515A & 515 Series
Serie de 515A & 515
Série 515A & 515

515A & 515 Serie
Serie da 515A & 515
515A & 515 Serie

CE 0044

EN DeVilbiss® Oxygen Concentrator Instruction Guide

WARNING–*Read instruction guide before operating this equipment.*

CAUTION– *Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.*

MADE IN THE USA of U.S. and Imported Parts

DANGER–NO SMOKING

ES Guía de Instrucciones del Concentrador de Oxígeno DeVilbiss®

ADVERTENCIA–*Lea la guía de instrucciones antes de poner a funcionar este equipo.*

PRECAUCION– *La ley federal (EE.UU.) establece que este aparato sólo lo puede vender un médico o por prescripción del mismo.*

FABRICADO EN EE. UU. de partes nacionales e importadas

PELIGRO–NO FUMAR

FR Guide d'Instructions sur le Concentrateur d'oxygène de DeVilbiss®

AVERTISSEMENT–*Lire le mode d'emploi avant d'utiliser ce dispositif.*

ATTENTION–*En vertu de la Loi fédérale américaine, la vente de cet appareil n'est autorisée que par un médecin ou sur ordonnance de ce dernier.*

FABRIQUÉ AUX ÉTATS-UNIS avec des pièces des États-Unis et des pièces importées

DANGER–NE PAS FUMER

DE DeVilbiss® Sauerstoffkonzentrator Bedienungsanleitung

WARNUNG–*Vor Inbetriebnahme des Gerätes Bedienungshinweise lesen.*

ACHTUNG– *Dieses Gerät darf US-Bundesgesetzen zufolge nur von Ärzten oder auf deren Anweisung hin verkauft werden.*

Gefertigt in den USA unter Verwendung amerikanischer und importierter Teile.

GEFAHR–RAUCHEN VERBOTEN

IT Manuale di Istruzioni del Concentratore di ossigeno DeVilbiss®

AVVERTENZA–*Leggere il manuale di istruzioni prima di usarel'apparecchio*

ATTENZIONE–*La legislazione federale degli Stati Uniti limita la vendita di questo prodotto al personale medico o alle persone munite di prescrizione medica.*

ASSEMBLATO NEGLI USA con componenti prodotti negli Stati Uniti e importati.

PERICOLO - NON FUMARE

NL DeVilbiss® zuurstofconcentrator Instructiehandboekje

WAARSCHUWING–*Lees dit instructiehandboekje zorgvuldig door voordat u het apparaat gaat gebruiken.*

ATTENTIE–*De federale wetgebing in de Verenigde Staten schrijft voor dat dit apparaat uitsluitend mag worden verkocht of voorgeschreven door een arts.*

GEPRODUCEERD IN DE VERENIGDE STATEN met Amerikaanse en geïmporteerde onderdelen

GEVAAR– VERBODEN TE ROKEN

EN ENGLISH **EN-2**
ES ESPAÑOL **ES-10**
FR FRANÇAIS **FR-18**
DE DEUTSCH **DE-26**
IT ITALIANO **IT-34**
NL NEDERLANDS **NL-42**

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CAUTION– *Federal (U.S.A.) law restricts this device to sale by or on the order of a physician.*

INDICATIONS FOR USE– The DeVilbiss Oxygen Concentrator is intended for use as an oxygen concentrator to provide supplemental low flow oxygen therapy in the home, nursing homes, patient care facilities, etc.

WARNING

Under certain circumstances, oxygen therapy can be hazardous. Seek medical advice before using an oxygen concentrator.

Physician Information

Physician Name: _____

Telephone: _____

Address: _____

Prescription Information

Name: _____

Oxygen liters per minute

at rest: _____ during activity: _____ other: _____

Oxygen use per day

Hours: _____ Minutes: _____

Comments: _____

DeVilbiss Oxygen Concentrators *(check one)*

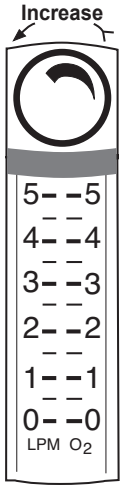
☐ **4-liter w/OSD,** ☐ **5-liter,** ☐ **5-liter w/OSD, Serial Number:** _____

DeVilbiss Equipment Provider Information

Set-Up Person: _____

This instruction guide was reviewed with me and I have been instructed on the safe use and care of the DeVilbiss Oxygen Concentrator.

