

# COMPETITOR PLUS™

## Rotary Positive Blowers

COMPETITOR PLUS rotary blowers are designed to be interchangeable with equivalent sizes of Roots Universal RAI®, and many Sutorbilt® California Series B and F, and Legend™ Series L and P blowers. COMPETITOR PLUS models are rated up to 15 PSIG discharge pressure or 16" Hg dry vacuum.

In addition to interchangeability, Tuthill Pneumatics Group has improved on existing designs with the following superior features ordinarily found only on premium blowers:

### Helical Gearing

COMPETITOR PLUS blowers are timed with hardened, precision helical gears, keyed to the rotor shafts, not taper fit spur gears as offered by other manufacturers, which have greater backlash, and can slip and lose timing. Helical gears are also quieter, reducing mechanical noise.

### Stronger Bearings

All COMPETITOR PLUS blowers include double row ball bearings at the gear end, stronger than single row ball bearings offered by other manufacturers. Drive shaft bearing is cylindrical roller type for additional strength against side loading from V-belt drives. As a result of this superior design, COMPETITOR PLUS blowers offer design bearing life as much as 50% greater than models offered by other manufacturers.

### Rotors with Integral Shafts

COMPETITOR PLUS blowers include precision machined ductile iron rotors with large, integrally cast shafts, not press fit and/or pinned shafts offered by other manufacturers, which can loosen over time and cause rotor clash. All rotors are dynamically balanced for vibration-free rotation.

### Positive End Clearances

End clearances are positively established at the blower gear end, eliminating the risk of shifting end clearances when installing or removing drive components. This also eliminates the need for those special fork and saddle tools required by other brands to reset end clearances.

### Polished Sealing Surfaces

All shaft surfaces in contact with sealing members are polished to reduce seal wear and risk of leakage.

### Individually Tested

Every COMPETITOR PLUS blower is factory tested to assure you of the highest quality. While some manufacturers perform only sample testing, Tuthill Pneumatics Group goes the distance to insure that your blower meets our rigid ISO 9001 registered quality standards.

### ISO 9001 Registration

COMPETITOR PLUS blowers are manufactured under Tuthill Pneumatics' ISO 9001 registered quality assurance program, the first American manufacturer of rotary blowers to gain such international recognition.

### Warranty

Every COMPETITOR PLUS blower is backed by Tuthill Pneumatics' limited warranty for a period of 18 months after installation or 2 years after original blower shipment, whichever occurs first.

### Versatility

COMPETITOR PLUS blowers can be field converted from horizontal to vertical flow, or vice versa, without any special tools or additional components.

### Metric Availability

All COMPETITOR PLUS blowers are available with metric drive shaft and process connections.

### Worldwide Sales and Service

With sales offices and service facilities located on six continents, you can be assured of availability and service for your COMPETITOR PLUS blowers.

### Material Specifications:

- Housing: Cast iron
- End Plates: Cast iron
- End Cover: Cast iron
- Rotors: Ductile iron
- Shafts: Ductile iron cast integrally with rotors
- Bearings: Gear end - Double row ball, both rotors  
Drive end - Cylindrical roller on drive rotor  
Single row ball on driven rotor
- Drive Shaft: Ductile iron, cast integrally with drive rotor
- Gears: Heat treated alloy steel, helical cut
- Seals: Lip seals on rotor shafts and drive shaft
- Lubrication: Oil splash on gear end, grease on drive end

Model Size	Max. Press. PSI	Max. Vac. (in. Hg)	Maximum RPM	Displacement CFR
2002	12	16	5275	.016
2004	7	16	5275	.032
3002	15	16	3600	.0467
3003	12	15	3600	.0616
3006	7	15	3600	.102
4002	15	16	3600	.061
4005	10	16	3600	.121
4007	7	15	3600	.160
5003	15	16	2850	.132
5006	13	16	2850	.221
5009	7	15	2850	.323
6005	15	16	2350	.246
6008	14	16	2350	.395
6015	7	14	2350	.740
7006	15	16	2050	.402
7011	10	16	2050	.738
7018	6	12	2050	1.200

