

SOGEVAC SV 500 B



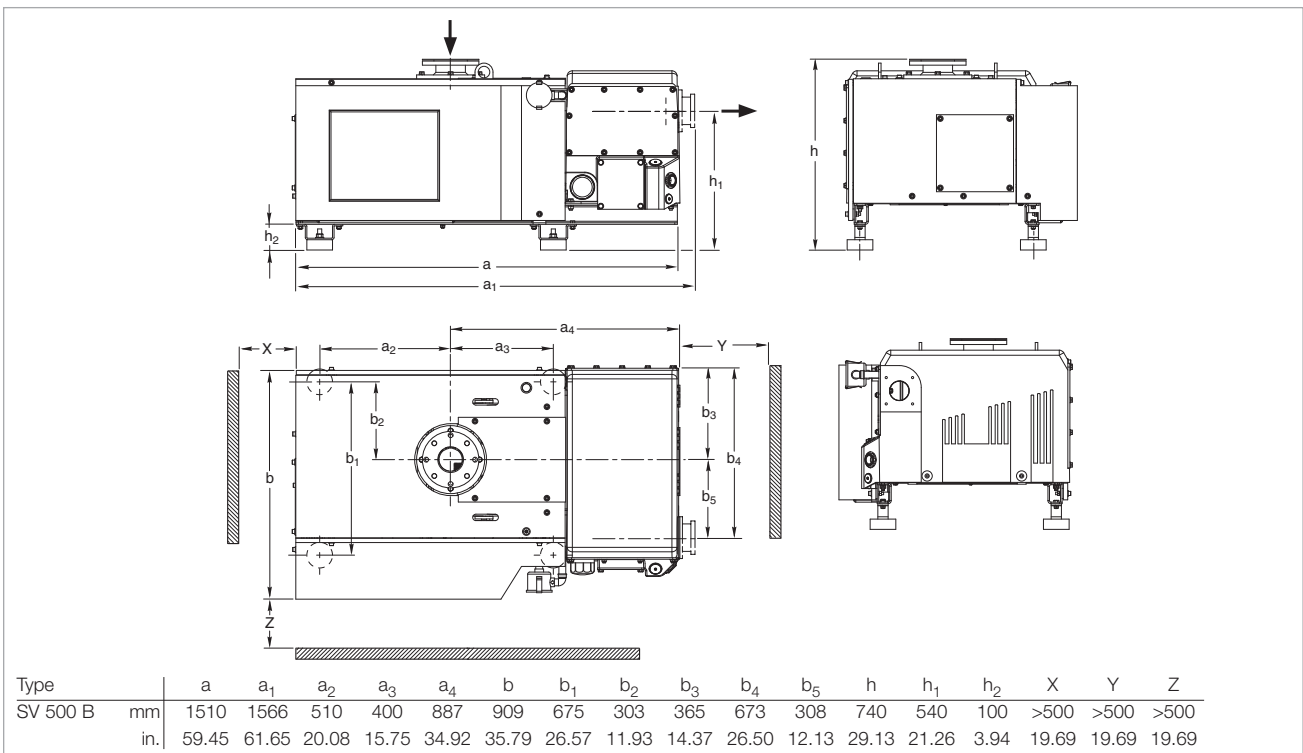
SOGEVAC SV 500 B

Advantages to the User

- Low pump temperature: ideal for harsh applications. Optimal oil life time thus reached
- Low generator rotational speed
- Integrated exhaust filters with low oil mist flow: long filter life time
- Optimised integrated lubrication without external pipes: yellow metal free as standard
- Integrated oil recovery system and anti-suckback valve
- Low noise level
- High reliability due to separate greased ball bearings (30.000 h life)
- Best ultimate pressure
- Big oil volume for long oil life time

