



**ARUDHRA TECHNOLOGIES**

# PLUS



Roots Vacuum Pump  
Twin Lobe Roots Blowers  
PD Type Roots Blowers

## PRODUCT Catalogue



## BLOWER PERFORMANCE TABLE

MODEL	SPEED (RPM)	0.10 kg/cm <sup>2</sup>		0.20 kg/cm <sup>2</sup>		0.30 kg/cm <sup>2</sup>		0.40 kg/cm <sup>2</sup>		0.50 kg/cm <sup>2</sup>		0.60 kg/cm <sup>2</sup>		0.70 kg/cm <sup>2</sup>		Suction NB(mm)	Features
		m <sup>3</sup> /hr	BHP	m <sup>3</sup> /hr	BHP	m <sup>3</sup> /hr	BHP	m <sup>3</sup> /hr	BHP	m <sup>3</sup> /hr	BHP	m <sup>3</sup> /hr	BHP	m <sup>3</sup> /hr	BHP		
ZP-365	1000 1200 1440	51 65 80	0.43 0.52 0.60	42 56 71	0.70 0.84 0.98	35 49 64	0.96 1.16 1.35	29 44 58	1.23 1.47 1.72	24 38 53	1.48 1.70 2.06					40	Nosie Level 85+/-5 db(A)
ZP-350	1000 1200 1440	51 65 80	0.43 0.52 0.60	42 56 71	0.70 0.84 0.98	35 49 64	0.96 1.16 1.35	29 44 58	1.23 1.47 1.72	24 38 53	1.48 1.70 2.06					40	
ZP-450	800 1100 1440	52 83 118	0.6 0.8 1.1	40 71 106	0.9 1.2 1.6	31 62 96	1.2 1.6 2.1	23 54 89	1.5 2.0 2.7	16 47 89	1.8 2.4 3.0	10 2.1	4 2.4			40	
ZP-42	1000 1300 1600	77 108 109	0.7 1.0 1.2	67 98 128	1.1 1.4 1.8	59 90 120	1.5 1.9 2.4	52 83 114	1.9 2.4 3.0	46 77 108	2.2 2.9 3.6	40 71 102	2.6 3.4 4.2	35 66 97	3.0 3.9 4.8	40	
ZP-44	1000 1300 1600	112 157 202	0.9 1.2 1.5	97 142 187	1.5 1.9 2.4	85 130 175	2.0 2.6 3.3	75 120 165	2.6 3.4 4.1	66 111 156	3.1 4.1 5.8	58 103 148	3.7 4.8 5.9	51 96 141	4.2 5.5 6.7	65	
ZP-47	1000 1300 1600	209 290 372	1.6 2.1 2.6	183 264 346	2.6 3.4 4.2	162 244 326	3.6 4.7 5.8	146 227	4.6 6.0							80	
ZP-53	1000 1300 1500	187 254 299	1.6 2.0 2.4	171 239 284	2.4 3.1 3.6	160 227 272	3.2 4.2 4.8	150 217 262	4.0 5.2 6.0	141 208 253	4.8 6.3 7.3	133 200 245	5.7 7.3 8.5	125 193 238	6.5 8.4 9.7	65	
ZP-55	1000 1300 1500	234 321 378	1.8 2.3 2.6	211 296 356	2.8 3.6 4.2	194 280 338	3.9 5.8 5.8	179 265 323	4.9 6.4 7.4	166 252 310	6.0 7.8 8.9	154 241 298	7.0 9.1 10.5	143 230 288	8.1 10.5 12.1	80	
