

Nuvair[®]

Low Pressure Compressors

Nuvair has been manufacturing low pressure breathing air systems for the working diver for over 30 years. We offer standard and custom configurations for a wide variety of stationary and portable installations. Do you need a customized compressor to meet your specific needs? Let us guide you through the many configurations that the compressor packages can be purchased in. Our staff understands that need, budget and comfort level lead to the choices one makes on the type, brand and model of compressor you will be using. Nuvair offers custom and stock configurations of "tried and true" compressor brands combined with electric, gas or diesel motors of the same caliber.

Our commercial diving low pressure compressors are broken down into three categories, Light Duty, Medium Duty, and Heavy Duty. This catalog is designed to guide you through the different compressor packages and options available to you. We realize that not all options are pictured and described which is why we encourage you to call us and help us create the perfect compressor package for you.

All Nuvair compressor packages are manufactured in-house and tested before leaving Nuvair. From start to finish our technicians are making sure your package is inspected, tested and delivered on time

Standard Features and Options:

- ABAC, Champion, Quincy, Rotair, CompAir
- Electric, Gas, or Diesel motors by Baldor, Weg, Honda, Deutz, Kohler, Kubota or Yanmar
- Aluminum, Steel or Stainless Steel frames with vibration mounts, drip pans, and belt guards that encapsulate the compressor package.
- Base, tank mount and on site installation options as well.
- Lifting eyes, forklift slots, raised feet, wheels, and handles are options provided for ease of transportation.
- Hankison or Norgren breathing air filtration can be provided
- Air coolers and volume tanks
- Analyzers for moisture, CO, CO₂, and O₂
- Head Un-loaders or Load Genie
- Diver Manifolds and Regulators
- Audible and Visual Alarms combined with Mechanical and Digital read outs both panel and component based
- Auto shutdowns and air bleed valves

Many custom options available. Please call us to customize your equipment!

- Custom Frame
- Configuration Options
- CO₂ Moisture, CO and/or O₂ Analyzers
- Automatic Shutdown or Audible and Visual High Temperature Alarm



www.nuvair.com



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About Us

Nuvair has been manufacturing low and high pressure breathing air systems for the working diver for over 30 years. We offer standard and custom configurations for a wide variety of stationary and portable installations. Nuvair can create customized compressors to meet your specific needs and guide you through the many configurations of compressor packages that can be purchased. Our staff understands needs, budget and comfort level lead to the choices one makes on the type, brand and model of compressor you will be using. Nuvair offers custom configurations of tried and true compressor brands combined with electric, gas or diesel motors of the same caliber.

All Nuvair compressor packages are manufactured in-house and tested before leaving Nuvair. From start to finish our technicians are making sure your compressor package is inspected, tested and delivered on time.

The Company's CEO and founder, Glenn Huebner, is the innovative force behind many of the Company's Nitrox Systems. He has a Bachelor's of Science Degree in Finance from California State University, Northridge and over 25 years experience in commercial and sport diving and the use of gas producing systems.

The Company's Production Manager, Danny Graham, assists in the technical design of the Company's products and is responsible for coordinating the manufacturing process. He is a certified compressor repair technician and has over 15 years experience in the commercial and sport diving industry.

Nuvair Specialties Include

Nitrox Membranes

Nuvair has pioneered the use of semi-permeable membrane technology and its use with compressors to produce nitrox. Using Nuvair's patented membrane system nitrox can be produced for low pressure or high pressure delivery from 21% to 40% oxygen. Nuvair manufacturer's turnkey systems that provide nitrox in a standalone package or nitrox generators that can be placed in line with your existing compressor system.

Low Pressure and High Pressure Turn Key Nitrox Compressor Systems

Nuvair combines their innovative membrane nitrox technology with low pressure and high pressure compressor packages to offer complete turnkey systems for continuous duty use. Low pressure systems that can be taken on site for commercial diving use and high pressure nitrox generating compressor packages enclosed for cool and quiet operation. Often referred to as "Nitrox in a box"

Low Pressure Compressors

Nuvair manufactures their own line of low pressure compressors onsite. Years of experience in the commercial diving industry as divers has given Glenn and Danny the upper hand in manufacturing low pressure compressors for commercial diving. Nuvair uses only the finest components in producing compressors and always tries to meet and exceed industry standards. Nuvair compressor packages may look like the rest, however it is the finer details and choice of components that make Nuvair compressors stand out from the rest.

Custom Built Compressors

Nuvair is a manufacturer with a "Can Do" attitude. We realize your needs may differ than our standard packages and we often tweak or design packages to meet the customer's specific needs. With all manufacturing done in-house we can make subtle or extensive design changes for a custom package that is exactly what the customer wants. We encourage the customer to call us and help us create the perfect compressor package for their needs.

Custom Low Pressure Compressor Choices

The first choice will be the size or output of the compressor. What CFM or LPM air output will be required to supply the diver(s) that will use the compressor?

The minimum pressure requirement can be calculated as maximum depth pressure plus 100 psi. CFM calculations normally are done for a demand helmet at $(3 \times \# \text{ divers}) \times (\text{depth} + 33)/33 = \text{CFM}$ and for a free flow helmet $(4.5 \times \# \text{ divers}) \times (\text{depth} + 33)/33 = \text{CFM}$ (1 CFM = 28.3 LPM).

The second choice is the type of compressor used to pump the air. The choices are reciprocating (piston) or rotary screw. Traditionally the reciprocating has been used due to lower oil "mist" carry over. The newer Rotary Screw compressors also have very low oil carry over and require little maintenance. In the reciprocating category for small sizes there is a choice of oil lubricated or oil-less. For shallow work the light oil-less can offer some advantages. For the deeper water the oil lubricated is going to be more reliable at higher pressure ratings and require less maintenance. Another recommendation for deeper water is a two stage pressure lubricated compressor with even higher pressure output.

