

WEBSTER

WEBSTER WRB SERIES



THREE
LOBES ROTARY
ROOTS BLOWER
VACUUM PUMP





WEBSTER WRB SERIES

Key benefits of WEBSTER Three Lobes Blower

Smoother and stable airflow

- The three-lobe design ensure a more even distribution of air, resulting in a consistent flow with more stable and predictable airflow.

Reduced Pulsation noise

- This design minimizes noise and vibration compared to two lobes blowers making them quieter in operation reducing noise pollution in surrounding environment.

Improved energy efficiency

- It allows for a more efficient use of energy by optimize airflow and reducing internal leakage.

Longer life span

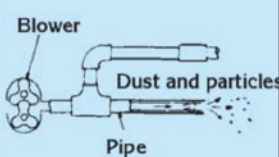
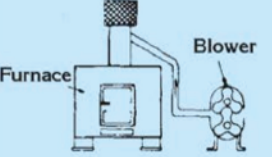
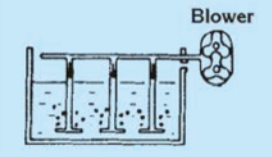
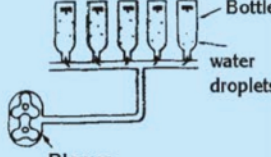
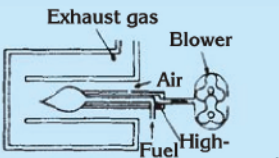
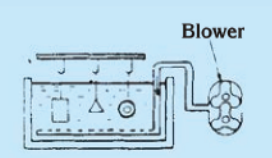
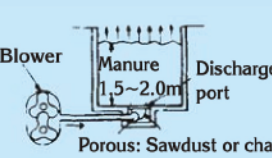
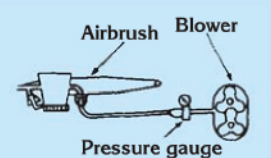
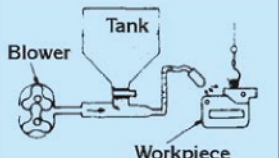
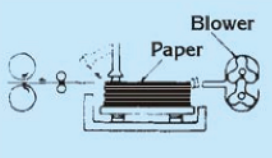
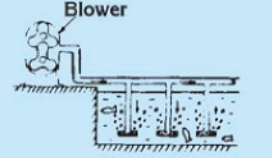
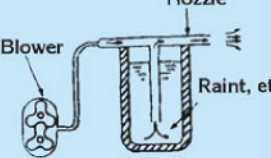
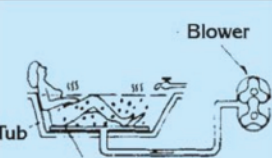
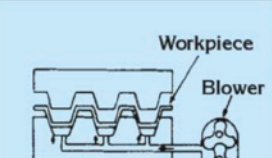
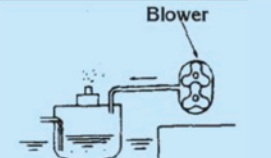
- The combination of reduced vibration, higher energy efficiency and smooth operation can lead to a longer lifespan for the blower.

Oil-Free operation

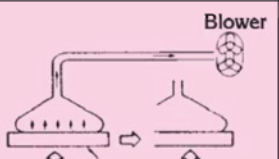
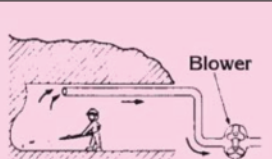
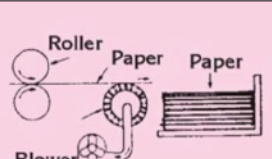
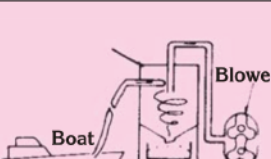
- Many three lobes blower is designed for oil-free operation, ensuring clean air and gas for various industrial applications.

APPLICATION OF ROOTS BLOWER

FOR PRESSURE OPERATION

PIPE CLEANING	FURNACE	PURIFICATION TANK	BOTTLE WASHER
 Used to remove dust and rust when replacing piping or conducting periodic inspections.	 The blower can help boost burn performance and promote exhaust gas removal.	 Used to agitate sediment and for purification at water treatment plants.	 Used to remove water droplets remaining inside bottles after washing.
GAS BURNER	PLATING TANK	FERTILIZER PRODUCTION USING MANURE FERMENTATION	AIRBRUSH
 High-pressure discharge air can be used to disperse the fuel.	 To improve the quality of plating, air is fed into the tank to recirculate the electrolyte. The Roots blower is used as the air source.	 Used to hasten fermentation by feeding air.	 High-pressure discharge air containing no oil is extremely well-received for airbrush applications.
SANDBLASTING	PRINTING PRESS PAPER FEED	FISHERY POND ENZYME SUPPLY	SPRAYING
 Used as the air source for sandblasting.	 Operations are simplified by using discharge air to separate, align, and feed the paper.	 Used for underwater enzyme supply in comparatively shallow ponds.	 Used to supply high-pressure discharge air containing no oil to the sprayer.
BACKWASH	THERAPEUTIC BATH	STAMPING DIE	BALLAST PUMP
 Used as a backwash for filters.	 Widely used in hospitals and hotels for healthy bath aeration.	 Used to remove the stamped workpiece from the die.	 Used for liquid chemical ship lowering and other types of ballast pumping.