Signature: _____ Date: _____



DeVilbiss 4- & 5-Liter Series

IMPORTANT SAFEGUARDS

Read this entire guide before using your DeVilbiss concentrator. Important information is highlighted by these terms throughout this guide:

DANGER **Urgent safety information for hazards that will cause serious injury or death.**

WARNING **Important safety information for hazards that might cause serious injury.**

CAUTION *Information for preventing damage to the product.*

NOTE *Information to which you should pay special attention.*

Important safeguards are indicated throughout this guide; pay special attention to all safety information.

DANGER
NO SMOKING

READ ALL INSTRUCTIONS BEFORE USING.

SAVE THESE INSTRUCTIONS.

INTRODUCTION

This instruction guide will acquaint you with the DeVilbiss oxygen concentrator. Make sure that you read and understand this guide before operating your unit. Important safeguards are indicated throughout this guide; pay special attention to all safety information. Contact your DeVilbiss equipment provider should you have any questions.

WARNING

For your safety, the oxygen concentrator must be used according to the prescription determined by your physician.

Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

This device contains electrical and/or electronic equipment. Follow local governing ordinances and recycling plans regarding disposal of device components.

DANGER

Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy. Do not use within 5 feet (1.6m) of hot, sparking objects or naked sources of flame.

Why Your Physician Prescribed Supplemental Oxygen

Today, many people suffer from heart, lung, and other respiratory diseases. Many of these people can benefit from supplemental oxygen therapy. Your body requires a steady supply of oxygen to function properly. Your physician prescribed supplemental oxygen for you because you are not getting enough oxygen from room air alone. Supplemental oxygen will increase the amount of oxygen that your body receives.

Supplemental oxygen is not addictive. Your physician prescribed a specific oxygen flow to improve symptoms such as headaches, drowsiness, confusion, fatigue, or increased irritability. If these symptoms persist after you begin your supplemental oxygen program, consult your physician.

How Your DeVilbiss Oxygen Concentrator Works

Oxygen concentrators are the most reliable, efficient, and convenient source of supplemental oxygen available today. The oxygen concentrator is electrically operated. The unit separates oxygen from room air which allows high-purity supplemental oxygen to be delivered to you through the oxygen outlet. Although the concentrator filters the oxygen in a room, it will not affect the normal amount of oxygen in your room.

IMPORTANT PARTS OF YOUR CONCENTRATOR

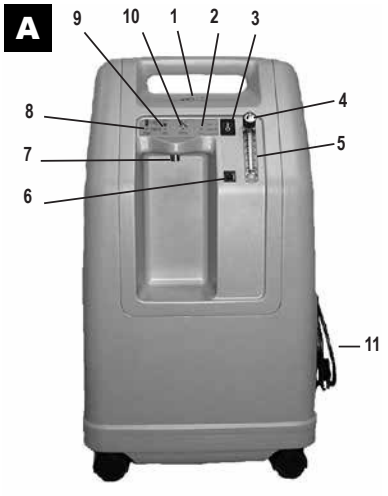
Please take time to familiarize yourself with your DeVilbiss oxygen concentrator before operating.

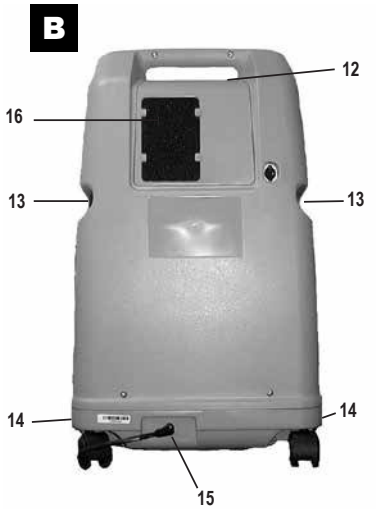
Front View (Figure A)

