



We love
control freaks
Virtuoso® Sales Aid





THE FUTURE IN FOCUS

Virtuoso® introduces a new level of control throughout novel fluidics, lower phaco energy, redefined vitreous cutting and aspiration, and seamless OR workflow.^{1,2,3,4,5,6,7,8,9,11,12}



Virtuoso®



**True Control Gives You
the Freedom to Perform**



Virtuoso®

Advanced Vision Solutions



Virtuoso DUAL®

Advanced Vision Solutions



Technical Data Sheet

Pack Info

IFU



System Features



MoA Animations



Technical Data Sheet



Pack Info



IFU

System Features

MoA Animations



Virtuoso®



Virtuoso®



Equality™

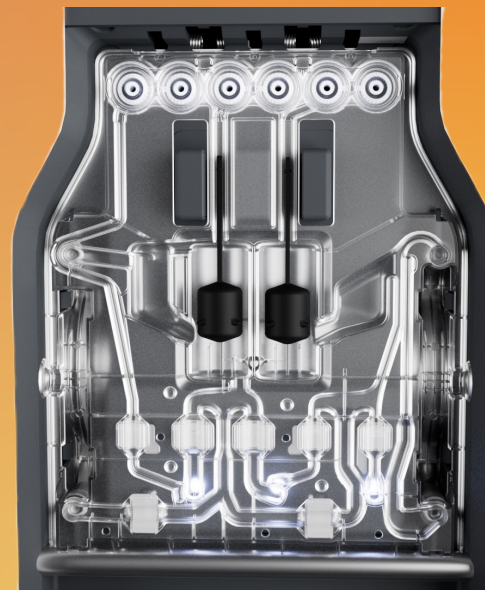
Resolute™

Velvet™

EasyFit™

Consistently Consistent from start to finish

Equality™ Fluidics Control actively maintains the same target IOP throughout the entire cataract procedure, from phaco steps to I/A steps, uniquely fusing the control of a flow pump with the efficiency of a pressure pump.^{1,2,3}



 **Equality™**
Fluidics Control

Mechanism of Action





Virtuoso®



Virtuoso®



Equality™

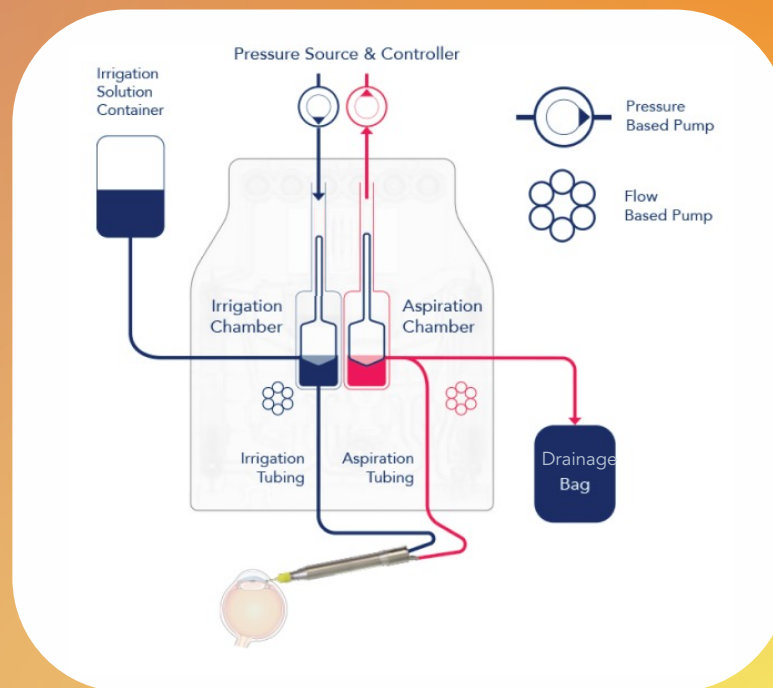
Resolute™

Velvet™

EasyFit™

Fluidics equalizer

Equality™ Fluidics Control actively maintains target IOP by immediately adjusting actual infusion flow according to varying aspiration demand; the Irrigation Compensation further supports the surgeon to offset any incision-related condition, preventing anterior chamber instability from wound leakage or wound compression.^{1,3}





Virtuoso®



Virtuoso®



Equality™

Resolute™

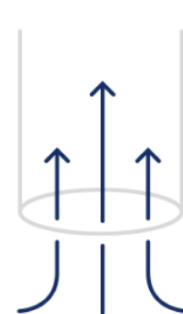
Velvet™

EasyFit™

Customized aspiration

Equality™ Fluidics Control offers different aspiration modalities aimed at creating a customized surgical procedure based on preferred response, personal techniques and case scenario.^{1,4}

- **Vacuum control with uncapped flow** for surgeons preferring direct vacuum build.
- **Flow control with vacuum limit** for surgeons looking for full vacuum build only upon occlusion.
- **Vacuum control with flow limit** as a blended option offering enhanced control when the capsular bag is more exposed, like epi-nucleus, cortical removal and OVD removal.



Vacuum
Control



Flow
Control



Vacuum
Control with
Flow Limit



Equality™
Fluidics Control



Virtuoso®



Virtuoso®



Equality™

Resolute™

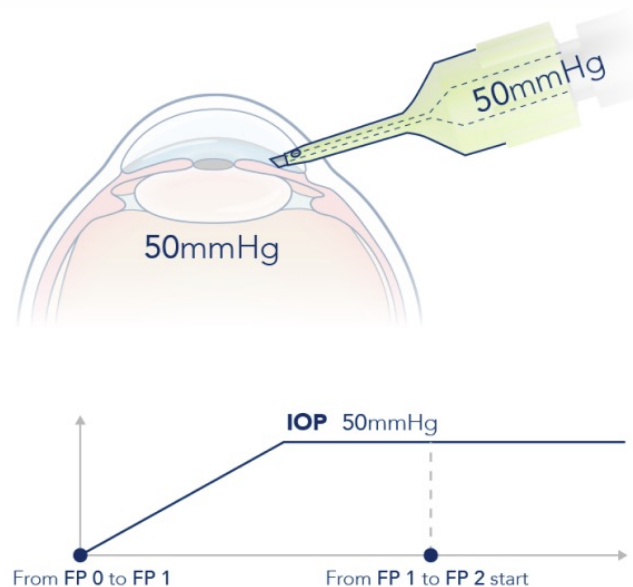
Velvet™

EasyFit™

Pressure equalizer from the start

While other systems can experience IOP fluctuations at the start of the aspiration due to the pressure gradient between IOP in the eye and ambient pressure in the aspiration tubing, Equality™ Fluidics Control equalizes the pressure in the aspiration tubing with the desired IOP setpoint programmed on the Graphic User Interface immediately upon activation of aspiration.^{1,2}

 **Equality™**
Fluidics Control





Virtuoso®



Virtuoso®



Equality™

Resolute™

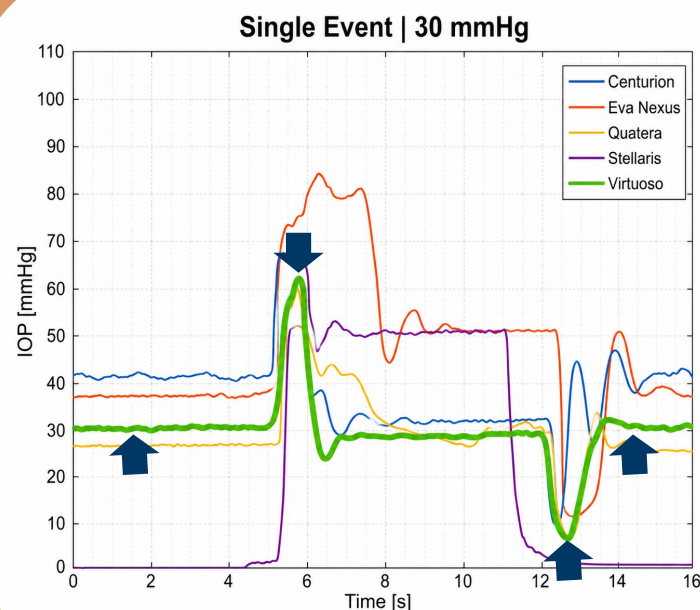
Velvet™

EasyFit™

Anterior chamber stability during phacoemulsification: comparing different phacoemulsification systems - Rossi T, et al.

Single Event | 30 mmHg (IOP vs. Time)

Virtuoso® is among the best-performing systems at the occlusion-break moment, showing one of the smallest pressure dips and the quickest time to IOP stability.



 **Equality™**
Fluidics Control



Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

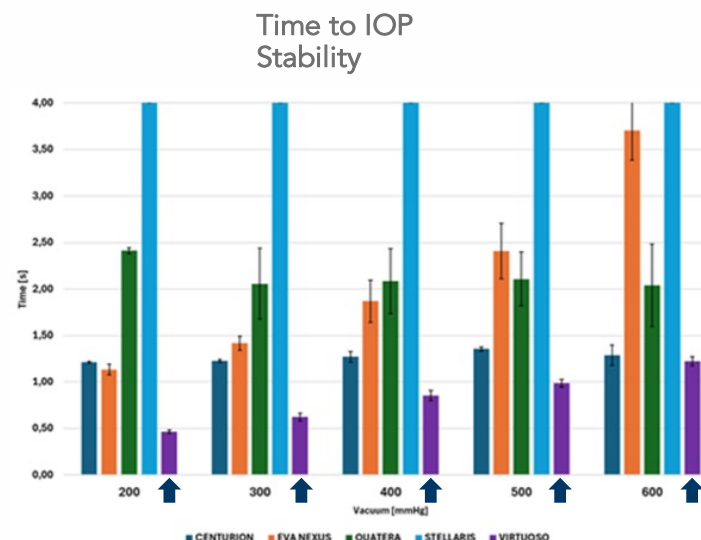
EasyFit™

Anterior chamber stability during phacoemulsification: comparing different phacoemulsification systems - Rossi T, et al.

Time to IOP Stability (Time vs. Vacuum, 30 mmHg preset)

Virtuoso® recovers stable pressure fastest of all five systems, at every vacuum level tested.

Per the study: Virtuoso® "took a significantly shorter time to reach and maintain IOP... at all vacuum levels and test IOP values."





Equality™

Resolute™

Velvet™

EasyFit™

**BVI**

**Equality™**
Fluidics Control

Equality™ Fluidics Control actively maintains the same target IOP throughout all cataract procedure, from phaco steps to I/A steps, uniquely fusing the control of a flow pump with the efficiency of a pressure pump







Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™

We put our energy into energy

Discover an energy delivery system that intelligently senses cataract resistance and dynamically compensates to maintain the target energy level – empowering you to operate at a lower energy set point.^{3,4,5,6}



Resolute™

Load-Sensing Energy Optimizer

Mechanism of Action





Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™

Intelligent lens sensing

Maintaining target energy through sensing and compensating for cataract resistance.^{3,4,5,6}

 **Resolute™**
Load-Sensing Energy Optimizer





Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™

Lower energy

By ensuring this consistency between programmed and delivered energy, Resolute™ allows a lower energy setpoint throughout all phaco steps, differently than other systems that require a higher energy setpoint, especially for harder cataracts.^{3,4,5,6}



Resolute™

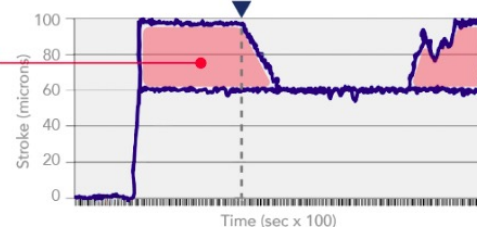
Load-Sensing Energy Optimizer

Tip Stroke Pattern (Microns) ▼ Contact between phaco tip and cataract material

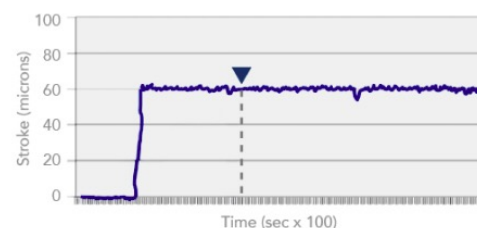
Competitor

Wasted Energy

Phaco without Resolute™



Resolute™





Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™



Resolute™

Load-Sensing Energy Optimizer

Resolute™ Load-Sensing Energy Optimizer intelligently senses cataract resistance and dynamically compensates to maintain the target energy level, engineered to help surgeons operate at a lower energy set point.





