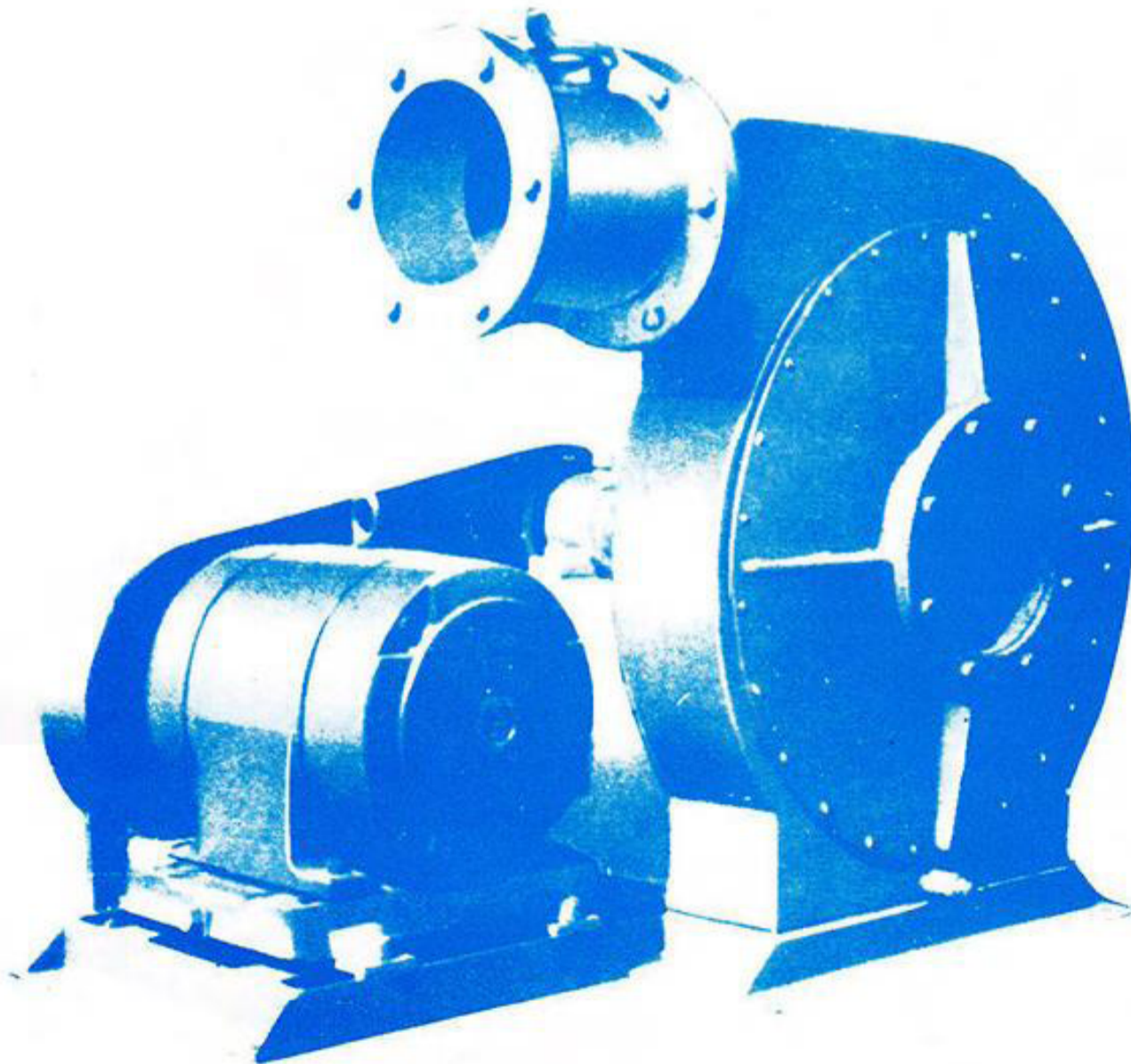


Wind Force System



TURBO FAN & TURBO BLOWERS

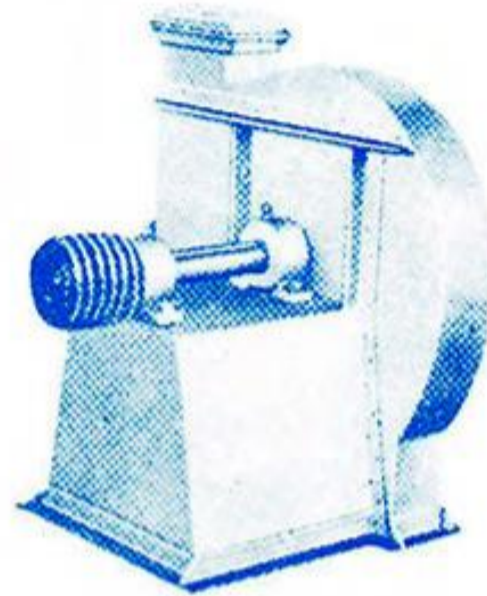


Furyoku Kiko Co., Ltd.