The third choice will be the type of motor that is used to turn the compressor. The choices from Nuvair are gas, diesel, electric or hydraulic. Electric is available in any voltage or Hz required. For multinational companies 50/60Hz compressors are available. We also offer diesel/electric combo packages where the compressor can be run by electric when available or diesel when electric is not available.

The fourth choice is the type of frame that is used. Each frame type has advantages and disadvantages. Choose the frame that will be best for the type of job, portability and place it will be used.

An additional thought is Air or Nitrox? Nuvair has a complete line of LP Nitrox compressors systems listed in the second half of this catalog.

Examples of compressor blocks and output.



Quincy 325
19 CFM



Quincy 370
49 CFM



Quincy 5120
95 CFM



Champion R15
23 CFM



Champion R30
49 CFM



Rotair RVK
28 - 80 CFM

Custom Low Pressure Compressor Choices

Compressor Block Choices (Select One)

Quincy Reciprocating, Pressure Lubricated	ABAC Splash Lubricated
Champion or Gardner Denver Splash Lubricated	Champion or Gardner Denver Pressure Lubricated
Rotair Rotary Screw	CompAir Rotary Screw

Engine/Motor Choices (Select One)

Yanmar Diesel (Manual Start)	Yanmar Diesel (Electric Start)
Kohler Diesel (Manual Start)	Kohler Diesel (Electric Start)
Kubota Diesel (Electric Start)	Kubota (Air Start)
Deutz Diesel (Electric Start)	Deutz Diesel (Air Start)
Honda Gas Engine (Pull Start)	Honda Gas Engine (Electric Start)
Electric Motor (List Voltage, Hz, and Phase)	Hydraulic Drive (Special Order)

Frame Style Choices (Select Options You Want)

Bare Block	Block Mounted on Base/Compressor Plate
Steel Compressor Plate	Stainless Steel Compressor Plate
Base Mounted	Tank Mounted
Volume Tank Mounted in Frame with Compressor	No Volume Tank with Compressor Frame
Aluminum Frame	Steel Frame
Lifting Eyes	No Lifting Eyes
Forklift Slots/Metal Feet	Wheels or Wheels on the Bottom
Side Lifting Handles	No Handles
Bottom Drip (Oil) Pan	No Pan Open Bottom
Top Cover	Open Easy Access Top

Air Cooling, Filtration and Delivery (Select Options You Want)

Air After-Cooler (Cools Air For Better Filtration)	Air Filtration (Supplies Grade "D" Air After Filtration)
Diver Manifold (Choose the Amount of Valve Outlets)	Pressure Above 200 PSI
CO Analyzer	Automatic High Temperature Shut Down
Moisture Analyzer	Oxygen Analyzer
CO ₂ Analyzer	
Hour Meter	Tach Hour Meter
Separate Volume Tank (List Size)	Separate Volume Tank Mounted In Frame (List Size)
Canvas Cover	

Not all options are available for every compressor combination, please call for compatibility.

Light Duty Compressors

Our light duty commercial compressors are ideal for shallow work areas in depths of 20ft. or less. Lightweight, low cost and portability are the main reasons for choosing a light duty compressor. You can choose between oil free or oil lubricated compressor. The oil free designs are light and easy to move around and do not require some of the options necessary with oil lubricated compressors to meet OSHA Regulations. Diver air filtration does not come standard with our light duty compressors and is an important option to discuss and make sure you have on any breathing air compressor system.

One final consideration when purchasing a light duty compressor would be your planned use. If you plan to use the compressor for continuous duty work or have multiple divers in the water it will be important to get a compressor that meets the demands of the CFM and pressure you will need. As always give us a call and we will guide you through the decision process and be sure your purchase meets your requirements.

ABAC
12 CFM Electric



GAS
15 CFM Gas



pictured with breathing Air Filtration option

ABAC Gas & Electric Specifications

	Model# ABAC-E	Model# 15CFM (gas)
Air Delivery	12CFM @ 90 PSI (350 L/min @ 6 Bar)	15 CFM @ 90 PSI (424 L/min @ 6 Bar)
Engine	Solga 5 HP Electric Motor	Honda 8.5 HP Gas Engine
Max Pressure	90 PSI (6 Bar)	90 PSI (6 Bar)
Lubrication	Splash	Splash
Air Tank Capacity	20 Gallon Tank (75.7 liters)	(2) 4 Gallon Tanks (30.3 liters)
Air Quality	Grade "D" with Filtration	Grade "D" with Filtration
Unit Dimensions (H x L x D)	38" x 48" x 29" (96 x 122 x 74 cm)	29" x 42" x 18" (74 x 107 x 46 cm)
Weight	230 lb. (104 kg)	224 lb. (102 kg)

Champion R15 with 11 HP Gas Specifications



	Model# HGR5-3H (gas)
Air Delivery	19 CFM @ 175 PSI (538 L/min @ 12 Bar)
Engine	Honda 11 HP Gas
Max Pressure	175 PSI (12 Bar)
Lubrication	Splash Lubricated
Air Tank Capacity	30 Gallon Tank (114 liters)
Air Quality	Grade "D" with Filtration
Unit Dimensions (H x L x D)	46" x 38" x 28" (117 x 96 x 71 cm)
Weight	459 lb. (208 kg)

Medium Duty Compressors

Medium duty compressors range from 18 CFM to 50 CFM and come in standardized and customized configurations. You can choose from a wide range of compressors and motors to meet your specific needs. Portability and CFM air requirements are two factors to consider in choosing the right medium duty compressor for your job. We have built a few versatile packages based on our experience and are happy to customize these or start from the ground up for your job requirements.

Your choice will depend on where you will use it and what equipment it will be used with. Our medium duty range is available in gas, diesel, hydraulic or electric drive. In electric the motors are available for any voltage or Hz that you may require. Three phase models are available in 50 or 60Hz or both 50/60Hz. Our frames include a belt guard and are made with 6061 aluminum, steel, or if preferred stainless steel. The compressor plates are made with aluminum, steel or stainless steel. A drip pan is included on most models and optional for those without. Smaller packages are set up to have handles, wheels and a lifting eye. While larger packages tend to be constructed of aluminum frame material with four lifting eyes and forklift slots for transporting. Volume tanks and diver air filtration options should also be considered when customizing your compressor package.