Equality™

Resolute™

Velvet™

EasyFit™

We've laboured over anterior vitrectomy, so you don't have to

Unique dual blade probe for anterior vitrectomy redefining safety and efficiency by minimizing the risk of retinal tractions, optimizing cutting and aspiration with a wide range of probes to suit every surgeon's needs.^{3,7,8,9,11,12}

 **Velvet™**
Vitrectomy Probe

Mechanism of Action 





Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™

Uninterrupted flow for safer vitrectomy

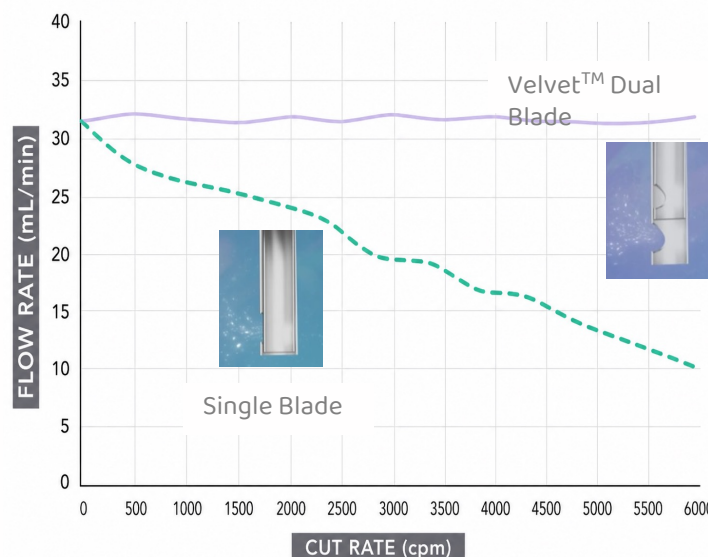
Velvet™ is a leading Dual Blade probe for Anterior Vitrectomy, delivering continuous aspiration flow at any cutting frequency.^{3,7,8,9}

This uninterrupted flow minimizes the potential of iatrogenic retinal break, reducing complications and enhancing safety for precise anterior vitrectomy procedures.



Velvet™

Vitrectomy Probe





Virtuoso®



Virtuoso®



Equality™

Resolute™

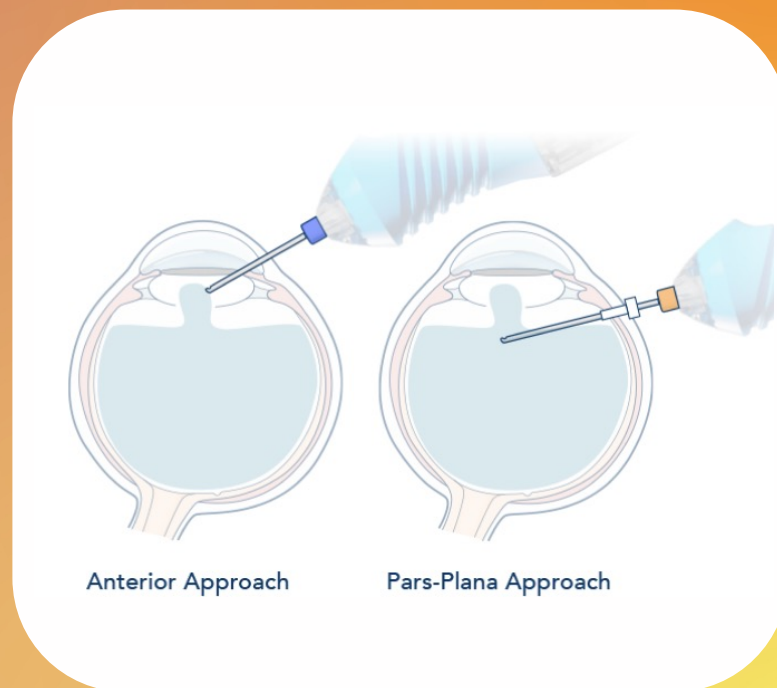
Velvet™

EasyFit™

Tailored precision for every technique

Velvet™ offers a unique assortment of probes for anterior vitrectomy, designed for every surgical technique, accessible via a side port or pars plana.^{1,3,10}

A full portfolio matching each surgeon's preferences accelerates the learning curve and enables seamless adoption for enhanced precision and efficiency.



Velvet™

Vitrectomy Probe



Equality™

Resolute™

Velvet™

EasyFit™

**BVI**

**Velvet™**
Vitrectomy Probe

Velvet™ elevates safety and efficiency across both anterior and posterior procedures. Synchronous cutting and aspiration help minimize retinal traction in anterior cases, while enhanced access to target tissue and increased instrument stiffness support







Virtuoso®

< Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™

Our success is making yours easier to achieve

The optimized Virtuoso® footprint via HW integration and the enhanced procedure setup bring preparation and intra-op control of cataract surgery to the next level.^{1,3}

 **EasyFit™**
All At Once Setup

Mechanism of Action 





Virtuoso®



Virtuoso®



Equality™

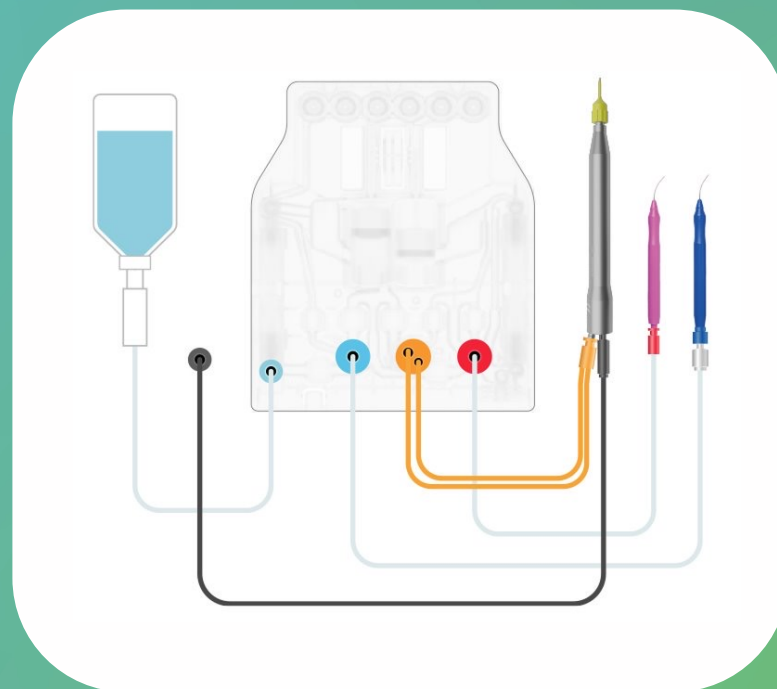
Resolute™

Velvet™

EasyFit™

Simultaneous setup

Thanks to the simultaneous preparation and priming of both Phaco handpiece and I/A handpiece before the start of the cataract surgery, EasyFit™ All At Once Setup delivers uncompromised procedural safety to the surgeon and a flawless OR workflow to the entire OR staff when switching from Phaco steps to I/A steps.^{1,3}



EasyFit™

All At Once Setup



Virtuoso®



Virtuoso®



Equality™

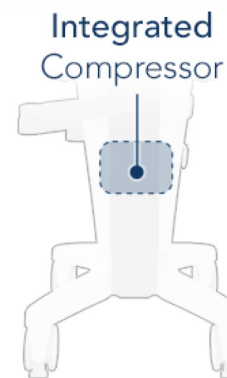
Resolute™

Velvet™

EasyFit™

Enhanced footprint and ergonomics

A streamlined, compact hardware integration optimizes OR footprint and maximizes space efficiency.^{1,3}



EasyFit™

All At Once Setup



Virtuoso®

Virtuoso®



Equality™

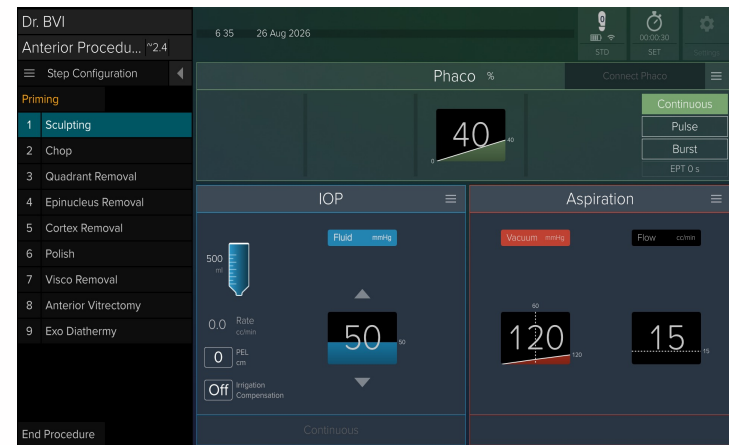
Resolute™

Velvet™

EasyFit™

Intuitive guided setup and intra-op adjustments

Virtuoso® Graphic User Interface provides intuitive guided setup for seamless intra-op adjustments.¹



EasyFit™
All At Once Setup



Virtuoso DUAL



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™



EasyFit™ All At Once Setup

EasyFit™ All At Once Setup brings a new level of preparation and intraoperative control in cataract surgery, enabling simultaneous setup of both Phaco and I/A handpieces for greater efficiency from start to finish.





Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™



Equality™ Fluidics Control

Equality™ Fluidics Control actively maintains the same target IOP throughout all cataract procedure, from phaco steps to I/A steps, uniquely fusing the control of a flow pump with the efficiency of a pressure pump





Virtuoso®



Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™



Resolute™

Load-Sensing Energy Optimizer

Resolute™ Load-Sensing Energy Optimizer intelligently senses cataract resistance and dynamically compensates to maintain the target energy level, engineered to help surgeons operate at a lower energy set point.





Virtuoso®

< Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™



Velvet™ Vitreotomy Probe

Velvet™ elevates safety and efficiency across both anterior and posterior procedures. Synchronous cutting and aspiration help minimize retinal traction in anterior cases, while enhanced access to target tissue and increased instrument stiffness support





Virtuoso®

< Virtuoso®



Equality™

Resolute™

Velvet™

EasyFit™



EasyFit™ All At Once Setup

EasyFit™ All At Once Setup brings a new level of preparation and intraoperative control in cataract surgery, enabling simultaneous setup of both Phaco and I/A handpieces for greater efficiency from start to finish.





Virtuoso®

PHACO-X PACK

BASIC-X PACK

PHACO KIT



VIRTUOSO®
Advanced Vision Solutions



General Information

Manufacturer	Model
Viteq B.V. Seggelaan-Noord 2, 3237 MG Vierpolders, The Netherlands	Virtuoso® Advanced Vision Solutions
SKU #	
EQ00.R01	
Regulatory Compliance	
European Medical Device Regulation (EU) 2017/745, and the following additional European Directives	
• Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) • Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) • Directive 2014/53/EU on Radio Equipment (RED)	
Electrical Safety Compliance	
EN IEC 60601-1:2006/A13:2024 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance EN IEC 60601-1-2: 2015/ A1:2021 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements and tests	
Lens Removal, Vitrectomy, and Diathermy Safety Compliance	
Lens Removal and Vitrectomy Devices IEC 60601-2-58:2024 Medical electrical equipment - Part 2-58: Particular requirements for the basic safety and essential performance of lens removal devices and vitrectomy devices for ophthalmic surgery.	
Diathermy IEC 60601-2-2:2017/A1:2023 Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories.	