Email: info@wind-force.co.jp



Wind Turbo Blowers - Turbo Fan



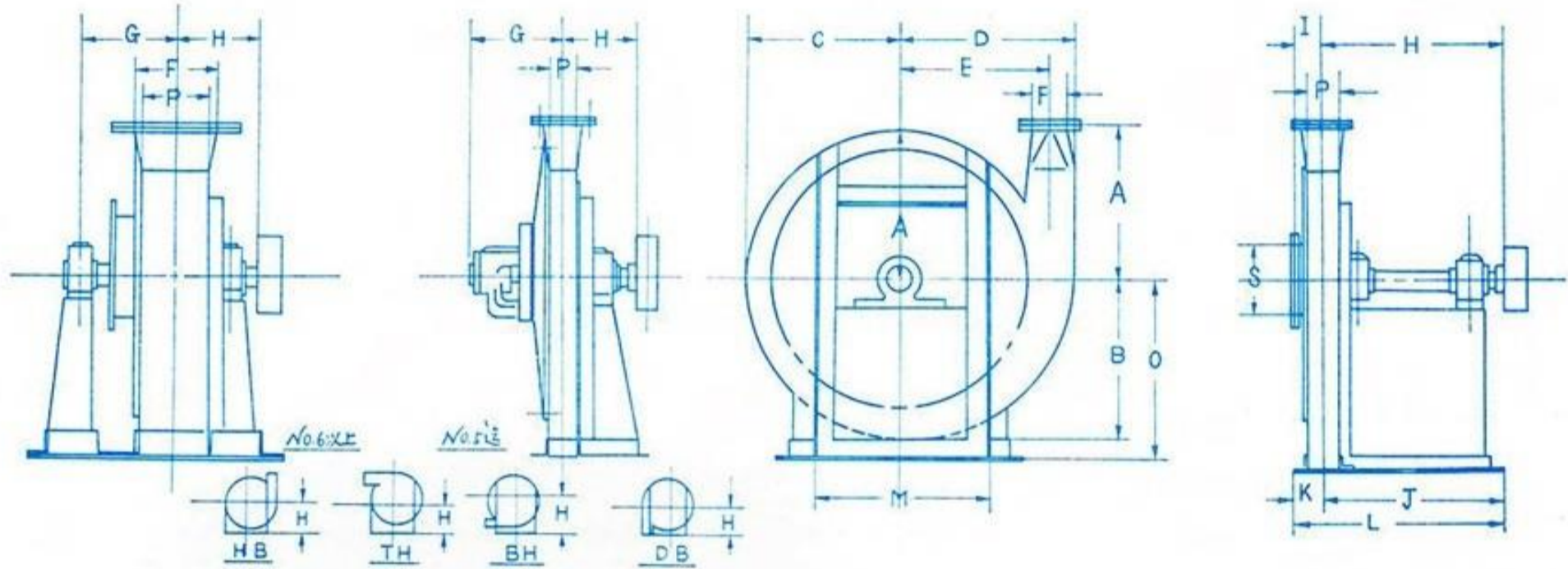
Turbo blower and turbo fan are products based on many years of research and experiments by professional engineers. It aims to create quiet and comfortable working environment.

Turbo blower is appropriate to work under pressure ranges from 500mmAq or more. The pressure is generated by the centrifugal force of the spinning air or gas through the propeller, like centrifugal pumps. With solid structure and non-vibrate, turbo blower operates economically and efficiently.

Turbo fan, one type of centrifugal blowers, can operate in maximum pressure of 400mmAq. Propeller is designed to work better under the condition demanding high air flow and higher performance. Furthermore, shaft power is a special structure to prevent overloading incidents. Turbo fan which has less number of blades and solid composition, would be used in high temperature or corrosive gas environment.



Approximate Dimensions Table of Tow Turbo Blower



Symbol No.	A	B	C	D	E	F	G	H	I
No. 2A	305	330	318	353	310	50	75 191	130 380	75
No. 2	355	380	370	395	350	50	90 196	130 420	90
No. 3	355	380	370	395	350	75	100 203	160 420	100
No. 4	360	400	380	420	350	100	110 203	160 465	110
No. 5	365	420	395	450	370	125	130 216	190 520	130
No. 6	380	430	400	460	370	156	150 330	220 550	150
No. 8	390	450	420	480	370	182	170 390	250 560	170
No. 10	410	462	430	511	380	253	190 450	300 590	190

