

# LUBRICATED ROTARY SCREW AIR COMPRESSORS

.....

25 to 40 HP

Sullair LS-10 Series Air Compressors.

They're bulletproof.



## SULLAIR: A COMPRESSOR COMPANY WITH A FOCUSED VISION.

### *Unchallenged leadership*

For decades, Sullair has been a leader in rotary screw technology. Our ability to respond to our customers' needs, with new, cutting-edge advancements is solid evidence of our leadership. Sullair compressor innovations include our encapsulated compressors, our energy efficient two-stage tandem compressors and our unprecedented 24KT™ 10-year air end warranty. Building on a solid base of experience and innovation, Sullair's leadership in rotary screw technology is unparalleled in the world today.



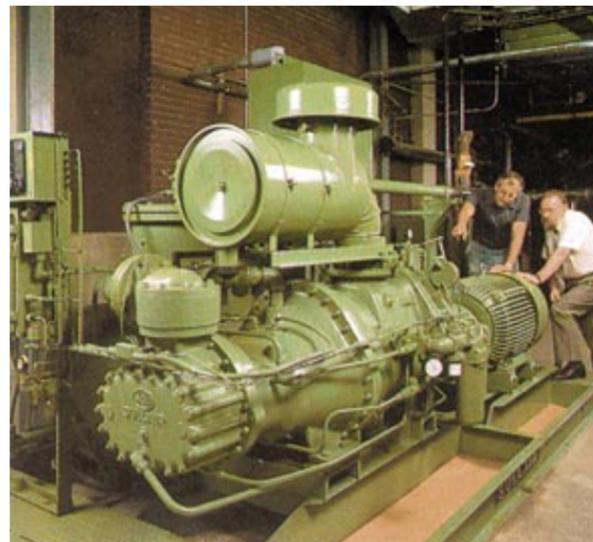
### *Focus on rotary screw technology*

Sullair Corporation, a subsidiary of Sundstrand Corporation, is one of the world's leading authorities on rotary screw compression technology. Since it began manufacturing rotary screw compressors in 1965, Sullair has focused on this area of specialization. Sullair uses its extensive resources in Michigan City, Indiana to further develop and advance rotary screw technology. The company continues to compile a body of research and expertise that is unparalleled in the field.

### *Sullair's global reach*

Sullair serves the world marketplace. In addition to its manufacturing complex in the U.S., Sullair has manufacturing facilities in China and France. From these centers, Sullair coordinates a sales and service network that provides comprehensive product support to customers around the world.

ISO 9001



Member of:

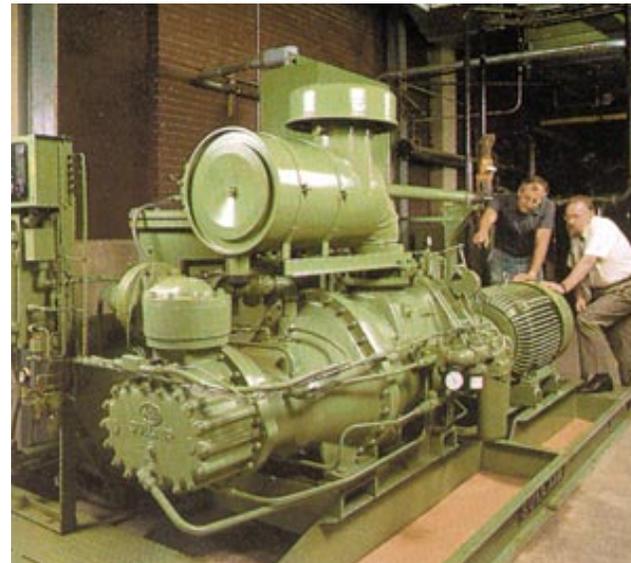


# SULLAIR

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## THE SULLAIR LS-10 SERIES. RELIABILITY, PERFORMANCE, AND A TIME PROVEN DESIGN.

### Continuous duty

Sullair Series LS compressors have established themselves as outstanding in the 25 to 40 horsepower range. These compressors offer the inherent reliability of Sullair's rotary screw design and also provide continuous-duty performance. Components of every Sullair compressor have been carefully selected to assure complete reliability.

### Rotary screw dependability

These LS models use a single-stage rotary screw air end, featuring Sullair's rugged bearing design: tapered roller bearings on the discharge end and cylindrical roller bearings on the inlet, for high load-carrying capacity. On standard models, the air end is warranted for a period of **5 years<sup>(1)</sup>**. On 24KT™ models, the air end is warranted for **10 years<sup>(2)</sup>**.