Typical Applications

- Heat treatment / Metallurgy
- ATEX applications
- ... and more



Dimensional drawing for the SOGEVAC SV 500 B

Technical Data

SOGEVAC SV 500 B

| | | 50 Hz | 60 Hz |
|---|--|----------------------------|----------------------------|
| Nominal speed ¹⁾ | m ³ x h ⁻¹ (cfm) | 570 (336) | 570 (336) ³⁾ |
| Pumping speed (according to PNEUROP) ¹⁾ | m ³ x h ⁻¹ (cfm) | 520 (306) | 520 (306) ³⁾ |
| Ultimate partial pressure ¹⁾ without gas ballast | mbar (Torr) | ≤ 0.08 (≤ 0.06) | ≤ 0.08 (≤ 0.06) |
| Ultimate total pressure with 1 gas ballast | mbar (Torr) | ≤ 0.7 (≤ 0.53) | ≤ 0.7 (≤ 0.53) |
| Water vapor tolerance with standard gas ballast | mbar (Torr) | 40 (30) | 40 (30) |
| Water vapor capacity with 1 gas ballast | l/h (qt/h) | 13.0 (14.0) | 13.0 (14.0) |
| Noise level (according to DIN 466535) ²⁾ | | | |
| Air | dB(A) | 70 | 70 |
| water | dB(A) | 68 | 68 |
| Motor power 3-ph. (with IEC Euro motor) | kW (hp) | see Ordering Information | see Ordering Information |
| Mains voltage and mains frequency for 3-ph. motor | V | see Ordering Information | see Ordering Information |
| Nominal speed | min ⁻¹ (rpm) | 630 | 630 |
| Type of protection | IP | 54 | 54 |
| Isolations class 3-ph. motor | | F | F |
| Leak rate | mbar x l x s ⁻¹ | ≤ 1 x 10 ⁻³ | ≤ 1 x 10 ⁻³ |
| Oil capacity GS 77, min. / max. | l (qt) | 20 (21) / 23 (24) | 20 (21) / 23 (24) |
| Weight, net. (with oil filling) depending on the type of motor | kg (lbs) | 630 (1390) | 630 (1390) |
| Cooling | | Air (water ⁴⁾) | Air (water ⁴⁾) |
| Connections | | | |
| Intake | DN | see Ordering Information | see Ordering Information |
| Exhaust | DN | see Ordering Information | see Ordering Information |
| Gas ballast | Number / base type | 1 + (1 option) / manual | 1 + (1 option) / manual |

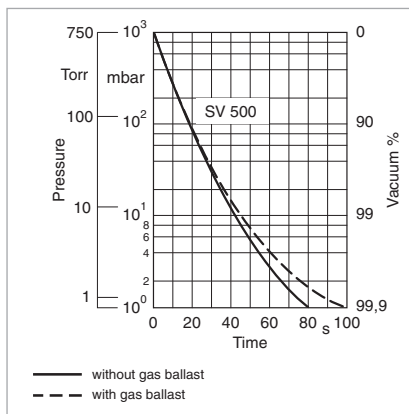
¹⁾ To DIN 28 400 and following numbers

²⁾ Operated at the ultimate pressure without gas ballast, free-field measurement at a distance of 1 m (3.5 ft)

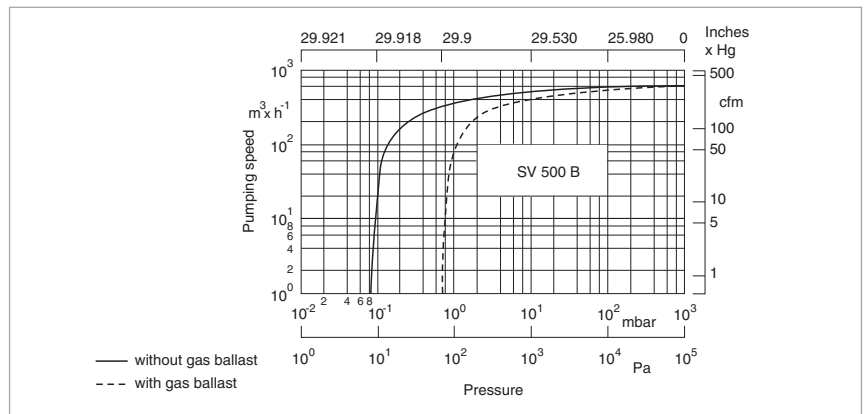
³⁾ Valid NEMA variants. Values for Japan (JIS motors) upon request

⁴⁾ Option

Note: Further pump options upon request (for example, water cooled pumps)



