Rotary Screw Vacuum Packages

ASV, BSV, CSV
Capacities from 168 to 555 acfm

kaeser.com
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, CNC router hold-down, 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 and vacuum needs. Kaeser’s expertise and world-wide reputation for superior reliability and efficiency offer great performance and peace of mind.

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 product.

Service-friendly

From the ground up, these vacuum packages have been designed with the user in mind. A smart component layout with generously sized maintenance doors and removable panels simplify service. Premium quality materials ensure reduced maintenance requirements, longer service intervals, and extended service life.

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.
Efficient and economical

Sigma Profile™ airend
The rotary screw vacuum airend with Sigma Profile is designed for longevity and to efficiently reach vacuum levels as deep as 99%. 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.

Sigma Control 2
This intelligent controller ensures the most energy efficient vacuum operation possible. The controller monitors operation conditions and provides maintenance reminders and service alerts. An Ethernet port and built-in web-server facilitate IIoT integration. Multiple industrial communications interfaces are available as plug-in options for seamless integration into plant control/monitoring systems.

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.

Comprehensive sensors
A comprehensive array of sensors and switching contacts for monitoring pressure, temperature, oil pressure, and oil level ensures reliable operation and enables remote monitoring and visualization of operating status and all recorded data via the Sigma Control 2.
Quality in every detail

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.

Vacuum inlet filter
The inlet filter is integrated inside the cabinet to reduce the overall footprint and reduce on-site installation time and cost. The filter is easy to access and has a contamination indicator to signal when service is needed.

Gas ballast system
This Kaeser exclusive feature enhances the vacuum pump’s water vapor tolerance and prevents condensation from forming inside the suction chamber, ensuring trouble-free operation.

Design and construction
The compact enclosure is mounted on a solid base frame with anti-vibration feet. Steel cabinet panels and access doors are powder coated and feature mineral wool soundproofing covered by stain resistant fabric. Additional anti-vibration mounts for the airend and motor, along with flexible pipe connections prevent loose piping and wiring.
Cooling air flow

Vacuum generation produces heat in the airend, which is then absorbed by the cooling oil and discharged into the surrounding ambient air via the air cooler.

The hot exhaust air is directed outwards through the top of the unit by the internal fan; from here it is conveyed outside by the exhaust air ducting. Since the main fan already produces sufficient residual thrust to achieve this, no auxiliary fan is required, thereby saving energy costs and increasing safety.

Heat recovery

Reduce your heating and cooling costs by using warm exhaust air in cooler months and ducting it outside in warmer months.
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.

Easy access vacuum filter requires no tools for servicing.

Generously sized doors fully swing out or are easily removed.

Multi-ribbed belt drive with automatic tensioner.

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

Pre-filter mats prevent particles larger than 40 microns from entering the enclosure. Mats can be cleaned and/or replaced.

Sigma Control 2 with secure RFID access signals with PM is due.
## Technical specifications

Performance curves ASV - BSV - CSV*

![Graph showing performance curves for ASV, BSV, and CSV models](image)

*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>Vacuum Conn. (in.)</th>
<th>Air Discharge (in.)</th>
<th>Dimensions L x W x H (in.)</th>
<th>Weight (lb.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASV 41</td>
<td>168</td>
<td>99</td>
<td>10</td>
<td>15</td>
<td>2½</td>
<td>2¼</td>
<td>53 x 36¼ x 49¼</td>
<td>1113</td>
</tr>
<tr>
<td>ASV 61</td>
<td>242</td>
<td></td>
<td>20</td>
<td>25</td>
<td>3</td>
<td>2½</td>
<td>65¾ x 40½ x 55¼</td>
<td>1653</td>
</tr>
<tr>
<td>BSV 81</td>
<td>296</td>
<td></td>
<td>30</td>
<td>40</td>
<td></td>
<td></td>
<td>77⅜ x 50 x 65¼</td>
<td>3329</td>
</tr>
<tr>
<td>BSV 101</td>
<td>367</td>
<td></td>
<td></td>
<td>230/460 V - 3 ph - 60 Hz</td>
<td></td>
<td></td>
<td></td>
<td>3417</td>
</tr>
<tr>
<td>CSV 126</td>
<td>463</td>
<td></td>
<td></td>
<td>30</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>CSV 151</td>
<td>555</td>
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<td></td>
<td>40</td>
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Specifications subject to change without notice.
The world is our home

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 systems deliver superior performance with maximum uptime.