RIX SA

AIR COMPRESSORS

OIL-FREE BREATHING AIR TO 4,500 PSIG

RIX INDUSTRIES' SA COMPRESSORS INCLUDE:

- ***Three Stages of Oil-Free Compression***
- ***Portable***
- ***Air Cooling***
- ***Swash Plate Construction***
- ***Grease-Lube Crank Mechanism***
- ***Gas or Electric Drive***
- ***Compact, Easy to Maintain Design***
- ***Easy to Breathe Humid Air***

The RIX SA compressors feature swash plate construction for balanced operation and completely oil-free compression.

FEATURES

Oil-free Operation- Rix is a world leader in oil-free compression, having built thousands of oil-free compressors for demanding applications such as pure oxygen and breathing air for the U.S. Navy, SCUBA shops and fire departments.

The SA's use ring designs developed by RIX specifically for breathing air use.

The RIX SA has been in production for over 18 years, and is used extensively by the U.S. Navy Seal Team divers and many other breathing air customers.

Safety-The RIX Sweet Air SA-3 and SA-6 breathing air compressors are totally oil-free. Oil-free means that there is no lubricating oil inside the compressor. It is impossible for these compressors to create oil mist or carbon monoxide. Thus, it is impossible for these contaminants to be compressed into your breathing air unless they come in with the compressor inlet air. Regardless of the age or condition of the SA compressor, it can never contribute to a reduction in air quality, or the possible poisoning of the breathing air. Oil-free means no mist or carbon monoxide caused by the compressor - ever!

This is especially critical for partial pressure blending of nitrox. Any oil in the air used for nitrox blending can cause an explosion. (Note: The SA is not designed or approved for compressing **preblended** nitrox.)

Many SCUBA divers, including Navy SEALS, normally take advantage of the oil-free construction by filling their tanks directly from the compressor without using dryers or purification. The humid air produced by the RIX SA compressors eliminates the uncomfortable "dry throat" caused by breathing completely dry air .

Easy to Maintain

RIX compressors are designed to be easy to work on. Two key features are:

- All three pistons can be easily removed for quick and easy ring changes.
- With oil-free operation, there are no oil separators to maintain, and no disposal of discharge oil.

The Compact Design, Easy Maintenance RIX SA-6E

SPECIFICATIONS

Horsepower:
1–5 HP (Electric)
5.5–8 HP (Gas)

Flow:
1–5.5 SCFM
(Free Air Delivery)
1.2–6.5 SCFM
(Charging Rate**)

Cylinders:
3 Stages, Oil Free

Applications:
Pure Breathing Air;
Air Sampling

CONSTRUCTION

Cylinders - Field replaceable bronze and hardened stainless steel liners.

Piston Rings - Piston & rider rings are all self-lubricating TFE materials. All stages use RIX patented spiral piston rings with close tolerance pistons for long life and quick replacement.

Valves - Stainless steel reed valves.

Heads- Stainless steel 3rd stage; Aluminum 1st and 2nd stages.

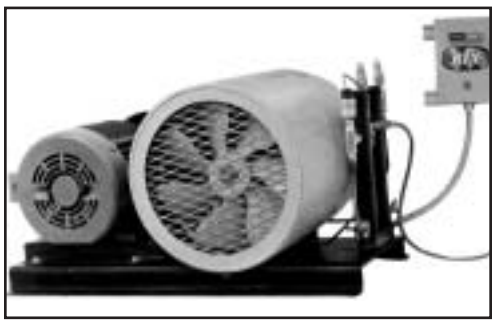
Phone: (707) 747-5900
Fax: (707) 747-9200

RIX SA SWEET AIR SERIES

SA-3E
Electric Motor Drive

SA-3G
Gas Engine Drive

SA-6E
Electric Motor Drive



SA-6G
Gas Engine Drive

PURE AIR, EASY MAINTENANCE, COMPACT DESIGN

Service on the RIX Sweet Air Oil-free compressor is simple and easy. It requires no special technical abilities. Since there is no "oil-bath" crankcase, as in lubricated compressors, the parts requiring normal service and maintenance are easily accessible. Compression pistons and rings can be removed and replaced without disturbing high pressure lines, cylinder heads, valves, etc. Repairs can be done in the field with a minimum of parts and tools, requiring very little time.