1. Operating instructions
2. Green Power light – illuminates when your concentrator is operating
3. Power Switch
   | = ON
   O = OFF
4. Flow meter knob
5. Flow meter
6. Circuit breaker – resets the unit after electrical overload shutdown
7. Oxygen outlet – oxygen is dispersed through this port
8. Normal Oxygen (green) light only on units w/OSD (see page 4)
9. Low Oxygen (yellow) light only on units w/OSD (see page 4)
10. Red Service Required light – when illuminated contact your DeVilbiss provider
11. Line cord strap

Back View (Figure B)

12. Important Safeguards
13. Handgrip
14. Exhaust
15. Power cord and/or IEC power connector.
16. Air filter – prevents dirt, dust, and lint from entering your unit.





Accessories

Oxygen Outlet Connector - Plastic - 1/pack..... CN100

Bubble Humidifier..... Salter Labs 7600 or equivalent

There are many types of humidifiers, oxygen tubing and cannulas/masks that can be used with this device. Certain humidifiers and accessories may impair the device's performance. A mask or any nasal cannula can be used with continuous flow delivery and may be sized according to your prescription as recommended by your homecare provider who should also give you advice on the proper usage, maintenance, and cleaning.

NOTE– *A maximum of 50 feet (15 meters) of crush-proof oxygen tubing plus 7 feet (2.1 meters) of cannula plus a bubble humidifier is allowed between the concentrator and the patient.*

NOTE– *The oxygen supply accessory (patient tubing) shall be equipped with a means that in case of fire stops the delivery of oxygen to the patient. This means of protection should be located as close to the patient as practicable.*

SETTING UP YOUR OXYGEN CONCENTRATOR

1. Position your unit near an electrical outlet in the room where you spend most of your time.

DANGER

Keep the oxygen concentrator at least 5 feet (1.6 m) from hot, sparking objects or naked sources of flame.

NOTE– *Do not connect to an electrical outlet controlled by a wall switch. No other appliances should be plugged into the wall outlet.*

2. Position your unit at least 6 inches (16 cm) from walls, draperies, or any other objects that might prevent the proper flow of air in and out of your oxygen concentrator. The oxygen concentrator should be located so as to avoid pollutants or fumes.

BEFORE OPERATING YOUR OXYGEN CONCENTRATOR

1. Before operating your unit, always check to be sure the air filter (located on the back of your unit) is clean. Proper cleaning of this filter is discussed in the Caring For Your Concentrator section on page 5.
2. Attach the appropriate oxygen accessories to the oxygen outlet.

   Oxygen Tubing Connection:
   a. Thread the oxygen outlet connector onto the oxygen outlet.
   b. Attach the oxygen tubing directly to the connector (Figure 1).

   Oxygen Tubing Connection With Humidification:
   If your physician has prescribed an oxygen humidifier as part of your therapy, follow these steps (If using a prefill, go to step b.):
   a. Fill the humidifier bottle with distilled water. Do not overfill.
   b. Thread the wing nut located on the top of the humidifier bottle to the oxygen outlet so that it is suspended (Figure 2). Make sure it is securely tightened.
   c. Attach the oxygen tubing directly to the humidifier bottle outlet fitting (Figure 3).
3. Your physician has prescribed either a nasal cannula or face mask. In most cases, they are already attached to the oxygen tubing. If not, follow the manufacturer's instructions for attachment.
4. Remove the power cord completely from the line cord strap. Make sure the power switch is in the "Off" position, and insert the plug into the wall outlet. The unit is double insulated to guard against electric shock.

NOTE– *(only 115 volt units) The plug on the DeVilbiss oxygen concentrator has one blade wider than the other. To reduce the risk of electric shock, this plug is intended to fit in a wall outlet only one way. Do not attempt to defeat this safety feature.*

WARNING

Improper use of the power cord and plugs can cause a burn, fire, or other electric shock hazards. Do not use the unit if the power cord is damaged.