These frame styles can be configured to have room for a volume tank and proper filtration for the diver. Additionally we can enclose the volume tank in a separate frame depending on your space and transportation needs. Notice: The volume tank is always on the opposite side of the engine exhaust.



R15 Kohler Diesel with Volume Tank
23 CFM



R15 Honda Gas with Volume Tank
20 CFM

Pictured above are two of our turn-key LP diver packages. Champion R15 continuous duty compressor pump combined with a diesel or gas engine, 30 gallon (114 Liter) volume tank and "Grade D" breathing air filtration all inset within the frame. Standard features include: 6061 aluminum frame with lifting eyes and forklift slot, Steel Compressor plate and aluminum belt guard.

Options available: bottom drip pan, stainless steel or powder coated frame and CO analyzer. The frame package can be purchased with almost any combination of diesel, gas or electric drive and any compressor that is desired.



A volume tank and filtration are necessary to deliver breathing air with most low pressure compressors. Nuvair's stand alone volume tanks have been built in accordance with the ASME, ABS, USCG, UN, SAE-J10 and others. Nuvair carries a variety of sizes from 15-400 gallons (55-1500 Liters). Volume tanks are available in a vertical or horizontal models, with or without frames.



Quincy 325 with Diesel or Electric motor

Industry leader Quincy 325 Low Pressure Compressor, loadless start with head unloaders. The Yanmar 10 HP Air Cooled diesel engine features key electric start or Pull Start, Tach/Hour meter, and battery with battery box.

This package has a 1 gallon surge tank, over pressure valve, drain valve, large air after cooler, check valve, gate valves and plumbing. The frame is made with 6061 aluminum and has an enclosed bottom, lifting eyes, handles, and wheels that make it easy to wheel on and off the job. All equipment is inset; compressor and diesel are mounted on an aluminum plate and have independent vibration absorption mounts.



Quincy 325 Diesel



Quincy 325 Electric

Quincy 325 with 10 HP Yanmar or 5 HP Weg Electric Specifications

	Model# Q-325DY	Model# Q-325E
Air Delivery	19CFM @ 175 PSI (528 L/min @ 12 Bar)	17.4 CFM @ 175 PSI (492 L/min @ 12 Bar)
Engine	Yanmar 10 HP Diesel	Weg 7.5 HP electric motor
Max Pressure	175 PSI (12 Bar)	175 PSI (12 Bar)
Lubrication	Pressure	Pressure
Air Quality	Grade "D" with Filtration	Grade "D" with Filtration
Unit Dimensions (H x L x D)	38" x 48" x 29" (96 x 122 x 74 cm)	38" x 48" x 29" (96 x 122 x 74 cm)
Weight	545 lbs. (247 kg)	411 lbs. (186 kg)

Compressor Features:

- Tach/Hour Meter
- Aluminum Frame: Enclosed Bottom Lifting Eyes / Forklift Slots or Handles and Wheels
- Aluminum Belt Guard
- Over Pressure Valve
- Air Cooler for improved filter life

Options:

- Electric Motor
- Stainless Steel Package
- Steel Frame
- Powder Coat Frame
- 30 Gallon Volume tank or larger
- Grade "D" Breathing Air Filtration
- CO & CO₂ Analyzer with Alarm
- Audible and Visual High Temperature Alarms

Always use a volume tank with filtration before the air is delivered to the divers.

Champion R15 with diesel, gas or electric motor

Electric start Yanmar diesel, Honda gas or Weg electric motor with Champion R15 pump.

This package has a 1 gallon surge tank, over pressure valve, drain valve, large air after cooler, check valve, gate valves and plumbing. The frame is made with 6061 aluminum and has an enclosed bottom, lifting eyes, handles, and wheels that make it easy to wheel on and off the job. All equipment is inset; compressor and diesel are mounted on an aluminum plate and have independent vibration absorption mounts.



Champion R15 Diesel



Champion R15 Electric

Pictured in custom open frames

Champion R15 with 10 HP Yanmar Diesel or 7.5 HP Electric or 11 HP Honda Gas

	Model# LP-R15DY	Model# LP-R15E	Model# LP-R15G
Air Delivery	20CFM @ 175 PSI (528 L/min @ 12 Bar)	23.1 CFM @ 175 PSI (654L/min @ 12 Bar)	20CFM @ 175 PSI (528 L/min @ 12 Bar)
Engine	Yanmar 10 HP Diesel	7.5 HP Electric Motor	Honda 11 HP Gas
Max Pressure	175 PSI (12 Bar)	175 PSI (12 Bar)	175 PSI (12 Bar)
Lubrication	Splash Lubricated	Splash Lubricated	Splash Lubricated
Air Quality	Grade "D" with Filtration	Grade "D" with Filtration	Grade "D" with Filtration
Unit Dimensions (H x L x D)	38" x 48" x 29" (96 x 122 x 74 cm)	38" x 48" x 29" (96 x 122 x 74 cm)	38" x 48" x 29" (96 x 122 x 74 cm)
Weight	411 lbs. (186 kg)	370 lbs. (167 kg)	370 lbs. (167 kg)

Compressor Features:

- Tach/Hour Meter
- Aluminum Frame: Enclosed Bottom Lifting Eyes / Forklift Slots or Handles and Wheels
- Aluminum Belt Guard
- Over Pressure Valve
- Air Cooler for improved filter life

Options:

- Electric Motor
- Stainless Steel Package
- Steel Frame
- Powder Coat Frame
- 30 Gallon Volume tank or larger
- Grade "D" Breathing Air Filtration
- CO & CO₂ Analyzer with Alarm
- Audible and Visual High Temperature Alarms

Always use a volume tank with filtration before the air is delivered to the divers.