FOR VACUUM OPERATION

ABSORBING CONVEYANCE	CONSTRUCTION SITE	CONVEYING PAPER	PARTICLES TRANSPORT
 It can convey relatively light materials by absorbing them.	 Can be used partial disposal of powders or poisonous gases.	 Conveying paper in printing machines.	 Used for air transfer of pellet material.



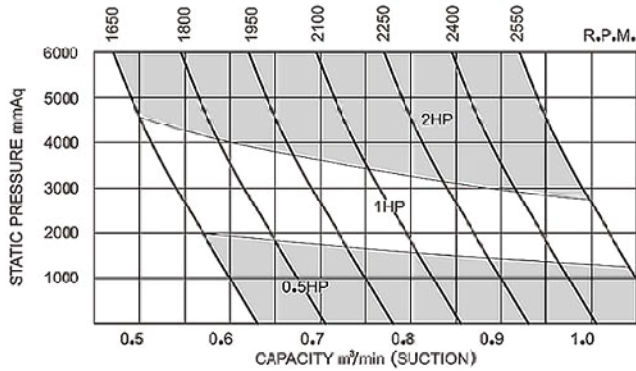
WEBSTER WRB SERIES

PERFORMANCE TABLE

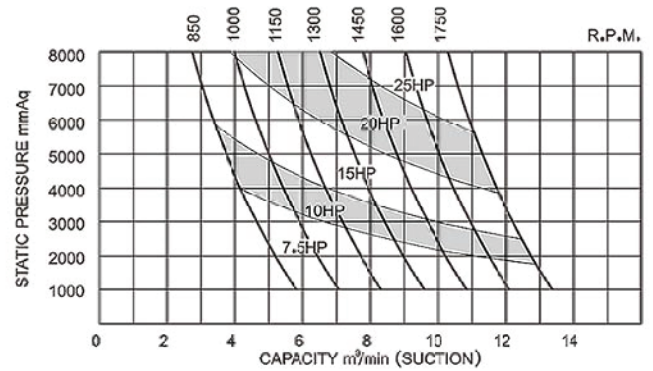
TYPE	RPM	Qs(m³/min)						PRESSURE(mmAq)						La(Kw)					
		1000mmAq		2000mmAq		3000mmAq		4000mmAq		5000mmAq		6000mmAq		7000mmAq		8000mmAq			
		Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La	Qs	La		
WRB-40	1650	0.60	0.19	0.57	0.37	0.54	0.53	0.51	0.67	0.49	0.81	0.48	0.94						
	1800	0.68	0.21	0.64	0.40	0.61	0.57	0.59	0.74	0.57	0.88	0.55	1.02						
	1950	0.75	0.23	0.71	0.43	0.69	0.62	0.66	0.80	0.64	0.96	0.62	1.11						
	2100	0.83	0.24	0.79	0.47	0.76	0.67	0.74	0.86	0.71	1.03	0.70	1.19						
	2250	0.90	0.26	0.86	0.50	0.84	0.72	0.81	0.92	0.79	1.11	0.77	1.28						
	2400	0.97	0.28	0.94	0.53	0.91	0.77	0.88	0.98	0.86	1.18	0.85	1.36						
	2550	1.05	0.30	1.01	0.57	0.98	0.81	0.96	1.04	0.94	1.25	0.92	1.45						
WRB-50	850	0.99	0.41	0.79	0.80	0.64	1.16	0.50	1.51	0.38	1.84	0.29	2.15	0.21	2.45	0.15	2.74		
	1000	1.31	0.48	1.11	0.94	0.96	1.37	0.82	1.77	0.70	2.16	0.61	2.53	0.53	2.88	0.47	3.22		
	1150	1.63	0.56	1.44	1.08	1.28	1.57	1.15	2.04	1.02	2.49	0.93	2.91	0.86	3.32	0.79	3.71		
	1300	1.95	0.63	1.76	1.22	1.61	1.78	1.47	2.31	1.34	2.81	1.25	3.29	1.18	3.75	1.12	4.19		
	1450	2.27	0.70	2.08	1.36	1.93	1.98	1.79	2.57	1.67	3.13	1.58	3.67	1.50	4.18	1.44	4.67		
	1600	2.60	0.77	2.40	1.50	2.25	2.19	2.11	2.84	1.99	3.46	1.90	4.05	1.82	4.61	1.76	5.16		
	1750	2.92	0.85	2.72	1.64	2.57	2.39	2.43	3.11	2.31	3.78	2.22	4.43	2.14	5.05	2.08	5.64		
WRB-65	850	2.07	0.62	1.89	1.21	1.71	1.76	1.55	2.29	1.41	2.78	1.29	3.26	1.19	3.71	1.09	4.15		
	1000	2.58	0.73	2.41	1.42	2.22	2.07	2.07	2.69	1.93	3.27	1.81	3.83	1.71	4.37	1.60	4.88		
