

M-D Pneumatics™

COMPETITOR SL™

Rotary Positive Blowers

Designed with features found ordinarily on high-end blowers, **COMPETITOR SL** blowers are still designed to be interchangeable, with respect to foot print, shaft height and diameter, with equivalent sizes of Roots Universal RAI/RAI-J®, and many Sutorbilt® California Series Legend™ Series L and P, as well as M-D Pneumatics **COMPETITOR PLUS™** blowers.

Splash Oil Lubrication at Both Ends

COMPETITOR SL blowers include splash oil lubrication at both the gear end **and** drive end of the blower. Splash lubrication provides for longer bearing and seal life through improved heat dissipation versus grease lubrication.

Revolutionary Noise Reduction Technology

Many sizes of **COMPETITOR SL** blowers are available with Tuthill's unique noise reduction technology with tri-lobe rotors specially designed for maximum displacement and special porting on the discharge side to significantly reduce noise.

Helical Gearing

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

Stronger Bearings

All **COMPETITOR SL** 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 SL** blowers offer significantly longer bearing life than models offered by other manufacturers.

Rotors with Integral Shafts

COMPETITOR SL 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 Drive Shaft Sealing Surfaces

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

Individually Tested

Every **COMPETITOR SL** blower is factory tested to assure you of the highest quality. While some manufacturers perform only sample testing, Tuthill Vacuum & Blower Systems goes the distance to insure that your blower meets our rigid ISO 9001 registered quality standards.

ISO 9001 Registration

COMPETITOR SL blowers are manufactured under Tuthill Vacuum & Blower Systems ISO 9001 registered quality assurance program, the first American manufacturer of rotary blowers to gain such international recognition.

Versatility

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

Metric Availability

All **COMPETITOR SL** 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 SL** blowers.

Material Specifications:

Housing: Cast iron

End Plates: Cast iron

End Covers: 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

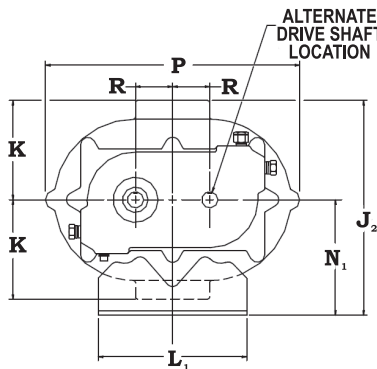
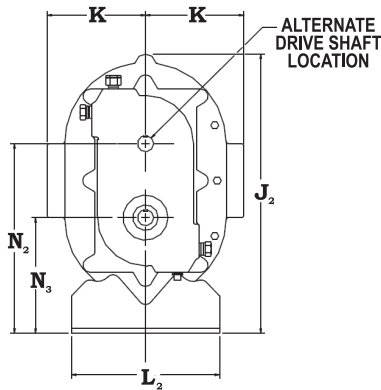
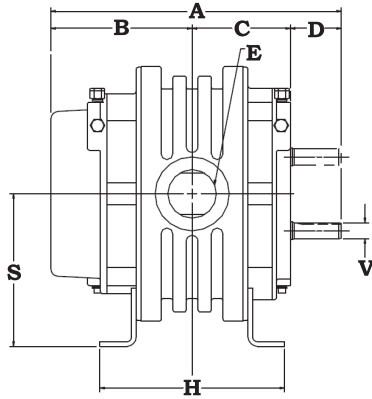
Lubrication: Oil splash on both ends

Model Size	Maximum Nominal Pressure (PSIG)	Maximum Nominal Vacuum (in. Hg)	Maximum RPM
3002	15	16	3600
3003	12	15	
3006	7	15	
4002	15	16	3600
4005	10	16	
4007	7	15	
5003	15	16	2850
5006	13	16	
5009	8	15	
6005	15	16	2350
6008	14	16	
6015	7	14	