OPERATING YOUR DEVILBISS OXYGEN CONCENTRATOR

DANGER

Oxygen causes rapid burning. Do not smoke while your oxygen concentrator is operating, or when you are near a person utilizing oxygen therapy. Keep the oxygen concentrator at least 5 feet (1.6 m) from hot, sparking objects or naked sources of flame.

DANGER
NO SMOKING

DANGER

Do not lay the cannula down while the concentrator is delivering oxygen. High concentrations of oxygen can cause rapid burning.

1. Press the power switch to the "On" position. When the unit is turned on, the Power light will illuminate, and the patient alert system – Service Required light and audible signal – will briefly alarm.

Only DeVilbiss Oxygen Concentrators with OSD

The OSD (Oxygen Sensing Device) is a device within your concentrator that monitors the oxygen produced by your unit. When the unit is turned "On," all four lights (Power, Service Required, Low Oxygen, and Normal Oxygen) on the front panel will illuminate briefly. After a few seconds, only the Power and Normal Oxygen lights will remain lit.

The OSD lights on the front panel are defined as follows:

- Green Normal Oxygen light–acceptable oxygen level.
- Yellow Low Oxygen light– below an acceptable oxygen level.

If the oxygen purity falls below the acceptable level, the green Normal Oxygen light will shut off and the yellow Low Oxygen light will illuminate. Switch to your reserve oxygen system. Refer to the Minor Troubleshooting section in this guide on page 6 and contact your DeVilbiss provider.

As an added safety feature should the oxygen purity continue to drop, an intermittent audible signal will sound. Contact your DeVilbiss provider immediately. Do not attempt any other maintenance.

NOTE– *If the Service Required light illuminates and the audible signal alarms but the unit is not operating, there is no power to the unit. Refer to the Minor Troubleshooting chart on page 6 and contact your DeVilbiss provider if necessary.*

NOTE– *If an audible low-frequency vibration sound is detected, the unit is not operating properly. Refer to the Minor Troubleshooting chart on page 6, and contact your DeVilbiss provider if necessary.*

2. Check the flow meter to make sure that the flow meter ball is centered on the line next to the prescribed number of your flow rate.

CAUTION– *It is very important to follow your oxygen prescription. Do not increase or decrease the flow of oxygen – consult your physician.*

NOTE– *Your DeVilbiss provider may have preset the flow meter so that it can not be adjusted.*

NOTE– *If the flow meter knob is turned clockwise, the flow decreases (and eventually will shut off the oxygen flow). If the knob is turned counterclockwise, the flow increases.*

NOTE– *For prescriptions of 5 LPM, be sure the ball is centered on the 5 liter line; the ball should not touch the red line. Setting the flow higher than 5 may cause the oxygen purity level to drop.*

NOTE– *The low-flow alarm will activate if the flow meter ball is set below .3 lpm. The unit will continue to run; however, the Service Required light will come on accompanied by an audible alarm. Adjust the flow meter to your prescribed flow.*

NOTE–*On later models of the 515 concentrators equipped with an OSD, the low-flow alarm may be activated if the flow meter ball is set below 1 lpm. The unit will continue to run; however, the Service Required light will come on accompanied by an audible alarm. Adjust the flow meter to your prescribed flow.*

3. Your DeVilbiss concentrator is now ready for use, properly position the cannula or mask (Figure 4). Allow 20 minutes for oxygen concentrator to reach stated performance.

RESERVE OXYGEN SYSTEM

As a precaution, your DeVilbiss provider may supply you with a reserve oxygen system. If your unit loses electrical power or fails to operate correctly, the Patient Alert System will sound to signal you to switch to your reserve oxygen system (if provided) and contact your DeVilbiss provider.

CARING FOR YOUR DEVILBISS OXYGEN CONCENTRATOR

NOTE– *Use no lubricants, oils or grease.*

WARNING

Before attempting any cleaning procedures, turn the unit "Off."

Cannula/Mask, Tubing, and Humidifier Bottle

Clean and replace the cannula/mask, tubing, and humidifier bottle according to the manufacturer's instructions.