	1150	3.10	0.84	2.93	1.64	2.74	2.38	2.58	3.09	2.45	3.77	2.33	4.41	2.22	5.03	2.12	5.62		
	1300	3.62	0.95	3.45	1.85	3.26	2.69	3.10	3.50	2.96	4.26	2.84	4.99	2.74	5.68	2.64	6.35		
	1450	4.13	1.06	3.96	2.06	3.77	3.01	3.62	3.90	3.48	4.75	3.36	5.56	3.26	6.34	3.15	7.08		
	1600	4.65	1.17	4.48	2.28	4.29	3.32	4.13	4.30	4.00	5.24	3.88	6.14	3.77	6.99	3.67	7.81		
	1750	5.17	1.28	5.00	2.49	4.81	3.63	4.65	4.71	4.51	5.73	4.39	6.71	4.29	7.65	4.19	8.55		
WRB-80	850	3.24	1.12	2.87	2.14	2.54	3.08	2.23	3.94	1.95	4.73	1.70	5.47	1.48	6.15	1.28	6.79		
	1000	4.14	1.32	3.77	2.52	3.44	3.62	3.13	4.63	2.85	5.57	2.60	6.44	2.38	7.24	2.18	7.99		
	1150	5.04	1.51	4.67	2.90	4.34	4.16	4.03	5.33	3.75	6.40	3.50	7.40	3.28	8.33	3.08	9.19		
	1300	5.94	1.71	5.57	3.27	5.24	4.71	4.93	6.02	4.65	7.24	4.40	8.37	4.18	9.41	3.98	10.39		
	1450	6.84	1.91	6.47	3.65	6.14	5.25	5.83	6.72	5.55	8.07	5.30	9.33	5.08	10.50	4.88	11.58		
	1600	7.74	2.11	7.37	4.03	7.04	5.79	6.73	7.41	6.45	8.91	6.20	10.30	5.98	11.58	5.78	12.78		
	1750	8.64	2.30	8.27	4.41	7.94	6.33	7.63	8.11	7.35	9.75	7.10	11.26	6.88	12.67	6.68	13.98		
WRB-100	850	5.80	1.57	5.19	3.00	4.65	4.31	4.16	5.51	3.74	6.63	3.36	7.66	3.03	8.62	2.74	9.51		
	1000	7.06	1.84	6.45	3.53	5.91	5.07	5.42	6.49	5.00	7.80	4.62	9.01	4.29	10.14	4.00	11.19		
	1150	8.32	2.12	7.71	4.05	7.17	5.83	6.68	7.46	6.26	8.97	5.88	10.36	5.55	11.66	5.26	12.86		
	1300	9.58	2.40	8.97	4.58	8.43	6.59	7.94	8.43	7.52	10.14	7.14	11.71	6.81	13.18	6.52	14.54		
	1450	10.84	2.67	10.23	5.11	9.69	7.35	9.20	9.41	8.78	11.31	8.40	13.06	8.07	14.70	7.78	16.22		
	1600	12.10	2.95	11.49	5.64	10.95	8.11	10.46	10.38	10.04	12.47	9.66	14.42	9.33	16.22	9.04	17.90		
	1750	13.36	3.23	12.75	6.17	12.21	8.87	11.72	11.35	11.30	13.64	10.92	15.77	10.59	17.74	10.30	19.57		
WRB-125	750	10.29	2.59	9.42	4.96	8.62	7.13	7.88	9.12	7.25	10.97	6.66	12.67	6.11	14.26	5.65	15.74		
	900	12.69	3.11	11.81	5.95	11.01	8.55	10.28	10.95	9.64	13.16	9.05	15.21	8.51	17.11	8.04	18.89		
