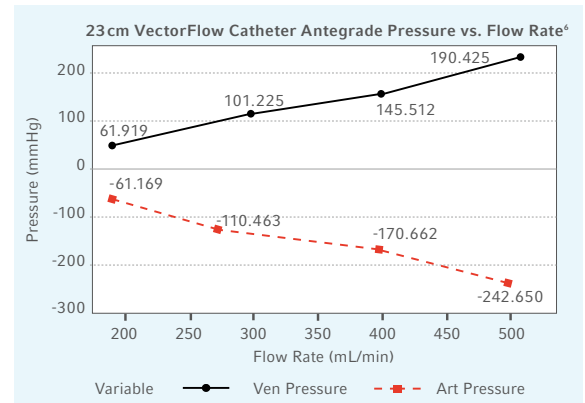
Design of catheter

Allows for tip location flexibility with minimal impact on recirculation^{4,5}



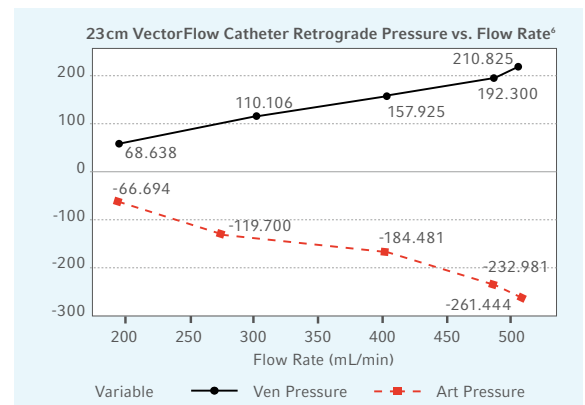
Antegrade Catheter Performance⁴

Recommended Flow Rate and Pressure Range for Catheters Intended for Internal Jugular and Subclavian Insertion



Retrograde Catheter Performance⁴

Recommended Flow Rate and Pressure Range for Catheters Intended for Internal Jugular and Subclavian Insertion



Arrow-Clark VectorFlow Hemodialysis Catheter

RETROGRADE	DESCRIPTION	TIP-TO-CUFF INSERTION LENGTH
CS-15192-VFE	15 Fr. x 19 cm Retrograde Radiopaque Polyurethane Catheter	19 cm
CS-15232-VFE	15 Fr. x 23 cm Retrograde Radiopaque Polyurethane Catheter	23 cm
CS-15272-VFE	15 Fr. x 27 cm Retrograde Radiopaque Polyurethane Catheter	27 cm
CS-15312-VFE	15 Fr. x 31 cm Retrograde Radiopaque Polyurethane Catheter	31 cm
CS-15422-VFE	15 Fr. x 42 cm Retrograde Radiopaque Polyurethane Catheter	42 cm
CS-15552-VFE	15 Fr. x 55 cm Retrograde Radiopaque Polyurethane Catheter	55 cm

RETROGRADE HUB REPLACEMENTS	DESCRIPTION	TIP-TO-CUFF INSERTION LENGTH
VF-15192-E	ARROW-Clark VectorFlow Replacement Hub for ref. CS-15192-VFE (19 cm)	19 cm
VF-15232-E	ARROW-Clark VectorFlow Replacement Hub for ref. CS-15232-VFE (23 cm)	23 cm
VF-15272-E	ARROW-Clark VectorFlow Replacement Hub for ref. CS-15272-VFE (27 cm)	27 cm
VF-15312-E	ARROW-Clark VectorFlow Replacement Hub for ref. CS-15312-VFE (31 cm)	31 cm
VF-15422-E	ARROW-Clark VectorFlow Replacement Hub for ref. CS-15422-VFE (42 cm)	42 cm
VF-15552-E	ARROW-Clark VectorFlow Replacement Hub for ref. CS-15552-VFE (55 cm)	55 cm

ANTEGRADE	DESCRIPTION	TIP-TO-CUFF INSERTION LENGTH
CS-15192-VFIE	15 Fr. x 19 cm Antegrade Radiopaque Polyurethane Catheter	19 cm
CS-15232-VFIE	15 Fr. x 23 cm Antegrade Radiopaque Polyurethane Catheter	23 cm
CS-15272-VFIE	15 Fr. x 27 cm Antegrade Radiopaque Polyurethane Catheter	27 cm
CS-15312-VFIE	15 Fr. x 31 cm Antegrade Radiopaque Polyurethane Catheter	31 cm
CS-15422-VFIE	15 Fr. x 42 cm Antegrade Radiopaque Polyurethane Catheter	42 cm
CS-15552-VFIE	15 Fr. x 55 cm Antegrade Radiopaque Polyurethane Catheter	55 cm

- 1 "Comparison of Symmetric Hemodialysis Catheters Using Computational Fluid Dynamics" Clark, Timothy W.I. et al., *J Vasc Interv Radiol* 2015; 26 (2): 252-259
- 2 KDOQI Clinical Practice Guidelines and Clinical Practice Recommendations for 2006 Updates: Hemodialysis Adequacy, Peritoneal Dialysis Adequacy and Vascular Access. *Am J Kidney Dis* 48:S1-S322, 2006 (suppl 1).
- 3 *ASAIO J.* 2008 ; 54(1): 64-72. doi:10.1097/MAT.0b013e31815d6898.
- 4 Reference on file at Teleflex.
- 5 KDOQI 2006 Updates Clinical Practice Guidelines and Recommendations "Long-term catheter systems—tunneled cuffed catheters (TCCs) and tunneled port catheter systems—should have their tips within the right atrium confirmed by fluoroscopy for optimal flow."
- 6 Testing was performed using a 2:3 glycerin/deionized water solution with a viscosity of 3.2-3.5 cP at 37°C.

The Arrow-Clark™ VectorFlow™ Hemodialysis Catheter is indicated for use in attaining long-term vascular access for hemodialysis and apheresis. Contraindications: The Arrow-Clark VectorFlow Hemodialysis Catheter is intended for long-term hemodialysis vascular access only and should not be used for any other purpose other than those indicated in the Instructions for Use. Do not use this catheter in patients with thrombosed vessels. Warnings: Device is Sterile, Single use: Do not reuse, reprocess or resterilize. Reuse of device creates a potential risk of serious injury and/or infection which may lead to death.

Refer to package insert for complete warnings, indications, contraindications, precautions, potential complications, and Instructions for Use.

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