PROVAC SALES
PHONE: 831-462-8900 FAX: 831-462-3536 WWW.PROVAC.COM

Leybold SP-250
Technical Specifications

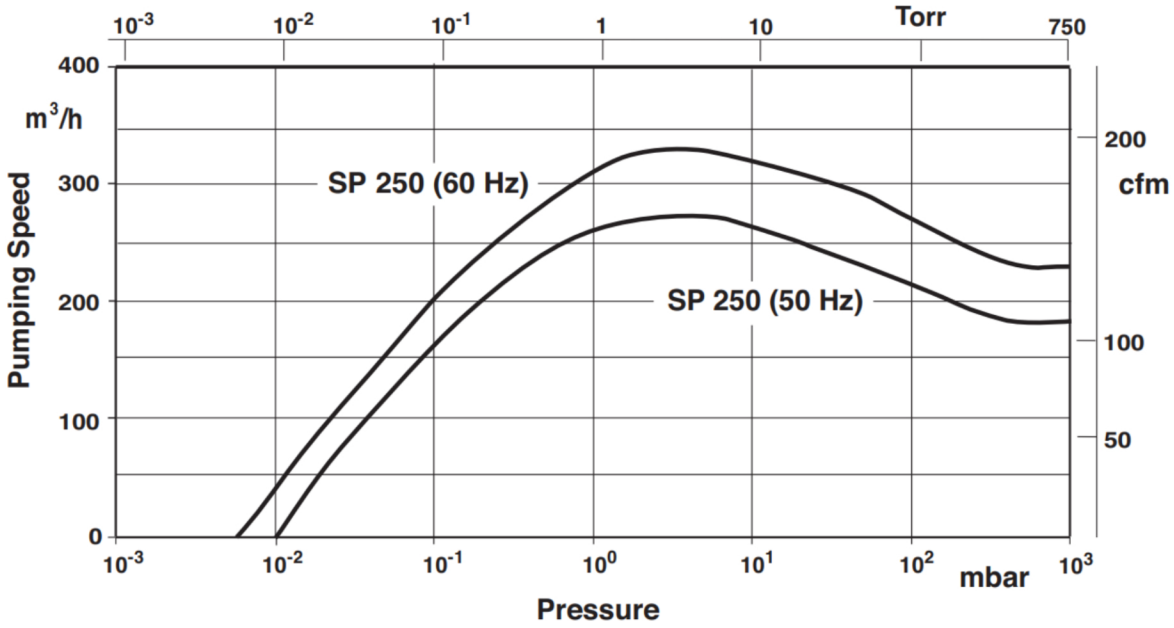
		50 Hz	60 Hz
Effective pumping speed	m³/h (cfm)	270 (157)	330 (194)
Ultimate pressure, total	mbar (Torr)	≤ 0.01 (≤ 0.0075)	≤ 0.005 (≤ 0.0038)
Permissible intake pressure, max.	mbar (Torr)	1030 (773)	1030 (773)
Maximum exhaust pressure with reference to the ambient pressure		$p_{ex} = p_{amb}$ + 200 mbar (150 Torr) – 50 mbar (37 Torr)	$p_{ex} = p_{amb}$ + 200 mbar (150 Torr) – 50 mbar (37 Torr)
Permissible ambient temperature	°C (°F)	+10 to +40 (+50 to +104)	+10 to +40 (+50 to +104)
Water vapour tolerance (with gas ballast)	mbar (Torr)	60 (45)	75 (56)
Water vapour capacity (with gas ballast)	kg/h (gal/h)	10 (2.7)	18 (4.9)
Installation location		up to 3000 metres (9.800 feet) (above sea level)	up to 3000 metres (9.800 feet) (above sea level)
Cooling		Air	Air
Power supply at operating voltage	ΔΔ Δ	32.0 A / 200 V (cos phi 0.88) 16.0 A / 400 V (cos phi 0.88)	31.5 A / 210 V (cos phi 0.88) 15.5 A / 460 V (cos phi 0.88)
Nominal power	kW (HP)	7.5 (10.0)	7.5 (10.0)
Power consumption at ultimate pressure	kW (HP) kW (HP)	5.9 (8.0) at 3-ph. 200 V / 400 V 6.5 (8.8) at 3-ph. 500 V	7.2 (9.8) at 3-ph. 200 V / 400 V –
Energy efficiency class		IE 2	IE 2
Motor rotational speed	rpm	2920	3505
Type of protection	IP	55	55
Thermal protection class		F	F
Lubricant filling (LVO 210)	l	7	7
Intake flange, standard Clamping flange Bolt flange Bolt flange		ISO 1609-1986 (E)-63 (DN 63 ISO-K) [1] ASME B 16.5 NPS 3 class 150 EN 1092-2-PN 6 – DN 65	ISO 1609-1986 (E)-63 (DN 63 ISO-K) [1] ASME B 16.5 NPS 3 class 150 EN 1092-2-PN 6 – DN 65
Exhaust flange, standard Clamping flange		ISO 1609-1986 (E)-63 (DN 63 ISO-K)	ISO 1609-1986 (E)-63 (DN 63 ISO-K)
Exhaust flange, optional Clamping flange Bolt flange Bolt flange Bolt flange		ISO 1609-1986 (E)-63 (DN 63 ISO-K) [1] ASME B 16.5 NPS 3 class 150 EN 1092-2-PN 16 – DN 65 EN 1092-2-PN 6 – DN 65	ISO 1609-1986 (E)-63 (DN 63 ISO-K) [1] ASME B 16.5 NPS 3 class 150 EN 1092-2-PN 16 – DN 65 EN 1092-2-PN 6 – DN 65
Materials (components in contact with the gas)		Aluminum, aluminum anodic oxidised, C steel, CrNi steel, grey cast-iron, FPM (FKM) ((Viton))	Aluminum, aluminum anodic oxidised, C steel, CrNi steel, grey cast-iron, FPM (FKM) ((Viton))
Weight, approx.	kg (lbs)	450 (992)	450 (992)
Dimensions (W x D x H)	mm (in.)	1350 x 530 x 880 (53.1 x 20.9 x 34.6)	1350 x 530 x 880 (53.1 x 20.9 x 34.6)
Noise level [2]	dB(A)	67	72