Air Filter and Oxygen Outlet Connector

The air filter and connector should be cleaned at least once a week. To clean, follow these steps:

1. Remove the air filter, located on the back of the unit. Remove the oxygen outlet connector (if used).
2. Wash in a solution of warm water and dishwashing detergent (Figure 5).
3. Rinse thoroughly with warm tap water and towel dry. The filter should be completely dry before reinstalling.

CAUTION– *To prevent product damage, do not attempt to operate the unit without the air filter or while the filter is still damp.*

Exterior Cabinet

As needed, clean the concentrator exterior cabinet by using a damp cloth or sponge with a mild household cleaner and wipe it dry.

WARNING

To avoid electric shock, do not remove the concentrator cabinet. The cabinet should only be removed by a qualified DeVilbiss technician. Do not apply liquid directly to the cabinet or utilize any petroleum-based solvents or cleaning agents.

Use of harsh chemicals (including alcohol) is not recommended. If bactericidal cleaning is required, a non-alcohol based product should be used to avoid inadvertent damage.

PROVIDER'S NOTES - Cleaning and Disinfection When There is a Patient Change

When medical devices have already been used with a patient, contamination with human pathogenic germs should be assumed (unless there is evidence to the contrary), and the next patient, user or third party should be protected by appropriate handling and preparation.

Therefore, when there is a patient change, people must be protected during the transport and handling of the device, and the device must be fully processed, i.e., cleaned and disinfected, by suitably trained personnel before reuse to protect the next patient. The complete processing may only be done by the manufacturer or by a qualified DeVilbiss provider/service technician.

NOTE–*If the following described complete processing of the concentrator by a qualified DeVilbiss provider/technician is not possible, the device must not be used by another patient!*

DeVilbiss Healthcare recommends that at least the following procedures be carried out by the manufacturer or a qualified third party between uses by different patients.

NOTE–*If preventive maintenance is due at this time, these procedures should be carried out in addition to the servicing procedures.*

1. Dispose of all accessory components that are not suitable for reuse, i.e., particularly the oxygen tubing, the nasal cannula/mask, oxygen outlet connector and humidifier bottle.
2. **CAUTION–the concentrator must be disconnected from the power supply for this step:** Open the concentrator and remove all dust deposits inside the cabinet with an appropriate vacuum cleaner.
3. Clean and disinfect all parts of the cabinet inside and outside and the power cord with a suitable disinfecting agent, e.g., Microbac Forte or Terralin®.
4. Check the cord, the plug on the back of the device, the power switch, the fuse holder and the indicator light for possible damage.
5. Replace all damaged or worn components.
6. Replace the cabinet air filter on the back of the device.
7. Check the oxygen concentration. If the device is within specifications, the extended life intake bacteria filter does not need to be replaced between patients. If the concentration is not within specifications, the provider should refer to the service manual section on Troubleshooting.

TROUBLESHOOTING

The following troubleshooting chart will help you analyze and correct minor oxygen concentrator malfunctions. If the suggested procedures do not help, switch to your reserve oxygen system and call your DeVilbiss homecare provider. Do not attempt any other maintenance.

WARNING

To avoid electric shock hazard, do not remove the cabinet. The cabinet should only be removed by a qualified DeVilbiss homecare technician.

