



# WS SERIES

18-75 kW

7.6/8.6/10.6/12.6 bar(g)

## Stationary Oil Flooded Screw Air Compressor



# ABOUT SULLAIR

*Since 1965, Sullair has been leading innovation in the field of screw compression and vacuum technology. With more than 50 years of experience, we have made a new round of innovation in this field. Sullair adopts the most advanced technology, equipment and production processes to provide customers with the best air compressors and vacuum equipment to meet the most demanding requirements of customers. Sullair has a first-class screw rotor design, which leads the industry trend in this field.*

## RELIABILITY

Customers who work with Sullair have found that the intangibles make all the difference — things like trust, confidence and peace of mind. They go to work every day having full faith in their equipment, as well as the knowledge that dedicated distributors and Sullair personnel have their back every step of the way.

## DURABILITY

Bulletproof. Built to last. However you spin it, Sullair compressors are in it for the long haul, driven by the design of the legendary Air End. In factories and on jobsites all over the world, you will find Sullair compressors standing the test of time, running consistently today like they did on day one.

## HIGH PERFORMANCE

Sullair is constantly innovating to improve the performance of our compressors. For our portable line, this means longer run-time at the jobsite. For our stationary compressors, this means more energy efficiency. With energy costs often far exceeding the upfront cost of a compressor, Sullair is committed to helping you manage your operating expenses — for as long as they run!