Champion R30 Electric Mounted on 120 Gallon tank

Champion R30 continuous duty pump with electric motor mounted on a 120 gallon tank or in a frame. Our framed models offer a variety of designs to meet your needs. The basic package is a pump and electric motor on ASME rated 120 Gallon Tank.



Champion R30 Electric Specifications

Model# LP-R30e (10 or 15 HP)	
Air Delivery	35 or 49 CFM @ 175 PSI (991 or 1387 L/min @ 12 Bar)
Motor	10 or 15 HP 3 phase electric motor
Max Pressure	175 PSI (12 Bar)
Lubrication	Splash Lubricated
Air Quality	Grade "D" Breathing Air
Unit Dimensions (H x L x D)	56"x73"x24"(142x185x61cm)
Weight	890 lbs. (404 kg)

Compressor Features:

- Reliable Electric Motor
- High Quality Two Stage Splash Lubricated Pump
- Centrifugal Unloader - Loadless Starts
- Simple to Operate, Reliable and Versatile
- Grade "D" Breathing Air Filtration
- Motor Starter

Options:

- Custom Frame with Volume Tank Separate
- Honda Gas or Diesel Engine
- Low Pressure Regulator for Down Stream Pressure
- Air After Cooler
- CO and/or CO₂ Analyzers
- Audible and Visual High Temperature Alarm
- Low Oil Shut Down
- High Temp Shut down
- Tach/Hour Meter
- Refrigerated Air Dryer

Quincy 370 with 28 HP Kohler Diesel Engine

Industry leader Quincy 370 Low Pressure Compressor, loadless start with head unloaders. The Kohler 28.5 HP diesel engine features electric start, Tach/Hour meter, battery with battery box, 10 gallon fuel tank with sight gauge and filter.

This package has a 3 gallon surge tank and manifold, over pressure valve, drain valve, large air after cooler, check valve, gate valves and plumbing. The frame is made with 6061 aluminum, lifting eyes, forklift slots and enclosed bottom, steel powder coated compressor plate. All equipment is inset; compressor and diesel have independent vibration absorption mounts and are mounted on a steel plate.



Quincy 370 Diesel Specifications

Model# Q-370D	
Air Delivery	49 CFM @ 175 PSI (1387 L/min @ 12 Bar)
Engine	Kohler 28.5 HP Diesel
Max Pressure	175 PSI (12 Bar)
Lubrication	Pressure
Air Quality	Grade "D" with Filtration
Unit Dimensions (H x L x D)	44" x 60" x 35" (112 x 153 x 89 cm)
Weight	1030 lbs. (467 kg)

Compressor Features:

- Tach/Hour Meter
- Aluminum Frame:
Enclosed Bottom
Lifting Eyes / Forklift Slots or
Handles and Wheels
- Aluminum Belt Guard
- Over Pressure Valve
- 10 Gallon Fuel Tank

Options:

- Electric Motor
- Stainless Steel Package
- Steel Frame
- Powder Coat Frame
- 120 Gallon Volume tank
- Grade "D" Breathing Air Filtration
- CO & CO₂ Analyzer with Alarm
- Audible and Visual High Temperature Alarms

Always use a volume tank with filtration before the air is delivered to the divers.

Heavy Duty High CFM compressors

Heavy duty compressor packages range from 50cfm and up. Our standard packages are built around the industry leading Quincy 5120 air compressor. The compressor can be driven by a diesel engine or electric motor in any three phase voltage required. Base, tanks and frames for all of our Q 5120 line are made of steel and powder coated to protect the surface. Configurations available are base mounted, tank mounted and enclosed frame model. Standard and custom options available for each of the packages include: forklift slots, four point lifting eyes, belt guard, drip pan, single or double volume tanks, larger capacity fuel tank, top cover plate, and galvanized coating.

Nuvair has Rotary compressor options for above 100 CFM, shoot us an email or call us for 100 CFM plus compressors.

The Quincy 5120 base mounted electric compressor includes Q5120 block, electric motor, NEMA 4x enclosure for starter and belt guard mounted on a steel plate. Add a 120 gallon tank in a frame and our breathing air filtration pack to make the package dive ready.



Quincy 5120 Base Mounted Electric Specifications

Model# QR5120SB00191	
Air Delivery	87 CFM @ 175 PSI (2463 L/min @ 12 Bar)
Motor	25 HP (18.6 kW)
Max Pressure	200 PSI (13.8 bar)
Lubrication	Pressure
Air Quality	Grade "D" with Breathing Air Filtration
Unit Dimensions (H x L x D)	42" x 72" x 37" (107 x 183 x 94 cm)
Weight	1450 lbs. (658 kg)

Compressor Features:

- High Quality Reliable Electric Motor
- NEMA 4x Enclosure and starter
- LVD Control
- Belt Guard
- Simple to Operate, Reliable and Versatile
- 25 HP (18.6 Kw) motor

Options:

- Standard Starter
- Low Pressure Regulator for Down Stream Pressure
- CO & CO₂ Analyzer with Alarm
- Grade "D" Breathing Air Filtration
- Audible and Visual High Temperature Alarms
- ASME Rated 120 Gallon Volume Tank
- TEFC motor
- 50Hz motor

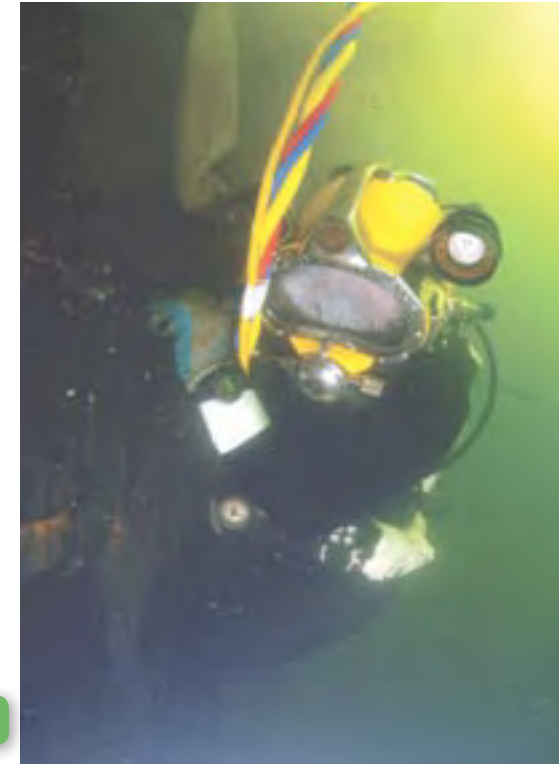
Always use a volume tank with filtration before the air is delivered to the divers.