[1] This flange is required when ISO-K flanges are to be connected (Part No. 267 47)
[2] With connected exhaust gas line at ultimate pressure

PROVAC SALES
PHONE: 831-462-8900 FAX: 831-462-3536 WWW.PROVAC.COM

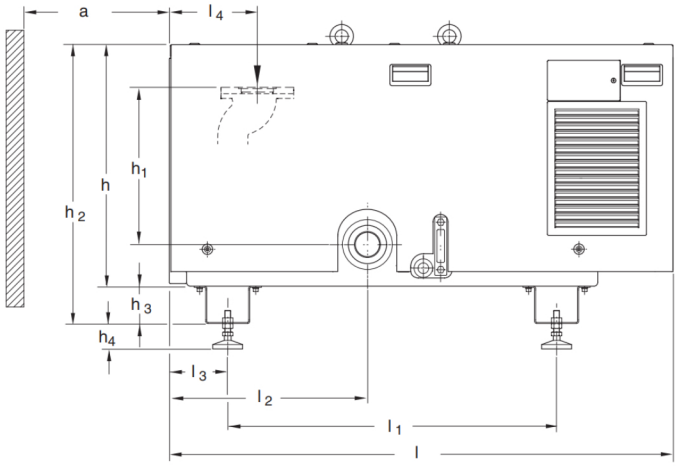
Leybold SP-250

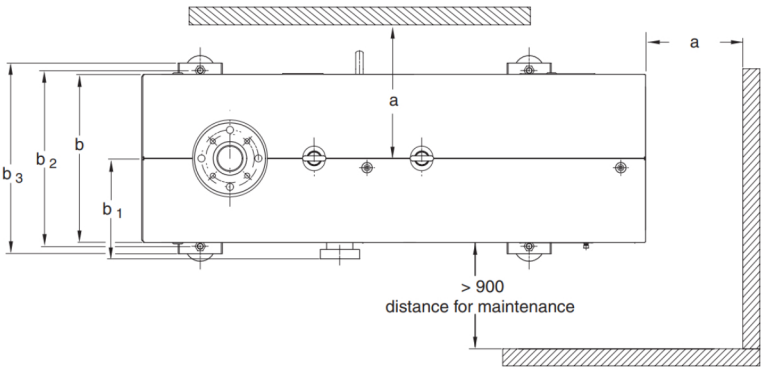
Pumping Curves



Effective pumping speed of the SCREWLINE SP 250 for air, without gas ballast (50/60 Hz)

Dimensions





	a	b	b_1	b_2	b_3
mm	> 500	450	268	470	510
in.	> 19.69	17.72	10.55	18.50	20.08

	h	h_1	h_2	h_3	h_4
mm	646	385	746	100	68 – 75
in.	25.43	15.16	29.37	3.94	2.68 – 2.95

	l	l_1	l_2	l_3	l_4
mm	1348	880	529	156	236
in.	53.08	34.65	20.83	6.14	9.29

PROVAC SALES
Phone: 831-462-8900 Fax: 831-462-3536 www.provac.com

Leybold SP-250

Features & Benefits

- SP-GUARD monitors vital parameters
- rapid cleaning of pump chamber leads to minimum downtimes
- low internal temperatures helps avoid deposits
- minimum operating costs
- directly air cooled, no need for cooling water
- no seal gas needed for standard applications
- no oil in pump chamber; no contaminated oil disposal
- gear oil change only every 2 years
- multi-flange for all commonly used pipe connections
- silencing hoods for further reduction of noise emissions

Applications

- food processing • vacuum coating • lamination • loadlock chambers
- mechanical engineering • automotive industry • metallurgy/furnaces
- crystal pulling • degassing • electrical engineering • energy & welding technology • lamps/tubes manufacture • cooling & air conditioning
- chemistry/pharmaceuticals • chemical research laboratories • vacuum drying • freeze drying systems • environmental engineering • space simulation • packaging • medical technology • analytical engineering
- research & development • backing pump for HV-systems