ZP-57	1000 1300 1500	327 449 530	2.2 2.8 3.3	295 417 498	3.6 4.7 5.5	271 392 473	5.1 6.7 7.7	250 372 453	6.6 8.6 9.3	232 353 434	8.1 10.5 12.1	216 337	9.5 12.4			100	
ZP-59	1000 1300 1500	457 622 732	3.0 3.9 4.5	419 584 694	5.0 6.5 7.5	390 555 665	7.0 9.1 10.5	366 531 640	9.0 11.7 13.5							100	
ZP-65	1000 1300 1600	300 413 525	2.4 3.1 3.8	270 382 494	3.7 4.8 6.0	247 359 471	5.1 6.6 8.1	227 339 451	6.4 8.4 10.3	210 322 434	7.8 10.2 12.5	194 306 418	9.2 11.9 14.7	179 292 404	10.5 13.7 16.9	80	
ZP-67	1000 1300 1600	454 622 791	3.0 4.0 4.9	410 578 746	5.1 6.6 8.1	376 544 712	7.1 9.3 11.4	347 515 684	9.2 11.9 14.7	322 490 658	11.2 14.6 17.9	299 467 635	13.3 17.2 21.2	278 446 615	15.3 19.9 24.5	100	
ZP-610	1000 1300 1600	607 832 1056	3.7 4.8 6.0	547 772 997	6.5 8.4 10.3	502 727 952	9.2 11.9 14.7	464 689 913	11.9 15.5 19.1	430 655 880	14.7 19.0 23.4	400 624 849	17.4 22.6 27.8	371 596 821	20.1 26.1 32.2	150	
ZP-615	1000 1300 1600	921 1258 1594	5.2 6.7 8.3	838 1175 1511	9.3 12.1 14.8	775 1111 1448	13.4 17.4 21.4	721 1057 1394	17.4 22.7 27.9							150	
ZP-76	1000 1300 1600	602 809 1015	3.8 4.9 6.1	567 773 980	6.3 8.2 10.1	539 746 952	8.8 11.5 14.1	516 723 929	11.3 14.7 18.1	496 702 909	13.8 18.8 22.1	477 684 890	16.3 21.2 26.2	461 667 874	18.9 24.5 30.2	100	
ZP-78	1000 1300 1600	700 1073 1348	4.6 6.0 7.4	748 1023 1298	8.0 10.4 12.8	709 985 1260	11.3 14.7 18.1	677 953 1228	14.7 19.1 23.5	649 924 1200	18.0 23.4 28.8	623 898 1174	21.4 27.8 34.2	600 875 1150	24.7 32.1 39.5	125	
ZP-710	1000 1300 1600	1000 1344 1688	5.5 7.1 8.8	938 1283 1627	9.7 12.6 15.5	892 1236 1580	13.8 18.0 22.1	852 1196 1540	18.0 23.4 28.8	817 1161 1506	22.2 28.9 35.5	786 1130 1474	26.4 34.3 42.2	757 1101 1445	30.6 39.7 48.9	150	
ZP-713	1000 1300 1600	1295 1742 2190	6.7 8.7 10.8	1214 1662 2109	12.2 15.8 19.5	1152 1599 2047	17.6 22.9 28.1	1100 1547 1994	23.0 29.9 36.8	1054 1501 1984	28.4 37.0 45.5	1012 1459 1906	33.9 44.0 54.2	974 1421	39.3 51.1	150	