# SULLAIR WS SERIES STATIONARY OIL FLOODED SCREW AIR COMPRESSOR

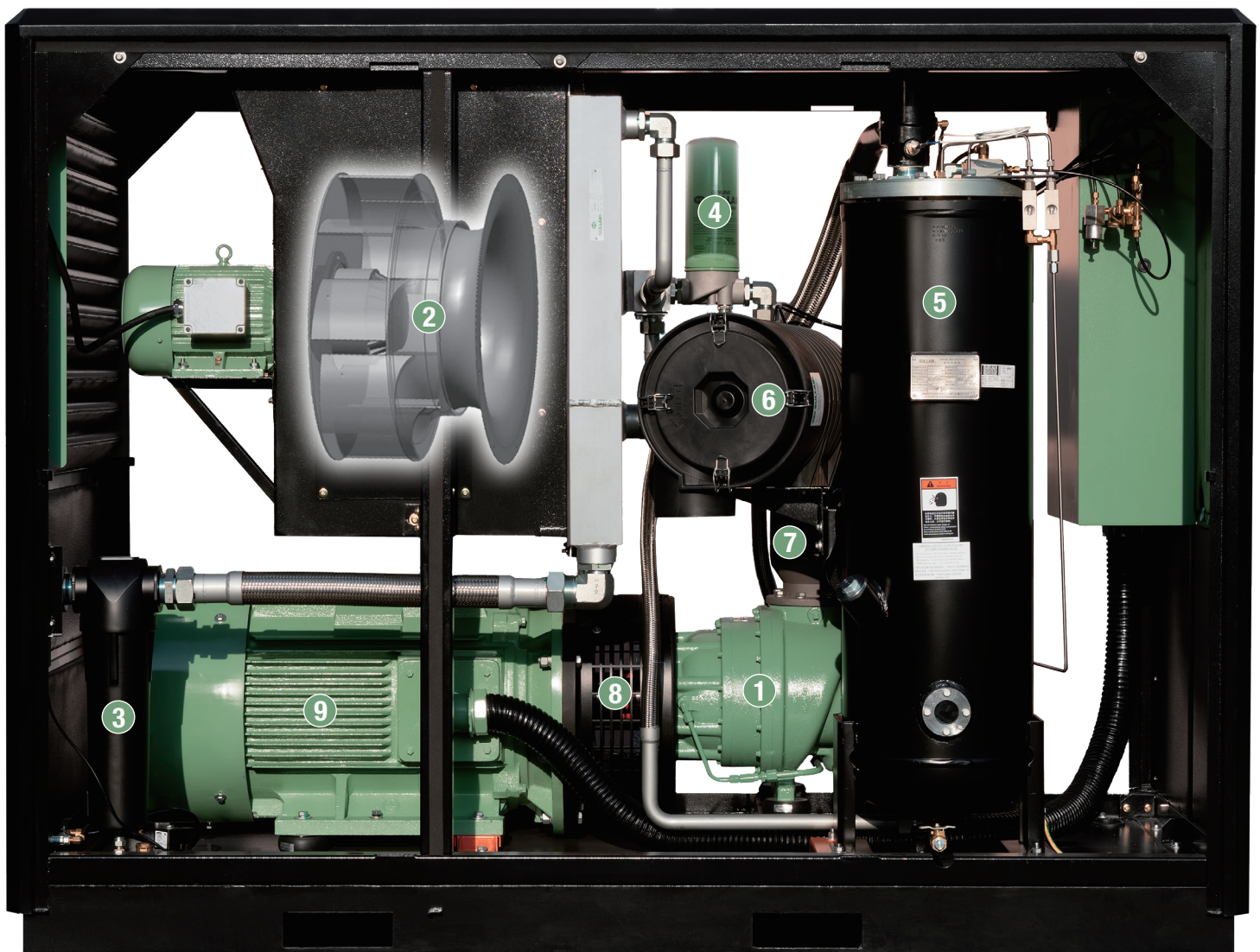
Range: 18-75 kW

Pressure range: 7.6 - 12.6 bar (110 - 182.7 psig)

## Features and Benefits

- Compact design.
- High quality rotor screw assembly.
- Patented rotor design, ensure the Air End longer life.
- Bearing with design life of 100,000 hours.
- Sullube with 8,000 hours life, biodegradeable.
- 5 years warranty will be provided for the screw Air End.
- Low noise, 67dB.
- High efficiency motor - IP55 IE3.

# KEY PRODUCT FEATURES AND INDICATORS THAT BRING YOU BETTER PERFORMANCE



### **1. Air End**

- Sullair patented Air End designed, engineered and manufactured in the USA.
- The design of the slotline and pitch line reduce the internal leakage.
- Proven reliable bearing design to extend bearing life ( up to 100,000 hours) and reduce on maintainace cost.
- 5 years warranty will be provided for the screw Air End with Sullube.

### **2. Cooling System**

- Larger cooler for fast heat dissipation with up to 46 degree C design ambient temperature.
- With high efficiency of heat dissipation reduce operational cost.
- High efficiency - centrifugal fan to improved the ventilation and provide lower noise.

### **3. Drain Valve**

- Automatic Zero-loss Drain with aluminium shell, more energy saving.

### **4. Filuid Filter**

- High quality material.

### **5. Sullair Optimizer™ Air Seperation System**

- Large capacity tank for better separation.
- Two stage separator elements ( only available from WS37-WS75kW) with oil carry over reduce to 1 ppm.
- Low pressure drop provide saving additional 1% power consumption.

### **6. Sullair Optimalair™ Filtration System**

- High quality material, 99.9% efficiency per ISO5011.
- Able to withhold three times more capacity than normal filter.

### **7. Inlet Regulating Valve**

- Reduce the frequency of load and unload and reduce the operating cost.
- Ability to match the compressor output with demand of 0-100%.
- Decrease the loading and unloading shock, extend the service life of machine.

### **8. Flexible Coupling**

- Reduce impulsive load, high efficient transmission and reliable operations.
- Ease of maintenance.

### **9. High Efficiency Motor**

- IP55 IE3 class motor.
- High quality bearing for longer life span.

### **Microprocess Controller**

- LCD screen with easy access.
- Real time display - temperature/ pressure/ other parameters including warning alarms.
- RS485 port using Modbus protocol.
- Bulit-in sequence control. No additional external sequence panal is required.
- Ease to access maintenance and analysis records.