Performance

Pressure performance is based on inlet conditions of 1.02 kgf/cm² A and 20° C. Vacuum performance is based on inlet temperature of 20° C and discharge pressure of 1.02 kgf/cm² A. 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	Style	SPEED (RPM)	7 PSIG		8 PSIG		10 PSIG		12 PSIG		13 PSIG		15 PSIG		Max. Vacuum		
			CFM	HP	CFM	HP	CFM	HP	CFM	HP	CFM	HP	CFM	HP	"Hg	CFM	BHP
3002	2 Lobe	1170	20	1.9	18	2.1									10	19.1	1.4
		1750	47	2.8	45	3.1	40	3.9	123	9.4	121	10.1	118	11.6	16	28.0	3.1
		3600	134	5.7	131	6.5	127	7.9	123	9.4	121	10.1	118	11.6	16	114.4	6.4
3003	2 Lobe	1170	28	2.4	24	2.4									10	26.9	1.7
		1760	64	3.6	61	4.1									14	48.6	3.5
		3600	178	7.4	175	8.3	169	10.3	164	12.2					15	157.8	7.7
3003	3 lobe	1170	28	3.3											10	27.3	2.6
		1760	65	4.9	62	5.4									14	49.3	4.9
		3600	180	10.1	177	11.1	171	13.0	166	15.0					15	159.9	10.5
3006	2 Lobe	1170	59	3.8											11	52.3	3.0
		1760	119	5.8											15	91.3	6.1
		3600	306	11.8											15	279.0	12.4
3006	3 lobe	1170	59	4.7											11	52.8	3.9
		1760	120	7.1											15	92.2	7.4
		3600	309	14.6											15	281.7	15.2
4002	2 Lobe	880	16	1.8											10	15.5	1.3
		1760	70	3.6	67	4.1	62	5.0	58	5.9	56	6.4	164	15.0	14	56.5	3.5
		3600	181	7.4	178	8.3	174	10.2	170	12.1	168	13.1	164	15.0	16	160.6	8.2
4005	2 Lobe	880	39	3.4	35	3.9									9	42.6	2.2
		1760	146	6.9	141	7.8	133	9.6							14	121.6	6.7
		3600	368	14.0	364	15.9	355	19.7							16	331.2	15.7
4005	3 lobe	880	37	3.4	33	3.8									9	40.6	2.2
		1760	139	6.7	135	7.6	126	9.4							14	116.0	6.6
		3600	351	13.8	347	15.6	339	19.2							16	315.9	15.3
4007	2 Lobe	880	52	4.5											10	49.4	3.2
		1760	192	8.9											14	160.3	8.8
		3600	486	18.3											16	436.6	20.4
4007	3 lobe	880	49	4.4											10	47.1	3.1
		1760	183	8.7											14	152.8	8.6
		3600	463	17.8											16	416.0	19.9
5003	2 Lobe	710	34	3.1	29	3.5									10	32.0	2.2
		1760	172	7.6	168	8.6	160	10.7	153	12.7	150	13.7			14	150.5	7.5
		2850	316	12.3	312	14.0	304	17.2	297	20.5	294	22.2	288	25.4	16	282.5	13.7
5006	2 Lobe	710	65	5.0	59	5.7									10	62.7	3.6
		1760	297	12.4	291	14.1	279	17.5	269	20.9	264	22.6			14	264.2	12.2
		2850	538	20.1	532	22.8	520	28.3	510	33.8	505	36.6			16	487.3	22.5
5006	3 lobe	710	65	5.4	59	6.1									10	63.0	4.0
		1760	299	13.4	292	15.1	281	18.5	270	21.9	265	23.6			14	265.4	13.2
		2850	540	21.7	534	24.4	522	30.0	512	35.5	507	38.2			16	489.5	24.1
5009	2 Lobe	710	112	7.2	104	8.2									11	100.0	5.6
		1760	451	17.9	443	20.4									14	409.4	17.6
		2850	803	29.0	795	33.0									15	750.5	30.4
5009	3 lobe	710	113	7.6	104	8.6									11	100.3	6.0
		1760	453	18.9	445	21.4									14	410.7	18.6
		2850	806	30.6	798	34.6									15	752.8	32.0
6005	2 Lobe	700	88	5.6	82	6.4	71	7.9							12	71.9	4.8
		1760	348	14.2	343	16.1	332	19.9	322	23.6	318	25.5	309	29.3	16	301.5	15.8
		2350	493	18.9	488	21.5	477	26.5	467	31.6	463	34.1	454	39.1	16	446.7	21.1
6008	2 Lobe	700	141	8.8	131	10.0	114	12.4							12	115.4	7.5
		1760	559	22.2	550	25.2	533	31.3	517	37.4	510	40.4			15	497.9	23.3
		2350	792	29.6	783	33.7	766	41.8	750	49.9	743	53.9			16	717.2	33.1
6015	2 Lobe	700	263	16.2											10	256.7	11.5
		1760	1048	40.7											14	956.6	40.0
		2350	1484	54.4											14	1393.2	53.4

Dimensions

Model Size	Style	A	B	C	D	E	H	J1	J2	K	L1	L2	N1	N2	N3	P	R	S	V
3002	2-lobe	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	.875
3006		14.81	7.38	4.94		2 1/2" NPT	10.00												
3003	3-lobe	12.38	6.13	4.19		2" NPT	7.63	9.63	12.81	4.63	7.25	7.25	5.00	8.50	5.00	12.19	1.75	6.75	.875
3006		14.75	7.31	5.38	2.06	2 1/2" NPT	10.00												
4002		12.94	6.25	3.69		1 1/2" NPT	7.25												
4005	2-lobe	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												
4005		15.69	7.63	5.31		2 1/2" NPT	10.00												
4007	3-lobe	17.44	8.50	6.19	2.75	3" NPT	11.75	11.56	15.13	5.13	8.00	8.00	6.25	10.25	6.25	13.69	2.00	8.25	.875
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	3-lobe	20.88	10.19	7.31		4" NPT	14.00												
5006		17.88	8.69	6.13	3.13	4" NPT	11.06	13.25	17.38	6.50	10.50	10.50	6.75	11.25	6.25	17.19	2.50	8.75	1.125
5009		20.88	10.19	7.63		4" NPT	14.06												
6005	2-lobe	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									

Values shown are approximate and should not be used for construction.

Certified drawings are available through your local Tuthill Vacuum & Blower Systems Sales Professional.

Your Local Tuthill Vacuum & Blower Systems Sales Professional:



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