	1050	15.08	3.63	14.20	6.94	13.41	9.98	12.67	12.77	12.03	15.35	11.44	17.74	10.90	19.97	10.44	22.04		
	1200	17.48	4.15	16.60	7.93	15.80	11.40	15.07	14.59	14.43	17.55	13.84	20.28	13.29	22.82	12.83	25.18		
	1350	19.87	4.66	18.99	8.92	18.19	12.83	17.46	16.42	16.82	19.74	16.23	22.81	15.69	25.67	15.23	28.33		
	1500	22.26	5.18	21.39	9.91	20.59	14.25	19.85	18.24	19.22	21.93	18.63	25.35	18.08	28.52	17.62	31.48		
	1650	24.66	5.70	23.78	10.90	22.98	15.68	22.25	20.07	21.61	24.13	21.02	27.88	20.48	31.38	20.01	34.63		
WRB-150	750	13.32	3.34	12.62	6.39	11.98	9.19	11.40	11.76	10.87	14.14	10.39	16.34	10.00	18.39	9.61	20.30		
	900	16.40	4.01	15.70	7.67	15.06	11.03	14.49	14.11	13.95	16.97	13.48	19.61	13.09	22.07	12.70	24.36		
	1050	19.49	4.68	18.79	8.95	18.15	12.86	17.58	16.47	17.04	19.80	16.57	22.88	16.18	25.75	15.78	28.41		
	1200	22.58	5.35	21.88	10.23	21.24	14.70	20.66	18.82	20.13	22.62	19.65	26.15	19.26	29.42	18.87	32.47		
	1350	25.66	6.02	24.96	11.50	24.33	16.54	23.75	21.17	23.21	25.45	22.74	29.42	22.35	33.10	21.96	36.53		
	1500	28.75	6.68	28.05	12.78	27.41	18.38	26.84	23.52	26.30	28.28	25.83	32.69	25.44	36.78	25.05	40.59		
	1650	31.84	7.35	31.14	14.06	30.50	20.21	29.92	25.88	29.39	31.11	28.91	35.96	28.52	40.46	28.13	44.65		
WRB-200	600	17.01	4.84	15.95	9.27	15.04	13.32	14.21	17.06	13.53	20.51	12.93	23.71	12.40	26.68	11.98	29.45		
	750	22.68	6.05	21.62	11.58	20.71	16.65	19.88	21.32	19.20	25.64	18.60	29.64	18.07	33.36	17.65	36.82		
	900	28.35	7.27	27.29	13.90	26.38	19.98	25.55	25.59	24.87	30.77	24.27	35.57	23.74	40.03	23.32	44.18		
	1050	34.02	8.48	32.96	16.22	32.05	23.32	31.22	29.85	30.54	35.89	29.94	41.49	29.41	46.70	28.99	51.55		
	1200	39.69	9.69	38.63	18.53	37.72	26.65	36.89	34.12	36.21	41.02	35.61	47.42	35.08	53.37	34.66	58.91		
	1350	45.36	10.90	44.30	20.85	43.39	29.98	42.56	38.38	41.88	46.15	41.28	53.35	40.75	60.04	40.33	66.27		
	1500	51.03	12.11	49.97	23.17	49.06	33.31	48.23	42.65	47.55	51.28	46.95	59.28	46.42	66.71	46.00	73.64		