Performance Characteristics of the Virtuoso® Advanced Vision Solutions

Diathermy Function	Irrigation Pressure
200 kHz, 10 W at 200 Ohm load	5 to 120 mmHg
Aspiration Pressure	Phacoemulsification
up to 650+ mmHg	≥80 W at 40kHz
Vitrectomy Cut Rate	
60 to 20,000 qpm, single cut mode selectable	



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05/07/06-01



Virtuoso®

PHACO-X PACK

BASIC-X PACK

PHACO KIT

20G Virtuoso® PHACO-X PACK
flared phaco-tip

Virtuoso® PHACO-X PACK
20G flared phaco-tip

Pack for cataract surgery through 2.2-2.5mm incision using phacoemulsification technique
- Sterile - Single use

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 20G flared phaco-tip	20G-001

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 20G flared phaco-tip	20G-001

20G Virtuoso® PHACO-X PACK
flared-bent phaco-tip

Virtuoso® PHACO-X PACK
20G flared-bent phaco-tip

Pack for cataract surgery through 2.2-2.5mm incision using phacoemulsification technique
- Sterile - Single use

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 20G flared-bent phaco-tip	20G-002

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 20G flared-bent phaco-tip	20G-002

21G Virtuoso® PHACO-X PACK
flared phaco-tip

Virtuoso® PHACO-X PACK
21G flared phaco-tip

Pack for cataract surgery through 2.2-2.5mm incision using phacoemulsification technique
- Sterile - Single use

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 21G flared phaco-tip	21G-001

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 21G flared phaco-tip	21G-001

21G Virtuoso® PHACO-X PACK
flared-bent phaco-tip

Virtuoso® PHACO-X PACK
21G flared-bent phaco-tip

Pack for cataract surgery through 2.2-2.5mm incision using phacoemulsification technique
- Sterile - Single use

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 21G flared-bent phaco-tip	21G-002

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 21G flared-bent phaco-tip	21G-002

22G Virtuoso® PHACO-X PACK
flared phaco-tip

Virtuoso® PHACO-X PACK
22G flared phaco-tip

Pack for cataract surgery through 2.2-2.5mm incision using phacoemulsification technique
- Sterile - Single use

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 22G flared phaco-tip	22G-001

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 22G flared phaco-tip	22G-001

22G Virtuoso® PHACO-X PACK
flared-bent phaco-tip

Virtuoso® PHACO-X PACK
22G flared-bent phaco-tip

Pack for cataract surgery through 2.2-2.5mm incision using phacoemulsification technique
- Sterile - Single use

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 22G flared-bent phaco-tip	22G-002

Product Information	
Item	Part No.
Virtuoso® PHACO-X PACK 22G flared-bent phaco-tip	22G-002



Virtuoso®

PHACO-X PACK

BASIC-X PACK

PHACO KIT



Virtuoso® BASIC-X PACK

Pack* for cataract surgery
Sterile - Single use



Product Information

Name	Description	Qty/Bx	SKU #
Virtuoso® BASIC-X PACK	Pack* for cataract surgery Sterile - Single use *Tipless and Sleeveless	12	PA00.D02

Manufacturer	Product Compliance
BVI Vierpolders Seggelant-Noord 2 3237 MG Vierpolders The Netherlands	EN 556-1 EN 868-5 EN 1041 EN ISO 20417 EN ISO 10993-7 EN ISO 11135 EN ISO 11607-1 EN ISO 11607-2 EN ISO 14644-1 EN ISO 14971

Packaging	Biocompatibility
12 per box	All materials in the kit devices that come into direct or indirect contact with the patient have been declared: - Biocompatible (by the respective manufacturers) - Compliant with EN ISO 10993-1 standard (by accredited laboratories).

Latex	Phthalates
None of the kit components contain natural latex.	None of the kit components contain phthalates.

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Virtuoso®



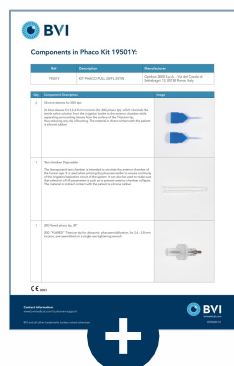
Virtuoso®



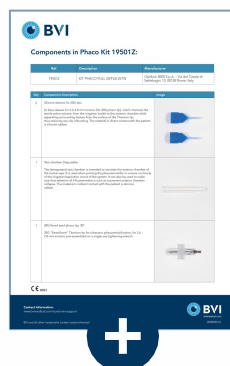
Technical Data Sheet

PHACO KIT

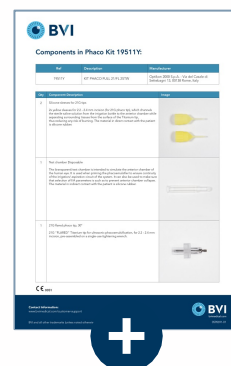
**KIT PHACO FULL 20/FL
2STW**



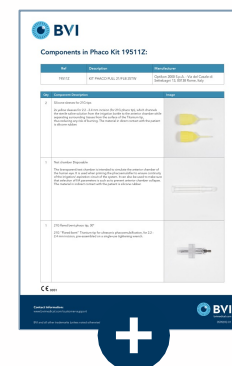
KIT PHACO FULL 20/FLB 2STW



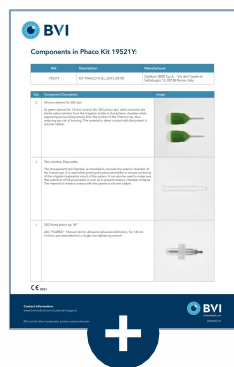
**KIT PHACO FULL 21/FL
2STW**



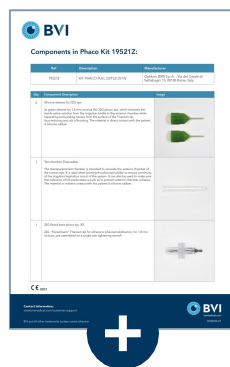
**KIT PHACO FULL 21/FLB
2STW**



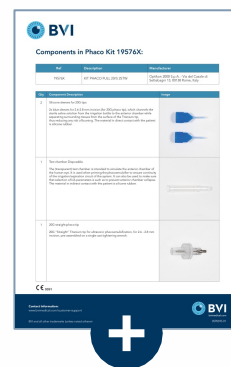
**KIT PHACO FULL 22/FL
2STW**



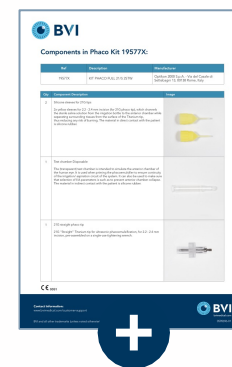
**KIT PHACO FULL 22/FLB
2STW**



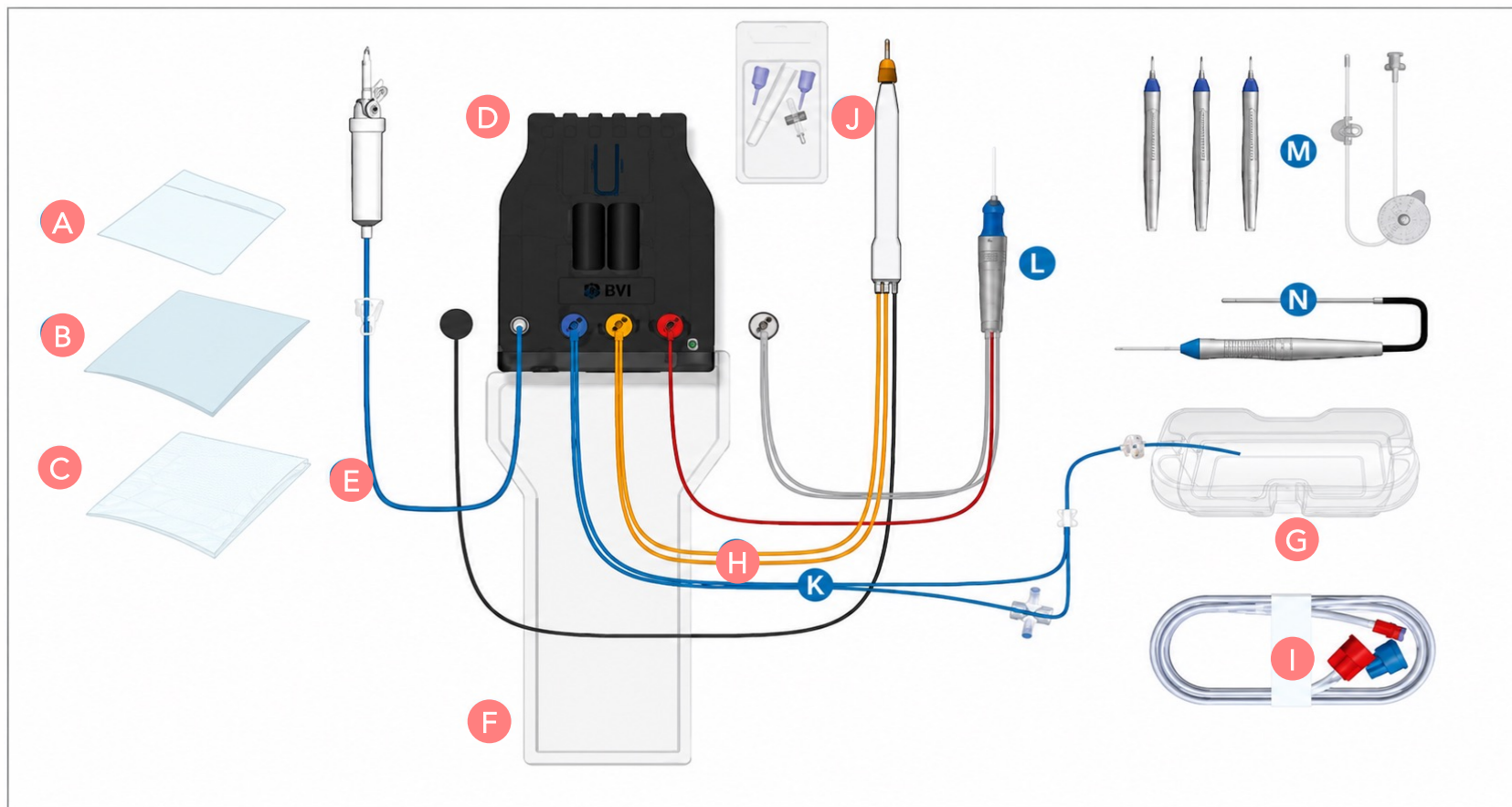
KIT PHACO FULL 20/S 2STW



**KIT PHACO FULL 21/S
2STW**



PHACO-X PACK



D: Virtuoso® Cassette
E: Irrigation Input Tubing

H: EasyFit™ Orange Connector with I/A Tubing
I: EasyFit™ Blue and EasyFit™ Red Connectors
with Second I/A Tubing

K: EasyFit™ Blue Connector with Tubing for Fluid/Air Infusion

L: Velvet™ Vitrectomy Probe (with EasyFit™ red connector aspiration tubing)