Quincy 5120 Electric Mounted on 120 Gallon Tank

Breathing air and /or Industrial air the Quincy 5120 electric drive tank mount is a versatile compressor package with 87 CFM @ 175 PSI. Years of proven dependability as an industry work horse this is the standard in many dive companies and industrial uses word wide. The basic dive package includes a 5120 compressor block with head unloaders, a TEFC 25HP Motor and Belt Guard, NEMA 4 Starter Box, mounted on a ASME rated 120 gallon tank with Fork Lift Slots, 3 stage breathing air filtration and diver manifold .



pictured with options



Quincy 5120 Electric Tank Mount Specifications

Model# Q-5120-E-120	
Air Delivery	87 CFM @ 175 PSI (2463 L/min @ 12 Bar)
Motor	25 HP (18.6 kW)
Max Pressure	200 PSI (13.8 Bar)
Number of Stages	2
Lubrication	Pressure
Air Tank	120 Gallon (452 liters)
Air Quality	Grade "D" with Breathing Air Filtration
Unit Dimensions (H x L x D)	73" x 34" x 72" (185 x 183 x 86 cm)
Weight	2140 lbs. (971 kg)

Compressor Features:

- High Quality Reliable Electric Motor
- Low Oil Carry Over Compression Rings
- LVD Control
- Air Cooler & ASME Rated 120 Gallon Volume Tank
- Simple to Operate, Reliable and Versatile

Options:

- NEMA 4 Starter
- Low Pressure Regulator for Down Stream Pressure
- CO & CO₂ Analyzer with Alarm
- Grade "D" Breathing Air Filtration
- Audible and Visual High Temperature Alarms
- Diver Manifold
- TEFC motor
- 50Hz motor

Quincy 5120 Framed In Diesel or Electric

Our standard package is built around the industry leading Quincy 5120 air compressor. Power options included can be either diesel (Deutz or Kubota) or electric in any three phase voltage required.

Our entire heavy duty compressor package line is made of steel with a powder coated surface. Standard build includes: (2) 60 gallon tanks, forklift slots, four point lifting eyes, belt guard, drip pan, Grade "D" breathing air filtration, and 4 diver manifold. Options available: size of volume tank, size of fuel tank, top cover plate, canvas cover and galvanized dipped.



Q-5120 Kubota



Q-5120 Deutz



Q-5120-E

Quincy 5120 Deutz Diesel Specifications

Model# Q-5120-D	
Air Delivery	95 CFM @ 175 PSI (2690 L/min @12 Bar)
Engine	Diesel
Engine Power	46.2 HP @ 2800 RPM
Max Pressure	200 PSI (13.8 bar)
RPM	1040
Number of Stages	2
Lubrication	Pressure
Air Quality	Grade "D" Breathing Air
Unit Dimensions (H x L x D)	53" x 96" x 55" 135 x 244 x 140 cm
Weight	2900-3100 lbs. (1406 kg)

Compressor Features:

- Air Cooled Deutz F3L2011 Diesel Engine
- Hayes PTO and Bearing Block
- Full Instrument Panel
- 15 Gallon Fuel Tank
- Air Cooler & 2 ASME Rated 60 Gallon Volume Tanks
- Hankison Filtration to .003 PM Oil Vapor
- Surface Supply, Hookah Membrane Supply
- 4 Diver Manifold
- Simple to Operate, Reliable and Versatile
- Heavy Duty Powder Coated Offshore Frame with Vibration Isolated Inner Frame
- Primary Fuel Filter

Options:

- Kubota D1803-M Diesel
- 25 HP TEFC Electric Motor
- Low Pressure Regulator for Down Stream Pressure
- CO & CO₂ Analyzer with Alarm
- Audible and Visual High Temperature Alarms
- cover

Nitrox Membrane System

The benefits of utilizing Nitrox in diving such as increased bottom time and enhanced safety have become widely known throughout the diving industry. Producing Nitrox using a membrane is a safe, economical alternative to oxygen blending. Nuvair has pioneered and advanced the production of Nitrox for commercial diving applications. Nuvair's Nitrox systems are built to meet OSHA, IMCA, and ADC diving standards.

The Nuvair Nitrox System uses semi permeable membranes to produce O₂ rich air (Nitrox). A constant flow of Nitrox from 22% to 40% O₂ can then be delivered immediately to divers via a low-pressure compressor. As your diving depths change you can increase or decrease the percentage of Nitrox delivered and not be committed to one percentage from a blended mix storage system. You will be amazed to discover the cost savings, increased productivity, and safety that can be afforded to you using a Nuvair commercial Nitrox diving system.

Incorporating a membrane system with your compressor ensures an endless supply of Nitrox customized to your specific diving profile. Whether you are supplying air to one or twenty divers, Nuvair can design a system to meet your specific needs.