ZP-717	1000 1200 1500	1696 2086 2671	8.8 10.6 13.2	1590 1980 2565	15.9 19.1 23.9	1508 1899 2484	23.0 27.6 34.5	1440 1830 2415	30.1 36.2 45.2							150	
ZP-89	1000 1200 1440	1076 1314 1600	8.3 10.0 12.0	1029 1267 1553	12.7 15.2 18.2	993 1231 1517	17.0 20.4 24.5	963 1201 1486	21.3 25.6 30.7	936 1174 1460	25.7 30.8 37.0	912 1150 1435	30.0 36.0 43.2	890 1128 1413	34.3 41.2 49.4	100	
ZP-812	1000 1200 1440	1439 1757 2139	9.8 11.8 14.1	1376 1695 2076	15.6 18.7 22.4	1328 1646 2028	21.4 25.7 30.8	1288 1606 1988	27.2 32.6 39.1	1252 1570 1952	33.0 39.6 47.5	1219 1538 1919	38.8 46.5 55.8	1190 1508 1890	44.6 53.5 64.2	125	
ZP-816	1000 1200 1440	1919 2343 2852	11.7 14.1 16.9	1835 2260 2769	19.5 23.3 28.8	1771 2195 2704	27.2 32.6 39.1	1717 2141 2650	34.9 41.9 50.3	1669 2093 2602	42.6 51.2 61.4	1626 2050 2559	50.4 60.4 72.5			200	
ZP-820	1000 1200 1440	2399 2929 3565	13.7 16.4 19.7	2294 2824 3461	23.3 28.0 33.6	2214 2744 3380	33.0 39.6 47.5	2146 2676 3313	42.6 51.2 61.4							200	
ZP-1012	1000 1200 1440	2460 3004 3657	14.9 17.9 21.5	2353 2897 3550	24.8 29.8 35.7	2271 2814 3467	34.7 41.7 50.0	2201 2745 3398	44.6 53.5 64.3	2140 2684 3336	54.5 65.4 78.5	2084 2628 3281	64.4 77.3 92.8	2034 2578 3230	74.3 89.2 107.1	150	
ZP-1016	1000 1200 1440	3306 4037 4914	18.3 22.0 26.4	3162 3893 4770	31.6 37.9 45.5	3051 3782 4659	44.9 53.9 64.7	2958 3689 4566	58.2 69.9 83.9	2875 3606 4483	71.6 85.9 103.0	2801 3532 4409	84.9 101.8 122.2	2733 3464 4341	98.2 117.8 141.4	200	
ZP-1020	1000 1200 1440	4229 5163 6285	22.0 26.4 31.7	4044 4979 6101	39.1 46.9 56.2	3902 4837 5959	56.1 67.3 80.8	3783 4718 5840	73.1 87.7 105.3	3678 4613 5734	90.1 108.2 129.8	3583 4518 5639	107.2 128.6 154.3				
SB-1024	1000 1200 1440	4967 6065 7382	25.0 30.0 36.0	4750 5848 7166	45.0 54.0 64.8	4584 5682 6999	65.0 78.8 93.6	4443 5541 6859	85.0 102.0 122.4	4320 5418 6735	105.0 126.0 151.2					300	
Air Blowers Gas Blower Water Cooled Acoustic Hood & Enclosures																	