As you can see, the Rix Sweet Air oil-free breathing air compressor offers substantial advantages over old-fashioned oil-lubricated compressors. Safety during operation and ease of service are the trademark of the RIX compressor. RIX has been designing, manufacturing, and assembling air compressors in the San Francisco Bay area since 1878. Pure breathing air and minimal service problems are now, and have been for over 100 years, the goal of RIX compressors.

OTHER USES

The SA's are also very suitable for air sampling, contaminant-free gas recovery and other industrial uses where **oil-free** high pressure compression is needed. Please call or fax us if you have any questions about the SA's or our other oil-free compressors.

SPECIFICATIONS - SA Series Compressors

Drive	Model	Max PSI	FAD SCFM	Charging Rate** SCFM	Dimensions	Weight DRY	Comments
Electric	SA-6E	3300 4500*	5.5	6.5	30"L x 19" x 18"H	187 lbs 213 lbs	5 hp, 230/460V, 3 phase standard 230V, 1 phase (optional)
Gas	SA-6G	3300 4500*	5.5	6.5	33"L x 19" x 18"H 35"L x 19" x 18"H	150 lbs 155 lbs	7.5 hp Wisconsin, remote fuel tank 8 hp Honda, integral 6 qt. fuel tank
Electric	SA-3E	3300	2.2 3.0	2.5 3.5	24"L x 16" x 15"H	124 lbs 130 lbs	2 hp, 230 volt, 1 phase, standard 3 hp, 3.0 SCFM (optional)
Gas	SA-3G	3300	3.0	3.5	27"L x 16" x 15"H	108 lbs	5.5 hp Honda, 3.8 qt. fuel tank

*Standard relief valve is 3600 psi. A 4,000 or 4,500 psi relief valve is a no cost option (SA-6 only). A 5000 psi relief valve is available on special order. Contact RIX Sales Dept.

*** "Charging Rate" based on filling tank from 500 to 3000 psig.*

SA 6-97

Available from:

RIX INDUSTRIES
4900 Industrial Way
Benicia, CA 94510 USA
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RIX 4VX

INDUSTRIAL GAS / AIR COMPRESSOR

OIL-FREE GAS OR AIR COMPRESSION TO 6,000 PSIG

RIX INDUSTRIES' 4VX COMPRESSOR INCLUDES:

- ***One to Four Stages of Oil-Free Compression***
- ***Air or Water Cooling***
- ***Crosshead Construction***
- ***Pressure-Lube Crankcase***
- ***Continuous Duty***
- ***Compact, Easy to Maintain Design***

The RIX 4VX compressor features heavy-duty crosshead construction in a "V" cylinder arrangement with totally oil-free compression.

FEATURES

Oil-free Operation: RIX is a world leader in oil-free compression, having built thousands of oil-free compressors for demanding applications such as pure oxygen, nitrogen, argon, hydrogen, helium, CO_2, and other mixed gases.

The 4VX uses gapless ring designs developed by RIX for maximum sealing and long life. Special ring materials are available for many different gases and performance requirements.

Optional piston rod seals provide capture of hazardous and rare gases.

Easy to Maintain

- RIX's free-floating high pressure pistons allow for quick and easy ring changes.
- Four con rods on the crankshaft allow each piston and cylinder to be serviced independently.
- With oil-free operation, there are no oil separators to maintain, and no disposal of discharge oil.

Long Service Life

- Moderate operating speeds reduce wear on moving parts.
- Pressure-fed oil to the center main, rod bearings, and wrist pin bushings ensures long life of these critical components.
- High capacity heat exchangers and moderate compression ratios keep cylinder temperatures low.

CONSTRUCTION

Crankcase: Pressure lubricated with shaft mounted gerotor oil pump and spin-on oil filter.

Bearings: Tapered roller main bearings; sleeve-type center main and con rod bearings; bronze wrist pin bushings.

SPECIFICATIONS

Horsepower:
10 to 50 BHP

Cylinders:
1 to 4 Stages, Oil Free
4 " Stroke

Speed:
300 – 1100 RPM

Application:
Industrial gases / air / oxygen

Cylinders: Air-cooled aluminum with hardened stainless steel liners. Water cooled steel cylinders with field replaceable stainless steel liners optional.