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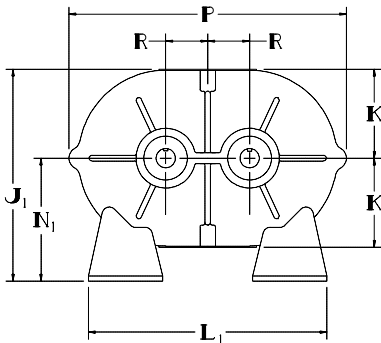
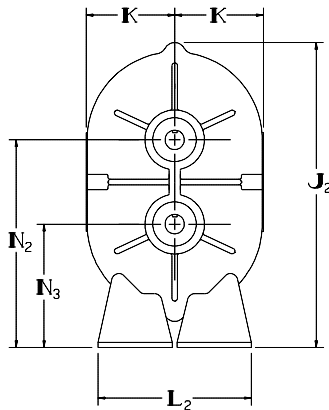
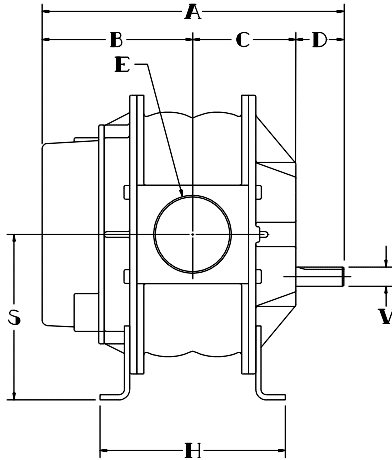
## Performance

Pressure performance is based on inlet conditions of 14.70 PSIA and 70° F.

Vacuum performance is based on inlet temperature of 70° F and discharge pressure of 14.70 PSIA.

In conjunction with our program of continuous testing and upgrading, all specifications are subject to change without notice.

All data are approximate. Request a quotation for your specific application.



Blower Model	SPEED (RPM)	6 PSIG		7 PSIG		10 PSIG		12 PSIG		13 PSIG		14 PSIG		15 PSIG		Max. " Hg	Vacuum		
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		CFM	BHP	
2002	1750	8	0.9	6	1.0											9	7	0.7	
	3600	38	1.8	36	2.1	32	2.8	29	3.3							14	28	2.4	
	5275	64	2.7	63	3.1	59	4.2	56	4.9							16	51	3.1	
2004	1750	24	1.6	21	1.9											10	20	1.4	
	3600	83	3.3	80	3.8											14	68	3.8	
	5275	137	4.9	134	5.6											16	115	6.3	
3002	1170	23	1.6	20	1.9											10	19	1.4	
	2700	94	3.8	92	4.3	85	6.0	81	7.1	79	7.6	77	8.2	75	8.7	15	76	4.5	
	3600	136	5.0	134	5.7	127	7.9	123	9.4	121	10.1	119	10.9	118	11.6	16	114	6.4	
3003	1170	31	2.1	28	2.4											10	27	1.7	
	2700	126	4.8	122	5.5	114	7.7	109	9.2							14	107	5.4	
	3600	181	6.4	178	7.4	169	10	164	12							15	158	7.7	
3006	1170	62	3.3	57	3.8											11	51	3.0	
	2700	218	7.7	213	8.9											15	185	9.3	
	3600	310	10	305	12											15	277	12	
4002	880	20	1.6	17	1.8											10	16	1.3	
	1760	74	3.2	71	3.6	64	5.0	60	6.0	58	6.4	56	6.9			14	58	3.6	
	3600	186	6.5	183	7.4	176	10	172	12	170	13	168	14	166	15	16	163	8.3	
4005	880	44	3.0	39	3.4											9	42	2.2	
	1760	150	5.9	145	6.9	132	9.6	124	11							14	121	6.7	
	3600	373	12	368	14	354	20	347	24							16	330	16	
4007	880	58	3.9	52	4.5											9	56	2.9	
	1760	199	7.7	193	9.0											13	169	8.2	
	3600	494	16	487	18											15	447	19	
5003	710	42	2.7	38	3.1											10	36	2.2	
	1760	181	6.6	176	7.6	166	11	159	13	156	14	153	15	294	25	16	146	8.5	
	2850	324	11	320	12	309	17	303	21	300	22	297	24	294	25	16	289	14	
5006	710	70	4.3	63	5.0											10	61	3.6	
	1760	302	11	295	12	277	17	266	21	261	23					14	262	12	
	2850	543	17	536	20	518	28	507	34	502	37					16	485	22	
5009	710	133	6.2	125	7.2											11	114	5.6	
	1760	472	15	464	18											14	427	18	
	2850	824	25	816	29											15	769	30	
6005	710	93	4.9	87	5.6	70	7.9									12	70	4.8	
	1760	352	11	345	14	328	20	318	23	313	25	309	27	304	29	16	296	16	
	2350	497	16	490	19	473	26	463	31	458	34	454	36	449	39	16	442	21	
6008	710	150	7.6	139	8.9	112	13									12	113	7.5	
	1760	565	19	554	22	527	31	510	37	503	40	496	43			15	490	23	
	2350	798	25	787	29	760	41	744	50	736	54	729	58			16	709	33	
6015	710	281	14	261	16											10	254	12	
	1760	1058	35	1038	40											14	943	40	
	2350	1494	46	1475	54											14	1380	53	
7006	710	195	7.8	188	9.1	168	13	157	15	152	17					13	161	8.3	
	1760	617	19	610	22	591	32	579	38	574	41	569	44	564	47	16	556	25	
	2050	734	23	726	26	707	37	696	44	691	48	686	51	681	55	16	672	29	
7011	710	367	14	354	16	321	23									13	308	15	
	1760	1142	35	1129	41	1096	58									16	1035	45	
	2050	1356	41	1343	47	1310	67									16	1249	53	
7018	710	632	23													10	608	19	
	1760	1892	56													12	1830	55	
	2050	2240	65													12	2178	64	