PERFORMANCE CURVE

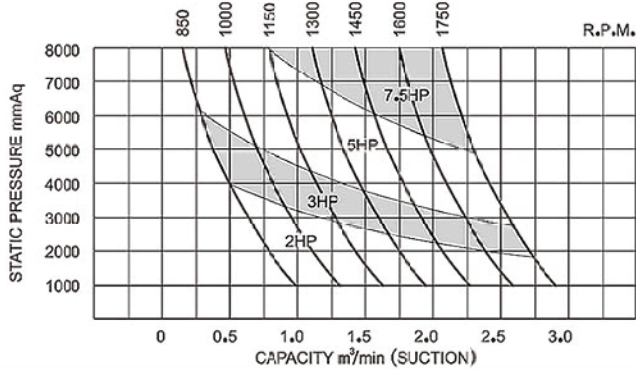
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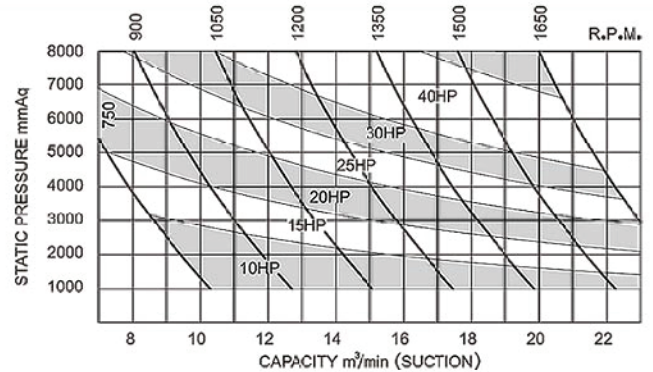
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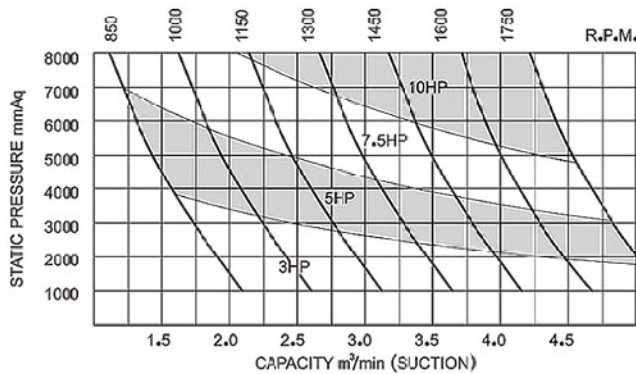
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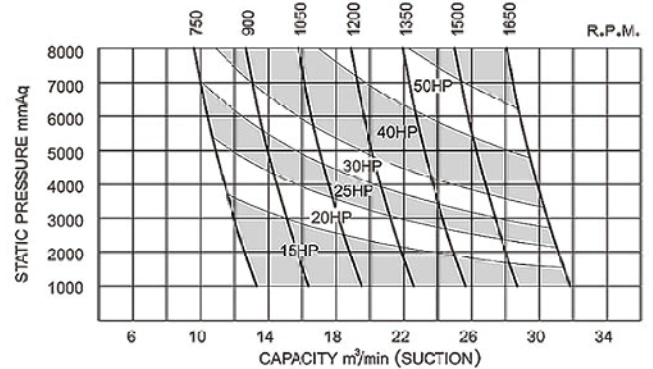
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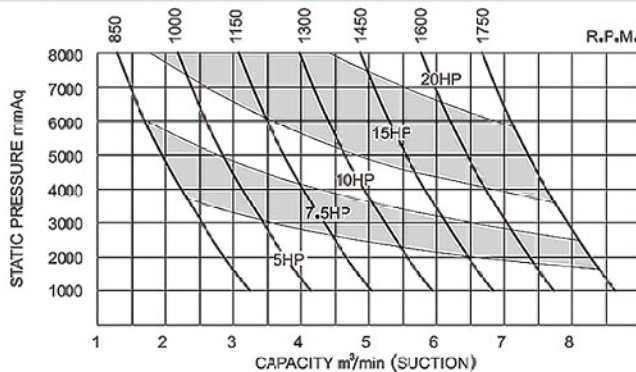
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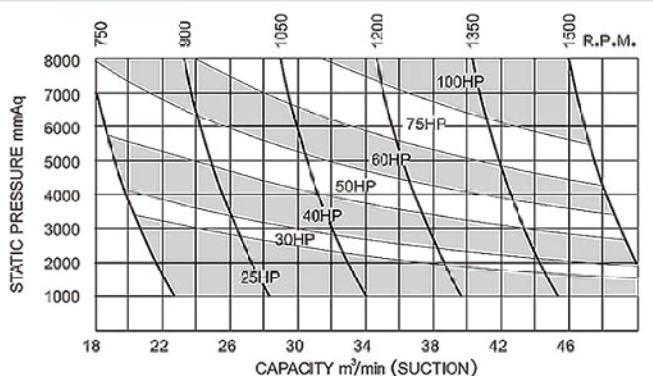
WRB-150



WRB-80



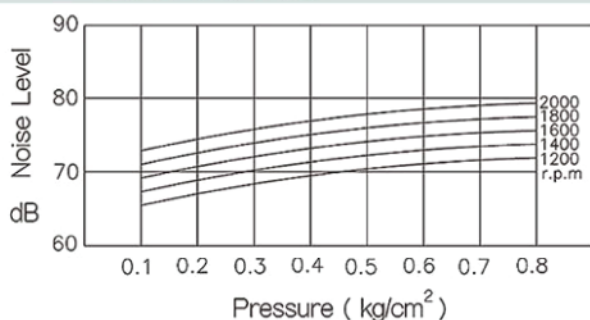
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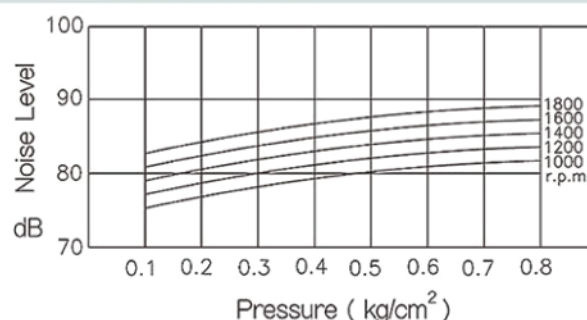
NOISE LEVEL

- NOISE LEVEL MEASURED AT DISTANCE 1 METER FROM THE BLOWER FITTED WITH STANDARD SILENCER.