<sup>(1)</sup> Sullair's 5-year warranty includes motor, air/fluid receiver and cooler(s).

<sup>(2)</sup> Sullair's 24KT warranty includes 5-years on the motor, air/fluid receiver and cooler(s).

### Lower maintenance costs

As a result of Sullair's rugged, time-proven design, the LS Series requires only minimum maintenance for optimum performance. There are no troublesome belts to wear out or replace.

### Broad operating range

LS-10 compressors, which are fluid lubricated and cooled, are available in 25 to 40 horsepower, with capacities from 76 to 152 acfm and pressure ratings of 100 to 175 psig.



### NO BELTS!

- Eliminates side loads on bearings associated with V-belts.
- Energy costs are reduced.
- Reduced maintenance.



**COMPRESSOR  
HEALTH  
ASSURANCE**



**TEN YEAR  
AIR END  
WARRANTY**

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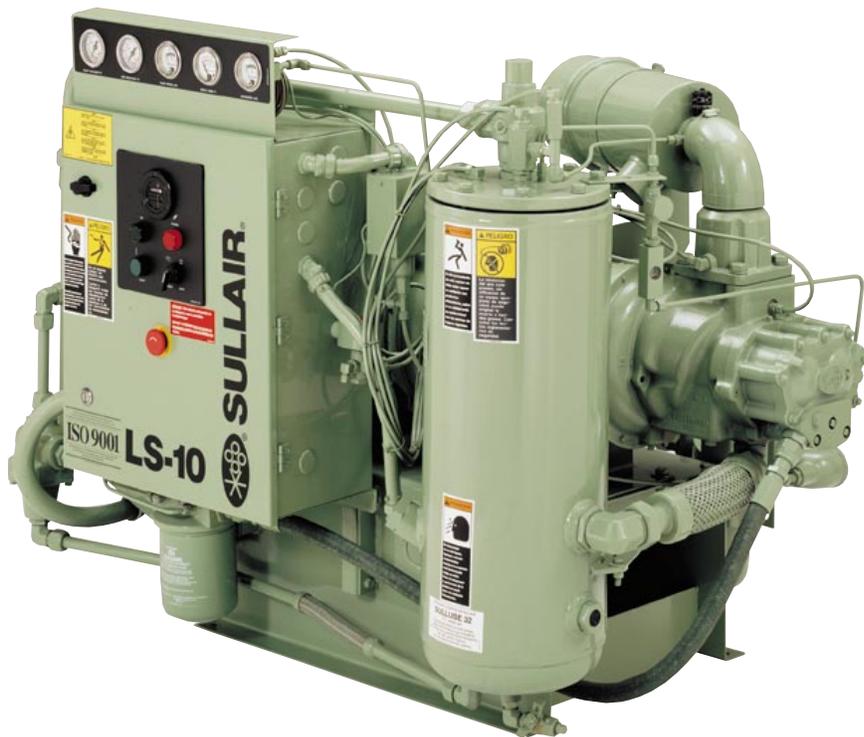
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**TEN YEAR  
AIR END  
WARRANTY**

# THE SULLAIR LS-10 SERIES. THE BULLETPROOF COMPRESSOR.

## Superior package design

SAE O-ring fittings are standard.  
Number of fittings is reduced.  
Designed for continuous duty.  
Aftercooler, moisture separator and trap.  
Air-cooled or-water-cooled models available.

## 1 Instrumentation

Differential pressure gauges for fluid filter and separator provide accurate monitoring of pressure drop.  
Air receiver and line pressure gauges provide direct reading of sump and discharge pressures.  
Panel also includes compressor discharge air/fluid temperature gauge and hour meter.  
Supervisor II Deluxe microprocessor optional.

## 2 Cooling

Air-cooled units require no separate fan motor.  
Water-cooled units use a shell and tube heat exchangers for easy maintenance and water regulating valve.

## 3 Multi-stage air/fluid separation



Multi-stage separation and a long life pleated separator element, reduce oil carryover to less than 2 ppm.  
Reduced carry-over lowers make-up fluid costs.  
Pleated Optimizer™ element lowers initial pressure drop for greater efficiency and longer element life.

## 4 Heavy-duty air filter

Includes remote air intake connection.  
Protects premature failure of key components.  
Extends separator, fluid filter and fluid life.  
Differential pressure indicator.

