



# Leybold WA/WAU-251, 501

## Technical Specifications

		WA/WAU 251		WA/WAU(H) 501	
		50 Hz	60 Hz	50 Hz	60 Hz
Nominal pumping speed <sup>1)</sup>	m <sup>3</sup> x h <sup>-1</sup> (cfm)	253.0 (149.0)	304.0 (179.0)	505.0 (297.4)	606.0 (357.0)
Max. effective pumping speed with backing pump	m <sup>3</sup> x h <sup>-1</sup> (cfm)	210.0 (123.7)	251.0 (148.0)	410.0 (241.0)	530.0 (312.0)
	TRIVAC	D 65 B	D 65 B	–	–
	SOGEVAC	–	–	SV 200	SV 200
Ultimate total pressure <sup>2)</sup>	mbar (Torr)	< 8 x 10 <sup>-4</sup> (< 6 x 10 <sup>-4</sup> )	< 8 x 10 <sup>-4</sup> (< 6 x 10 <sup>-4</sup> )	< 4 x 10 <sup>-2</sup> (< 3 x 10 <sup>-2</sup> )	< 4 x 10 <sup>-2</sup> (< 3 x 10 <sup>-2</sup> )
Max. permissible pressure difference during continuous operation <sup>3)</sup>	mbar (Torr)	80.0 (60.0)	80.0 (60.0)	80.0 (60.0)	80.0 (60.0)
Leak rate, integral	mbar x l x s <sup>-1</sup>	< 5 x 10 <sup>-4</sup>	< 5 x 10 <sup>-4</sup>	< 5 x 10 <sup>-4</sup>	< 5 x 10 <sup>-4</sup>
Mains supply	V	200-240	200-240	200-240	200-240
	V	380-400	380-480	380-400	380-480
Thermal class		F	F	F	F
Permissible ambient temperatures	°C	+5 to +40	+5 to +40	+5 to +40	+5 to +40
	(°F)	(+ 41 to +104)	(+ 41 to +104)	(+ 41 to +104)	(+ 41 to +104)
Motor power	kW (hp)	1.1 (1.5)	1.1 (1.5)	2.2 (3.0)	2.2 (3.0)
Energy efficiency class		IE 2	IE 2	IE 2	IE 2
Nominal speed, approx.	rpm	3000	3600	3000	3600
Max. permissible speed	rpm	3600	3600	3600	3600
Type of protection	IP	55	55	55	55
ATEX protection category <sup>4)</sup>		Category 3i	Category 3i	Category 3i	Category 3i
Lubricant for the bearing chamber <sup>5)</sup>	vertical pumping action, approx.	0.6 (0.63)	0.6 (0.63)	0.8 (0.85)	0.8 (0.85)
	horizontal pumping action, approx.	0.45 (0.48)	0.45 (0.48)	0.7 (0.74)	0.7 (0.74)
Lubricant of the shaft sealing ring housing	l (qt)	0.6 (0.63)	0.6 (0.63)	1.0 (1.06)	1.0 (1.06)
Connection flanges	DN	63 ISO-K	63 ISO-K	63 ISO-K	63 ISO-K
Materials (materials in contact with the gas)		C steel, CrNi steel, grey cast iron, FPM (FKM)	C steel, CrNi steel, grey cast iron, FPM (FKM)	C steel, CrNi steel, grey cast iron, FPM (FKM)	C steel, CrNi steel, grey cast iron, FPM (FKM)
Weight WA / WAU	kg	85.0 / 89.0	85.0 / 89.0	128.0 / 133.0	128.0 / 133.0
	(lbs)	(187.4 / 196.2)	(187.4 / 196.2)	(282.2 / 293.3)	(282.2 / 293.3)
Noise level <sup>6)</sup>	dB(A)	< 62	< 64	< 65	< 67



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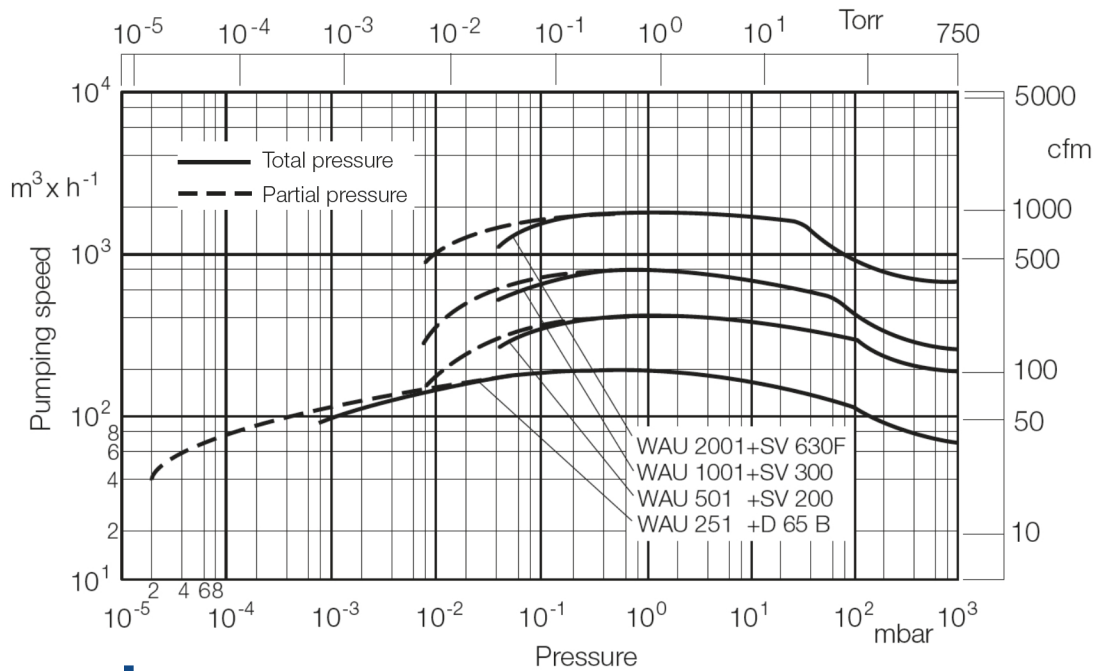
## SALES