# SPRIAL VALVE

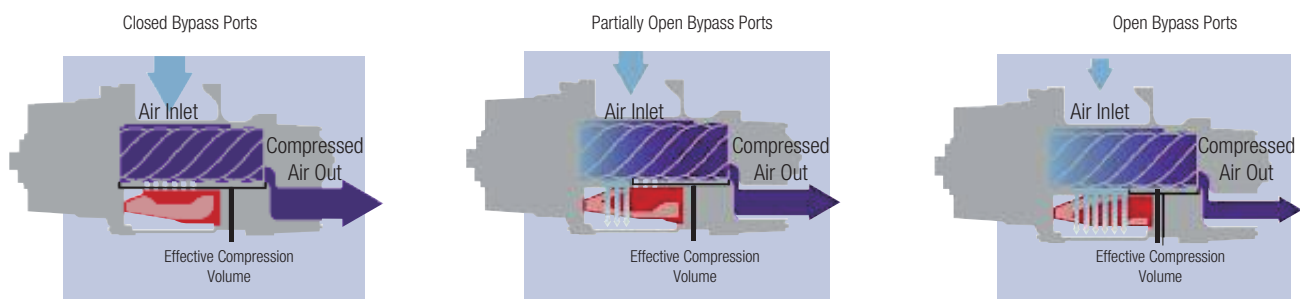
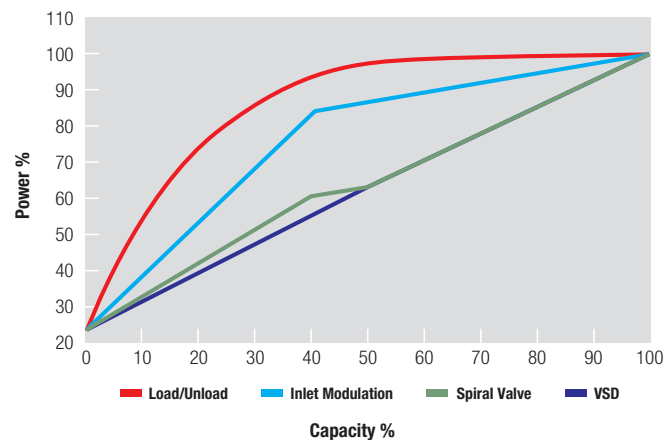
(OPTIONAL FOR ONLY 45-75KW)

The main cost to operate an air compressor is energy costs. The saving of the energy cost can recover from the initial air compressor investment. Effectively matching compressor production capacity with sprial valves to facilitate your needs and also the best way to save both energy and money.

## Features and Benefits

- Comparing with VSD, spiral valve technology brings the value for high temperature/ critical environment application.
- It can match the demand of the compressor 50%-100% variable adjustment.
- Stable discharge pressure.
- It provide a linear part load performance compare with other control method.
- Compression volume is varied to suit air demand by progressively opening or closing internal bypass ports on the Air End. And compression chamber closed bypass ports utilize the entire length of the rotor.
- Capacity is matched to system demand - prevent the wastage of air.
- As compared to other compressors using suction throttling , or load/no load control, power saving up to 10% at part load conditions.

Part-load Performance Assessment



# SULLAIR GENUINE PARTS AND LUBRICANTS AIR TREATMENT AND OTHER VALUE ADDED SERVICE SULLAIR WILL ASSIST IN OPTIMIZING YOUR OPERATION.

With Sullair what you get is more than an Air Compressor. You are also getting the world's leading rotary screw technology and global service. We provide you with quality after sales products and top service.

*If you have any needs, please contact the distributors supporting your region or Sullair after market support team.*



## ENGINEERED FOR PERFORMANCE

### ■ The Sullair Solution

Sullair offers a full line of high-quality fluids, each one formulated for optimal compressor performance.

### ■ Sullube® — Unmatched performance. Exceptional value.

Featuring a 10,000-hour advanced formulation, Genuine Sullube is the standard factory fill for Sullair stationary air compressors.

### ■ SRF II/8000® — High quality. Value priced.

Sullair SRF II/8000® is a highly-refined, long-lasting standard replacement fluid for stationary air compressors.

### ■ SRF 1/4000® — Your 1-year/4,000-hour advantage.

Boasting a high viscosity index, Sullair SRF 1/4000® is the standard replacement fluid for stationary vacuum compressors.

### ■ 24KT® — The fluid that slashes maintenance costs.

Sullair 24KT has no recommended change interval, which means it's a workhorse for machines that run 24/7.

### ■ Pristine FG™ — A longer-life food-grade lubricant.

Sullair Pristine FG™ is a reliable synthetic lubricant that meets requirements for use in food, beverage and pharmaceutical applications.

# PRODUCT INFORMATION AND TECHNICAL PARAMETERS

For more information, please contact Sullair distributors in your area.