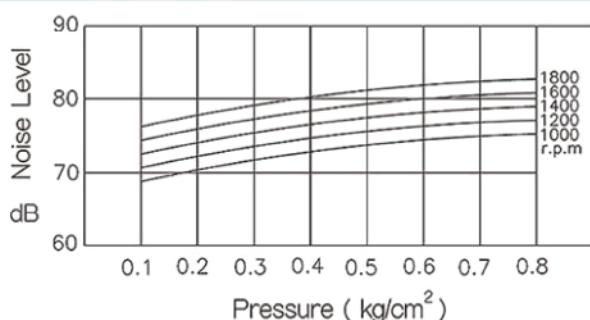
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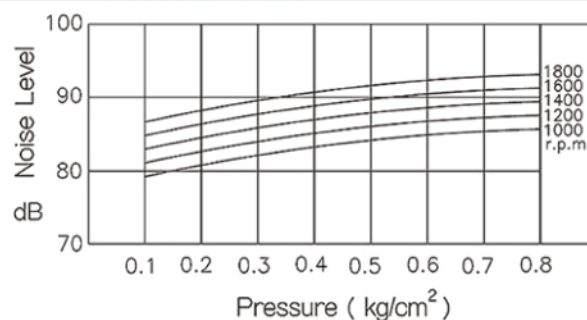
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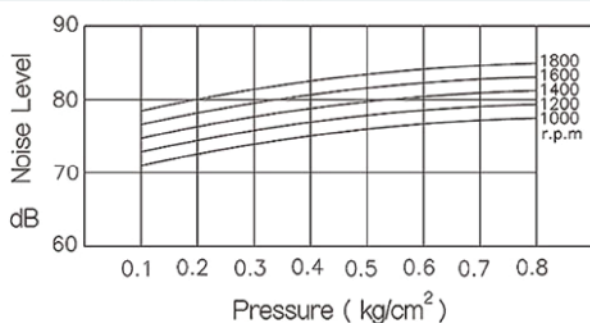
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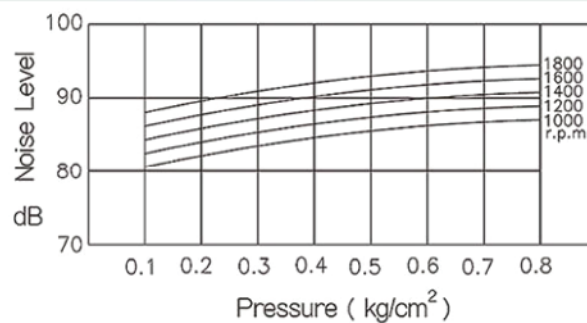
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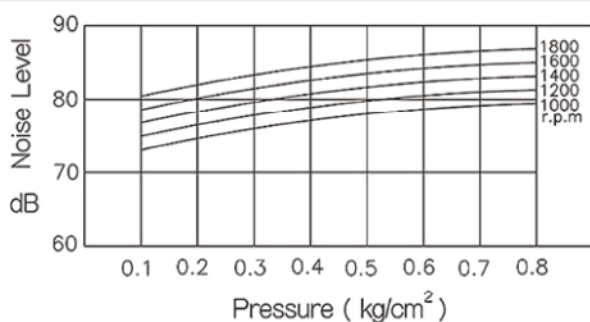
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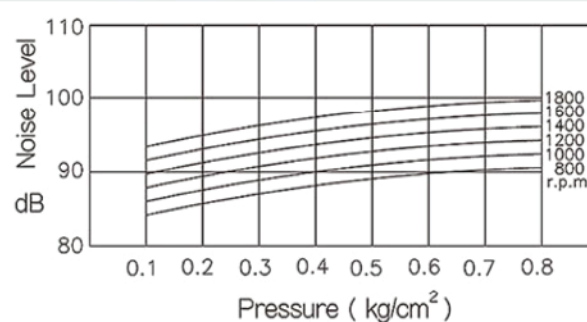
WRB-150