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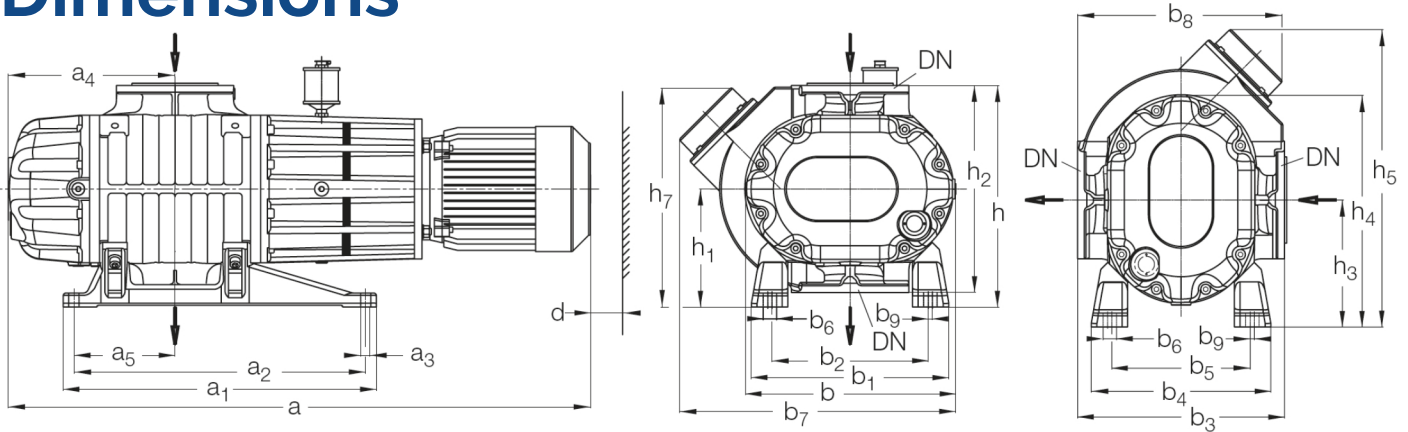
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# Leybold WA/WAU-251, 501 Pumping Curves



## Dimensions



Type		DN	a <sup>1)</sup>	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	a <sub>4</sub>	a <sub>5</sub>	a <sub>6</sub>	b		
WA/WAU 251	mm	63	732	405	365	14	209	120	194	250		
	in.		28.82	15.94	14.37	0.55	8.23	4.72	7.64	9.84		
WA/WAU 501	mm	63	830	486	450	14	237	155	218	310		
	in.		32.68	19.13	17.72	0.55	9.33	6.10	8.58	12.20		
			b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	b <sub>4</sub>	b <sub>5</sub>	b <sub>6</sub>	b <sub>7</sub> <sup>2)</sup>	b <sub>8</sub>	b <sub>9</sub>	d
WA/WAU 251	mm		270	210	280	230	170	24	305	285	7.5	50
	in.		10.63	8.27	11.02	9.06	6.69	0.94	12.01	11.22	0.30	2.00
WA/WAU 501	mm		299	229	320	271	201	24	390	313	7.5	50
	in.		11.77	9.02	12.60	10.67	7.91	0.94	15.35	12.32	0.30	2.00
			h	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub> <sup>2)</sup>	h <sub>6</sub>	h <sub>7</sub>		
WA/WAU 251	mm		300	160	280	180	306	360	330	307		
	in.		11.81	6.30	11.02	7.09	12.05	14.17	12.99	12.09		
WA/WAU 501	mm		340	180	320	194	348	430	370	332		
	in.		13.39	7.09	12.60	7.48	13.70	16.93	14.57	13.07		



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## Leybold WA/WAU-251, 501 Features & Benefits

- reliable & trouble-free
- sealing rings & their housing can be readily replaced
- easy to exchange with custom motors
- integrated pressure equilization line for protection against overloading
- conversion from vertical to horizontal pumping action can be done
- provided with directly flange-mounted air-cooled, 3 phase motors

## Applications

- vacuum coating • chemistry • pharmaceutical • metallurgy • furnaces
- packaging • central vacuum supply systems • freeze drying • electrical engineering • mechanical engineering • automotive industry

