

# AV-S



## Technical Specification

Physical		
Size	- Control Unit Only	185 x 290 x 300 mm (H x W x D)
	- with Adult Bellows	385 x 290 x 300 mm (H x W x D)
Screen		210 mm (8.4") TFT
Weight	- Control Unit Only	7.6 kg
	- with Adult Bellows	9.0 kg
Bellows (Latex Free)		20 to 1600 ml, Pediatric option 20 to 350 ml
Power		90 to 264 VAC, 47 to 63 Hz
Drive Gas		Oxygen or Air
Functional		
Tidal Volume (Vt)		29 to 1600 ml
Rate (BPM)		4 to 100 bpm
I:E Ratio		1:0.3 to 1:8
Pressure Limit		10 to 80 cmH <sub>2</sub> O
Fresh Gas Compensation		Automatic Tidal Volume Adjustment
Ventilation Modes		Off, Standby, Volume, Pressure Controlled, Spontaneous, SIMV, SMMV, and PSV (for use in anaesthesia procedures only)
Sigh Function (Volume Mode)		Tidal Volume (Vt) x 1.5 is delivered once, twice, three or four times every 50 breaths (Frequency is user selectable)
Pressure Control		10 to 50 cmH <sub>2</sub> O
Spontaneous Mode		Active Volume and Pressure Alarms, Patient Support Function - Automatic switch to Volume Cycle Mode if apnea alarm is triggered
Electronic PEEP		4 to 30 cmH <sub>2</sub> O
Oxygen Monitor		Fuel Cell type
SIMV, SMMV, PSV		
Trigger		0.7 to 4 L/min (PEEP Referenced)
Trigger Window		60% of Expiratory Time
Tidal Volume (Vt)		As Volume Mode
Minute Volume (Vm)		As Volume Mode
Inspiratory Time (Ti)		0.5 to 5 Seconds
Inspiratory Time (Ti)		3 to 20 cmH <sub>2</sub> O (PEEP Referenced)
Alarms - Automatic		
Alarm Mute		30 Seconds
Low Drive Gas Pressure		Less than 235 kPa (34psi)
High Continuous Airway Pressure		Above 30 cmH <sub>2</sub> O at start of cycle
Low Pressure		4 to 14 cmH <sub>2</sub> O PEEP Referenced
Low Tidal Volume		50% of Volume Set (Spirometry)
Incorrect Rate or Ratio		
Mains Failure		30 minutes Battery Backup
Low Battery		5 Minutes Use
Vent Inop		Internal or Battery Failure
Apnoea		Flow Referenced
Sigma Delta Vaporizer		
Size		
Selectatec Compatible with interlock (H x W x D)		242 x 120 x 190 mm
Dräger Plug-in Compatible with interlock (H x W x D)		242 x 100 x 190 mm
Cagemount (H x W x D)		219 x 133 x 158 mm
Physical		
Weight		5 kg
Capacity		Volume at MAX mark: 250 ml nominal Volume at MIN mark: 35 + 10ml
Note:		After draining approximately 60 + 10 ml of liquid is retained by the wick
Flow Range		0.2 to 15 litres / min
Temperature Range		Operating: 15 to 35°C (58 to 95°F)

Alarms - Optional User Set		
Tidal Volume	- Minimum	0 to 1600 ml
	- Maximum	20 to 1600 ml
Minute Volume	- Minimum	0 to 10 L
	- Maximum	0 to 30 L
Low and High O <sub>2</sub> Concentration		18% to 105%
High Airway Pressure		10 to 80 cmH <sub>2</sub> O Adjustable
Default Settings		
	Adult	Pediatric
VOLUME		
Tidal Volume (Vt)	600 ml	150 ml
Rate (BPM)	10	15
I:E Ratio	1:2	1:2
Pmax	38 cmH <sub>2</sub> O	38 cmH <sub>2</sub> O
PRESSURE		
Tidal Volume (Vt)	600 ml	150 ml
Rate (BPM)	10	15
I:E Ratio	1:2	1:2
P-Target	10 cmH <sub>2</sub> O	10 cmH <sub>2</sub> O
SIMV		
Tidal Volume (Vt)	600 ml	200 ml
Rate (BPM)	6	10
Inspiratory Time	2 Seconds	1 Second
Trigger	-1 cmH <sub>2</sub> O	-1 cmH <sub>2</sub> O
SMMV		
Minute Volume (Vm)	3:6 L	2 L
Rate (BPM)	6	10
Inspiratory Time	2 Seconds	1 Second
Trigger	-1 cmH <sub>2</sub> O	-1 cmH <sub>2</sub> O
PSV		
Support Pressure	10 cmH <sub>2</sub> O	10 cmH <sub>2</sub> O
Inspiratory Time	2 Seconds	1 Second
A200SP Absorber		
Physical		
Size (H x W x D)		420 x 230 x 430 mm
Weight (Empty)		15 kg
Absorbent Capacity		1.3 kg