- Latest Membrane Technology: Now up to 20% more efficient than other membrane systems
- Produce 10-50 CFM at 200 PSI
- Compressors can be used independently to provide low pressure air or together, to provide Nitrox
- Nitrox Generator packages can be placed in-line with your existing LP diver compressor set up

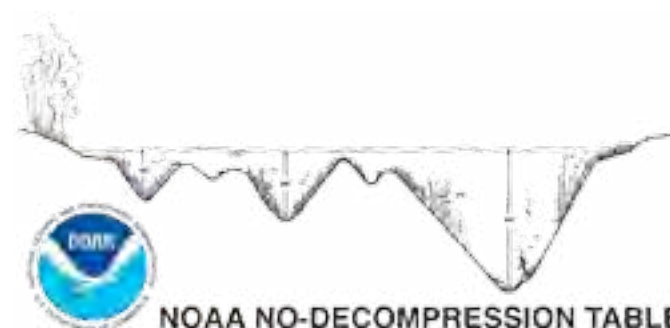
Nitrox is simply a mixture of nitrogen and oxygen that contains more oxygen, and less nitrogen, than standard air. By reducing the amount of nitrogen in the gas mixture, we can reduce the amount of nitrogen absorbed, shrinking the diver's decompression obligation for the time spent at any given depth.

Using nitrox gives the diving company a competitive edge that is easy to obtain and becomes particularly important when working in areas where there are short weather windows or at altitude. In areas where there are extreme tidal flows, nitrox can also be a real time saver, allowing the divers to make the most out of the slack tide periods.

The most significant benefits of using nitrox occur in the 60-80 FSW depth range. For example, using a mix containing 36% oxygen with a PO₂ of 1.13 at 40 feet provides a 405 minutes of dive time with no required water stops, compared to a 163 minutes allowable bottom time on air. That's more than two times the normal no-decompression limit!

In a nut shell: Nitrox will bring a significant savings to your project in money and time by increasing the bottom time a diver can stay over air in shallow water.

NOAA DECO TABLES				
Depth-	40'	60'	80'	100'
Air	163 min	60 min	39 min	25 min
Nitrox 32%	405 min	100 min	50 min	30 min
Nitrox 36%	405 min	100 min	60 min	40 min



Complete State-of-the-Art LP > LP Nitrox Generating System

Nuvair LP>LP gas, diesel or electric powered Nitrox systems are built to deliver surface supply air or Nitrox at up to 40% O₂ directly to the diver. The proceeding pages show our turn-key packages. In electric they are available for any voltage or Hz that you may require. Our frames are constructed of 6061 aluminum, steel, or if need be stainless steel. The compressor plates are usually made with stainless steel or steel. A drip pan, belt guard, lifting eyes and forklift slots for transporting are included on all models. Volume tanks size and diver air filtration options can be customized for your needs.

Nitrox RVK > R15



Nitrox Membrane System:

- Pro O₂ Analyzer
- Pro O₂ Analyzer with In-line Sensor
- Membrane rated up to 20 CFM @ 36% O₂
- Auto Thermostatic Control Heater
- BP Air Flow Regulator & O₂% Control
- Air Intake Filter & Static Mixing Tube
- Synthetic Food-Grade Compressor Lubricant for Nitrox breathing air applications
- Mix Accurate to Within 1/10th%

Compressor Features:

- Rigid 2" Sq. Aluminum Frame & Belt Guard
- Stainless Steel 1/4" Compressor Mounting Plate
- Vibration Mounts below Compressor Plate & Frame
- Rotary Screw compressor with Modulation Device
- Hour Meter/Tachometer
- Low Oil Shut Down
- High Temperature Shut Down
- Produces Nitrox 40% at 16 CFM 175 PSI
- Produces Nitrox 36% at 16 CFM 175 PSI
- Produce LP Air at 66 CFM 175 PSI
- Hankison LP Air Filtration
- Diver LP Air Filtration
- LP Dual Control Head Un-loaders
- Two Air After coolers
- Electric Start
- 12 Volt Battery with Box
- 18 Amp Charging System

Nitrox RVK > R15 Specifications

Model# 7069D-RVK-R15	
Engine	Kohler Diesel
Engine Power	28.5 HP
Max Op. Pressure	175 PSI (12 Bar)
Rotair RVK 8-20	50 CFM @ 175 PSI (1415 L/min @ 12 Bar)
Champion R15	16 CFM @ 175 PSI (453 L/min @ 12 Bar)
Air Tank	(2) Steel 30 Gallon
Fuel Tank	15 Gallon (57 Liters)
Lubrication	Pressure
Air Quality	Grade "D"
Unit Dimensions (H x L x D)	76" x 35" x 62" 193 x 89 x 158 cm
Weight	1400 lbs. (635 kg)

Options:

- 60 Gallon Volume Tank
- Low/High O₂% Shutdown and Alarm
- CO Analyzer with Alarm
- CO₂ Analyzer with Alarm
- TEFC Electric Motor
- 20 CFM @ 175 PSI for Nitrox up to 36%

Nitrox RVK >

Our RVK > Q325 Nitrox package is built for the demands a multi diver environment. Can be powered by either a diesel engine or three phase TEFC electric motor in either 50 or 60 Hz. These compressor packages are made of 6061 Aluminum with Stainless Steel mounting plate and independent vibration mounts. Standard frame includes: forklift slots, four point lifting eyes, belt guard, and drip pan.



Nitrox Membrane System:

- Pro O₂ Analyzer
- Pro O₂ Analyzer with In-line Sensor
- Membrane rated up to 20 CFM @ 36% O₂
- Auto Thermostatic Control Heater
- BP Air Flow Regulator & O₂% Control
- Air Intake Filter & Static Mixing Tube
- Synthetic Food-Grade Compressor Lubricant for Nitrox breathing air applications
- Mix Accurate to Within 1/10th%

Compressor Features:

- Rigid 2" Sq. Aluminum Frame & Belt Guard
- Stainless Steel 1/4" Compressor Mounting Plate
- Vibration Mounts below Compressor Plate & Frame
- Rotary Screw compressor with Modulation Device
- Hour Meter/Tachometer
- Low Oil Shut Down
- High Temperature Shut Down
- Produces Nitrox 40% at 16 CFM 175 PSI
- Produces Nitrox 36% at 16 CFM 175 PSI
- Produce LP Air at 66 CFM 175 PSI
- Hankison LP Air Filtration
- Diver LP Air Filtration
- LP Dual Control Head Un-loaders
- Two Air After coolers
- Electric Start
- 12 Volt Battery with Box
- 18 Amp Charging System