## Dimensions

Model Size	A	B	C	D	E	H	J1	J2	K	L1	L2	N1	N2	N3	P	R	S	V
2002	10.00	4.88	2.63	2.50	1" NPT	5.00	6.88	9.69	3.13	5.13	5.13	3.75	6.25	3.75	9.38	1.25	5.00	.625
2004	12.00	5.88	3.63		2" NPT	7.00												
3002	11.56	5.69	3.38		1 1/4" NPT	6.75												
3003	12.44	6.19	3.75	2.50	2" NPT	7.63	8.94	12.81	3.94	7.25	7.25	5.00	8.50	5.00	12.19	1.75	6.75	.750
3006	14.81	7.38	4.94		2 1/2" NPT	10.00												
4002	12.94	6.25	3.69		1 1/2" NPT	7.25												
4005	15.69	7.63	5.06	3.00	2 1/2" NPT	10.00	10.63	15.13	4.38	8.00	8.00	6.25	10.25	6.25	13.69	2.00	8.25	.875
4007	17.44	8.50	5.94		3" NPT	11.75												
5003	15.25	7.38	4.50		2 1/2" NPT	8.38												
5006	17.88	8.69	5.81	3.38	4" NPT	11.00	12.13	17.38	5.38	10.50	10.50	6.75	11.25	6.25	17.19	2.50	8.75	1.125
5009	20.88	10.19	7.31		4" NPT	14.00												
6005	18.75	9.44	5.63		3" NPT	10.13	15.06		6.25									
6008	21.75	10.94	7.13	3.69	5" NPT	13.13	15.06	21.69	6.25	17.00	11.00	8.75	14.75	8.75	19.81	3.00	11.75	1.375
6015	28.75	14.44	10.63		6" FLG	20.13	16.44		7.50									
7006	20.31	10.31	5.94		4" NPT	11.75	20.63		9.63									
7011	25.31	12.69	8.44	4.06	6" FLG	16.75	19.50	26.13	8.50	21.00	14.00	11.00	18.00	11.00	23.25	3.50	14.50	1.562
7018	32.31	16.31	11.94		8" FLG	23.75	19.50		8.50									

Values shown are approximate and should not be used for construction. Certified drawings are available through your local Tuthill Pneumatics Sales Professional.

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