J	K	L	M	O				P	S
				U B	T H	B H	D B		
400	65	465	350	370	360	395	345	50	127
440	68	508	360	420	410	435	395	56	152
450	73	523	360	420	410	435	395	66	160
500	93	593	420	450	430	470	410	85	175
556	97.5	647.5	420	470	445	500	420	95	200
570	123	693	450	495	465	525	445	115	225
590	145	735	500	515	485	545	455	165	252
625	165	790	550	530	495	580	475	200	280



TOW's Performances Table (V-Belt Driven, Gas Temperature 20°C)

Pres- sure	No.		No.2A	No. 2	No. 3	No. 4	No. 5	No. 6	No. 8	No.10	Blow Spd m/s	Suction Spd m/s	Peripheral Spd m/s
	Specification												
100	Air flow	m ³ /min	2.9	3.1	3.9	7.3	7.6	13.4	18.9	28.6	10~25	3~8	30~40
	Rotation Speed	r. p. m	1385	1184	1096	1068	1105	1060	1096	1020			
	Power	B. KW	0.12	0.12	0.12	0.22	0.25	0.38	0.52	0.81			
200	Air flow	m ³ /min	4.1	4.4	5.5	10.3	10.8	19.0	26.7	40.4	13~38	4~10	49~55
	Rotation speed	r. p. m	1960	1674	1550	1510	1560	1500	1550	1443			
	Power	B. KW	0.34	0.33	0.33	0.63	0.70	1.07	1.48	2.30			
300	Air flow	m ³ /min	5.1	5.4	6.7	12.6	13.2	23.3	32.7	49.5	16~46	5~13	60~67
	Rotation speed	r. p. m	2400	2050	1896	1850	1914	1838	1896	1768			
	Power	B. KW	0.60	0.60	0.60	1.15	1.28	1.98	2.72	4.21			
350	Air flow	m ³ /min	5.5	5.9	7.3	13.6	14.3	25.2	35.3	53.5	18~50	5~15	65~70
	Rotation speed	r. p. m	2590	2218	2050	2000	2064	1986	2050	1910			
	Power	B. KW	0.77	0.76	0.76	1.45	1.62	2.48	3.42	5.31			
400	Air flow	m ³ /min	5.9	6.3	7.8	14.5	15.3	27.0	37.8	57.2	19~54	6~16	70~80
	Rotation speed	r. p. m	2770	2370	2191	2132	2210	2122	2192	2042			
	Power	B. KW	0.93	0.93	0.93	1.77	1.98	3.04	4.20	6.51			
450	Air flow	m ³ /min	6.2	6.7	8.3	15.4	16.2	28.6	40.1	60.6	20~57	6~16	75~82
	Rotation speed	r. p. m	2940	2512	2325	2261	2342	2250	2325	2165			
	Power	B. KW	1.12	1.12	1.11	2.11	2.36	3.63	5.00	7.76			
500	Air flow	m ³ /min		7.0	8.70	16.3	17.0	30.1	42.3	63.9	21~59	6~21	80~86
	Rotation speed	r. p. m		2650	2450	2393	2468	2372	2570	2282			
	Power	B. KW		1.31	1.31	2.50	3.22	4.25	6.77	9.10			
550	Air flow	m ³ /min		7.4	9.1	17.0	17.8	31.6	44.3	67.0	22~63	7~18	80~90
	Rotation speed	r. p. m		2780	2571	2502	2468	2490	2570	2395			
	Power	B. KW		1.50	1.51	2.86	3.40	4.92	7.04	10.5			
600	Air flow	m ³ /min		7.7	9.5	17.8	18.6	33	46.3	70.0	23~65	7~19	85~95
	Rotation speed	r. p. m		2900	2685	2620	2700	2600	2685	2500			
	Power	B. KW		1.72	1.72	3.27	3.63	5.60	7.68	11.9			
650	Air flow	m ³ /min			9.9	18.5	19.4	34.3	48.2	72.8	24~68	7~20	89~98
	Rotation speed	r. p. m			2797	2718	2815	2705	2790	2600			
	Power	B. KW			1.93	3.66	4.10	6.32	8.65	13.5			
700	Air flow	m ³ /min			10.3	19.2	20.2	36.6	50	75.6	25~70	7.5~20	90~100
	Rotation speed	r. p. m			2900	2821	2920	2805	2900	2700			
	Power	B. KW			2.16	4.09	4.57	7.04	9.70	15.1			

Note 1: Shaft motor brake power is capable of increasing 10%-15% of value on the table. Note 2: Air flow can be increased to 45% in same machine.

Note 3: Direct types are designed separately.

