

SOGEVAC SV 300 B



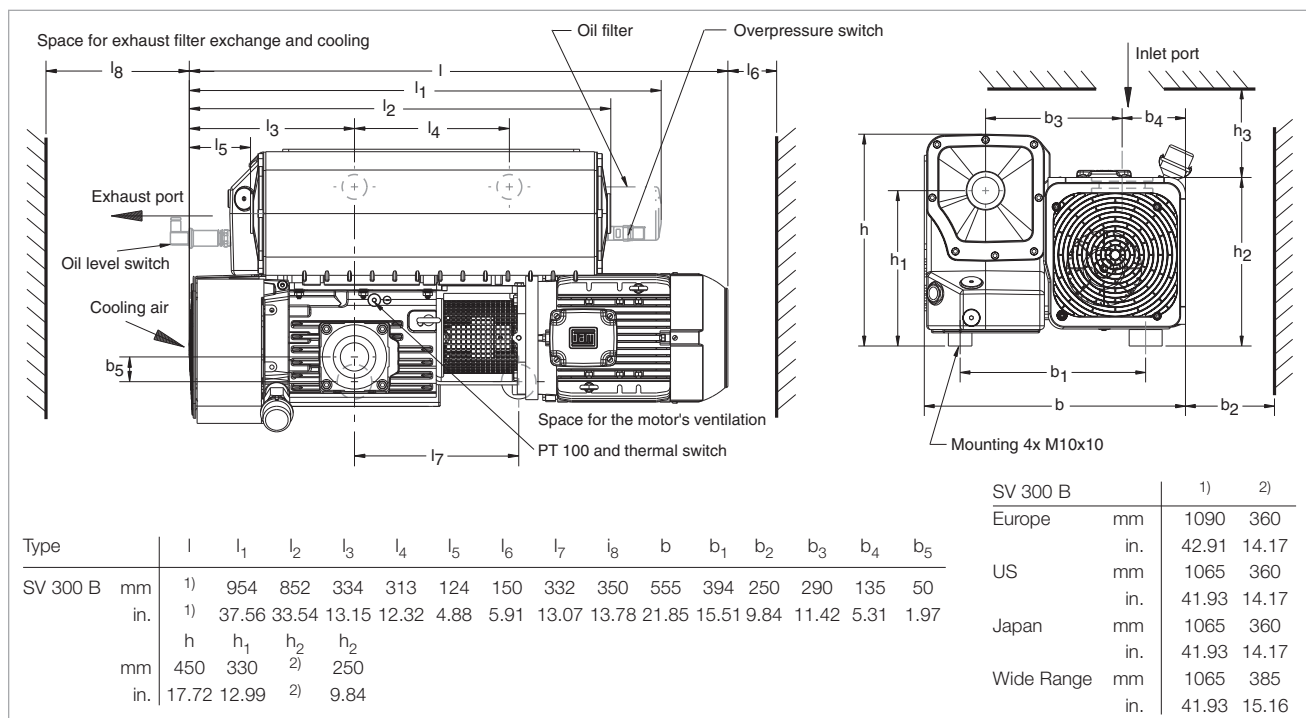
SOGEVAC SV 300 B

Advantages to the User

- Lowest pump temperature on the market: ideal for harsh applications. Optimal oil life time thus reached
- 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)
- Variant concept
- Best ultimate pressure
- Big oil volume for long oil life time

Typical Applications

- Coating systems and load locks
- Oil purification
- Plastic & rubber injection presses
- Heat treatment / Metallurgy
- Lamination
- ATEX and O₂ applications
- ... and more