Minor Troubleshooting Chart

SYMPTOM	POSSIBLE CAUSE	REMEDY
A. Unit does not operate. Power light is off when the power switch is "On." Audible alert is pulsing and Service Required light is flashing.	1. Power cord not properly inserted into wall outlet.	1. Check power cord connection at the wall outlet. On 230 volt units, also check the mains connection on the back of the unit.
	2. No power at wall outlet.	2. Check your home circuit breaker and reset if necessary. Use a different wall outlet if the situation occurs again.
	3. Oxygen concentrator circuit breaker activated.	3. Press the concentrator circuit breaker reset button located below the power switch. Use a different wall outlet if the situation occurs again. If the above remedies do not work, contact your DeVilbiss provider.
B. Unit operates, the Power light is on when the power switch is "On." Red Service Required light is illuminated. Audible alert may be sounding.	1. Air filter is blocked.	1. Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 5.
	2. Exhaust is blocked.	2. Check the exhaust area; make sure there is nothing restricting the unit exhaust.
	3. Blocked or defective cannula, face mask, or oxygen tubing.	3. Detach cannula or face mask. If proper flow is restored, clean or replace if necessary. Disconnect the oxygen tubing at the oxygen outlet. If proper flow is restored, check oxygen tubing for obstructions or kinks. Replace if necessary.
	4. Blocked or defective humidifier bottle.	4. Detach the humidifier from the oxygen outlet. If proper flow is obtained, clean or replace humidifier.
	5. Flow meter set too low.	5. Set flow meter to prescribed flow rate. If the above remedies do not work, contact your DeVilbiss provider.
C. Unit operates, the power light is on when power switch is "on," audible low-frequency vibration sound is detected.		1. Turn your unit "Off." Switch to your reserve oxygen system, and contact your DeVilbiss provider immediately.
D. If any other problems occur with your oxygen concentrator.		1. Turn your unit "Off." Switch to your reserve oxygen system, and contact your DeVilbiss provider immediately.
Minor Troubleshooting Chart - only OSD Concentrators		
A. Both the green Normal Oxygen and the yellow Low Oxygen lights are either on or off.	1. OSD malfunction.	1. Contact your DeVilbiss provider.
B. Yellow Low Oxygen light is on or the yellow Low Oxygen light is on and the intermittent audible signal is sounding.	1. Flow meter is not properly set.	1. Ensure the flow meter is properly set to the prescribed number.
	2. Air filter is blocked.	2. Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 5.
	3. Exhaust is blocked.	3. Check the exhaust area; make sure there is nothing restricting the unit exhaust. If the above remedies do not work, contact your DeVilbiss provider.
C. Red Service Required light is on and an intermittent audible signal is sounding.	1. Flow meter is not properly set.	1. Ensure the flow meter is properly set to the prescribed number.
	2. Air filter is blocked.	2. Check the air filter. If the filter is dirty, wash it following the cleaning instructions on page 5.
	3. Exhaust is blocked.	3. Check the exhaust area; make sure there is nothing restricting the unit exhaust. If the above remedies do not work, contact your DeVilbiss provider.