Special notes:

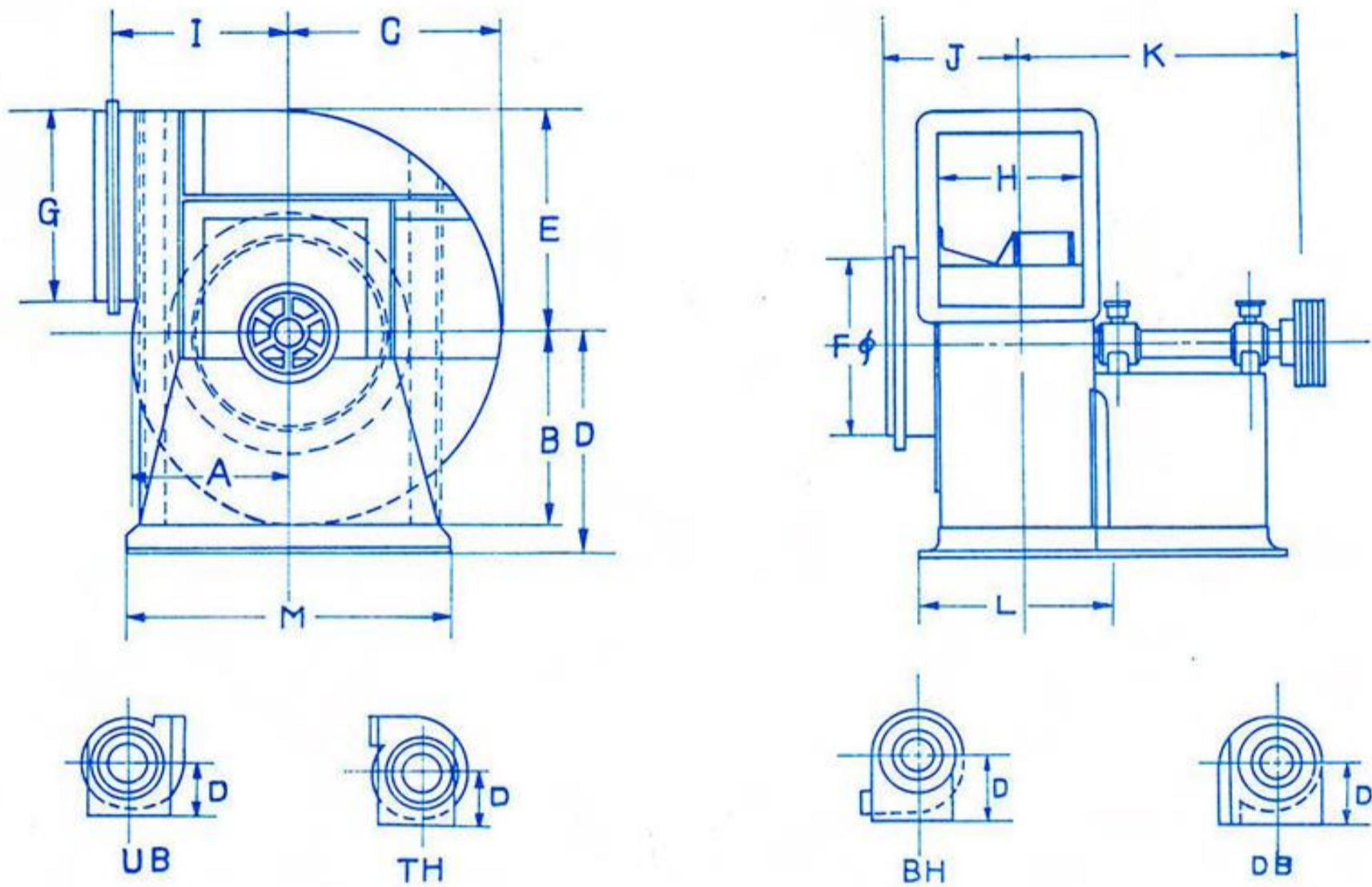
Air flow quantity 20 m³/min ~ 100 m³/min

Static pressure 1,000 ~ 1,500 mmAq

TOW-SH type is designed and manufactured separately according to an order.



Approximate Dimensions Table of TB-F Turbo Fan



Symbol No.	A	B	C	D				E	F	G	H	I	J	K	L	M
				UB	TH	BH	DB									
No. 1½	145	186	205	230	215	250	180	225	180	180	150	180	130	360	250	290
No. 2	198	232	256	285	260	330	230	300	240	240	200	230	175	530	310	470
No. 2½	246	289	332	360	320	400	280	375	300	300	250	280	200	580	360	580
No. 3	291	344	397	325	400	480	330	450	360	360	300	330	230	660	410	690
No. 3½	340	401	463	490	430	550	370	525	420	420	350	370	255	700	460	800
No. 4	390	460	530	560	490	630	420	600	480	480	400	420	290	750	540	920
No. 4½	435	515	595	620	550	700	470	675	540	540	450	470	315	830	590	1030
No. 5	480	570	660	690	600	780	520	750	600	600	500	520	350	910	640	1140
No. 5½	530	629	727	755	660	850	570	825	660	660	550	570	375	1000	690	1250
No. 6	564	676	788	820	700	930	620	900	720	720	600	620	420	1100	740	1340
No. 6½	595	714	832	860	740	1000	670	975	780	780	650	670	450	1150	790	1400
No. 7	645	780	915	940	810	1080	720	1050	840	840	700	720	480	1200	860	1500