## 5 The reliable Sullair air end

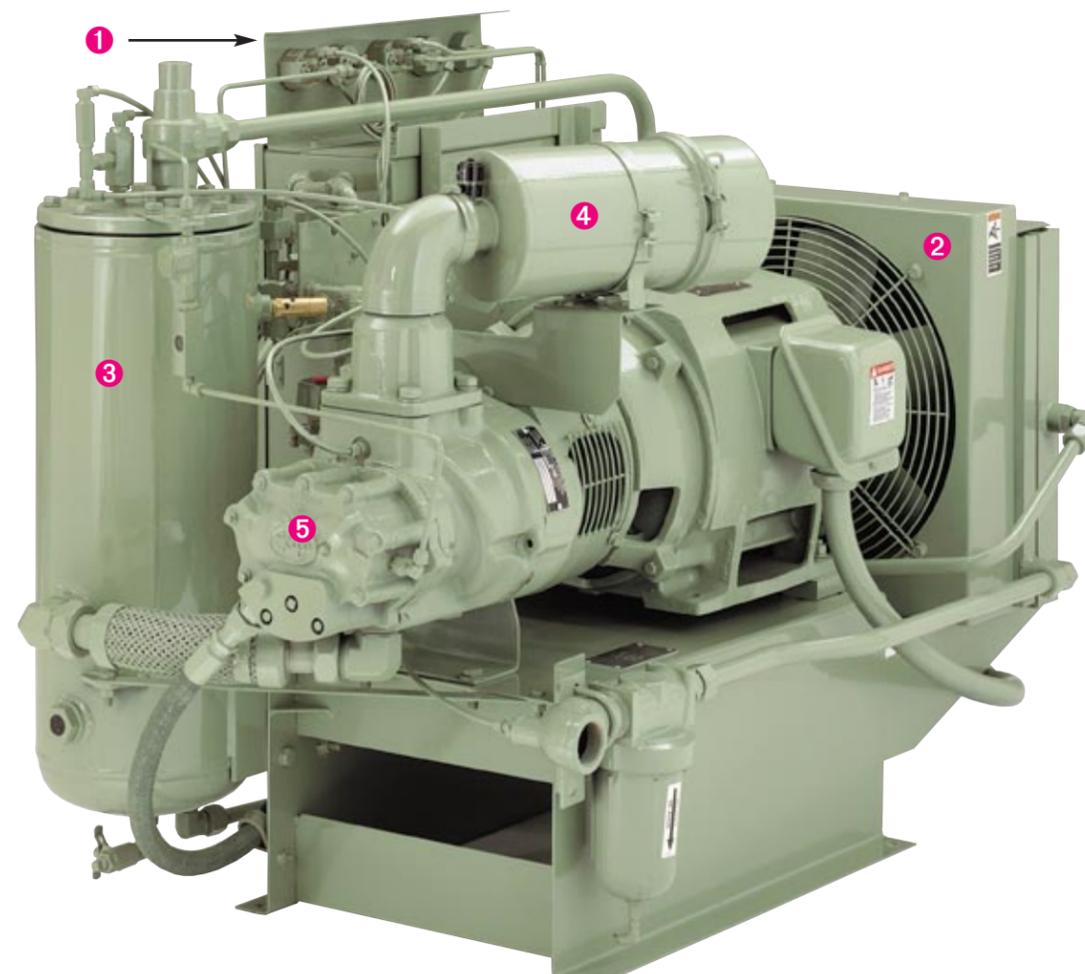
Longer average bearing life, designed for up to 100,000 hours of service.

## Spin-on fiberglass fluid filter

Aircraft-quality media provides better filtration.  
Up to 20% more efficient than conventional paper elements.  
Lengthens life of the compressor

## Flange-mounted motor and air end

Up to 3% energy savings over belt drive.  
Eliminates maintenance expense associated with V-belts.  
NEMA frame design.  
Provides positive alignment.  
Optimizes bearing life of air end and motor.



## Blowdown is piped to the inlet

Keeps fluid mist off package.

## Select one of these long-life fluids...

### Sullube™ is standard factory fill.

5-year air end warranty.  
Biodegradable.  
One year or 8000 hour service life.  
Reduces fluid disposal costs.

### 24KT™ is optional.

Exclusive 10-year air end warranty.  
Eliminates annual fluid changes.  
Eliminates annual fluid disposal costs.

### Free fluid sampling and analysis program with either fluid.

## Sullair's Versatile Control System

Matches output to demand.  
Stabilizes system pressure.  
Minimizes need for an air receiver.  
Extends package life.

## Premium efficient motor

Improved energy conservation.  
5-year warranty.  
Direct coupled design for extended bearing life.  
250,000-hour insulation life.

## Bearing Fluid Reservoirs

Ensure fluid is available at startup.  
Extends air end life.

## Helical design drive gears

Reduce thrust load, increase bearing life.



Reduces fluid carryover.