Dimensional drawing for the SOGEVAC SV 300 B, European version

Technical Data

SOGEVAC SV 300 B

		50 Hz	60 Hz
Nominal speed ¹⁾	m ³ x h ⁻¹ (cfm)	280 (165)	340 (200)
Pumping speed (according to PNEUROP) ¹⁾	m ³ x h ⁻¹ (cfm)	240 (141)	290 (171)
Ultimate partial pressure without gas ballast ¹⁾	mbar (Torr)	≤ 0.08 (≤ 0.06)	≤ 0.08 (≤ 0.06)
Ultimate total pressure with gas ballast ¹⁾	mbar (Torr)	≤ 0.7 (≤ 0.5)	≤ 0.7 (≤ 0.5)
Water vapor tolerance	with standard gas ballast ¹⁾	30 (23)	40 (30)
	with big gas ballast ²⁾	60 (45)	70 (53)
Water vapor capacity	with standard gas ballast	5.4 (5.7)	7.4 (7.8)
	with big gas ballast	10.0 (10.6)	12.5 (13.2)
Noise level (according to DIN 466535) ³⁾	dB(A)	70	74
Admissible ambient temperature	°C (°F)	12 to 40 (54 to 104)	12 to 40 (54 to 104)
Motor power 3 ~ (with IEC Euro motor) ⁴⁾	kW (hp)	5.5 (7.5)	6.3 (8.6)
Mains voltage and frequency 3 ~ motor	V	see Ordering Information	see Ordering Information
Nominal speed	min ⁻¹ (rpm)	1500 (1500)	1800 (1800)
Type of protection	IP	55	55
Isolation class 3 ~ 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)	8.5 (9.0) / 11.5 (12.2)	8.5 (9.0) / 11.5 (12.2)
Net weight (with oil filling) dependant on the motor	kg (lbs)	200 (430)	200 (430)
Dimensions (L x W x H)	mm (in.)	1090 x 555 x 450 (42.91 x 21.85 x 17.72)	1090 x 555 x 450 (42.91 x 21.85 x 17.72)
Connections ⁵⁾			
Intake, Thread	G or NPT	2"	2"
Exhaust, Thread	G or NPT	2"	2"

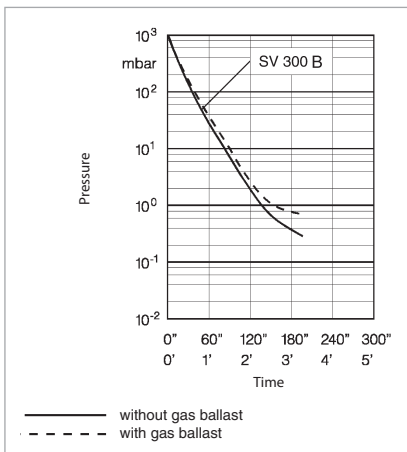
¹⁾ To DIN 28 400 and following numbers

²⁾ Ordering Information see Section "Accessories"

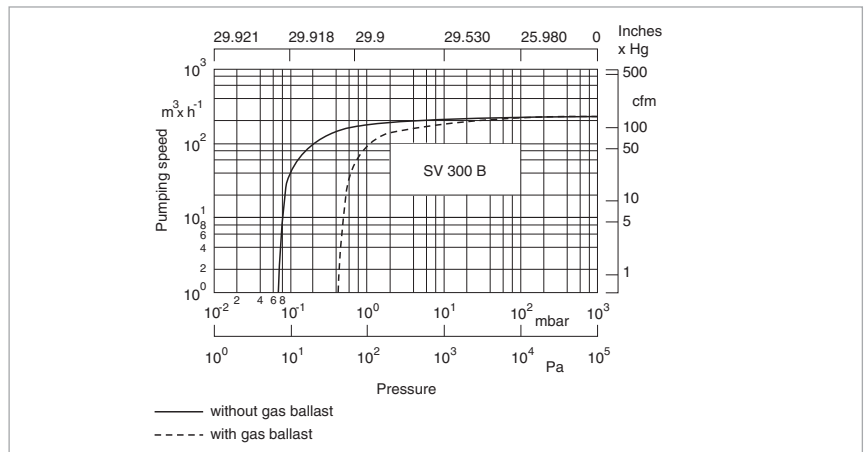
³⁾ Operated at the ultimate pressure without gas ballast, free-field measurement at a distance of 1 m (3.5 ft)

⁴⁾ Versions with NEMA motor have 10 hp motors

⁵⁾ Pumps with European and Japanese motors have G, pumps with US (NEMA) motors have NPT



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



Pumping speed characteristics of the SOGEVAC SV 300 B at 50 Hz (60 Hz curves at the end of the section)