Nitrox RVK > Q325 Specifications

Model# 7069D-RVK-325	
Engine	Kohler Diesel
Engine Power	28.5 HP
Max Op. Pressure	175 PSI (12 Bar)
Rotair RVK 8-20	50 CFM @ 175 PSI (1415 L/min @ 12 Bar)
Quincy Q325	16 CFM @ 175 PSI (453 L/min @ 12 Bar)
Air Tank	(2) Steel 30 Gallon
Fuel Tank	15 Gallon (57 Liters)
Lubrication	Pressure
Air Quality	Grade "D"
Unit Dimensions (H x L x D)	76" x 35" x 62" 193 x 89 x 158 cm
Weight	1400 lbs. (635 kg)

Options:

- 60 Gallon Volume Tank
- Low/High O₂% Shutdown and Alarm
- CO Analyzer with Alarm
- CO₂ Analyzer with Alarm
- TEFC Electric Motor
- 20 CFM @ 175 PSI for Nitrox up to 36%

Nitrox LP 500 Diesel



Nitrox LP 500 Diesel Specifications

Model# 7056.5	
Engine	Kohler Diesel
Engine Power	28.5 HP
Max Op. Pressure	175 PSI (12 Bar)
Rotair RVK 8-20	60 CFM @ 175 PSI (1700 L/min @ 12 Bar)
Fuel Tank	15 Gallon (57 Liters)
Lubrication	Pressure
Air Quality	Grade "D"
Unit Dimensions (H x L x D)	46" x 54" x 36" 117 x 137 x 91 cm
Weight	796 lbs. (362 kg)

Compressor Features:

- Rigid 2" Sq. Aluminum Frame & Belt Guard
- Low Pressure Rotary Screw Compressor
- Kohler Diesel 28.5 HP, Air Cooled, 2 cyl, 3000rpm
- On/Off Flow Valve
- Back Pressure Regulator with Modulation Control
- LP Filtration, Grade D Breathing Air
- Oil/Air Heater Thermostat Control including:
Pressure Switch
Heat Exchanger
- Semi-Permeable Membrane – Compatible with HP Compressors rated up to 20 CFM (566 L/min)
- Mixing Tube & Air Intake Filter
- Nuvair Pro O₂ Remote™ Panel Mount inline O₂ Analyzer
- Compressor Intake Hose for Nitrox Compressor
- Nuvair Pro O₂™ Fill Oxygen Analyzer including:
High Pressure>Low Pressure Regulator
Flow Restrictor, 1 - 5 L/min

Options:

- Seawater Heat Exchangers for cooling
- Water Cooled Exhaust
- Powder Coat Frame
- 110/220 Volt Refrigerated Air Dryer
- Large Remote Fuel Tank
- Nitrogen Discharge Hose

Accessories

Our relationship does not end with the delivery of your compressor. Need supplies or additions to your compressor packages? Nuvair stocks consumables for all compressors and filtration systems we sell.

Air Purification- We offer three stage breathing air filtration packages and can supply components and consumables. We stock replacement elements for breathing air filtration by Hankison and Norgren.

Lubricants- Our premium quality synthetic food grade breathing air compressor oil is made to meet FDA guidelines for food grade additives. Unlike most mineral and synthetic lubricants on the market, Nuvair oil will not produce harmful by-products when used in elevated O₂ environments. Nuvair oil is available in quart, gallon, and five gallon containers or larger quantities by custom order. We offer two types of low pressure compressor oils Nuvair 455 for reciprocating and Nuvair 546 for rotary screw compressors both food grade synthetics.

Regulators, Valves and Panels- Nuvair can supply simple to complex diver manifolds to meet your needs. Using quality components we can work with you to design a manifold panel or valve outlet for your Air/Nitrox compressor packages or take a look at our stock panel designs. Panels can be mounted on the compressors or into a portable locking case. We stock a wide array of regulator and valve parts as well.

Volume Tanks- Nuvair's stand alone volume tanks are built in accordance with ASME, ABS, USCG, UN, SAE-J10 and others standards. We stock sizes from 15-120 gallons (55-454 Liters) that are made from steel. Additional sizes and stainless steel tanks can be special ordered. Aluminum, steel or stainless steel frames can be built to accommodate horizontal or vertical applications. Valves and gauges to fit your needs can be installed before the tank leaves Nuvair. Give us specifications and we will create the solution.

Analyzers- We offer three styles of O₂ Analyzers to accommodate most applications and carry Helium, Trimix, CO, CO₂ and moisture analyzers. Replacement parts and sensors are also available for all of analyzers.



Lubricants

Tanks

Analyzers

Regulators, Valves and Panels

Low Pressure Volume Tanks

Nuvair offers a range of low pressure volume tank (Gas Receivers) storage solutions. Free standing, caged, compressor mounted, grass hopper and dual tanks offered with or without integrated diver air filtration. Stock tanks are made of steel and have a 200 psi operating pressure. We can custom order stainless steel tanks and tanks with higher pressure ratings.

The use of an air receiver with low pressure compressors has several purposes:

- Removal of moisture
- Decrease the wear and tear of your compressor by reducing cycling
- Provide a short back up supply of air should the compressor be shut off

Nuvair stocks 15,30,60,80 and 120 Gallon tanks and can custom order larger tanks.

- Our standard framed tanks are made with 1-1/2 in. Marine Grade Aluminum stock and can be built thicker
- Inlet valves, full flow brass ball valve with #10 SAE brass fitting
- Outlet manifolds from one to four standard 1/2 brass ball valves with #10 SAE brass fittings
- Drain valve 1/4in. brass ball valve standard additional sizes custom
- Pressure Gauge 0 to 300 PSI
- ASME tanks have a pressure relief valve 1/4in. set at 200 PSI



A volume tank and filtration are necessary to deliver breathing air with low pressure compressors.