Virtuoso®

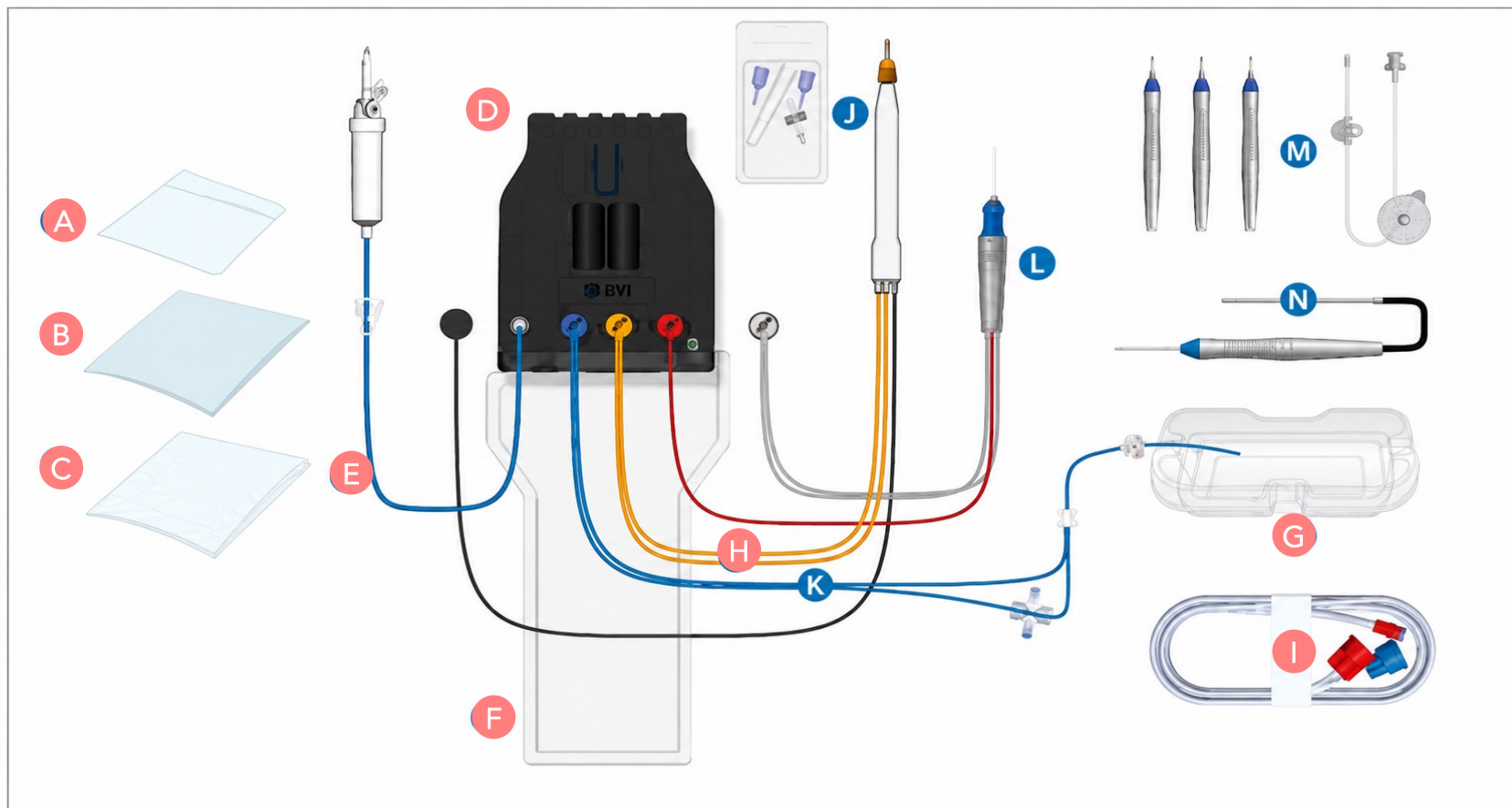


Virtuoso®



PHACO-X PACK

BASIC-X PACK



A: Virtuoso® Remote Control Pouch
B: Virtuoso® Tray Drape
C: Virtuoso® Screen Drape
D: Virtuoso® Cassette
E: Irrigation Input Tubing

F: Drainage Bag (pre-assembled to Virtuoso Cassette)
G: Priming Cup
H: EasyFit™ Orange Connector with I/A Tubing
I: EasyFit™ Blue and EasyFit™ Red Connectors with Second I/A Tubing

J: Phaco Kit (#1 phaco tip/ wrench, #2 sleeves, 1 test chamber) to be connected to Slim 4 Phaco Handpiece (not included in the Pack)
K: EasyFit™ Blue Connector with Tubing for Fluid/Air Infusion

M: InViTe™ Valved Entry System (#3) with infusion cannula (to be connected to "K")
N: 45° Shielded Light Fiber
L: Velvet™ Vitrectomy Probe (with EasyFit™ red connector aspiration tubing)



Virtuoso®



Virtuoso®



Technical Data Sheet

Pack Info

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BVI



Virtuoso® DUAL
Advanced Robot Systems



Virtuoso®
Robotics Vision Solutions

Virtuoso® Operator's Manual

MD



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www.bvimedical.com

Operator's Manual: IFU-94000029-EN, English, Version 07



IFU-94000029-EN Virtuoso IFU - Rev 07

Virtuoso® Operator's Manual

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DOC-ID: IFU-94000029-EN



System Features

MoA Animations



Technical Data Sheet

System Features



Technical Data Sheet



Pack Info



IFU



Pack Info

IFU

System Features



Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

When it comes to delivering cutting-edge precision, we're not flexible.

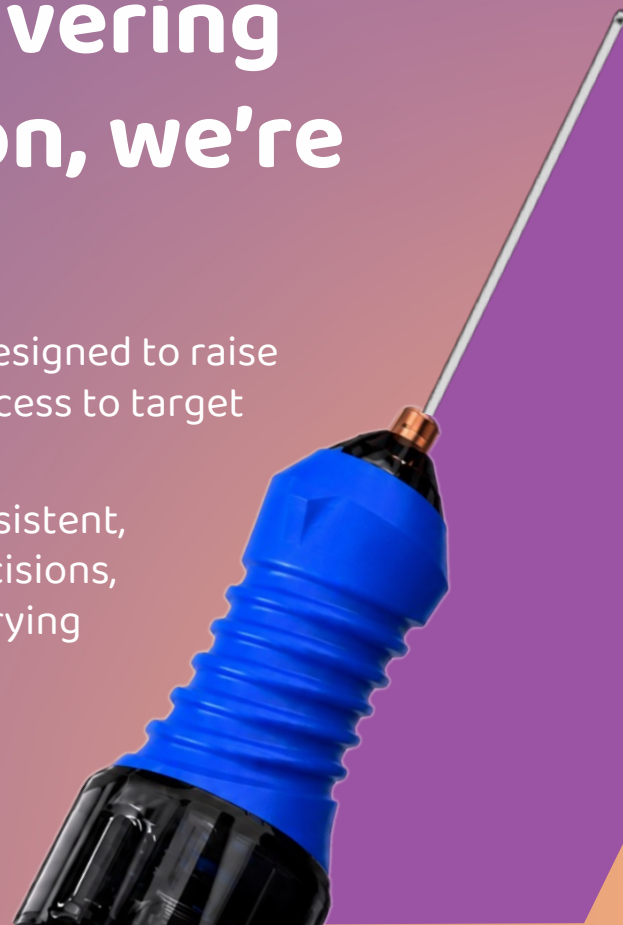
Introducing a breakthrough in surgical precision, designed to raise the bar in safety and efficiency thanks to closer access to target tissue, enhanced stiffness and control.

Our Dual Pneumatic, Dual Blade probes deliver consistent, high-performance cutting through the smallest incisions, so you can focus on what you do best without worrying about the rest.^{3,11,12}



Velvet™

Vitrectomy Probe



Technical Data Sheet

Pack Info

IFU



Virtuoso® DUAL

Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

< Virtuoso® DUAL



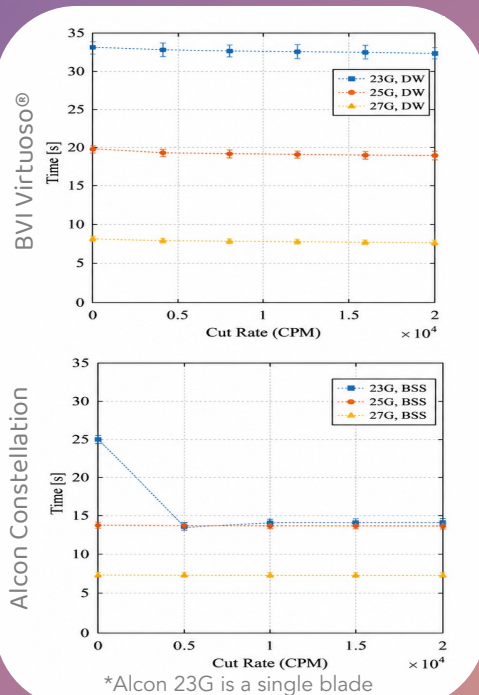
Cutting precision & aspiration efficiency

Velvet™ offers dual pneumatic drive for a precise and consistent cutting quality across any CPM, high-speed dual blade up to 20,000 CPMs for an efficient vitreous aspiration.^{1,3,12}

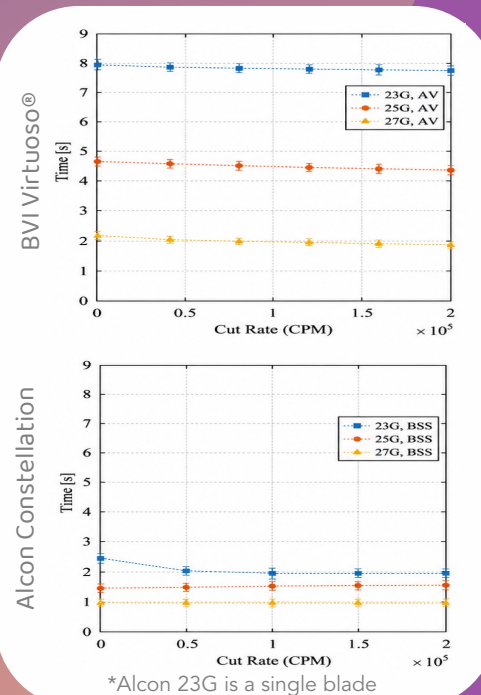
Aspiration Study (BSS and Artificial Vitreous, vac = 650 mmHg)

Virtuoso® shows higher flow rates vs. Alcon Constellation across 23G, 25G, 27G gauges in both BSS and artificial vitreous, with more advantage in artificial vitreous (x2-4 higher).

Aspiration experiments
BSS (VAC 650mmHg)



Aspiration experiments
Artificial Vitreous (VAC 650mmHg)



*Performance of a new dual action high speed vitrectomy system – Steel D., Li X.

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Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Closer access to target tissue

Velvet™ is designed to support faster resolution of retinal tractions during the retinal shaving step.^{3,11,12}



Velvet™

Vitrectomy Probe



Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Enhanced shaft stiffness

Velvet™ is designed to support faster resolution of retinal tractions during the retinal shaving step.^{3,11,12}

Stiffness: Yield point (permanent bend) occurred at similar strain (~16–17.5%) but lower force for 27G (0.16 vs. 0.28 N) — expected for a thinner shaft.



Velvet™

Vitrectomy Probe

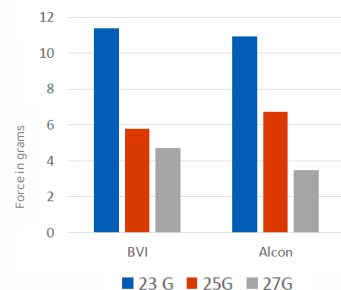
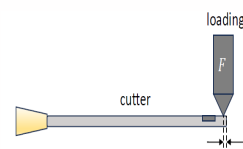
Cutting action unimpaired



BVI Virtuoso®
27G No.3, 20k CPM, $\theta = 35^\circ$

BVI Virtuoso®
27G No.3, 20k CPM, $\theta = 0^\circ$

Force and displacement of vitrectors at tip



*Vibration, rigidity and cutting efficiency under load of narrow-gauge vitrectomy probes. – Steel
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Virtuoso® DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Longer workable distance

In VR procedures, Velvet™'s longer working length (31 mm for 23G/25G and 28mm for 27G) is designed to extend workable distance, addressing the growing clinical need in high myopic eyes.^{1,3}



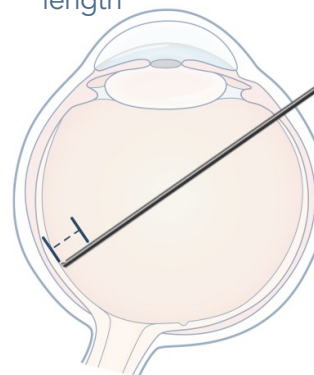
Velvet™

Vitrectomy Probe

Up to

15%

longer working
length





Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

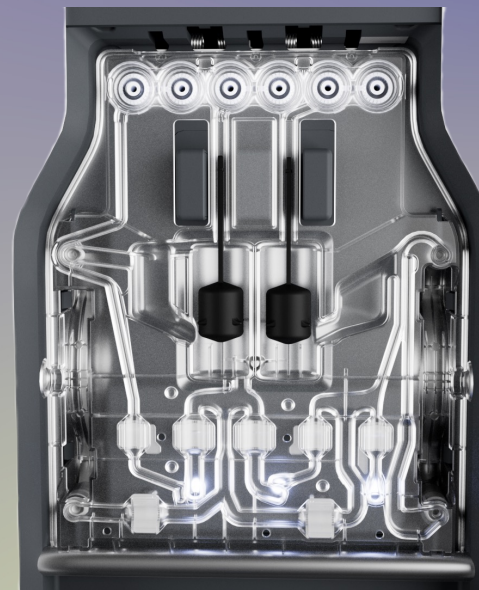
EasyFit™

InViTe™

Resolute™

Never be under pressure

Equality™ is designed to manage the pressure of maintaining intraocular pressure throughout all surgical steps and any fluid, uniquely fusing the control of a flow pump with the efficiency of a pressure pump.^{1,2,3}