## WATER COOLED BLOWERS

Water cooled series is similar in construction and performance except in the change of cooling arrangement. In water cooled blower the plates have water jackets around them where water is circulated, which dissipates the heat of compression generated and keeps internals cool.

Water cooled blowers are recommended for application where discharge pressure exceeds 6000 mm WG since it is essential to dissipate heat for efficient working and long life of the bearings and oil seals. Our water cooled blower available for discharge capacities upto 7000m<sup>3</sup>/hr and pressure upto 1 kg/cm<sup>2</sup> through single-staging.

Model	SPEED	.50 kg/cm3		.6kg/ cm3		.7kg/ cm3		.8kg/ cm3		.9kg/ cm3		1.0 kg/cm3		COOLING WATER	OPENING
	(RPM )	m3 /hr	BHP	m3 /hr	BHP	m3 /hr	BHP	m3 /hr	BHP	m3 /hr	BHP	m3 /hr	BHP		
53WC	950	132	4.6	124	5.4	116	6.2	110	7	103	7.8	97	8.6	4-5 LPM	65
	1200	186	5.8	178	6.8	170	7.8	163	8.7	154	9.7	151	10.7		
	1500	253	7.3	245	8.5	238	9.7	231	10.9	224	12.2	218	13.4		
55WC	950	154	5.7	142	6.7	132	7.7	122	8.8	112	9.8	103	10.8	4-5 LPM	80
	1200	224	7.2	212	8.4	201	9.7	191	10.9	181	12.2				
	1440	293	8.6	281	10.1	270	11.6	260	13.1						
65WC	1000	210	7.8	194	9.2	179	10.5	166	11.9	153	13.3	141	14.6	5-6 LPM	80
	1300	322	10.2	306	11.9	292	13.7	278	15.5	266	17.2	254	19		
	1600	434	12.5	418	14.7	404	16.9	390	19	378	21.2	366	23.4		
67WC	1000	322	11.2	299	13.3	278	15.3	258	17.3	240	19.4	223	21.4	5-6 LPM	125
	1300	490	14.6	467	17.2	446	19.9	427	22.5	408	25.2	391	27.9		
	1500	658	17.9	635	21.2	615	24.5	595	27.8	577	31	559	34.2		
610WC	1000	430	14.7	400	17.4	371	20.1	345	22.8	321	25.6	298	28.2	6-8 LPM	150
	1300	655	19	624	22.6	596	26.1	570	29.7	546	33.2				
	1500	805	22	774	26.1	746	30.2	720	34.3						
78WC	1000	649	18	623	21.4	600	24.7	578	28	557	31.4	537	34.7	6-8 LPM	125
	1300	924	23.4	898	27.8	875	32.1	853	3.5	832	40.8	813	45.2		
	1600	1200	28.8	1174	34.2	1150	39.5	1128	44.9	1108	50.2	1088	55.6		
710WC	1000	817	22.2	786	26.4	757	30.6	730	34.7	704	38.9	680	43.1	8-10 LPM	150
	1300	1161	28.9	1130	34.3	1101	39.7	1074	45.5	1049	50.6	1026	56		
	1600	1506	35.5	1474	42.2	1445	48.9	1418	55.6						
812WC	1000	1252	33	1219	38.8	1190	44.6	1162	50.4	1136	56.2	1111	61.9	10-12 LPM	125
	1200	1570	39.6	1538	46.5	1508	53.5	1480	60.4	1454	67.4	1430	74.3		
	1440	1952	47.5	1919	55.8	1890	64.2	186	72.5						
1012WC	1000	2140	54.5	2084	64.4	2034	74.3	1986	84.2	1942	94.2	1900	104.1	10-12 LPM	150
	1200	2684	65.4	2628	77.3	2578	89.2	2530	101	2486	113	2444	124.9		
	1440	3336	78.5	3281	92.8	3230	107	3183	121	3138	136	3096	149.8		
1016WC	1000	2875	71.6	2801	84.9	2733	98.2	2669	112	2609	125	2553	138.1	16-18 LPM	200
	1200	3606	85.9	3532	101.8	3464	118	3400	134	3340	150	3284	165.7		
	1440	4483	103	4409	122.2	4341	141	4277	161						

## AQUA BLOWERS FOR AQUACULTURE

We have introduced its new range of AQUA series twin lobe rotary air blowers to meet the growing demand for aquaculture requirements which essentially demand 100% oil free air. these blowers are totally dry machines where lubricating chambers are physically isolated from the main air chamber ensuring 100% oil free Air delivery. They deliver, practically, a constant flow rate irrespective of back pressures thereby maintaining dissolved oxygen levels.

### 100% OIL FREE DELIVERY

Model	CAPACITY	PRESSURE	RPM	HP	LINE SIZE	ORIENTATION
47AQUA	250	2000	1200	5HP	80	VF
59AQUA	550	2000	1200	7.5HP/10HP	100	VF
615AQUA	1050	2000	1200	12.5HP	150	VF

## OPERATING INSTRUCTIONS

MAKE SURE proper oil level are maintained in the gear Cover end.

CHECK OIL level every 40 hours of operation.  
Loss of oil should be replenished

FIRST OIL change should be done within the first 100 Operating hours and thereafter every 1000 hours or more often, if oil gets dirty. (OIL NO: SERVO/CASROL SAE90)

CHECK BELT tension every fortnight. Too tight belts would cause premature bearing failure while too loose belts would cause overheating of belts and pulleys

CHECK REGULARLY for any knocking or abnormal sound. High frequency sound indicates bearing trouble. Knocking sound indicates rotor timing upset. Contact "ZED PLUS BLOWERS" for necessary adjustments.

CLEAN AIR filter every fortnight. Chocked filter would result in excessive power consumption and overheating of blower. Replace filter every three months or earlier.

CHECK and CLEAN air silencer every month...



**ARUDHRA TECHNOLOGIES**

### ADDRESS

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