Rotary Screw Vacuum Packages

ASV, BSV, CSV
Capacities from 168 to 555 acfm
ASV / BSV / CSV Series

Superior quality and efficient design
Kaeser’s Rotary Screw Vacuum Packages feature a Sigma Profile™ airend specifically designed for vacuum applications such as dust collection, packaging, bottle and tube filling, drying, forming, and filtration. Their rugged design combines ease of use with exceptional reliability and simple maintenance.

Innovation you can trust
With a cutting edge research and development team committed to building industry-leading products, Kaeser continues to deliver better solutions to meet our customers’ compressed air needs. Kaeser’s expertise and world-wide reputation for superior reliability and efficiency offer great performance and peace of mind.

Service-friendly
From the ground up, these vacuum packages have been designed with the user in mind. Fewer wearing parts and using premium quality materials ensure reduced maintenance requirements, longer service intervals, and extended service life. A smart component layout with generously sized maintenance doors and removable panels simplify service and lower your operating costs.

Kaeser reliability
Kaeser’s vacuum screw compressors meet our rigorous “built for a lifetime” standard. Designed and built with Kaeser’s generations of manufacturing experience, you can rest assured that these packages will continue to deliver the level of vacuum you need with the exceptional reliability you expect from a Kaeser vacuum screw package.

Easy installation
Kaeser vacuum packages are completely pre-piped, pre-wired, and ready for installation. Packages feature a solid steel floor with anti-vibration mounts, eliminating the need for special foundations. A powder-coated, sound-dampening enclosure is standard on all models, ensuring low noise levels. These units also meet or exceed NFPA 99C guidelines for use in hospital installations.
Gas ballast system

This Kaeser exclusive feature prevents condensation from forming inside the vacuum pump, ensuring trouble-free operation.

Sigma Profile™ airend

The rotary screw vacuum airend with Sigma Profile has oversized bearings to ensure long service life. The pneumatic inlet valve is activated by a solenoid control valve and full-flow/idle switching is controlled by an adjustable vacuum switch. A full-flow positive displacement lubricant pump is driven by the female rotor for proper lubrication at all vacuum levels.

Belt drive with automatic tensioning

A multi v-belt drive efficiently transfers power from motor to airend. Our unique automatic tensioning device maintains proper tension to maximize energy efficiency, prolong belt life, and simplify routine maintenance. The belt tension can easily be verified through a window in the service panel.

Premium efficiency drive motor

Kaeser only uses Premium Efficiency Totally Enclosed Fan Cooled (TEFC) motors with class F insulation for extra protection from heat and contaminants. Remote grease fittings make maintenance a breeze. 230/460 or 575 V, 3-phase, 60 Hz is standard. Other voltages are available. Units come complete with a full-voltage magnetic starter and 115V-1 ph-60 Hz control voltage transformer.
Vacuum filter

On BSV and CSV packages, the externally mounted vacuum filter for the suction line is equipped with a pressure differential system to signal contamination and enable you to schedule needed maintenance.

Air/coolant system

Kaeser’s Rotary Screw Vacuum Package is equipped with an air-cooled fluid cooler. A package cooling fan is mounted on the motor drive shaft. The combination valve features a thermostatic element and full-flow micro fluid filter with spin-on replacement cartridge as one integrated unit.

The package has a combined reservoir and separator tank complete with safety relief valve and a multistage oversized separator cartridge. Two quick disconnect fittings make manual verification of differential pressure across the separator cartridge convenient. The package is shipped complete with an initial charge of synthetic fluid. Discharge can be easily piped away from unit due to an external connection on the package enclosure.

Fluid separation system

Our multi-stage separation system provides low fluid carry-over (1-3 ppm), and extended filter service life. Our no-leak design features rigid steel piping, flexible connections, and vibration isolators. Each separator system includes wet side/dry side fittings to check differential pressure, an easy to read fluid level indicator, and our unique quick fluid drain system.