TB-F's Performances Table 1 (V-Belt Driven, Gas Temperature 20°C)

Pres- sure	No.		No.1½	No. 2	No.2½	No. 3	No.3½	No. 4	No.4½	No. 5	No.5½	No. 6	No.6½
	Specification												
50	Air flow	m ³ /min	10.4	18.4	28.7	41.4	56.7	72.2	92.8	115	148	166	195
	Rotation Speed	r. p. m	2650	1995	1590	1326	1145	995	884	796	725	664	612
	Power	B. KW	0.13	0.25	0.39	0.57	0.78	0.98	1.25	1.54	1.87	2.22	2.61
75	Air flow	m ³ /min	12.6	22.3	35.0	50.2	68.5	892	113	140	179	202	237
	Rotation Speed	r. p. m	3225	2420	1935	1613	1382	1210	1075	968	881	807	744
	Power	B. KW	0.25	0.44	0.70	1.00	1.36	1.77	2.24	2.76	3.36	4.00	4.70
100	Air flow	m ³ /min		25.9	40.6	58.4	79.6	104	131	163	209	234	275
	Rotation Speed	r. p. m		2815	2250	1874	1606	1406	1249	1125	1024	938	864
	Power	B. KW		0.70	1.09	1.55	2.13	2.78	3.51	4.36	5.30	6.30	7.33
125	Air flow	m ³ /min			47.6	68.5	93.3	122	154	190	244	275	322
	Rotation Speed	r. p. m			2635	2196	1883	1648	1464	1318	1200	1100	1014
	Power	B. KW			1.75	2.51	3.43	4.47	5.65	7.00	8.50	10.1	11.8
150	Air flow	m ³ /min			49.8	71.6	97.4	127	161	200	255	287	337
	Rotation Speed	r. p. m			2755	2296	1968	1724	1531	1378	1254	1149	1060
	Power	B. KW			2.00	2.87	3.90	5.13	6.46	8.00	9.70	11.5	13.5
200	Air flow	m ³ /min				86.8	118	154	194	241	309	346	407
	Rotation Speed	r. p. m				2780	2381	2085	1852	1668	1519	1390	1283
	Power	B. KW				5.09	7.00	8.96	11.4	14.2	17.2	20.4	24.0
250	Air flow	m ³ /min				92.4	126	164	207	257	330	370	435
	Rotation Speed	r. p. m				2965	2540	2222	1975	1778	1619	1483	1368
	Power	B. KW				6.17	8.36	11.0	13.9	17.3	20.8	24.8	29.1
300	Air flow	m ³ /min					138	180	227	282	361	405	476
	Rotation Speed	r. p. m					2780	2435	2162	1947	1772	1.62	1498
	Power	B. KW					11.0	14.5	18.3	22.6	27.3	32.7	38.2
350	Air flow	m ³ /min					149	194	246	304	390	438	514
	Rotation Speed	r. p. m					3005	2630	2338	2102	1915	1755	1618
	Power	B. KW					14.0	18.3	23.0	28.4	34.5	44.2	48.2
400	Air flow	m ³ /min						208	262	325	417	468	550
	Rotation Speed	r. p. m						2812	2500	2250	2049	1875	1730
	Power	B. KW						22.3	28.1	34.9	42.2	50.3	58.8
450	Air flow	m ³ /min						220	279	344	443	498	584
	Rotation Speed	r. p. m						2988	2652	2379	2173	1992	1836
	Power	B. KW						26.6	33.6	41.3	50.7	60.1	70.1
500	Air flow	m ³ /min							293	362	466	525	615
	Rotation Speed	r. p. m							2795	2502	2290	2100	1935
	Power	B. KW							39.2	48.1	59.1	70.6	82.1

Note 1: Shaft motor brake power is capable of increasing 15%-20% of value on the table.

Note 2: Air flow can be increased to 50% in same machine.

Note 3: Direct types are designed separately.



