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THE ART OF EYE CARE



The CV-30000 provides complete support for Cataract and Vitreoretinal surgery with four features that enhance usability:

#### Essential Components

#### Fortas Pump Advanced peristaltic pump

ETS

Exquisite tubing system

#### **Phaco Innovation**

## VIS

Optimal pulse control for Phacoemulsification

#### **APS-Plus**

The next generation of Auto Pulse System

### **Cut Control**

## High Speed Vitreous Cutter

Enhanced vitreoretinal surgery with 3000 cuts / min

#### **Pro-Pedal Mode**

Smart software control of vacuum pressure, flow rate, and cutting rate

## **User Friendly**

Navigation Mode Surgeon friendly navigation

## Sequential Mode

Memory of surgical sequences



## **Fortas Pump**

#### New peristaltic pump

The refined pump achieves vacuum rise at shorter times than the venturi pump with use of a CV-30000 phaco cassette and provides secure nucleus retentivity of a phaco tip and enhanced followability. It achieves vacuum rise at similar times as the venturi pump with use of a CV-30000 vit cassette and provides quick vacuum response during vitreoretinal surgery.



## **ETS (Exquisite Tubing System)**

#### Phaco cassette

The new evolved tubing system enhances the efficiency of aspiration and reduces the risk of surge.



#### Vit cassette

The new vent system controls the vacuum pressure effectively with reduction of the residual suction.

#### Comparison of vacuum rise / drop at 600 mmHg \*



\* Data on file

#### Phaco Innovation

## **VIS (Variable Intervals and Strokes)**



## **APS-Plus (Auto Pulse System-Plus)**

#### Efficient control of ultrasound and aspiration pump

Both ultrasound and aspiration pump automatically stop immediately after occlusion breaks to minimize surge. When the phaco tip is occluded, an automatic increase in the pulse duty provides a highly efficient control for phacoemulsification. The change in IOP can be controlled when the occlusion breaks.



# Cut Control

## **High Speed Vitreous Cutter**

### Maximum 3000 cuts / min

The excision per single cut is decreased with a high speed cutter and it is effective for precise treatment proximal to the retina.





## **Pro-Pedal Mode**

#### Desired setting with smart software

Cutting rate, flow rate, and vacuum can be independently controlled and modified in three dimensions. This software improves performance during vitreoretinal surgery and efficiency of vitreous body excisions.



Vitreous cutter (20 G) aspiration flow rate



# User Friendly

## **Navigation Mode**

Guidance with pictures for the setup procedure

Navigation screen uses images to aid in the setup procedure for ease of use.

## **Sequential Mode**

Programming for surgical procedure

Operation modes can be switched using the foot pedal.

Example of the program for combined cataract and vitreoretinal surgery



## **Multi-functional Foot Pedal**

Enhanced operability with customized foot pedal functions

Foot pedal functions are customizable with up to 8 selectable positions.

## **Integration with Green Laser**

Efficient operation flow and space-saving

The CV-30000 is equipped with a room to integrate the NIDEK Green Laser GYC-1000. It enables efficient operation flow and effective use space in the operating room.





# **Optimal Cassette System**

#### Separate cassette system for optimal vacuum control

With the use of the separate cassette system for cataract and vitreoretinal surgery, the CV-30000 provides optimal intraoperative vacuum control during the surgery.





Phaco cassette

Vit cassette

# Variety of Accessories



## Disposable phaco tip

The CV-30000 comes with a cost effective disposable phaco tip to maintain sterile conditions intraoperatively.

## Selectable vitreous cutter

The selectable vitreous cutter based on the surgical techniques optimizes the effectiveness of vitreoretinal surgery.

# Fortas<sup>™</sup> CV-30000 Specifications

Туре	AP	A
Application	Cataract / Vitreoretinal surgery	Cataract surgery
Vacuum		
Pump type	Peristaltic pump	
Vacuum setting	0 to 700 mmHg	<i>←</i>
Flow rate	0 to 60 mL / min (cataract surgery mode)	
	0 to 200 mL / min (vitreoretinal surgery mode)	
Ultrasound		
Transducer	Piezoelectric	
Frequency	40 kHz	→ →
Pulse mode	1 to 100 pulses / s	
Diathermy		
Frequency	515 kHz	$\leftarrow$
Output	0.5 to 10 W (5 to 100%)	
Vitreous cutter		
Cutting system	Pneumatic driven guillotine system	
Cutting rate	100 to 2500 cuts / min (with built-in air compressor)	←
	100 to 3000 cuts / min (with gas as an external drive source)	
External driven source	Air or nitrogen gas, 550 to 750 kPa	
Intraocular illumination		
Light source	Halogen lamp (12 V / 50 W)	Not available
Output	2 ports	
Air pressure of FGX	10 to 100 mmHg	Not available
Driving pressure of viscosity		
fluid infusion	100 to 300 kPa	Not available
Intraocular scissors		
Cutting rate	50 to 400 cuts / min	Not available
Driving pressure	140 to 250 kPa	
HID illumination unit (optional)		
Light source	Xenon lamp (75 W)	Not available
Output	1 lamp / 2 ports	
Power supply	AC 100, 115, 230 V	
	50 / 60 Hz	→ →
Power consumption	650 VA	450 VA
Dimensions / Mass	512 (W) x 555 (D) x 1540 (H) mm	←
	115 kg	110 kg



Specifications and design are subject to change without notice.





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