## Technical parameters

| Standaed Compressors |       |      |                       |           |          |          |              |                       |                         |
|----------------------|-------|------|-----------------------|-----------|----------|----------|--------------|-----------------------|-------------------------|
| Model                | Motor |      | Max. working pressure |           |          |          | Weight<br>kg | Unit size<br>L*W*H mm | Discharge<br>Connection |
|                      | HP    | kW   | 7.6 bar               | 8.6 bar   | 10.6 bar | 12.6 bar |              |                       |                         |
|                      |       |      | Capacity m³/min       |           |          |          |              |                       |                         |
| WS1800               | 25    | 18.5 | 3.2                   | 2.9       | 2.5      | 2.2      | 610          | 1,350×800×1,350       | Rc1-1/2                 |
| WS2200               | 30    | 22   | 3.75                  | 3.55      | 3.1      | 2.7      | 680          |                       | Rc1-1/2                 |
| WS3000               | 40    | 30   | 5.1                   | 4.75      | 4.1      | 3.25     | 820          | 1,574×875×1,562       | Rc1-1/2                 |
| WS3700               | 50    | 37   | 6.8                   | 6.3       | 5.8      | 5.1      | 1,020        |                       | Rc1-1/2                 |
| WS4500               | 60    | 45   | 8.5                   | 7.8       | 6.9      | 5.65     | 1,685        | 2,300×1,180×1,750     | G2                      |
| WS4500PS             | 60    | 45   | 4.3-8.6               | 3.9-7.8   | —        | —        | 1,685        |                       | G2                      |
| WS5500               | 75    | 55   | 10.5                  | 9.5       | 8.6      | 7.6      | 1,715        |                       | G2                      |
| WS5500P              | 75    | 55   | 11.2                  | 10        | —        | —        | 1,715        |                       | G2                      |
| WS5500PS             | 75    | 55   | 5.6-11.2              | 5.0-10    | —        | —        | 1,715        |                       | G2                      |
| WS7500               | 100   | 75   | 13.5                  | 12.5      | 11.1     | —        | 1,910        |                       | G2                      |
| WS7500P              | 100   | 75   | 14.7                  | 13.7      | 12.4     | 10.8     | 1,910        |                       | G2                      |
| WS7500PS             | 100   | 75   | 7.35-14.7             | 6.85-13.7 | 6.2-12.4 | 5.4-10.8 | 1,910        |                       | G2                      |

| Sullair's VSD Compressors |       |      |                       |            |           |           |              |                       |                         |
|---------------------------|-------|------|-----------------------|------------|-----------|-----------|--------------|-----------------------|-------------------------|
| Model                     | Motor |      | Max. working pressure |            |           |           | Weight<br>kg | Unit size<br>L*W*H mm | Discharge<br>Connection |
|                           | HP    | kW   | 7.6 bar               | 8.6 bar    | 10.6 bar  | 12.6 bar  |              |                       |                         |
|                           |       |      | Capacity m³/min       |            |           |           |              |                       |                         |
| WS1800 VSD                | 25    | 18.5 | —                     | 1.0-3.0    | 0.8-2.6   | 0.7-2.2   | 660          | 1,350×800×1,350       | Rc1-1/2                 |
| WS2200 VSD                | 30    | 22   | —                     | 1.2-3.6    | 1.0-3.1   | 0.9-2.8   | 740          |                       | Rc1-1/2                 |
| WS3000 VSD                | 40    | 30   | —                     | 1.6-4.75   | 1.4-4.25  | 1.2-3.7   | 870          | 1,574×875×1,562       | Rc1-1/2                 |
| WS3700 VSD                | 50    | 37   | 2.3-6.8               | 2.1-6.3    | 1.9-5.6   | 1.7-5.1   | 1,070        |                       | Rc1-1/2                 |
| WS4500 VSD                | 60    | 45   | 1.95-8.5              | 1.92-7.93  | 1.9-6.9   | 1.78-5.65 | 1,765        | 2,300×1,180×1,750     | G2                      |
| WS5500 VSD                | 75    | 55   | 2.52-10.6             | 2.54-9.85  | 2.13-8.6  | 2.09-7.73 | 1,795        |                       | G2                      |
| WS7500 VSD                | 100   | 75   | 3.23-13.5             | 3.29-12.55 | 2.79-11.1 | —         | 1,990        |                       | G2                      |
| WS7500P VSD               | 100   | 75   | 3.55-14.8             | 3.55-13.7  | 2.71-12.0 | 2.71-10.8 | 1,990        |                       | G2                      |
| WS7500PS VSD              | 100   | 75   | 1.78-14.8             | 1.78-13.7  | 1.36-12.0 | 1.36-10.8 | 1,990        |                       | G2                      |

- Unit performance parameters and acceptance criteria shall be subject to Appendix C, ISO1217.
- Reference conditions absolute intake pressure 1 bar, air intake temperature 20 Deg C, relative humidity 0%.
- WS18-37 series are air-cooled model and WS45-75 Series include air-cooled model and water cooled model.

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