TB-F's Performances Table 2 (V-Belt Driven, Gas Temperature 20°C)

Pres- sure	No.		No. 7	No.7 1/2	No. 8	No. 9	No.10	No.11	No.12	No.13	No.14	No.15	No.16	No.18	Input speed m/sec	Output speed m/sec
	Specification															
50	Air flow	m ³ /min	225	259	294	372	460	558	662	780	904	1040	1180	1490	6.84	6.43
	Rotation Speed	r. p. m	569	530	498	442	398	362	332	308	285	266	249	221		
	Power	B. KW	3.03	3.47	3.96	5.0	6.12	7.53	8.88	10.89	12.23	13.95	15.67	19.77		
75	Air flow	m ³ /min	274	315	357	452	559	678	807	944	1100	1265	1440	1820	8.26	7.80
	Rotation Speed	r. p. m	692	645	605	537	484	440	404	373	346	323	303	269		
	Power	B. KW	5.45	6.25	7.10	8.95	11.16	13.5	16.11	19.32	21.86	25.07	28.35	36.18		
100	Air flow	m ³ /min	318	366	415	526	649	787	936	1096	1275	1460	1660	2110	9.6	9.03
	Rotation Speed	r. p. m	804	749	703	624	562	511	469	433	402	375	352	312		
	Power	B. KW	8.58	9.77	11.04	14.1	17.31	21.11	25.07	30.06	34.02	39.02	44.01	56.7		
125	Air flow	m ³ /min	373	429	486	616	762	924	1098	1287	1495	1720	1870	2470	11.3	10.6
	Rotation Speed	r. p. m	942	878	824	732	660	599	550	508	471	440	412	366		
	Power	B. KW	13.8	15.82	18.58	22.68	28.05	34.17	40.58	48.79	54.83	63.41	71.62	89.52		
150	Air flow	m ³ /min	390	487	508	644	796	966	1146	1343	1563	1800	2050	2590	11.7	11.0
	Rotation Speed	r. p. m	985	1000	862	765	689	627	574	530	493	460	431	383		
	Power	B. KW	15.67	23.28	20.44	25.89	32.0	39.09	46.03	55.35	62.66	73.26	82.06	104.44		
200	Air flow	m ³ /min	480	542	616	780	963	1168	1387	1625	1890	2200	2460	3130	14.2	13.4
	Rotation Speed	r. p. m	1193	1112	1043	926	834	758	695	642	596	560	522	463		
	Power	B. KW	27.98	32.0	36.26	45.95	56.7	69.08	81.31	97.73	109.66	130.55	144.72	182.77		
250	Air flow	m ³ /min	504	578	656	832	1026	1246	1480	1732	2018	2320	2630	3340	15.2	14.3
	Rotation Speed	r. p. m	1270	1185	1112	988	889	808	741	684	636	593	556	494		
	Power	B. KW	33.72	38.72	43.57	55.88	68.63	83.55	99.22	118.61	134.28	155.91	175.31	223.8		
300	Air flow	m ³ /min	551	634	718	911	1125	1366	1620	1900	2210	2530	2880	3660	16.7	15.7
	Rotation Speed	r. p. m	1392	1298	1218	1082	975	886	811	750	696	649	609	541		
	Power	B. KW	44.31	51.03	57.67	73.11	90.27	110.41	129.8	158.15	176.06	204.4	231.26	294.67		
350	Air flow	m ³ /min	596	683	777	984	1215	1480	1750	2050	2385	2750	3110	3960	17.95	16.9
	Rotation Speed	r. p. m	1504	1400	1316	1168	1053	957	877	810	752	702	658	584		
	Power	B. KW	55.95	63.86	72.88	91.76	113.39	140.25	163.37	197.69	223.8	258.86	290.94	373		
400	Air flow	m ³ /min	636	732	830	1054	1300	1576	1870	2192	2550	2950	3330	4250	19.2	18.0
	Rotation Speed	r. p. m	1607	1500	1407	1250	1126	1023	937	866	804	750	704	624		
	Power	B. KW	68.26	78.33	88.77	113.39	139.5	169.34	199.93	240.96	272.29	313.32	354.35	447.6		
450	Air flow	m ³ /min	676	76	880	1117	1380	1674	1990	2330	2710	3120	3530	4500	20.4	19.2
	Rotation Speed	r. p. m	1706	1591	1493	1326	1195	1086	996	919	854	797	747	663		
	Power	B. KW	81.31	93.25	105.93	135.03	166.36	202.17	240.96	287.21	328.24	373	421.49	537.12		
500	Air flow	m ³ /min	713	818	929	1186	1455	1765	2100	2450	2852	3280	3820	4720	21.5	20.2
	Rotation Speed	r. p. m	1800	1676	1574	1397	1260	1145	1050	968	900	839	786	699		
	Power	B. KW	95.49	109.66	123.84	157.41	195.45	237.23	282.73	336.45	380.46	436.41	492.36	634.1		