 **Equality™**
Fluidics Control



Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

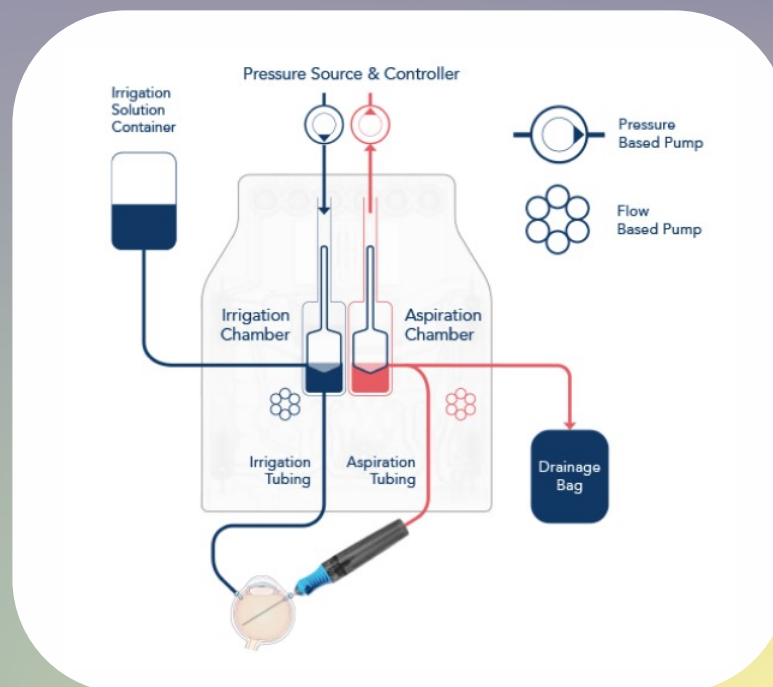
EasyFit™

InViTe™

Resolute™

Fluidics equalizer

Equality™ Fluidics Control actively maintains target IOP by immediately adjusting actual infusion flow according to varying aspiration demand; the Automatic Leakage Compensation further supports the surgeon by detecting IOP loss due to any intra-operative leakage.^{1,2,3}



 **Equality™**
Fluidics Control



Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

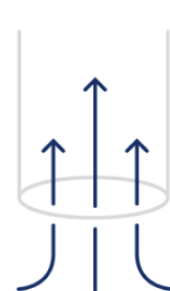
InViTe™

Resolute™

Customized aspiration

Equality™ Fluidics Control offers different aspiration modalities aimed at creating a customized surgical procedure based on preferred response, personal techniques and case scenario.^{1,4}

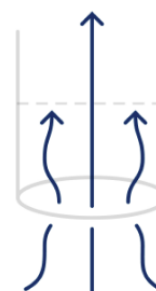
- **Vacuum control with uncapped flow** for surgeons preferring direct vacuum build.
- **Flow control with vacuum limit** for surgeons looking for full vacuum build only upon occlusion.
- **Vacuum control with flow limit** as a blended option offering enhanced control when the capsular bag is more exposed, like epi-nucleus, cortical removal and OVD removal.



Vacuum
Control



Flow
Control



Vacuum
Control with
Flow Limit



Equality™
Fluidics Control



Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

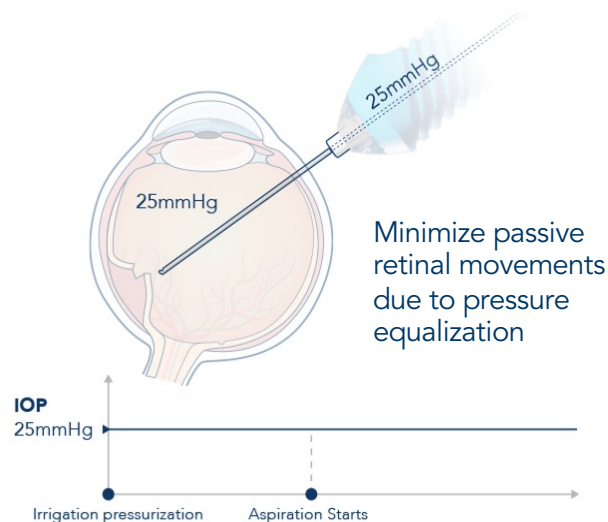
EasyFit™

InViTe™

Resolute™

Pressure equalizer from the start

While other systems can experience undesired passive aspiration, Equality™ Fluidics Control equalizes pressure in the aspiration tubing with the pre-set IOP in the Graphic User Interface immediately upon activation of aspiration — avoiding passive aspiration flow due to the pressure gradient between the eye and the vitrectomy probe.¹





Virtuoso DUAL

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Velvet™

Equality™

EvenFlow™

EasyFit™

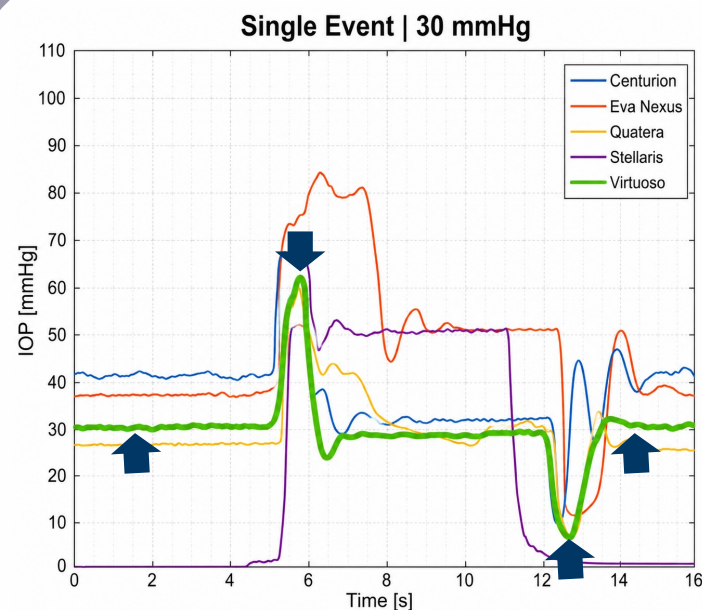
InViTe™

Resolute™

Anterior chamber stability during phacoemulsification: comparing different phacoemulsification systems - Rossi T, et al.

Single Event | 30 mmHg (IOP vs. Time)

Virtuoso® is among the best-performing systems at the occlusion-break moment, showing one of the smallest pressure dips and quickest time to IOP stability.



 **Equality™**
Fluidics Control

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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

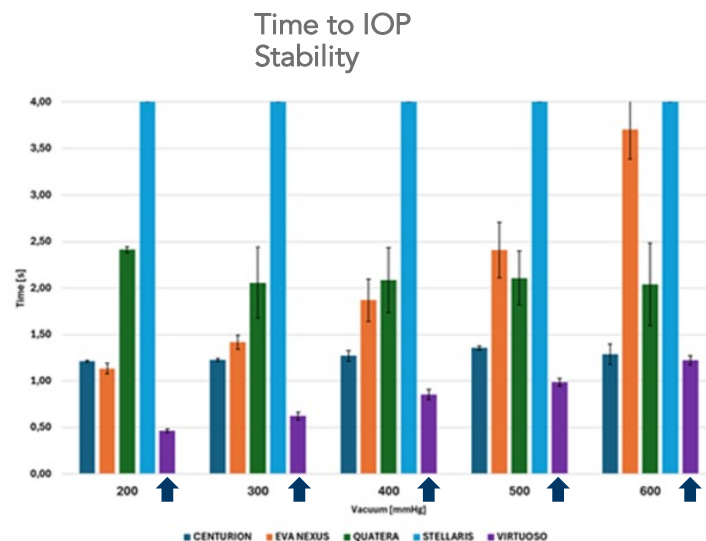
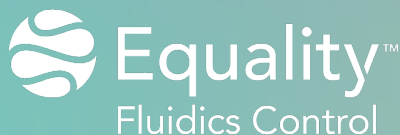
Resolute™

Anterior chamber stability during phacoemulsification: comparing different phacoemulsification systems - Rossi T, et al.

Time to IOP Stability (Time vs. Vacuum, 30 mmHg preset)

Virtuoso® recovers stable pressure fastest of all five systems, at every vacuum level tested.

Per the study: Virtuoso "took a significantly shorter time to reach and maintain IOP... at all vacuum levels and test IOP values."





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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

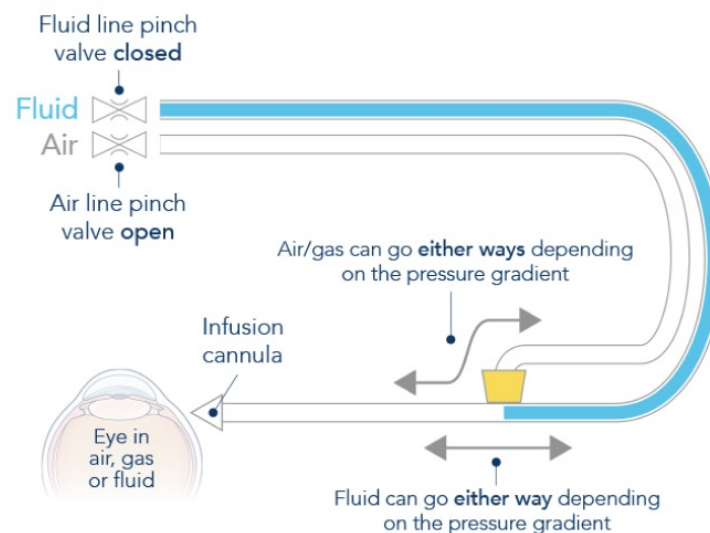
Resolute™

In the know. In control. In every moment.

EvenFlow™ Automatic Fluid-Air Exchange offers a paradigm shift in Fluid-Air Exchange Control, uniquely combining the benefits of automatic full IOP control, uninterrupted workflow and full visualization. Stay in the know in every moment.^{1,3}



EvenFlow™
Automatic FAX





Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

**In the know.
In control.
In every moment.**

Automatic full IOP control

Venting through the infusion cannula during fluid exchanges and VFI, both in air and fluid.^{1,3}

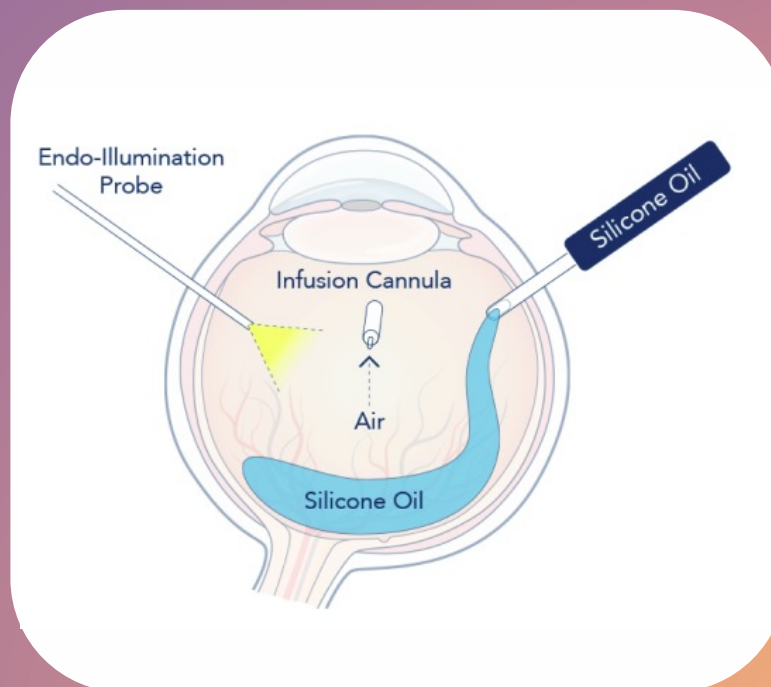
Full visualization

Maximizing the endo-illumination source in viscous fluid injections.^{1,3}



EvenFlow™

Automatic FAX





Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Uninterrupted workflow

EvenFlow™ is designed to reduce reliance on manual OR staff interventions by enabling surgeon-controlled Fluid-Air exchange via foot pedal.^{1,3}



EvenFlow™

Automatic FAX



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< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

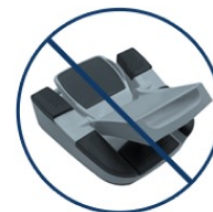
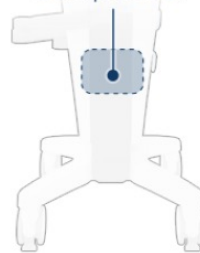
Resolute™