Pump-down characteristics of a 1000 l vessel at 50 Hz



Pumping speed characteristics of the SOGEVAC SV 500 B at 50 Hz (60 Hz curves at the end of the section)

Ordering Information

SOGEVAC SV 500 B 50/60 Hz

| | |
|---|---------------------------|
| <p>SOGEVAC SV 500 B ¹⁾ air cooled, without oil filter, with thermal switch (pump) with 3 phase motor (Japan), JIS motor with PTC sensors 200 V + 10% - 15%, 50/60 Hz, 15 kW Inlet: DN 100 PN / DN 100 ISO-K Exhaust: DN 100 ISO-K</p> | Part No. 960 852 V |
| <p>with 3 phase motor (Europe), IEC motor with PTC sensors 380 V ± 5% / 400 V ± 10% / 690 V ± 10%/ 415 V ± 5%, 50 Hz, 11 kW 50 Hz operation only Inlet: DN 100 PN / DN 100 ISO-K Exhaust: DN 100 ISO-K</p> | Part No. 960 853 V |
| <p>with 3 phase motor (US), NEMA motor with PTC sensors 400 V ± 10%, 50 Hz, 15 hp / 230 V ± 10% / 460 V ± 10%, 60 Hz, 15 hp Inlet: 4" ASA 150 / DN 100 ISO-K Exhaust: 4" ASA 150 / DN 100 ISO-K</p> | Part No. 960 855 V |
| <p>water cooled, without oil filter, with thermal switch (pump) with 3 phase motor (Japan), JIS motor with PTC sensors 200 V + 10% - 15%, 50/60 Hz, 15 kW Inlet: DN 100 PN / DN 100 ISO-K Exhaust: DN 100 ISO-K</p> | upon request |
| <p>with 3 phase motor (Europe), IEC motor with PTC sensors 380 V ± 5% / 400 V ± 10% / 690 V ± 10%/ 415 V ± 5%, 50 Hz, 11 kW 50 Hz operation only Inlet: DN 100 PN / DN 100 ISO-K Exhaust: DN 100 ISO-K</p> | upon request |
| <p>with 3 phase motor (US), NEMA motor with PTC sensors 400 V ± 10%, 50 Hz, 15 hp / 230 V ± 10% / 460 V ± 10%, 60 Hz, 15 hp Inlet: 4" ASA 150 / DN 100 ISO-K Exhaust: 4" ASA 150 / DN 100 ISO-K</p> | upon request |
| Other voltages/frequencies ²⁾ | upon request |
| Filling with special oil ²⁾ | upon request |

¹⁾ Junction box with six terminals for star/delta circuit

²⁾ Please indicate when ordering a pump

Note: Further pump options upon request (for example, water cooled pumps)

Ordering Information**SOGEVAC SV 500 B****50/60 Hz**

| Accessories | |
|--|--|
| Adapter for Roots pump Roots adapter 1000 Roots adapter 2000 | Part No. 971 432 340 Part No. 971 432 350 |
| Oil drain valve | Part No. 711 30 114 |
| Gas ballast kit electromagnetic, 24 V DC | Part No. 971 438 170 |
| Gas ballast, standard manual | Part No. 971 446 490 |
| 2. gas ballast valve electromagnetic, 24 V DC manual | Part No. 971 438 160 Part No. 971 438 340 |
| Exhaust filter monitoring gauge | Part No. 951 94 |
| Oil level check | Part No. 971 425 760 |
| Temperature switch | standard |
| Water cooling with thermostatic valve | upon request |
| Intake kit DN 100 ISO-K | standard |
| Exhaust filter overpressure switch | Part No. 712 36 360 |
| Oil filter bypass | Part No. 712 36 390 |
| Spare Parts | |
| Oil filter, standard | Part No. 714 05 310 |
| Exhaust filter AFE SV630/SV750B/SV300B (6 are required) | Part No. 971 431 120 |
| Intake filter element Paper Metal Activated charcoal Polyester | Part No. 710 35 242 Part No. 710 37 734 Part No. 710 37 724 Part No. 712 61 508 |
| Seal kit FPM (FKM) | Part No. 971 437 310 |
| Repair kit, complete | Part No. 971 437 320 |
| Generator kit | Part No. 971 437 330 |
| Maintenance kit | Part No. 971 437 340 |