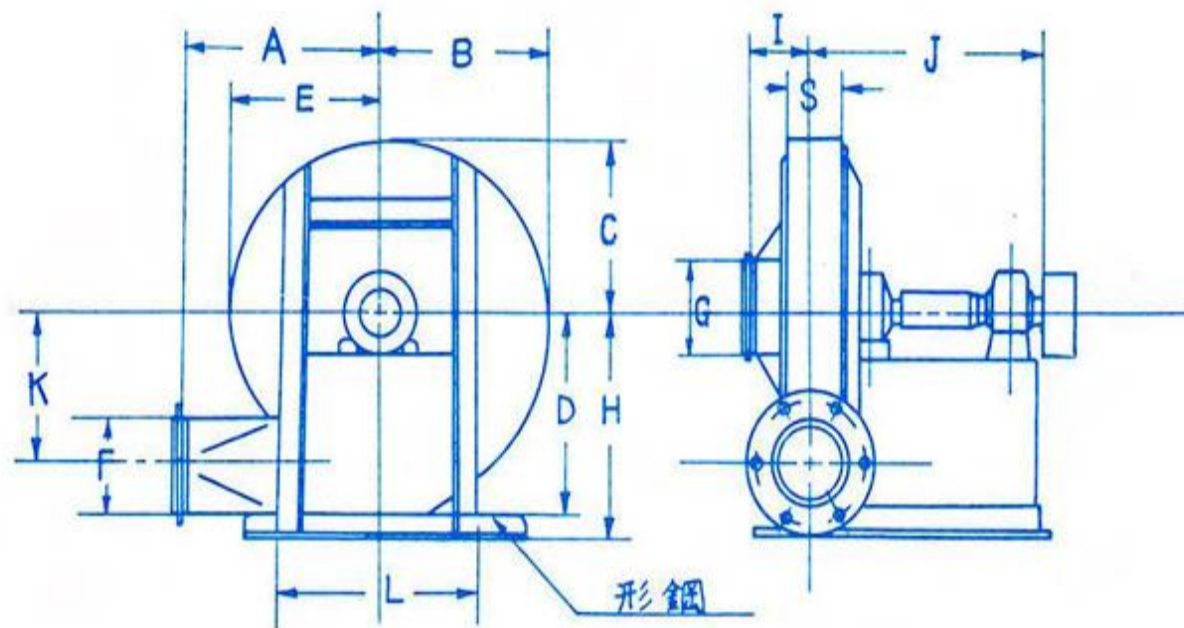
Note 1: Shaft motor brake power is capable of increasing 10%-15% of value on the table.

Note 2: Air flow can be increased to 45% in same machine.

Note 3: Direct types are designed separately.



Approximate Dimensions Table of POW-K Turbo Blower



	A	B	C	D	E	F	G	H	I	J	K	L	S	Steel size
No. 2	285	265	241	289	217.5	140	165	320	90	530	220	330	111	5 × 40 × 40
No. 2 ½	360	331	301	361	272	175	210	400	110	580	275	410	139	5 × 40 × 40
No. 3	430	397.5	361.5	433.5	326	210	250	485	130	660	330	490	167	6 × 50 × 50
No. 3 ½	500	464	422	506	381	245	290	570	155	700	385	580	194	6 × 50 × 50
No. 4	575	530	482	578	435	280	330	650	175	740	440	660	222	6 × 65 × 65
No. 4 ½	650	596	542	650	490	315	370	735	200	770	495	740	250	6 × 65 × 65
No. 5	720	662	602	723	544	350	415	810	220	820	550	820	277	6 × 65 × 65
No. 5 ½	790	729	663	795	598	385	455	890	240	900	605	900	305	6 × 65 × 65
No. 6	860	795	723	867	652	420	495	975	260	990	660	990	333	6 × 65 × 65
No. 6 ½	930	862	783	939	707	455	536	1050	285	1100	715	1060	361	9 × 75 × 75
No. 7	1000	928	844	1012	762	490	580	1150	305	1150	770	1150	388	9 × 75 × 75
No. 8	1150	1060	964	1156	870	560	660	1300	350	1250	880	1320	444	9 × 75 × 75
No. 9	1300	1193	1085	1300	979	630	745	1450	395	1400	990	1500	500	9 × 75 × 75
No. 10	1450	1325	1205	1445	1088	700	825	1600	440	1500	1100	1650	555	9 × 90 × 90

POW-K's Performances Table (V-Belt Driven, Gas Temperature 20°C)