SOGEVAC SV 300 B

50/60 Hz

Ordering Information

SOGEVAC SV 300 B ¹⁾ with oil filter with three-phase motor, without gas ballast, 230/400 V ± 10%, 50 Hz and 460 V ± 10%, 60 Hz (CEI) ²⁾	Part No. 960 700
with small gas ballast, 230/400 V ± 10%, 50 Hz and 460 V ± 10%, 60 Hz (CEI) ²⁾	Part No. 960 701
208 V ± 10%, 230/460 V ± 10%, 60 Hz and 400 V ± 10%, 50 Hz (NEMA) ²⁾	Part No. 960 706
200 V + 10% - 15%, 50/60 Hz (JIS) ¹⁾	Part No. 960 711 V
with standard gas ballast, 230/400 V ± 10%, 50 Hz and 460 V ± 10%, 60 Hz (CEI) ²⁾	Part No. 960 702
208 V ± 10%, 230/460 V ± 10%, 60 Hz and 400 V ± 10%, 50 Hz (NEMA) ²⁾	Part No. 960 707
200 V + 10% - 15%, 50/60 Hz (JIS) ¹⁾	Part No. 960 712
with big gas ballast, 230/400 V ± 10%, 50 Hz and 460 V ± 10%, 60 Hz (CEI) ²⁾	Part No. 960 703
208 V ± 10%, 230/460 V ± 10%, 60 Hz and 400 V ± 10%, 50 Hz (NEMA) ²⁾	Part No. 960 708
200 V + 10% - 15%, 50/60 Hz (JIS) ¹⁾	Part No. 960 713 V
with Wide range motor, 200 V - 15% to 230 V + 10% / 380 to 400 V ± 10%, 50 Hz, CTP; 5.5 kW & 200 V - 15% to 230 V + 10% / 380 to 400 V ± 10% and 460 V ± 10%, 60 Hz, CTP; 6.6 kW	
with small gas ballast	Part No. 960 716 V ³⁾
with standard gas ballast	Part No. 960 717 ³⁾
with big gas ballast	Part No. 960 718 ³⁾

¹⁾ Pumps with European and Japanese motors have G, pumps with US (NEMA) have NPT

²⁾ IEC motor (Europe) 50/60 Hz have IP 55, NEMA motor have TEFC

²⁾ F and P inlet

Connections (thread and plugs) provided for:

- G 3/8" for external oil filtration
- oil level sensor (vibration)
- thermostatic valve
- temperature sensor PT100 and switch

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

Ordering Information

SOGEVAC SV 300 B 50/60 Hz

Accessories	
Adaptor for Roots pump ^{1), 2)} RUVAC 501 (BR 2) RUVAC 1001 (BR 2)	Part No. 971 463 880 Part No. 971 463 890
Mounting pedestal for fitting to a Roots pump	Part No. 971 456 590
Oil level monitor ^{1), 2)} (several types are available)	upon request
Thermal switch ²⁾	Part No. 971 463 930
Resistance thermometer PT 100 sensor ²⁾	Part No. 971 464 020
Exhaust filter gauge, mechanical ^{1), 2)}	Part No. 951 94
Exhaust filter monitoring switch, electric ¹⁾	upon request
Manual gas ballast kit ²⁾ (incl. small, standard and big)	Part No. 971 464 130
Gas ballast valve, electromagnetic 24 V DC ^{1), 2)}	upon request
Two gas ballast valves ¹⁾	upon request
Water cooling with thermostatic valve ¹⁾	upon request
Oil filter bypass ^{1), 2)}	Part No. 712 30 570
Spare Parts	
Oil filter	Part No. 710 18 850
Exhaust filter cartridge (3x required) AFE SV 300 B - SV 750 B	Part No. 971 431 120
Vanes (set of 3 pieces)	Part No. 971 446 880
Set of gaskets FPM (FKM) (standard)	Part No. 971 464 950
Repair kit complete	Part No. 971 464 960
Maintenance kit complete	Part No. 971 464 970
Generator complete G 2" NPT 2"	Part No. 971 447 390 Part No. 971 458 970

¹⁾ Please indicate when ordering a pump

²⁾ Can be retrofitted