Our success is making yours easier to achieve

The Virtuoso® footprint is optimized by the integrated air compressor and the laser integrated footswitch. The footswitch gives full surgeon independence on laser activation increasing surgical efficiency, while streamlining ergonomics via its shroud-free design.^{1,3}



Integrated
Compressor



Shroud-free
Footswitch



EasyFit™

All At Once Setup



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Velvet™

Equality™

EvenFlow™

EasyFit™

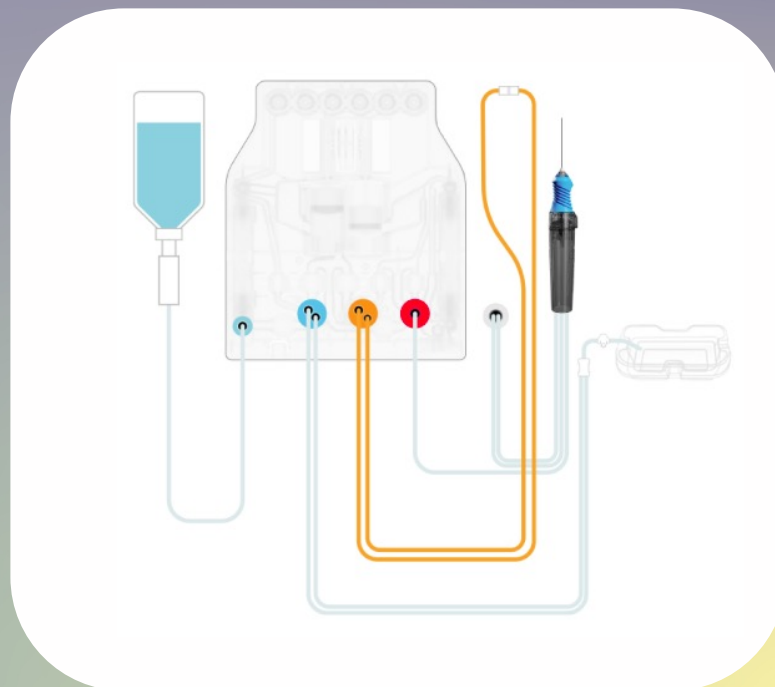
InViTe™

Resolute™

Streamlined workflow

EasyFit™ All At Once Setup simplifies equipment setup for all procedures and avoids tubings tangling, together with the double-pouched tray.^{1,3}

Streamlining OR workflow is essential, especially in case of high staff turnover or unspecialized OR staff.



EasyFit™

All At Once Setup



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Velvet™

Equality™

EvenFlow™

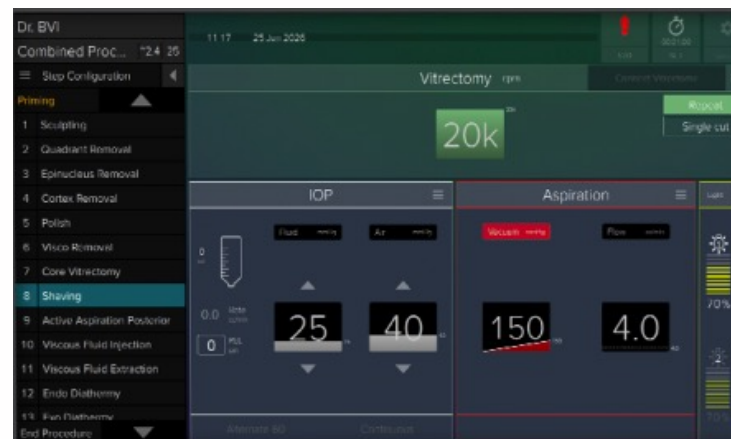
EasyFit™

InViTe™

Resolute™

Intuitive guided setup and intra-op adjustments

Virtuoso® Graphic User Interface provides intuitive guided setup for seamless intra-op adjustments.¹



EasyFit™
All At Once Setup



Virtuoso DUAL

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Velvet™

Equality™

EvenFlow™

EasyFit™

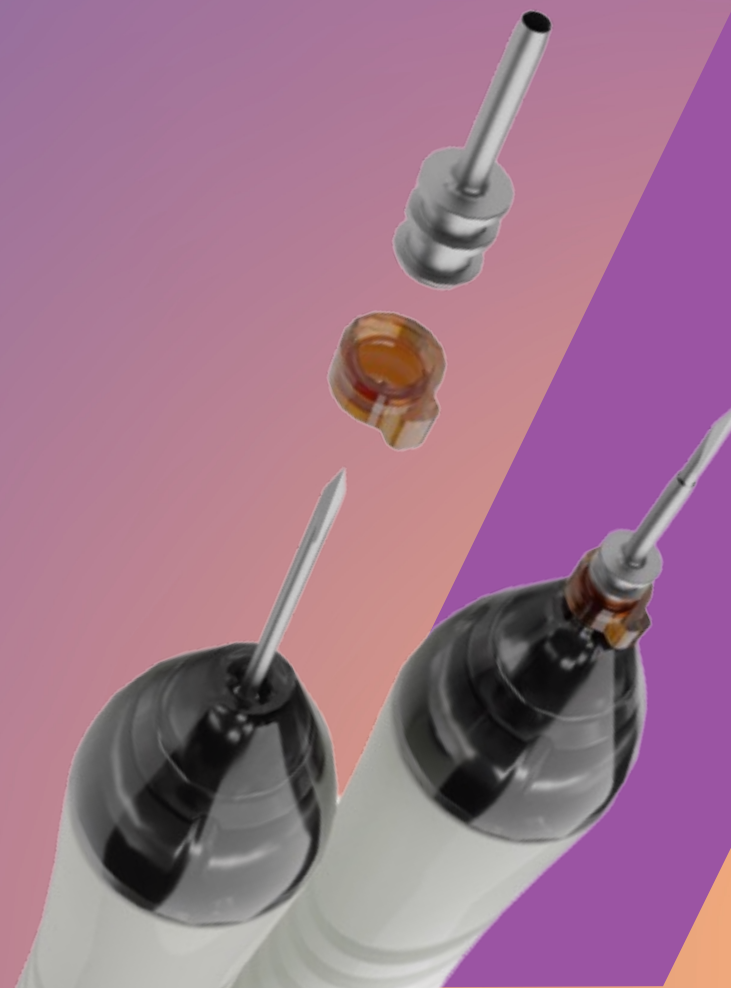
InViTe™

Resolute™

Entry redefined. Control perfected.

inViTe™ Valved Entry System enhances
intra-op control and surgical efficiency in
vitreoretinal surgery.^{3,13}

 **inViTe™**
Valved Entry System



Technical Data Sheet

Pack Info

IFU



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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

High Flow directional infusion cannula

inViTe™ Valved Entry System's high flow directional infusion cannula prevents direct jet stream during Air Fluid exchanges, avoiding iatrogenic damage risk, and delivers uncompromised inflow capability.^{3,13}



inViTe™

Valved Entry System



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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

IOP stability and surgical flexibility

inViTe™ offers a smooth one-step entry, enduring valve sealing for IOP stability, and removable valve capability to maximize surgical efficiency and expand surgical flexibility.^{3,13}



inViTe™

Valved Entry System



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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Comparing the Efficiency of Valved Trocar Cannulas for Pars Plana Vitrectomy - Rossi T, et al.

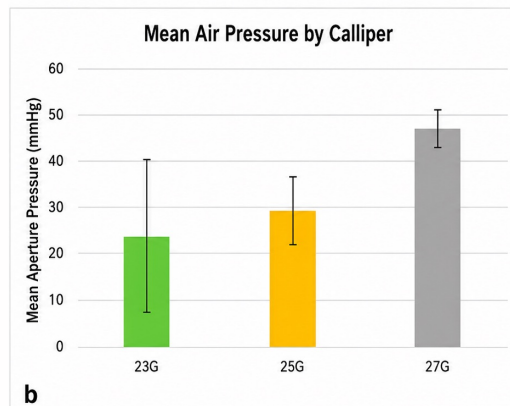
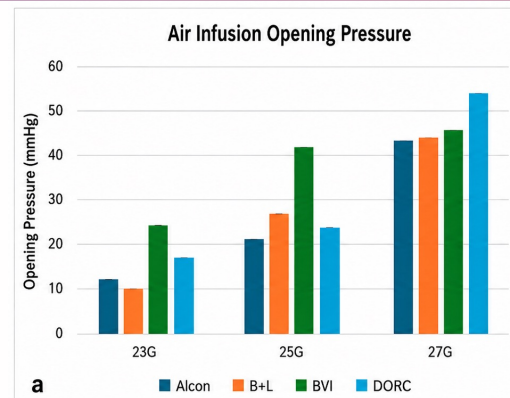
Mean aperture pressure valve under air infusion divided per brand and gauge

Valved trocar cannulas effectively maintain stable intraocular pressure, with the 27G gauge exhibiting a significantly higher average opening pressure (47.2 ± 3.9 mmHg) and superior air-sealing efficiency over 25G and 23G models.

 **inViTe™**
Valved Entry System

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Tier 1 System Comparison





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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

We put our energy into energy

Discover an energy delivery system that intelligently senses cataract resistance and dynamically compensates to maintain the target energy level – empowering you to operate at a lower energy set point.^{3,4,5,6}



Resolute™

Load-Sensing Energy Optimizer



Technical Data Sheet

Pack Info

IFU



Virtuoso DUAL

< Virtuoso® DUAL



Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Intelligent lens sensing

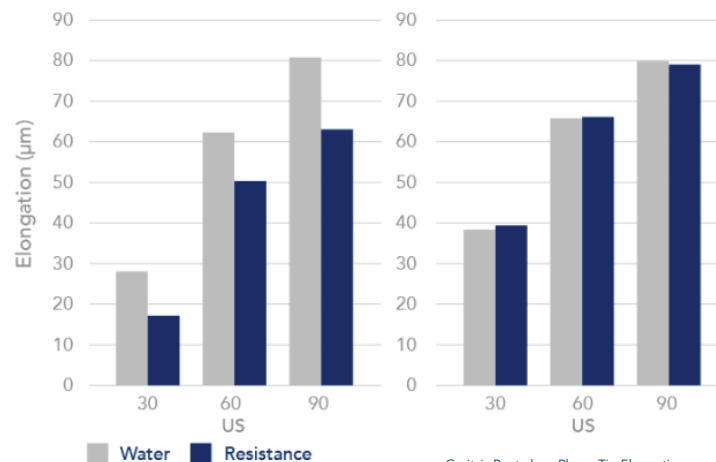
Maintaining target energy through
sensing and compensating for cataract
resistance.^{3,4,5,6}



Resolute™

Load-Sensing Energy Optimizer

Phaco without
Resolute™



Garitsis P, et al. — Phaco Tip Elongation
Consistency Under Load: A Study



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Velvet™

Equality™

EvenFlow™

EasyFit™

InViTe™

Resolute™

Lower energy

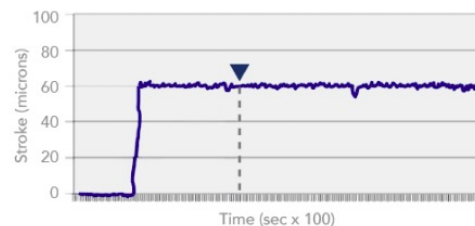
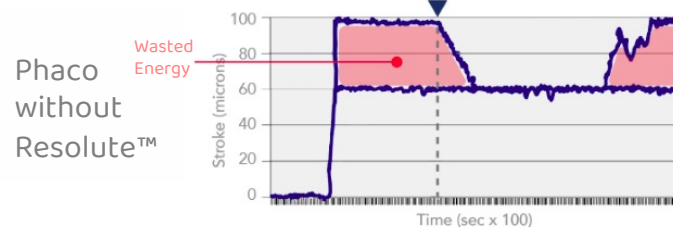
By ensuring this consistency between programmed and delivered energy, Resolute™ allows a lower energy setpoint throughout all phaco steps, differently than other systems that require a higher energy setpoint, especially for harder cataracts.^{3,4,5,6}



Resolute™

Load-Sensing Energy Optimizer

Tip Stroke Pattern (Microns) ▼ Contact between phaco tip and cataract material





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Virtuoso DUAL® Incl. Laser

Virtuoso DUAL® Excl. Laser

VR-X PACK

PHACO-X PACK

BASIC-X PACK

PHACO KIT

System Features



VIRTUOSO® DUAL Advanced Vision Solutions incl. Laser



General Information

Manufacturer	Model
Vitrex B.V. Seggelaan Noord 2, 3237 MG Vierpolders, The Netherlands	Virtuoso® DUAL Advanced Vision Solutions incl. Laser
SKU #	
EQ00.R02	
Regulatory Compliance	
European Medical Device Regulation (EU) 2017/745, and the following additional European Directives:	
• Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) • Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) • Directive 2014/53/EU on Radio Equipment (RED)	
Electrical and Laser Safety Compliance	
Electrical Safety EN IEC 60601-1:2006/A13:2014 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance EN IEC 60601-1-2:2015/A1:2021 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements and tests.	
Laser Safety EN IEC 60601-2-22:2020/A11:2024 Medical electrical equipment - Part 22: Particular requirements for basic safety and essential performance of surgical, cosmetic, therapeutic, and diagnostic laser equipment. EN 60825-1:2014/A11:2021 Safety of laser products - Part 1: Equipment classification and requirements.	
Lens Removal, Vitrectomy, and Diathermy Safety Compliance	
Lens Removal and Vitrectomy Devices IEC 60601-2-38:2020 Medical electrical equipment - Part 2-38: Particular requirements for the basic safety and essential performance of lens removal devices and vitrectomy devices for ophthalmic surgery.	
Diathermy IEC 60601-2-2:2017/A1:2023 Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories.	
Endoluminator ISO 15752:2010 Ophthalmic instruments – Endoluminators – Fundamental requirements and test methods for optical radiation safety.	