VERSATILE CONTROL SYSTEM

Allows the compressor to run in modulation or load/no load operation.  
Dual control operation includes automatic start/stop.



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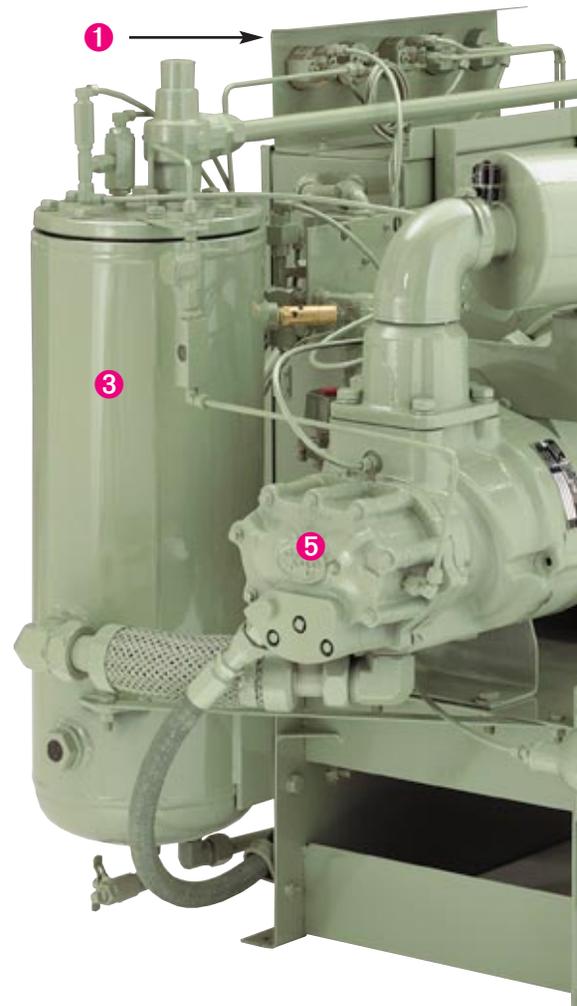
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Includes remote air intake connection.  
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Differential pressure indicator.

### **5** *The reliable Sullair air end*

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**VERSATILE CONTROL SYSTEM**

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*Dual control operation includes automatic start/stop.*



*Extends bearing life.*

## The reliable Sullair air end

*Decades of proven reliability are testimony to the quality of the Sullair air end.*

Although the principle of rotary screw compression remains the same, Sullair is continually improving materials, engineering and design of its air ends and compressor packages.

### *No loss of capacity or efficiency*

Sullair air ends have only two moving parts: the asymmetrical profile rotors. Contact occurs only on a lubricated pitchline, so wear is virtually eliminated. As a result, Sullair compressors do not lose capacity or efficiency.

### *Longer air end life*

Controlled pressure lubrication and BFR (Bearing Fluid Reservoirs) assure a reliable supply of fluid to rotating elements.



### *Lower operating costs*

Discharge port matches ratios of volume and operating pressure for maximum efficiency. Axial air inlet avoids preheating inlet air for further savings.

## Sullair's air end exchange program

If your Sullair compressor requires a replacement air end, Sullair will provide one with updated components featuring the latest technology. The replacement air end is factory warranted and is easy to install. If the replacement occurs during the warranty period, labor is also included.



## Sullube™ Sullair's standard long-life compressor fluid

### *Environmentally compatible*

Sullube™ is a biodegradable fluid that is recyclable. Low levels of Sullube carried over in condensate may be accepted for direct sewer disposal without additional separation/equipment. Contact local authorities for approval.

### *8,000-hour fluid*

Because Sullube can operate for three full shifts for one year, labor related to fluid change-out and associated downtime costs during this time are virtually eliminated.

### *Non-varnishing*

Because of its unique chemical formulation, Sullube will not varnish.

### *Longer fluid life*

Unique additive package maintains desired characteristics over a wide range of operating conditions for extended periods.



## Toshiba premium efficiency motor with 5-year warranty

### *5-year warranty*

The EQP III motor is warranted for 5 years.

### *Improved energy conservation*

These premium efficiency motors are designed and manufactured in the U.S.A. to meet North America's ever increasing need for improved energy conservation and product reliability. Toshiba EQP III motors are standard on the LS-10. Motors are direct-coupled to eliminate the problems of belt maintenance and energy loss.

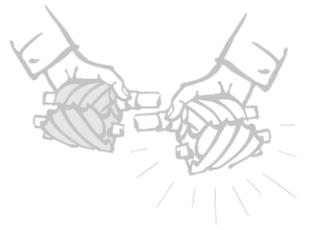


### *Inverter grade insulation system*

This new insulation system, designed to meet NEMA MG1 Part 31.40.4.2 standards, provides even more energy savings.