Pres- sure	No.		No. 2	No. 2½	No. 3	No. 3½	No. 4	No. 4½	No. 5	No. 5½	No. 6	No. 6½	No. 7	No. 8	No. 9	No. 10	Peripheral Spd m/sec	Input Spd m/sec	Output Spd m/sec
	Specification																		
100	Air flow	m ³ /min	11.2	17.6	25.3	35.0	45.0	57	70	85.0	102	118	138	180	223	282	37.9	8.7	12.0
	Rotation Spd	r. p. m	2220	1780	1480	1272	1114	988	890	809	742	678	636	556	483	445			
	Power	B. KW	0.30	0.48	0.70	0.94	1.22	1.55	1.94	2.30	2.75	3.14	3.73	4.85	5.77	7.68			
125	Air flow	m ³ /min	12.6	19.8	28.2	39.0	50.0	64	78	95.0	114	132	154	201	249	314	42.4	9.8	13.5
	Rotation Spd	r. p. m	2490	1995	1655	1420	1244	1104	992	904	829	757	710	622	539	497			
	Power	B. KW	0.43	0.67	0.95	1.31	1.71	2.07	2.64	3.23	3.84	4.39	5.21	6.79	7.53	10.6			
150	Air flow	m ³ /min	13.8	21.6	31.0	42.5	55.0	70	86	105	125	145	169	221	273	346	46.5	10.8	14.9
	Rotation Spd	r. p. m	2730	2180	1815	1560	1365	1212	1092	992	910	831	780	682	592	546			
	Power	B. KW	0.54	0.87	1.25	1.74	2.24	2.86	3.54	4.27	5.08	5.78	6.91	9.03	10.6	14.1			
200	Air flow	m ³ /min	15.9	25.0	35.6	49.0	64.0	80	100	120	144	167	195	255	315	399	53.5	12.1	17.0
	Rotation Spd	r. p. m	3150	2520	2095	1800	1575	1398	1260	1145	1050	959	900	787	683	630			
	Power	B. KW	0.87	1.36	1.92	2.66	3.46	4.39	5.43	6.53	7.83	8.80	10.6	13.9	16.3	21.6			
250	Air flow	m ³ /min		27.9	39.8	55.0	71.0	90	111	135	160	187	219	285	352	446	59.9	13.9	19.0
	Rotation Spd	r. p. m		2810	2330	2010	1760	1563	1407	1279	1173	1072	1010	880	763	704			
	Power	B. KW		1.87	2.66	3.72	4.82	6.13	7.53	9.10	10.9	12.5	14.9	19.3	22.7	30.2			
300	Air flow	m ³ /min		29.8	42.6	58.0	76.0	96.0	119	144	171	199	232	303	375	475	63.8	14.9	20.0
	Rotation Spd	r. p. m		3000	2500	2140	1874	1664	1498	1362	1248	1140	1070	936	812	749			
	Power	B. KW		2.27	3.27	4.48	5.83	7.4	9.2	11.0	13.1	14.9	17.9	23.2	27.4	36.5			
350	Air flow	m ³ /min		33.0	47.0	65.0	84.0	107	132	159	190	221	257	337	416	514	70.8	16.1	22.0
	Rotation Spd	r. p. m		3330	2760	2375	2080	1845	1664	1512	1385	1266	1188	1040	900	832			
	Power	B. KW		3.12	4.45	6.13	7.98	10.1	12.5	15.1	18.0	20.5	24.4	31.9	37.3	50			
400	Air flow	m ³ /min			50.5	69.0	90.0	114	141	170	203	236	276	361	446	564	75.7	17.5	24.0
	Rotation Spd	r. p. m			2955	2545	2227	1976	1780	1618	1485	1355	1272	1114	965	890			
	Power	B. KW			5.45	8.21	9.77	12.4	15.4	18.4	22.1	25.0	28.8	39.3	46.0	61.2			
450	Air flow	m ³ /min			53.5	73.0	95.0	121	149	180	215	251	292	382	472	602	80.3	18.5	25.5
	Rotation Spd	r. p. m			3140	2695	2360	2093	1886	1714	1573	1435	1347	1180	1022	950			
	Power	B. KW			6.46	8.88	11.6	14.7	18.2	21.9	26.2	29.8	35.5	46.5	54.4	74.3			
500	Air flow	m ³ /min			56.2	77.0	100	127	157	190	227	264	308	402	496	623	84.5	19.2	26.5
	Rotation Spd	r. p. m			3300	2840	2485	2207	1986	1806	1656	1512	1420	1241	1076	1000			
	Power	B. KW			7.61	10.5	13.6	17.2	21.3	25.7	30.7	34.7	41.7	54.1	63.4	86.5			
600	Air flow	m ³ /min				85.0	119	140	173	209	249	290	338	442	546	697	93.0	21.5	29.5
	Rotation Spd	r. p. m				3120	2940	2425	2185	1985	1820	1662	1560	1365	1183	1100			
	Power	B. KW				13.9	18.1	22.9	28.3	34.1	40.7	46.3	55.2	72.2	84.3	116			
700	Air flow	m ³ /min					119	151	186	225	268	312	364	476	588	750	100	22.5	32.0
	Rotation Spd	r. p. m					2940	2610	2350	2138	1960	1790	1680	1470	1274	1184			
	Power	B. KW					22.5	28.6	35.4	42.4	50.7	57.8	68.9	89.5	106	142			

Note 1: Shaft motor brake power is capable of increasing 15%-20% of value on the table.

Note 2: Air flow can be changed from -30%- 40% in same machine.

Note 3: Direct types are designed separately.