Intelligent control and protection

To protect your investment and ensure the most efficient operation possible, we control these packages with our Sigma Control 2™. This intelligent controller comes standard with multiple pre-programmed control profiles so you can select the one that best fits your application. Sigma Control 2 monitors more than 20 critical operating parameters, shuts the unit down to prevent damage, and signals if immediate service is required. It also tracks preventive maintenance intervals and provides notice when PMs are due. An RFID sensor provides secure access and simplifies managing maintenance intervals. An SD card slot with included SD card enables fast, easy software updates, storing key operational parameters, and offers long-term data storage for analyzing energy consumption and vacuum operation. Sigma Control 2 has superior communications capabilities. An Ethernet port and built-in web-server facilitate integration into the IloT. ModBus, Profinet, Profibus, Devicenet, and other industrial communications interfaces are also available as plug in options for seamless integration into plant control/monitoring systems.

See our Sigma Control 2 brochure for more information.
Service-friendly design

The ASV, BSV, and CSV series rotary screw vacuum packages feature an open package layout. All of the major components are easily accessible, reducing preventive maintenance time by as much as 50% when compared to other similarly sized units.

For installations where space is limited, the front doors and the back access panels are easily removable, making it possible to perform maintenance from the front or back of the package. Each door can also be removed for even more service accessibility options. The top panel fully extends, providing quick and easy access to the inlet filter, separator tank, and more.

When you consider the energy efficiency savings and the maintenance costs savings, it’s clear that owning a Built for a lifetime™ Kaeser rotary screw vacuum package will save you money, year after year.

Sigma Control 2 with secure RFID access signals when PM is due.

Generously sized doors fully swing out or are easily removed.

Easy access vacuum filter requires no tools for servicing.

Single piece, multi-ribbed belt with automatic tensioner.

Wet and dry side quick connect fittings for easily checking pressure differential across the separator.

Replaceable, cleanable cabinet pre-filter mats prevent particles larger than 40 microns from entering the enclosure.
Technical Specifications

Performance curves* ASV - BSV - CSV

*Data on the curves is based on 29.92” Hg absolute discharge pressure, inlet air temperature of 68°F, and 60 Hz electric motor operation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Capacity (acfm)</th>
<th>Max. Vacuum (%)</th>
<th>Rated Power (hp)</th>
<th>Power Supply</th>
<th>Overall Dimensions W x D x H (in.)</th>
<th>Standard Unit Connections (in.)</th>
<th>Dimensions (in.)</th>
<th>Weight (lb.)</th>
</tr>
</thead>
</table>
| ASV 40 | 168             | 99              | 10               | 230/460 V - 3 ph - 60 Hz | 55½ x 35¼ x 42¼ | 2½ Flg. | 1½ NPT | 19½ | 11 | 1014  
| ASV 60 | 242             | 99              | 15               |             |                                   |                               |                 |             |
| BSV 80 | 296             | 99              | 20               | 63¼ x 40¾ x 54¼ | 4 NPT | 2 NPT | 21¼ | 13¼ | 1410 |
| BSV 100 | 367             | 99              | 25               |             |                                   |                               |                 |             |
| CSV 125 | 463             | 99              | 30               | 76¼ x 49½ x 57½ | 4 Flg. | 3 NPT | 28   | 14¼ | 3031  
| CSV 150 | 555             | 99              | 40               |             |                                   |                               |                 | 3417 |

Specifications are subject to change without notice.
As one of the world’s largest compressed air systems providers and compressor manufacturers, Kaeser Compressors is represented throughout the world by a comprehensive network of branches, subsidiary companies and factory trained partners.

With innovative products and services, Kaeser Compressors’ experienced consultants and engineers help customers to enhance their competitive edge by working in close partnership to develop progressive system concepts that continuously push the boundaries of performance and compressed air efficiency. Every Kaeser customer benefits from the decades of knowledge and experience gained from hundreds of thousands of installations worldwide and over ten thousand formal compressed air system audits.

These advantages, coupled with Kaeser’s worldwide service organization, ensure that our compressed air products and system deliver superior performance with maximum uptime.