Piston Rings: Piston and rider rings all self-lubricating TFE materials. High pressure stages use RIX patented spiral piston rings with a close tolerance floating piston for long life and quick replacement.

Valves: Stainless steel reed type with air-cooling. Plate or poppet with water-cooling.

Heads: Aluminum or stainless steel.

RIX 4VX
Four Stage, Oil-Free
Industrial Compressor

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ISO 9001 CERTIFIED

SPECIFICATIONS

Inlet Pressure	Ambient Inlet			25 psig Inlet			100 psig Inlet*			500 psig Inlet*		
Performance	MAX. PRESSURE (PSIG)	MAX. FLOW (SCFM)	Motor HP	MAX. PRESSURE (PSIG)	MAX. FLOW (SCFM)	Motor HP	MAX. PRESSURE (PSIG)	MAX. FLOW (SCFM)	Motor HP	MAX. PRESSURE (PSIG)	MAX. FLOW (SCFM)	Motor HP
4-stage	5000	26	25	6000	45	40	N/A			N/A		
3-stage	1000 400	26 55	20 30	2000	60	40	6000	65	40	N/A		
2-stage	260 200	50 70	25 30	550	100	40	1800	100	40	6000	90	40
1-stage	55	110	30	160	180	40	500	180	40	2300	180	40

* Nitrogen use - with underside of pistons vented to atmosphere

STANDARD ACCESSORIES

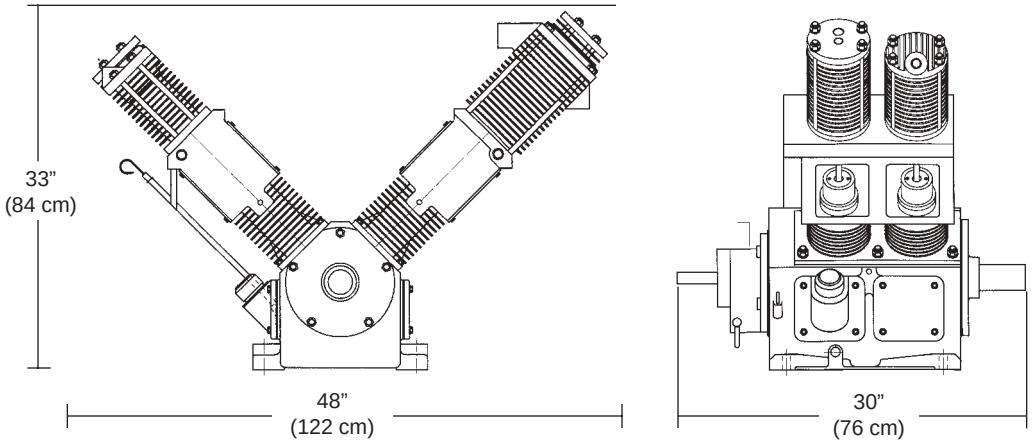
- Steel Skid
- Electric Motor & V-belt drive
- Intercoolers & Aftercooler
- Cooling Air Shroud with Fan
- TENV Cooling Fan Motor
- Safety Switches
- Pressure Gauges
- Relief Valves
- Conversion Resistant Piping
- OSHA Beltguard

TYPICAL PACKAGE OPTIONS

- Complete Control Panel with First-out Lights
- PLC Control
- Motor Starter
- Nema 4 or Nema 7
- Moisture Separators
- Purification Systems
- Pulsation Bottles
- Bypass Valve

A LONG RECORD OF SUCCESS

Since 1878, RIX Industries has been engineering and manufacturing compressors for military, industrial and commercial applications. Over that long period of time, we've developed a world-wide reputation for producing and servicing a line of extraordinary, high quality products. Today, RIX compressors are providing reliable long-term service in such diverse installations as air separation plants, submarines, aircraft, steel mills and refineries.



Bare Unit Weight: 750 lbs. (with flywheel) 340 kg
Typical Package Dimensions: 47"W x 84"L x 45"H; Weight - 2,100 Lbs.

AVAILABLE FROM:

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