



SV SERIES ROTARY VANE VACUUM PUMPS

Compact pumps. Industrial pumps. Vacuum systems.



NANTONG ZHONGTIAN MACHINERY CO., LTD.

ztpumps.com



Compact SV Pumps



SV10B / SV16B



SV20B / SV25B

Compact, oil-sealed single-stage design

The compact SV single-stage rotary vane pumps are suitable for indoor installation. Oil seals the clearances, lubricates the vanes and carries away compression heat. An exhaust filter separates oil from the discharged gas.

Designed to evacuate vessels and vacuum systems to the medium-vacuum range. Suitable for air and other dry, non-toxic, non-corrosive and non-explosive gases. Water vapour may be pumped only within the permitted vapour-pressure limit.

Features

FKM seals; a dedicated oil-mist filter design; integrated pump and motor construction; precision-machined components; compact dimensions; and a built-in anti-oil-return device.

Applications

Food packaging, processing, filling and preservation; vacuum handling and lifting; degassing and filling; composite and rubber moulding; hospital negative-pressure systems with bacterial filtration.



Compact Pump Specifications

Parameter	SV10B	SV16B	SV20B	SV25B	SV16
Pumping speed, 50 Hz (m ³ /h)	10	16	20	25	16
Pumping speed, 60 Hz (m ³ /h)	12	19.2	24	30	19.2
Ultimate total pressure (Pa)	150	150	100	100	100
Motor power (kW)	0.75	0.75	0.9	0.9	0.9
Inlet connection	G1/2 (KF25)	G1/2 (KF25)	G1/2 (KF25)	G1/2 (KF25)	G1/2 (KF25)
Rotational speed (rpm)*	2800	2800	2800	2800	1400
Oil capacity (L)	0.3	0.3	0.5	0.5	0.5
Gross weight (kg)	18	18	20	20	21
Noise (dB(A))	75	75	78	78	72
Dimensions (mm)	328×228×212	328×228×212	335×232×243	341×232×243	460×232×243

Guaranteed-pressure configuration: SV20B and SV25B can be supplied with a guaranteed ultimate total pressure of ≤ 66.7 Pa. Specify this requirement in the order; the standard catalogue ratings above remain unchanged.

*The source gives one rotational-speed value per model and does not specify a separate 60 Hz speed.

Notes: Pressure values in the source specification are measured with a capacitance diaphragm gauge. Readings with a Pirani gauge may be higher by 0.5 to 1 order of magnitude. Motor acceleration may be delayed at low supply voltage and the minimum permitted ambient temperature; the motor protection switch may operate. Specifications are subject to change.

Optional inlet filters

KF-25, G3/4 and G1/2 inlet filters.

Industrial SV Pumps

**SV040****SV063****SV100****SV160****SV200****SV250****SV300**

Reliable operation. Flexible configuration.

The industrial SV series uses a proven single-stage rotary vane design. Robust construction, flexible configuration and serviceability support a wide range of industrial applications. Pumps may operate independently or serve as backing pumps in vacuum systems.

Applications

Vacuum packaging, degassing and coating; pneumatic conveying, lifting and holding; drying and impregnation; evacuation, pressing and lamination.



Industrial Pump Specifications

Parameter	SV040	SV063	SV100	SV160	SV200	SV250	SV300
Pumping speed (m ³ /h)*	40	63	100	160	200	250	300
Ultimate total pressure (mbar)	0.1–0.5	0.1–0.5	0.1–0.5	0.1	0.1	0.1	0.1
Motor power (kW)	1.5	1.5 / 2.2	3	4	4.5	5.5	7.5
Motor speed (rpm)*	1440	1440	1440	1440	1440	1440	1440
Permitted water-vapour pressure (mbar)	40	40	40	40	40	40	40
Water-vapour capacity (kg/h)	0.6	1	1.6	2.5	4	4.5	5
Operating temperature (°C)	80	84	84	95	95	81	83
Oil capacity (L)	1	2	2	5	5	7	7
Weight, source G.W (kg)	45	55	70	150	150	195	211
Noise (dB(A))	≤65	≤67	≤70	≤72	≤73	≤75	≤75
Dimensions (mm)	650×280×265	650×420×295	710×430×295	850×500×430	850×500×430	1010×540×425	1040×540×425

*The industrial table does not distinguish 50 Hz and 60 Hz ratings. Confirm the electrical configuration and corresponding performance when ordering.

Features

Continuous high vacuum; gas-ballast operation for vapour-handling applications; compact, robust construction; and a built-in oil-mist separator. The source states oil separation of 99.99%.

Notes: Pressure values in the source specification are measured with a capacitance diaphragm gauge. Readings with a Pirani gauge may be higher by 0.5 to 1 order of magnitude. Motor acceleration may be delayed at low supply voltage and the minimum permitted ambient temperature; the motor protection switch may operate. Specifications are subject to change.

Vacuum Systems

Mobile vacuum reservoir stations

A vacuum pump, receiver tank and electrical controls form a vacuum supply station. For intermittent demand with modest pumping requirements, a reservoir can reduce pump running time and extend service life compared with direct continuous operation.

Receiver capacity	120 L	200 L	300 L	400 L	600 L
Pump options	SV040 SV063 SV100	SV100 SV160 SV200	SV100 SV160 SV200	SV160 SV200 SV300	SV200 SV300

Roots vacuum pump systems

A Roots pump serves as the main pump, backed by a rotary vane or liquid-ring pump. Applications include metallurgy, coating, heat treatment, welding, petrochemicals, pharmaceuticals, food processing and aerospace.

Source system range: pumping speed 30–2,500 L/s; working pressure 10^5 –0.1 Pa. These are system-level ranges, not ratings for each illustrated configuration.



600 L / SV300



400 L / SV160



ZJ600 / SV300



ZT PUMPS

SV SERIES | ROTARY VANE VACUUM PUMPS

Specify Your SV Pump



Nantong Zhongtian Machinery Co., Ltd.

SV SERIES ROTARY VANE VACUUM PUMPS

Information for quotation and order confirmation

Please specify the model and quantity, voltage, phase and frequency, application and pumped gas, required ultimate pressure, inlet connection and any accessories or system requirements.

For SV20B / SV25B orders requiring ≤ 66.7 Pa ultimate total pressure, state the guaranteed-pressure configuration explicitly.

Website

ztpumps.com