WRB-80

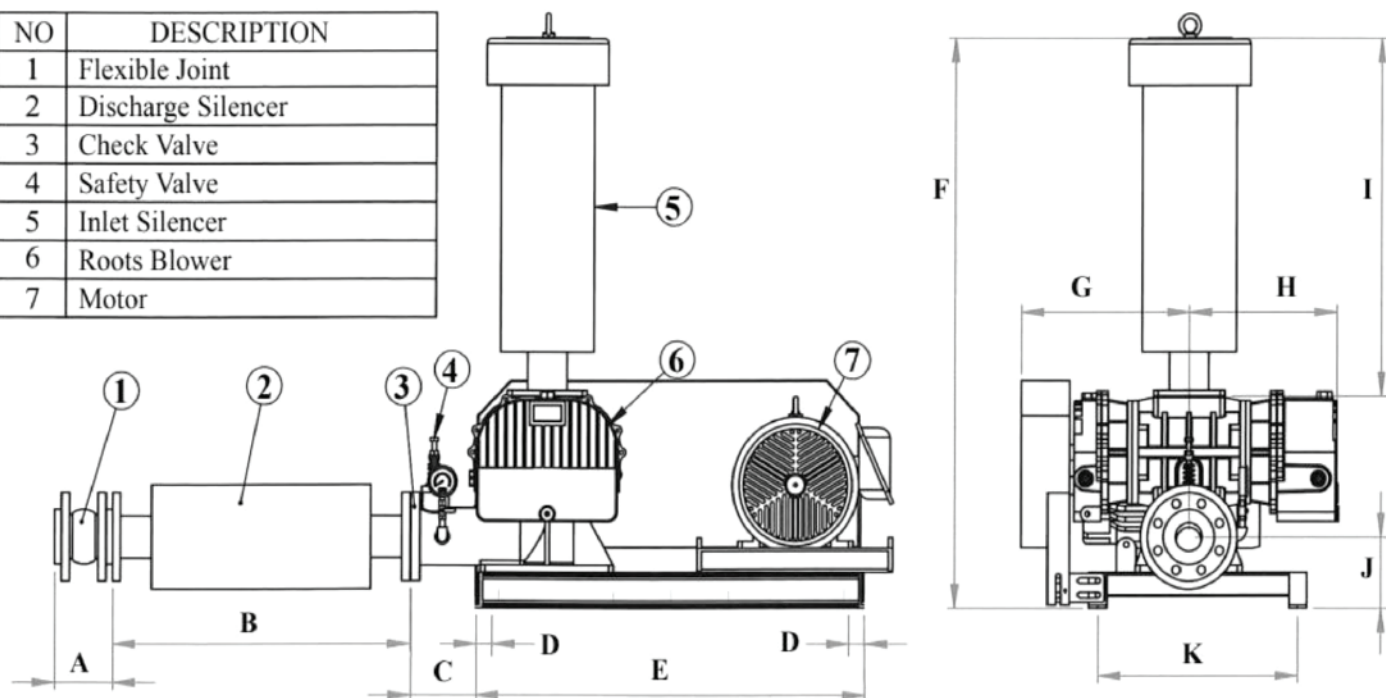


WRB-200



OUTLINE DIMENSIONS

NO	DESCRIPTION
1	Flexible Joint
2	Discharge Silencer
3	Check Valve
4	Safety Valve
5	Inlet Silencer
6	Roots Blower
7	Motor