6800 N.W. 77 Court, Miami, Florida 33166  
 Phone: 305-477-6331 · Fax: 305-477-5351  
 info@advanced-inst.com · www.advanced-inst.com

www.advanced-inst.com

Contact us for additional information.  
 Contáctenos para información adicional.

NOTE: Specifications subject to change without notice.  
 NOTA: Especificaciones sujetas a cambio sin previo aviso.

# anesthesia MACHINE

## AV-S

Anesthesia System Advanced technology flexible specification, open architecture and easy to use



With its integrated design and superior build quality each AV-S is custom built to meet your requirements.

- ◆ New Levels of workstation integration between AV-S, A-200SP Absorber and AV-S Ventilator
- ◆ Modular construction and low life cost
- ◆ Left or right handed layout
- ◆ Up to four gases
- ◆ Open architecture for monitors and accessories
- ◆ Monitor shelf options:  
Standard  
Additional mid-shelf  
Large screen

Balanced ultra low flow anaesthesia, plus patient safety with proven Mechanical AHD system

- ◆ Specially designed for low flow
- ◆ 50 - 75 ml/min basal oxygen flow
- ◆ 27 - 33% minimum Oxygen flow
- ◆ Mechanical Anti-Hypoxic Device and Air/N<sub>2</sub>O Interlock

SB-AVS  
 REV. 00  
 OCT. 2009





**The A200-SP Absorber combines advanced system integration, ease of use and high performance**

- ◆ Absorber/Ventilator interface provides seamless ventilation mode switching
- ◆ Excellent ergonomics with multi-position mounting and adjustable breathing bag arm
- ◆ Optional heated circuit
- ◆ Protected, integrated spirometry sensors
- ◆ Quick release canister for loose or pre-packed absorbent
- ◆ Built-in oxygen monitor sensor
- ◆ Autoclavable
- ◆ 'Life-Care' or optional 'Life-Care' Plus Warranty and Customer Care scheme
- ◆ 100% MRI Compatible with the use of the NUFFIELD Ventilator



**Nuffield MRI-Compatible Anesthesia Ventilator**



**Anesthetic Vaporizer**

**AV-S Ventilator Multi-mode Ventilator**  
**An easy to use, multifunction anaesthesia ventilator, designed for all patient profiles**

- Volume, PCV, Psv, SIMV and AMMV modes
- Comprehensive printer/data outputs for networking and interfacing to patient monitors
- Integrated Oxygen Monitor and Spirometry
- Inverse I: E Ratio capability
- Electronic PEEP
- Autoclavable Latex Free Bellows
- Oxygen or Air drive gas
- 30 minutes battery backup
- Selectable Dual Waveform Display  
 Pressure v. Time  
 Pressure v. Volume (for ventilation analysis) plus waveform freeze facility
- Save and recall function for user specific settings
- Adult and Pediatric default settings
- Flexible specification  
 Stand- alone operation or seamless integration with AV-S Workstation  
 Display mounting option  
 Multilingual display



**AV-S Ventilator**



**Touchscreen Control**

Prompt and easy operation from either the Touchscreen or via the Com-wheel



**Latex-free bellows**

The latex-free bellows, canister and base assembly are fully autoclavable



**SIMV**  
 SIMV combines spontaneous and set mandatory breaths



**SMMV**  
 SMMV combines spontaneous breaths with synchronised mandatory breaths to achieve the set minute volume



**PVS**  
 PVS assists each spontaneous breath with a preset pressure, thus reducing the effort required to breathe