SPECIFICATIONS

DEVILBISS 4-LITER AND 5-LITER SERIES			
Catalog Number	**515ADS/515ADZ 515DS/515DZ**	**515AKS/515AKZ 515KS/515KZ/515NS**	**515UK 4-Liter**
Delivery Rate (Lower delivery rates available for low flow applications)	1 to 5 LPM	1 to 5 LPM	1 to 4 LPM
Maximum Recommended Flow (@ nominal outlet pressures of zero and 7 kPa)	5 LPM	5 LPM	4 LPM
Outlet Pressure	8.5 psig (58.6 kPa)	8.5 psig (58.6 kPa)	8.5 psig (58.6 kPa)
Electrical Rating	**515A Series** - 115 V, 60 Hz, 4.1 Amp	**515A Series** -220-230 V~, 50 Hz, 1.7 Amp 230 V~, 60 Hz, 2.4 Amp	230 V~, 50 Hz, 1.4 Amp
	515 Series - 115 V, 60 Hz, 4.2 Amp	**515 Series** - 220-230 V~, 50 Hz, 1.7 Amp 230 V~, 60 Hz, 1.9 Amp	
Operating Voltage Range	97-127 V~, 60 Hz	187-255 V~, 50 Hz 218-253 V~, 60 Hz	195-253 V~, 50 Hz
Oxygen Percentage	1-5 LPM=93%±3%	1-5 LPM=93%±3%	1-4 LPM=93%±3%
Operating Altitude			
(tested at 21°C only) 0-1500 M (0-4921 ft)	*Across the voltage range:* No degradation of performance	*Across the voltage range:* No degradation of performance	*Across the voltage range:* No degradation of performance
1500-3000 M (4921-9842 ft)	**515A Series** *Tested at nominal voltage only:* No degradation in performance expected based on tests of similar products.	**515A Series** *Tested at 230V/50Hz only:* No degradation in performance expected based on tests of similar products.	Not recommended/Not tested
	515 Series *Tested at nominal voltage only:* No degradation in performance	**515 Series** *Tested at 230V/50Hz only:* ~4% oxygen performance drop at 5 LPM	
3000-4000 M (9842-13123 ft)	Not recommended/Not tested	Not recommended/Not tested	Not recommended/Not tested
Operating Environment Range*			
10°C to 35°C, humidity range of 30% to 75%	**515A Series** - No degradation in performance up to 40°C across the operating voltage range. (tested at 670 m).	**515A Series** - No degradation in performance up to 40°C across the operating voltage range. (tested at 670 m).	No degradation in performance across the operating voltage range (tested @ sea level).
	515 Series - No degradation in performance across the operating voltage range (tested @ sea level)	**515 Series** - ~4% oxygen performance drop at 5 LPM and 35˚C condition. No degradation in performance across the operating voltage range at other liter flows (tested at 670 M).	
Power Consumption	**515A Series** - 385 Watts Average ***515ADS Only*** - 320 Watts @ 2.5 LPM & below **515 Series** - 400 Watts Average	**515A Series** - 230V / 50 Hz - 330 Watts Average 230V / 50 Hz - 305 Watts Average ***515AKS Only*** *@ 2.5 LPM & below* **515 Series** - 230V / 50 Hz – 365 Watts Average **515A Series** - 230V / 60 Hz - 450 Watts Average 230V / 60 Hz **515AKS Only** - 415 Watts Average @ 2.5 LPM & below **515 Series** – 230V / 60Hz – 435 Watts Average	295 Watts Average
Weight	**515A Series** - 50 lbs. (22.7 Kilograms)	**515A Series** - 50 lbs. (22.7 Kilograms)	53 lbs. (24.5 Kilograms)
	515 Series - 52 lbs. (23.5 Kilograms)	**515 Series** - 53 lbs. (24.5 Kilograms)	
Sound Level (ISO 8359:1996 from front)	**515A Series** - 48 dbA overall average	**515A Series** - 48 dbA (50Hz) overall average	50.5 dbA overall average
	515 Series - 52.5 dbA overall average**	**515 Series** - 50.5 dbA (50Hz) overall average	
Dimensions	27.75"H x 16"W x 14"D (70.5 x 40.6 x 35.6 cm)	27.75"H x 16"W x 14"D (70.5 x 40.6 x 35.6 cm)	27.75"H x 16"W x 14"D (70.5 x 40.6 x 35.6 cm)
Pressure Relief Valve	**515A Series** - 40 psig±5psig (276 kPa±34.5 kPa)	**515A Series** - 40 psig±5psig (276 kPa±34.5 kPa)	44 psig±3psig (303 kPa±2.1 kPa)
	515 Series - 44 psig±3psig (303 kPa±21 kPa)	**515 Series** - 44 psig±3psig (303 kPa±21 kPa)	