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Technical Data Sheet

Pack Info

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< Virtuoso® DUAL



Virtuoso DUAL® Incl. Laser

Virtuoso DUAL® Excl. Laser

VR-X PACK

PHACO-X PACK

BASIC-X PACK

PHACO KIT



VIRTUOSO® DUAL
Advanced Vision Solutions
excl. Laser



General Information

Manufacturer	Model
Vitrex B.V. Seggelaan-Noord 2, 3237 MG Vierpolders, The Netherlands	Virtuoso® DUAL Advanced Vision Solutions excl. Laser
SKU #	
EQ00.R03	
Regulatory Compliance	
European Medical Device Regulation (EU) 2017/745, and the following additional European Directives:	
• Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) • Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) • Directive 2014/53/EU on Radio Equipment (RED)	
Electrical Safety Compliance	
EN IEC 60601-1:2006/A13:2021 Medical electrical equipment - Part 1: General requirements for basic safety and essential performance	
EN IEC 60601-1-2: 2015/A1:2021 Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic disturbances - Requirements and tests.	
Lens Removal, Vitrectomy, and Diathermy Safety Compliance	
Lens Removal and Vitrectomy Devices	
IEC 60601-2-58:2024 Medical electrical equipment - Part 2-58: Particular requirements for the basic safety and essential performance of lens removal devices and vitrectomy devices for ophthalmic surgery	
Diathermy	
IEC 60601-2-2:2017/A1:2023 Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories.	
Endoilluminator	
ISO 15752:2010 Ophthalmic instruments - Endoilluminators - Fundamental requirements and test methods for optical radiation safety	

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Virtuoso DUAL® Excl. Laser

VR-X PACK

PHACO-X PACK

BASIC-X PACK

PHACO KIT

23G Virtuoso® VR-X PACK

BVI
23G Virtuoso®
VR-X PACK

Pack for Posterior or Combined®
abdominal surgery through
23G incision using Fun Plane
Viewing Technique - Sterile -
Single use

Product Information

Name	Description	Qty/Box	SKU #
23G Virtuoso® VR-X PACK	Pack for Posterior or Combined® abdominal surgery through 23G incision using Fun Plane Viewing Technique - Sterile - Single use	1	302-033

Accessories

Name	Description	Qty/Box
23G Virtuoso® VR-X PACK	Pack for Posterior or Combined® abdominal surgery through 23G incision using Fun Plane Viewing Technique - Sterile - Single use	1

Warnings

Do not use for laparoscopic or combined laparoscopic and open abdominal surgery.

Notes

Read the IFU for complete instructions.

+

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25G Virtuoso® VR-X PACK

BVI
25G Virtuoso®
VR-X PACK

Pack for Posterior or Combined®
abdominal surgery through
25G incision using Fun Plane
Viewing Technique - Sterile -
Single use

Product Information

Name	Description	Qty/Box	SKU #
25G Virtuoso® VR-X PACK	Pack for Posterior or Combined® abdominal surgery through 25G incision using Fun Plane Viewing Technique - Sterile - Single use	1	302-034

Accessories

Name	Description	Qty/Box
25G Virtuoso® VR-X PACK	Pack for Posterior or Combined® abdominal surgery through 25G incision using Fun Plane Viewing Technique - Sterile - Single use	1

Warnings

Do not use for laparoscopic or combined laparoscopic and open abdominal surgery.

Notes

Read the IFU for complete instructions.

+

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27G Virtuoso® VR-X PACK

BVI
27G Virtuoso®
VR-X PACK

Pack for Posterior or Combined®
abdominal surgery through
27G incision using Fun Plane
Viewing Technique - Sterile -
Single use

Product Information

Name	Description	Qty/Box	SKU #
27G Virtuoso® VR-X PACK	Pack for Posterior or Combined® abdominal surgery through 27G incision using Fun Plane Viewing Technique - Sterile - Single use	1	302-035

Accessories

Name	Description	Qty/Box
27G Virtuoso® VR-X PACK	Pack for Posterior or Combined® abdominal surgery through 27G incision using Fun Plane Viewing Technique - Sterile - Single use	1

Warnings

Do not use for laparoscopic or combined laparoscopic and open abdominal surgery.

Notes

Read the IFU for complete instructions.

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Virtuoso DUAL®

< Virtuoso® DUAL



Virtuoso DUAL® Incl. Laser

Virtuoso DUAL® Excl. Laser

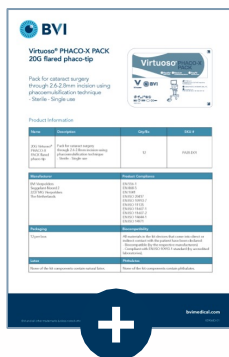
VR-X PACK

PHACO-X PACK

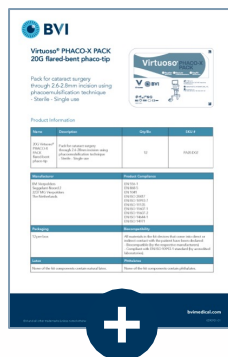
BASIC-X PACK

PHACO KIT

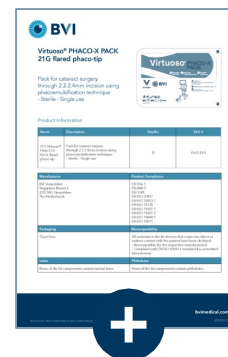
20G Virtuoso® PHACO-X PACK
flared phaco-tip



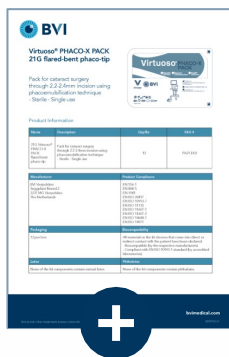
20G Virtuoso® PHACO-X PACK
flared-bent phaco-tip



21G Virtuoso® PHACO-X PACK
flared phaco-tip



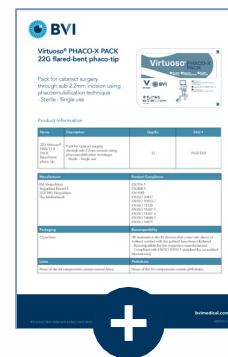
21G Virtuoso® PHACO-X PACK
flared-bent phaco-tip



22G Virtuoso® PHACO-X PACK
flared phaco-tip



22G Virtuoso® PHACO-X PACK
flared-bent phaco-tip





Virtuoso DUAL®

< Virtuoso® DUAL



Virtuoso DUAL® Incl. Laser

Virtuoso DUAL® Excl. Laser

VR-X PACK

PHACO-X PACK

BASIC-X PACK

PHACO KIT



Virtuoso® BASIC-X PACK

Pack* for cataract surgery
Sterile - Single use



Product Information

Name	Description	Qty/Bx	SKU #
Virtuoso® BASIC-X PACK	Pack* for cataract surgery Sterile - Single use *Tipless and Sleeveless	12	PA00.D02
Manufacturer BVI Vierspolders Seggellant-Noord 2 3237 MG Vierspolders The Netherlands		Product Compliance EN 556-1 EN 868-5 EN 1041 EN ISO 20417 EN ISO 10993-7 EN ISO 11135 EN ISO 11607-1 EN ISO 11607-2 EN ISO 14644-1 EN ISO 14971	
Packaging 12 per box		Biocompatibility All materials in the kit devices that come into direct or indirect contact with the patient have been declared: - Biocompatible (by the respective manufacturer). - Compliant with EN ISO 10993-1 standard (by accredited laboratories).	
Latex None of the kit components contain natural latex.		Phthalates None of the kit components contain phthalates.	

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Virtuoso DUAL®

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Virtuoso DUAL® Incl. Laser

Virtuoso DUAL® Excl. Laser

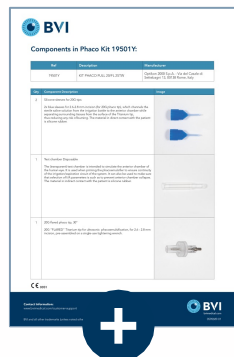
VR-X PACK

PHACO-X PACK

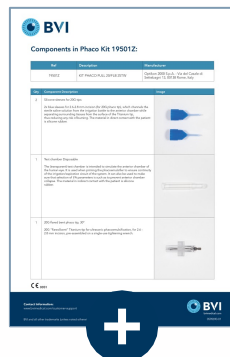
BASIC-X PACK

PHACO KIT

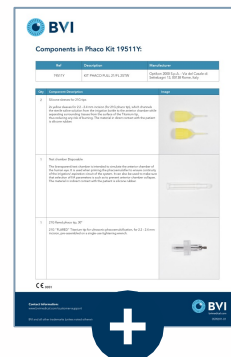
KIT PHACO FULL 20/FL
2STW



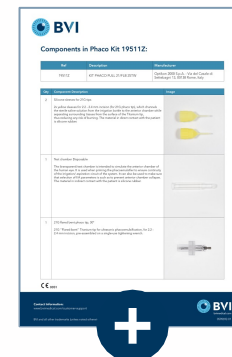
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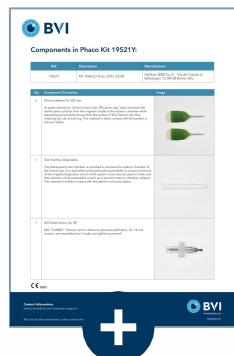
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2STW



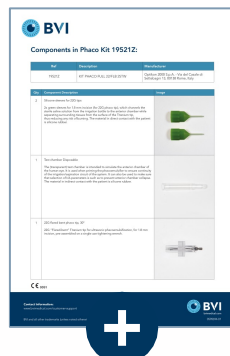
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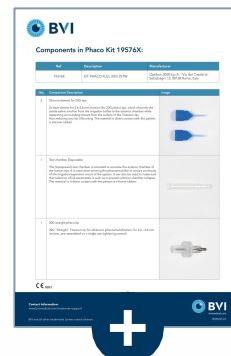
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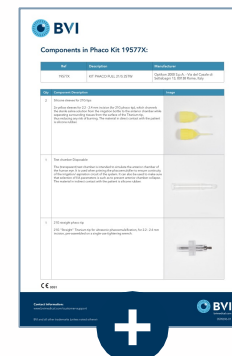
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KIT PHACO FULL 20/S
2STW