Steel Tank Specifications (tank no mounting plate or frame)			
Gallon / Liters	PSI / Bar	Weight (Horizontal)	Weight (Vertical)
30 gal (114 L)	200 / 14	77 lb (35 kg)	83 lb (38 kg)
60 gal (228 L)	200 / 14	163 lb (74 kg)	132 lb (60 kg)
120 gal (456 L)	200 / 14	278 lb (126 kg)	286 lb (130 kg)
200 gal (757 L)	200 / 14	545 lb (247 kg)	517 lb (235 kg)

Nuvair 3 Stage Grade "D" Breathing Air Filtration

Nuvair stocks low pressure breathing air filters, condensate and oil/water separators commonly used in commercial diving practices. Whether you looking for individual filters or multiple stage packages Nuvair has your filtration in stock. You can simply order individual filters on-line or contact us to put together a breathing air package for your compressor based on your specific needs.

Nuvair represents multiple companies for gas filtration products

Hankison and Norgren are some of the biggest manufacturers in the business and we carry a wide range of products from each of these vendors.



Norgren Filter Package 6063.1

LP Norgren filter packs includes three stage filtration for 12-18 CFM compressors with #10 SAE inlet fitting, on/off ball valve and #10 SAE fitting for divers hose. Recommended for ABAC pumps and small industrial type pumps



Hankison HF 20 Filter Package 6063.2

LP Hankison HF 20 filter packs includes three stage filtration for 20-60 CFM compressors with #10 SAE inlet fitting, on/off ball valve and #10 SAE fitting for divers hose. Recommended for Quincy 325 and Champion R15 pumps



Hankison HF 24 Filter Package 6063.3

LP Hankison HF 24 filter packs includes three stage filtration for 60-100 CFM compressors with #12 SAE inlet fitting, on/off ball valve and #12 SAE fitting for divers hose. Recommended for Quincy 370 and Quincy 5120 pumps



OSHA GRADE 'D' AIR STATEMENT

Nuvair supplied products meet CGA Grade-D specifications for Federal OSHA Grade 'D' Air. Compressor air quality standards meet or exceed OSHA 1910.134 requirements.

Nuvair™ Pro CO₂

Carbon Dioxide Analyzer

High performance, general purpose CO₂ sensor that provides a temperature compensated and linear CO₂ measurement over sensing range. The sensor contains a long life tungsten filament infrared light source, an optical cavity into which gas diffuses. The Pro CO₂ analyzer measures Carbon Dioxide levels of breathing gas mixtures and air. We offer two models that can be connected in-line on your gas or diesel compressor for continuous monitoring of any CO₂ contamination in your gas.

Advantages:

- 2 Programmable alarm thresholds
- Fast response
- Made to test breathing gases
- Easy to operate, reliable and accurate
- Non-dispersive infrared technology
- Modulated Infrared Light Source = NO Moving Parts

Features:

- On/Off switch
- Response time of 90% in less than 60 seconds
- Low battery warning indicator
- 50 ppm CO₂ resolution on digital display
- Two custom audible and visible alarms that can communicate through the analyzers relay port
- 4-20 mA Analog output for external devices



Part # 9616

Panel Mount
Part # 9617

Specifications Pro CO₂ * (Part#9616)

Maximum Gas Flow Rate	600 cc/min. or 1/2 liter/min.
Accuracy (assumes accurate recent calibration)	Better than 50 ppm + or - resolution
Repeatability (assumes stable atm press and temp)	Better than ± 1 ppm
Warm up time (@22° C)	1 minute to +/- 0.2% 10 Minutes Max Accuracy
Full Scale Resolution (FSR)	0 to 2500 is 50 ppm
Temperature Performance	+ or - 10% of reading up to 50% FSD + or - 15% of reading up to 50% to 100% FSD
Storage Temperature Range	-4° F to 122° F (-20° to 50° C)
Humidity Range	0 to 95% RH, Non-Condensing
Power Requirements	9 Volt battery
Dimensions (H x W x D)	4 1/8 x 2 1/2 x 1 7/8 in (10.5 x 6.35 x 4.8 cm)
Weight	7 ounces (200 g)
Warranty	1 Year Limited

*Specifications subject to change without notice.

Nuvair Pro CO with High Temp & Low Pressure Alarm

Carbon Monoxide Analyzer with High Temp & Low Pressure Alarms

Pro CO, LP High Temp (part #9621)

The Pro CO with Low Pressure and High Temperature alarms is an all in one solution built to meet the US Army Corps of Engineers requirement for monitoring breathing air compressors. The Analyzer includes audible and visual alarms that are activated according to user programmed settings for CO.



Advantages:

- 2 Programmable alarm thresholds
- Audible alarm at set point or 10 ppm CO
- Fast response
- Accuracy of +/- 1%
- High temp switch set at 350°F
- Low Pressure Visual & Audible Alarm
- Compact water resistant container
- Made to test breathing gases**
- Easy to operate, reliable and accurate
- Optional relays for external alarm or compressor control

Features:

- Audible & visual alarms for CO, High Temp & Low Pressure
- On/Off button CO
- On/Off switch high temp
- Accuracy of +/- 1%
- Response time of 90% in less than 15 seconds
- Temperature compensated sensor
- User replaceable batteries
- Low battery warning indicator
- 4-20 mA output
- Factory reset
- 6 ft. sensor cable & analyzer hose

Pro CO Analyzer Only



Part # 9625

Compressor mounted with relay capability for shutdown.

Specifications Pro CO Carbon Monoxide Analyzer

Range	0-100 ppm CO
Display Accuracy	+/- 1%
Sensor Type	Electrochemical
Expected Cell Life, Room Air	18 Months
Response Time	less than 50 Seconds
Operating Temperature	41-104°F (5-40°C)
Storage Temperature	41-104°F (5 to 40°C)
Operating Humidity	15 to 90% r.h.

*All specifications are at ambient / sea level, 77°F (25°C) **Calibration must be done with calibration CO test gas



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