DEVILBISS 4-LITER AND 5-LITER SERIES			
Catalog Number	**515ADS/515ADZ 515DS/515DZ**	**515AKS/515AKZ 515KS/515KZ/515NS**	**515UK 4-Liter**
Operating System	Time Cycle / Pressure Swing	Time Cycle / Pressure Swing	Time Cycle / Pressure Swing
For units equipped with an OSD, the visible "low oxygen" indicator will activate at the following level	**515A Series** 84% ± 2% (The audible alarm will alert at approximately 75%. At less than 60%, the red "service required" light will activate.)	**515A Series** 84% ± 2% (The audible alarm will alert at approximately 75%. At less than 60%, the red "service required" light will activate.)	Units with serial numbers less than H20000: 85%± 2% (The audible alarm will alert at approximately 75%). Units with serial numbers of H20000 and greater: 83.5%± 1.5%. (The audible alarm will alert at approximately 75%. At less than 60%, the red "service required" light will activate.)
	515 Series Units with serial numbers less than H20000: 85%± 2% (The audible alarm will alert at approximately 75%). Units with serial numbers of H20000 and greater: 83.5%± 1.5%. (The audible alarm will alert at approximately 75%. At less than 60%, the red "service required" light will activate.)	**515 Series** Units with serial numbers less than H20000: 85%± 2% (The audible alarm will alert at approximately 75%). Units with serial numbers of H20000 and greater: 83.5%± 1.5%. (The audible alarm will alert at approximately 75%. At less than 60%, the red "service required" light will activate.)	
Storage Conditions	-40°C to 70°C, humidity range of 10% to 100%, including condensation	-40°C to 70°C, humidity range of 10% to 100%, including condensation	-40°C to 70°C, humidity range of 10% to 100%, including condensation
Equipment Class and Type	☐ Class II Equipment Double Insulated; Type B Applied Part Ordinary Equipment, IPX0	☐ Class II Equipment Double Insulated; Type B Applied Part Ordinary Equipment, IPX0	☐ Class II Equipment Double Insulated; Type B Applied Part Ordinary Equipment, IPX0
Approval Body and Safety Standard	CSA CAN/CSA-C22.2 No. 601.1-M90	**515A Series** TUV IEC 60601-1 EN 60601+A1+A2 ISO8359:1996 (515AKZ excluded)	TUV IEC 601-1+A1+A2 EN 60601+A1+A2 ISO8359:1996
		515 Series TUV IEC 601-1+A1+A2 EN 60601+A1+A2 ISO8359:1996 (515KZ excluded)	
EMC Compliance To	**515A Series** - IEC 60601-1-2	**515A Series** - IEC 60601-1-2	IEC 601-1-2
	515 Series - IEC 601-1-2	**515 Series** - IEC 601-1-2	

***NOTE:** *The OSD performance at 10°C to 35°C, 95% R.H. through voltage range on the 515ADS/515AKS/515DS verified at 670m.*

****NOTE:** *This corresponds with a sound level of 50 dbA overall average as measured according to the guidelines of the now defunct ANSI Z79.123-1981 standard.*

Specifications subject to change without notice.

DEVILBISS GUIDANCE AND MANUFACTURER'S DECLARATION

WARNING

Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put into service according to the Electromagnetic Compatibility [EMC] information provided in the accompanying documents.

Portable and Mobile RF Communications Equipment can affect Medical Electrical Equipment.

The equipment or system should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it will be used.

NOTE– *The EMC tables and other guidelines provide information to the customer or user that is essential in determining the suitability of the Equipment or System for the Electromagnetic Environment of use, and in managing the Electromagnetic Environment of use to permit the Equipment or System to perform its intended use without disturbing other Equipment and Systems or non-medical electrical equipment.*

Guidance and Manufacturer's Declaration – Electromagnetic Emissions

This device is intended for use in the electromagnetic environment specified below. The customer or the user of this device should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment – Guidance
RF Emissions CISPR 11	Group 1	This device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class B	This device is suitable for use in all establishments including domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class B	
Voltage fluctuations / flicker emissions	Complies	

Guidance and Manufacturer's Declaration – Electromagnetic Immunity

This device is intended for use in the electromagnetic environment specified below. The customer or the user of this device should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Electrostatic discharge (ESD) IEC 61000-4-2	±6kV contact ±8kV air	Complies	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2.5GHz	Complies	Field strengths outside the shielded location from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than 3 V/m. Interference may occur in the vicinity of equipment marked with the following symbol: 
Conducted RF IEC 61000-4-6	3 Vrms 150kHz to 80MHz	Complies	
Electrical fast transient IEC 61000-4-4	±2kV power line ±1kV I/O lines	Complies	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1kV differential ±2kV common	Complies	
Power frequency magnetic field IEC 61000-4-8	3 A/m	Complies	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Voltage dips, short interrupts and voltage variations on power supply input lines IEC 61000-4-11	>95% dip 0.5 cycle 60% dip 5 cycles 70% dip 25 cycles 95% dip 5 secs.	Complies	Mains power quality should be that of a typical commercial or hospital environment. If the user of this device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or battery.