KIT PHACO FULL 21/S
2STW





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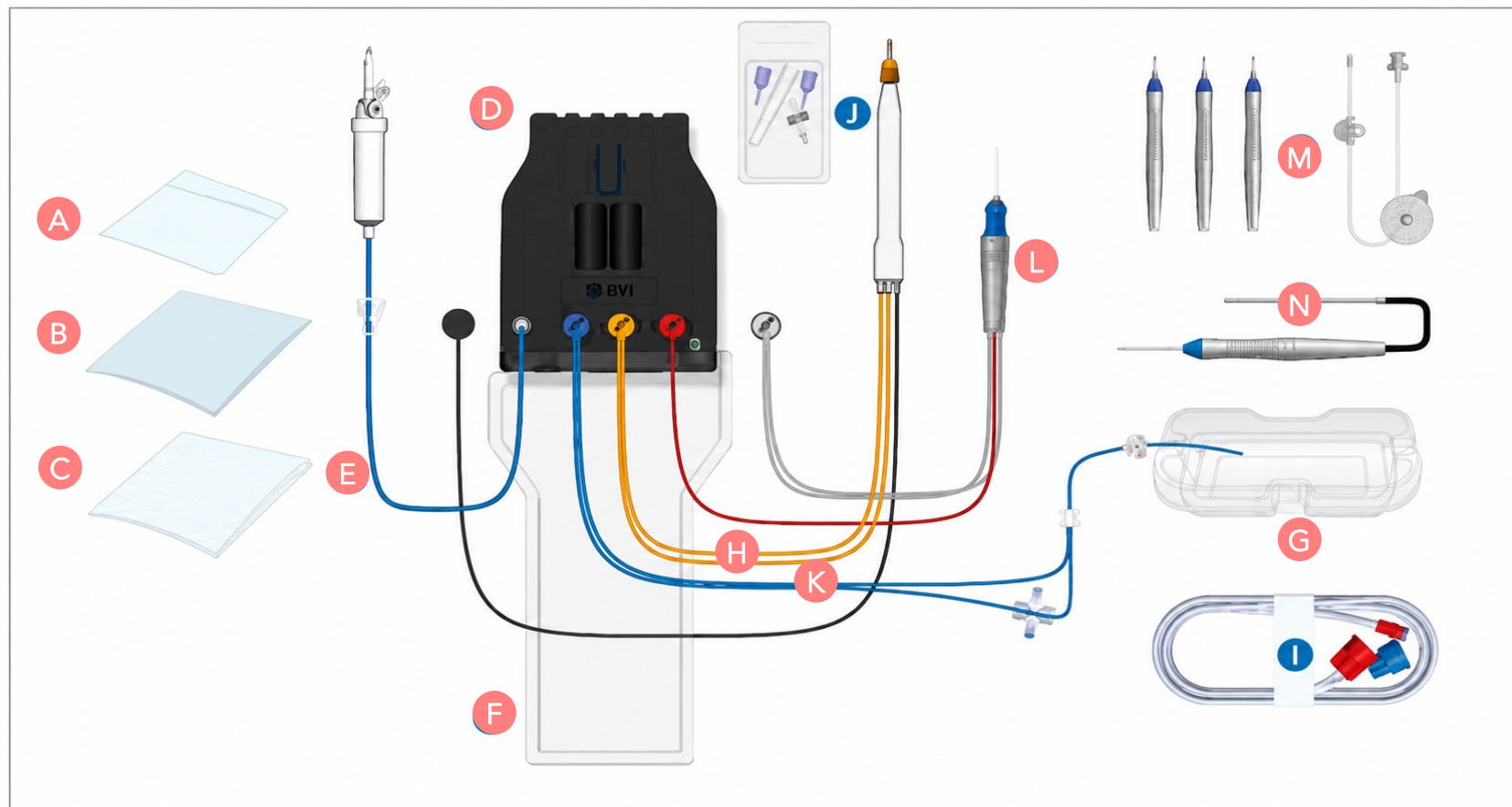
< Virtuoso® DUAL



VR-X PACK

PHACO-X PACK

BASIC-X PACK



A: Virtuoso® Remote Control Pouch
B: Virtuoso® Tray Drape
C: Virtuoso® Screen Drape
D: Virtuoso® Cassette
E: Irrigation Input Tubing

F: Drainage Bag (pre-assembled to Virtuoso Cassette)
G: Priming Cup
H: EasyFit™ Orange Connector with I/A Tubing
I: EasyFit™ Blue and EasyFit™ Red Connectors with Second I/A Tubing

J: Phaco Kit (#1 phaco tip/ wrench, #2 sleeves, 1 test chamber) to be connected to Slim 4 Phaco Handpiece (not included in the Pack)
K: EasyFit™ Blue Connector with Tubing for Fluid/Air Infusion

M: InViTE™ Valved Entry System (#3) with infusion cannula (to be connected to "K")
N: 45° Shielded Light Fiber
L: Velvet™ Vitrectomy Probe (with EasyFit™ red connector aspiration tubing)



Virtuoso DUAL®

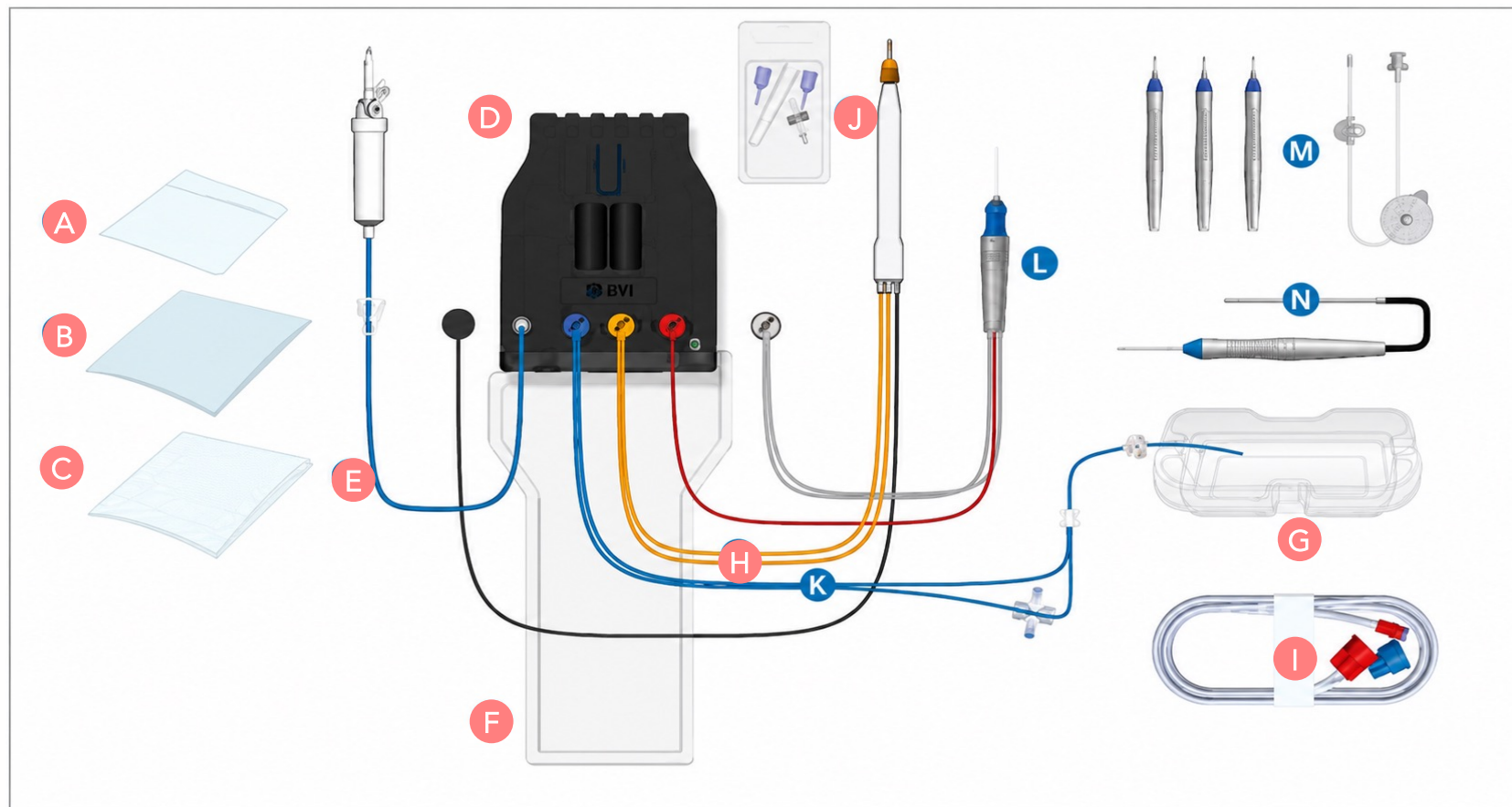
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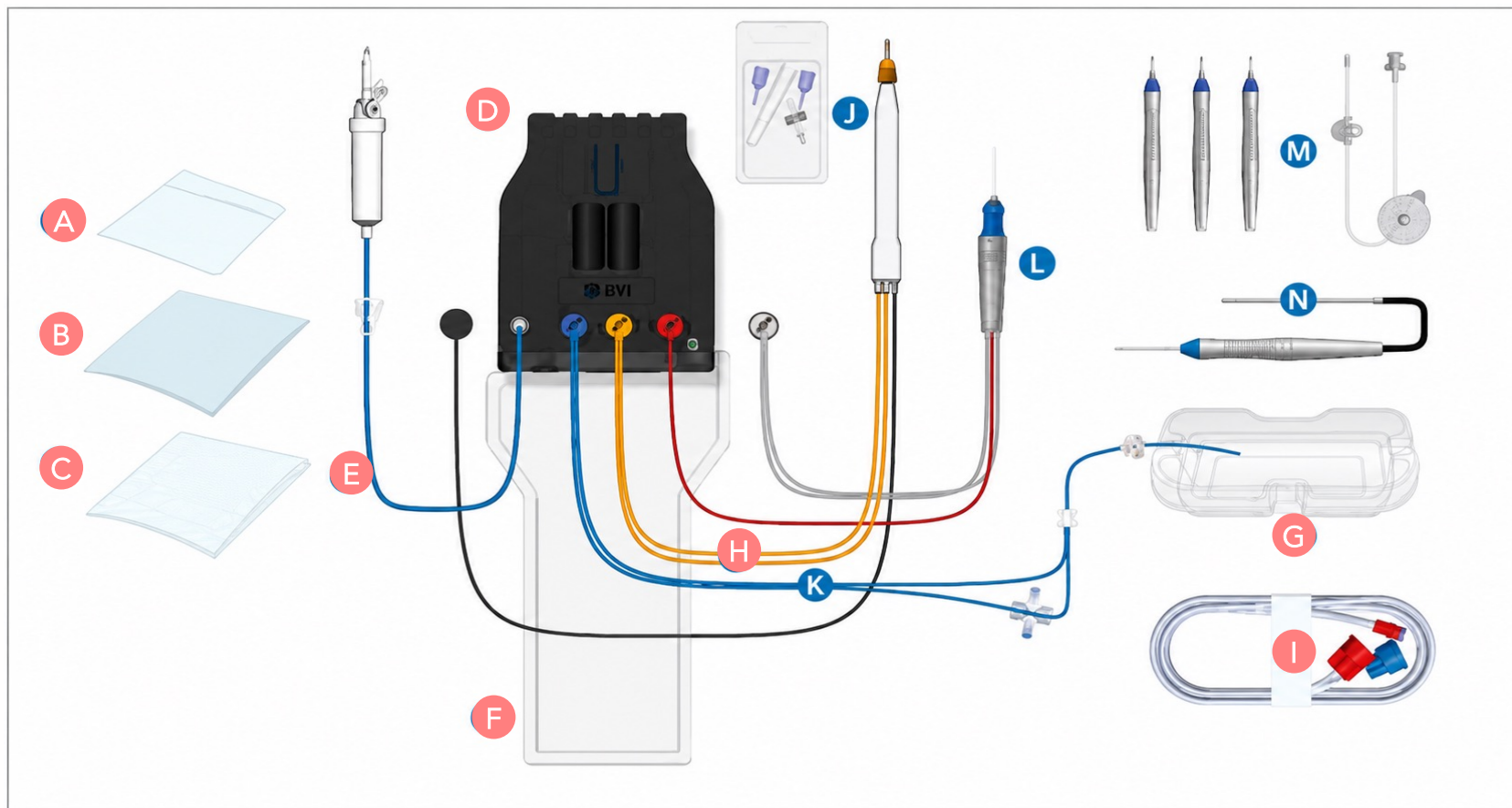
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help the Environment by providing
digital versions of our printed material.

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