OUTLINE DIMENSION DATA

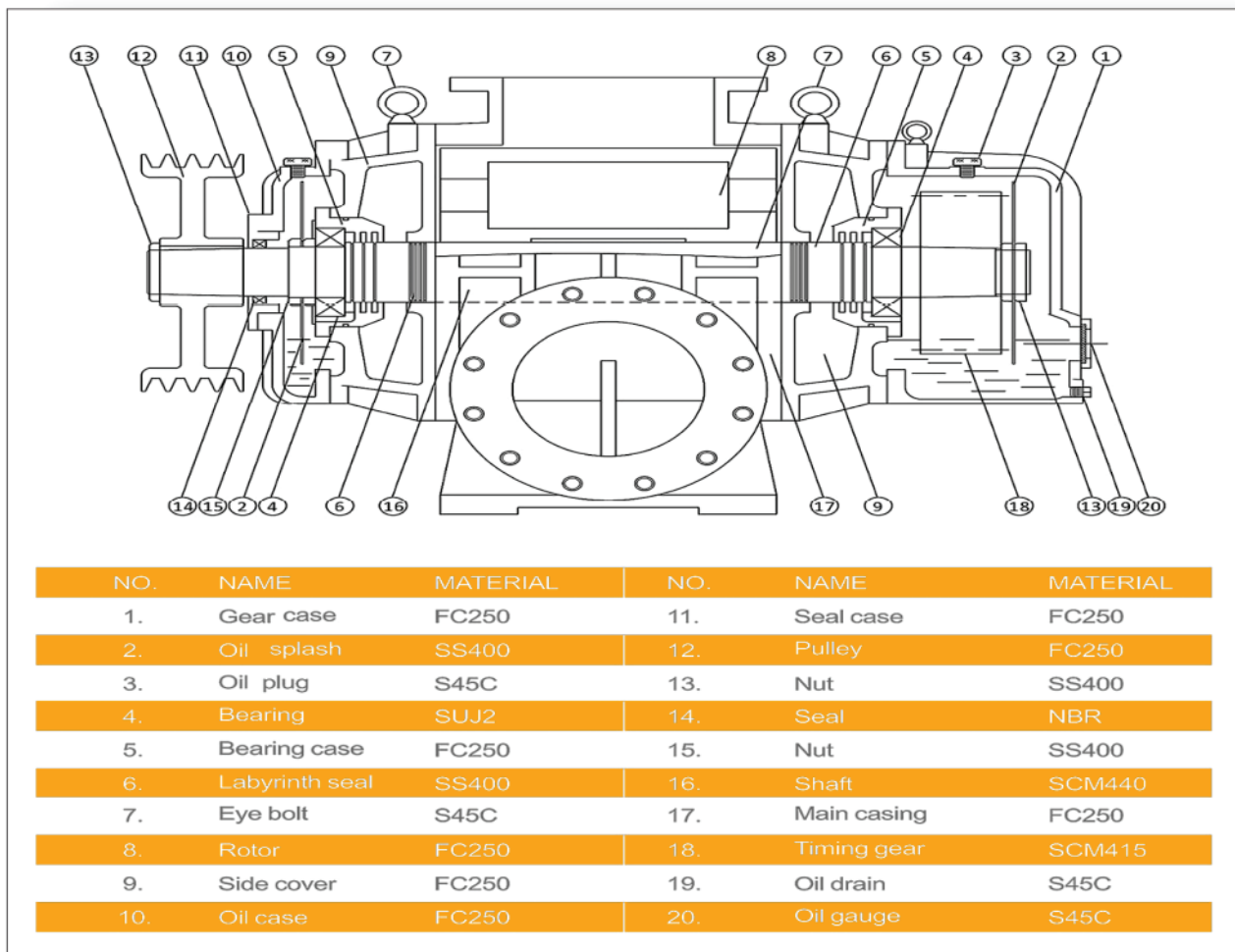
UNIT: mm

MODEL	A	B	C	D	E	F	G	H	I	J	K	WEIGHT (KG)
WRB 40	105	N/A	N/A	60	480	383	185	165	495	83	110	25
WRB 50	105	660	125	60	795	1090	285	240	650	165	400	76
WRB 65	115	660	140	60	815	1110	290	280	680	170	410	94
WRB 80	130	755	150	60	900	1270	355	320	780	185	410	167
WRB 100	150	755	160	60	955	1270	410	370	820	220	480	193
WRB 125	170	1190	190	80	1120	1435	485	445	1270	255	652	353
WRB 150	185	1190	210	80	1200	1905	530	510	1270	255	652	418
WRB 200	205	1735	260	100	1500	2805	595	515	2030	315	790	720

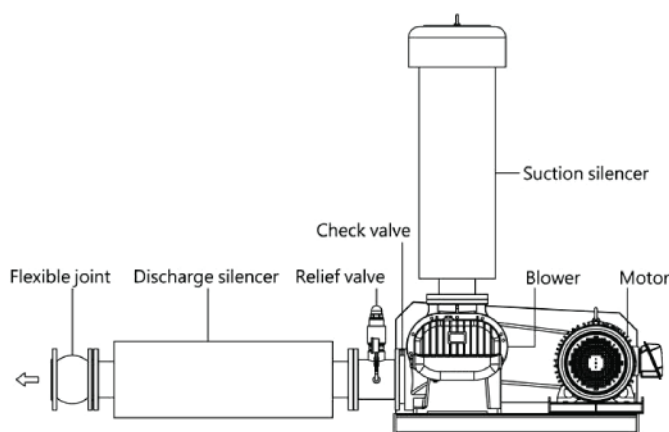
*Note: 1) The weight above is for blowers only, motors excluded.

2) The dimension and weight are approximately only.

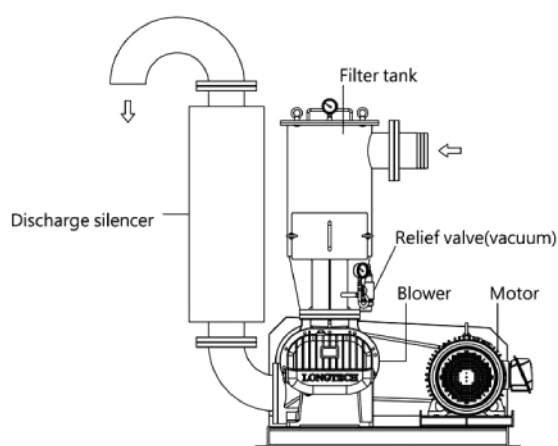
STRUCTURE & MATERIAL LIST



TYPICAL INSTALLATIONS OF AIR BLOWER & VACUUM PUMP



AIR BLOWER



VACUUM PUMP