### *Rugged construction*

Motor has a cast iron frame and bearing brackets, stainless steel nameplate with bearing data, and lip seal/slinger bearing protection. NEMA frame is standard.



*Fact: Factory replacement air ends are built to the latest technology.*



*Fact: Thousands of municipalities worldwide approve Sullube in condensate form to be acceptable for sewage disposal.*

# FEATURES

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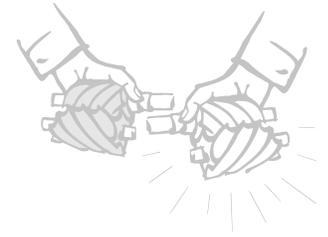


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GENUINE  
**SULLUBE™**  
BY SULLAIR

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## Sullair Supervisor II Deluxe microprocessor controller



### Compatible and user-friendly

This state-of-the-art, computer-compatible microprocessor controller has a simple graphical illustration of the monitored functions and an easy-to-read keypad.

### Featuring:

- Constant readout of pressure and temperature.
- On-demand readout of all operating and maintenance conditions.
- Monitors key functions and safety shutdowns.
- Power failure auto re-start.
- Dual control, provides automatic start-stop operation.
- Lead-lag and sequencing with multiple compressors.

### Two-way communications

RS 485 communications port allows remote input of operating parameters and output of actual readings.

## 24KT™ compressor fluid and the 10-year warranty

**10-year compressor air-end warranty**  
24KT fluid formulation is so revolutionary, Sullair is the only compressor manufacturer to offer this unprecedented warranty.

Sullair's 24KT warranty includes 5-years on the motor, air/fluid receiver and cooler(s).

### Routine fluid disposal costs are eliminated

There is no foreseeable end to the useful life of 24KT fluid, when used according to Sullair recommendations. Fluid-related maintenance costs are drastically reduced.

### 24KT Fluid extends compressor component life

24KT is chemically inert and does not break down or varnish. It works clean. Filters, separators and coolers will not plug. Bearings last longer. Associated labor costs are also reduced.

### Compressor operates at peak performance

Constant viscosity insures excellent lubrication to all rotating parts.



## Oil-Free Guarantee

The Sullair Contaminant Removal System is designed to provide the highest quality oil-free air for critical applications. The System consists of a refrigerated or regenerative dryer; filters for particulate, fluid and odor removal; and a Sullair LS compressor. These components function

together to deliver air that is virtually contaminant-free. Sullair offers an exclusive guarantee on the quality of compressed air delivered by this oil-free system and assures that the system will meet specified performance levels throughout its operational life.

## Standard and optional equipment

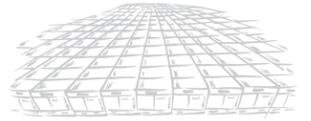
	LS-10
Direct Coupled	●
Highly Efficient Air/Fluid Separation—MSS	●
Spin-On Fiberglass Fluid Filter	●
Built-In Aftercooler	●
Heavy Duty Intake Filter	●
Sullube 8000 Hour Compressor Fluid	●
SRF 1/4000 Compressor Fluid	●
Emerald 5-year Health Assurance <sup>(1)</sup>	●
24KT (10-Year Air End Warranty) <sup>(2)</sup>	●
Sound Attenuating Enclosure	●
Tank Mounting	●
Bearing Fluid Reservoir—BFR	●
Sullair's Versatile Control System—VCS	●
Cold Weather Package	●
Water-cooled	●
Supervisor II Deluxe	●
Electro-Mechanical Controls	●

● = Standard    ● = Option

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Sullair is committed to a program of continuous improvement. Features and specifications may change without notice. Consult your Sullair representative or authorized Sullair distributor.



**Fact: Today, more than 150,000 Sullair compressors are in use around the world.**

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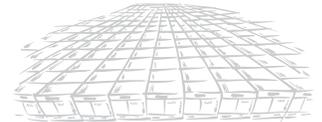
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## Global service support and worldwide parts availability



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Because Sullair believes that using Genuine Sullair Replacement Parts is critical for optimum compressor system performance, we make them available on a global basis. Through Sullinet, our on-line network, distributors can procure Genuine Sullair Replacement Parts for any piece of Sullair equipment in any part of the world, quickly and efficiently.



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Member of:



*Sullair Corporation  
is a member of the  
Compressed Air Challenge,  
sponsored by the United States  
Department of Energy.*



[www.sullair.com](http://www.sullair.com)

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